

ANGLIA RUSKIN UNIVERSITY

**ICARUS PARADOX: THE INTERPLAY BETWEEN ENTREPRENEURIAL
COGNITION AND INTERNAL STAKEHOLDER PERCEPTION**

LIANNE BERNADETTE MILLER

A Thesis in partial fulfilment of the requirements of Anglia Ruskin
University for the degree of Doctor of Philosophy

Submitted: February 2014

ACKNOWLEDGEMENTS

I would like to thank Anglia Ruskin University for providing financial and intellectual support for completing this research. In particular my supervisors, Professor Lester Lloyd-Reason, Director, Centre for Enterprise Development and Research (CEDAR), and Emeritus Professor Vernon Trafford for their hours of guidance and advice.

I am also incredibly indebted to my three children, Danielle, Zachariah and Kregan who have always been there to offer kind words of support, encouragement and love. I also thank my partner, sister, colleagues and friends for their support and constructive criticism when reading earlier drafts.

This work is original except where stated otherwise, and is not the result of collaboration. It has not been submitted for a degree at any other university.

Lianne Bernadette Miller

February 2014

ANGLIA RUSKIN UNIVERSITY
ABSTRACT
LORD ASHCROFT INTERNATIONAL BUSINESS SCHOOL

DOCTOR OF PHILOSOPHY

**ICARUS PARADOX: THE INTERPLAY BETWEEN
ENTREPRENEURIAL COGNITION AND INTERNAL STAKEHOLDER
PERCEPTION**

By LIANNE BERNADETTE MILLER
February 2014

This thesis focuses on how entrepreneurial cognition interacts with internal stakeholder perception in established entrepreneurial organizations. In addition, the influence of interdependent factors of cognitive biases, temporality, growth and performance on the interaction has been examined.

The study is exploratory, phenomenological and framed within an interpretive research paradigm. Primary data was gathered using a qualitative multiple case study methodology. Semi-structured interviews were conducted every three months over an eighteen-month period with entrepreneurs and internal stakeholders of nine organizations in Phase I and three organizations in Phase II.

This research is original because it focuses exclusively on the interaction between concepts of entrepreneurial cognition and biases, temporality, internal stakeholder perception, organizational factors, growth and performance for established entrepreneurial organizations. The empirical evidence highlights that cognitive diversity and differences in perception and expectations have an impact on entrepreneurial and internal stakeholder interrelationships in established entrepreneurial organizations. Furthermore, entrepreneurial decision-making leads to the Icarus Paradox of confidence-success-attribution cycle that either moderates or mediates organizational growth and performance. The consequence of longer communication chains is limited information flow that results in cognitive dissonance.

The research contributes to closing the gap in literature on the interdependent nature of entrepreneurial cognition and internal stakeholder perception on organizational growth and performance. The contribution to practice therefore is that in established entrepreneurial organizations the entrepreneurs and internal stakeholders can focus on performance by understanding the cause and effect influence of their interactions. This sets the foundation for further research on the interaction between entrepreneurial cognition and other organizational concepts.

Key words: entrepreneurial cognition, decision-making, opportunity recognition, internal stakeholders, growth and performance

GLOSSARY

ATM	Asynchronous Transfer Mode
CAQDAS	Computer-Assisted Qualitative Data Analysis Systems
CE	Corporate Entrepreneurship
CEDAR	Centre for Enterprise Development and Research
CEO	Chief Operating Officer
CSI	Cognitive Style Index
CF	Conceptual Framework
CTO	Chief Technical Officer or Chief Technology Officer
DM	Decision-making
ESDM	Entrepreneurial Strategic Decision-making
ETCC	Entrepreneurial Team Collective Cognition
EO	Entrepreneurial Orientation
FD	Finance Director
FMCG	Fast Moving Consumer Goods
FAIMS	Field Asymmetric Ion Mobility Spectrometer
GST	General Systems Theory
ICSB	International Council for Small Business
I-E	Implicit and Explicit Cognitions
I/O	Industrial Organizational Psychology
IT	Information Technology
IRQ	Integrated Research Question
IS	Internal Stakeholders
ISBE	Internal Small Business and Enterprise
KSA	Knowledge Skills and Abilities
LAIBS	Lord Ashcroft International Business School
LO	Learning Orientation
LOC	Locus of Control
LTM	Long Term Memory
MBA	Masters of Business Administration
MD	Managing Director
MOC	Management and Organizational Cognition
OL	Organizational learning

OpR	Opportunity Recognition
PhD	Doctor of Philosophy
P-O	Person Organization Fit
QD	Quality Director
SDM	Strategic Decision-making
S-R	Stimulus-Response
SME	Small-Medium Enterprises
UK	United Kingdom
USA	United States of America
WM	Working Memory

CONTENTS

1. CHAPTER 1 INTRODUCTION	1
1.1 SYNOPSIS	1
1.2 BACKGROUND TO RESEARCH	2
1.3 RESEARCH QUESTIONS	7
1.4 RESEARCH PROPOSITIONS	7
1.5 JUSTIFICATION FOR RESEARCH FOCUS	9
1.6 METHODOLOGY	11
1.7 OUTLINE OF THE THESIS	12
2. CHAPTER 2 ENTREPRENEURIAL COGNITION	14
2.1 INTRODUCTION	14
2.2 ENTREPRENEURIAL DECISION-MAKING	14
2.3 RATIONAL VERSUS EFFECTUATION	20
2.4 FRAMEWORKS FOR ENTREPRENEURIAL DECISION-MAKING	24
2.5 TEMPORAL THEORIES IN DECISION-MAKING	29
2.6 OPPORTUNITY RECOGNITION, ALERTNESS AND COGNITIVE LEARNING	30
2.7 INFORMATION PROCESSING	34
2.8 SCHEMAS	35
2.9 COGNITIVE BIASES AND HEURISTICS	36
2.10 SUMMARY	40
3. CHAPTER 3 INTERPLAY THEORIES	41
3.1 INTRODUCTION	41
3.2 GENERAL SYSTEMS THINKING	41
3.3 CONFIGURATION THEORY	45
3.4 LIFE-CYCLE STAGE MODELS TO DYNAMIC STATE MODELS	47
3.5 SHARED AND COLLECTIVE COGNITION	52
3.6 COMMUNICATION THROUGH SENSEMAKING AND SENSEGIVING	54
3.7 PERSON-ORGANIZATION FIT	57
3.8 SUMMARY	59
4. CHAPTER 4 CONCEPTUAL FRAMEWORK	61
4.1 INTRODUCTION	61
4.2 UNDERPINNING OF THE CONCEPUTAL FRAMEWORK	61
4.3 COMPONENTS OF THE CONCEPTUAL FRAMEOWORK	69

4.4 MODELS CONSIDERED BUT NOT SELECTED	75
4.5 LIMITATIONS OF THE CONCEPTUAL FRAMEWORK	77
4.6 SUMMARY	77
5. CHAPTER 5 RESEARCH DESIGN	78
5.1 INTRODUCTION	78
5.2 RATIONALE FOR RESEARCH APPROACH	78
5.3 RESEARCH DESIGN	78
5.4 ONTOLOGICAL POSITION	80
5.5 SUMMARY	90
6. CHAPTER 6 RESEARCH METHODOLOGY AND METHODS	91
6.1 INTRODUCTION	91
6.2 RATIONALE FOR A CASE STUDY METHODOLOGY	91
6.3 METHOD: CASE STUDIES	93
6.4 JUSTIFICATION FOR A MULTIPLE CASE DESIGN	95
6.5 RATIONALE FOR A LONGITUDINAL APPROACH	96
6.6 CASE SELECTION CRITERIA	98
6.7 SEMI-STRUCTURED INTERVIEWS	106
6.8 EMAIL DATA AS TRIANGULATION	110
6.9 COGNITIVE MAPS	112
6.10 CODING DATA	114
6.11 VALIDITY AND RELIABILITY	116
6.12 RESEARCH ETHICS	117
6.13 SUMMARY	117
7. CHAPTER 7 PHASE I CASE SELECTION AND PHASE II DATA CODING	119
7.1 INTRODUCTION	119
7.2 CASES A – I SELECTION	119
7.3 CASE A PROFILE	120
7.4 CASE B PROFILE	124
7.5 CASE C PROFILE	127
7.6 CASE D PROFILE	131
7.7 CASE E PROFILE	132
7.8 CASE F PROFILE	132
7.9 CASE G PROFILE	133
7.10 CASE H PROFILE	134

7.11 CASE I PROFILE	135
7.12 DATA CODING IN PHASE II	136
7.13 SUMMARY	138
8. CHAPTER 8 PHASE II CASE A FINDINGS	140
8.1 INTRODUCTION	140
8.2 SYNOPSIS OF THE ENTREPRENEUR AND THE INTERNAL STAKEHOLDERS	140
8.3 SET I: JANUARY – APRIL 2011	141
8.4 SET II: JUNE - AUGUST 2011	155
8.5 SET III: SEPTEMBER - DECEMBER 2011	163
8.6 SUMMARY	167
9. CHAPTER 9 PHASE II CASE B FINDINGS	168
9.1 INTRODUCTION	168
9.2 SYNOPSIS OF THE ENTREPRENEUR AND THE INTERNAL STAKEHOLDERS	168
9.3 SET I: JANUARY – APRIL 2011	169
9.4 SET II: JUNE - AUGUST 2011	179
9.5 SET III: SEPTEMBER - DECEMBER 2011	185
9.6 SUMMARY	191
10. CHAPTER 10 PHASE II CASE C FINDINGS	192
10.1 INTRODUCTION	192
10.2 SYNOPSIS OF THE ENTREPRENEUR AND THE INTERNAL STAKEHOLDERS	192
10.3 SET I: JANUARY – APRIL 2011	194
10.4 SET II: JUNE - AUGUST 2011	204
10.5 SET III: SEPTEMBER - DECEMBER 2011	211
10.6 SUMMARY	218
11. CHAPTER 11 THE ICARUS PARADOX: AN ENTREPRENEURIAL INTERPRETATION	219
11.1 INTRODUCTION	219
11.2 PHILOSOPHICAL ASSUMPTIONS AND INTERPRETIVE FRAMEWORK	219
11.3 MODES OF ANALYSIS	224
11.4 THE ICARUS PARADOX	225
11.5 SIX THEMES IDENTIFIED	230
11.6 THE CONTRIBUTION OF ORGANIZATIONAL LEARNING IN INTERPRETING THE FINDINGS	239

11.7 MODIFICATION OF THE CONCEPTUAL FRAMEWORK BASED ON OPEN SYSTEMS THINKING	249
11.8 SUMMARY	264
12. CHAPTER 12 CONCLUSION	265
12.1 INTRODUCTION	265
12.2 CONTRIBUTION TO KNOWLEDGE	265
12.3 ANSWERS TO THE RESEARCH QUESTIONS	270
12.4 CONCEPTUAL CONCLUSIONS	274
12.5 SIGNIFICANCE FOR ESTABLISHED ENTREPRENEURIAL ORGANIZATIONS	276
12.6 RESEARCH PROPOSITIONS	277
12.7 CRITIQUE OF RESEARCH	277
12.8 IMPLICATIONS FOR FUTURE RESEARCH	278
12.9 RESEARCH REFLECTIONS	279
REFERENCES	283
<i>Appendix 1 Research Consent Form</i>	314
<i>Appendix 2 Ethics Approval</i>	316
<i>Appendix 3 Phase II Interview Questions (Entrepreneur)</i>	317
<i>Appendix 4 Phase II Interview Questions (Internal stakeholders)</i>	321
<i>Appendix 5 Data Collection Process</i>	326
<i>Appendix 6 Email Exemplar from Case A</i>	327
<i>Appendix 7 Phase I Case A Selection Themes</i>	329
<i>Appendix 8 Phase II Set III Case C Exemplar Transcript</i>	332

BOXES

BOX 5.1 RESEARCH DESIGN	79
BOX 8.1 SUMMARY PROFILES OF CASE A PARTICIPANTS	141
BOX 8.2 DECISION-MAKING	144
BOX 8.3 OPPORTUNITY SPOTTING	145
BOX 8.4 ENTREPRENEUR'S EXPERIENCE	146
BOX 8.5 TEMPORALITY	147
BOX 8.6 THE FACTORS AFFECTING INTERACTIONS	151
BOX 8.7 THE RISK-AVERSE DECISIONS THAT AFFECT THE INTERACTION	157
BOX 8.8 THE FLOW OF INFORMATION	160
BOX 9.1 SUMMARY PROFILES OF CASE B PARTICIPANTS	169
BOX 9.2 THE FACTORS AFFECTING INTERACTION	175
BOX 9.3 SENSEMAKING	175
BOX 9.4 ENTREPRENEUR'S COMMENT ON THE INTERACTION	176
BOX 9.5 INTERNAL STAKEHOLDER CONFIDENCE	179
BOX 9.6 ACCEPTANCE OF DIFFERENCES	186
BOX 10.1 SUMMARY PROFILES OF CASE B PARTICIPANTS	193
BOX 10.2 DIFFERENT DEFINITIONS OF OPPORTUNITY RECOGNITION	197
BOX 10.3 ALIGNING DECISION-MAKING	199
BOX 10.4 INTERRELATIONSHIPS	200
BOX 10.5 RESPECT IN INTERACTIONS	201
BOX 10.6 ALIGNED COGNITION	203
BOX 10.7 FEAR IN INTERACTION	204
BOX 10.8 DIFFERENT RISK DEFINITIONS	207
BOX 10.9 SENSEGIVING	214

FIGURES

FIGURE 1.1 SPAN OF THE LITERATURE CRITIQUE	6
FIGURE 2.1 FIELD DEVELOPMENT IN ENTREPRENEURIAL COGNITION RESEARCH	20
FIGURE 2.2 A FRAMEWORK FOR ENTREPRENEURIAL DECISION-MAKING	25
FIGURE 2.3 THE DIRECTION OF THE ENTREPRENEURIAL PROCESS	31
FIGURE 2.4 SIGNAL DETECTION THEORY	33
FIGURE 2.5 THE ENTREPRENEURIAL INFORMATION PROCESSING FRAMEWORK	35
FIGURE 2.6 FACTORS INFLUENCING DIFFERENTIAL SUSCEPTIBILITY	37

FIGURE 3.1 SIMPLE SYSTEMS CONCEPTUAL MODEL	43
FIGURE 3.2 DYNAMIC STATE MODEL	47
FIGURE 3.3 ENTREPRENEURIAL ORIENTATION	49
FIGURE 3.4 DYNAMIC SPIRAL LOOPS	52
FIGURE 3.5 ENTREPRENEURIAL COLLECTIVE COGNITION	54
FIGURE 3.6 PERSON-ENTREPRENEURSHIP FIT	59
FIGURE 4.1 ENTREPRENEURIAL ORIENTATION	64
FIGURE 4.2 CONCEPTUAL FRAMEWORK	71
FIGURE 6.1 RESEARCH STAGES	92
FIGURE 6.2 CASE STUDY METHOD	94
FIGURE 6.3 PHASE II DATA COLLECTION TIME-LINE	98
FIGURE 6.4 COGNITIVE MAP FOR OPPORTUNITY RECOGNITION	113
FIGURE 11.1 THEMES AND LAYERS OF ANALYSIS	223
FIGURE 11.2 FOUR CONFIGURATIONS AND TRAJECTORIES	226
FIGURE 11.3 EFFECTUATION	231
FIGURE 11.4 PERPECTUAL CYCLE OF AUTONOMOUS DECISION-MAKING	235
FIGURE 11.5 ENTREPRENEURIAL LERNING AND OPR	245
FIGURE 11.6 ORGANIZATIONAL LEARNING AS A DYNAMIC PROCESS	246
FIGURE 11.7 SINGLE AND DOUBLE LOOP LEARNING	247
FIGURE 11.8 MODIFIED CONCEPTUAL FRAMEWORK	252

TABLES

TABLE 1.1 RESEARCH PROPOSITIONS	8
TABLE 2.1 ENTREPRENEURIAL DECISION-MAKING	22
TABLE 2.2 THREE CORE AREAS FOR A COGNITIVE RESEARCH AGENDA	28
TABLE 3.1 INTERPLAY MODELS	43
TABLE 4.1 RATIONALE FOR CONSTRUCTS CONTRIBUTING TO THEORETICAL UNDERPINNING	62
TABLE 4.2 ADDITIONAL DIMENSIONS TO ENTREPRENEURIAL ORIENTATION	68
TABLE 4.3 MODELS CONSIDERED BUT NOT SELECTED	76
TABLE 5.1 PARADIGMS	81
TABLE 5.2 ENTREPRENEURSHIP AS A SOCIAL CONSTRUCTION	82
TABLE 5.3 DIFFERENCES BETWEEN QUALITATIVE AND QUANTITATIVE RESEARCH	85
TABLE 5.4 CONFERENCES ATTENDED AND CONFERENCES ATTENDED	87

TABLE 6.1 CASES A, B AND C ISSUE DOMAINS	96
TABLE 6.2 PHASE I CASE PROFILES	100
TABLE 6.3 PHASE I CRITERIA FOR FURTHER INVESTIGATION	104
TABLE 6.4 PHASE II CASE PROFILES	105
TABLE 6.5 ENTREPRENEURS AND INTERNAL STAKEHOLDERS INTERVIEWED	106
TABLE 6.6 FOUR RESEARCH QUESTIONS FOR THE ENTREPRENEUR AND INTERNAL STAKEHOLDERS	109
TABLE 6.7 GUIDELINES FOR USING E-MAILS AS A SOURCE OF DATA	111
TABLE 6.8 FIFTEEN CONCEPTS LINKED TO THE RESEARCH QUESTIONS	116
TABLE 7.1 CASES A-I SYNOPSIS	119
TABLE 7.2 THREE CASES IN PHASE II	135
TABLE 7.3 CODE BOOK DERIVED FROM OPEN CODING	137
TABLE 7.4 CATEGORISATION USING THE CONCEPTUAL FRAMEWORK	138
TABLE 8.1 INTERNAL STAKEHOLDER JOB TITLES	140
TABLE 9.1 INTERNAL STAKEHOLDER JOB TITLES	168
TABLE 10.1 INTERNAL STAKEHOLDER JOB TITLES	192
TABLE 11.1 CATEGORY ANALYSIS FOR CASES A, B AND C	220
TABLE 11.2 COMPARISON ACROSS CASES A, B AND C	237
TABLE 11.3 MODES OF LEARNING THAT GENERATE OPPORTUNITIES IN ENTREPRENEURIAL FIRMS	241
TABLE 11.4 FOUR SYSTEMS OF ANALYSIS	259
TABLE 12.1 FACTUAL CONCLUSIONS LINKED TO THE CONTRIBUTION TO KNOWLEDGE	267

COPYRIGHT

The copyright of this thesis rests with Anglia Ruskin University for one year and thereafter with Lianne Bernadette Miller.

This copy of the thesis has been supplied on condition that anyone who consults it is bound by copyright regulation and can be referred to within Anglia Ruskin University or lent to other libraries for the purpose of consultation or may be photocopied for such purposes.

1. Chapter 1 Introduction

1.1 Synopsis

This thesis explains how entrepreneurial cognitive processes interplay with internal stakeholder perception. Entrepreneurial cognitive processes of decision-making, opportunity recognition, alertness and schemas research emphasise individual differences (Busenitz and Barney, 1997; Baron, 1998; Haynie et al., 2009), but fail to investigate the impact of these differences on interrelationships, growth and performance. Although this research recognizes the centrality of the entrepreneur (Gregoire et al., 2010), the interdependency of entrepreneurial autonomous decision-making, growth and performance are considered as influencing factors. In addition, the research is contextualised by organizational theory related to the cognition-success-attribution cycle (Miller, 1992) of feedback that is characterised by limited information flow and top-down communication, and conceptualized in open systems thinking (von Bertalanffy, 1968).

The aim of the research is to progress knowledge on the interaction of entrepreneurial cognition with internal stakeholder perception. By combining disparate concepts in new ways, my research contributes original knowledge to this interrelationship. The contribution to practice may be beneficial to expert entrepreneurs with more than seven years experience (Sarasvathy, 2008) from established entrepreneurial organizations in which the entrepreneurs and the internal stakeholders can focus on growth and performance by understanding the cause and effect influence of their interactions. Established entrepreneurial organizations are regarded as continuous-growth organizations in excess of ten years and are differentiated from early or high-growth companies (Achtenhagen et al., 2010) in lifecycle and stage models.

In drawing on cognitive science, this research will contribute empirical evidence to the literature on entrepreneurial cognition, perception aspects of the internal stakeholders to the entrepreneurs and organizational theory.

1.2 Background to Research

I spent ten years of my career consulting as an Organizational Psychologist on international projects for large corporations across both private and public sectors nationally and internationally. These projects included organizational and team development, leadership and management development, organizational redesign, culture audits post mergers and acquisition, and psychometric design and delivery. During this time, I found that management was largely driven by growth and performance measurement, and my role as a consultant included the alignment of stakeholder values, motivation, roles and responsibilities with the organizational strategy. The challenges that emerged during these interventions encompassed a lack of communication and honest interaction between the management and the employees. In addition, it emerged that decision-making was concentrated in middle or senior management levels, and employees were driven by meeting departmental goals and objectives with little perceived autonomy. During this period the dichotomy between organizations operating as a whole system and collective team decisions versus individual decision-making materialized.

This dichotomy in my observation continued as a business founder of a start-up business that manufactured, marketed and retailed natural beauty products in Europe and Canada. My discussions with other business founders with regards to a perceived lack of employee decision-making ability and opportunity recognition reinforced the duality between individual and team cognition. My own interaction and experience with management and employees resulted in frustrated interrelationships in which communication was top-down, and decision-making was more directive than participative. In addition, there was relationship conflict caused by different perceptions with regards to open and shared discussion between employees and management.

I became increasingly aware of the affect of individual differences in thinking, the impact of these different perceptions and interactions on interrelationships, and the subsequent influence on growth and performance of the organization. However, I found that the differences in cognitive or structural complexity

(Kelly, 1955), referred to in psychological theory, did not explicitly inhibit organizational growth and performance in the literature. In addition, business and academic literature centred on underperforming or fast growth organizations, with the result that the interaction of entrepreneurial and internal stakeholder cognition was largely ignored in established organizations.

My grounding as a consultant in classic organizational theory such as lifecycle growth models, psychological contract, systems thinking and traditional models on management and leadership provided an intellectual context in which I started to consider the above issues. I subsequently embarked on academic research and decided to study the topic of how successful entrepreneurs and managers' cognitive differences influenced their interrelationships in the organizational context. In doing this I was able to bring together my knowledge and experience in organizational development theory (Senge, 1990; Handy, 1995) and cognitive psychological theory to provide insight into the phenomenon.

I began to extend my reading to include how interrelationships and information flow link individuals within the organization, and why it forms an integral aspect of organizational growth and performance. I found that much of academic literature in entrepreneurship focuses on either the centrality of entrepreneurial cognition and biases (Mitchell et al., 2002; Baron and Ward, 2004; Baron, 2006), the entrepreneurial team (West, 2007), or the entrepreneurial organization as separate units of analysis (Gregoire et al., 2010) and entrepreneurial orientation (Covin and Slevin, 1991) in large corporate organizations.

The definition adopted in my research of the entrepreneur as the founder of a new business and an innovator is derived from Schumpeter (1934). Consistent with my experience and reading, Schumpeter also drew a distinction between managers and entrepreneurs. My context of the entrepreneurial organization is defined by Knight (1921), who extended the centrality of the individual to organizational theory by focusing on uncertainty, risk and profit. While these two economists contributed to research by focusing on economic development, dominance of the entrepreneur personality developed as an additional perspective from cognitive scientists. Psychologists focused on individual differences in

personality traits during 1970-1980, but it became clear to me that research into entrepreneurial personality was inconsistent and inconclusive across entrepreneurship studies.

My understanding of the literature is consistent with Sarasvathy's (2008) view that the trait approach to entrepreneurship has been largely abandoned and can be attributed to the lack of consensus. Scholars have subsequently turned to cognitive psychology as a theoretical perspective to understand entrepreneurial differences further. In order to focus my literature critique on entrepreneurial cognition, entrepreneurial personality and its influence on internal stakeholders is not explored. Instead, based on the literature and the gaps in knowledge, the research supports Mitchell et al.'s (2002) assertion that the cognitive lens is an effective tool in understanding the entrepreneurial process.

The starting paradigmatic perspective of my research therefore is that the agent (the entrepreneur) sits within a social context (the organization) in which they influence others, by enacting entrepreneurial cognitive processes. In turn, the social structure has an influence on the entrepreneur, which will affect the way in which the organization grows and performs. The view that these two processes are not mutually exclusive is consistent with my personal and professional experience as well as academic researchers on open systems thinking (von Bertalanffy, 1968; Senge, 1990).

My reading showed that there were a variety of significant influences on entrepreneurial cognition literature. I found that decision-making literature is dominated by traditional, rational and heuristic decision-making models (Tversky and Kahneman, 1973; Mintzberg and Waters, 1985; Busenitz and Barney, 1997; Sarasvathy, 2001, 2008; Vermeulen and Curseu, 2008) and forms a solid empirical and conceptual foundation for this research. In addition, Tversky and Kahneman (1973) identified biases that influence entrepreneurial cognitive processes more than non-entrepreneurs, this alerted me to consider and include these differences.

I discovered that Neisser (1967) had earlier defined cognition as the transformation, reduction, elaboration, storage, and recovery of information. This definition is consistent with my psychological studies on the individual. The use of the phrase ‘entrepreneurial cognition’ refers to the mental representations or schemas that entrepreneurs use to represent new and existing information, decision-making and opportunity recognition. My research also considers Busenitz et al.’s (2003) definition that the way in which entrepreneurs connect new and existing information enables them to recognize opportunities. Although I undertook the cognitive lens in my research, I have adopted the process approach used by Sarasvathy (2001, 2008) to study entrepreneurial activity. The process approach captures the interaction between entrepreneurial cognition and internal stakeholder perception in the context of the organization.

My paradigmatic perspective that the entrepreneur operates in a context provides me with a wider research base within which to explore entrepreneurial interactions. Covin and Slevin’s (1991) organizational research into entrepreneurial orientation and Greiner (1972) and Levie and Lichtenstein’s, (2010) stage models of organizational growth provide empirical and conceptual evidence for the influences of the environment on the entrepreneur in the context of the organization.

The definitions of business growth used in my research reflects what the entrepreneurs perceive as central to their organization’s growth. Growth in my research denotes an increase in amount and size due to internal process of development where growth is considered as a process and not a static point (Penrose, 1959). Achtenhagen et al. (2010) argued that the growth literature is fragmented and academic research needed to be more aligned with practitioner definitions of growth to create value and impact. This argument is in keeping with my own experience as a business founder and researcher.

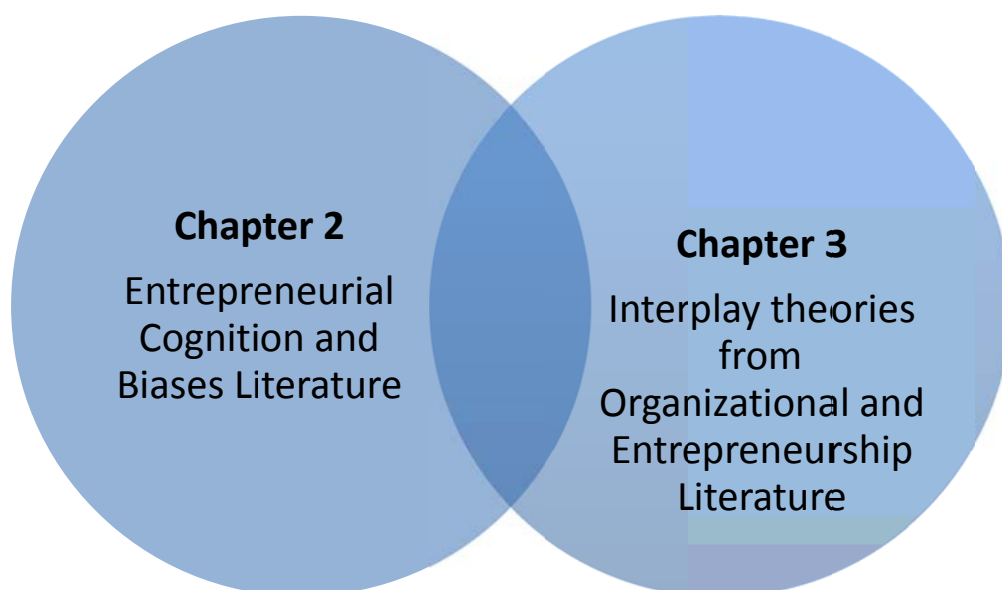
For the purposes of my study, the concept of established entrepreneurial organizations as continuous-growth organizations is derived from the lifecycle and stage literature (Achtenhagen, 2010). Early or high-growth organizations continue to dominate the literature, while continuous-growth organizations are

under-researched with little knowledge on the internal development processes referred to by Penrose (1959).

The insight I gathered over a ten-year period of reading cognition and entrepreneurship literature, lead to specific theoretical perspectives that have recently been captured by researchers. Gregoire et al. (2010) found that there were few researchers who examined cognition as part of the entrepreneurial process across different levels of analysis, perspectives and diverse interpretations. Although a recent study by Lim et al. (2013) extends classical agency theory on entrepreneurial interaction with stakeholders by focusing on feedback to investors. However, I found that the research into the interaction of entrepreneurial cognition with organizational theory is limited.

The significant feature of my research is to combine disparate concepts in a new way to investigate the interrelationship between entrepreneurial cognition and internal stakeholder perception. The nexus between entrepreneurial cognition with internal stakeholder perception spans two areas of the corpus and is represented in Figure 1.1 Span of the Literature Critique and reflects the disparate nature of the concepts investigated in this research.

FIGURE 1.1 SPAN OF THE LITERATURE CRITIQUE



1.3 Research Questions

The primary research question is:

How and why does entrepreneurial cognition affect the interaction with internal stakeholder perception in the organization? (Q1)

There are three supplementary questions that address supporting issues:

- What are the temporal issues regarding the interaction between entrepreneurial cognition and internal stakeholders? (Q2)
- How do biases affect the interaction between the entrepreneur and internal stakeholders? (Q3)
- How does this interaction occur within the context of organizational growth? (Q4)

These questions provide the scope of my research which will explore the ways in which entrepreneurs' thinking affects the interaction with internal stakeholders' perception, focusing on the cognitive aspects of decision-making, opportunity recognition, schemas, and alertness (Q1). The temporal aspects of the decision-making, and opportunity recognition process are considered (Q2). The third question explores the influence of cognitive biases such as counterfactual thinking, representativeness, over-optimism and over-confidence (Q3), whilst the final question draws attention to the interplay in the context of organizational growth and performance (Q4).

The derivation and use of the primary research question and supplementary questions will be explained and justified in Section 5.2 of Chapter 5.

1.4 Research Propositions

The aim of my research propositions is to clarify the important areas of the study that have guided the development of the research questions. In this way the relevant research considered in this study shows how my reading informed and influenced my doctoral journey. Yin (2008: 28) purported that research propositions "guide attention to something that should be examined within the

scope of the study”. In this way, by stating the propositions they help to focus attention on relevant literature in the selection of the concepts in the conceptual framework and shape the data analysis. Furthermore, Yin suggested that research propositions are a helpful way in which to create research boundaries and place limits such as time and activity (Stake, 1995; Creswell, 2007), as well as definition and context (Miles and Huberman, 1994) on the study. The research propositions include the assumptions within which the research takes place, and are clarified in the literature critique in a detailed review providing the justification for the research focus.

These six research propositions below in Table 1.1 are derived from the research questions and from the specific literature discussed in Chapters 2 and 3.

TABLE 1.1 RESEARCH PROPOSITIONS

Propositions	Source (these represent examples from the literature)
1. Entrepreneurs use different cognitive processes to managers (Q1)	Busenitz and Lau (1996); Gaglio and Katz (2001); Mitchell et al. (2002); Busenitz et al. (2003)
2. Entrepreneurs are more affected by cognitive biases than others (Q3)	Tversky and Kahneman (1973); Busenitz and Barney (1997); Baron, (1998); Mitchel et al. (2004); Baron, (2004)
3. Experienced entrepreneurs use their prior knowledge and prior experience to make decisions and spot new opportunities/develop new patterns (Q1)	Gregoire et al. (2010)
4. Entrepreneurs’ timing around decision-making reflects their experience (Q3)	Tversky and Kahneman (1973); Plous, (1993); Bluedorn and Martin (2008)
5a). Sensemaking is composed of communication (Q1) 5b). Sensegiving is different for entrepreneurs and other stakeholders	Gioia and Chittipeddi (1991); Weick, (2009)

(Q1)	
6. Entrepreneurs interact with their business in a mutually reinforcing, interrelated way (Q1, Q4)	von Bertalanffy (1968); Senge (1990); Covin and Slevin (1991); Markman and Baron (2003); Shepherd et al. (2010); Vaghely and Julien (2010)

1.5 Justification for Research Focus

1.5.1 The Practical Significance of the Interplay between Entrepreneurial Cognition and the Internal Stakeholder Perception

The research approach is in line with the earlier 1930's non-reductionist argument (Bygrave, 1989) to studying entrepreneurship, which states that individual entrepreneurs operate as part of a complex system in mutual relationships with each other and nature. In addition, earlier studies have identified that the frequency of interaction affects the identification of organizational issues (Dutton and Duncan, 1987; Thomas and McDaniel, 1990).

The paradox between the entrepreneur as autocratic decision-maker (Likert, 1967) versus the benefits of shared cognition (Tripsas and Gavetti, 2000), are regarded in this research as critical to the organization's growth and performance. Entrepreneurs are alert to new opportunities and create economic wealth, it is therefore considered important that we understand how they use, share and integrate existing information and knowledge with internal shareholders when making decisions. Understanding these interrelated concepts is also relevant for organizational succession planning and learning. The influences on cognitive interactions, shared cognition and an understanding of entrepreneurial cognitive success need to be understood, and the limitations made explicit. Von Bertalanffy's (1934) open systems approach to entrepreneurial cognitive processes has wider reach in the organization than Schumpeter's (1934) earlier economic perspectives that have centralised the entrepreneur in generating growth. In this way the practical significance of

expert entrepreneurs with an excess of seven years experience as defined by Sarasvathy (2008) and their interactions with internal stakeholders can be examined.

This conceptual grounding is especially significant in entrepreneurial cognition research because of the gap in a systematic and an integrated approach to entrepreneurship studies identified by Gregoire et al. (2010). For the purposes of this study the words interplay or interaction are used interchangeably to describe the reciprocal action between the entrepreneur and internal stakeholders.

1.5.2 The Theoretical Contribution of Entrepreneurial Cognition and Internal Stakeholder Interplay

Entrepreneurs are often known to cognitively construct their worlds based on their own perceptions, which are different from those around them (Russell, 1999). This involves being alert to new opportunities and making decisions in uncertain and ambiguous environments with little resources. Much is known about the decision-making and opportunity recognition (OpR) of entrepreneurs and managers within larger organizations, but little academic knowledge can be found regarding the interplay between entrepreneurial cognition and other stakeholders in small-medium enterprises (SME's) and its reciprocal effects.

At present, entrepreneurial cognition and biases are disparate concepts with regards to the impact it has on interrelationships with internal stakeholders. Even more disparate are the temporal, growth, performance and organizational interlinking concepts. By exploring how these interrelationships respond and are affected by each other, these concepts can be linked to form a conceptual foundation for investigation. Mitchell et al. (2007) suggest that the cognitive approach to entrepreneurship is still in its early stages of development and provides an under-researched area to explore the gap in knowledge regarding multi-levels of study. The theoretical gap identified justifies the need for this research into the interaction of entrepreneurial cognition on interrelationships, growth and performance.

1.5.3 The Relevance of Internal Stakeholder Perception in Organizations

There are widely accepted studies (Miller, 1992; Busenitz and Barney, 1997; Sarasvathy, 2001, 2008) that entrepreneur's decision-making and opportunity recognition are the main drivers of growth in their organization. However, in established SME's, management teams form part of the organization's operational and strategic decision-making with responsibility to execute these decisions. Therefore, it is significant for the growth and performance of these organizations to understand the different cognitive processes, expectations, perceptions and experiences affecting the interaction between the entrepreneur and the management team in executing these decisions.

Baron (2004) showed that cognition can affect the success of the entrepreneur and cognition has also been used in organizational studies to change the mindset of internal stakeholders (Barley, 1986; Gioia et al., 1994). However, the exploration of the interaction between the entrepreneur and internal stakeholders in SME's attracts limited attention in studies of established entrepreneurial organizations (Gregoire et al., 2010).

The significance of internal stakeholders is that they are interacting regularly with the entrepreneur in key decisions within the business. In addition, the entrepreneurial organization is repeatedly producing and delivering ideas and opportunities for new products and services (Jelinek and Litterer, 1995: 137) that involve interrelationships with stakeholders and decision-makers.

1.6 Methodology

The research is a qualitative exploratory study, framed within an interpretive constructivist paradigm. This paradigm allowed for interpretations and meanings of cognitive constructs such as decision-making and opportunity recognition of the entrepreneur and internal stakeholders to be captured and explored (Gioia and Thomas, 1996). A case study methodology was adopted with semi-structured interviews of the entrepreneur and the internal stakeholders in Phases I and II. In Phase I nine cases were selected using contacts within the Entrepreneur in

Residence network¹ within the Centre for Enterprise Development and Research (CEDAR) of Lord Ashcroft International Business School, Anglia Ruskin University, Cambridge, United Kingdom. In Phase II, three cases were interviewed every three months for twelve months.

1.7 Outline of the Thesis

The thesis consists of 12 chapters. Chapter 1 introduces the personal impetus for the research topic and provides the academic context.

Chapter 2 explores the literature on entrepreneurial cognitive psychology and individual differences. Chapter 3 provides a critical review of psychological and management literature that focus on the interplay of entrepreneurial interrelationships within an organizational context.

Chapter 4 introduces the conceptual framework derived from the literature and my own experience. Five disparate concepts of cognition, temporality, biases, growth and performance and organizational factors are interlinked in order to explore the interaction between the entrepreneur and internal stakeholders.

Chapter 5 presents the research philosophy, design and methodology and research methods. Chapter 6 describes the data collection processes from Phases I and II.

Chapter 7 presents a descriptive account of the nine cases in Phase I based on the selection criteria and research questions. The chapter describes the criteria by which the three cases were chosen and the subsequent thematic analysis used in Phase II.

¹ Entrepreneur in Residence is a Cambridge network of (primarily) Cambridge based entrepreneurs involved with (Centre for Enterprise Development and Research) CEDAR, Lord Ashcroft International Business School

Chapters 8, 9 and 10 present the empirical findings of the longitudinal study in Phase II over a period of twelve months. Set I, II and III data points reflect the temporal aspects of the data.

Chapter 11 uses both an individual and organizational level perspective to interpret the empirical data using cognitive psychology, classic organizational theories and analytical tools to provide meaning. In addition, The Icarus Paradox is used as a metaphoric conceptualisation, and open systems thinking is used to provide a framework for the modification of the conceptual framework in accordance with the findings and the literature.

Chapter 12 concludes by answering the four research questions, stating both factual conclusions that arose from the findings, and conceptual conclusions. A contribution to knowledge and justification for the claim is presented, followed by modified propositions. In addition, an agenda for future research and my reflections on learning are presented.

Having presented my personal background and curiosity at the interrelatedness of entrepreneurial cognition, management, growth and performance, a brief summary of the academic literature was presented in this chapter. In order to further refine the research area, the following two chapters examine specific literature to identify the gap in knowledge. In this way, the reasons why these research questions were designed and how they were informed are explained in Chapter 5.

Chapter 2 Entrepreneurial Cognition

2.1 Introduction

The substantive literature on entrepreneurial cognition contributes to our understanding of information processing, decision-making and opportunity recognition. This chapter reviews the chronological journey that led to the argument that entrepreneurs use different cognitive processes than do others, and demonstrates the contradiction in empirical studies. In addition, the literature that suggests these differences have other influences on the entrepreneurial process is considered.

2.2 Entrepreneurial Decision-Making

Research that has attempted to understand, define and categorise entrepreneurs has dominated literature since the 1920's (Knight, 1921; Schumpeter, 1934; Kirzner, 1973; McClelland, 1987a). Early economic literature defines the entrepreneur as the creator of a new venture (Schumpeter, 1934; Low and MacMillan, 1988), centralizing the entrepreneur in this process. Others define an entrepreneur as one who searches, discovers and exploits fresh opportunities, creating new products and services in order to commercialize it (Shane and Venkataraman, 2000).

However, early economic theorist definitions of entrepreneurs had little empirical basis (Baumol, 1993; Bull and Willard, 1993) for their argument and failed to develop a consistent trait-based typology that depicted the entrepreneur accurately, and resulted in non-significant results (Brockhaus and Horowitz, 1986; Sexton and Bowman-Upton, 1991; Shaver, 1995). In addition, trait theories failed to explore the value of entrepreneurial interactions between traits and context (Herron and Sapienza, 1992) and were not regarded as dynamic (Pervin, 1996). Bandura (1999) also questioned the scientific utility of the centrality of the entrepreneur.

Craik (1943) was the first to introduce the concept of mental models and use cognitive studies in order to understand how people think, behave and act in an environment. The dominance of inconclusive typologies on entrepreneurial personality officially came to an end with Neisser (1967) who changed the way the entrepreneur was studied by shifting the research from the behaviourist to cognitive perspective. Neisser also concluded that cognitive psychology needed to focus less on linear information processing models and include the study of perception and behaviour. The historical roots of the cognitive perspective thus lies in cognitive psychology developed furthered by Comegys's (1976) focus on cognition style, offering a continuous way to study entrepreneurial cognitive processes and the interactions with others (Mitchell et al., 2004; Baron, 2004).

The distinct manner in which individuals process information in order to recognize opportunity brings with it a research debate on differences between entrepreneurs and others in terms of their cognitive or thinking styles. Miller (1987) claimed that analytical cognitive style was risk-averse and that problem solving and decision-making was incremental. This was in contrast to a holistic cognitive style, which is less risk-averse, goes beyond the norm of existing frameworks and makes larger steps in decision-making. The consistency in definition is represented further by Streufert and Nogami (1989) and later by Riding and Rayner (1998) who added that cognitive style is defined as the way people process and arrange information in order to reach a decision.

The Cognitive Style Index (CSI) is classified under the Holistic-Analytic family of styles (Kirton, 1976; Allinson and Hayes, 1996; Sadler-Smith and Badger, 1998), which suggested that these dimensions interact with the external environment to affect behaviour and attitudes. The CSI is a tool for measuring cognitive style and it suggests that the way in which individuals process information can be at either end of the continuum between intuitive and analytical. Intuitivists tend to have an open-ended approach to problem solving, relying on random methods of exploration requiring a broad perspective, whilst analysts tend to be more compliant and prefer a structured and systematic approach to problem solving (Allinson and Hayes, 1996).

Overall, cognitive style is regarded by some researchers as the more stable aspect of entrepreneurs (Alvarez and Busenitz, 2001; Mitchell et al., 2002; Katz and Shepherd, 2003). Kozhevnikov (2007) suggests that although cognitive style is theoretically and methodologically challenging to assess, it is consistently regarded as a psychological dimension representing the acquisition and processing of information. Furthermore, there is a lack of literature that links cognitive style with growth. Although studies by Sadler-Smith et al. (2004) and Dutta and Thornhill (2008) found that organizational growth was more influenced by entrepreneurial behaviour than cognitive style.

The two dimensions of CSI have some similarity with Mintzberg's (1978) 'entrepreneurial' and 'planning' modes. He observed growth in an entrepreneurial organization and found different modes of decision-making amongst the entrepreneur and managers. He claimed that the entrepreneur thought in terms of 'sprints' and 'pauses' with regards to growth. By studying the changing growth patterns, he was able to contrast the entrepreneurial mode with the planning mode and showed how entrepreneurs moved adeptly between narrow and broader perspectives. Furthermore, Gardner (1985) emphasised that intimate knowledge of the organization overlapped with expertise and did not necessarily equate to success and in this way support Mintzberg's (1978) study.

Although the CSI dimensions of intuitive and analytical, and Mintzberg's (1978) entrepreneurial and planning modes are similar in definition, the arguments contradict each other. Through a longitudinal study, Mintzberg demonstrated that because expertise knowledge can reside within the entrepreneur and management by engaging intimately with the detail of products, both are able to switch between entrepreneurial and planning mode. The CSI argument by contrast, positions the entrepreneur in either the analytical or intuitive modes irrespective of product or organizational knowledge.

Mintzberg's (1978) decision-making theory showed less applicability across a cross-cultural study undertaken by Pearson and Chatterjee (2003). In addition, Cecil et al. (2003) conducted a study looking at managerial roles and found that although there was a degree of overlap, the findings did not apply in South-East

Asia. They concluded that Mintzberg's (1978) principles were not culture-free or cross socio-cultural applicable and were specific to a Western culture. One of the key differences identified by Cecil et al. (2003) relevant to this research is that they found communication flow and dissemination of information by managers were entrenched in the organization's culture and managerial work. Although Mintzberg's argument offered less support for cognitive differences, cognitive psychologists continue to argue for individual differences in the way information is captured, recognized and processed (Miller, 1987).

In this way, several researchers have specifically highlighted cognitive differences between entrepreneurs and non-entrepreneurs (Fredrickson and Mitchell, 1984; Smith et al., 1988; Busenitz and Lau, 1996; Busenitz and Barney, 1997; Mitchell et al., 2000; Gaglio and Katz, 2001; Mitchell et al., 2002). Other empirical work by Markoczy and Goldberg (1995) found that there was a significant cognitive difference between managers at the same level of the same organization. Although, Fiet (2002) contradicts cognitive differences and argues that successful entrepreneurs, like managers, routinely employ linear rational thinking in the opportunity discovery process.

Cognitive differences were also underscored by Kaish and Gilad (1991), who assessed the number of materials, and the length of time that entrepreneurs and managers took to read it. They found that entrepreneurs use non-verbal scanning, and paid special attention to risk cues, whilst managers focused on the economics of the opportunity. However, Busenitz (1996) did not achieve these results with a repeat study on assessing the entrepreneurial alertness hypothesis. Although, studies by Bird (1988), Esienhardt (1989) and Stevenson et al. (1999) confirmed that entrepreneurs, unlike non-entrepreneurs, made quick decisions and recognized patterns in their field.

Researchers continued to find that entrepreneurs used more heuristic based (mental short cuts) decision-making than managers (Busenitz and Lau, 1996; Busenitz and Barney, 1997; Mitchell et al., 2002; Busenitz et al., 2005). In other studies, Sarasvathy et al. (1998) used think-aloud verbal protocols to show that entrepreneurs and bankers think and process information differently. However,

Markman and Baron (2003) recognized the need for further study into differences such as how entrepreneurs used configurations to identify opportunities.

The specific risk and uncertainty characteristics of decision-making also form part of entrepreneurial cognition literature. General decision-making called 'prospect theory' states that entrepreneurs place more weight on losses than on gains (Tversky and Kahneman, 1973). Tversky and Kahneman argued that this aversion to loss was the opposite of the certainty effect that has an affect on decision-making.

Kahneman et al. (1982) argued that loss aversion, which can be viewed as a risk calculation by the decision-maker, is a reason to maintain the status quo within an organization. However, Weber et al. (2004) and Hertwig et al. (2004) challenged prospect theory claiming that an entrepreneur's experience in different events will determine how accurately they define risk. Nevertheless, there is still a lack of empirical research as to whether the risk-seeking entrepreneur is more likely to start their own business, than manage the downside of losing the opportunity (Baron, 2004).

Entrepreneurial cognition research continued to gain momentum between the 1990's and early 2000 as a framework within which to investigate how entrepreneurs think (Baron, 1998), and how it influenced communication and action (Baron, 2004). The framework is purported by Mitchell et al. (2002, 2007) to be the knowledge structures entrepreneurs use to make assessments, judgments or decisions for opportunity evaluation and growth. By this definition, the researchers contextualised entrepreneurial cognition within their own unique domain of opportunity evaluation and growth, thus externalising entrepreneurial cognition. The externalising and interplay of these concepts of opportunity tension later became central to the Levie and Lichtenstein's (2010) dynamic state model discussed in Chapter 3.

Mitchell et al. (2007) in a special journal review on entrepreneurial cognition, extended the research area by setting research boundaries and clarifying the use

of definitions. They firstly examined four approaches that dominated the literature at that time: heuristic based logic (Tversky and Kahneman, 1973, 1974); perception processes and alertness (Kirzner, 1973; Kaish and Gilad, 1991); entrepreneurial experience in information processing (Mitchell, 1996) and effectual reasoning (Sarasvathy, 2001). Although the four approaches were different, the authors acknowledged the commonality in the explanations of these approaches. In their review they also examined the discussion on cognitive style fit between entrepreneurs and the organization (Fiske and Taylor, 1991; Allison and Hayes, 1996; Markman and Baron, 2003; Brigham et al., 2007) using the intuition-analysis continuum.

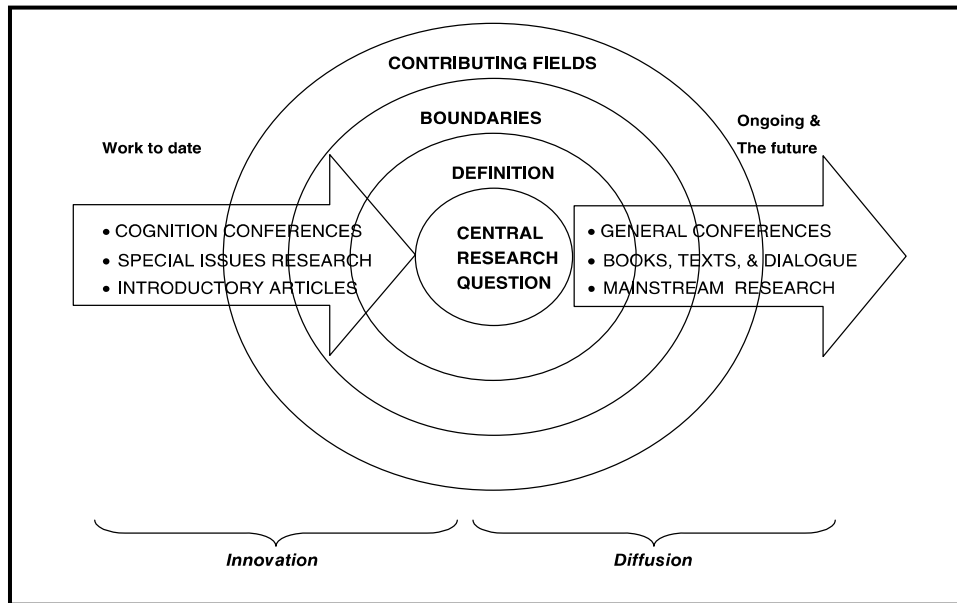
Mitchell et al. (2007) then considered West's (2007) empirical work in which he developed entrepreneurial team collective cognition (ETCC) that extends entrepreneurial cognition research and is discussed further in Chapter 3. They included a path for a cross-disciplinary approach for easing tensions (Aldrich, 1999) in the review from contributing fields of entrepreneurial and cognition research. They subsequently produced the illustration in Figure 2.1 after considering the progression in the entrepreneurial cognition domain to show how the field has developed. The illustration shows how innovations in entrepreneurial cognition emerged out of a diffusion of cross-disciplines in which concepts are exchanged after tensions are resolved.

Mitchell et al.'s (2007) use of innovation and diffusion as a framework to explain the emergence of entrepreneurial cognition was adopted from Rogers (2003) who presented the factors and timeline involved that emerge when a new idea, or product, becomes accepted by a wider audience. The use of this framework by Mitchell et al. (2007) reflects the peer-to-peer nature of academia that Rodgers argued produced higher levels of diffusion sooner than mass-market discussions of an innovation. In this way, the application of the innovation and diffusion framework to academia offers insight into how new fields of research becomes accepted.

By using this framework, Mitchell et al. (2007) was able to highlight the need for further research on the interaction of the entrepreneurial context and individual

cognitive mechanism to create entrepreneurial attitudes, intentions and behaviours.

FIGURE 2.1 FIELD DEVELOPMENT IN ENTREPRENEURIAL COGNITION RESEARCH



Source: Mitchell et al. (2007)

Vaghely and Julien (2010) later contributed to entrepreneurial cognition literature by concluding that entrepreneurs engaged in decision-making by changing from using information that they have rationally internalized to information that is subconsciously made up through reconstruction. This conclusion fits within the four approaches stated earlier by Mitchell et al. (2007) on the use of information processing in entrepreneurial experience.

2.3 Rational versus Effectuation

The rational decision-making model that has been extensively challenged by entrepreneurial cognition researchers cannot describe the realities of strategic decision-making (Simon, 1959; Allison, 1971). Rational decision-making assumes that individuals make rational decisions and behave on purpose (Eisenhardt and Zbaracki, 1992). Historically however, the rational model of decision-making dominated strategic and entrepreneurial decision-making

literature and assumed that choices are made on the basis of the entrepreneur's probability judgments and by maximizing expected utility (Alvarez and Barney, 2006; Ye et al., 2008). Alvarez and Barney's (2006) suggestion that the entrepreneurial process of creating firms to maximize value and reduce transaction costs was opposite to Sarasvathy's (2001) earlier effectuation reasoning theory that differs fundamentally from the rational decision-making model.

Effectuation posits a strategic approach typified by a response, which is adaptive and follows the Knightian (1921) uncertainty logic. In contrast to effectual reasoning, Wiltbank et al. (2006) claimed that the causal reasoning approach is one of planning even in uncertain environments. This continuum is similar in character to the earlier approaches of CSI (Sadler-Smith and Badger, 1998), and Mintzberg (1978). This said, effectuation theorists have built on previous research of cognitive differences, that entrepreneurs use very different decision-making processes and redraw existing information into new opportunities (Sarasvathy, 2004; Wiltbank et al., 2006).

Sarasvathy's (2001) research was a cognitive science-based study of 27 expert entrepreneurs who through success and failure developed a total of \$200 million to \$6.5 billion organizations. Each entrepreneur had an excess of 15 years of experience through success or failure. This is a significant study for the support of cognitive differences highlighted earlier (Smith et al., 1988; Busenitz and Lau, 1996; Busenitz and Barney, 1997; Gaglio and Katz, 2001), that entrepreneurs used effectual reasoning while managers used causal reasoning in decision-making.

Although the study results support cognitive differences between entrepreneur and others, Sarasvathy (2001) argued that successful entrepreneurs are not genetically developed through personality traits. She asserted that novice and experienced entrepreneurs could use a 'common logic', or thinking process, to solve entrepreneurial problems. In addition, through failure and the use of a few resources, a novice entrepreneur can learn and quickly become an expert. Although there are differences in cognition and managers can learn the entrepreneurial approach to decision-making, this argument still supports

Mintzberg's (1978) earlier claim that the entrepreneurial mode of thinking can be learned.

Furthermore, based on her findings, Sarasvathy (2001) asserts that managers use causal reasoning in which they focus on a given set of means to achieve the most efficient result while entrepreneurs limit the downside by focusing on the possible effects that can be achieved through their individual means (Sarasvathy, 2001; Davidsson and Wiklund, 2001). These findings offer support for prospect theory (Tversky and Kahneman, 1973).

Although Sarasvathy (2001b) proposed that the causal model of rational thinking does not adequately describe how entrepreneurs actually behave, her study supported other empirical studies by Allinson et al. (2000). Supporting Sarasvathy, Corbett (2002) also found that successful entrepreneurs demonstrated a greater intuitive thinking style versus managers who prefer an analytical or linear approach to information processing and decision-making.

Table 2.1 identifies separate schools of thought in entrepreneurial decision-making with opposing ends of a continuum over a period of more than thirty years of research.

TABLE 2.1 ENTREPRENEURIAL DECISION-MAKING

Concept	Researchers
Entrepreneurial and planning mode	Mintzberg (1978)
Heuristic and analytical	Allinson and Hayes (1996); Vaghely and Julien (2010)
Effectual and causal	Sarasvathy (2001)
Intuitive thinking style	Allinson et al. (2000); Corbett (2002)
Intuitive and rational; automatic and controlled	Vermeulen and Curseu (2008)

Linear and nonlinear thinking	Groves et al. (2011)
-------------------------------	----------------------

Sarasvathy's effectuation (2008) also looked at the constraints that entrepreneurs face in uncertain conditions and how others adopt and share in the vision. In a different study, Sarasvathy et al. (2009) used Masters of Business Administration (MBA) students and experienced entrepreneurs as their respondents. They found that entrepreneurs framed the hypothetical problem they were given by using effectual rather than predictive reasoning. The two groups were diametrically opposed with experienced entrepreneurs resisting taking predictions seriously and MBA students following a path that would lead them towards goals they had set for themselves. These results reinforced early studies of cognitive differences.

Gibcus et al. (2006) extended Sarasvathy's (2001) effectuation theory by developing a typology of entrepreneurial decision-makers. The typology includes five different types of entrepreneurial decision-making of Dare Devils, Lone Rangers, Doubtful Minds, Informers' Friends and Busy Bees. This typology was developed from the analysis of 646 entrepreneurs in SME's. The main differences between the typologies relate to:

- 1 the type and frequency of decision-making which shows that, the more decisions entrepreneurs make, the more expertise they develop. It also shows that different entrepreneurs have different levels of dependency on others in the process of decision-making;
- 2 entrepreneurs vary in their level of confidence when making a decision;
- 3 entrepreneurs have different levels of innovativeness;
- 4 experienced entrepreneurs searched for less information than novice entrepreneurs but also entrepreneurs differ in the way they collect information;
- 5 entrepreneurs use different times and alternatives when considering a decision;

- 6 entrepreneurs have a different perception of risk;
- 7 entrepreneurs experience different challenges on their way to making a decision.

Their taxonomy confirms previous research by Julien et al. (1997) and later by Wennekers and Thurik (1999), that different types of entrepreneurial decision-making exists. Gibcus et al. (2006) acknowledged however that their taxonomy is more in line with a decision-making behavioral perspective.

2.4 Frameworks for Entrepreneurial Decision-Making

Brigham et al. (2007) identified three categories of responses that they believed lead to the failure of studies to reach a consensus on the individual entrepreneurial traits. These three distinctive camps for studying entrepreneurial cognition are:

- 1 Improper methodologies that led to a focus on personality;
- 2 External/economic explanations of entrepreneurial behaviour;
- 3 Cognitive determinants of entrepreneurial behaviour.

Mitchell et al. (2007) extended this thinking and proposed that research into entrepreneurs would be enriched by drawing concepts from both entrepreneurship and cognitive research fields. In addition, they argued that any entrepreneurial perception and thinking processes should take place within a context, because an entrepreneur is constantly communicating and interacting with the business. In this way they support Brigham et al.'s (2007) argument that instead of categorising the study of entrepreneurs, researchers should focus on the interactive relationship between the entrepreneur and their work context.

Entrepreneurial strategic decision-making (ESDM) (Vermeulen and Curseu, 2008) extends the cognitive determinants criteria for entrepreneurial cognition research suggested by Mitchel et al. (2007), but the two frameworks overlap on the concepts of personality and environment. Although there are many theories

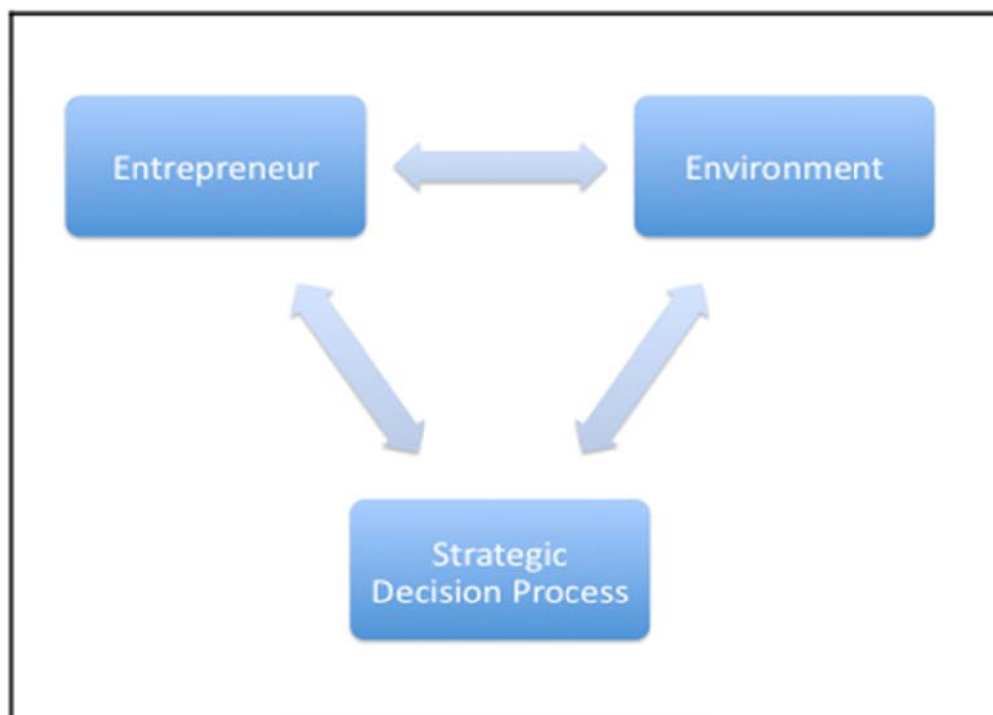
on management and organizational decision-making, ESDM is seen to be different because of the complexity of the decisions, the uncertainty of the situation, and the time constraints that entrepreneurs experience.

Vermeulen and Curseu used EIM Business and Policy Research data to develop the triadic reciprocal framework to decision-making (see Figure 2.2). EIM is a research and consultancy organization in the Netherlands that has been carrying out policy and entrepreneurship research for more than 75 years.

Vermeulen and Curseu's framework interlinks three components:

- 1 Different types of entrepreneurs with a focus on personality types;
- 2 The environment which includes stakeholders;
- 3 The strategic decision itself.

FIGURE 2.2 A FRAMEWORK FOR ENTREPRENEURIAL DECISION-MAKING



Source: EIM (2004) taken from Vermeulen and Curseu (2008)

In this figure, the first component, 'Different types of entrepreneur', focuses primarily on personality types and characteristics reflecting earlier research on the centrality of the entrepreneur. The figure underpins the taxonomy of five personality types (Gibcus et al., 2006) discussed earlier and emphasises the question 'who are entrepreneurs?' However, Vermeulen and Curseu (2008) deemed cognition to be an important aspect of ESDM.

The second component, 'the environment', includes the uncertain and chaotic (Busenitz and Barney, 1997) environment in which entrepreneurs operate and the associated risks (Knight, 1921), which are similar to the construct in Brigham et al.'s (2007) framework of external/internal explanations of behaviour.

The final component considers traditional and rational decision-making theories, which follow a particular pattern of rationality (Mintzberg, 1978; Simon, 1979).

This generic cognitive model for ESDM argues that entrepreneurs **handle** information using a two-way process of automatic (intuitive) and controlled (rational) processing or 'dual-processing', also called heuristic and systematic thinking (Baron, 2004). The interplay between these two cognitive systems underpin strategic entrepreneurial decision-making (Dane and Pratt, 2007) and is consistent with earlier studies on entrepreneurial cognitive differences.

In this generic entrepreneurial cognitive decision-making model, heuristics are acquired through experience and interact with the more analytical information processing used by entrepreneurs (Vermeulen and Curseu, 2008). Heuristic information processing in this model includes: schemas from long-term memory developed previously and the use of cognition. The model also uses the cognitive aspects of working memory to explain the explicit and implicit nature of how knowledge is transformed in an interdependent process (Dane and Pratt, 2007).

Groves et al.'s (2011) empirical study of 219 professionals confirmed part of the argument for the differences between entrepreneurial cognition and non-

entrepreneurial cognition. Their study offered support for ESDM that entrepreneurs switched between linear and non-linear decision-making processes. The researchers defined non-linear thinking as intuitive, creative and emotional, and linear thinking as analytical, rational and logical. They found that the entrepreneurs switched more than actors, accountants and front line managers but the same as senior executives. Another finding was the link between how long an organization was in business and their ability to switch between linear and non-linear thinking, emphasising the importance of experience and age in cognitive development. Their finding that senior managers and entrepreneurs had similar profiles and balanced linear and non-linear decision-making is similar to Mintzberg's (1978) argument that cognitive processing can be learned.

Considering the extensive empirical and conceptual literature, Gregoire et al. (2010) claimed that entrepreneurial cognitive science is still considered to have weak theoretical and conceptual foundations, and is in need of improvement in its application to managerial sciences. The complexity is compounded by several different disciplines which entrepreneurial process research has emerged from such as, economics, psychology, sociology and cognitive science. In addition, each discipline emphasises different levels of analysis. Although Gregoire et al. (2010) have not referenced Mitchel et al.'s (2007) earlier innovation and diffusion framework, their research argument also reflects that entrepreneurial cognition is an emerging field. Gregoire et al. (2010) extends this perspective by adding that as a developing field, there is a need to articulate and coalesce around common organizing themes and to develop a conceptual agenda for entrepreneurship.

In an attempt to fulfil the lack of common organizing themes, Gregoire et al. (2010) reviewed 154 articles using an entrepreneurial cognitive perspective from 1976-2008, and argued specifically for clear articulation of cognition between the entrepreneur and the organization. They found that only a small percentage of articles researched cognition as a process, and included terms, such as sense-making, and interactions between individuals and their environment. Another assertion they made was that articles which included individual cognitive differences, cognition as a process and different levels of analysis, were

considerably limited in terms of an empirical basis. They used three areas to support their agenda in order to augment the contribution that the cognitive perspective makes to management research, and to address existing challenges that have resulted from a lack of a systematic agenda as shown in Table 2.2.

TABLE 2.2 THREE CORE AREAS FOR A COGNITIVE RESEARCH AGENDA

Developments of Entrepreneurial Cognition	Process Orientation (Interaction Between Cognitive Elements)	Across Levels of Analysis
<p>Founders of SME's rely more on decision heuristics than non-founders (Busenitz and Barney, 1997).</p> <p>Using heuristics is an advantage in highly uncertain tasks (Gaglio, 2004; Simon et al., 2002).</p> <p>Is the development of heuristics due to traits, environment constraints or learned preferences (Baron, 1998; Forbes, 2005; Simon and Houghton, 2002).</p> <p>Is the cause of cognition due to internal or external factors (Shaver and Scott, 1991).</p> <p>Effects of entrepreneurial action on cognitive elements (Weick, 1991)</p>	<p>Knowledge is not distributed evenly in society (Hayek, 1945).</p> <p>Prior knowledge is a factor in identifying opportunities (Shane, 2000; Shepherd and DeTienne, 2005).</p> <p>Questioned studies on how individuals leverage prior knowledge (Dimov (2007b).</p> <p>Developed a model on opportunity recognition (Gregoire et al., 2010).</p> <p>The study of interactions considering two cognitive phenomena is needed (Walsh, 1995).</p>	<p>Constraints on uncertainty and cognitive implications using effectuation (Sarasvathy, 2001).</p> <p>A different approach to cognition information processing is needed (Lant and Shapira, 2001; Hodgkinson and Healey, 2008).</p> <p>Theoretical, methodological and empirical cognition research at multiple levels needs to be undertaken (Elsbach et al., 2005; Haynie et al., 2010).</p>

Source: Gregoire et al. (2010)

Building on Mitchell et al.'s (2007) emergence of entrepreneurial cognition as a research area, Table 2.2 illustrates the research forms proposed by Gregoire et al. (2010) that can be explored systematically.

2.5 Temporal Theories in Decision-Making

Temporal influences on cognition were not considered by the Gregoire et al. (2010) review of entrepreneurial cognition articles, and they are largely ignored by other researchers. However, as an aspect affecting decision-making, temporality has previously been considered in terms of new venture creation and entrepreneur's perception of timing with tasks (Bird, 1992; Bluedorn, 2002). A study based on Type A-Type B personality models (Freidman and Rosenman, 1974) found that the more polychronic the individual, the greater the striving towards achievement and the more extraverted they were (Digman, 1990). A further study of 20 firms from the telecommunications and publishing industries found that the higher the level of polychronicity, or the ability to do a variety of things at the same time, the more an individual valued doing things faster (Onken, 1999).

Das and Teng (1997) asserted that cognitive and entrepreneurship research failed to incorporate time as a variable, adding that a framework which includes traits, cognitive factors and time, needs to be developed. Further researchers have argued that actions and interventions brought to the organization by entrepreneurs and top management display a temporal aspect (Balkin et al., 2000). Although temporal studies are limited, an earlier study of temporality in larger organizations looked at strategic decision-making and the time it took for management to implement a smoking ban (Willemsen et al., 1999). Their study found that the decision-making process consisted of three phases of orientation, negotiation and implementation. In terms of the interaction between managers and managing directors, they found that strong-minded managing directors convinced management that a complete ban was necessary. An additional finding was that Managing Directors resorted to a confrontational and centralised decision-making process within a given time, which correlates with the typology developed later by Gibcus et al. (2006).

More recently Bluedorn and Martin (2008) undertook a study into past and future temporal depths of entrepreneurs and noted a positive correlation between past and future temporal depths. They suggested that understanding temporal issues

and the importance of time is another way of understanding entrepreneurs and the contexts within which they work. The research discovered that the further entrepreneurs thought in the past, the further into the future they tended to think as well. Bluedorn and Martin (2008) suggested that there was a gap in research findings with regards to temporal depth and entrepreneurial decision-making. The element of entrepreneurial timeliness is only briefly acknowledged in literature with regards to the interplay between cognitive aspects of the entrepreneur and the business (Vaghely and Julien, 2010).

2.6 Opportunity Recognition, Alertness and Cognitive Learning

Another aspect of entrepreneurial cognition was defined by Kirzner (1973) as alertness or the ability to notice without searching, to recognise overlooked opportunities that have not been seen by others, in order to generate economic values such as profit (Baron, 2004, 2006). Kirzner suggested that more alert entrepreneurs have more accurate mental models, also called 'schemas', that drive opportunity recognition.

Busenitz (1996) argued that studies of the differences in alertness between entrepreneurs and non-entrepreneurs have produced mixed results and require significantly improved empirical and theoretical research. In this way, Gaglio and Katz (2001) developed a conceptual model of entrepreneurial alertness, hypothesising that individuals who possess this alertness schema will notice change in the market place, and adjust their schemas accordingly (Foss and Klein, 2010). And because of this alertness, Baron (2004) separately argued that entrepreneurs would be able to adapt their mental framework to 'think outside of the box'. Although, how this adaptation process takes place is unclear from their research.

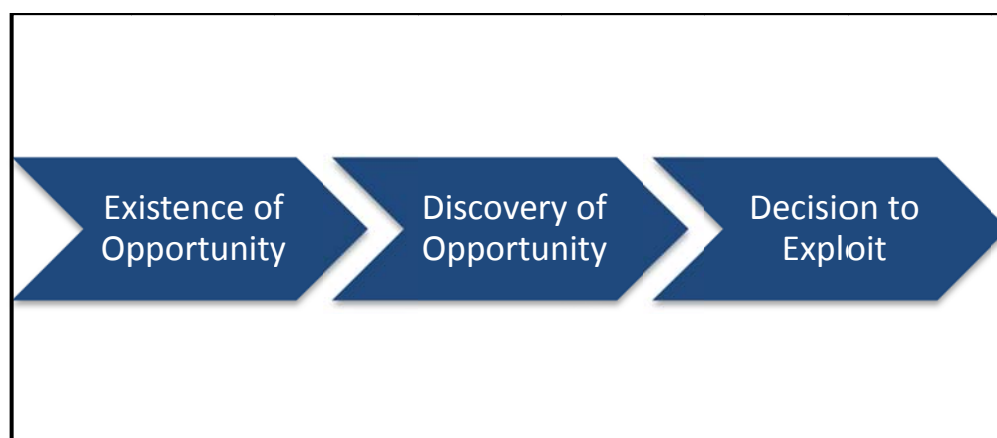
Alertness and the way in which entrepreneurs view patterns or configurations of opportunities have largely been neglected in research, even though it allows them to develop superior businesses (Markman and Baron, 2003; Baron, 2004). Complementing this position, Shane (2003) argued that entrepreneurship could be explained through the nexus between the entrepreneur and opportunity.

However, studies on the entrepreneur and cognitive processes such as decision-making and opportunity recognition do not take into account Festinger's (1957) general theory of 'cognitive dissonance'. He defined cognitive dissonance as cognitive elements that exist when an individual deviated from reality. Festinger also argued that the existence of dissonance would drive individuals to achieve cognitive consonance (Baron, 2007) when integrating new information with existing information to make a decision. Not much attention is given to cognitive dissonance in the entrepreneurship literature, but Shaver (in Baron et al., 2007: 336) asserted that it is a reasonable explanation to understand the behavior in failing entrepreneurial organizations.

In this way, reactions and interactions between stakeholders in terms of the reduction of cognitive dissonance in decision-making can be explained through this theory. More specifically, Festinger (1957) argued that the factors relating to the importance of the decision, the attractiveness of an alternative decision, and other cognitive elements would determine how stakeholders think about complying with a decision that was made.

Figure 2.3 has been adapted to demonstrate Shane's (2003) one-directional entrepreneurial process in opportunity recognition.

FIGURE 2.3 THE DIRECTION OF THE ENTREPRENEURIAL PROCESS



Source: Adapted from Shane (2003: 12)

Shane (2003: 21) argued that the existence of opportunities is either Schumpeterian (1934) or Kirznerian (1973). He asserted that Schumpeterian opportunities are “innovative and break away from existing knowledge”, whilst Kirznerian opportunities are “not very innovative and replicate existing organizational forms”.

The discovery of opportunity is based on experience and information that some people have and others may not have (Baron, 2006), and complements the research processes of entrepreneurs (Vermeulen and Curseu, 2008). In this way, the decision to exploit an opportunity is characterized by individual differences that include cognitive processing and were highlighted earlier (Busenitz and Lau, 1996; Busenitz and Barney, 1997; Gaglio and Katz, 2001; Mitchell et al., 2007).

Baron's (2004) assertion that the cognitive lens is more useful than the economic lens aligns with Gregoire et al.'s (2010) later arguments, and is included in their analysis of using the cognitive perspective in entrepreneurship. Baron (2004) focused specifically on opportunity recognition and organizational growth putting forward three cognitive elements:

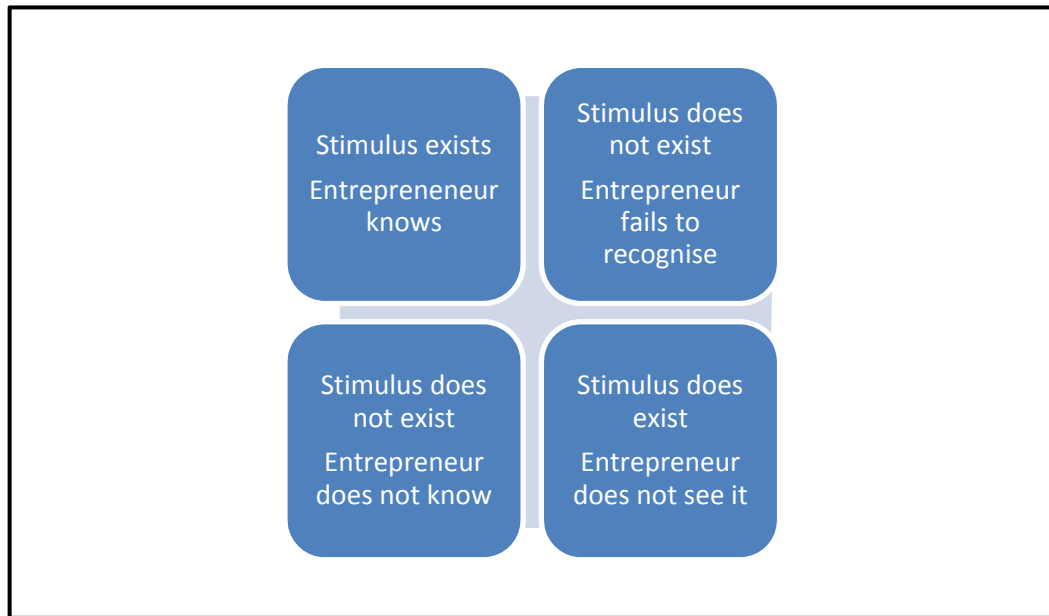
- 1 the importance of the perceptual process in the recognition of patterns or configurations;
- 2 insights from signal detection and regulatory focus theory;
- 3 the role of schemas, such as alertness.

He argued that it is not the uniqueness of the opportunity, but the ability of the entrepreneur to see it that is important. In this way, Baron's (2004) perspective draws attention to the individual's role in opportunity recognition which is distinctly different to the more complex dynamic perspective of entrepreneurial cognition identified by Gregoire et al. (2010).

Baron's (2004) signal detection theory suggests four situations relevant to opportunity recognition as represented in Figure 2.4 in which an individual will determine whether a stimulus exists or not. In turn, signal detection theory is affected by the promotion aspects of regulatory theory in which an individual

will focus on accomplishment, and then recognize a stimulus when it is present. In contrast, the prevention aspect of regulatory theory means that the individual will avoid negative outcomes by concluding that the stimulus is not present and avoid opportunities that do not exist.

FIGURE 2.4 SIGNAL DETECTION THEORY



Baron (2004) claimed that successful entrepreneurs are focused on accomplishment and therefore adopt a promotion focus while non-entrepreneurs have a prevention focus and therefore are less likely to engage with opportunities. This distinction offers further insight to the literature on cognitive differences between successful entrepreneurs and non-successful entrepreneurs at the individual level of analysis. Baron (2006) later added to Kirzner's (1979) theory that alertness rests on other cognitive capacities such as high intelligence and creativity, and stressed the necessity of cognitive processes in opportunity recognition.

Mitchell and Shepherd (2010) further developed Baron's (2004, 2006; Baron and Ensley, 2006) argument that the ability of the individual and not the opportunity has to be taken into consideration. In a study with 121 technology entrepreneurs making 1,936 decisions about hypothetical opportunities, they discovered that the images an entrepreneur has of vulnerability and capability, impact the images

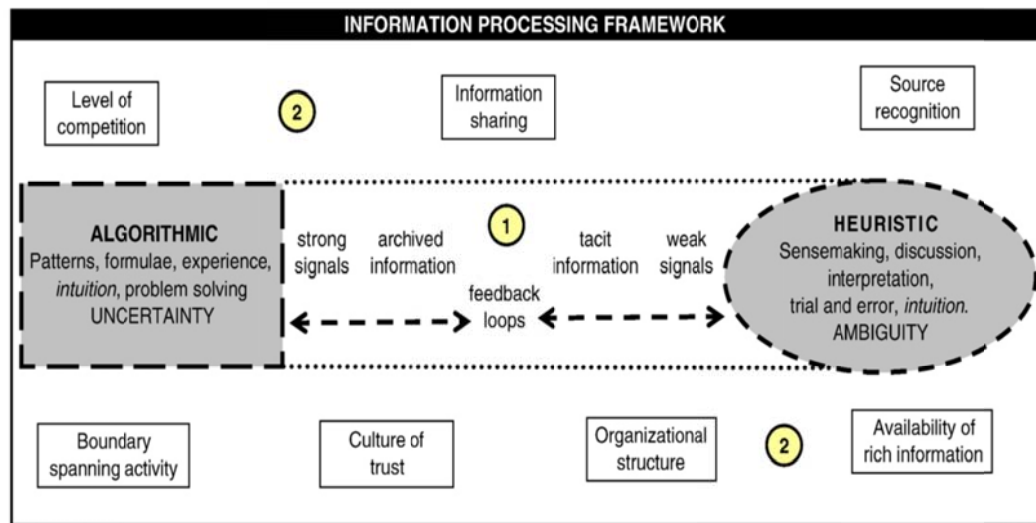
of opportunity. Earlier researchers had argued that an individual opportunity recognition process may also be influenced by the organization's ability to integrate new knowledge, and conversely that the entrepreneur's ability to see opportunities can influence the learning of the team (Lumpkin and Lichtenstein, 2005).

Deakins et al. (2000) argued that the literature on individual entrepreneurial learning in SME's is limited with the focus traditionally concentrated on larger organizations. However, since then researchers have developed entrepreneurial learning further by adding that entrepreneurs learn through doing and emphasising the importance of studying the interactive learning between the entrepreneur and the business as a process (Cope, 2005; Dutta and Thornhill, 2008; Lumpkin and Lichtenstein, 2005; Politis, 2005).

2.7 Information Processing

Information processing is defined as the ability to seek and integrate new knowledge that might influence an individual's opportunity recognition processes (Lumpkin and Lichtenstein, 2005). Although they focused on learning, they claimed that entrepreneurs transform information and data into knowledge for the organization in order to increase strategic assets. Vaghely and Julien (2010) also used the insight of information process theories of algorithmic and heuristic information processing to demonstrate how entrepreneurs identify opportunities (Figure 2.5). The two main aspects of their framework are firstly, the algorithmic thought processing, which is categorised by intuition, patterns and problem solving; and secondly, the heuristic thought processing which is categorised by sense-making (Weick, 1979), discussion, interpretation and intuition.

FIGURE 2.5 THE ENTREPRENEURIAL INFORMATION PROCESSING FRAMEWORK



Source: Vaghely and Julien (2010)

Vaghely and Julien (2010) found that four out of ten entrepreneurs were strong information processors who switched adeptly between algorithmic and heuristic modes of thought. This supports decision-making research that was discussed earlier between Mintzberg's (1978) heuristic and analytical thinking and Vermeulen and Curseu's (2008) generic cognitive two-way process of automatic (intuitive) and Groves et al.'s (2011) controlled (rational) processing and linear and non-linear.

In this way, Vaghely and Julien's (2010) emphasis on schemata and scripts are associated with Neisser's (1967) information processing model. However, they noted their research limitations with regards to the size of the database for statistical analysis, and the restrictions of using primarily manufacturing based case studies only. They regarded communication transactions as significant to understanding change, and to enable people to make sense of ambiguous information and interpret data.

2.8 Schemas

Cognitive social theory introduced the idea that in any given situation the entrepreneur has mental models, also called schemas, of how things work

(Gardner, 1985; Mitchell et al., 2002). Schemas are also defined as images that allow information to be organized and expectations to be formed and enacted (Gioia and Poole, 1984). However, other definitions relevant to entrepreneurial cognition refer to schemas that are used to recognise and observe opportunities, and make decisions with regards to organizational growth (Busenitz and Barney, 1997; Baron, 1998; Mitchell et al., 2002).

Casson (2010) extended the use of schemas further by linking Kirzner's (1973) alertness theory to schemas, and contended that entrepreneurs have more complex schemas than non-entrepreneurs. In addition, they contributed to the argument on entrepreneurial cognitive difference by showing that the counterfactual bias (Roese, 1997; Baron, 1998) is more prominent in entrepreneurs than non-entrepreneurs. Their research showed that the process of past successes, or previously formed schemas, can influence present and future decisions thus re-enforcing the way in which entrepreneurs perceive opportunity. This example of a process orientation articulated by Gregoire et al. (2010), differentiates the cognitive perspective of entrepreneurship from the behaviourist view by emphasising the interaction between cognition and the environment.

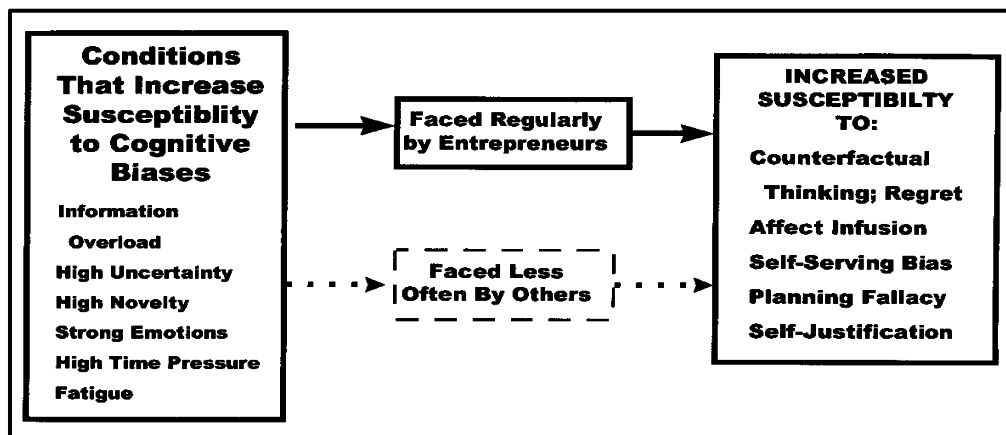
2.9 Cognitive Biases and Heuristics

Cognitive mechanism such as biases and heuristics influence entrepreneurial decision-making in rational and non-rational ways (Eisenhardt and Zbaracki, 1992). Heuristics are mental short cuts and a set of decision rules that help decision-makers cope with uncertainty (Busenitz and Barney, 1997; Simon and Houghton, 2002). Heuristics may also lead to behavioral biases that could result in potentially severe decisional errors (Tversky and Kahneman, 1973; Simon et al., 2002; Forbes, 2005).

In addition to biases and heuristics affecting decision-making, researchers have noted that entrepreneurs have a tendency towards risk-aversion (Bellu et al., 1990) which is consistent with prospect theory. Palich and Bagby (1995) later asserted that entrepreneurs' perceptions of risk reflected greater bias than those of non-entrepreneurs.

Entrepreneurial cognition on decision-making and opportunity recognition research indicates that the organizational context created by the entrepreneur is generally regarded as more complex and uncertain than those faced by individuals in larger organizations (Hambrick and Crozier, 1985; Busenitz and Barney, 1997; Covin and Slevin, 1997; Baron, 1998). Paradoxically, this environment will also attract entrepreneurs with certain biases and heuristics (Brigham et al., 2007) because of the overload of information they receive, high levels of uncertainty in which they operate, and the time pressure they operate under (Baron, 1998) as represented by Figure 2.6.

FIGURE 2.6 FACTORS INFLUENCING DIFFERENTIAL SUSCEPTIBILITY



Source: Baron (1998)

Fiske and Taylor (1991) stated that biases and heuristics help entrepreneurs to make decisions when they do not have existing schemas. Gilbert et al. (1992) added that by limiting cognitive overload the entrepreneur is able to deal with more information. These arguments support Baron's (1998) assertion that certain conditions lead the entrepreneur to make decisions that are influenced by biases because of limited information processing capacity and the desire to minimise mental effort

The over-confidence bias is described as the failure to know one's knowledge limitations and not realising when they are incorrect (Tversky and Kahneman, 1973). Hambrick and Crozier (1985) found that entrepreneurs perceived their decision-making as infallible, while Busenitz (1999) noted that individuals with

over-confidence still endeavour to explore opportunities even if they have little knowledge because of their strong self-belief. These differences, between entrepreneurs and non-entrepreneurs, were also highlighted by Levander and Raccuia (2001). Similarly, Bernardo and Welsh (2001) found that over-confidence causes entrepreneurs to ignore the facts and others' opinions in order to follow their own judgements.

In another study, Arabsheibani et al. (2000) conducted a longitudinal investigation over six years asking entrepreneurs and others about their future economic prospects. They found that over-confidence in their answers meant that entrepreneurs were four times more likely than non-entrepreneurs to believe they would be better off in a year when they actually experienced deterioration.

However, Simon et al. (2002) did not find significance with regard to over-confidence and the economic situation when studying SME's. Their study in over-confidence contradicted Busenitz and Barney (1997) who regarded over-confidence as significant for entrepreneurs in the start-up phase.

However, in support of entrepreneurial cognitive biases, Van den Steen (2004) included optimism, over-confidence and illusion of control in his model on biases, arguing that when over-optimism leads to failure individuals will often blame exogenous factors, and when successful they will attribute it to their own action. The contradictory findings could in part be explained by Casson (2010) who cautioned that trying to understand the influence of entrepreneurial cognitive biases, one has to consider the methodological implications when collecting data about the decision-making processes. These processes could be situationally dependant, and are complex especially when the organizational response is not aligned to the entrepreneur's expectations. Casson's (2010) argument is reinforced by Gregoire et al.'s (2010) assertions that there is a need for stronger conceptual and empirical foundations in entrepreneurial cognition research.

The representativeness bias is the degree to which the use of a small sample can be generalised across a larger population (Tversky and Kahneman, 1973, 2008).

However, this ability to make decisions under uncertain conditions with little information using heuristic decision-making is under-researched with few documented empirical studies. Busenitz and Barney (1997) studied 124 business founders and 74 managers and noted that entrepreneurs scored higher on the representative scores than managers, and have a different decision making style to managers. This study was supported by Shane (2003), who discovered that entrepreneurs sometimes make decisions based on a representative sample not substantially based on fact or historical data, which supports Schumpeter's (1934) earlier suggestion that the intuition bias is a vital ingredient for any entrepreneur.

Like representativeness bias and over-confidence bias, intuition bias is based less on fact and more on individual feelings, and will increase the possibility that an entrepreneur will undertake an opportunity spotted (Allinson et al., 2000). In addition, Allinson et al. (2000) and Corbett (2002) found that entrepreneurs use intuition more than managers in their decision-making. Groves et al. (2011) also emphasised that the ability to recall and synthesize relevant experiences and knowledge is consistent with the nature and utility of intuition in entrepreneurial thinking.

Another bias that influences entrepreneurial decision-making is the illusion of control bias that refers to an entrepreneur's overemphasis on the impact they can have on an outcome (Simon et al., 2000). Langer (1983) noted that illusion of control may occur under the condition that people tend to seek out information that supports their hypothesis and ignore disconfirming evidence. Tversky and Kahneman (1973) added when entrepreneurs use the planning fallacy bias they underestimated the time tasks take, and believed that they had control over outcomes when they did not.

Cognitive factors such as counterfactual thinking or the tendency to imagine different outcomes in a given situation than what actually occurred (Roese, 1997; Baron, 1998) are different between entrepreneurs and other groups (Baron, 2004). In a study by Baron (2004), entrepreneurs were found to engage in lower

levels of counterfactual thinking than non-entrepreneurs, and thought more about the future than past failings.

2.10 Summary

This chapter reviewed entrepreneurial cognition, differences and ambiguities between entrepreneurs and non-entrepreneurs. In doing so, the entrepreneur was given considerable focus reflecting entrepreneurship research over several decades. However, the inconsistency in the literature in attributing success to entrepreneurial cognition in its entirety means that the context within which entrepreneurs operate has to be taken into account. Based on this view, research that considers the interplay between the entrepreneur and the environment are reviewed in Chapter 3.

Chapter 3 Interplay Theories between the Entrepreneur and the Organization

3.1 Introduction

This chapter assesses the literature on the interplay between entrepreneurial cognition and the organizations that are accepted as conceptual models in social science (Mitchell et al., 2007). A brief background to the historical use of interrelated constructs that have been restricted to individual level dynamics (Haynie et al., 2010), and larger organizations in management and organizational research in the form of systems thinking (von Bertalanffy, 1968; Senge, 1990) is considered. At the entrepreneurial level, the combinations of configurations that are reviewed include; 1 entrepreneurial cognition, 2 organizational aspects of strategy, structure, culture and resources, and 3 the environment. In this way, this chapter brings together entrepreneurial and organizational level interplay models in order to examine the interrelated and inter-relational concepts of cognition, the organization and growth.

3.2 General Systems Theory (GST)

General systems thinking is a concept originally derived from the study of botanical organisms by von Bertalanffy (1968) and later used in organizational studies by Senge (1990). Both offer an explanation of how complex relationships influence each another in mutually reinforcing ways. Systems thinking is an empirical field in which the interrelationships presented conceptually form a generic and historic platform to explore further dynamic interrelationship models in organizational and entrepreneurial studies. von Bertalanffy argued that a collection of parts with inputs, processes, outputs and outcomes are interacting in a constant and reinforcing feedback loop. He also emphasised the importance of communication between parts as being intrinsic, and not as an outside event ensuring the successful operation of a whole system.

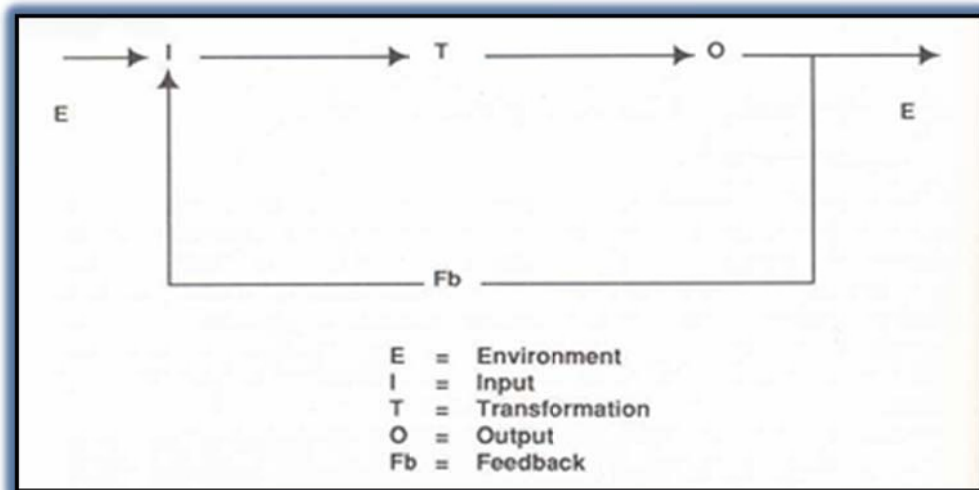
In turn, the social structure (the organization) has an influence on the entrepreneur, which will affect the way in which the organization grows. These

two processes are not mutually exclusive, but do however reflect an on-going interplay as represented in Figure 3.1. Specifically, von Bertalanffy (1968) argued that if one element in the system were to change, then it would affect other parts or processes within that system. This illustrates the interdependency of parts that is the central tenet in open systems thinking. In this way, interrelationships can result in synergy which is when the whole is greater than the sum of its parts. If the whole is less than the sum of its parts then the result is dysergy. Both outcomes, synergy and dysergy, are determined by the interactions and feedback systems in the organization.

Senge (1990) recognized that systems thinking could be viewed as a conceptual framework. He proposed extending von Bertalanffy's model by suggesting that four extra levels operate within a system. Senge saw systems theory as interrelationships rather than linear cause-and-effect chains. These four levels or 'disciplines' include patterns, mental models, systems and events.

He applied systems thinking in explaining the operations of industries such as services, high-technology and human resources and proposed solutions to problems using a systems or holistic approach. In this way he demonstrated the transferability of open systems thinking to a business and organizational context that demonstrated the generic potential for organizational analysis of von Bertalanffy's (1968) original application. Senge asserted that systems theory accommodates personal mastery, mental models, building a shared vision and team learning to provide more insight into how it can be used in a learning organization. In support of this mutually reinforcing model, Scheider and Angelmar (1993) argued that individual and collective cognition served as stimuli to change each other which von Bertalanffy (1968) concluded was ultimately self-regulating.

FIGURE 3.1 SIMPLE SYSTEMS CONCEPTUAL MODEL



Source: von Bertalanffy's (1968: 141)

The complexity and mechanisms of how such organizational constructs are configured to maximise performance, can further be explored by linking internal and external factors as seen in Figure 3.1.

In this way, configuration theory is an organizational level theory that builds on the notion that in order for a firm to perform, there has to be congruence between relationship type, characteristics and business strategy (Mintzberg, 1979; Zaefarian and Henneberg, 2010). A summary of the interaction and orientation of characteristics are presented in Table 3.1 showing either one-way or interactive dynamic models of action between the entrepreneur and the organization. In addition, Table 3.1 clarifies the research focus and specific characteristics that have been undertaken since von Bertalanffy's (1968) open system thinking until Shepherd et al.'s (2010) conceptual model on the entrepreneurial mindset and environment.

TABLE 3.1 INTERPLAY MODELS

Model	Author and Date	Interactive and Orientation	Characteristics
General Systems Theory	von Bertalanffy (1968)	Whole system	Process of change Interrelated parts Mutually reinforcing
Configuration Theory	Mintzberg (1978); Miller and Friesen (1984b)	Holistic Reciprocal Non-linear Multiple	Stable Presence of elements results in predictability Consistent
EO Energy Conversion	Covin and Slevin (1991)	Two-way: entrepreneurial and environment Process orientation Conceptual and empirical	Converts capabilities into products and services for customers Entrepreneurial posture, culture and structure versus financial performance Organizational level perspective Organizational behaviour
Entrepreneurial Orientation (EO)	Lumpkin and Dess (1996) Wang (2008)	Multiple dimensions Process orientation Cognitive components	EO Contingency framework Performance is context specific EO and learning organization (LO)
Stage Models Versus Dynamic States	Greiner (1972); Adizes (1979); Churchill and Lewis (1983)	One way/linear Conceptual and Empirical	Speculative Personality emphasis at different growth stages
Person and Entrepreneur-ship Fit	Pervin (1968); Kirton (1976); Chan (1996)	One way Conceptual	Cognitive misfit-dominant style versus work context Style fit to circumstances Interplay between opportunity recognition and social skills

P-E Fit	Markman and Baron (2003)	Dynamic/reciprocal elements Conceptual Multiple	Interplay between person and entrepreneurship
Sensemaking	Weick (2009)	Reciprocal exchanges	Entrepreneur and environment Understanding the context Sensemaking Cognitive interdependence between workflow and enactment
Psychological Attributes and Processes	Shane (2007)	One way Conceptual	Relationship between entrepreneur, opportunity and decision-making Organizational performance emphasis
ETCC	West (2007)	Dual Conceptual	Start-ups Team cognition
Dynamic State	Levie and Lichtenstein (2010)	Dynamic/interactive Conceptual Multiple	Between the organization and entrepreneur Continuous
Dynamic Spiral Loops	Shepherd et al. (2010)	Process model Dynamic/reciprocal Conceptual Dual	Positive and negative relationship Entrepreneurial mindset and organizational culture Multiple and reinforcing feedback loops

3.3 Configuration Theory

It was Mintzberg (1979) who developed the notion of configurations as the interplay of strategy, environment and organizational structure. In this way the constructs that he used overlapped with systems thinking (Miller and Friesen, 1984b), but focused on five different internal structures of an organization. The five configurations are the entrepreneurial, bureaucratic, professional, divisional and adhocracy organizations.

Configuration theorists argue that coherence between elements and the presence of some elements can lead to reliable predictions in a configuration (Miller and Mintzberg, 1983: 57). Levie (1986) added that this predictability and stability of a configuration would only change during periods of radical organizational change such as in the entrepreneurial organization when the founder retires. Mintzberg argued that when success and decision-making is centred on the entrepreneur, the increase in growth could increase their role and responsibilities, and insisted that the organizational configuration would change. The general idea therefore of configurations in larger organizations is to understand and determine patterns between tightly-woven interrelated relationships which are reciprocal and non-linear (Meyer et al., 1993). Specifically, Mintzberg's bureaucratic, professional and divisional configurations demonstrate linear characteristics in their decision-making.

At the small-medium size organizational level, Korunka et al. (2003) used configuration theory to understand nascent entrepreneurs at the start-up stage, but the identification and examination of configurations at that stage of growth is limited (Harms et al., 2007). Although start-up researchers (Harms et al., 2009) recognize that transferring the configuration research approach from large to start-up and small businesses is a challenge, they emphasise the value of their findings that the configuration of entrepreneur and the environment are valuable in establishing patterns.

The use of configuration theory in both large and small-medium size organizations focuses largely on the relationship with performance (Dess et al.,

1997; Wiklund and Shepherd, 2005). In this way, Witmeur and Fayolle (2011) developed a typology of entrepreneurial growth that showed organizations transitioning through stages in the same way that lifecycle stage model theories are configured. Their typology was developed by building on and examining three streams of research which include lifecycle stage models, the fit between strategy and environment, management of information technology (IT) consulting and professional services. From this examination, Witmeur and Fayolle (2011) supported configuration theory by developing seven configurations that they compared against Mintzberg's (1979) organizational and strategic idea types. Although their approach was consistent with configuration theory, they emphasised the importance of managing all the elements in a dynamic way.

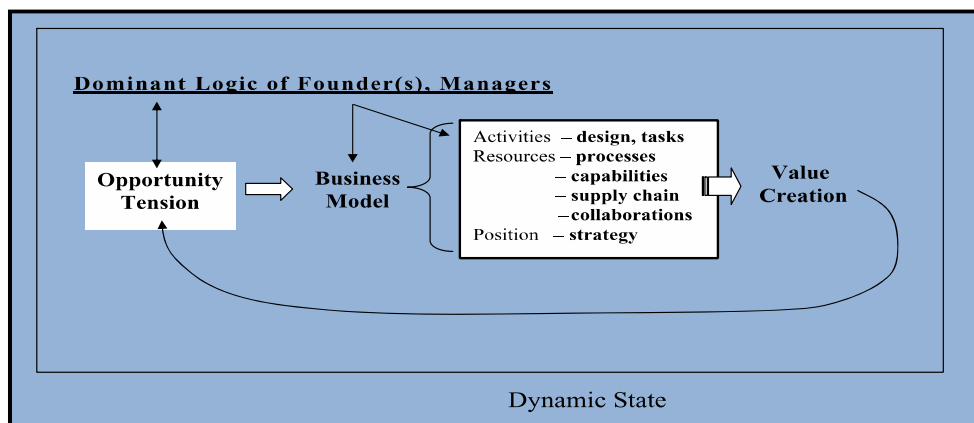
Lifecycle stage models is the idea of using configurations to link context, structure and performance as a trajectory (Hanks et al., 1994). Although the linear configuration is in contradiction to the interrelated and continuous constructs of open systems thinking, the development model of growth in stages had significant impact in practice in organizational consultancy and research. The lack of empirical basis has been argued by Levie and Lichtenstein (2010), in light of dynamic growth models and configurations that focus on performance and characteristics not previously studied in entrepreneurship.

The lack of consensus of linear and non-linear organizational growth in the literature is compounded by the differences of perception between entrepreneurs and academics regarding what constitutes business growth (Achtenhagen et al., 2010). Although Levie and Lichtenstein (2010) challenged the acceptance of linear models of growth, Achtenhagen et al. focused more specifically on the lack of focus on the entrepreneur's perception of growth which they regarded as relevant. As a result of the findings, they suggested a re-conceptualization of business growth that is more relevant and meaningful for both practitioners and academics.

3.4 Lifecycle Stage Models to Dynamic State Models

Linear lifecycle stage models (Greiner, 1972; Adizes, 1979; Galbraith, 1982; Churchill and Lewis, 1983; Miller and Friesen, 1984) dominated up to 40 years of research into how organizations transition across stages of growth. However, in a review of 104 models, Levie and Lichtenstein (2010) found no consensus for the number of growth stages or the factors that are required in order to progress. The argument that each stage is characterised by single loop cause and effect relationships (Hornsby et al., 1992; Hornsby et al., 2002) failed to recognize the dynamic on-going reinforcing feedback loop and the constant interdependencies of organizational factors (von Bertalanffy, 1968). In an attempt to capture these issues, Levie and Lichtenstein (2010) developed the dynamic state model as represented in Figure 3.2

FIGURE 3.2 DYNAMIC STATE MODEL



Source: Levie and Lichtenstein (2010)

Mintzberg's (1979) study showed that entrepreneurial growth happens in bursts of growth and 'pauses' rather than a linear trajectory. Steyaert and Hjorth (2003) added that entrepreneurial personality requirements at each stage of growth are based on 'speculative theory'. However, growth stage theories are still referenced as a teaching tool in major academic textbooks as noted by Levie and Lichtenstein (2010) and sales as a measure of growth still dominates the literature (Achtenhagen et al., 2010).

Levie and Lichtenstein (2010) conceptualised the potential of an untapped market as 'opportunity tension' by using constructs, relationships and drivers as a way of challenging traditional lifecycle models. They reflect briefly on the cognitive aspect that the entrepreneur is driven by 'perceived capability' even when the market does not yet exist. They hint at the temporal aspects of the dynamic model that can change over time in an adaptive system as management expectations differ and individual agendas develop. In this way, the dynamic state model is similar to von Bertalanffy's (1968) open complex system and the energy conversation characteristics in Slevin and Covin's (1991) entrepreneurial orientation model. All three of these models, incorporate the organization of resources for the benefit of the customer (Katz and Gartner, 1988).

Furthermore, their report on empirical assessment of the conceptual models showed little support for the Greiner (1972) or Churchill and Lewis (1983) models for the sequences of growth. On the basis of their research, Levie and Lichtenstein (2010) argued to replace stage theory with dynamic state theory, which focuses on the entrepreneur's drive to grow the organization. In this way, they concluded that opportunity tension is the contradiction between stability and change that exists in every dynamic state.

Having examined dynamic state theory and stage theory models with regards to configurations there are two similarities. The first is that the organizations will grow according to various different configurations, and secondly that these configurations may be predictable. However, a significant difference between stage and dynamic theories is that because of changes in the organization's model, or environment, the number of configurations and the speed at which changes occur is accepted as unpredictable in the dynamic state theory.

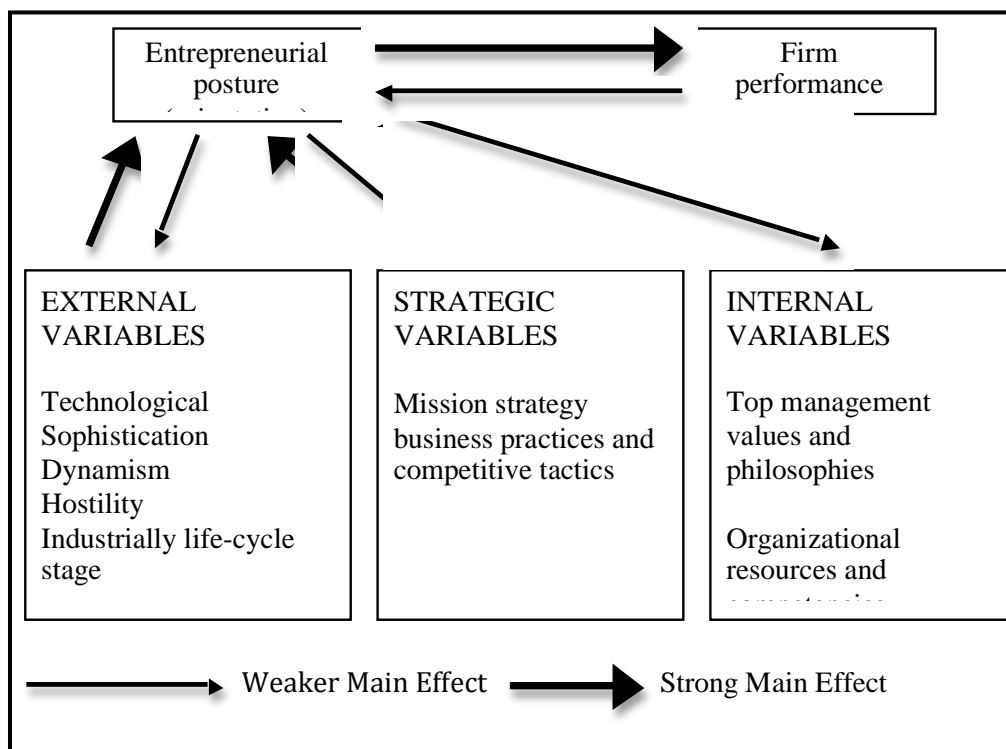
Since Levie and Lichtenstein (2010) challenged the stages and lifecycle models, little empirical and conceptual research has been undertaken to develop the model further. However, over the years the configuration approach has been adopted by other researchers in order to understand the relationship between performance, organizational and environmental factors in entrepreneurship

research (Covin and Slevin, 1991; Lumpkin and Dess, 1996; Li, Zhang and Chan, 2005).

When applied to entrepreneurship, Dess et al. (1997) suggested that configuration theory captures the complex interrelationships of the entrepreneurial orientation of an organization. In the same way that open systems theory captures the whole system, they argue that configuration refers to the notion that the whole is more than a sum of the isolated parts of the organization which von Bertalanffy (1968) regarded as synergy in a system.

An example of a configuration is Covin and Slevin (1991) who coined the term 'entrepreneurial orientation' (EO) and developed three dimensions – innovativeness, risk-taking and proactiveness to demonstrate how an organization went about being entrepreneurial. They developed EO and Figure 3.3 shows the interrelationship between high performance and posture, and the subsequent influence on the interrelationships of external, strategic and internal variables in the energy conversion system.

FIGURE 3.3 ENTRPERENEURIAL ORIENTATION



Source: Adapted from Covin and Slevin (1991)

It was mentioned earlier that the focus on organizational performance and growth are the common threads that link open systems theory, lifecycle stage models and configuration theory. However, a major difference is that Covin and Slevin's (1991) configuration approach used entrepreneurial behaviour rather than psychological personality profiles used in lifecycle stage models as an indicator of organizational performance. A common argument between lifecycle stage theory and EO configuration is that firm size and age are relevant for performance. While EO refers to processes, practices and decision-making, the empirical findings on the positive relationship between firm performance and EO are still inconclusive and context specific (Lumpkin and Dess, 1996; Su and Xie, 2011).

Although there is an argument that configuration theory suffers from a lack of meaningful constructs and relationships (Dess et al., 1993), Lumpkin and Dess (1996) modified EO by adding two extra dimensions, autonomy and competitive aggression to the model and linking it to the exploitation of opportunities. They regard an organization as being entrepreneurial if it engaged in autonomy, innovativeness, risk-taking, proactiveness and competitive aggressiveness. Although their model is based on new start-ups, they hint that if organizations decline to take risks and become 'overly passive' they lose the entrepreneurial edge, but there is no clear suggestion why and how this might occur. The external variable in Covin and Slevin's (1991) original model was developed further by Wiklund and Shepherd (2005) using a resource based view (RBV). They found that environment dynamism has an influence on performance and that a configuration approach produced explanatory findings.

While EO provides researchers with a framework to explore an organization's ability to act entrepreneurially and increase performance, Covin et al. (2006) in a study of 110 manufacturing firms found that learning from strategy affected growth rate. The idea of learning was developed further by Wang (2008) who extended EO by considering how medium-large organizations learn. The findings that a learning organization (LO) mediates the performance of an organization support Covin et al.'s (2006) argument that the need for entrepreneurial organizations to learn from strategic mistakes is more important

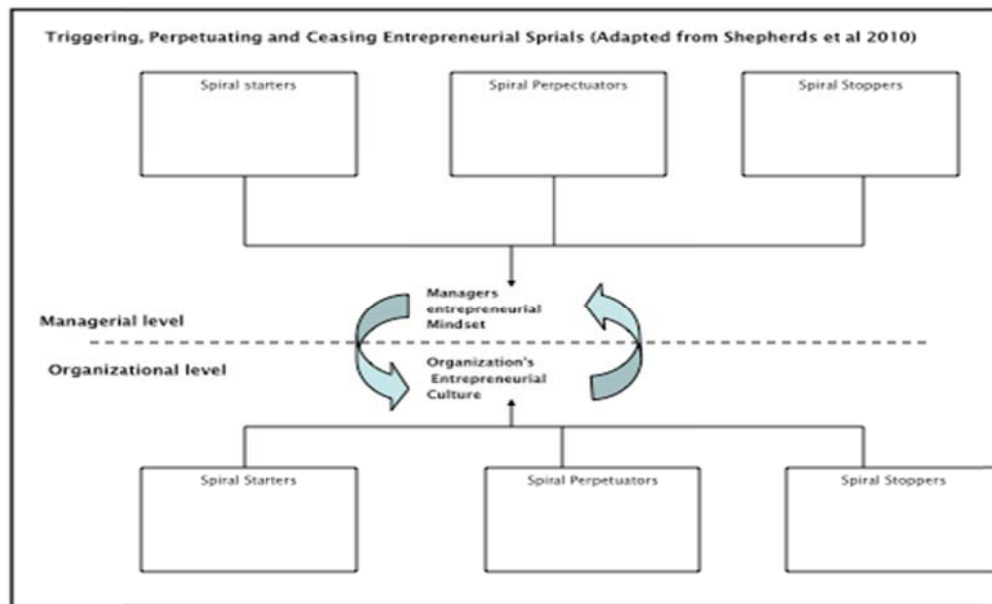
than in conservative organizations. Their argument is based on the behaviour of entrepreneurial organizations to continuously seek new opportunities rather than stop to seek opportunities when one does not work. Based on these findings, Wang (2008) emphasised the importance of future research in EO and LO to consider the age and size of organizations.

Although Harrison and Leitch (2005) suggested that organizational learning (OL) is still in its early stage of being adopted in entrepreneurship studies and with little available empirical research, Lumpkin and Lichtenstein (2005) developed a framework that linked OL to the cognitive aspect of opportunity recognition. These qualities are referred to as an organization's ability to create, acquire and transfer new knowledge and subsequently modify behaviour to reflect the acquired knowledge and insight. This modification of behaviour is similar to von Bertalanffy's (1968) self-regulatory open system thinking earlier, in which through learning, there is synergy in the organization after intended change has occurred.

Through combining OL and opportunity recognition, Lumpkin and Lichtenstein (2005) proposed three approaches; cognitive, behaviour and action. Unlike lifecycle stage theories, their framework includes the cognitive aspects of using new and existing knowledge to develop customer solutions, behaviour aspects of streamlining processes and action to engage with the organization.

The cognitive aspect of Lumpkin and Lichtenstein's (2005) model was further developed by Shepherd et al. (2010). They presented an iterative process of multiple feedback loops between mindset and organization culture shown in Figure 3.4.

FIGURE 3.4 DYNAMIC SPIRAL LOOPS



Source: Shepherd et al. (2010)

Although Shepherd et al. (2010) offered no empirical basis for their model, their conceptual dynamic feedback model attempts to bridge the gap between the individual and the organization arguing that the mindset and the culture equally affect each other. However, the model fails to explain the complex cognitive concepts of the iterative and reinforcing entrepreneurial mindset with the organization.

3.5 Shared and Collective Cognition

Meyer and Dean (1990) found that a lack of a shared perspective between the entrepreneur and strategic decision-makers resulted in a lack of appreciation of suggested strategy by the entrepreneur. Their study suggests that shared cognition enabled the organization to progress with a focus on consistent purpose and actions. Nosek and McNeese (1997) contributed to this view by adding that knowledge sharing and transfer between business members of a team is linked to efficiency and effectiveness in teams and reduced bureaucracy. Their findings suggested that when people in groups within technology organizations shared mental models it allowed them to make sense of information they processed.

However, Tripsas and Gavetti (2000) noted that researchers have paid little

attention to the interplay between individual and team cognition across organizational hierarchies and dynamic state models. In their study, Tripsas and Gavetti gave consideration to the role of shared cognition and capability with regards to inertia in an established entrepreneurial digital imaging organization. They focused on how the organization adapted from analog to digital imaging, and discovered that an important indicator of success was the relationship between managerial cognition and organizational adaptability. In addition, the absence of shared cognition in Tripsas and Gavetti's study led to management clashes which extended studies on the cognitive differences between entrepreneurs and non-entrepreneurs (Busenitz and Lau, 1996; Busenitz and Barney, 1997; Mitchell et al., 2000; Sarasvathy, 2000; Gaglio and Katz, 2001) beyond the centrality of the entrepreneur.

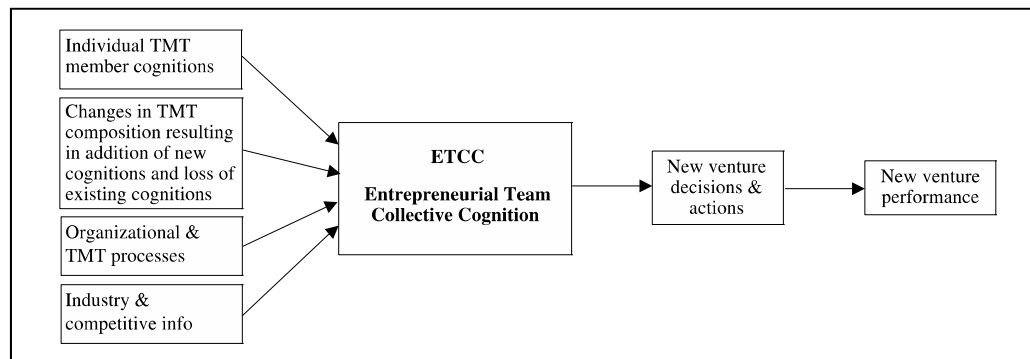
Although Tripsas and Gavetti's (2000) findings support studies on the benefits of shared cognition, the organization successfully made the transition from analog to digital without successfully managing a shared cognitive approach. They argued that the success was due to the lasting influence of the co-founding entrepreneur, but warned of the potential danger to growth of not having shared cognition, given that not all entrepreneurs can have a lasting effect on organizational capabilities and cognition.

West (2007) contributed to the debate at start-up level that shared cognition between the entrepreneur and management led to success. He developed the entrepreneurial team collective cognition (ETCC) model with two key structural properties of differentiation and integration in which the top management team (TMT) had different cognitive processes (Figure 3.5). He suggested that a lack of integration of cognition and uncoordinated action across the levels of entrepreneur and management can lead to opportunities not being followed up, potential destruction of the organization and lack of team motivation.

West also echoed the earlier ideas of Bougon (1992) by arguing that the differentiation in ETCC is not just a collection of individual cognitive processes decided by researchers to be important, but that the relevant level of integration of thinking, guides the direction of the organization. He asserted that ETCC is not natural or effortless, but when absent could either impede or facilitate the

success or performance of an organization. Thus, over fifteen years he drew together thinking on this topic.

FIGURE 3.5 ENTREPRENEURIAL COLLECTIVE COGNITION



Source: West, 2007

Other researchers developed the advantages of a collective approach by linking conflict in relationships to the reduction of effective decision-making, satisfaction, resentment and cooperation (Ensley et al., 2002; Choi and Sy, 2010; Thatcher and Patel, 2012). While Ensley et al. (2002) found that relationship conflict amongst top management teams led to reduced cohesiveness and growth, Lim et al. (2013) went further and supported West's finding that too much conflict clouds shared judgement.

Although West (2007) argued that too much or too little differentiation and integration affected performance, he failed to consider the extent to which individual or team members are cognizant of individual differences and cognitive sharing. Furthermore, in an attempt to draw parallels between individual and team level cognition, it is unclear from the research how the information is shared and communicated between team members

3.6 Communication Through Sensemaking and Sensegiving

The notion of making and giving sense in entrepreneurship is largely linked to how the entrepreneurs interpret and translate decision-making (Daft and Weick, 1984), and the way others interpret information that is communicated to them (Balogun, 2003; Balogun and Johnson, 2004). Given the relevance of interpretation and communication of information in organizations, Gioia and

Chittipeddi (1991) argued that sensegiving is integral to research on entrepreneurial cognition as it refers to an attempt to influence others (Maitlis and Lawrence, 2007).

It was mentioned earlier that sensemaking enables people to make sense of information (Nosek and McNeese, 1997) and that the flow of information enhances performance (Ensley et al., 2002). In this way, sensemaking is seen as a search for meaning in the on-going collection of information, which can be different for managers and employees respectively (Weick, 2009). Weick suggested that in organizing this process, individuals use conversation, text and mutual effort that is intrinsically linked to communication. However, Busenitz et al. (2004) argued that if knowledge and information is diverging and hidden, then there is limited exchange of knowledge. Yin et al. (2008) claimed that if there was an exchange of accurate information at top management level, it would be simpler to make sense and interpret information that could improve performance.

The way in which the entrepreneur gives sense to the organization can be interpreted in a multiplicity of ways, referred to by Weick (1991) as 'equivocality'. Although in the case of Weick's study, he used it to describe a political opportunity that the individual had in order to influence the identity of the organization and other stakeholders. In this example, sensemaking and sensegiving explores the psychological processes the entrepreneur goes through when interacting with their environment. The concept of 'testing the water' was used earlier by Mintzberg (1978) to describe the way entrepreneurs sense the environment before they dived into an opportunity.

The argument by Weick (2009), Warglien (2002) and Jennings and Greenwood (2003) is that sensemaking can be treated as reciprocal exchanges between the entrepreneur and the environment. Although Gioia and Chittipeddi, (1991) argue that the focus of sensemaking has been in establishing organizational identity for leaders within a company. They asserted that research has not focused on the iterative process of sensemaking with regards to performance aspects in the organization. Gioia and Thomas (1996) went further to emphasise the link

between performance measures and the communication of sensemaking. They argued that the organization aspires to whatever performance measures are communicated.

Later studies by Dunford and Jones (2000), Corley and Gioia, (2004) and then Maitlis and Lawrence (2007), have typically used sensemaking as a vehicle with which to understand the vision and direction set by the CEO of an organization.

The emphasis on communication was developed further by Taylor and Van Every (2000: 58), who suggested that “symbolically encoded representations” of circumstances, become actions through interactive talking and texting. They claimed that the level, direction and type of communication an entrepreneur used would mediate the effect of sensegiving to the business.

Supporting the importance of sensemaking in communication, Baron and Markman (2000) found that when entrepreneurs from both the cosmetics and high-tech industries had higher social skills they experienced greater financial success. They noted that the ability to interact with individuals from a wider background and higher accuracy in perceiving others were predictors of financial success for entrepreneurs. It was unclear from the study what kind of interaction was referred to. Locke (2002) contributed to the literature by adding that entrepreneurs see the whole picture of their business and make sense out of the chaos without getting overwhelmed.

Weick (2009) later linked the organization and sensemaking arguing that in order to understand sensemaking, the context within which decisions are made has to be studied. He argued further for cognitive interdependence between workflow and the way it is enacted, recognising that there was a limited amount of research on how entrepreneurs make sense of the environment and organizational sensemaking. This ‘enactment’ process is seen to be part of entrepreneurial decision-making (Weick, 1979; Busenitz and Barney, 1997). But as Holt and Macpherson (2010) have argued, little is known of how sensemaking occurs within entrepreneurial conditions. In addition to Weick, research by Nicholls and Cho (2006) demonstrated that sensemaking is typically undertaken in social

entrepreneurship studies that investigate funding schemes through performance measurement.

In more recent research by Mitchell et al. (2011) and Cornelissen and Clark (2012), communication as a mediating effect when influencing the cognition of others has been emphasized. Mitchell et al. (2011) examined entrepreneurial communication with regard to feedback, and maintained that when an entrepreneur received feedback from managers, which they could validate or correct, cognitive differences could be reduced. However, Cornelissen and Clarke (2012) found that the inner thoughts and imaginations of entrepreneurs are not spoken or even necessarily 'speakable'.

Whilst there isn't much research on organizational sensegiving, Steier (2000) suggests that the level, direction and type of communication will mediate the effect of sensegiving to the business. In addition, Gallen (2006) emphasised that the way in which entrepreneurs give sense regarding information, is due to their perception of the information, rather than any variation in the available information.

3.7 Person-Organization Fit (P-O)

P-O entrepreneurship research is concerned with the interplay or interaction between the entrepreneur and the opportunity (Markman and Baron, 2003; Brigham et al., 2007). P-O fit builds on empirical and conceptual studies in larger organizations, with little attention being paid to P-O fit in SME's (Markman and Baron, 2003). Although P-O fit is defined in both organizational and entrepreneurship research as the match between an individual's knowledge, skills, personality, performance and job satisfaction (Kristof, 1996), the traditional models do not include entrepreneurial cognition. In furthering our understanding of P-O fit, an earlier study by Pervin (1968, 1996) also showed that organization performance tended to be higher when there was less of a misfit between the entrepreneurs' individual characteristics and the organization. These earlier studies formed part of the P-O fit identified by Chan (1996) later as 'cognitive misfit'. Brigham et al. (2007) claimed that cognitive misfit was the degree of mismatch between the individual's preferred and dominant style, and

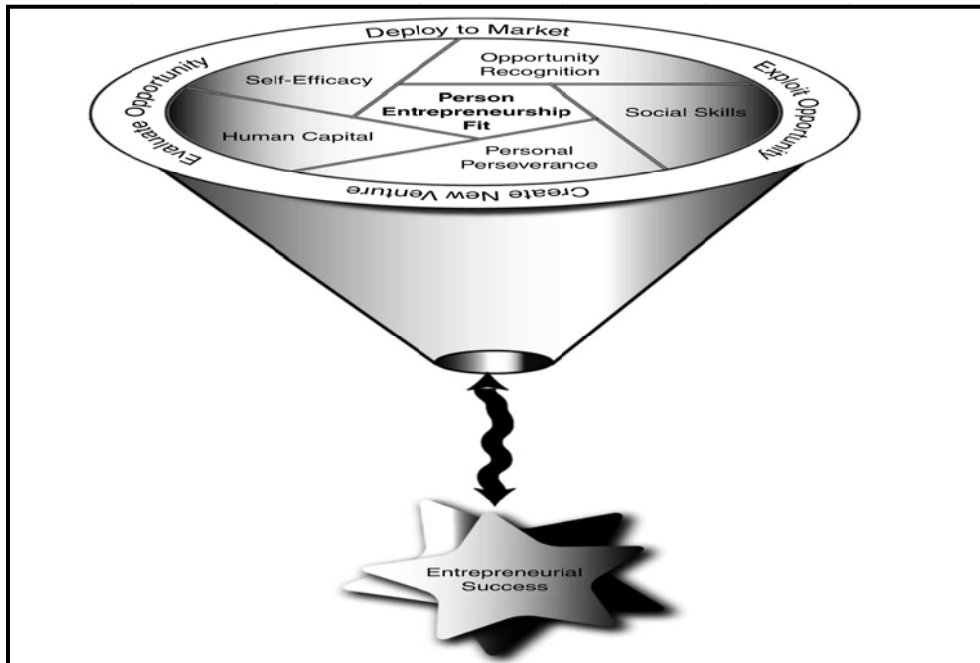
that of the work context. In their study of 253 engineers, they demonstrated the validity of cognitive misfit as a predictor of actual turnover.

Studies have shown that in order to cope with organizational circumstances that do not reflect their preferred style, entrepreneurs will either adapt their style (but only temporarily), or change the circumstances to fit their style (Kirton, 1976). Kirton (1989) also extended cognitive style to the organizational setting by arguing that the organizational climate is set by a working group who share their style. And although cognitive style is thought to be stable, factors such as education and experience can influence a change.

Markman and Baron (2003) built on the P-O argument and showed that the closer the match between an entrepreneur's characteristics and entrepreneurial activities, such as creating new organizations and transforming discoveries, then the more successful they would be. As shown in Figure 3.6, they proposed that by observing the interplay between different aspects of the entrepreneur, such as opportunity recognition and superior social skills, the answer to individual differences between successful and non-successful entrepreneurs could be understood.

Although P-O looked specifically at the fit between the entrepreneur and the organization, the model did not discuss 'how' the particular individual aspects of entrepreneurial cognition, for example the ability to recognize opportunities, interacted with the organization. In addition, the relationship between the entrepreneur and the organization is ignored although it does build on individual differences such as knowledge, skills and ability. The researchers also considered the external environment in the same way that Covin and Slevin (1991) did, highlighting the pharmaceutical industry as having an effect on knowledge, skills and ability because of high regulation.

FIGURE 3.6 PERSON-ENTREPRENEURSHIP FIT



Source: Markman and Baron (2003)

While further empirical and conceptual work is required to confirm and build on Markman and Baron's (2003) preliminary model, they have highlighted the interplay of cognitive aspects of opportunity recognition, performance and the organization.

3.8 Summary

This chapter reviewed conceptual and empirical research to understand the interaction of both individual and organizational level dynamics that have combined specific constructs. An examination of these models has shown that there are various combinations of constructs between the entrepreneur and the organization which either support linear, dual or multiple models of interaction. Although studies on collective cognition and communication in entrepreneurial organizations are limited, this chapter has examined the potential for increased performance and growth when these concepts are integrated using a configuration or systems approach.

The next chapter uses entrepreneurial cognition from Chapter 2 and interplay theories from Chapter 3 building on specific theories and models to develop the conceptual framework for this research.

Chapter 4 Conceptual Framework

4.1 Introduction

This chapter draws on entrepreneurial cognition and organizational literature in order to provide a map for the empirical work to be undertaken (Miles and Huberman, 1994). The purpose of the conceptual framework in this chapter is to make explicit the decisions to examine particular relationships regarded as important that in turn affect the kind of data to be collected and analysed (Lesham and Trafford, 2007). The decisions to select particular concepts are recognized by Andersen et al. (1999) to be subjective and are my representations of the relevant factors that affect the interrelationship between the entrepreneur and the internal stakeholders. This chapter discusses the theories underpinning the conceptual framework, the components of the conceptual framework and limitations, models that were considered but not selected and concludes with the chapter summary.

4.2 Underpinning of the Conceptual Framework

The literature reviewed in Chapter 2 demonstrates strong empirical and conceptual support for the differences between entrepreneurial cognition and non-entrepreneurs. However, the influence of these differences on shared cognition is limited. Furthermore, in order to understand how differences in entrepreneurial cognition interact with internal stakeholder perception, organizational theories in Chapter 3 were examined. The examination of the literature revealed that conceptualization of the interplay between the entrepreneurial level of cognition and the organization level of analysis was found to be limited (Gregoire et al., 2011). In this way, a combination of elements from individual and organizational level theories, has been used to form the conceptual framework.

An individual level theory by Vaghely and Julien (2010) concerned with the algorithmic-heuristic duality in entrepreneurial information processing highlights entrepreneurial cognitive differences and informs the conceptual framework. The reason for the selection of their theory is twofold. Firstly, Vaghely and

Julien's (2010) model builds on previous research that emphasises the differences in entrepreneurial cognition and non-entrepreneurs' cognitive processes (Busenitz, 1996; Gaglio and Katz, 2001; Mitchell et al., 2002; Groves et al., 2011), giving it an empirical and validated foundation. Secondly, the model is comprehensive in the dimensions that it represents from the influence of intuition biases (Tversky and Kahneman, 1974; Busenitz et al., 1997) and patterns in algorithmic thought processing (Vermeulen and Curseu, 2008) to sensemaking and intuition in heuristic thought processing (Mintzberg, 1978; Groves et al., 2011). These concepts are all relevant to the research questions in this study.

Although the relationship between entrepreneurial cognition and time is not often explored in the literature, time is considered important to opportunity recognition and in regards to an organization's growth trajectory (Kirzner, 1979; Korunka et al., 2003). This conceptual framework is developed on the foundation that interrelations between the concepts of entrepreneurial cognition, biases, temporality and communication affect growth and performance.

The rationale and assumptions based on the individual level concepts deemed relevant to this investigation are presented in Table 4.1. These concepts emerged from the conceptual perspectives which were presented in the previous two chapters. Everything has been introduced before but are now been used in a different way.

TABLE 4.1 RATIONALE FOR CONSTRUCTS CONTRIBUTING TO THEORETICAL UNDERPINNING

Concepts	Rationale
Entrepreneurial Cognition	Differences in cognition (Vaghely and Julien, 2010)
Entrepreneurial Biases	Affects entrepreneurial cognition (Kahneman and Tversky, 1979; Baron, 1998)
Temporality	Interwoven relationships and

	entrepreneurial characteristics modify the organization over time (Korunka et al., 2003)
Communication	The ability to give sense and make sense affects performance (Weick, 1979)

Lumpkin and Dess's (1996) model informs the organizational level of this conceptual framework. The EO dimensions of autonomy, innovativeness, risk taking, proactiveness and competitive advantage represent the entrepreneur as well as the organization. The focus of the interactions in the EO model is primarily on performance and the positive influence of risk-taking that Cantillon (1734) in the 18th Century regarded as central to the entrepreneur. Although in strategic decision-making participativeness was found to have a moderating effect on EO affecting performance (Covin et al., 2006). This means that Covin et al. (2006) found that when senior decision makers use autocratic and non-participative methods to make major operating and strategic decisions, it has a positive effect on growth. This finding has important implications for this research.

Following on from these assumptions about the relevance of interactions of decision-making and growth, the selection of this model to underpin my conceptual framework can be summarised in five points;

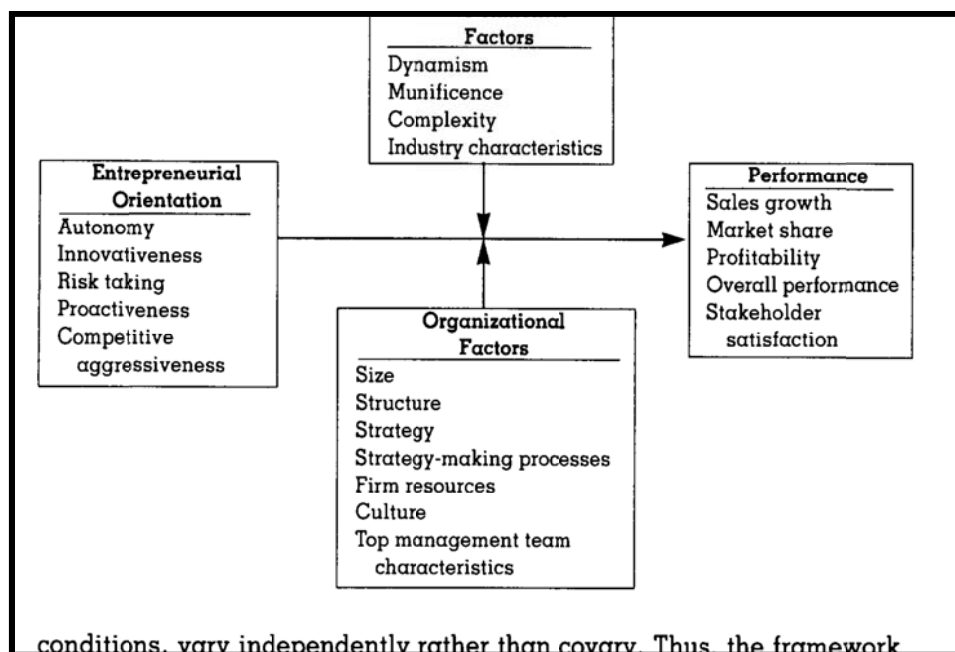
- 1 the model has interrelated multi-dimensions of EO and organizational factors such as strategy-making processes, firm resources and top management team characteristics. Therefore, as a mainly empirical body of research the effect of the concepts on each other can be explored;
- 2 the EO dimensions can vary independently (Schollhammer, 1982);
- 3 further research opportunities have been highlighted by Lumpkin and Dess (1996), who suggest that EO dimensions or constructs should be

developed, such as how entrepreneurs see risk, and Edmond and Wiklund (2010) call for moderating effects on EO to be undertaken;

- 4 EO has a comprehensive empirical and conceptual basis in organization studies, but has not been widely explored at the individual level (Edmond and Wiklund in Landstrom and Lohrke, 2010);
- 5 the use of case studies to catalogue and develop the EO mechanism is considered an ‘ideal’ basis to contribute to cumulative EO research (Edmond and Wiklund in Landstrom and Lohrke, 2010).

The use of Lumpkin and Dess’s (1996) model in Figure 4.1 as a theoretical foundation for this research builds on the entrepreneurial cognition strategy for research that is centred on interaction between cognitive elements, processes and levels of analysis (Gregoire et al., 2010). Figure 4.1 shows the interaction of EO with performance, environmental and organizational factors. As a researcher this offers me an opportunity to contribute empirically and theoretically to a growing cognitive perspective in entrepreneurship and offers a secure conceptual framework that can be used for further research.

FIGURE 4.1 ENTREPRENEURIAL ORIENTATION



Source: Lumpkin and Dess (1996)

Lumpkin and Dess's (1996) model is a modification of Covin and Slevin's (1991) earlier model in which they coined the term 'entrepreneurial orientation'. Covin and Slevin accelerated EO empirical research and demonstrated that it was a useful configuration for further organizational and entrepreneurship research (Landstrom et al., 2010) and has since been widely researched (Lumpkin and Dess, 1996, 2001; Covin et al., 2006; Huang et al., 2010).

Research areas that have extended the EO model include the effect of time on EO and methodological grounding (Wiklund, 1999); theoretical grounding of the constructs (Wiklund and Shepherd, 2005) and relating the EO model to growth (Covin et al., 2006).

Covin and Slevin (1991) also undertook empirical work on CE (corporate entrepreneurship) and in this way EO formed the conceptual basis for studying entrepreneurial behaviour in larger corporations (Kraus et al., 2011). They argued that external, internal and strategic variables have a strong effect on the entrepreneurial posture or position of an organization that in turn affects performance. The dynamic interaction enabled the organization to change and adapt, and thereby increased its capacity to perform through the interaction of the three dimensions: innovativeness, risk-taking and proactiveness.

The Lumpkin and Dess (1996) model was extended by Kropp and Zolin (2008) after a study with high-tech start-ups and technology development firms. The performance measure dimension that included, sales growth, market share, profitability, overall performance and stakeholder satisfaction were extended to include commercialization, technology transfer and survival. Other researchers emphasised the control of internal and external contingent factors when performance is examined (Wiklund, 1999; Wiklund and Shepherd, 2005; Rauch et al., 2004; Walter et al., 2005; Covin et al., 2006).

Lumpkin and Dess (2001) went further to test the dimensions of proactiveness and competitive aggressiveness on 95 organizations with entrepreneurs and top-level decision-makers. They found that a different approach to entrepreneurial decision-making by entrepreneurs and top-level executives had different effects

on a firm's performance especially with regard to external factors. In addition, their findings revealed that proactiveness was appropriate in rapidly changing environments with several opportunities for young organizations and that competitive aggressiveness benefits mature industries where competition is fierce. However, they concluded that EO is not always positively related to performance and added that the organization's conditions and external environment is a significant contributing factor.

The concept of opportunity recognition modified the EO model even further. Wiklund and Shepherd (2003) argued that opportunity recognition is positively related to a firm's performance and that EO enhances this relationship. Researchers that have focused mainly on the performance areas of the EO model also found that size was influenced by EO (Rauch et al., 2004), and that access to financial resources contributed to performance (Wiklund and Shepherd, 2005).

Stam and Elfring (2008) claimed that EO is not enough for a new entrant to increase its wealth (Covin and Slevin, 1983; Ireland et al., 2003), and investigated the contribution that social capital and networks made (Walter et al., 2005). Their empirical study found support for EO in terms of how networks increase performance in new ventures. Renko et al. (2009) have also examined the relationship between EO factors in an empirical study on biotechnology start-ups. They found a link between technology capability and product innovativeness, while other researchers have argued that EO is determined by the context in which organizations operate (Covin et al., 2006).

Further EO studies relevant to this research is the ability of the model to explain the iterative learning experience between entrepreneurial cognition and internal stakeholders. Wang (2008) looked at an organization's ability to maximize EO through learning (Senge, 1990). While Wang (2008) argued that the model of looking at the effect of EO on performance is deficient, the study contributed to the literature by demonstrating that a learning organization mediates EO and organizational strategy moderates the effect of EO.

Wang (2008) claimed that for medium-to-large organizations, improvement to

performance is dependent on the distribution of the entrepreneurial spirit across organizational levels, a commitment to learn, and a shared vision. In Wang's study, a shared vision was found to be a crucial element in the mediating effect of LO in EO and performance.

Although researchers have modified and tested various dimensions as shown in Table 4.2, the model still remains unaltered, and combined with entrepreneurial cognition theories forms the theoretical foundation for the components of this conceptual framework.

TABLE 4.2 ADDITIONAL DIMENSIONS TO ENTREPRENEURIAL ORIENTATION

Relevant Research	Dimensions
Covin and Slevin (1983)	EO + corporate entrepreneurship
Lumpkin and Dess (1996)	EO + proactiveness + competitive aggressiveness
Kropp and Zolin (1996)	EO + commercialisation, technology transfer and survival
Wiklund (1999)	EO + time
Lumpkin and Dess (2001)	EO + different types of decision-making
Wiklund and Shepherd (2005)	EO + opportunity recognition
Rauch et al. (2004)	EO + performance, size and access to finance
Wiklund (1999); Rauch et al. (2004); Covin et al. (2006)	EO + controlling internal and external factors
Covin et al. (2006)	EO + moderating effect on growth of entrepreneurial participative decision-making
Stam and Elfring (2008); Walter et al. (2005)	EO + social capital and networks
Wang (2008)	EO + organizational learning
Covin and Lichtenstein (2012)	EO + measurement
Boso and Cadogan (2013)	EO + market orientation as success drivers in export

Table 4.2 represents research spanning 30 years of EO dimensions that have been tested, developed and principally limited to examining start-ups or medium-large organizations. This research modifies and builds on the EO (Lumpkin and Dess, 1996) model and introduces the interaction of the concepts of entrepreneurial cognition, biases, temporality, internal stakeholder perception, growth and performance.

4.3 Components of the Conceptual Framework

The basis of this conceptual framework is drawn from the empirical and conceptual work of the Lumpkin and Dess (1996) EO model and is underpinned by an open systems thinking approach to how each concept is interconnected and interdependent (von Bertalanffy, 1968).

The EO model consists of the dimensions of entrepreneurial orientation, environmental factors, organizational factors and performance. Lumpkin and Dess (1996) stated that the way in which elements of the model are configured will influence the performance, but did not discuss a theoretical configuration that explained the interrelationship between entrepreneurial cognitive aspects, internal stakeholder perception and performance.

EO is hereby extended to include entrepreneurial cognition and the specific EO dimension is modified to include aspects of decision-making, opportunity recognition, alertness and schemas because entrepreneurial cognition research has found that it affects performance (Tripsas and Gavetti, 2000).

The EO dimension of performance as sales growth, market share, profitability, overall performance and stakeholder satisfaction is maintained but modified to include commercialization, technology and survival (Kropp and Zolin, 1996).

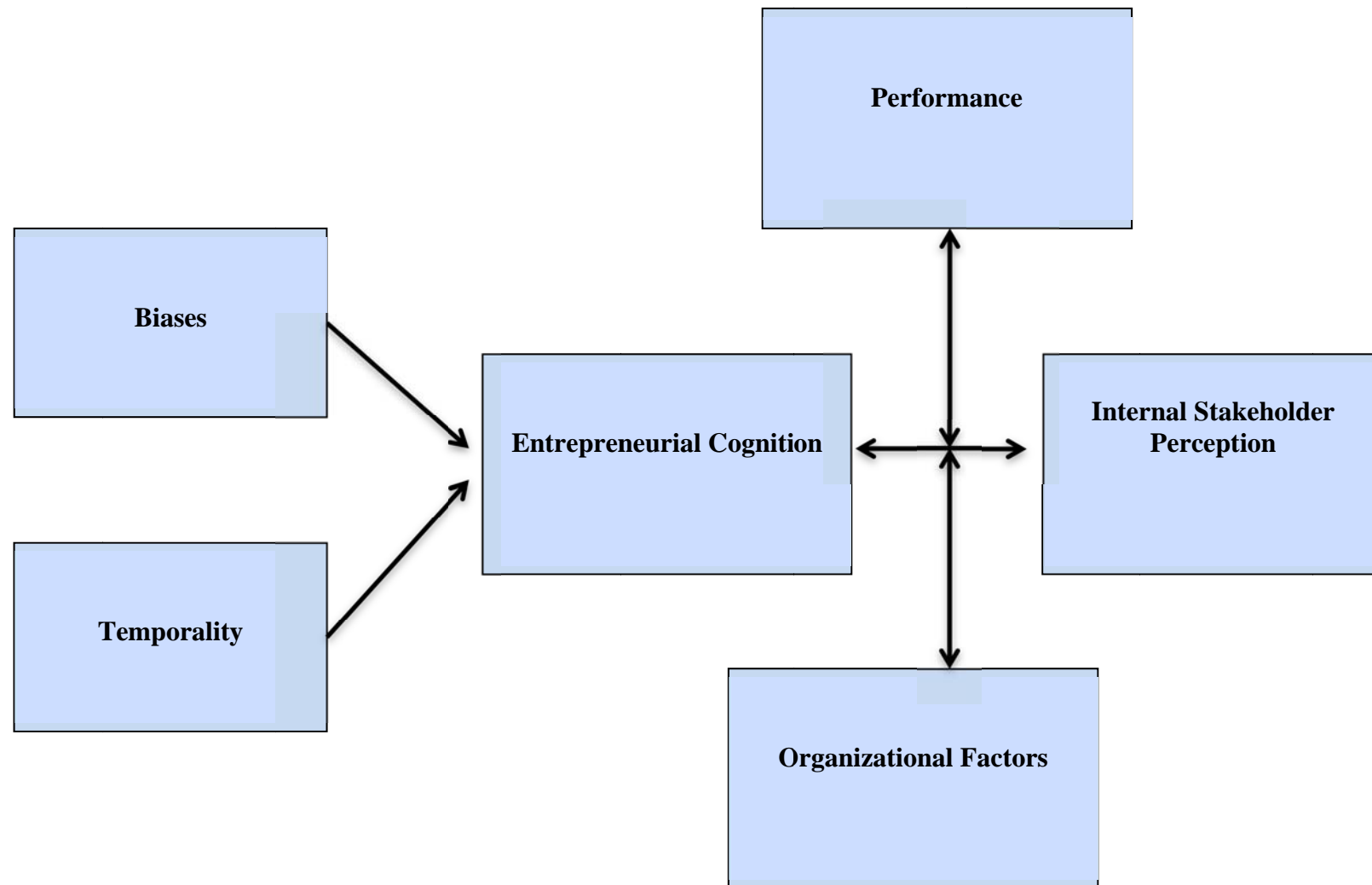
The aspect of organizational factors in the EO model (Lumpkin and Dess, 1996) is top management team characteristics and is changed to 'internal stakeholder perception' to include other management levels with which the entrepreneur

interacts. External environmental factors are not within the boundaries of this research and so are not included in the conceptual framework.

There is no feedback loop from performance to the dimensions EO or organizational factors in the Lumpkin and Dess (1996) model. In this conceptual framework the interplay between entrepreneurial cognition and internal stakeholders is linked to temporality, biases and performance and feeds into the interaction between entrepreneurial cognition and internal stakeholders. The feedback loop in this conceptual framework suggests that these concepts have an iterative and reinforcing effect on each other.

Figure 4.2 represents the dimensions and linkages between these concepts that have been informed by the literature and my experience of the phenomenon. The interplay between these concepts demonstrates the continuous reinforcing dynamic nature of the entrepreneurial process.

FIGURE 4.2 CONCEPTUAL FRAMEWORK



In Lumpkin and Dess' (1996) model, the entrepreneurial organization is regarded as an extension of the entrepreneur. The dimension autonomy is the independent decision-maker and idea generator (Mintzberg, 1973) in Lumpkin and Dess' (1996) model, and is regarded as an aspect of cognition in the conceptual framework.

The mindset of an entrepreneur is inextricably linked to the organization through the dimension of internal stakeholder perception and is very interdependent (Ireland et al., 2003) and explained within the conceptual framework. The critical aspect of this conceptual framework is the interrelationship between the way entrepreneurial cognition is communicated to the internal stakeholders and the way this communication is perceived and fed back to the entrepreneur as represented in open systems thinking. Linking these concepts builds on the differences between entrepreneurs and non-entrepreneurs cognition in literature.

In this conceptual framework I have extended the EO model by conceptually presenting that there is interplay between the dimensions of entrepreneurial cognition and internal stakeholder perception that affects performance, which in turn affects the interrelationship. More specifically, entrepreneurs are going through a cognitive process in which they scan, analyse, and interpret their environment in order to recognize an opportunity.

The entrepreneurial process of opportunity recognition contributes to performing organizations (Markman and Baron, 2003). However, research shows that these organizations perform and grow through a contribution from non-entrepreneurs through shared cognition (Tripsas and Gavetti, 2000), and entrepreneurs communicating their strategic decision-making (Vermuelen and Cursue, 2008). Although contradicting this argument, it was mentioned earlier in EO research, that participative entrepreneurial strategic decision-making has a moderating effect on performance (Covin et al., 2006).

The process of entrepreneurial cognition and biases is dependent on the organizational context (Casson, 2010). This conceptual framework considers the organizational factors that the entrepreneur and internal stakeholders are

communicating about as influencing the interrelationship. This builds on Covin et al.'s (2006) argument that the context of the organization will determine the EO of an organization.

At an organizational level, EO (Lumpkin and Dess, 1996) refers to innovativeness in the entrepreneurial process (Schumpeter, 1934) that reflects an organization's capacity for new ideas and willingness for new and creative practices (Miller, 1987). In the conceptual framework, the process of innovativeness is extended to include an entrepreneur's cognitive process of opportunity recognition and alertness.

The entrepreneurial cognitive dimension of alertness influences the speed at which the entrepreneur interacts with the organization (Gaglio and Katz, 2001), and temporality is considered as a dimension that influences this interaction. Furthermore, the assumptions made in the conceptual framework are based on Vaghely and Julien's (2010) argument that opportunity identification and recognition is sensitive and dependent on time, which has been ignored by other theories. This cognitive process enables entrepreneurs to see opportunities others cannot see and is regarded as proactiveness in EO (Miller and Friesen, 1978; Lumpkin and Dess, 1996) and entrepreneurs acting on future needs by Venkatraman (1989).

The literature on entrepreneurial cognitive dimension of decision-making states that the entrepreneur is either using heuristics or analysis to make decisions, and adeptly switches between two cognitive processing systems (Busenitz and Barney, 1997; Vaghely and Julien, 2010). The conceptual framework extends this aspect of decision-making to explore how these differences make sense (Weick, 1979) to internal stakeholders in the decision-making process within the context (Casson, 2010) or issue domains (Maitlis, 2005) with which they interact.

Individual cognitive differences such as decision-making and opportunity recognition between entrepreneurial cognition and non-entrepreneurs may affect the interaction between the entrepreneur and the internal stakeholders and has a

mediating effect in shared cognition (Busenitz and Barney, 1997; Cornelissen and Clarke, 2012). In addition, entrepreneurial cognition is affected by biases (Tversky and Kahneman, 1973) that non-entrepreneurs are less affected by (Baron, 1998). Based on this literature, biases are considered an important conceptual component of the interaction between the entrepreneur and the internal stakeholders in this conceptual framework. Casson (2010) reinforced this view that entrepreneurs use their experience to represent knowledge and patterns that is different to managers' schemas.

The biases dimension is an extension of the EO model and includes overconfidence, representativeness, intuition, optimism, planning fallacy and illusion of control. These biases are aspects of cognition that (1) influence the way in which the entrepreneur frames a problem, takes in information and makes decisions (Tversky and Kahneman, 1973; Shane, 2007); (2) has a heavily weighted role to play in entrepreneur's decision-making (Busenitz and Barney, 1997; Baron, 1998; Simon et al., 2000); (3) show that entrepreneurs are more susceptible than others (Baron, 2004) and (4) have been linked to growth (Mintzberg, 1978, 1982). The influence of biases is therefore regarded as significant in the interplay between entrepreneurial cognition and internal stakeholder perception.

The temporal concept reflects the time line associated with entrepreneurial cognition such as decision-making, opportunity recognition and alertness to opportunities and when they communicate these cognitive processes to internal stakeholders. It was noted in research earlier that timing with regards to opportunity recognition and reacting to the market are important aspects of entrepreneurship. In addition, actions and interventions in the organization by entrepreneurs and internal stakeholders have a temporal aspect to them (Balkin et al., 2000). Timing is therefore considered as an important aspect of the interplay in this conceptual framework.

The performance dimension forms part of the EO model. In addition, entrepreneurial literature has linked growth and venture creation in entrepreneurial firms to entrepreneurial cognitive aspects such as decision-

making and opportunity recognition (Mitchell et al., 2002, 2007; Wright and Stigliani, 2013). Lumpkin and Dess (1996) provided an empirical and conceptual basis, claiming that organizational factors influence EO and subsequently lead to performance. But their EO model does not include a reciprocal dimension for the cognitive interrelationship between the entrepreneur and internal stakeholder contribution to performance. In this way, the conceptual framework extends the EO model by exploring the influence of performance on the interrelationship between the dimensions of entrepreneurial cognition and internal stakeholder perceptions and includes growth in the conceptual framework.

4.4 Models Considered but Not Selected

Conceptual models that represent the interplay between entrepreneurial cognition and internal stakeholder perceptions was underrepresented in the literature. The frameworks that were reviewed have been drawn from studies on entrepreneurial cognition and general organizational models on the interplay between the entrepreneur and the environment. In considering their conceptual and empirical contributions, the models discussed in chronological order below formed part of the decision-making process to select the Lumpkin and Dess (1996) EO organizational level model. Table 4.3 summarizes the models that were rejected.

TABLE 4.3 MODELS CONSIDERED BUT NOT SELECTED

Model	Author and Date	Reason for Rejection
EO Energy Conversion	Covin and Slevin (1991)	Focuses on the entrepreneur and environment Emphasises the interplay of entrepreneurial posture, culture and structure Organizational level perspective Focuses on organizational behaviour
P-E fit	Markman and Baron (2003)	Lack of empirical research Focuses specifically on performance and opportunity recognition
Entrepreneurial Psychological Attributes and Processes	Shane (2007)	No feedback loop or dimension that influences execution of the opportunity
ETCC	West (2007)	Focused on start-ups Lack of empirical research
Dynamic State	Levie and Lichtenstein (2010)	Limited empirical research Focused on the entrepreneur
Dynamic Spiral Loops	Shepherd et al. (2010)	Focused on the interplay between entrepreneurial mind-set and organizational culture Lack empirical research and limited dimensions

4.5 Limitations of the Conceptual Framework

This framework is the first conceptualisation of the interplay between entrepreneurial cognition and internal stakeholder perception, building on entrepreneurship cognition research and organizational dynamic studies on interrelationships. At this point of the research, the conceptual framework represents assumptions that are based on theoretical perspectives that have been extracted from literature and my professional experience about the importance of these dimensions.

The interlinking combination of concepts are not cause and effect relationships, but have an influence on each other which is modified after the findings have been analysed in Chapter 12 Analysis and Discussion.

4.6 Summary

In order to investigate the interplay between entrepreneurial cognition and internal stakeholder perception, this chapter has explained the theories that have collectively formed part of the conceptual framework. In doing so, the interrelated concepts of entrepreneurial cognition, internal stakeholders, temporality, biases, communication and performance were combined to undertake the research.

The following chapter uses this conceptual framework to inform the research design that in turn is linked to the research methodology and methods.

Chapter 5 Research Design

5.1 Introduction

This chapter presents the research strategy and provides the philosophical foundation for the study. In this way, the research design provides a direct link between my research questions and the data collection process (Punch, 2000). This chapter is divided into the rationale for the philosophical perspective, reiterating the aims and objectives of this empirical research, followed by the research design and a philosophical discussion of the ontological and epistemological views, articulating the phenomenological position of this research, and the reasons for the selection of qualitative research for this research.

5.2 Rationale for Research Approach

In order to design the research questions I drew on theoretical perspectives from cognition, management and organizational literature. In conjunction, my professional experience as an organizational psychologist, business founder and academic steered the design of the research questions. In this way the primary research question explored how entrepreneurial cognitive processes, such as strategic decision-making and opportunity recognition, interplay with internal stakeholder perception. The three supplementary questions that address the supporting issues are concerned with biases, temporality, growth and performance. The four research questions were then answered by combining these disparate concepts that emerged from the literature review in a new way to investigate these interrelationships. The research approach is inductive and the conceptual framework provided the format in which the research was designed, the fieldwork undertaken and the findings were analysed.

5.3 Research Design

Research design is a holistic approach to the research process (Hussey and Hussey, 1997) which showed the methodological steps taken during this research

process. This approach helped me to select appropriate methods for data collection and analysis while cognizant of the research limitations and constraints (Saunders et al., 2000). The research design in Box 5.1 consists of nine methodological steps that reflect the overall research process and were used iteratively with constant consideration given to threats to the research process (Maxwell, 2005).

BOX 5.1 RESEARCH DESIGN

Step One: Getting Started

Define the research question and search for gaps in entrepreneurial cognition and biases, and interplay frameworks, theories and models from entrepreneurship and organizational literature.

Stage Two: Case Selection for Data Collection

Specify the population and criteria for case studies. Negotiate access to firms for data collection.

Stage Three: Preparation for Data Collection

Consider multiple data collection methods that are most suitable for a qualitative approach.

Stage Four: Data Collection

Interviews in two phases based on selection criteria. Interview nine cases in semi-structured interviews. Interview three cases quarterly in Phase II for twelve months. Overlap data collection and analysis.

Stage Five: Reduce Data

Gain familiarity with data. Sort, categorise and code interview transcripts using Nvivo 9. Use iterative and recursive processes to reduce data.

Stage Six: Analyse Data

Theory generation. Within case and cross-case analysis. Evidence gathered through multiple lenses to identify case similarities and differences.

Stage Seven: Shaping Research Questions

Iterative tabulation of each construct to confirm, extend and sharpen theory.

Stage Eight: Discussion of Findings and Claims

Raises theoretical level through discussion of literature, conceptual framework and research questions.

Stage Nine: Reaching Closure

Theoretical saturation when possible. Draw conclusions from discussion. Contributions to knowledge and areas for future research.

Source: Adapted from Eisenhardt (1989)

Stages 1-9 describe the process from the first point at which the research philosophy and methodology is established, through to the analysis and theoretical saturation. An iterative process of checking the data collection methods with the theoretical underpinnings was on-going throughout the research process. Chapter 6 Methodology and Methods that follows, explains these stages in more detail and describes the alternative data collection methods that were considered and rejected.

5.4 Ontological Position

The aims and objectives of this research are best suited to an interpretivist constructionist ontology which states that there is no objective reality (Krauss, 2005). The stance that everyone experiences life through their own point of view and perceptions are consistent with this research. This constructivist ontology posits that meaning lies in cognition, and is not external to the individual (Lythcott and Duschle, 1990). The reason for this view is that reality is constructed and interpreted in society by individuals (Denscombe, 2007). With this in mind, the most appropriate philosophical position for gaining insight into the interplay between entrepreneurial cognition and internal stakeholder perception is through a social constructivist perspective. A constructivist approach also allows for “multiple knowledges” to coexist when there is a lack of consensus (Guba and Lincoln, 1994: 113) which is relevant for this research that investigates the entrepreneur and internal stakeholder’s interaction.

Kuhn (1996) defined a paradigm as a way of seeing the world and a commitment to the same set of rules as others of a similar disposition. In this way he gave legitimacy to other researchers who have categorized paradigms. In the context of undertaking research Guba and Lincoln (1994) and Creswell (2007) posit that a paradigm is an individual’s belief system that guides an investigation. Creswell categorises four main paradigms in Table 5.1 as post-positivism, participatory, pragmatism and constructivism.

TABLE 5.1 PARADIGMS

Post-positivism	Constructivism
Determination Reductionism Empirical observation and measurement Theory verification	Understanding Multiple participant meanings Social and historical construction Theory generation
Advocacy/Participatory	Pragmatism
Political Empowerment issue-orientation Collaborative Change orientated	Consequences of actions Problem-centred Pluralistic Real-world practice orientated

Source: Creswell (2007)

The post-positivist paradigm challenges the positivists, an earlier philosophy of post-positivism, view that knowledge is an absolute truth. But like positivism it is also deterministic in its outlook, determining effects or outcomes in a reductionist way by looking at what causes the phenomenon, event or process. In contrast to the constructivist assumption, the positivist separates the self from the world they study and rejects phenomena that are observable but cannot be measured (Healy and Perry, 2000; Denscombe, 2007).

The positivist paradigm focuses more on the externally created social world (Easterby-Smith et al., 2009). It is reductionist because of the way it reduces ideas into something that is testable and measureable in order to prove predetermined theories from the collected data (Creswell, 2007). Denscombe (2007) argued that one of the differences between interpretivism and positivism refers to where social reality is constructed in an entrepreneurial organizational context. In this research the entrepreneur and internal stakeholders construct realities that do not exist objectively in the way positivists would argue (Denzin & Lincoln, 2000). This research is concerned with how and why these realities are constructed.

Creswell (2007) describes the participatory paradigm as a development from the constructivist paradigm with specific consideration to the political agenda. This is in contrast to the positivists who imposed structure, laws and theories. The emphasis of this paradigm is on improving individuals' lives and therefore the

research questions are focused towards an action agenda. As this research is not about socially improving participants' lives by formulating policy, it is not a suitable paradigm to adopt for this research.

The pragmatism paradigm has much more freedom in the methods it allows and is not confined to one system. It is characterised by whatever the researcher feels is appropriate at the time with an open-minded approach to multiple different methods and different assumptions.

The constructivist paradigm (Piaget, 1967) is adopted in this research in which the learner is actively involved in the construction (Papert, 1980). More specific to this research is the view of Lindgren and Packendorff (2009) who argued that constructionism is a suitable ontological perspective with which to study entrepreneurship and the interpretation of meanings in management (Saunders et al., 2000). The socially constructed and re-structured view of individuals about what constitutes entrepreneurship is the basis for this argument. This constructed view developed as a result of interactions such as the sharing of ideas in meetings, discussion and other social interactions (Jack and Anderson, 2002). In the same way, entrepreneurs' interactions and thinking form part of the entrepreneurial process. These shared views are in contrast to a more deterministic scientific view of the entrepreneur. The ontological position of entrepreneurship as a social construction between people (Table 5.2) supports the case study methodology in this research.

TABLE 5.2 ENTREPRENEURSHIP AS A SOCIAL CONSTRUCTION

Position	Entrepreneurship as a Social Construction
Ontological position (view of reality)	Entrepreneurship is inter-subjectively interpreted and constructed in social interaction between people
Epistemological position (view of knowledge)	Entrepreneurship research aims at creating understandings of how and why actors interpret and construct entrepreneurial processes.
Ideological position (view legitimizes research)	Awareness and responsibility required of researchers

Source: Lindgren and Packendorff (2009)

5.4.1 Epistemology

This ontological view of ‘beings’ leads to the study of the construction of knowledge, which is termed epistemology. The epistemological position of this research is interpretivism, which forms part of social constructionism. The aim of interpretivism is to understand and explain individual experiences (Esterby-Smith et al., 2009). The sharing and construction of knowledge in this research is context specific, and should be understood in relation to the situation. In this way, Easterby-Smith et al. (2009) argue that knowledge is constructed and ideas can be generated from a small sample compared with the more generalized view of the positivist epistemology in which large numbers are used and causality between interactions is established.

This process approach to the research is part of an ongoing discussion amongst researchers in entrepreneurship who argue that it is the most suitable epistemological approach (Bygrave, 1989; Zahra, 2007). The inductive approach adopted in this research “will develop and construct theory” (Trafford and Leshem, 2008: 97) and is qualitative because it aims to seek meaning and interpretation rather than measurement of the social world (Creswell, 2007).

5.4.2 Qualitative Research

Qualitative research is used as a methodology in this research because of the rich detailed way in which phenomena can be investigated within the context in which they occur (Krauss, 2005). Krauss argued that it facilitates the meaning-making process which Bloomberg and Volpe (2008) suggested allows questions of how and why knowledge is socially constructed to be captured. Denscombe (2007) regarded these rich descriptions that are socially constructed as multi-layered, providing the researcher with greater insight, and defined by Creswell (2007: 27) as representing “a means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem”.

Because this research will gain insight into the under-researched area of cognitive interactions between individuals, ‘building theory’ is more appropriate

than the quantitative approach of testing theory (Yin, 2007). Building theory in this research contributes to the paucity of studies that combine entrepreneurial cognition (Kaish and Gilad, 1991; Busenitz and Lau, 1996; Busenitz and Barney, 1997; Mitchell et al., 2000, 2002; Gaglio and Katz, 2001; Vaghely and Julien, 2010) and biases (Tversky and Kahneman, 1979) with organizational factors (Mitchell et al., 2007). Furthermore, quantitative research is characterised by ‘theory verification’ and is a way of testing theories by examining relationships among variables using statistical analysis (Creswell, 2007). Therefore, the reasons why and how entrepreneurial cognition interplays with internal stakeholder perceptions could not be captured through these cause and effect techniques used in quantitative research (Bloomberg and Volpe, 2008).

In this study I required insight, and although the search for causality “is a useful human tool for picturing a process of events” (Gene and Chan, 1997: 60), it does not answer the question of why and how entrepreneurial cognition interacts with internal stakeholder perception. Lichtman (2006) favoured a constructivist philosophy which enabled qualitative researchers to understand the context in which participants think and construct their views. Lichtman advocated that researchers should visit the environment in order to do this.

Inductive research develops theory while deductive research tests theory and Table 5.3 summarises the key differences. These characteristics of differences informed my methodological decisions and subsequent methods used in the data collection process.

TABLE 5.3 DIFFERENCES BETWEEN INDUCTIVE AND DEDUCTIVE RESEARCH

Criteria	Inductive Research	Deductive Research
Purpose	To understand and interpret social interactions	To test hypotheses, look at cause and effect, and make predictions
Group Studied	Smaller and not randomly selected	Larger and randomly selected
Variables	Study of the whole, not variables	Specific variables studied
Type of Data Collected	Words, images or objects	Numbers and statistics
Form of Data Collected	Qualitative data such as open-ended responses, interviews, participant observations, field notes and reflections	Quantitative data based on precise measurements using structured and validated data-collection instruments
Type of Data Analysis	Identify patterns, features and themes	Identify statistical relationships
Objectivity and Subjectivity	Subjectivity is expected	Objectivity is critical
Role of Researcher	Research and their biases maybe known to participants in the study and participant characteristics may be known to the researcher	Research and their biases are not known to participant in the study and participant characteristics are deliberately hidden from the researcher
Results	Conclusions cannot be generalized	Conclusions can be generalized
View of Human Behaviour	Dynamic, situation, social and personal	Regular and predictable
Common Research Objectives	Explore, discover and construct	Describe, explain and predict
Nature of Observation	Study in natural environment	Study under controlled conditions
Nature of Reality	Multiple realities, subjective	Single reality, objective
Final Report	Contextual description and direct quote	Statistical report with correlations and comparisons

Source: Adapted from Lichtman (2006) and Johnson and Christensen (2008)

I am aware of subjectivity and biases in the data collection and analysis processes (Denscombe, 2007). However, as Denscombe argued, biases are entrenched in the research process and cannot be extracted. Delbridge and Kirkpatrick in Saunders et al. (2009: 43) captured this argument and said, “we are part of the social world we are studying, we cannot detach ourselves from it”. Husserl (1970) described extracting oneself from the situation as ‘bracketing’ the outside world and certain beliefs, or suspending judgement regarding particular phenomena in order to have a clear view.

One way to reduce this bias is by using my skills as a psychologist to listen in a neutral state (Patton 2002; Denscombe, 2007), but at the same time being open to what I hear. Another way I reduced my research bias was to discuss my research with colleagues in both the external and internal academic environment. Discussions with academic peers internally included my supervisors who are both experts in their respective fields as well as methodologically experienced. Creswell (2007) calls this process ‘external audits’ in which the presentation of conference papers provided valuable feedback and opportunities to share my research with peers internationally, and increased external validity at the same time.

Table 5.4 represents the symposiums and conferences at which I presented my research. The external audits are a significant aspect of my personal and professional development. I believe that the quality of my thesis has been improved through the feedback from academics and practitioners by presenting my research at regular stages where my thinking was challenged. My personal learning has been enriched through discussions with peers from different perspectives and cultural orientations. In addition, Table 5.4 shows that from the beginning of this research the academic community has demonstrated an interest by accepting my earlier research for presentation at international conferences.

TABLE 5.4 CONFERENCES ATTENDED AND JOURNAL PUBLICATIONS

Year	Conference/Journal	Title
2009/10	University of Plymouth, “Building Bridges in Social Science” EIASM (European Institute for Advanced Studies in Management) London, “Entrepreneurship and Innovation”	Interplay between the entrepreneurial personality and the firm Entrepreneurial processes: The interplay of entrepreneurial thinking processes and the business
	ECSB (European Council for Small Business), Bulgaria, “European Entrepreneurship as an Engine for Post-Crisis”	Interplay between the entrepreneurial personality and the firm
2010/11	ICSB (International Council for Small Business) Sweden, “Changes in Perspectives of Global Entrepreneurship”	Entrepreneurial processes: The interplay of entrepreneurial thinking processes and the business
	ISBE (Institute for Small Business and Entrepreneurship) Sheffield, “Sustainable Futures”	The interplay of entrepreneurial thinking processes and the business
	EFMD (European Foundation for Management Development) Estonia, “Does Entrepreneurship Matter?”	Entrepreneurial processes: The interplay of entrepreneurial thinking processes and the business
	RENT, Norway	The interplay of entrepreneurial thinking processes and the business
	ICSB, New Zealand (poster accepted-not presented)	The interplay of entrepreneurial thinking processes and the business
2011/12	RENT Lyon, France	Understanding how entrepreneurial cognition interacts with internal stakeholders in the context of organizational growth
	EIASM, Finland	Decision-making and opportunity recognition: The interplay between entrepreneurs and internal stakeholders
	EIASM, Venice	Decision-making and opportunity recognition: The interplay between entrepreneurs and internal stakeholders

	ICSB Dublin, Ireland	The Interplay between Entrepreneurial Cognitive Mechanisms and Internal Stakeholders
2012/13	ISBE (Institute for Small Business and Entrepreneurship) Cardiff, Wales	Cognitive Alignment in Entrepreneurial Team building
	RENT, Lithuania	The Effect of Selective Entrepreneurial Learning on Interrelationships with Management and Performance
2013	International Journal of Entrepreneurship and Small Business	The interplay of entrepreneurial cognition and internal stakeholders
2013/2014	Management Learning (working paper)	Sensemaking and learning in established entrepreneurial organizations
2014	Systemic Entrepreneurship, South Africa	Effect of Selective Entrepreneurial Learning on Interrelationships with Management and Organizational Performance
2014	Entrepreneurship, SMEs and Social Enterprise, Romania	Cognitive Alignment in Entrepreneurial Team building

5.4.3 Phenomenology

This research takes a phenomenological ontological position. I am interested in the way people experience life as described by Bloomberg and Volpe (2008: 11), “to identify the core essence of human experience as described by research participants”. Ontology is defined as the concern for the nature of reality and phenomenological ontology raises questions about the way the world operates (Saunders et al., 2007).

The history of the phenomenological tradition in the early 20th Century was led by Edmund Husserl and his followers and is considered to be both a movement and a discipline within philosophy. Phenomenology has become more popular as research methodology (Denzin and Lincoln, 2000). Husserl was concerned with individuals’ perception of stimuli within a context and how they experienced the world. Denscombe (2007) explains that phenomenology is based on subjectivity, description and interpretation, and takes into account multiple realities. These meanings form part of phenomenology, and are an appropriate perspective with which to view the way entrepreneurs and internal stakeholders interact. This research is interested in the meanings participants assign to the interplay of cognitive processes as opposed to the positivist stance of objectivity and measurement (Denscombe, 2007).

The conscious view of Husserl between the mind and the external environment is a suitable perspective for studying the perceptions of the entrepreneur and internal stakeholders in their environment. Patton (2002) adds that collecting data from people directly, is the phenomenological view because they have direct involvement with the phenomenon.

Laverty (2003) explored how several researchers have attempted to provide answers using Husserl’s methodological idea of ‘bracketing’. However, Laverty’s (2003) suggestion that interpretations arise through a blend of the text and its context, as well as the participants, the researcher, and their contexts, is the approach taken in this research. There were multiple individuals interviewed with regards to their views on the same interaction process. Denscombe (2007) explained that the social construction by multiple people seeing things differently is an acceptable feature of this perspective. From a phenomenological perspective, what people see and describe

emerges from their respective experiences and accounts (Patton, 2002). In this way, my research takes a phenomenological perspective since it is based on the perception of the entrepreneurs and the internal stakeholders of their interactions and all the biases associated with retrieving the past as well as my own perception and analysis of the responses.

The discussion in this chapter on my philosophical position helped me to design the research, use the conceptual framework to identify issues to investigate and also informed the methodological approach I used.

5.5 Summary

This chapter presents the research strategy and philosophy for this empirical research. The thinking behind the research design is explained so that this research can be replicated. The next chapter explains the research methodology and methods used in this research process and the associated ethical considerations.

Chapter 6 Research Methodology and Methods

6.1 Introduction

Chapter 6 discusses the methodology and the methods selected in this research guided by the philosophical stance presented in Chapter 5. Its sections present the rationale for the use of a case study methodology, the advantages and disadvantages of using case study as a method, and multiple case studies which contextualise the interactions between the entrepreneur and internal stakeholders using issue domains. The justification for a longitudinal approach, the selection criteria and a discussion on semi-structured interviews follows. A section on the use of email data in the triangulation process, data collection processes, and issues regarding reliability and validity are addressed. Finally, a consideration of the ethics of the study and summary closes the chapter.

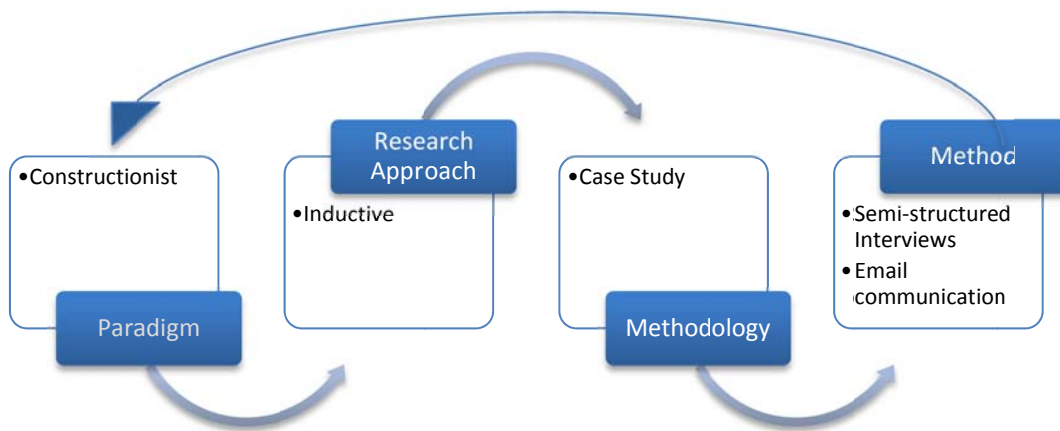
6.2 Rationale for a Case Study Methodology

This research adopted was inductive which Bloomberg and Volpe (2008) stressed, captures the process of interaction and is most suited to case study design. As a methodology, case study research allows for the analysis of a phenomenon or system that is bound by time or place (Miles and Huberman, 1994; Creswell, 2007), using multiple data sources to understand individual and comparative cases (Yin, 2008).

I adopted the social constructionism paradigm because I wanted to explore the interrelationships between the entrepreneur and internal stakeholders in their natural organizational context. In addition, by using this paradigm I was able to investigate how participants socially constructed their interrelationship through their own point of view. The view that I hold is aligned with Krauss (2005) that there is no objective reality and that cognition resides inside the individual.

The process used to acquire, build and analyse the data in the research process is represented by Figure 6,1 in which Trafford and Lesham (2008) show the iterative stages of research suggested by Creswell (2007) that an illustration of the research approach is considered an effective way to increase social research validity.

FIGURE 6.1 RESEARCH STAGES



Source: Adapted from Trafford and Leshem (2008: 94)

As a result of choosing this paradigm and considering the research methodology to undertake, the deductive approach of high reliability and testable theories did not appear suitable to achieve the intentions that I had for my research. I was more interested in the meanings that participants allocated to their interrelationships and how theory can be interpreted and constructed from the data. For this reason, a case study methodology was used in this inductive research because, as Eisenhardt (1989a) and Siggelkow (2007) have argued, the level of detail can be explored and theory extended with this approach.

A case study methodology is not new to entrepreneurship and is accepted in small business studies (Perren, 2004) as well as having dominated entrepreneurial research at various levels of analysis such as the individual entrepreneur, group and organization. Indeed, the case study methodology and the use of interviews have been used extensively in both entrepreneurial cognition studies to investigate individual cognitive differences (Tripsas and Gavetti, 2000; Sarasvathy, 2001; Vaghely and Julien, 2010), EO (Edmond and Wiklund in Landstrom and Lohrke 2010), entrepreneurial communication (Cornelissen et al., 2012), and in organizational and management literature in interplay theories (Mintzberg, 1978, 1983). In addition, Dutta and Thornhill

Chapter 7 Phase I Case Selection and Phase II Data Coding

7.1 Introduction

This chapter presents a descriptive account of the nine cases in Phase I derived from the interviews of entrepreneurs and internal stakeholders, and the analytical data coding process. Direct quotes are shown in italics to represent the thoughts and perceptions of the entrepreneur and internal stakeholders from these interviews.

The analytical data process took place with entrepreneurs and internal stakeholders from three cases identified in Chapter 6 to categorize the empirical data into meaningful concepts. The selection criteria for the entrepreneurs and internal stakeholder and the data coding process for Phase II are presented.

7.2 Cases A-I Selection

Table 7.1 below illustrates a synopsis of the nine organizations used in this research. In Cases A, B, C, E, G, H and I, the founders were still strategically involved in the business, and interacted with the management team. Individuals in the management team are referred to in this study as ‘internal stakeholders’. In order to meet the objectives of the study, entrepreneurs and internal stakeholders had to have regular interaction over strategic and operational decisions regarding the organization’s growth and performance.

The tenure of the cases ranged from six years (Case H) to fifty years (Case E), although in Case E, the entrepreneur took over the family business from his father 40 years after start-up.

TABLE 7.1 SYNOPSIS OF CASES A-I

Case Study	Company Tenure	Sector-Specific Focus
A	20+ years	Contract Pharmaceutical, Biotech and Healthcare industries
B	10+ years	Specialists in Electrical Testing, Fixed Wire Testing, Portable Appliance Testing, Periodic Inspection

C	20+ years	Creating new business based on advances in Technology (Digital Printing, Communications, Instrumentations, Medical Products Drug Discovery, Micro Devices, Optics Software)
D	17+ years	Publishing and Consultancy
E	50+ years	Manufactures and supplies standard bespoke temperature controlled laboratory equipment for incubating, shaking and mixing samples
F	10+ years	Technology, Software, Micro Systems
G	10+ years	A members organization for Health and Life Science companies
H	6+ years	Makes Micro Chip Gas Sensors, Nano technology
I	10+ years	Specialist Recruitment

Note: The shaded area represents the three cases selected for Phase II interviews.

Using the four selection criteria identified in Chapter 6 the following section presents the findings and the decisions for further investigation.

7.3 Case A Profile

Case A is a privately owned organization employing 72 people, which services the Pharmaceutical, Biotech and Healthcare industries through attracting and fulfilling contracts for clients. These services include chemical and physical analysis of pharmaceutical products, identifying the chemical composition of packaging used, and developing new chemical entities into pharmaceutical products. More recently, the organization had invested in a manufacturing suite to enhance their subcontracting offer to clients and increase their market share.

Three entrepreneurs originally founded the organization and were actively involved in decision-making. The entrepreneur interviewed is the Chairman and had a partial role as the Managing Director (MD) whilst trying to hand over the MD role to the internal stakeholder, who had been with the organization for several years.

The second co-founder, the entrepreneur's wife, is the Finance Director (FD); the third co-founder is the Quality Director (QD). Other members of the entrepreneur's family worked in the business: his son, who is the Business

Developer had ten years working in the organization, and his brother-in-law is a Project Manager.

The organization appears to have a socialist culture, in that everybody is treated equally, with no special benefits for executives such as company cars or private health insurance. The organization did not own any intellectual property and operated a consultancy model, charging their time to clients rather than selling products.

The incoming MD considered it to be a people and products based business, rather than a manufacturing business. However, unlike some other service sector organizations, they operated in a heavily regulated environment. Because of this regulation, several processes had been implemented which was subsequently monitored and controlled both internally and externally.

The MD internal stakeholder highlighted that he and the entrepreneur had a similar cognitive process and approached decisions in a similar way even though he noted differences in their background. He mentioned that the entrepreneur followed a technical and commercial route before starting the organization, whilst he gained experience by working in sales and marketing before joining the company.

7.3.1 Entrepreneurial Interaction with the Internal Stakeholders (Q1 and Q3)

The MD internal stakeholder mentioned that he interacted and managed the relationship with both the entrepreneur and the organization. He sometimes found this to be a challenge, because of the 20 years experience that the entrepreneur had in building it.

Internal Stakeholder

That's something that we're going through this year, it's something that (the entrepreneur) and I are just sitting down now and talking about, some of the different options.

The internal stakeholder felt that the entrepreneur did not manage the relationship with him, and that succession management was clearly a difficult aspect for the entrepreneur.

Internal Stakeholder

Obviously you wouldn't hand over your baby after 20 years and say there you go, you look after it now and get on with it. I think again it's quite an interesting situation to manage, it requires management of both the founder and the company.

However, the internal stakeholder did feel that he had actively made a steady impact on the company in the five to six years since the entrepreneur first handed him the role of MD.

It was clear from the interviews with both the entrepreneur and the internal stakeholder that they communicated daily, and that further exploration of the issues they discussed, such as succession management, manufacturing, and recruiting would provide a rich environment for Phase II investigation.

7.3.2 Entrepreneurial Participation in Decision-Making (Q1, Q2 And Q3)

The second criterion, derived from the research questions, was to assess if the entrepreneur was still involved significantly in strategic and operational decision-making process. Both confirmed that they were interactively engaged with this process.

Entrepreneur

So it is really then around your pricing strategy, right from understanding how much work you can get done in a day. So there's a lot of work in the front end to get that planned efficiently.

The internal stakeholder viewed himself, rather than the entrepreneur, as being responsible for the success of certain aspects of the organization's growth. There

was constant interaction between the entrepreneur and the internal stakeholder with regards to driving things forward in the organization. This was regarded by both as a key interaction.

7.3.3 Entrepreneurial Participation in Opportunity Recognition (Q1 And Q4)

At the time of this interview the organization appeared to be experiencing significant change and growth. Case A's growth was defined as productivity, the number of employees and consultancy time sold to clients. Because of this approach, the internal stakeholder felt that growth was restricted and increasing growth quickly would be a challenge.

MD Internal Stakeholder

I think there's an interest in how you change pace of growth. Can you do it in a company that is mature? You know you can step up the mark to growing at 50% a year or 100% a year, or does the size of the company become naturally limiting at some point? In order to grow they have to be more efficient, and increase productivity.

He defined growth as the achievement of client satisfaction, which he regarded as his contribution to the organization. Both the entrepreneur and MD internal stakeholder constantly mentioned that the organization needed to change in order to grow.

Entrepreneur

So it's a transition for them as well that they need to be moving on and moving upwards in terms of their thinking and what they are doing. It's been very positive so far, we've grown by getting on to nearly 20% this year...looking to do the same again next year.

Case A showed that the entrepreneur and the internal stakeholder interacted daily with regards to decision-making and looking for growth opportunities.

7.3.4 Availability of the Entrepreneur and the Internal Stakeholders (Q2)

In Case A, the entrepreneur and internal stakeholder were available to discuss major operational and decision-making issues. This offered the level of interaction that was needed for the research in Phase II. The organization was also changing as a result of the global recession that started in 2008 and was still in a state of change. This environment provided several opportunities to explore the reciprocal dynamic between the entrepreneur and internal stakeholders as they worked through these changes and challenges.

After the interview with the entrepreneur and the internal stakeholder, I decided that Case A was a suitable for Phase II exploration.

7.4 Case B Profile

Case B is a privately owned organization founded in 1993 by the entrepreneur to assist clients with their responsibilities under the Electricity Work Act 1989. They are specialists in Health and Safety Compliance Services, which include testing on portable appliances, electrical goods, emergency lighting, fire alarm and maintenance and detection services. The organization had a network of over 100 field-based engineers working in over 35,000 locations throughout the UK. The engineering team was supported by a further 40 staff in management, planning, administration, and sales. Contracts with clients of all sizes, ranged from small one-off contracts to individual national contracts. It was still managed by the entrepreneur, who was the predominant decision-maker, working alongside the internal stakeholders.

7.4.1 Entrepreneurial Interaction with the Internal Stakeholders (Q1 and Q3)

The entrepreneur in Case B interacted with the internal stakeholders in a selection of ways depending on the strategic or operational decision that was required. Depending on how the business operated, sales conducted, standard of

operations set, and relationships with clients undertaken, he would be actively involved and claimed to be aware of what was going on.

Entrepreneur

They can see the line between how the business operates, how (I) operate, and the standards I expect to follow and everybody else to follow.

The entrepreneur expected a reciprocal type of interaction in the way he wanted to be treated. He believed that people needed to be managed and pulled “into line from time to time”, because they forgot to “do the basics” and didn’t work as fast as he did.

Entrepreneur

I expect people to treat me how I treat them and visa versa. I think it’s...I don’t think I’m, I don’t think I’m as demanding as people think I am. But people would say I’m quite demanding of them. But I think I also give a lot, I expect a lot, but I also give a lot in all aspects of life, without demanding something in return, but I’m probably in some ways I expect something in return. If I’m putting a lot of effort into something I expect someone to also put the same effort into the other side so that it balances.

The entrepreneur believed that the business was fundamentally about people and relationships, but argued that he still needed to “clamp down” from time to time even though he was more passionate about these relationships, than he was about the business.

He felt that the external relationships with customers formed a key part of their business and he therefore interacted constantly internally and externally looking for new opportunities to grow the organization. This made the organization suitable for Phase II investigation.

7.4.2 Entrepreneurial Participation in Strategic Decision-Making (Q1, Q2 and Q3)

The entrepreneur was the key decision-maker in this organization and was actively involved at all levels of the decision-making process. Although he had a management team he could share the decision-making process with, the entrepreneur saw himself as the one who enforced decisions in order to instigate change and make progress.

Entrepreneur

I think business generally, especially if they have been set up by the principle, they go through a very rapid learning curve and that there is a constant change as the company grows. And it's how you manage that change and manage the people within that dynamic and actually getting people to understand we need to make... we need to go forward, and that we constantly ask them to do new things which they maybe not used to. So they are constantly not comfortable, they are constantly at the edge of their comfort zone.

He saw himself as a mentor or coach who needed to set high expectations for internal stakeholders to deliver, by pushing them to meet their potential. Even though he didn't enjoy the process of pushing people, he was very active in decision-making and challenged internal stakeholders when they had made a decision. The interaction with internal stakeholders in decision-making made the organization suitable for Phase II study.

7.4.3 Entrepreneurial Participation in Opportunity Recognition (Q1 and Q4)

The entrepreneur was very focused and involved in ensuring an efficient sales process in order to increase sales and maintain good customer satisfaction. He regarded the sales process as having a positive "knock-on" effect which affected all other departments in the organization.

Entrepreneur

If you do actually get on the telephone and see if they receive it and overcome objections and follow up, funny enough, you get the sales. And then that has another effect, because things are buoyant suddenly the engineering department is busy, the sales department is busy.

He believed that the relationships with customers, as well as strong business principles would grow the organization, and the higher salaries enjoyed by internal stakeholders was evidence of this. The growth activity confirmed the organization's suitability for Phase II case study analysis.

7.4.4 Availability of the Entrepreneur and the Internal Stakeholders (Q2)

The entrepreneur was very aware of time, and its value and made reference to it throughout the interview. He appeared to encourage staff to use their time effectively.

Entrepreneur

Once you get a process in place and you get systems, policies procedures that people can follow, it speeds up the effectiveness of the business, it means that we produce more within a limited time, within a shorter time frame.

He agreed to take part in Phase II of the research, as he was interested in the outcome, and enjoyed using his time to do different things outside of the business.

7.5 Case C Profile

Case C is an independent employee-owned organization founded in 1987 by 22 co-founders. Two founders were still actively involved in various aspects of the business. The entrepreneur in this research is the MD for one of the organization's operating subsidiaries, of which he is also part-Chairman for the umbrella organization itself, of which the other founder is part-time Chairman.

The core competence of the business is in creating new businesses based on advances in technology such as digital printing, communications, instrumentations, electronics and sensors, micro-devices, medical products, drug discovery, micro devices, optics software and systems.

The organization developed and commercialized these various technologies and products for a wide range of markets and worked closely with global clients. The culture of the organization was innovative and creative, with mostly informal communications between all levels of the management and employee teams. At the time of this interview there were 350 employees divided into seven groups each with a Group Head, and separate portfolio of clients, products, and development work. The organization regarded recruitment as an important strategic advantage and focused on recruiting commercially-minded, highly talented individuals.

7.5.1 Interaction with the Internal Stakeholders (Q1 and Q3)

The entrepreneur interacted with Group Heads across the seven groups. He was also responsible for global relationships in Japan, Korea, China, America and Europe. His daily interactions were with the internal stakeholder who was in the process of taking over the CEO role from the entrepreneur. His weekly and monthly interactions also involved other Group Heads in both formal meetings and informal communication when issues needed to be discussed.

Entrepreneur

I'm also Managing Director of the --- partnership which was the original sort of incubator/contract arm of the business. So I'm still Managing Director of that. I do have a deputy who assists with that so, erm, so I split my time between the group, and that business.

Interactions were usually driven by the internal stakeholder, who wanted feedback from the entrepreneur with regards to decision-making, or challenges they faced.

Entrepreneur

The ideal form of leadership management is where you're more or less invisible. Um, actually, it's sort of light touch, doesn't mean disconnected. I tell my people that report to me, I expect them to know everything that's happening within their business.

He preferred to lead from the front, but found it increasingly harder now that he was MD, and more hands-on with regards to the operations of the organization. However, the majority of his interactions involved aspects of the culture, values and ethics, while he was trying to hand over the strategic decision-making to one of the internal stakeholders who was interviewed in Phase II. These interactions made the organization suitable for Phase II investigation.

7.5.2 Entrepreneurial Participation in Decision-Making (Q1, Q2 and Q3)

The entrepreneur was involved in decision-making in both his role as MD and Chairman, interacting with Group Heads throughout the process.

Entrepreneur

..it's not independent, you know, so it does rely on collaborating with other people, it's not a strategy of collaboration, if you like, but each bit of the business can, well...it's small enough that people can see and be seen, and hear and be heard, take responsibility, feel involvement, and decide we're going to do this.

The entrepreneur preferred not to make any decisions, which he believed should be made by the internal stakeholders, but instead encouraged them to take ownership and make decisions independently of each other.

He would encourage this process by asking them questions rather than giving them the answers. During this questioning process, the internal stakeholders produced decisions themselves which they communicated to him.

He believed that part of the delegation process was to exercise judgment in a situation when an internal stakeholder made a decision, rather than dictate what should be done. Additionally, the element of trust between the internal stakeholders and himself, enabled a decision to be made quickly without waiting for a committee of internal stakeholders to get together first. This interaction made the organization suitable for Phase II investigation.

7.5.3 Entrepreneurial Participation in Opportunity Recognition (Q1 and Q4)

The entrepreneur's role in looking for new opportunities had changed from following up on sales opportunities, to more strategic networking, development and design opportunities through long-term relationships. The front-line sales opportunities and responsibilities had been transferred to the internal stakeholders in his group and across to the other groups. His interactions with internal stakeholders involved him asking the right questions regarding discussions about opportunities and strategic decisions. He believed that by asking the right questions, the individual and organization could be successful.

Although the entrepreneur was no longer directly involved with selling, he interacted with and managed the internal stakeholder, who was still growing that section of the business in China.

Entrepreneur

We were the first people in China, who were forming a bridge to China, so that people in the West could develop a product, and have it manufactured in China, satisfactorily. And um, and so we've been out in China whilst it's all been growing and things like that.

The entrepreneur was also actively involved in ensuring that various parts of the business continued to grow by not targeting the same markets.

Entrepreneur

I sort of initiated, I guess, it's situations like that where it sort of falls to me to resolve the situation. Um, so actually what we did we reviewed the strategy of this business, and it stopped doing that bespoke stuff and focused on its core business.

The organization did not have a formal long-term strategy for growth because they were constantly searching for and finding new opportunities and innovating according to the changes in the environment. The interaction between the entrepreneur and the internal stakeholders made the organization suitable for Phase II study.

7.5.4 Availability of the Entrepreneur and the Internal Stakeholders (Q2)

The entrepreneur was very aware of time, and regarded time as “running out”. I received agreement and commitment from the entrepreneur to interview him and four internal stakeholders. The internal stakeholders were selected by the entrepreneur on the basis of the most interaction he had with them. He was fully involved in the recruitment process and met everyone who was interviewed, which was one of the regular interactions with the internal stakeholders that the entrepreneur wanted to explore in Phase II of this research.

7.6 Case D Profile

Case D is a publishing organization founded in 1989, and sold several years later by the entrepreneur because she felt that her personal goals and values were no longer being met. They grew from a UK Cambridge-based publishing organization, to an international publishing organization when their clients began using the Internet to source information and conduct research.

The core competence of the business was to sell consultancy and system installations to larger organizations and university departments. They also provided international recruitment services and research anywhere in the world for fast-moving consumer goods (FMCG) clients. Because the entrepreneur had

sold the organization, she no longer interacted with any internal stakeholders, or participated in decision-making, and opportunity recognition. The case was therefore not suitable for Phase II investigation.

7.7 Case E Profile

Case E is an independent, privately owned company, founded in 1952 to manufacture and design equipment for sample preparation, scientific analysis, data acquisition and data analysis, as well as providing solutions to the global scientific and industrial markets. The entrepreneur took over the business from his father, after having had his own business for 15 years. He is the MD and responsible for transformational change in the organization from manual systems to computerized systems and processes. His strategic plan to modernize the organization had taken nine years, rather than the estimated five years he had anticipated.

The organizational transition led to severe challenges for the entrepreneur, who wanted to grow quickly by increasing the company's market share, product range and turnover. However, because of the extent of the internal challenges, neither he, nor the organization was able to take part in Phase II of this research. The time required was too demanding for the entrepreneur, and an exploration of the interactions with his internal stakeholders would have led to further tension in an already strained relationship. Therefore, further investigation into Case E was not possible.

7.8 Case F Profile

Case F is a Data Communications organization, that became the leading developer of ATM (*Asynchronous Transfer Mode*) data network in Cambridge and Pittsburg, USA. The entrepreneur was initially responsible for the finance and business strategy, including raising venture capital. He then ran the software engineering group, building it up to a team of 200 engineers eventually being responsible for technical strategy as the Chief Technology Officer (CTO). In 1999, when it employed over 2,000 employees and had annual revenues of over \$600 million, the organization was sold for \$4.5 billion. The entrepreneur

continued as CTO until April 2000.

The entrepreneur was no longer involved in the organization, and was now an active angel investor and mentor to start-up businesses in the UK and US. In September 2001 he co-founded, and was currently Chairman of an investment group of seasoned technology and biotechnology entrepreneurs who invested in and mentored technology start-ups in Cambridge, UK. Since 2002, the group had invested nearly £10 million in over 20 technology and biotechnology businesses, mostly based in Cambridge, UK. Case F was not suitable for further investigation because the entrepreneur met none of the four criteria.

7.9 Case G Profile

Case G is a member's organization for Health and Life science organizations, designed to facilitate collaborations between academic organizations and research institutes. It is a not-for-profit company set up to facilitate better links between the organization and the industry. They had a bio-incubator arm and an agenda to feed the government's investment strategy. The entrepreneur became the regional international trade advisor for bio-technology and the pharmaceutical industry, working for UK trade and investment in 2005 before running the organization.

Case G now consisted mostly of service sector organizations in medical biotechnology, medical devices, contract research organizations, technical service providers, design consultancies and commercial service providers. Although the entrepreneur assisted and communicated with entrepreneurial organizations, she did not have internal stakeholders as employees, and was not involved in decision-making or opportunity recognition for growth within an organization. On this basis, as a member organization, I decided that this case was not suitable for Phase II exploration.

7.10 Case H Profile

Case H is a university spin-out nano-technology organization founded in 2005 and run by three young entrepreneurs who are still full time employees in the organization. Their products were used around the world in numerous industry sectors for the detection and analysis of chemicals. By using leading-edge nano-fabrication techniques, the organization had developed a complete chemical detection system on a very small chip called 'Field Asymmetric Ion Mobility Spectrometer' (FAIMS). The chip had the ability to monitor a broad range of chemicals rapidly at very low quantities with high confidence.

The organization had raised \$50 million from start-up and operated with 40 employees in both the UK and USA. Their product range had extended to the development of gas sensors for the detection of toxic gases and industrial process control where instruments were used to detect contamination in food and beverage products. The research and development part of the organization is based in Cambridge, UK, and the commercially focused part is based in the USA.

Case H met three of the four criteria for Phase II of the research. The entrepreneur interacted daily with internal stakeholders on decision-making and recognizing opportunities for growth, but was unable to commit to 12 months that was required for Phase II. The entrepreneur travelled extensively to the USA and had limited time due to tight schedules which made this case unsuitable for inclusion in Phase II.

7.11 Case I Profile

Case I is a privately owned global specialist recruitment organization focused on the Service Sector, Museums and Heritage, Sports, Aviation and Airlines, and Hotels and Hospitality. In eight years the entrepreneur and internal stakeholders had grown the organization into eight companies within the group with offices and employees in the UK, USA, Qatar and France. Within the Sports sector,

their recruitment operations were being undertaken in China, South Africa, Mauritius and Brazil.

They were the first company to win a contract with the Qatar Museums Authority, and their contracts in Qatar were a significant part of their growth. The entrepreneur resided in the South of France, and even though he was willing to take part in Phase II of the research, the timing and logistics of travelling were too expensive and challenging. On this basis, Case I was not selected for further investigation.

On the basis of the above selection criteria three cases were selected for Phase II as presented in Table 7.2.

TABLE 7.2 THREE CASES IN PHASE II

Case Study	(i)Interaction with IS	(ii)Decision-Making	(iii)Opportunity Recognition	(iv)Financial Growth	Meets criteria for Phase II
A	Daily	YES	Actively	Founder involved in business growth	YES
B	Daily	YES	Actively	Founder fully involved in business growth	YES
C	Daily	YES	Actively	Founder involved in business development And leading growth in product and international development	YES

In these three cases the entrepreneurs interacted daily with the internal stakeholders on strategic decision-making and recognizing opportunities for business development. Each entrepreneur committed to the length of time for Phase II interviews and recommended internal stakeholders who could participate.

The empirical data collected from these cases was collected through semi-structured and then analysed. The first part of the analysis process is described next.

7.12 Data Coding in Phase II

Nvivo9 was used to analyze the interview and email data, and is summarized in Table 7.3. The interview transcripts were read several times to identify common themes. The first step in the email coding process was to upload all email data into the Nvivo9 folder. The second step was to read through the final list of codes developed from the axial coding processes of the interviews. The third step was to read through the emails and select relevant words and phrases, which fitted into the labels and categories generated from the open and axial coding processes.

A manual process of highlighting the relevant text from emails was used, taking into account the frequency of the same word in the conversation. In this way, both the frequency and relevance of the words were taken into consideration in the analysis. Email data was only available for Cases A and C.

Key words and phrases were identified in order to understand the data and called open coding. Denscombe (2007) referred to open coding as words and phrases that are mostly descriptive with similar meanings. Sixty-two hours of recorded data were collected from undertaking the Set I, Set II, and Set III interviews. I read and reread the transcripts to produce 127 identified codes that were reduced to 37 in Table 7.4. The Code Book consists of the main codes that have subsumed codes with similar meanings and the explanations for each provided. These codes are regarded as vital to “any explanation of the complex social phenomenon” (Descombe, 2007: 98).

Guba (1978) cited in Patton (2002) suggested a second opinion on what data falls into which category to ensure consistency. For the purposes of consistency in understanding, a colleague read the code names and the description as it is presented in Table 7.3. For each of the 37 codes, my description and the colleagues’ understanding of the code name were aligned and no alterations were

required following the feedback. In this way, my original decisions in developing the codes and descriptions were confirmed.

TABLE 7.3 CODE BOOK DERIVED FROM OPEN CODING

Code Name	Code Description
1. Alert	Exercising ability to spot issues and opportunities
2. Atmosphere	The internal climate of the business
3. Background	The knowledge and skills that have been acquired
4. Business Development	Going out and finding clients and opportunities
5. Change	An alteration from the current state
6. Communication	The way people interact and share
7. Culture	Customs and artefacts people identify with
8. Decision-Making	Coming to a conclusion about something
9. Employees	Internal stakeholders
10. Entrepreneurship	Idea creation and realisation
11. Environment	Internal and external conditions
12. Experience	Learning gained from what one has encountered
13. Feedback	Response to a particular process
14. Finance	Issues relating to turnover, sales, profit and loss Financial plans and targets
15. Generation	Relating to different age groups
16. Growth	Improvement, moving forward and a measure of output
17. Influence	The ability to persuade others into action
18. Information Gathering	Sources and methods of acquiring knowledge
19. Innovative	Development of products, services and markets
20. Insight	In-depth ways of seeing things
21. Interaction	Process of interrelationships
22. Management	Senior decision makers
23. Negotiation	Exchange of information for gain
24. Opportunity	Something that hasn't been recognised before
25. Optimistic	Positive approach and attitude
26. Outsourcing	Procuring products and services external to the organization
27. Pattern Recognition	Joining the dots in opportunities and new information
28. Perception	A view based on experience and knowledge
29. Personality	A set of characteristics an individual displays
30. Purpose	A set of objectives to meet an outcome
31. Recession	A period of reduced output
32. Recruitment	Attracting and securing human resources
33. Relationship	The way in which two or more things are connected
34. Responsibility	Required to do as a set of obligations
35. Sales	Contracts of commercial value
36. Technology	Commercial application of science and engineering
37. Temporality	The relationship and variations with and over time

Mason (1996) argued that during the analysis of qualitative data, the researcher moves between ‘literal’, ‘interpretative’ and ‘reflexive’ approaches. This process was undertaken and the conceptual framework was used to give structure to the 19 concepts in the form of axial coding that emerged from further reduction of the data (Table 7.4). Axial coding looks for links, relationships and connections between themes and words (Descombe, 2007) and the main categories of the conceptual framework; entrepreneurial cognition, internal stakeholder perception biases, temporality and performance.

TABLE 7.4 CATEGORISATION USING THE CONCEPTUAL FRAMEWORK

(8) Entrepreneurial Cognition	(4) Internal Stakeholders
Alert, decision-making, information gathering, pattern recognition, insight, experience, opportunity	Interaction, relationship, feedback, influence
(1) Biases	(4) Performance
Optimism	Growth, sales, technology, business development
(3) Temporality	
Generation, change, background	

The open and axial coding completed the categorization of similar meanings into concepts. The specific codes, their ascribed categories, links to the literature and meanings are discussed in Chapter 11 The Icarus Paradox. In addition, the next stage of the analysis that the relationships between the concepts and how they influence each other is presented.

7.13 Summary

This chapter was presented in two main sections. The first section was the descriptive account of the nine cases used in Phase I, and how three cases were selected for further investigation. The second section included the data coding analysis process of the three cases using open and axial coding. These codes are

used in the following three chapters to present the empirical findings for each case.

Chapter 8 Phase II Case A Findings

8.1 Introduction

This chapter presents the findings of the empirical data in Case A. The entrepreneur and internal stakeholders were each interviewed three times in Sets I, II and III. A synopsis of the entrepreneur and four internal stakeholders is presented, followed by the findings of the entrepreneur's cognitive interaction with each of the internal stakeholders. Direct quotes in *italics* from the entrepreneur and internal stakeholders present a glimpse of the interview. The textual function of Boxes 8.2-8.7 was to enhance text that I regarded as significant in order to focus attention, and supplement the data presented. The text boxes individually or collectively do not have a conceptual purpose. The lexicon used in the direct quotes, text boxes and text are the precise words that the participants used the majority of the time. It presents the data directly as it was captured.

8.2 Synopsis of the Entrepreneur and the Internal Stakeholders

The codes and job titles for the four internal stakeholders are presented in Table 8.1.

TABLE 8.1 INTERNAL STAKEHOLDER JOB TITLES

Case Study	Internal Stakeholder	Job Titles
A	IS 1 IS 2 IS 3 IS 4	Managing Director Finance Director (and entrepreneur's wife) Operations Director and Laboratory Manager Quality Control Administrator

The codes (1-19) were grouped into categories to present the findings based on their similar meanings.

BOX 8.1 SUMMARY PROFILES OF CASE A PARTICIPANTS

(i) Profile of the Entrepreneur

The entrepreneur in Case A is a biologist and has a chemistry degree. He now acts as the Chairman for the organization, but is gradually handing over responsibility for running the organization to the Managing Director, Internal Stakeholder 1. He worked for a large corporate pharmaceutical company and learned about the industry from several different jobs before deciding to start his own business. He spotted an opportunity to offer services to the pharmaceutical industry in outsourcing the formulation side such as tablets, capsules and aerosol markets which no one else was doing at the time.

(ii) Job Profiles of Four Internal Stakeholders (IS 1- IS 4)

IS 1 was acting as the MD, and taking over the role from the entrepreneur. He first started in the organization 18 years ago in the lab whilst doing a Chemistry degree part-time, but left to work in Sales and Marketing for a large scientific equipment provider. He spent six years gaining experience in other organizations and returned to work for the entrepreneur seven years ago in a business development role. He recently took over the MD role, which he and the founder had spent several years planning for in their succession management discussion.

IS 2 is the wife of the entrepreneur and is the Personnel and Finance Director. She had worked in the organization since it started, is a board member and interacted daily with the entrepreneur.

IS 3 is the Operations Director and Laboratory Manager who has been with the organization for six years. He was responsible for all the operations, formulation activity, analytical work, and reported directly to IS 1 and then to the entrepreneur. Although his reporting line is directly to the MD, he had daily interaction with the entrepreneur on strategic guidance and decisions.

IS 4 is the Quality Control Administrator and had been with the organization since 1992 and worked with the entrepreneur in a previous organization. Although she was not part of the Senior Management team like the other internal stakeholders, she was mentored by the entrepreneur who was a technical support for her. She interacted with him regularly in a mentoring capacity. She worked with the Quality Manager and reported to IS 1 directly for operational issues.

8.3 SET I: JANUARY – APRIL 2011

Set I presents the findings of the interviews, which took place between January and April 2011 with the entrepreneur and four internal stakeholders.

8.3.1 Decision-Making, Alertness, Information Gathering, Pattern Recognition, Insight, Experience and Opportunity Recognition (Q1)

The entrepreneur gathered information that he regarded was necessary for a decision depending on the available time. He did not believe in procrastinating over, or regretting a decision that was made. This thought process was confirmed by IS 1 and IS 2. IS 1 felt that the entrepreneur did not ever reflect on whether he had made a “wrong or right decision”, and that that kind of reflection was not part of the entrepreneur’s thinking process. Although IS 2 admitted that, unlike the entrepreneur, she did go back over past decisions, and reflected on what she could have done differently.

The entrepreneur’s process of decision-making was made before he consulted with others on their thoughts, and this was confirmed by IS 1, but contradicted by IS 2 in the first part of the interview who believed that she was part of his decision-making process. However, later in the interview, IS 2 changed her opinion supporting what both the entrepreneur and IS 1 had said.

IS2

He will have the decision made, he may have the decision a lot earlier than he tells you, but he will be churning it over, if he’s sure its the right decision but he won’t say anything.

I don’t think he actually talks about it until he knows about it himself so when he starts to talk about it he’s already thought about the pros and cons, so yes he will come across as quite confident, because if he’s dismissed it himself, he wouldn’t tell you about it.

When the entrepreneur was faced with moving jobs before he started the business, he did not spend time considering the “what ifs”. He took action “into the unknown” by gathering available information, rather than delay a decision in order to gather more information. IS 4 said the entrepreneur did not make quick decisions.

IS 2 felt that he was very open and strong in his decision-making and persuaded people around him to his way of thinking. IS 2 and IS 3 both said that the entrepreneur was an analyst by heart, very analytical in his decision-making, and confident in his decision-making process, although he also used his intuition when decision-making.

IS 1 confirmed that the way the entrepreneur went about gathering information was limited, and saw it as problem that he made decisions without gathering enough facts. This was contradicted by IS 2 and IS 3, who argued that the entrepreneur only “worked on facts” when making a decision, and IS 4 who said that the entrepreneur definitely gathered “lots” of information when making a decision. However, IS 3 added that the entrepreneur made quick decisions without sometimes having the facts. He used the example of the entrepreneur who advised an analysis after having heard only 10% of the story.

IS 1 however also regarded the entrepreneur as partly analytical in his decision-making, citing the use of key performance indicators to explain how important the measurement of performance was to the entrepreneur. The reason IS 3 gave for the entrepreneur needing the facts to make a decision was based on the highly regulated and compliance nature of the pharmaceutical industry, which he and the entrepreneur understood more than the other internal stakeholders. IS 1 also argued that when the entrepreneur made decisions on gut feeling, such as the example of building the manufacturing suite, he had not accumulated facts in order to weigh up the decision to build the manufacturing suite. The entrepreneur’s use of intuition was supported by IS 2 who added that the entrepreneur could see things that others could not.

According to IS 1, the entrepreneur did not use financial calculations to decide on whether or not an opportunity was a viable option, and in the case of the manufacturing suite, he had already made a decision to proceed before he spoke to IS 1, IS 2 and IS 3. IS 4 argued that the entrepreneur took people’s view into account, but “will go for it” when he decided to.

IS 1 confirmed that the entrepreneur collected facts and figures when making decisions to purchase equipment, but not when it involved people and things in the organization. But he added:

IS 1

He'll quite often have a preconceived idea of how it should have worked or should work and will not always necessary gather all the information to see whether he was right or wrong,

In making a quick decision about moving to bigger premises for expansion purposes, the entrepreneur evaluated the potential downside first, such as whether the organization could afford it. But part of his decision-making process was to also evaluate the downside of “not making the decision”. Although moving into bigger premises was a financial risk, the entrepreneur felt confident about the future, and the move ended up doubling their income. He was already looking at new premises for their next move. He appeared to be thinking ahead of the other internal stakeholders.

BOX 8.2 DECISION-MAKING

The entrepreneur recognized that he drives through decisions in a singular way, and sources information for a decision himself rather than asking internal stakeholders. The entrepreneur evaluated the potential downside first.

Although IS 2 perceived that the entrepreneur did not “push” people into agreeing with his decision, but rather persuaded them towards his decision. She also felt that he was open to change and discussion if his decision was not agreed with. This process of sharing his decision-making process with her before making a decision was not experienced by IS 1 and not mentioned by the entrepreneur. In his decision-making process the entrepreneur evaluated employees’ capacity to cope with information, and did not take a risk on those that he believed could not handle the information.

The entrepreneur felt that there were very few people who were able to see and act on an opportunity in the way that he did. He was able to see the potential in the development of a new product, which was not yet an obvious product for the organization to develop.

BOX 8.3 OPPORTUNITY SPOTTING

However, IS 1 felt that the entrepreneur was no longer involved in spotting opportunities, although he was an alert individual. He believed that in the past the entrepreneur was involved in spotting opportunities that involved growing and expanding the business, but was limited in terms of spotting new services and doing different things.

IS 1 said that the business had provided the same core services for 20 years. IS 1's view was contradicted by IS 2 and IS 4, who mentioned that the entrepreneur was always alert and looking for opportunities, and that the majority of the time the entrepreneur's ideas were taken forward. IS 4 suggested that other internal stakeholders saw the entrepreneur sitting at his desk and were not aware of what he was involved in.

Issue domain 'Recruitment' was an important aspect of growth for the organization and the entrepreneur believed that their new strategy to attract self-motivated, driven and ambitious people was leaving a gap in their resources.

Entrepreneur

We're looking now for the people who are willing to take those things on and who are willing to put themselves forward ...unfortunately they are quite thin on the ground.

IS 1 felt that new appointments should be made from the recruitment of people internally. He added that this process could be used to develop existing employees.

The entrepreneur's experience and familiarity with the industry enabled him to take risks with issue domain 'Manufacturing' and believed that it was an

opportunity to increase their offer to clients. He was optimistic about it as an area of expansion. It was not normally part of the organization's service offered to clients; however, he anticipated that the manufacturing suite would enable them to increase their size to potentially five to ten times bigger than it was. Even though the entrepreneur had taken a risk by building the new manufacturing suite, he took a calculated risk with regards to "hedging his bets" by continuing to provide the industry with their normal services as well.

BOX 8.4 ENTREPRENEUR'S EXPERIENCE

The entrepreneur made a judgment to go ahead. He was still able to see how it fitted into the business model and use his confidence to make a decision that did not specifically relate to his experience.

IS 1 considered this to be "pre-judging" without sufficient information, and instead believed that the entrepreneur based his decision-making on his experience. He added that the entrepreneur used general experience to make a decision rather than specific manufacturing experience.

Although the entrepreneur claimed to rely on his "gut feeling" when he decided to build the manufacturing suite, IS 1 said that the entrepreneur would still want to know the facts and data about how they would achieve growth in financial terms once it was built. IS 4 confirmed that the entrepreneur's decision-making was definitely informed by his experience.

IS 1 said he could not visualize the size or shape of the organization, but he knew the type of clients and projects that would be needed to make it successful. Although he regarded himself as instrumental in making the manufacturing suite happen, he said it had been in the business plan for years and no one had done anything about it.

IS 2 also said that she was sceptical about the manufacturing suite and the amount of investment needed to build it and finance the running costs. She said that although many staff were against it, the feedback from clients had been very

good. IS 4 also felt that the time and money required to provide the manufacturing suite had been underestimated, and that starting it was the entrepreneur's hardest decision.

IS 1 believed that the entrepreneur was risk-averse, and that his opportunity spotting ability was constrained by this, as well as by his experience. He added that although the entrepreneur would have taken risks in order to build the business initially, due to his age he was now risk-averse.

8.3.2 Change, Generation and Temporality (Q1, Q2 and CF)

The entrepreneur had always had a drive for change even before he started the organization. He had adopted a traditional business model, which was different from organizations that follow the market trend and then run out of money.

BOX 8.5 TEMPORALITY

IS 1 suggested that the entrepreneur's sense of time was different to his own, and that the entrepreneur felt everything should be done quicker than it actually was being done.

IS 1 argued that the entrepreneur was not time bound in the way the entrepreneur believed he was. However, with regard to decision-making IS 1 took longer than the entrepreneur to make a decision. He believed that it was due to his lack of experience compared to the entrepreneur's. IS 1 suggested that the entrepreneur made quicker decisions than he did when they had the same information. This included decisions concerning the technical, quality, regulatory and operational aspects of the organization. He also suggested that he minimized the time when making decisions.

IS 2 and IS 4 supported IS 1's view that the entrepreneur was not good with time and did not work to time scales. However, IS 4 felt that he was improving his time management ability. IS 2 remarked that when something needed to be

done, the entrepreneur would ensure that it was done in the given time, and that keeping appointments was always a challenge for him, whereas she was always five minutes early.

IS 3 and IS 4 mentioned that the entrepreneur worked according to deadlines, and would hold people accountable to a promised time if they gave him one. IS 2 preferred to “get it finished and off my desk”, whilst the entrepreneur didn’t get stressed about things in the same way, and used timing to get something done in a different way. IS 3 felt that the entrepreneur used to be more concerned about punctuality in the past than he was today.

IS 3 said that he tried to do things quickly even though it was made difficult due to a heavily regulatory environment. The difficulty was eased by the entrepreneur, who IS 4 said always pushed the time boundaries imposed by industry standards.

8.3.3 Optimism (Q3)

IS 1 regarded the entrepreneur as a realist, not an optimist or pessimist and suggested that he was a balanced individual. IS 4 felt that he was generally an optimist, although he was even-tempered and didn’t show much about how he felt.

8.3.4 Sensemaking and Sensegiving (Q4)

The entrepreneur made sense of his own decision-making abilities and was aware that he did not consult anyone when he was going through the process of thinking about something.

Entrepreneur

I’m very much a singular on that, I mean I would go and get that myself. I suppose at that stage that’s when I realize that I need to broaden my horizon even here because the company becomes a bit singular.

The entrepreneur did not communicate his thoughts about a new idea or opportunity immediately to the internal stakeholders. He did, however, brief them about the issues related to the business in formal team meetings. The interaction between the entrepreneur and the internal stakeholders who are employees, involved general communication about the organization's performance and objectives for the future rather than issues regarding profitability.

This sensegiving process was more formal than getting internal stakeholders to understand what profit was, and what it meant to the organization's growth. IS 2 and IS 4 said that the entrepreneur was a good communicator, and that he used simple terms when he offered assistance to internal stakeholders in the laboratory.

IS 1 thought that he listened to what internal stakeholders said much more than the entrepreneur did, but realized that it was too soon to tell whether his approach was the right one or not. He went further to suggest that the entrepreneur's decision-making was more "dictatorial" than consensus driven. As the MD, IS 1 preferred to have more of a consensus from other internal stakeholders before making a decision. This view was contradicted by IS 2 who believed that the entrepreneur did consider internal stakeholders in his decision-making process.

IS 2

He would always sort of sit and muse with other members of staff. He will sort of discuss things with them. He's not dogmatic in the way he comes to his decisions, he won't say well I've thought of this and this is the way I want to go, he's very much the sort of....well I've been thinking about this, what do you think and....er get feedback from them to see how comfortable they are with that decision.

IS 2 felt that the entrepreneur was good at giving sense to internal stakeholders. She said that people did not have the same vision as the entrepreneur.

IS 2

He's very good at erm....he can speak to all levels, so if he is speaking to one of the analysts he will paint the picture in a way that they will, can understand, and appreciate at a different level. He will alter it so that the finance side will come on board. He will see it from a more financial perspective rather than from an analytical and create a progression.

IS 3 regarded the communication between the entrepreneur and himself as open and regular, which was made easier by open plan desks, and sitting next to each other. IS 4 gave the example of when the organization moved to larger premises, the entrepreneur was good at keeping people informed all the time about what was going on, and that the entrepreneur was making sure that IS 1 would do the same when he took over the MD role completely.

8.3.5 Interaction and Relationships (Q1 and CF)

The entrepreneur interacted with internal stakeholders with regards to several issues within the organization. He would discuss strategic issues, such as short order books and lack of sales beyond three months, with IS 1, 2, and 3, who were on the management team, but not with IS 4. He believed that people preferred not to know the risk to their jobs, and controlled the information that was disclosed to staff who were lower down the organization.

In terms of the entrepreneur's interaction with the internal stakeholders about the 'Manufacturing' issue domain, he made the decision himself to take the risk. With regards to the internal stakeholders at management level, the entrepreneur discussed the business plan and his thoughts about the expansion into the USA.

Entrepreneur

I could make the judgment calls on those and ...tip the odds in our favour. I suppose it might just be a random decision on my part...or that's where I feel I'm moving to, so getting outside of the comfort zone and moving into.

IS 1 interacted daily with the entrepreneur and believed they had a “brilliant” relationship, and IS 3 believed his interactions on technical issues with the entrepreneur led to mutual agreement. Although, IS 3 said that on strategic issues the entrepreneur had the final decision.

IS 1

I think with him (the entrepreneur) has his decision and that will be the way it is done. He has already made his decision or his mind before he gets all the information. I will tend to listen to more opinions than perhaps he (the entrepreneur) does.

The entrepreneur’s opinion was that there were people in life who didn’t make decisions and then regretted it later. IS 1 felt the entrepreneur interacted differently and altered his information gathering and decision-making processes, depending on whom he was talking to in the management team, and the content of the communication. This was confirmed by IS 3. IS 2 said that he could influence the entrepreneur, but that the entrepreneur would still make the final decision. However, when there was a problem to discuss, the entrepreneur and IS 1 would come to a consensus on what to do. IS 3 also felt that the entrepreneur would ask him for his input into strategic decisions.

BOX 8.6 THE FACTORS AFFECTING INTERACTIONS

IS 2 said that the entrepreneur was not good at accepting peoples failings, and that in his interactions with internal stakeholders, some would get defensive and feel criticized by his frustrated response. IS 1 felt that issues that could affect their relationship would be a lack of confidence and a disagreement on how the organization should grow.

IS 1 thought that the company was improving and things were changing for the better, which was confirmed by IS 3 who felt that the organization was

experiencing increased levels of new employees, a larger market share and new product development opportunities.

IS 2 noted that the laid-back attitude of the entrepreneur affected the interactions with internal stakeholders in a positive way. IS 3 confirmed that the entrepreneur was very good at stepping back, and trying to find ways around the pharmaceutical industry regulation on new and existing product development without getting too concerned about it, whilst other internal stakeholders would be concerned by this relaxed approach. On occasions when IS 2 had reflected on the “what ifs” of a decision she made, the entrepreneur was quick to dismiss it as something she had no control over and to move on.

Interactions between the entrepreneur and IS 3 involved him sharing the entrepreneur’s experience and getting his input into operational issues. IS 4 received mentoring and technical support regularly from the entrepreneur. In her experience he was a good communicator and challenged her thinking.

Issue domain ‘Succession’ was discussed throughout the interview with both the entrepreneur and IS 1. IS 1 felt that the entrepreneur was slowly allowing him to make decisions, by reducing his time in the office and gaining confidence in IS 1’s ability to make decisions. This indicated that the entrepreneur was gradually managing the succession process. Although IS 2 added that the entrepreneur was still trying to run the organization as the one he had envisaged, but was aware that it will change as he took more of a backseat. She felt that with the entrepreneur stepping out, it would become more like the bigger corporations in their industry with structure, systems and process, and less communication between internal stakeholders.

IS 3 had also experienced succession issues with the entrepreneur who did not always agree with his approach, but he felt comfortable challenging him.

IS 3

I think sometimes he (the entrepreneur) maybe doesn’t like some of the ways that I achieve things erm ...I suppose the proof is in the pudding

sometimes, but then ...erm...I think that maybe he (the entrepreneur) would do things in a different way but he's happy to let me do that.

He perceived that the strategic direction, and also the senior management team, were heavily influenced by the entrepreneur. Although this view was supported by IS 4, she said that she was more forward planning in her thinking than the entrepreneur.

IS 3

I think one of his (the entrepreneur) biggest concerns is succession management erm...and where the next experts, in particular techniques or specialists in particular areas are coming from.

8.3.6 Growth (Q1 and CF)

The entrepreneur defined growth as “getting a bigger part of their existing client’s outsourcing work”, which they had developed for the past 20 years. The organization’s growth was approximately 20% cumulative per year. However, this growth was limited by the nature of the pharmaceutical industry, the restriction of available cash for expansion and investors’ need for intellectual property in their portfolio. The organization had been working on entering the US market for the past three years.

Entrepreneur

If somebody says have five million, just go do it, it could certainly double or treble the capacity of this company quite straightforwardly.

The entrepreneur did not feel that the organization had grown much in the past 20 years, and would have preferred to reach its present size ten years ago. He always had the vision of growing a large company, but some internal stakeholders found it hard to grasp that it was always planned in his mind. However, IS 2 confirmed this was his vision. Although his ambitions were always to increase the size of the organization, he was realistic about the

opportunities to expand into the USA without sufficient funding which could cause cash flow problems for the organization.

The growth prospect for the organization was to continue to provide outsourcing in their specialist area, which the entrepreneur had identified as the main opportunity when he started the business. In terms of this growth area, their clients were also their competitors and offered analytical services for the pharmaceutical industry. This was viewed as a threat to further expansion as well as the ongoing revenue stream. Their growth strategy was to increase their European market, which stood at 30% of their total sales, and control their exposure to the market. At the time of Set I interviews, the organization had a good relationship with the bank, and were aware of the inability to fund rapid growth into new geographical markets like the USA.

The entrepreneur considered that expansion into the USA was possible, but it would require setting up laboratories and an infrastructure with systems and processes to maximize their success. He believed he would be successful because of the integrity of the organization. IS 2 believed that the entrepreneur was growing the company to employ people and provide them with a living, rather than to fund his own lifestyle.

IS 1 regarded the manufacturing suite as a considerable growth opportunity for the organization while IS 2 regarded organizational growth as organic. Growth for IS 2 was to increase their staff levels from 72 to 85 within a year. The recession in 2008 however, meant that their clients had downsized and the organization did not need the extra capacity to do the work. IS 3 measured growth through sales turnover and employee numbers, and believed there was a clear business plan to achieve growth.

IS 3 felt that the organization was doing well with their clients and growing steadily, although IS 4 felt that there had been challenges in growing the business through two recessions.

IS 1 saw acquisition as a means towards growth, but believed that the entrepreneur's lack of desire to consider it was caused by his lack of specific experience in this area. He felt that as MD he was less risk-averse than the entrepreneur, and would consider acquisition if it meant that the organization would increase in size. In terms of interaction with regards to any acquisition, IS 1 did not feel that the entrepreneur would encourage communication about the issue because he had already made up his mind.

In contradiction to IS 1's view that the entrepreneur did not take risks, IS 2 felt that the entrepreneur was willing to take risks when he had collected the information, but that she was probably more of a risk-taker than he was.

8.4 SET II: JUNE – AUGUST 2011

Set II presents the analysis of the interviews that took place between June and August 2011 with the entrepreneur and four internal stakeholders. The purpose was to track any changes to the interactions over the issue domains and included any other new issues that may have arisen since Set I interviews. The entrepreneur's cognitive map was only used in Set II to assist me to explore the decision-making process and the opportunity recognition interactions with the entrepreneur.

8.4.1 Decision-Making, Insight and Opportunity Recognition (Q1)

The entrepreneur said that he was still very good at acquiring different types of information, and appeared frustrated that the internal stakeholders could not see the opportunities. He gave an example of being able to connect the dots for a potential opportunity that no one else could see. IS 4 believed that the entrepreneur was the visionary and IS 1 was a businessman.

Entrepreneur

Yeah but the dots are damn obvious. That's the issue. But, there's not much I can do about that if people don't see them.

The entrepreneur had the insight to know that one of their long-standing clients would withdraw from the UK market and appeared frustrated that the internal stakeholders could not see the same threat. In contrast, IS 1 argued that these predictions were difficult to achieve because the industry was so confidential. And IS 4 argued that the loss of this client did not affect the organization because they “were still busy”.

IS 3 contradicted the entrepreneur’s thoughts and said that people do understand the importance to their ongoing revenue of the projects they were working on, and the financial implications of what they did.

IS 3

I think they understand their job role, definitely. And yes I think they understand what they are doing and that we quote projects based on how much time the projects cost. They understand that what they are doing makes money.

IS 4 was aware that there were deadlines for projects, profits and payments by clients, and believed that some employees did have the same awareness, which supported what IS 3 said, but contradicted the entrepreneur thoughts.

The entrepreneur confirmed his comments from the Set I interview, that he saw himself as an analytical thinker, and not an entrepreneur. IS 1 confirmed his Set I thoughts that the entrepreneur was no longer involved in decisions which affected the operational side of the business. IS 4 said that the entrepreneur was involved in overseeing the whole of the operations and business plan. IS 1, in support of the comments he made in Set I felt that the entrepreneur was inconsistent in the way he used the organization’s metric system for financial and operation purposes, and sometimes relied on his intuition.

BOX 8.7 THE RISK-AVERSE DECISIONS THAT AFFECT THE INTERACTION

IS 1 felt that the entrepreneur's risk-averse attitude to acquisitions was based on his perceptions, which IS 1 felt were not substantiated. He reinforced that this could negatively impact organizational growth, and that the entrepreneur was not open to new opportunities. .

IS 2 confirmed what the entrepreneur had said, that he was still involved in finding opportunities to increase the size of the business and was always looking at the broader picture. She said that the entrepreneur was connecting the dots ahead of everybody else, and was focused on the detail of what he was doing. She recognized that some internal stakeholders had difficulty combining detail thinking with strategic thinking in the way the entrepreneur did. For example, providing financial detail for a client's proposal and being able to see the strategic benefits of the detail to the future of the organization.

IS 4 built on her Set I interview comments about the entrepreneur's vision when he started the organization, and said that he made a decision irrespective of whether others followed him or not. She added that sometimes he made a decision and went ahead, but that he also did listen to others' ideas.

The entrepreneur suggested that the recession brought opportunities such as restructuring the organization, but added that it needed to be done quickly in order for the organization to grow. The entrepreneur wanted to use the opportunity for the organization to move into sharing intellectual property and development work, rather than only working as a service provider. He confirmed his Set I interview comments that he was looking ahead three years at the new premises they would need.

The entrepreneur and IS 1 mentioned that regarding issue domain 'Manufacturing', they now had a license, which they didn't have in Set I interviews. He said that after starting it, the entrepreneur was less involved in it

now, but that he was still considering the strategic options. The entrepreneur's reduced level of involvement was ratified by IS 2 and IS 3.

IS 2 went further and confirmed her Set I interview that the internal stakeholders did not share the entrepreneur's vision for the manufacturing suite at the beginning, but that they were now operationally involved. IS 4, supporting her Set I comments felt that "they" were naïve about the profit the manufacturing suite would generate, and the time it would take to operationalize. However, she did see it as a part of the organization's growth that would bring in further analytical work.

IS 1 was hopeful that they would receive their first client within a few months, but that people in the organization did not see it as a core part of the business. IS 1 saw it as generating 15% of their future growth, even though the manufacturing revenue might only be a small part of the overall client contract. He stated that some internal stakeholders did not see that picture.

The entrepreneur was concerned that he was not given the correct information by the internal stakeholders in terms of how profitable the manufacturing suite was going to be. At the stage of Set II interviews, he was still in the process of gathering the facts about it. IS 1 referred to the entrepreneur as making "blanket decisions". He said that the entrepreneur didn't realize that things had changed, and that the organization did things in a different way to the one he remembered. He went further and declared that the entrepreneur used his intuition about the length of time and turnover the manufacturing suite would generate, rather than using factual information. IS 1 commented that he had also used his intuition in making decisions about the manufacturing suite without providing enough financial detail.

IS 2 acknowledged that the manufacturing suite was not making any money, and IS 3 confirmed that they were not manufacturing anything yet. IS 3 said that the process of developing a product with a client was presently happening and he believed it would improve.

8.4.2 Temporality (Q2 And CF)

The entrepreneur confirmed his thoughts from Set I interviews that the organization took too long to develop, and it should have happened sooner than 20 years. He felt that this slow development of 15-20% a year was not fast enough for investors and therefore the organization could not attract investment.

IS 2 said that the entrepreneur was relaxed and didn't stress or rush, but was always quick with regard to invoicing clients, IS 3 mentioned that the timing of the issue domain 'Manufacturing' did not go according to the predicted plan and was a month behind schedule. IS 4 confirmed that the manufacturing suite had taken longer than people had anticipated, but that she, because of her previous manufacturing experience, had predicted this outcome.

8.4.3 Sensegiving (Q4)

IS 2 said that the entrepreneur was good at giving sense to people at all levels of the organization from board level to the people on the floor in the laboratory, but confirmed what the entrepreneur said, that people at lower levels of the organization did not want to know the financial details of what was going on. IS 3 felt that the entrepreneur trusted him to run the laboratory, and he reinforced what IS 2 said, that the entrepreneur wanted to do the best for people in the organization. IS 3 believed that the entrepreneur challenged convention, and did not accept things being done the same way all the time.

IS 4 confirmed her Set I comments that the entrepreneur was good at explaining things and asking for her opinion.

8.4.4 Interactions (Q1 and CF)

The entrepreneur's interactions had changed since Set I interviews: he felt that he did not understand how to make people see the obvious.

Entrepreneur

I've given up on that and I'm now more interested in the differences in people as opposed to the similarities if you know what I mean. Accepting the differences as well, and different talents that people have. I'm not sure you can make people see something that they can't see.

He said that if people could see the things he did, they would not be working for his organization but they would be doing it themselves.

BOX 8.8 THE FLOW OF INFORMATION

He confirmed his Set I comments, that people do not want to know about figures, or to take risks in the business, that they wanted an “easy life” and thus that he limited the flow of information to internal stakeholders.

He admitted that he did not know what people thought, but believed that the link between the client and their salaries was too remote. He felt that because of the large size of the company, people did not understand that the client paid their salaries. Even though he felt this, according to IS 1 he still looked after everybody in the organization.

The entrepreneur reinforced his Set I views, that he could not communicate his vision to people, and that he always saw the company as this size and bigger. He commented that the success of the organization was no surprise to him. He went further and reinforced his Set I interview, that some internal stakeholders did not understand profit even though he communicated to them what it meant at every meeting.

IS 2 confirmed her Set I thoughts that the entrepreneur did not push people into making decisions, but would use his influence until they got to the decision he intended them to.

IS 2

I'll argue with him in that way whereas perhaps people are a bit more reticent but he's usually quite open to people's ideas, but if he thinks he has the best idea he will try and persuade them to come round to that way of thinking.

IS 2 confirmed her Set I interviews that the entrepreneur always tried to get people on board with what was going on, and that his interactions with people for the manufacturing suite involved several presentations.

IS 3 interactions with the entrepreneur were less frequent as the entrepreneur was trying to reduce his day-to-day activities. IS 3 contacted him via email if he needed to speak to him about a technical challenge, and found that the entrepreneur's solution would be the same one he had arrived at. He admitted that he thought the entrepreneur worked differently with him than he did with others.

Although IS 1 was the new MD, IS 3 revealed that the entrepreneur's level of technical experience was more suited to answer his questions in more detail than IS 1, who would analyze the problem from a Business Development perspective. IS 1's role and responsibilities therefore involved him engaging with IS 3 on performance and operational issues. In terms of issue domain 'Succession', IS 1 and IS 4 felt that the entrepreneur's mentoring role was being reduced because he was out of the office for longer periods.

Both IS 3 and IS 4 believed that they could understand the entrepreneur's thought process. IS 4 confirmed her Set I comments, that the entrepreneur bounced ideas off her because she was able to understand what he was saying, and could generally develop his idea.

8.4.5 Growth and Succession (Q1 and CF)

Although the entrepreneur had found an opportunity to develop a new a product with a client, he felt that his organization did not have the funds necessary to invest in its development. He was still working on new opportunities, but was more focused on his grandchildren. Even though his son works in the organization, he felt that his children did not have the same ambition that he did. The entrepreneur was confused about why his children were not interested in the business, and put it down to the hard work and sacrifices they had witnessed their parents going through when they were growing up.

IS 4 confirmed the entrepreneur's comment in Set I, that he always had a long-term vision for the company. The entrepreneur was surprised that when the business lost a large client project that threatened organizational growth the internal stakeholders appeared unconcerned about the safety of the jobs. The entrepreneur believed that internal stakeholders did not understand the significance of what happened, and he had expected that at least the management team would have been able to see it coming. IS 1 argued that it was impossible to have predicted that this client was going to withdraw from the UK.

The entrepreneur compared growth to a “wave with ups and downs”, and argued that the company could only progress through a steady stream of innovation and new ideas. IS 4 also described organizational growth as “peaks and troughs”. The entrepreneur confirmed that he still saw expansion into the USA as a possible growth opportunity. He added that the management should have a market penetration plan but did not think that they did. IS 3's view on growth was that the organization had “underlying growth” but that “top line” growth was not happening. However, he was confident that the organization would increase in size and output in year 2013 after the initial impact of the recession had passed.

IS 2 believed that the entrepreneur was still a risk taker which conflicted with what IS 1 stated about him in Set I interviews. However, IS 2 mentioned that she was less of a risk taker, and might have an influence over the entrepreneur not

taking risks now which contradicted what she said in Set I interviews that she was a bigger risk taker than the entrepreneur.

The entrepreneur believed that the organization would continue to grow and perform with the current management team, but was concerned with the level of detail that he was still required to get into in order to follow up on management decisions. He was also concerned that the management team was not able to look ahead at what was needed for the future, but recognized that he needed to play less of a management role if he was to sell the business in the future. However, he was not confident that he could achieve that.

IS 3 said that the organization was growing in other areas, except issue domain 'Recruitment'. However, they had recruited across the company recently, and were targeting senior people. He said that, because of the uncertainty and changes in their industry due to the recession, they had not recruited for a long time. The organization had lost three people and had not replaced them. IS 2, 3 and 4 confirmed their Set I comments that the growth of the company was dependent on the number of people they could recruit.

8.5 SET III: SEPTEMBER – DECEMBER 2011

Set III presents the analysis of the interviews that took place between September and December 2011 with the entrepreneur and four internal stakeholders. Its purpose was to track any changes and included any other new issues that may have arisen since Sets I and II interviews.

8.5.1 Decision-Making and Interaction (Q1 and CF)

The entrepreneur said that his interactions with IS 1 and the organization had changed significantly since the Set II interview. He was now much more confident in the way the business was going and although there were still differences of opinion between himself and IS 1, he could accept them. IS 2 confirmed her Set II comments, that the entrepreneur's involvement was much more strategic now, although employees would also go to IS 1 now for strategic

decisions. However, IS 2 mentioned that the entrepreneur was still “floating ideas to the board” and was involved in new opportunities, which contradicted what IS 1 had said.

IS 4 felt that she could see what the entrepreneur could see in terms of the quality of the product, but she recognized that he had a wider vision than she did. She admitted that she could not see, and did not have, a five-year vision like the entrepreneur, which confirmed what the entrepreneur said in his Set II interview.

With regards to issue domain ‘Manufacturing’ IS 1 and IS 4 revealed that they had not manufactured anything successfully yet in the new suite, but they believed that the manufacturing suite would be profitable in the future. IS 1 added that the sales predictions had been inaccurate, and it was frustrating that they had no success attracting manufacturing opportunities. IS 3 said that he expected manufacturing to take place in January 2012, whilst IS 4 felt it would take a year to be functional. She argued that it was lack of experience in manufacturing that caused the inaccurate predictions by internal stakeholders.

IS 1 confirmed his comments in Sets I and II, and said that the entrepreneur was not involved in opportunity recognition, and that he was the one successfully bringing in new projects and equipment. He added that the business would not have taken risks if he had not encouraged it, and claimed that he was responsible for the formulation activities that the organization now undertook. He iterated that although formulation was something that the entrepreneur wanted to do and it was in the Business Plan, nothing had previously been done with it.

8.5.2 Growth, Change, Temporality and Sensemaking (Q1, Q2, Q4 And CF)

The entrepreneur said that the business needed to change if it was to grow, and that IS 1 was equipped to deliver organizational growth. He stated that IS 1 trusted people to do the job much more than he had, and also delegated much more than he did, which was confirmed by IS 2. He went further to add that while he preferred to control all aspects of the organization, it was no longer a suitable way to develop the company. IS 2 said that the entrepreneur would try

and find the solution, but realized now that there were other ways of getting to a decision besides his own process.

Entrepreneur

But as the company gets to a certain size you start thinking, well the company itself has a future, and it may be that I could limit where the company could go and that.

He admitted that he would still take a risk, but that he was enjoying doing other things now. This was confirmed by IS 2 who perceived, that the change was due to the entrepreneur's age. In addition, IS 2 believed that clients preferred to see younger people in management in the organization.

IS 1 said that the entrepreneur was only comfortable making a decision with things that he knew very well, and cited this as a reason why the organization had not grown through formulation activities, with which the entrepreneur was unfamiliar.

IS 1 said that the entrepreneur had spent a lot of time away from the organization since the Set II interviews, which he felt helped IS 1 build his confidence in decision-making and running the organization. He declared that the entrepreneur trusted his decision-making. IS 2 and 3 confirmed that the entrepreneur seemed more relaxed and spent less time in the organization, and that IS 2 spent more time with IS 1 rather than the entrepreneur in decision-making. IS 4 noted that her relationship with the entrepreneur had become more personal and friendly rather than formal.

IS 1 confirmed his Set II comments that there were aspects of the business, such as the management of projects and the commercial side, which were very different to the way the entrepreneur remembered them to be; that the entrepreneur was now mainly familiar with the quality systems and not how the organization was run. IS 4 said that some internal stakeholders did not understand the quality side of the business in a similar way to the entrepreneur.

IS 1

He doesn't say it explicitly but implicitly he'd say " I cant understand why we don't do this." Well, we haven't' done it that way for years. That is how he remembers it happening. Not because that is the way it works now.

IS 2 felt that the organization had not suffered from the recession, and that because their client contracts were long-term their workload was consistent, which is what IS 2 and 4 had stated in previous interviews.

IS 4 noticed that her interactions with the entrepreneur were less frequent than when she was interviewed in Set II, and that the mentoring support she was receiving from the entrepreneur was replaced by that from other internal stakeholders. She also noticed that the day-to-day running had changed since the entrepreneur had handed over to IS 1, which she believed was due to IS 1's lack of experience. IS 4 said that one of the differences between the entrepreneur and IS 1 was that the entrepreneur would say "yes we can do that" and know what it took to get it done, whereas IS 1 would say "yes we can do that" and had no idea how to proceed. She felt that the entrepreneur mentored IS 1 constantly, which resulted in similar management styles with subtle differences.

Issue domain, 'Recruitment' for senior positions did not happen because the organization was busy with analytical work. IS 3 said that he didn't want to "mess it up for clients" and was not convinced by the quality of the recruits they interviewed for the senior positions. However, IS 2 said they had recruited six employees, which in Set II interviews she had mentioned she wanted to do, and IS 3 said they had recruited 4 people for laboratory work, and would be recruiting again in 2013. Both IS 2 and 3 revealed that customer sales had increased.

IS 2 said that there was very little evidence for the issue domain 'Succession' and added:

IS 2

I think the lab managers, they are all quite comfortable, but I think (ISI's) knowledge of perhaps chemistry is not as good as (the entrepreneur), and so on certain procedures they will go straight to him.

The entrepreneur realized that he could not do everything himself, and that by developing the right structure, the organization could develop without him. The entrepreneur went into the office once or twice a week rather than daily like he used to do.

8.6 Summary

This chapter presented the findings of Set I, II and III using the 19 categories derived from the empirical data. The cognitive differences between the entrepreneur and the internal stakeholders were highlighted with regards to these categories. These included biases and temporal issues regarding decision-making for issue domains 'Recruitment', 'Manufacturing' and 'Succession'. The chapter also highlighted the changes in entrepreneurial attitude and the level of interaction between the entrepreneur and the internal stakeholders. The following chapter presents the findings for Case B.

Chapter 9 Phase II Case B Findings

9.1 Introduction

This chapter presents the findings of the empirical data in Case B. The entrepreneur and internal stakeholders were interviewed three times. A synopsis of the entrepreneur and two internal stakeholders is presented. This is followed by the findings in Sets I, II and III. Direct quotes in *italics* from the entrepreneur and internal stakeholders present a glimpse of the interview. The textual function of Boxes 9.2-9.9 was to enhance text that I regarded as significant in order to focus attention, and supplement the data presented. The text boxes individually and collectively do not have a conceptual purpose. The lexicon used in the direct quotes, text boxes and text are the precise words that the participants used the majority of the time in order to present the data directly as it was captured.

9.2 Synopsis of The Entrepreneur and The Internal Stakeholders

The codes and job titles for the two internal stakeholders are presented in Table 9.1.

TABLE 9.1 INTERNAL STAKEHOLDERS JOB TITLES

Case Study	Internal Stakeholder (IS)	Job Titles
B	IS 5 IS 6	Marketing Coordinator Financial Controller

The codes (1-19) were grouped into categories to present the findings based on their similar meanings. The roles and responsibilities for the entrepreneur and internal stakeholders are summarized in Box 9.1.

BOX 9.1 SUMMARY PROFILES OF CASE B PARTICIPANTS

Profile of the Entrepreneur

The entrepreneur in Case B undertook building studies at university, but left after a year and started a six month placement as a trainee manager in a construction organization. He gained practical experience by working on sites as a manager, and two years later left to work for another subcontracting organization. He was promoted to run a £30 million budget as an Estimating Manager until the recession in the 1980's, and then decided to start his own business after completing his Chartership in building.

(ii) Job Profiles of Two Internal Stakeholders (IS 5 and IS 6)

IS 5 reported directly to the entrepreneur in his role as Marketing Coordinator. He joined the organization after completing a Degree in Engineering Management, and was moved to the Marketing Department after starting in Administration. He worked with the entrepreneur in developing the marketing plan and ran the Marketing Department.

IS 6 worked for a Chartered Accountancy firm, and was now the Financial Controller reporting directly to the entrepreneur. He worked with the entrepreneur for approximately 13 years in his present role and his previous accountancy organization combined.

9.3 SET I: JANUARY – APRIL 2011

Set I presents the analysis of the interviews, which took part between January and April 2011 with the entrepreneur and internal stakeholder.

9.3.1 Decision-Making, Alertness, Information Gathering, Pattern Recognition, Insight, Experience and Opportunity Recognition (Q1)

The entrepreneur was very practical in the way he saw things. He said that he didn't understand the conceptual elements of a process in the same way as the practical ones. This was confirmed by IS 6 who said that the entrepreneur preferred visuals in his presentations and reporting.

IS 5

He (the entrepreneur) is very analytical in his decision-making process. He does not make snap decisions, and is very cautious in his decision-making process. He gathers as much information as he can.

The entrepreneur thought that he should made quicker decisions. He added that people probably thought that he made quick decisions because they were not aware of the length of time he spent thinking about it before he decided. Although, this was not the case with IS 5 who recognized that the entrepreneur gathered information and took his time to make decisions.

IS 5 added that the entrepreneur made decisions based on experience rather than intuition, and that the entrepreneur would “rule out ideas” which had not worked in the past, even if IS 5 suggested doing it a different way to the one the entrepreneur had experienced. IS 6 felt that the entrepreneur was good at reading people, and that he understood the psychology of behavior. He was impressed with his attention to detail in his interactions and observations.

The entrepreneur believed that most decisions involved a financial aspect and therefore would ask IS 5 and IS 6 to find the information he wanted, which they confirmed. He trusted IS 5’s judgment, and said that IS 5 and IS 6 would not bring him information without considering all the options.

Entrepreneur

They know never to just bring me one set of answers, or what they think. I always look at the ‘what if factor’, what if something goes wrong. How are we exposed, what are the upsides, what are the downsides, to try and think about all that before I can make a decision ...

IS 6 felt that the entrepreneur didn’t realize that all decisions were controlled by him. He said people were fearful to make decisions independent of the entrepreneur even though he and the entrepreneur believed that they should.

IS 6

I know what information I need to give him for him to make a decision. If I'm kinda quite vague or don't work out figures or things... he's quite analytical in the way that he looks at things, so rather than me saying this is what I want to do and this is what I'm hoping to achieve, I'll give him an idea or I'll give him two ideas, compare them. Do all the thought processing, so he can make a quick decision.

IS 5 mentioned issue domain 'Technology' and said that he wanted to update the web presence for the organization. In order for the entrepreneur to make a decision, IS 5 had to provide the entrepreneur with financial and research details on the viability of the idea. The entrepreneur paid special attention to the financial requirements of any marketing project IS 5 brought to him.

The entrepreneur collected and assessed the information he received, irrespective of whether it was a decision about a photocopier purchase or a strategic decision. He admitted that he knew what he wanted, and would not be able to sit down and collect the detail himself, but that asking IS 5 and IS 6 to collect the information was the best approach for him because of his lack of patience.

Entrepreneur

When I set off at the start of it, I think I know the answer and therefore what I suppose I'm trying to do is justify the decision, and the answer that's going to come out at the end process, but I do feel I have to go through all those steps to do the research.

IS 6

He has probably made a decision, not based on that, based on either a general feeling or conversations with people, and then he would look for something to support that.

The entrepreneur made a decision after weighing up all the eventualities rather than acting on a 'hunch'. He did not explain the reason for his request to the internal stakeholders and believed that they would eventually see what he could

see later on in the process. He wasn't sure that they would arrive at the same decision that he would if they were given the same information, but tried not to influence their thinking.

The entrepreneur said that he would allow the internal stakeholders to decide for themselves, and even if they came out with a different decision than his, he still considered it. This was contradicted by IS 6 who said the entrepreneur was the person who made all the decisions.

Entrepreneur

That decision-making process once I've decided something and once we've gone through, then I do expect it to be carried out... if somebody goes against it...then the best for them to do is to take a long vacation from the office or from out of my vicinity.

The entrepreneur always looked for opportunities for the organization to run more efficiently, in contrast to the other managers who did not attempt to improve the systems and processes in their sales role. IS 5 confirmed that the entrepreneur's view was that some people in the organization worked because they had to, not because of a desire for job satisfaction.

IS 5 felt that the entrepreneur was constantly bringing new ideas to the organization, but the execution and implementation of the ideas did not always happen, because he would change his mind. IS 6 confirmed that the entrepreneur was actively involved in spotting new opportunities, such as marketing the business and the brand name.

IS 5 used the idea of issue domain 'Technology' to describe how he had been "pushing" a technological change for the Marketing department for several years. However, after the entrepreneur had heard from another organization that a technological change they had implemented had failed, he changed his mind about implementing it in the organization. IS 5 went further and said he had been trying to get the entrepreneur to engage with issue domain 'Technology' since he started working in the organization, and that although the entrepreneur

had bought into the idea after two years, IS 5 believed that the entrepreneur did not like change. IS 6 confirmed that the existing technology to support the issue domain 'Sales and Technology' was poor and inadequate.

Although the entrepreneur regarded his decision-making as analytical, IS 6 argued that, unlike him, the entrepreneur made decisions based on people rather than financial numbers. Like IS 5, IS 6 was always trying to work out what was behind the entrepreneur's questions and understood his thinking because of the length of time they had worked together.

9.3.2 Change, Generation and Temporality (Q1, Q2 and CF)

IS 6 explained that he worked quickly and added that other people considered the entrepreneur demanding of their time. The entrepreneur believed that most people came to work for a standard of living only, and not for a promotion or the challenge of the job, but believed that IS 5 and 6 were motivated by job satisfaction. IS 5 added that other managers did not feel part of the organization, and felt excluded by the entrepreneur's lack of communication.

The entrepreneur felt that when he changed a system because it was not working efficiently, the employees, management, IS 5 and 6 would regard it as him constantly changing things, rather than something they should have been doing independently. This was confirmed by IS 5's earlier comments.

IS 5

He doesn't want the processes changed, he just wants the answer so which is why when I changed that process, I didn't go to him, because he would have said no that's the way we always do it.

Although the entrepreneur recognized that the organization needed to change in order to grow, IS 5 felt that it was more theoretical than a practical intention to change. He added that the entrepreneur was not interested in a drastic change, and was happy with the organization the way it was. However, IS 5 said that the entrepreneur was happy with changes more recently than he used to be. He

added that it might have had something to do with the quality of the ideas, rather than the entrepreneur not wanting change.

The entrepreneur was determined that projects should finish on time, and used the example of a contract manager who did not have the same time effectiveness and urgency to deliver a quality project for the client. After several disagreements with the entrepreneur, the contract manager resigned and the entrepreneur replaced him. He added that the organization was wasting time and money because of inefficient work ethics. He felt that he never had enough time to do the things he wanted to do and that balancing work and home was a constant challenge.

IS 5 stated that the entrepreneur believed that things should happen faster than they did, and that with regards to issue domain 'Technology', the entrepreneur did not understand that there were no established processes to monitor issue domain 'Sales and Marketing' on the website. However, he added that the entrepreneur was beginning to see that the answer to his questions on sales and marketing opportunities were being answered a lot quicker with the new technology system implemented by IS 5. He thought that if the entrepreneur were to do certain tasks in the organization now, he would take a lot longer than other employees because he had forgotten how long they took.

IS 6 revealed that the entrepreneur was always pushing people to achieve better results and didn't like employees engaging in activities which wasted time. The entrepreneur's perception was that time is money. He added that the entrepreneur focused on the small things, and did not like anybody to stand around the coffee or water machine chatting when they had work to do. He went further and said that the entrepreneur reacted quickly if he felt that the sales department was under performing.

9.3.3 Optimism (Q3)

IS 5 cited that although the entrepreneur tried to be positive, he sometimes came across as being negative. Issue domain 'Sales and Marketing' affected how

positive the entrepreneur was. He supported his view that if sales were down that month, the entrepreneur could not hide his negativity. IS 6 said that the entrepreneur always insisted that the management team had a positive outlook and impression, irrespective of the sales figures dropping below expectation.

BOX 9.2 THE FACTORS AFFECTING INTERACTION

The atmosphere created by the entrepreneur affected all the employees, including IS 5 and 6. IS 6 felt that the entrepreneur was an optimistic person who didn't like negativity. He emphasized the fact that if the entrepreneur was negative, everybody in the office would pick it up.

9.3.4 Sensemaking and Sensegiving (Q4)

The entrepreneur stated that managers worked 'in' the department rather than 'on' the department. He believed that in order for them to make sense of the improvements needed in the organization they should become more strategic in their thinking. In the issue domain 'Sales and Marketing', the entrepreneur declared that the Sales Managers should have picked up that they had not received work for six months from their good clients.

BOX 9.3 SENSEMAKING

The entrepreneur tried to make sense of what people said, and then he considered whether it required a change in the business. IS 6 had learnt that the entrepreneur would analyze any comment he made to him and then tried to make sense of it. However, he thought that the entrepreneur was unaware of the effect of not communicating with people about the reasons behind the new recruits and what their role was within the organization.

IS 6 could not understand why the

entrepreneur waited to communicate recruitment changes to the employees.

9.3.5 Interaction and Relationships (Q1 and CF)

IS 5 felt that the entrepreneur did not change his opinion if someone disagreed with him, and that he was confident in his ability to do any job within the organization. He said that even though the entrepreneur might say he agreed with someone else's decision, they always ended doing what he wanted to do anyway, and they might not even realize it. IS 5 had witnessed people starting with a lot of ambition and then being deflated after six months because the entrepreneur did not want to implement their ideas.

IS 6 stated that the entrepreneur took his opinion into consideration much more since the senior sales director, who had been with the organization for ten years, had left. The entrepreneur interacted with IS 6 and felt confident that they knew each other well, because of their history together. He felt that IS 6 was committed to the organization, responded quickly and prioritized him when something needed to be done and delivered on time.

The entrepreneur dealt with employees very directly and firmly, and pointed out to the Sales Managers how they could improve their service to clients. Their interaction was confirmed by IS 6. The sales team was unable to see how they could make the improvement until the entrepreneur had shown them.

BOX 9.4 ENTREPRENEUR'S COMMENT ON THE INTERACTION

I'm not very tolerant (pause)...I'm not very tolerant of people who don't put the effort in erm....I'm not very tolerant of people who only go through a process half-heartedly... if you are gonna do a job, I think it should be done

IS 6 remarked "he gets a heckava lot out of his staff", but included that 99% of his interactions were with the management team and not employees. IS 6 felt that he drove the organization to make a profit for himself, and not to put it back into the organization, but he didn't think other people in the organization realized it.

Entrepreneur

They don't really have to come into contact with me other than in a smiling way if they are doing their job properly, if they are not doing their job properly and we are letting down the clients or we are not delivering internal service to other departments or anything...then I'm probably not the person they want to see...

The interactions with the entrepreneur were affected by how hard employees and internal stakeholders worked, and how committed they were. IS 5 stated that the entrepreneur had “pulled him around” to his way of thinking, and that the entrepreneur rewarded loyalty.

He said that, as IS 6 confirmed, his clients and employees felt that he was a very hard person to deal with, because his standards were so high and he had high expectations of people. The entrepreneur commented that his role was not to be liked, but to ensure that employees had a salary each month. He wanted employees to take responsibility for their work.

The entrepreneur believed that everybody should be able to see the obvious things, such as following up on a client and supervising people on expensive contracts rather than leaving them on the site alone.

IS 5 always used the entrepreneur's thought process when he was selling an idea to him, and that being on the “same wavelength” enabled a quicker agreement from the entrepreneur. He felt that working with the entrepreneur had influenced and focused his thinking. IS 6 confirmed that the entrepreneur would run any new ideas through IS 5. However, IS 5 felt that it was difficult to change the entrepreneur's mind even if he presented a strong case to him on a particular issue.

IS 5 revealed that the entrepreneur kept people “on their toes” and put people under pressure to deliver in a quicker time frame. IS 6 added that “there was a

lot of fear” of the entrepreneur in the organization, but believed that the organization was successful because of his actions.

The biggest impact on interrelationships was the sales and invoice white boards which showed whether the monthly sales were low at £300 000 or high at £500 000. The entrepreneur monitored these figures and was generally positive when they were high.

IS 5 felt that the entrepreneur told him what he wanted to hear with regards to changing his present role, rather than making changes that made a difference to him in a substantial and sustainable way. This resulted in IS 5 “switching off”. He said that although the entrepreneur said he trusted the management, including himself, he didn’t think the entrepreneur trusted that anybody could do the job as well as he could.

IS 6 believed that if he mentioned something to the entrepreneur he would consider it and listen to his opinion. Although he admitted that his interactions with the entrepreneur were too intense at times, and that the constant pushing did not motivate him.

9.3.6 Growth (Q1 and CF)

The entrepreneur spotted an opportunity for growth with existing clients, in issue domain ‘Sales and Marketing’, that could have been lost because of a problem in the archived filing system, costing the organization £800 000. IS 5 and IS 6, who volunteered to work over a weekend to sort it out, managed to correct the problem. The sales managers however, could not see the problem the entrepreneur had identified and kept telling him there was nothing to worry about because their sales figures were good. He was very keen that the organization became more efficient. IS 6 saw the situation as a retraining exercise for the sales department, rather than a cultural shift in the way people did things in the organization.

The entrepreneur believed that he could double the turnover of the organization, but that it would take time away from the other things he wanted to do. He used to measure the growth of the business in terms of their turnover, which was approximately £5 million, and the number of employees. More recently he considered the efficiency of the organization as an important aspect. IS 5 defined growth as profit, repeat business by clients and the development of certain markets. IS 6 added that growth meant turnover, and did not regard employee numbers as growth and confirmed that their sales figures had dropped.

BOX 9.5 INTERNAL STAKEHOLDER CONFIDENCE

IS 6 mentioned that because of the historical success, the management team and employees agreed with the entrepreneur's decisions.

The entrepreneur's interactions with the organization had increased because of the drop in sales. IS 6 mentioned the issue domain 'Recruitment', and said that in 2007, the organization had a high turnover of staff because of the demands the entrepreneur placed on people. He said that 12 out of 35 people had left within two weeks of him joining the organization 2 years ago.

9.4 SET II: JUNE – AUGUST 2011

Set II presents the analysis of the interviews that took place between June and August 2011 with the entrepreneur and two internal stakeholders. The purpose was to track any changes with the issue domains, and any other new issues that may have arisen. The entrepreneur's cognitive map was used to help me explore the decision-making process and the opportunity recognition interactions with the entrepreneur.

9.4.1 Decision-Making, Insight, Alertness, Information Gathering, Pattern Recognition, Insight, Experience and Opportunity Recognition (Q1)

The entrepreneur said that he knew where he wanted to get to in his strategic decision-making, but not necessarily where he wanted to get to in reality. He would then engage with people to validate or confirm this thought process. He believed that attention to detail and thinking about one's actions would result in fewer mistakes. He used the example of archiving the files in Set I, and said that "getting the order right" would have prevented the mistake of missing potential work from clients. He was confused and angry that employees allowed that to happen.

Entrepreneur

People just come to work and look at it as a process, they are not equating the success or not equating those orders to jobs, they looking at it as money, and really doesn't make a difference if it was done today or tomorrow.

IS 5 and IS 6 believed that having a different opinion to the entrepreneur would not alter his decision-making and that he would end up doing what he wanted to do. IS 6 believed that the entrepreneur's decision-making was all related to how well the organization was doing financially and that emotion was not a consideration in his decision-making process. However, he added that since the turmoil the organization had been going through since Set I, the entrepreneur was trying to have more of a positive attitude rather than "battering people" to improve productivity.

9.4.2 Change, Generation and Temporality (Q1, Q2 and CF)

IS 5's role had changed since Set I from Marketing Coordinator to Commercial Manager which involved more client interaction. He mentioned issue domain 'Sales and Marketing', and said that in his previous role, the contacts that he had developed would not be converted to a sale by him, whereas in his new role he had end to end client control. With regards to these changes, the entrepreneur

was able to make quick decisions if he felt confident that he was making the right decision, because there was no board to delay the decision.

The entrepreneur believed that people took too long to do a job and that they did not make the connection between getting the job done quickly, and the number of orders they received. IS 6 confirmed the entrepreneur's view on time, and said that the entrepreneur believed that saying goodbye to an ex-employee was wasting valuable time. The entrepreneur also felt that responding quickly to a client was very important in the client relationship.

9.4.3 Optimism (Q3)

The entrepreneur's attitude had been negative since Set I interviews because of the financial and operational difficulties. IS 6 mentioned that recently the entrepreneur had become more positive and added:

IS 6

He's been realistic about 'yes this is a big change for us, and ok I'm going to keep positive and keep motivating people and keep it going as we are heading in the right direction,' but I think it will last a number of months. The only time it wouldn't last is if, by probably the next 4 or 5 months, there hasn't been any positive change in the figures, if we're still floundering around you know, then he would.

9.4.4 Sensemaking and Sensegiving (Q4)

The entrepreneur acknowledged that, what seemed like commonsense for him, was not commonsense for those around him. He used the example of two employees putting a quote into a window envelope the wrong way around without anybody checking whether they could see the address and not "switching their brain on" when they got to work.

The entrepreneur noticed that people did not relate the clients' orders to "that's what keeps them in their jobs". He was always trying to make sense of the

impact of the financial figures on the business, and could not understand why others did not do the same thing.

Entrepreneur

I would look at that order and say well, ok that's £100 000 but if we get everything right we can make x amount out of it. So really, in that process there's a lot of money going to be spent in employing people in, getting in engineers' time and other elements so...you know, if you look at it as if we lost an order for £100 000 that's basically a few peoples' jobs.

The entrepreneur said that he had spent a large part of the year trying to get the management team to see the potential of the organization. He believed that the reason for employees and management not wanting to see the changes that were necessary for growth, was due to job insecurity and lack of skills and knowledge.

IS 5 felt that the entrepreneur didn't realize the negative impact issue domain 'Recruitment' of the new Sales Consultant was having on him or the rest of the organization. When the entrepreneur sensed the negative mood of the organization, he sent out questionnaires to gather data about what and how people were feeling. Based on the large amount of negative feedback, the entrepreneur decided to change his attitude to a more positive one.

9.4.5 Interaction and Relationships (Q1 and CF)

The entrepreneur mentioned the issue domain 'Sales and Marketing', and the difficulty he had getting the sales team to see that they should treat a sales order like cash and say thank you immediately for the work.

The entrepreneur had difficulty getting employees to take responsibility and be accountable in their jobs. This did not apply to IS 5 who felt that in his new role he enjoyed more responsibility, he felt that he was not motivated by "having a job". He also felt that the entrepreneur did not understand what motivated him.

IS 5

He does not think other people would care as long as they have a job.

The entrepreneur stated that when the company was smaller it was easier to monitor and measure employee's performance with regards to client relationships and the jobs. He added that increasing new clients resulted in a large number of errors and in demoralized employees. In contrast, IS 5 declared that the employees were demoralized because of the lack of information about the changes the entrepreneur was making with regards to issue domain 'Recruitment'.

The entrepreneur had tried several times to explain to the engineers the importance of timeliness with clients and the importance of following up on client contacts, but that they still did not understand. He believed that he had to always put pressure on them to pay attention, which resulted in them thinking he was being hard on them. He added that even management could not see the importance of having clean vans, even though their clients could. IS 5 noted that the entrepreneur had hired the new Sales Consultant to help him manage these aspects of the business. However, he was not certain whether this was the case.

The entrepreneur revealed that he was always fire fighting and made several changes in the Sales and Marketing departments. He mentioned issue domain 'Technology', and said that Sales Managers were using manual systems, and that when they left he hired new people and gave them laptops to work with. He said that the sales staff who had been with the organization a long time were reluctant to look for new and improved ways of working.

IS 5 mentioned his frustrations with all the organizational change which included issue domain 'Recruitment'. He did not know what the organization structure was and he didn't believe that the entrepreneur knew either. He felt that his interactions with the entrepreneur involved several hours of communication, but often left without an answer to his question.

IS 5 had noticed that although the entrepreneur always presented the organization's performance, he did not communicate the real reasons behind what he was doing. IS 5 and IS 6 believed that the entrepreneur was aware of the impact of what he was doing, but not the impact it was having on the organization.

9.4.6 Growth (Q1 and CF)

The entrepreneur witnessed that the organization's growth had resulted in the employees feeling detached from their jobs. There was also less informal communication between employees about clients' needs when the size of the organization increased.

However, the entrepreneur believed the organization was not big enough and had not yet fulfilled its potential, and felt frustrated that other people did not have the same vision as he did. He referred to the "comfort zone" that people preferred to exist in, although he mentioned that the past 18 months were the most turbulent of the last ten years. He added that when he was off sick for a few months, the organization did not grow and several clients were unhappy with the quality of the work they delivered. IS 5 shared the entrepreneur's concerns and said that growing past £5 million pounds in turnover was a challenge.

The entrepreneur mentioned the issue domain 'Recruitment', and said that even though the company needed to recruit people from the outside, it was politically difficult because of demotivating employees who had been with the organization for a long time. IS 5 believed that he could do the job just as well as one of the new recruits and confirmed the political challenges the entrepreneur faced. IS 5 confirmed that the entrepreneur was recruiting people from the outside in order to get experienced management input and that it created an uncertain environment. IS 5 also confirmed that the Sales Consultant was recruited in order to increase the sales team and to relieve the entrepreneur of some of his management responsibilities.

The organization was still recruiting, and employed more people than they did in Set I interviews. The entrepreneur believed that one way of building the organization was to recruit people that believed in its potential.

The entrepreneur confirmed IS 6's thoughts in Set I that several people had left the organization because of his desire to "push the organization towards growth and drive through changes". The entrepreneur reinforced the point that when he was not there, their turnover dropped by 40% within 2 months. He added that the organization was on the right track and growing again since his return. IS 6 contradicted this and argued that the entrepreneur's absence was not enough to justify the change in their sales, he believed that a slow time of year combined with a poor sales processes was the cause.

IS 5 confirmed that employees had left because of the amount of pressure the entrepreneur exerted on them. He thought that the entrepreneur could have handled the relationship better. He also mentioned that since Set I, the entrepreneur's secretary left after ten years with the organization as well as the Sales Director. IS 5 and IS 6 believed that the entrepreneur was very secretive about the employees who had left. IS 6 felt that the entrepreneur was not aware of the consequences of hiding information from employees and thought that the entrepreneur believed that the organization had an open culture.

IS 6 noted that it would be useful for the entrepreneur to see how employees' negative feelings were linked to performance, but he commented that it was difficult to measure this impact.

9.5 SET III: SEPTEMBER – DECEMBER 2011

Set III presents the analysis of the interviews that took place between September and December 2011 with the entrepreneur and two internal stakeholders. I tracked any changes to the interactions between the way the entrepreneur thinks and the internal stakeholder perception over the issue domains and any new issues that had arisen since Set I and Set II interviews.

9.5.1 Decision-Making and Interaction (Q1 and CF)

There were several changes since Set II interviews. IS 6 confirmed the issue domain 'Recruitment' changes had taken place at management level. IS 6 felt that the transformational changes had "flushed out" several inefficiencies in the organization. His role had changed slightly and now included Human Resource elements since the entrepreneur's secretary had left. The entrepreneur had restructured the Sales Department and changed the role of an employee who had been with the organization for ten years to a more responsible role.

The entrepreneur had decided to change the type of work they attracted because of the increased level of competition in their sector. He was looking at developing more long-term relationships with clients, rather than chasing the larger contracts that delivered short-term order books. This approach was different from his Set I and Set II strategy. The decision to change was a result of several failed attempts to maintain the status quo. He felt that the organization should always be undergoing Business Development, and that the previous Sales Director did not have the capacity to use issue domain 'Technology' to increase their sales and market share.

BOX 9.6 ACCEPTANCE OF DIFFERENCES

The entrepreneur still felt that employees and management did not have the same thought process as he did and they were not alert enough.

Entrepreneur

Trying to encourage people to increase their input and their returns rather than standing with a cattle prod behind them saying blooming do it.

IS 5 reiterated that the entrepreneur's lack of experience in issue domain 'Technology' had a negative impact on the way he viewed the implementation of

certain technologies. IS 5 felt that the way the entrepreneur thought about things had not changed, but that he was more prepared to let others make decisions. He added that the entrepreneur got people to agree with his decision by implying or insinuating things. IS 6 added that the entrepreneur expected “the world to flex to him, not him flex to the world”.

9.5.2 Change, Generation and Temporality (Q1, Q2 and CF)

The entrepreneur mentioned that he had “mellowed” with age and that others regarded him as an “unreasonable man”. The entrepreneur described an employee whose role he had changed, to improve their health and safety standards, within three months rather than a year, something the employee had thought was impossible.

The organization had experienced several changes since Set II interviews. The entrepreneur mentioned the issue domain ‘Recruitment’, and the changes to the sales team, which resulted in significant improvements in systems and processes. The entrepreneur believed that if IS 5 had joined the organization five years earlier, issue domain ‘Sales and Marketing’ would have been technologically more efficient. IS 5 mentioned issue domain ‘Technology’, and said that the website was now up and running, which it wasn’t in Set II, and confirmed the entrepreneur’s comments that the system was more efficient.

IS 5 noticed that the biggest change in the organization since Set II interviews was the entrepreneur’s attitude, which had become more “laid back”. He added that the entrepreneur was more emotional in his decision-making than he used to be, and that his perception of employees’ motivation had changed for the better. IS 5 was no longer looking for a new job, but added:

IS 5

If we don’t make money now for the next 3 months then, for good reason, he (the entrepreneur) will change the way he thinks about things and drastic changes will happen. So I’m sort of prepared for that really.

IS 5 and IS 6 agreed that the entrepreneur's change in attitude had gone too far and that he should still be concerned with cost and performance, but that everyone was happier around him now than in Set I and Set II.

9.5.3 Optimism (Q3)

IS 6 said that because of the turmoil the organization had been through, the entrepreneur was trying to be more positive in his outlook and that it was made easier by the new Sales Consultant who had a more hands-on approach, leaving the entrepreneur to focus on strategy. He added that everybody in the organization was feeling the impact of the entrepreneur's positive attitude and that the entrepreneur did not have emotional highs and lows like he used to.

9.5.4 Sensemaking and Sensegiving (Q4)

However, the entrepreneur believed that the employees were unaware of the reason behind his change in attitude and strategy, but that he did keep communicating to them that the market was changing. The entrepreneur was aware that giving employees too little information resulted in them thinking he had secrets, but felt that if he did tell them everything they would feel insecure and threatened.

9.5.5 Interaction and Relationships (Q1 and CF)

The entrepreneur still thought that he needed to drive people to achieve, which confirmed his Set I and Set II thoughts. He noticed that he had mellowed with age, that he did not drive people as much, but tried to influence them in his direction. Since the changes in the organization, he felt more comfortable with the team.

The entrepreneur recognized that IS 5 was an ambitious and capable manager with attention to detail, and was more prepared to let him make technological changes independently than he was in Set I and II. IS 5 felt more confident to challenge the entrepreneur than he used to in Set II interviews, and

acknowledged that the entrepreneur pushing him to achieve more had partly helped him.

The entrepreneur realised that the frequency of his interactions with employees and management had reduced, and as a result there seemed to be more open communication between employees and management than with him. He wanted the systems to drive improved behavior rather than him driving people to deliver. IS 5 confirmed that since the new Sales Consultant had been recruited a few months earlier, the entrepreneur spent less time on operational issues which he believed was good for the organization and gave IS 5 more freedom to do his job.

IS 6 thought that the entrepreneur listened more to people rather than enforcing his opinions on others. He added that the entrepreneur's interactions changed because he realized that employees were leaving and not responding to his "pushing" anymore.

IS 6

I do remember him saying to me probably round about that time. That he was going to change and stop the bollockings. I think those were his words. He said he would deal with things in a more positive way. I've really noticed that since then, it's a real change in him.

IS 6 said that the entrepreneur was trying to understand the reason why people did or didn't do things. He was more measured than he was in Set II.

9.5.6 Growth (Q1 and CF)

The entrepreneur said that issue domain 'Technology' had started to produce good results in Sales. He felt the new technology was more comfortable for IS 5 than it was for the older, more experienced sales employees. However, he failed to mention his own reticence due to experience and age with regards to the technological improvements. Both IS 5 and IS 6 felt that the entrepreneur was more confident with the changes in issue domain 'Sales and Marketing' now that he was seeing increased sales. IS 5 noticed that the entrepreneur was more

confident in the team he had around him now than he was at the time of the Set I and II interviews.

The organization had recruited 20 new staff in three months since Set II interviews, and would be recruiting in the following year to replace ex-employees and to cope with the expansion of the organization. The entrepreneur confirmed that his strategy had changed, and he was now looking at longer-term contracts, confirming his Set II thoughts.

Entrepreneur

I'd rather have 5 years work at 40% rather than a year's work at 50%.

The entrepreneur had made fewer harsh decisions recently than he would have made before, such as recruiting certain types of employees, or committing to the additional expenditure during a poor economic climate. He felt that if he had made even more ruthless decisions with employees and clients when he first started the company, the organization would have been a lot bigger than it was now. However, the entrepreneur mentioned that issue domain 'Sales and Marketing' was producing new clients.

The entrepreneur accepted that the turnover and profit would be down, due to his new longer-term strategy, but felt that the change was necessary. He used to measure the organization's growth through profit, but the success of his new strategy, which focused on organizational stability, was still unclear. IS 5 and IS 6 confirmed that previously the entrepreneur would not have accepted the drop in sales.

IS 5 stated that he could take more risks now that the entrepreneur was not involved in the detail of the issue domain 'Sales and Marketing', because the entrepreneur would make it difficult to implement changes quickly, because he didn't understand the benefits of issue domain 'Technology'.

9.6 Summary

This chapter presented findings of the interaction between the entrepreneur and internal stakeholders with regards to the 19 categories. The text highlighted the conflicting thoughts between the entrepreneur and the internal stakeholders with regards to issue domains. The entrepreneur's cognitive changes were also visible across the respective sets of interviews. The next chapter presents the findings for Case C.

Chapter 10 Phase II Case C Findings

10.1 Introduction

This chapter presents the findings of the empirical data in Case C. A synopsis of the entrepreneur and internal stakeholders is presented, followed by the findings of the entrepreneur's cognitive interaction with each of the four internal stakeholders with regards to their decision-making process and recognizing opportunities, presented in Sets I, II and III. Direct quotes in *italics* from the entrepreneur and internal stakeholders present a glimpse of the interview. The textual function of Boxes 10.2-10.9 was to enhance the text that I regarded as significant in order to focus attention, and supplement the data presented. The text boxes individually and collectively do not have a conceptual purpose. The lexicon used in the direct quotes, text boxes and text are the precise words that the participants used the majority of the time in order to present the data directly as it was captured.

10.2 Synopsis of Entrepreneur and Four Internal Stakeholders

The codes used for the four internal stakeholders are presented in Table 10.1.

TABLE 10.1 INTERNAL STAKEHOLDERS JOB TITLES

Case Study	Internal Stakeholder (IS)	Job Titles
C	IS 7 IS 8 IS 9 IS 10	Managing Director Group Head Group Head Senior Project Leader

The profile of the entrepreneur and internal stakeholders is displayed in Box 10.1.

BOX 10.1 SUMMARY PROFILES OF CASE C PARTICIPANTS

(i) Profile of the Entrepreneur

The Entrepreneur in Case C is a physicist who gained experience working for a £2 billion pound turnover organization that developed software and technology for aerospace suppliers and other clients. Following that, and during the recession of 1979, he worked as a consultant in Research and Science. After he had gained experience in areas such as display technology and imaging, he decided with 22 other founders, who worked in the same consultancy, to start their own business. He was the only founder remaining in the organization and was handing over the managing of one of the groups to IS 7.

(ii) Job Profiles of Two Internal Stakeholders (IS 5 and IS 6)

Internal Stakeholder 7 (IS 7) was in the process of taking over as MD for one of the groups within Case C. He was a physicist and had joined the organization 13 years earlier. Previously, he worked briefly in the telecommunications industry gaining commercial experience, and was now responsible for running the day-to-day activities of the group and taking over responsibilities from the entrepreneur.

Internal Stakeholder 8 (IS 8) was a physicist who had been in the business since 2003 and now ran one of the technology groups. He reported directly to the entrepreneur and indirectly to IS 7. He managed 27 consultants and three support staff.

Internal Stakeholder 9 (IS 9) had been with the organization for 13 years and was now responsible for Business Development and Technology Development for one of the groups in Case C. His Japanese work however spanned the other 6 groups. He interacted with the entrepreneur with regards to this market and reported to IS 8.

Internal Stakeholder 10 (IS 10) was a physicist who had joined the organization in 2002. He worked as a Senior Project Leader and reported to IS 8 in one of the groups within Case C, but he also interacted with IS 7 and the entrepreneur on strategic decision-making. His role also involved Business Development.

10.3 SET I: JANUARY – APRIL 2011

Set I presents the analysis of the interviews, which took part between January and April 2011 with the entrepreneur and four internal stakeholders IS 7, 8, 9 and 10. The interview schedule included the categories presented in Chapter 6 and contextualised with issue domains, ‘Recruitment’, ‘Business Development’ and ‘Strategy and Vision’.

10.3.1 Decision-Making, Alert, Information Gathering, Pattern Recognition, Insight, Experience, Opportunity (Q1)

The entrepreneur said that he no longer thought about his decision-making in the same way he had done 30 years ago. He now “just did it instinctively”. He felt his experience enabled him to make decisions, although he added that he constantly read new information and integrated it into his existing knowledge and experience. The entrepreneur noted that at his age he had a lot of experience, and that the way he internalized new information was not going to change now.

Attending negotiating and sales courses in the past was part of his accumulation of knowledge, but he added that he was naturally good at these aspects. However, the courses had given him extra confidence and a new perspective to what he was doing. IS 10 confirmed that the entrepreneur was always reading internal material to provide insight to the organization and to “stay on top” of what was going on.

The entrepreneur cited that successful people made relevant decisions for their environment and that the more correct decisions he made, the more confident he became in his decision-making. He mentioned issue domain ‘Recruitment’, and said that he was still involved in the interviewing process, but only if IS 8 and other internal stakeholder were going to offer the recruit the job.

Entrepreneur

I would say, you know I'm concerned about this, how do you feel about it? I try to get him to make the decision.

The entrepreneur stated that he and IS 7 would make a decision after reviewing the interview and the candidate's experience, whilst other managers and internal stakeholders involved others in the decision-making process. He believed that internal stakeholders did not want to take responsibility for the decision whether to recruit because they lacked experience. He added that by asking the recruit the right questions in a short space of time, he could work out a candidate's suitability for the job. IS 7 felt that the issue domain 'Recruitment' would not react well to external people being recruited into senior roles within the organization.

The entrepreneur noticed that employees, internal stakeholders and Group Heads wanted to do things according to processes, but that approach limited their ability to look for new opportunities. The entrepreneur had seen an opportunity to restructure the organization a few years ago and IS 10 declared that the entrepreneur changed his role without his input.

The entrepreneur regarded his decisions about risk as "managing the downside and the upside" and believed that the organization took risks but managed the downside. He felt that a lot of the organization's risk was contractual, and in negotiation with a big USA client he refused to take on all the risk and insisted that it was shared with the client.

Entrepreneur

This is a multi-billion dollar, multi national company and I just dig my heels in and eventually they gave up you know...and they, they accepted so we agreed.

IS 7 and IS 10 felt that the entrepreneur's decision-making was informed by his experience.

IS 7

He has a huge amount of experience, and he often calls up examples for me. I don't have the same level of experience so I tend to be more analytical and wanting to get to the facts.

IS 7 felt that the entrepreneur used to be less risk-averse in his decision-making, but that he was now the “arbiter of risk”, and could not work out if it was due to his age or that he wanted a good argument to justify the risk. He added that he was more analytical in his decision-making and that the entrepreneur looked at the cultural aspects of the decision. IS 7 used the entrepreneur’s thinking process when it came to helping other internal stakeholders present an opportunity to the entrepreneur by “packaging” the idea for him. IS 8 noted that the entrepreneur was emotional in his decision-making and preferred to “talk things through” which IS 10 confirmed.

IS 7 said that the entrepreneur did not make decisions when asked. This was confirmed by IS 8, who added that the entrepreneur had an instinct about what the decision should be, but hesitated to give the answers. However, IS 8 added that the entrepreneur could also be directive if he didn’t agree with something.

10.3.2 Change, Generation and Temporality (Q1, Q2 and CF)

The entrepreneur had a longer view of time than IS 7, which was confirmed by IS 10. IS 7 stated that the entrepreneur looked at longer-term value, but didn’t think that his view had filtered down to the organization. Employees and Group Heads were still working to shorter timescales. He said that internal stakeholders did not realize the entrepreneur’s view of time, although IS 10 added that the entrepreneur’s long-term view had influenced him and IS 8.

IS 7

He had a far longer horizon than anyone else, so he tends to think ten years and I tend to think a few years and the other guys tend to think short-term.

IS 10 confirmed that the entrepreneur's approach to time had not filtered down to him, and said that he had deadlines that IS 7 and IS 8 did not understand.

BOX 10.2 DIFFERENT DEFINITIONS OF OPPORTUNITY RECOGNITION

The entrepreneur said he achieved results to meet client requirements in a quick and effective way. IS 7 said the entrepreneur was no longer bringing new opportunities to the organization.

IS 8 declared that he did not have time to get into the detail that he needed and that he was forced to "let people get on with it". The entrepreneur in contrast, naturally felt that people should have the freedom to decide without being directive. Although he insisted that time was money.

Entrepreneur

Opportunities, you gotta grasp them quickly...cause they'll go away. If it's a problem it will run away from you and if it's an opportunity it will slip through your fingers. In order to achieve the unreasonable demands from clients, we have to be ruthless and prioritize.

IS 7 stated that he was part of the new generation that was running the organization and that the entrepreneur was scared of losing the culture that he and the other founders had developed. He believed that the organization had to change and that he and the entrepreneur had the same view on the change needed.

IS 7

I think there is a different generation so erm...not talking about me and (the entrepreneur), there is a different generation there, and also there's a different generation of young people who are now joining the company. So actually what we want, what excites someone to want to join this company, and what excited people twenty five years ago, will be different.

IS 7 used the example of the new generation who wanted to use LinkedIn, an on-line social website to talk about themselves, and the entrepreneur who wanted to ban the use of it in the organization. He believed that the entrepreneur had made a decision about it without considering all of the information, and that he had to persuade him to re-consider it. He added that the entrepreneur would just say “no” if he thought something was a bad idea. IS 7 revealed that it was hard for him and the entrepreneur to stay in touch with the new generation’s work ethic and communication with regards to information sharing.

10.3.3 Optimism (Q3)

IS 8 didn’t think the entrepreneur was optimistic, but instead thought that the entrepreneur was confident, and didn’t wear “rose tinted glasses” about the future. He added that his confidence was justified by his experience. IS 10 said the entrepreneur was optimistic but not “reckless”.

10.3.4 Sensemaking and Sensegiving (Q4)

The entrepreneur said that flexibility and the use of intuition was important when dealing with people. He added that the Project Leadership Training course run by the organization for new recruits gave them a sense of the culture. IS 8 expected that the entrepreneur’s role was to maintain the culture and the environment in which internal stakeholders and Group Heads could operate. This confirmed IS 7’s thoughts about the entrepreneur’s role.

IS 7 had no clear mandate from the entrepreneur in terms of his role and responsibilities. He made sense of what the organization needed and did it without questioning the entrepreneur, by filling in the “gaps”. Both the entrepreneur and IS 7 sensed what things “needed to be picked up” and each filled in the gap without defined or allocated tasks.

IS 7

The challenge for (the entrepreneur) and similarly for me is to be that enthusiastic person that catalyzes these things, but at the same time also

having a view of risk and working out how to apply that, so that when things do occur we have a balanced judgment.

10.3.5 Interaction and Relationships (Q1 and CF)

The entrepreneur revealed that he gave the Group Heads the freedom to take risks, but because all employees, internal stakeholders and Group Heads were shareholders, they were reluctant to take a risk with a big downside. For example, the entrepreneur made Group Heads go back to clients and renegotiate a better deal, in order to spread the risk between the organization and the client.

Entrepreneur

When you put some steel in their spine and they go back and say sorry we can't do that and they still get the contract.

The entrepreneur expected people to “use their brains” when thinking about Health and Safety issues because the organization developed potentially dangerous products. He added that his approach was hands-off and that he had minimal interaction in operational issues, although he did get actively involved when IS 10 was dealing with a difficult client. IS 7 supported the entrepreneur's view that the internal stakeholders should be making their own decisions, and IS 8 felt that he had freedom to make his own strategic decisions.

BOX 10.3 ALIGNING DECISION-MAKING

The entrepreneur preferred to influence the business without directing it and wanted his interactions with employees to be based on what they thought was the right decision, and not what he thought was the right decision.

The entrepreneur's interactions with the organization involved ethics, charities, facilities, Health and Safety, values and challenges anybody faced. However, IS 8 preferred that the entrepreneur gave him clarity about underlying principles of what he was expected to do, instead of “rambling on”.

BOX 10.4 INTERRELATIONSHIPS

IS 8 felt that the entrepreneur was not a “relationship person”, and that many people in the organization did not understand him.

IS 7 and 10 confirmed that the entrepreneur would speak to people in the office corridors, but that he interacted mostly with internal stakeholders and Group Heads, although he added that the entrepreneur kept a strategic eye over the printing group. The entrepreneur spoke to IS 10 about big projects when he saw him in the corridor.

IS 10

His ambition, his drive, I think that that is a mystery if you like.

He added that the entrepreneur’s interactions with the internal stakeholders and Group Heads were unstructured and explorative in nature, and was more of an opportunity to exchange ideas and communicate, than providing them with strategic direction.

IS 7 said that the entrepreneur liked to think that his role was more strategic, however he thought that he provided a source of insight because of his experience. IS 8’s interactions with the entrepreneur was a two-way discussion, although he did have strong opinions.

IS 7 said that the entrepreneur was being “very cautious” in handing over total responsibility of running the group to him. Although he and the entrepreneur constantly discussed how to get the internal stakeholders and Group Heads to think and take responsibility in a way that fitted in with the organization’s culture. However, IS 7 thought that that was the entrepreneur’s responsibility and not his.

IS 7 noted that there was a generation gap between the entrepreneur, employees, internal stakeholders and Group Heads which meant that they did not feel

comfortable communicating with him as they would younger colleagues. He added that the entrepreneur controlled the salaries, and had mentioned to him that he should start taking over that responsibility. He added that he didn't mind that the entrepreneur did not want to hand over total responsibilities, like dealing with shareholders, to him yet, but had spoken to him about needing to have clearer responsibilities. And because IS 8 was younger, he found it hard to interact with his direct reports in a directional way.

IS 7

If he left I would have some clear mandate.

IS 7 suspected that because he and the entrepreneur had not communicated on what needed to be done in the organization, nothing had happened with the succession plan. He believed that if he knew what his total responsibility was, he would have attended to the new type of recruits, and encouraged their development in alignment with the organizations.

IS 7 noticed that he interacted more with the internal stakeholders and other Group Heads than the entrepreneur, and that they communicated with him about how and what the entrepreneur thought. He acted as the "go between" for them for difficult situations with which the entrepreneur might disagree.

BOX 10.5 RESPECT IN INTERACTIONS

IS 7 said that people respect and tried to impress the entrepreneur, whereas he had more of an honest discussion with employees about their thoughts. This was confirmed by IS 10.

IS 7 said that the entrepreneur would "push through a decision" when it was about efficiency and ideas that were not plausible, but also to get things done quickly.

IS 7

If (entrepreneur) looks at it and says it is not very good, you haven't done well, then people think, actually I shouldn't have done that, I shouldn't have had that conversation and ...so he's probably aware of it.

IS 7 stated that the entrepreneur would have to change his interactions with Group Heads if he wanted to get more insight into what they were doing or thinking.

10.3.6 Growth (Q1 and CF)

IS 7 confirmed that they did not define growth because it was organic. He felt that that was because the organization operated as spin-outs and were always looking for opportunities that could take them into different directions. He added that issue domain 'Recruitment' limited their growth because of the challenges of attracting suitable candidates. He went further and said they did have a target of 20% growth, and that profit and new technologies were key aspects of it.

IS 8 said that there was no agreement amongst the entrepreneur, internal stakeholders and Group Heads about the purpose of the organization, except that the entrepreneur said it was to create an environment where opportunities could happen.

The entrepreneur mentioned that issue domain 'Business Development' was not the way the whole organization was structured. In the past, one half of the organization would develop technology as a packaged service, and then "roll it out" in the market. He felt that "growing" the organization using this approach to Business Development was no longer suitable and had to be replaced by a more questioning approach to what the market required. IS 10 confirmed what the entrepreneur has said, that each Group Head was responsible for their own Business Development.

The entrepreneur mentioned issue domain 'Strategy and Vision', and said that his approach to the business was successful but that if a part of the organization

“were struggling”, he would focus more on a future strategy than he was presently undertaking. He added that he looked at time in terms of progress that they could make if the organization was in the same place in twelve months time, then they should act immediately. IS 8 acknowledged that the entrepreneur did not have a plan for the future.

The entrepreneur used numbers as a means to diagnose not measure growth, but also looked at profit per head when measuring growth and added value. He added that for the printing side of the business the value was intangible, which made valuing the organization a difficult task. As a result, he made judgments on whether the organization was growing by looking at headline numbers of how intellectual property was being commercialized.

IS 7 mentioned issue domain ‘Business Development’, and said that he developed his part of the organization and was constantly looking for new opportunities. He felt that the organization was in a transition state. They were looking at diversifying by adding manufacturing to their client offer. IS 8 had developed the technology for manufacture but IS 7 felt that he was resisting the opportunity to develop it further. He believed that IS 8’s resistance was because he thought the entrepreneur believed that spins-outs were too risky. He went further and added that, in the past, the entrepreneur would “push you back” if he believed something was unusual.

IS 8 stated that when interacting with the entrepreneur, he left with a clearer picture about what the entrepreneur wanted, and tried to match his decision. IS 10 noted that the entrepreneur always encouraged him to develop new ideas, but knew he could exercise his “veto” rights.

BOX 10.6 ALIGNED COGNITION

I will go in to talk about something and I will leave with some further thinking to do, or an idea of how he sees the world.

There was a difference between the way the entrepreneur and IS 7 viewed how they should approach new clients and the development of products.

IS 7

(the entrepreneur) will say, 'well we don't go into the lab to try things, we just you know go and get projects clients', which is exactly what we don't want. The reasons we get projects with clients is because we do try things in the lab on our own and we come to them with crazy new things.

BOX 10.7 FEAR IN INTERACTION

So if they want to keep in with him they just keep following the straight

IS 7

The other thing I will do is I will package it up...so that it will work as a low risk opportunity for him (the entrepreneur).

IS 7 added that the high risk strategy the entrepreneur had with the printing part of the business, has resulted in a “skewed” view of risk in the rest of the business because of the length of time it has taken and the big investment they had made.

IS 8 defined growth as client relationships and increased organizational value, while IS 9 defined growth as head count and the number and type of spin-outs. When speaking about growth, IS 8 added that he did not see the organization as risk-taking.

10.4 SET II: JUNE – AUGUST 2011

Set II presents the findings of the interviews that took place between June and August 2011. They involved the entrepreneur and four internal stakeholders, in order to track any changes to the interactions between the way the entrepreneur thinks and the internal stakeholders over the issue domain and other new issues that may have arisen since Set I interviews were noted. The entrepreneur's

cognitive map was used to help me explore the entrepreneur's cognitive interactions.

10.4.1 Decision-Making, Insight, Alert, Information Gathering, Pattern Recognition, Insight, Experience, Opportunity (Q1)

The entrepreneur admitted that he saw less of IS 7 than he did in Set I and that they focused on “specifics rather than a review of things” when they met. IS 8 said that the handover of the organization to IS 7 was taking longer than expected because the entrepreneur wanted to “imbue him with the organization's way of doing things”.

The issue domain ‘Recruitment’ was taking place without the entrepreneur's intervention, although when IS 7 was away he advised a Group Head against recruiting someone. The Group Head followed the advice of IS 7. The entrepreneur had handed over the recruitment responsibility and day-to-day decision-making to IS 7 since Set I. This was confirmed by IS 8. IS 7 confirmed that the entrepreneur first met recruits after they had joined the company and not during the recruitment process as he had done in Set I. He had also taken over the salary list he mentioned in Set I, without waiting for the entrepreneur's approval.

IS 7 confirmed the entrepreneur's comments in Set I that he used his instincts to make a recruitment decision. In contrast, the internal stakeholders and Group Heads discussed their recruitment decisions with each other. He added that his decision-making was different to the entrepreneur's with regards to a few recruitment choices, and they both accepted that. IS 8 said that IS 7 found it hard to structure and focus the entrepreneur's contribution in meetings, and due to this behavior IS 8 found the entrepreneur to be indecisive. The entrepreneur confirmed his Set I thoughts that he preferred not to make decisions and tried to influence people to make decisions of which he would approve. The entrepreneur said that when he heard a decision was made, he kept an open mind and was open to persuasion.

IS 8 confirmed his Set I thoughts that the entrepreneur was emotional in his decision-making, and added that he hated to be “pinned down” to a decision. He went further and said that the entrepreneur would consider the options of a decision from all angles.

IS 8

It's very rare for him to actually say this is what we should do or anything like that. So you end up just kind of following this emerging train of thought, which eventually leads you somewhere. You sort of end up saying 'well you know how about we do this'. It's clearly what he'd like you to say, but he just doesn't want to say it himself. And this process can take quite a long period of time.

Since Set I, the entrepreneur was still involved in decisions with regards to the allocation of space and facilities and thought that overseeing these tasks was his strategic responsibility.

IS 7 perceived that the entrepreneur wanted to teach the Group Heads how to make decisions and run the organization, rather than discuss things.

IS 7

Now if I was being charitable I'd say they wanted people to have independent thought and therefore talking lots to them and telling them what you think doesn't give them an opportunity for independent thought.

IS 7 confirmed his thoughts and IS 10 comment that the internal stakeholders and the Group Heads adjusted their thinking to that of the entrepreneurs'. He added that the entrepreneur was not looking for opportunities because he was focused on maintaining a profitable organization. However, IS 8 said that the entrepreneur was “loosely” overseeing a new opportunity that he and IS 7 were presently investigating.

10.4.2 Change, Generation and Temporality (Q1, Q2 and CF)

The entrepreneur used the marketing brochure as an example of how decisions were made by Group Heads, without them taking the time to consider the implications, which confirmed his thoughts in Set I. In this example he disagreed with a decision because it lacked consideration of the customer and market. He believed it was not sufficiently thought through.

The entrepreneur commented that by IS 7 taking over the day-to-day running of the organization, he would create change, but that the culture, values and ethics were embedded, and would be unaffected. He believed that the lack of understanding about the way he thought was not due to a generation gap, but rather a lack of confidence and a belief by the internal stakeholders and Group Heads, in what the organization was about.

BOX 10.8 DIFFERENT RISK DEFINITIONS

A lot of people that come out of the education system and maybe the first few years in a corporate environment have got this 'we must do things properly, we must have procedures, standard operating procedures'. And pick up all the risk aversion and structures and procedures that clog up quite a lot of corporate activity.

The entrepreneur was still in the process of handing over the responsibility of the organization to IS 7 who had no idea when it was going to happen. IS 7 suggested that the entrepreneur felt nervous about leaving, and whether he would have the capability to do the job.

10.4.3 Sensemaking and Sensegiving (Q4)

The entrepreneur felt that if people didn't agree with him it was because they could not make sense of what he was thinking and why. He added that Group Heads would think he was being cautious or difficult, but that he would try and explain to them what he thought and what his values were.

IS 8 said that he questioned the entrepreneur's ability to make sense of the investment he made in the printing group and wondered whether it would be a profitable part of the organization.

10.4.4 Interaction and Relationships (Q1 and CF)

The entrepreneur discussed issue domains 'Business Development' and 'Recruitment' with internal stakeholders and Group Heads, and the broader organizational issues with IS 7. IS 7 noted that the entrepreneur told him things that he wouldn't previously have done. He suggested that internal stakeholders and Group Heads shared their individual strategies and learned from each other. IS 8 felt that IS 7 would have more interaction with the internal stakeholders and Group Heads than the entrepreneur had in the same role, which confirmed all his Set I thoughts.

The entrepreneur declared that for some internal stakeholders and Group Heads, they wanted to spend the organization's money without thinking it through, and wanted to take the easy way out rather than actively engaging with issue domain 'Business Development'.

Entrepreneur

And saying no to put some steel in their spine, to get them to figure out how to get the right thing...so yes there are things that are like that.

The entrepreneur acknowledged that IS 7 had similar thinking processes to his own, and that he would help him put any differences of opinion into perspective. He added that they both wished that the other internal stakeholders and Group Heads thought in the same way.

He mentioned that his disagreement with employees, which IS 7 mentioned in Set I about LinkedIn, was caused by them not thinking of the consequences to the organization and clients of uploading information. He felt that one of the other Group Heads had sent out a document before he had a chance to see it, which

confirmed what IS 7 said in Set I, about the entrepreneur's late involvement in decision-making. The entrepreneur felt that the document sent out was too policy-based, rather than a suggestion to employees about how they should behave, which is how he would have preferred it to be presented to staff. However, he preferred not to be directional and did not advise the employee on the course of action.

The entrepreneur and IS 7 had had a discussion about his responsibilities since Set I, but IS 7 still thought that his role was unclear. However, they had agreed that IS 7 would take over the monthly meetings with the internal stakeholders and other Group Heads. IS 8 noticed that the entrepreneur's interactions in team meetings were not helpful because he took a long time to discuss issues and then did not reach a decision. He would have preferred a more structured thought through contribution from the entrepreneur.

IS 7 confirmed that in his discussions with the entrepreneur they had decided that IS 7 would be responsible for the day-to-day running of the organization, and the entrepreneur would focus on the cultural issues. IS 8 stated that IS 7 understood what he was trying to do and provided him with more clarity in their discussions than did the entrepreneur. He confirmed IS 7's comments in Set I that the entrepreneur would "talk around the subject" and hated to be pinned down. Although, IS 8 declared that he reported to the entrepreneur and not to IS 7. IS 9 said that the entrepreneur had a more influencing style in his interactions, while IS 7 was more direct and "harsh".

IS 7 decided that when he took over managing the relationship with the other Group Heads, he would have a more open relationship with them than the entrepreneur did which confirmed his Set I thoughts.

IS 7

You just don't talk about those things, you just avoid those areas except under very managed and carefully controlled circumstances when you know that you've thought about it a lot and there's a very well considered angle to take.

IS 7 confirmed the entrepreneur's view that internal stakeholders and Group Heads would think about things before approaching him, which stopped employees from communicating with him. The entrepreneur's decisions had never been challenged by the internal stakeholders.

IS 7

So there is a tendency, and people wouldn't go to those places when he (the entrepreneur) is in the room, because they'd know he would just dismiss it. But in terms of a cultural change thing, there is more of a dialogue.

IS 7 thought that in the last ten years the communication with management had not been very good and it left people feeling that they could not be open and honest. Although, he added that the entrepreneur did not communicate on the future of the company, but recognized that the entrepreneur might not have a strategy and managed instinctively. IS 8 didn't know how important relationships were to the entrepreneur. He confirmed his Set I thoughts that he was not a "people person".

IS 9 confirmed the entrepreneur's comment in Set I that his approach was hands-off and used the Japanese handover to describe how the entrepreneur introduced to him to this contacts, but let him to handle the relationship.

IS 10 said that he had no interactions with the entrepreneur since Set I interviews.

10.4.5 Growth (Q1 and CF)

The entrepreneur discussed underperforming groups with IS 7, and was still involved in discussing employees leaving, and the affect of that on the organization. IS 8 confirmed that the entrepreneur did not have a strategy for growth. The entrepreneur felt that the employees and organization had survived the recession and thus had proved they could be successful. IS 7 believed that

the entrepreneur was opportunistic and did not have a worked-through considered plan for the future. He believed that the company had grown through the entrepreneur's efforts and thinking, and not through the ex-founders, and confirmed his Set I opinion that there have been less spin-outs and fewer opportunities operationalised.

IS 8 questioned whether the last 5 years growth was due to the entrepreneur, or IS 7's ability in issue domain 'Business Development'. He perceived that the entrepreneur was risk-averse because he had invested previously in the printing business and had "got his fingers burnt".

IS 7 mentioned issue domain 'Recruitment', and said that the entrepreneur had better insight into the head count than he did. He felt that the organization was risk-averse because they were "cash rich", and that the entrepreneur's focus was to maintain a profitable organization. He added that the organization was still increasing its head count.

IS 8 continued to believe that the organization's culture was set by the entrepreneur and had helped them to be successful. He added that each internal stakeholder and Group Head had a different view of the purpose of the organization, but reinforced his Set I idea that it was about creating an environment in which people could create.

10.5 SET III: SEPTEMBER – DECEMBER 2011

Set III presents the findings of the interviews that took place between September and December 2011 with the entrepreneur and four internal stakeholders. The purpose was to track any changes to the interactions over the issue domains and included any other new issues that may have arisen since Sets I and II interviews.

10.5.1 Decision-Making and Interaction (Q1 and CF)

The entrepreneur confirmed his Set II comments that he was no longer involved in the issue domain 'Recruitment.' This was confirmed by IS 7 and IS 8. He

admitted that his level of influence over recruitment was less than it used to be. He said that internal stakeholders and Group Heads would continue to ask his opinion if they were unsure about a decision to recruit an applicant. He added that some internal stakeholders and Group Heads went through a formal step by step process when recruiting staff and looked for evidence of the recruits' abilities. IS 7 felt that he was more challenging than the entrepreneur tended to be in the recruitment process. As a result he believed that "better people" were now being recruited. IS 7 added that the entrepreneur was more challenging of the recruitment decisions for groups that were not doing well, and questioned the role the recruit would have in the group. However, he left IS 7 to make his own decisions.

IS 7 said that he learned a lot from the entrepreneur and that he would listen to him irrespective of how long he talked. He confirmed Set II thoughts that the entrepreneur did not "do decision-making and neither did he make quick decisions". He added that the entrepreneur knew the answer to a decision that needed to be made, because he had the experience to support it "and waited for people to get there". IS 7 confirmed the other internal stakeholders' views that the entrepreneur spent hours talking about a subject without a clear outcome, but because they respected him, they therefore "indulged" him.

IS 7

Given a situation he thinks he knows the answer. And you remember there is a generational thing here, so he does view himself as a different generation and therefore he has seen all the problems. So given the situation he'll know the answer.

IS 7 felt that the entrepreneur would get angry with people when they didn't get to the decision he wanted, or expected them to, but wouldn't directly tell them what the decision ought to be. He added that his style was developed from working with strong independent people he couldn't direct when he founded the organization. He believed that this resulted in employees feeling lost and uncertain about what to do, but nobody would "dare to tell the entrepreneur that".

IS 8 confirmed that he would prefer a more concise interaction with the entrepreneur which gave him insight during their discussions.

IS 7 revealed that people regarded the entrepreneur as a senior person, although he had become “softer” over the years with more interaction with junior employees. This awareness of seniority was despite the fact that the organizational structure was flat. The entrepreneur felt that people deferred to him less in decision-making. However, he was still involved in investment decisions for ideas that internal stakeholders and Group Heads brought to him which contradicted IS 7 thoughts that the entrepreneur was no longer involved in opportunity spotting.

Entrepreneur

They can all create new opportunities, nearly every graduate scientist or engineer can create opportunities. So actually trying to get everybody thinking about that, and they will have different aptitudes and interests, and then the senior people in their particular area that's part of their job to do the same thing. Encourage people to sort of spot opportunities, spot trends, pick up intelligence about what is important, transfer technology, and be creative.

IS 8 said that the entrepreneur's decision-making was confined across group level activities, and not within their group, and that IS 7 has taken over the day-to-day running of the organization. He confirmed his Set II comment that the entrepreneur wanted internal stakeholders and Group Heads to take responsibility and not to direct them.

10.5.2 Change, Generation and Temporality (Q1, Q2 and CF)

The entrepreneur mentioned that IS 8 was under more time pressure because he was closer to the client. IS 7 confirmed that the organization was under pressure to perform now more than when the entrepreneur founded the business, because they had experienced, motivated and proactive people at start-up. He felt that now the organization had to have a structure that got employees up to speed with

experience much quickly than they needed to when the entrepreneur had founded the organization.

IS 7 said that although the entrepreneur was responsible for the change from the original founders to a younger generation of recruits, he had not thought about how the organization would train and engage these new staff.

10.5.3 Sensemaking and Sensegiving (Q4)

IS 7 noted that the entrepreneur was always making sense of what was needed for growth when he started the organization, but that with the younger generation of recruits he was not doing the same thing.

IS 8 felt that the entrepreneur made a conscious choice not to answer people's questions, and added that the entrepreneur did not like to communicate how he saw things.

BOX 10.9 SENSEGIVING

The previous MD of the organization, I am sure you've met him, was very fond of saying something like 'if you're smart enough to work here you are smart enough to understand.' I have never heard (the entrepreneur) say that but I suspect part of that culture is still there.

10.5.4 Interaction and Relationships (Q1 and CF)

IS 7 felt that his interactions with the entrepreneur were going through a change and he was not "poking about" and asking questions as much as he used to. He felt that his responses to questions and discussions were shorter than in the past. He confirmed his Set II comment that he did not know what the entrepreneur had on his mind in terms of succession, and that they both continued to do different tasks in the organization without having clearly defined roles. He suggested that the entrepreneur was preoccupied and he missed the communication between

them, which was confirmed by IS 8. IS 7 felt that the entrepreneur was less involved than he was in Set II, but that it was a temporarily distraction.

The entrepreneur said that he was more sympathetic to what employees were going through than one of the Group Heads who had more of a threatening approach, which confirmed Set II comments that he took people's feelings and views into consideration. He confirmed his Set I comments that he "nudged" people in the direction of a decision, rather than directing them.

Entrepreneur

Actually, a lot of my job is about forcing people to stand back and see the wood from the trees. Actually stand back and look at what the broader opportunities are.

IS 7 believed the employee's engagement levels were lower than in the past, and therefore they needed different management than the relationships the entrepreneur had with employees, internal stakeholders and Group Heads when he first started the organization.

IS 7 confirmed his Set II comments about LinkedIn, that the entrepreneur wanted to completely ban employees from using it, but took his advice about considering the options first. IS 7 felt the same as the entrepreneur, that he had also "dropped the ball" by letting the instruction to employees go out as a policy rather than a set of guidelines. He added that he spent a lot of time communicating with Group Heads about their thoughts, whereas the entrepreneur wanted to make a decision and not consider opinions.

IS 7 confirmed his Set II comments that he knew what caused the entrepreneur to be angry, but that the entrepreneur had strong views, such as employees should be business builders and keep their personal and private lives separate. He added that he could influence the entrepreneur with regards to how systems and databases in the organization were run. He also noted that the entrepreneur was not a traditional founder, and was open to change.

IS 7 felt that his interactions with the entrepreneur had made his style less directive and more questioning.

IS 7

There's a lot of value in what (the entrepreneur) does in terms of insight in terms of letting people think, and I want to do elements of the same.

IS 8's interactions with the entrepreneur had decreased even more since Set II. He interacted primarily with IS 7 and had "ad hoc" meetings with the entrepreneur over strategy, or at monthly management meetings. He was unsure whether the entrepreneur's "light touch management" had caused the culture, or whether it was accidental.

IS 8

What has (the entrepreneur) done to it? Well, very difficult thing to say. If he's done anything it's a very subtle emphasis, and you know influencing decisions and sort of setting direction for things in a very loose way.

IS 8 noted that the entrepreneur's interaction with the organization needed to be preserved in order for the younger generation to understand how it worked. IS 9 also felt that having monthly contact with the entrepreneur in a mentoring and guidance role would benefit his learning. However, IS 9 had little interaction with the entrepreneur since the handover of the Japanese work, but said that the entrepreneur still maintained an interest in the project. IS 10 added that he would prefer more interaction with the entrepreneur and had seen very little of him since Set II. IS 10 felt disappointed that he had had little interaction with the entrepreneur, and would like to understand the way he thought. He confirmed Set II comments that the entrepreneur was not as definitive as he would like him to be, and that occasionally he wanted direct guidance from him.

10.5.5 Growth (Q1 and CF)

The organization was doing well even though the entrepreneur was not as involved as he had been in Set II. IS 7 added that he could not bounce the strategic issues off the other Group Heads in the way he could with the entrepreneur, because it sometimes involved them. He noted that because costs were controlled, the organization was on target with profit but down on sales. He added that growth would come from issue domain 'Recruitment' and identifying new opportunities, although finding suitable recruits had proved to be difficult. IS 8 and IS 9 confirmed that they had not recruited new staff to their groups since Set II.

IS 7 believed that the motivation to increase the size of the organization now was not the same as when the founders started it, and the financial motivation level was not the same for the new generation of recruits. He confirmed his Set II thoughts that the entrepreneur was cautious with regards to risks such as a new building, which he did not understand.

IS 8 confirmed his Set II thoughts that there was no organizational strategy for growth, and felt the entrepreneur would argue that they did not need one. He added that although growth was organic, they would also attempt to license technology. He didn't think the entrepreneur was "motivated" to discuss how they would achieve this, but perceived that they had the freedom to decide themselves.

IS 8

One of (the entrepreneur's) favourite phrases is "serendipitous opportunity". He sort of feels that if you send enough bright people bumping around in the world they'll find enough interesting things, and if they are smart enough they'll pick up on them. And the business will do ok.

IS 8 mentioned that issue domain 'Business Development' did not have any central decision-making function. However, he added it would be helpful if they had more strategic direction from the entrepreneur.

10.6 Summary

This chapter presented the findings of Sets I, II and III using the 19 categories derived from the empirical data. These findings showed the different cognitive interactions and perceptions between the entrepreneur and internal stakeholders. The temporal changes associated with the entrepreneur's decision-making and communication was highlighted. This included the findings demonstrating the interaction over issue domains 'Recruitment', 'Business Development', 'Strategy and Vision' which contextualised the different findings. The next chapter presents the analysis and discussion of the empirical findings.

Chapter 11 The Icarus Paradox: An Entrepreneurial Interpretation

11.1 Introduction

This chapter provides an interpretation derived from the empirical evidence that cognitive diversity as well as differences in perception and expectations have an impact on entrepreneurial and internal stakeholder interrelationships in established entrepreneurial organizations. In addition, the Icarus Paradox (Miller, 1992) metaphor provides cognitive and organizational insight into the cognition-success-attribution cycle. By combining disparate concepts in the conceptual framework this chapter presents new meaning and understanding of each interrelationship derived from the empirical data.

11.2 Philosophical Assumptions and Interpretive Framework

The ontological approach of multiple perspectives can be seen throughout this chapter in the use of direct quotes in *italics* from entrepreneurs and internal stakeholders. The epistemological aims of this research were achieved through working closely with the entrepreneurs and internal stakeholders for twelve months to gain knowledge and insight into their interrelationship.

Case studies are suited to investigating patterns of under-investigated entrepreneurial interactions in real life settings (Yin, 2003; Creswell, 2007) such as the interplay between entrepreneurial cognition and internal stakeholder perception. In this way the grounded theoretical approach captured the success of the entrepreneur within the context of the organization across multiple case studies (Stake 2006; Denscombe, 2011). These combined approaches were used in this research. Narrative, phenomenological and ethnographical approaches had less utility for this research because the focus was not on exploring the individual's life, understanding how the experience feels or describing a culture-sharing group respectively. Once the approach to inquiry was decided, the question of how to analyse the data was addressed.

Miles and Huberman's (1994) approach to data analysis discussed in Chapter 6 was adopted. Their form of analysis was considered to be more rigorous and iterative between phases than those of either Madison (2005) or Wolcott (1994b). Sensitizing concepts (Blumer, 1954) developed through my experience as a psychologist and business founder, the literature review and the research questions influenced the formation of categories during the data collection and analysis stages. However, as Glaser and Strauss (1967) suggested, these concepts were used only in a non-prescriptive way.

The first stage of open coding (Strauss and Corbin, 1990: 181) for each case was taken from transcribed interviews, email communication, field notes and margin notes and organized using Nvivo software. Following Miles and Huberman's (1994) approach codes were put into categories after a process of identifying the similarities and differences. Through a rigorous inductive analysis process, patterns with related "conceptual properties" (Glaser and Strauss, 1967: 35) for each category were developed. In this way I was able to confirm the story (Stake, 1995) of what, how and when interactions between the entrepreneur and the internal stakeholders had taken place.

The terms 'code' and 'categories' are used interchangeably (Creswell, 2007) due to the process of moving between the two in interpreting the data and also the similarities in meaning. Reading and re-reading the data identified differences, characteristics, commonalities of words and phrases, and connections across the cases. Table 11.1 demonstrates an extraction of the data in categories relating it across the cases.

TABLE 11.1 CATEGORY ANALYSIS FOR CASES A, B AND C

Category	Case A	Case B	Case C
Decision-Making, Insight			
• Entrepreneur had already made a decision when he spoke to internal stakeholders	Y	Y	Y
• Entrepreneur could see what internal stakeholders needed to do/decide	Y	Y	Y
• Entrepreneur influenced or directed the internal stakeholders decision-making	I	D	I
• Used both analytical and intuitive decision-making	Y	Y	Y
• Entrepreneur led internal stakeholders to believe their input counted before he made the decision	Y	Y	Y

<ul style="list-style-type: none"> • Entrepreneur let internal stakeholders make their own decisions • Entrepreneur would veto something he disagreed with • Internal stakeholders were influenced by the entrepreneurs' cognitive process and timing 	Y Y Y	N Y Y	Y Y Y
Alert, Information Gathering <ul style="list-style-type: none"> • Entrepreneur used information gathering to justify a decision he had already made • Entrepreneur controlled information he gave to internal stakeholders • Lack of information led to internal stakeholders frustration and confusion 	Y Y Y	Y Y Y	Y Y Y
Experience, Opportunity <ul style="list-style-type: none"> • Entrepreneur used his experience to make decisions while internal stakeholders needed more facts • Entrepreneur felt he was still involved in opportunity recognition • Internal stakeholders felt entrepreneur was not involved in opportunity recognition • Internal stakeholder felt the entrepreneurs lack of experience in new areas limited growth 	Y Y Y Y	Y Y N Y	Y Y Y Y
Insight, Pattern Recognition <ul style="list-style-type: none"> • Entrepreneur could not get the internal stakeholders to see what he could see • Internal stakeholders felt they could not see what the entrepreneur could 	Y Y	Y Y	Y Y
Change <ul style="list-style-type: none"> • Entrepreneur made changes in the organization • Paradoxically internal stakeholders felt the entrepreneur did not like change • Organization experienced change in Issue Domains 	Y Y Y	Y Y Y	Y Y Y
Generation <ul style="list-style-type: none"> • Internal stakeholders felt there was a generation gap between them and the entrepreneur • Entrepreneur 'mellowed' with age 	Y Y	Y Y	Y Y
Temporality <ul style="list-style-type: none"> • Entrepreneur felt internal stakeholders should work quicker • Internal stakeholders felt that the entrepreneur had forgotten how long things took • Entrepreneur was more relaxed with each Set I, II and III • Entrepreneur took his time making a decision 	Y Y Y Y	Y Y Y Y	N Y Y Y
Optimism <ul style="list-style-type: none"> • Positive • Realistic 	Y Y	Y Y	Y Y

Sensemaking and sensegiving <ul style="list-style-type: none"> Entrepreneur felt internal stakeholders did not take responsibility, or relate client satisfaction to their salaries Internal stakeholders felt that they did relate their jobs to their salaries 	Y	Y	Y
	Y	Y	Y
Interaction and Relationships <ul style="list-style-type: none"> Uncertainty between what the entrepreneur was doing and what internal stakeholders thought he was doing Internal stakeholders wanted more clarity from the entrepreneur Entrepreneur was stepping back and internal stakeholders wanted more time with him Internal stakeholders felt the entrepreneur was a good communicator The entrepreneur had formalized meetings with employees, managers, group heads and internal stakeholders Succession planning was taking time from entrepreneur to Managing Director and CEO (IS 1 and IS 7) Internal stakeholders tried to please the entrepreneur with what they said and did Entrepreneur had never been challenged by the internal stakeholders Entrepreneur trusted that people would get the job done independent of him and to his standard Entrepreneur pushed people to get the job done 	Y	Y	Y
	Y	Y	Y
	Y	N	Y
	IS 3 only	N	N
	Y	Y	Y
	Y	Not happening	Y
	Y (except IS1)	Y	Y (except IS7)
	Y	Y	Y
	N	N	N
	N	Y	N
Growth <ul style="list-style-type: none"> Entrepreneur felt organization should be bigger than it was Internal stakeholders felt the entrepreneur did not take risks Entrepreneur felt internal stakeholders did not have the same vision as he did Growing through recruitment Entrepreneur had a strategy for growth Internal stakeholder felt that he was responsible for growth and not the entrepreneur (MD-IS1 and CEO-IS7) 	Y	Y	N
	Y	Y	Y
	Y	Y	Y
	N	Y	N
	N	N	N
	Y	N	Y

Key: *Y=*yes; *N=no*; *I=influence*; *D=direct*

Stake's (1995) four ways of interpreting the data provided additional rigour to the data analysis process:

- issues related from a number of instances;

- direct interpretation from a single instance;
- establishing patterns from categories;
- generalizations from the three cases that can be learned.

During the interpretation process, I derived identifiable patterns from the interactions between the entrepreneur and the internal stakeholders to ascertain the implicit causal relationships. This led to the emergence of six abstract themes: incongruence; fear; expectations; communication; success and learning. Figure 11.1 presents a higher-level abstraction to show the six themes, the cognitive psychological and organizational perspectives.

FIGURE 11. 1 THEMES AND LAYERS OF ANALYSIS



Source: Revised from Asmussen and Cresswell (1995)

The themes and patterns identified regarding the interaction between the entrepreneur and internal stakeholders were consistent for the cases over the longitudinal interview period of twelve months. The sample size of three cases proved to be sufficient to collect the required empirical data (Denscombe, 2011) and theoretical saturation was reached when no new concepts and themes emerged (Strauss, 1987) during Sets II and III interviews.

11.3 Modes of Analysis

This section introduces the contribution of the cognitive and organizational modes of analysis. The cognitive psychological perspective was used because it can be applied at the individual, group and organization level of analysis (Huff et al., 2002; Hodgkinson and Healey, 2008) in order to gain insight.

Sarasvathy's (2001) effectuation theory demonstrated the differences between entrepreneurial and internal stakeholder decision-making processes offering a conceptual and empirical basis for an argument in cognitive differences. In addition, ESDM (entrepreneurial strategic decision-making), rational and causal decision-making theories captured both strategic decisions and more general operational decision-making between the entrepreneur and internal stakeholders.

The organizational mode of analysis provided meaning by linking entrepreneurial cognition and internal stakeholder perception within a context. Configuration theory developed by Miller (1992) resonated with the way that the cases were configured. Differences in perception of success between cases led to further analysis using linear lifecycle stage and non-linear stage theories. In order to understand the significance of Miller's view, organizational learning and growth stage theories are presented to analyse the cause of the cognitive dissonance from the evidence. More specifically, through understanding single and double loop learning, further insight into the reasons for cognitive dissonance in their interrelationships (Argyris and Schön, 1975, 1978; Senge, 1990) is interpreted.

Lichtenstein and Lumpkin (2005) provided a framework for the analysis of the interactions, perceptions and communication between the entrepreneurs and internal stakeholders. In addition, the Politis (2005) model illustrated how transformation of entrepreneurial experience into knowledge has an interaction effect on internal stakeholders. Another mechanism for understanding the interaction between entrepreneurial cognition and internal stakeholder perception is Crossan et al. (1999). Their model offered an explanation for the barriers and

limitations faced by internal stakeholders that subsequently affected the interrelationship with the entrepreneurs.

The original conceptual framework using Lumpkin and Dess's (1996) entrepreneurial orientation framework was modified to include the dynamic interrelationships reflective of an open system. In this way the conceptualisation of the interrelationships and interdependencies incorporated the five factors in open systems (von Bertalanffy, 1968): input; throughput; output; environment and feedback to demonstrate both explicit and implicit causality.

Finally, the theory of psychological contracts (Schein, 1988) offered an explanation for cognitive misfit between the entrepreneur and internal stakeholders with insight into the complexities of expectations in their interrelationships. This theory highlights aspects of roles and responsibilities (Handy, 1999) that were then discussed within Likert's (1967) four systems of analysis (exploitive authoritative, benevolent authoritative, consultative and participative).

11.4 The Icarus Paradox

Miller (1992) developed the Icarus Paradox to interpret the success and failure of corporate organizations in a confidence-success-attribution cyclical model. He argued that success reduced the entrepreneurial incentive to learn. In my study the metaphor includes entrepreneurial cognition and over-confidence bias to form the cognition-success-attribution cycle. This moderate adaption of the Icarus cycle is developed on the research assumption that entrepreneurial cognition is affected by biases. The evidence showed that the entrepreneurs had experience in building a successful organization, and the cognitive aspects and biases contributed to that success.

Attribution theory (Heider, 1958) was applied to this paradox and captured the idea of how individuals perceived events (external attributions), thoughts and behaviours (internal attribution) and to what their attributions were made. In addition, attribution theory was used to illustrate that entrepreneurs and internal

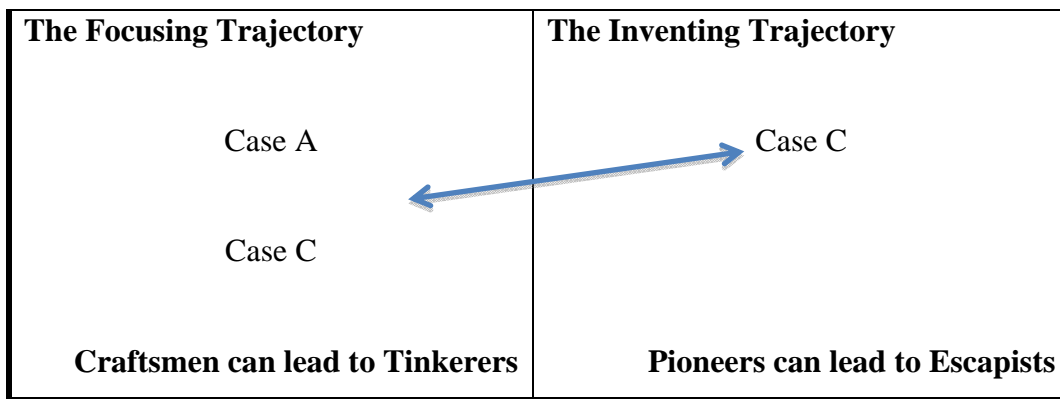
stakeholders in the cases attributed entrepreneurial success to entrepreneurial cognition, and failures to external sources.

Specifically, in Case A the lack of profitability of the issue domain ‘Manufacturing’ was regarded by the entrepreneur as a failure of the managing director (MD) internal stakeholder to plan, thoroughly investigate and provide accurate financial data. In Case B, the entrepreneur regarded the failure of issue domain ‘Sales and Marketing’ to implement new technology to improve systems and processes as the sales manager’s lack of opportunity recognition and responsibility. In Case C, the evidence for the slow profitability of innovative technology was attributed to the market not being ready. In Case C however, externalising the failure to the lack of readiness in the market and opinion leaders in the environment had some merit according to earlier research undertaken by Schein (1987). It might well be that in Case C, the ‘failure’ could be attributed to both internal and external factors.

Potential organizational failure in the Icarus metaphor was conceptualised as a reduction in performance in the cognition-success-attribution cycle, represented the conflict between the interrelated parts of the system and reduced performance with potential for organizational decline. In Figure 11.2 Miller’s (1992) four configurations highlight reduced performance in each of the cases and the trajectories that typify success and failure.

FIGURE 11.2 FOUR CONFIGURATIONS AND TRAJECTORIES

The Decoupling Trajectory	The Venturing Trajectory
None	Case B
Salesman can lead to Drifters	Builders can lead to Imperialists



Source: Adapted from Miller (1992)

1. *The Focusing Trajectory: from Craftsmen to Tinkerers.* Miller (1992) referred to the view that entrepreneurs sell what they are familiar with as the 'focusing trajectory'. Case A is dominated by quality in all its operations because of the highly regulated pharmaceutical environment. The entrepreneur with a technical background was more focused on this aspect than the MD internal stakeholder with a marketing background. As suggested by Miller's (1992) configuration, the MD's marketing lens dictated what he perceived as important, reflecting perceivers expectancy theory (Jones et al., 1984). These findings also support Miller's view that even though the organization had changed over time, the entrepreneur still used pre-existing mental frameworks to understand and make decisions. The conflict in the interactions with internal stakeholders was caused by the entrepreneur-as-Craftsman who attributed their success to the achievement of high levels of quality. This is in contrast to the MD internal stakeholder who attributed the organization's success to the strategic placement of highly skilled workers in the right market.

In Case A the internal stakeholders with greater technical expertise and experience were more aligned with the entrepreneur on attributing success to high levels of technical quality. In this example, the transformation from Craftsman to Tinkerer was moderated by the MD internal stakeholder who recognised the need for quality and diluted the potential for a monolithic culture created by the entrepreneur who used tried and tested approaches to growing the organization. Tinkerers were regarded by Miller (1992) as a decline into a narrow focus on specialized quality due to past successes.

Case C entrepreneur and MD internal stakeholder did not have this conflict because they had a similar scientific background and both could be categorised as Craftsmen. The findings in Case C illustrated the entrepreneur as a Craftsman who wanted to spend time perfecting new products but also had the commercial focus on growth. The evidence that the entrepreneur was a Craftsman with commercial focus is an entrepreneurial feature that is not considered by Miller (1992). In this way, the evidence showed a commonality between the interactions in Cases A and C in terms of the interactions of the entrepreneur as Craftsman and the internal stakeholders. As long as the entrepreneur was the key decision-maker rather than internal stakeholders, the decision was respected because of historic success, but it moderated their interaction.

In the cases the internal stakeholders' desire to focus on one core strength was clearly an issue that caused cognitive dissonance between the entrepreneur and internal stakeholders. It was unclear from Miller's (1992) trajectory if the founders or the management drove this focus on one core single strength. Paradoxically, the internal stakeholders attributed organizational success to the entrepreneurial cognition, but simultaneously wanted change.

2. *The Inventing Trajectory: from Pioneers to Escapists.* While Pioneers took the lead with new technologies and created new markets they could also decline into Escapists. The entrepreneurs in Cases A and C focused on futuristic projects that the market was not yet ready for which Miller (1992) asserted is characteristic of Pioneers. In Cases A and C, there was a tension between the entrepreneurs who developed products that were perceived by internal stakeholders to be premature for the market, and the internal stakeholders' desire for a market strategy and analysis before the development of new products.

3. *The Venturing Trajectory: from Builders to Imperialists.* The Builder typified the entrepreneur in Case B who pursued growth and expansion with a primary goal. In addition, he showed evidence of declining into an Imperialist through acquisition, mergers and fast strategies for growth. The findings from Case B showed signs of the Venturing Trajectory in which the entrepreneur had

ambitious goals and was able to raise large investment for potential acquisition (Miller, 1992). However, the conflict in the interactions with the internal stakeholders showed how the entrepreneur's goals transformed the Builder to Imperialist at the cost of interrelationships and reduced internal stakeholder performance. This evidence supports the Venturing Trajectory where the entrepreneur focused on financial and legal issues rather than the much needed production, research and development.

Although Case B is characteristic of the Venturing Trajectory, there was an inconsistency with regards to Miller's assertions on risk and the entrepreneur in Case B. Miller regarded the Builder as taking substantial risk while the evidence in this case is that the entrepreneur took less risk as the organization matured and became more established financially, operationally and strategically. Additionally, the internal stakeholder perception was that the organization should take more risks. Internal stakeholders failed to recognize the temporal aspects of growth, and that the entrepreneur did take risks at the start-up level. This implies that the internal stakeholder perception had a temporal bias towards the present rather than the past. The Venturing Trajectory characterised the conflict in Case B between the entrepreneur's view of risk that is based on past experience and internal stakeholders view of risk that is based on inexperience and a lack of temporal depth.

The changing temporal aspect of entrepreneurial risk from start up to maturity is not considered by Miller's (1992) four trajectories. My evidence provides insight that organizational age had an impact on entrepreneurial and internal stakeholder interplay as presented in the conceptual framework discussed in Section 11.7.

4. The Decoupling Trajectory: from Salesman to Drifters. There was no evidence that the entrepreneurs in the cases focused on sales at the expense of excellence. The Salesman was characterised by a desire to create an image rather than a quality product. The Salesman also focused on marketing and increased product lines much more than the other types, and was eventually a driver for decline.

5. Miller (1992) identified a lack of organizational learning and a loss of flexibility as the final driver for decline. The evidence is discussed in Section 11.6.

11.5 Six Themes Identified

The six themes represented earlier in Figure 11.1 are drawn from the analysis of the interactions between the entrepreneurs and internal stakeholders, as well as the decisions that were made with regards to issue domains.

11.5.1 Incongruent and Communication Themes

Incongruence can be explained using an Effectuation lens (Sarasvathy, 2001). Effectuation theory differs from rational choice decision theories since it is characterized by uncertainty and rational choice is exemplified by pre-existent goals, strategic objectives, (Knight, 1921) and ambiguity. The entrepreneurs in the cases used effectual reasoning but were misperceived by most of the internal stakeholders, as making decisions quickly without enough information. However, this is incongruent with the entrepreneur's decision-making processes, which was longer than perceived by internal stakeholders. The internal stakeholder perception is also incongruent with their own decision-making processes.

The following quote by the entrepreneur's wife and finance director internal stakeholder demonstrated their different perception to the other three internal stakeholders due to the close and regular nature of the interrelationship. The analysis illustrated that she displayed an accurate interpretation of the entrepreneur's analytical cognitive process.

Case B, Internal Stakeholder

He does not make snap decisions. He is very cautious in his decision-making process.

However, the evidence demonstrated that entrepreneurs used both rational and effectual decision-making processing dependant on the situation (Sarasvathy, 2010). The temporal aspects of when information was shared with the internal stakeholders also caused incongruence.

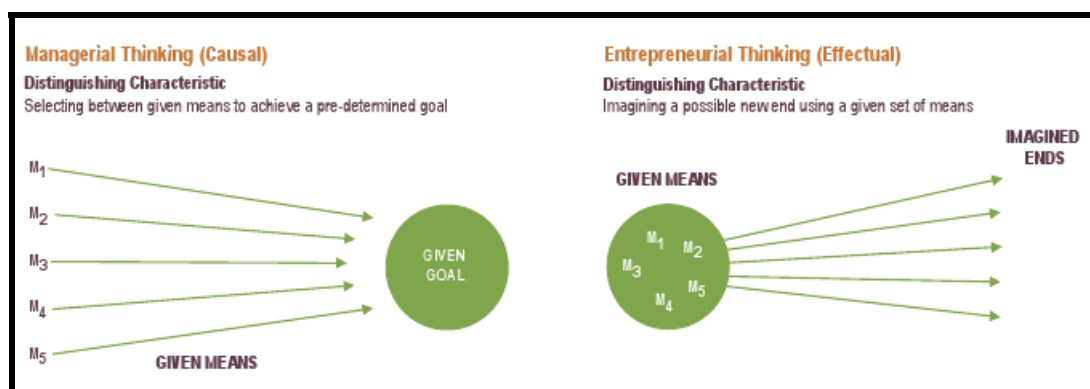
Internal stakeholder misperception illustrated that they failed to see that unlike themselves, who only used causal reasoning (Figure 11.3) that focused on a given set of means to achieve results, entrepreneurs used both. The entrepreneurs ‘limited the downside’ of decisions, which was characteristic of effectuation (Sarasvathy, 2010) and prospect theory.

Case B, Entrepreneur

They know never to just bring me one set of answers, or what they think. I always look at the ‘what if factor’, what if something goes wrong. How are we exposed, what are the upsides, what are the downsides, to try and think about all that before I can make a decision...

These differences contributed to incongruent cognitive processes that moderated their interrelationship. The internal stakeholders then perceived the entrepreneur to be risk averse which widened the gap between entrepreneurial thinking and internal stakeholder perception.

FIGURE 11.3 EFFECTUATION



Source: Sarasvathy (2001)

Sarasvathy's (2001) use of effectuation reflected in my evidence of entrepreneurial thinking, builds on Mintzberg's (1979) work that entrepreneurial thinking has been learned in successful medium to large organizations. Sarasvathy's and Mintzberg's approach can be applied to the internal stakeholders who switched between entrepreneurial and planning mode in a similar way to entrepreneurs.

Case A and C internal stakeholders who interacted more frequently with the entrepreneur learned increasingly to think like the entrepreneur and also switched to planning mode when necessary in their managerial capacity. This increased communication and regular interaction had positive results because the internal stakeholders experienced the temporal aspects of the entrepreneur's information gathering and decision-making processes. Therefore, the perception that the entrepreneur made quick decisions with insufficient facts was reduced or eliminated. However, the dominance and success of the entrepreneur's decision-making largely influenced the degree to which internal stakeholders were cognitively aligned.

The internal stakeholders who communicated less with the entrepreneurs, experienced their lack of desire to report their decision-making processes. This evidence contradicted West's (2007) finding in start-ups that entrepreneurial team collective cognition is important because decisions were made at the team level through discussion. The entrepreneurs in this study appear to be more single-minded in their decision-making process and controlled the information flow. As Case C internal stakeholder said: "we would start to question his decisions if he stopped being successful". In this way only positive upward feedback was communicated to the entrepreneur and this reinforced his decision-making.

It is also legitimate that the entrepreneurs were unable to report their mental experiences because they did not understand their psychological processes in decision-making and therefore were unable to communicate them (Nosek, 2007). This finding supports the psychological studies on unconscious cognitive processes by Dane and Pratt (2007) and Vermeulen and Curseu (2008). In

addition, the evidence suggested that the entrepreneur lacked sensemaking (Weick, 1979), that people were fearful to make decisions independent of him because of the challenges associated with accessing intrinsic cognitive processes. In some instances the internal stakeholder demonstrated sensemaking when he cognitively aligned with the entrepreneur's thinking.

Case B, Internal Stakeholder

Rather than me saying this is what I want to do and this is what I'm hoping to achieve, I'll give him an idea or I'll give him two ideas.

11.5.2 Fear and Success Themes

Prospect theory means that entrepreneurs placed more weight on losses than successes (Tversky and Kahneman, 1973). But by adopting such a position internal stakeholders denied themselves the opportunity to gain experience (Sarasvathy, 2001). Adding to this was the internal stakeholders' lack of decision-making experience that acted as a moderator on their interaction. This fear of failure derived from the evidence referred to the internal stakeholders' failing entrepreneurial expectations. The fear of not wanting to make mistakes limited the learning that can transform novice internal stakeholder decision-makers into experienced entrepreneurial decision-makers.

Mintzberg (1978) and Sarasvathy (2001) have argued that the entrepreneurial approach to decision-making can be learned. However, the fear of failure and lack of experience influenced the way the internal stakeholders adapted their thinking to that of the entrepreneur in the cases. Successful internal stakeholder decisions were therefore limited. Although, neither was cognizant of how and why their respective frame of reference affected their interrelationship and the organization, this resulted in internal stakeholder dissonance and misfit at the cognitive level. Fewer cognitive differences between the entrepreneur and internal stakeholder resulted in a closer collective focus on OpR and decision-making.

The evidence for this argument was presented in Cases A and C. The internal stakeholder, who worked closely with the entrepreneur and acted as the managing director, showed lower levels of cognitive dissonance than the other internal stakeholders. It was not observed in Case B because the entrepreneur was the autonomous decision-maker and internal stakeholders experienced cognitive dissonance due to their interaction. Although, when they adopted the entrepreneur's cognitive approach it similarly reduced cognitive dissonance. This suggests that regular interaction with the entrepreneur as mentor and coach helped the internal stakeholder to reduce fear of failure. In addition, it helped them to understand entrepreneurial cognitive differences and subsequently learn from their successes. This cognitive alignment process reinforced the cognition-success-attribution cycle.

Case B, Internal Stakeholder

I always use the entrepreneur's thought process when trying to sell him an idea. Working with him has influenced and focused my thinking.

The two aspects of fear and success are further illustrated in Case A where both entrepreneur and MD internal stakeholder made a manufacturing investment decision and used heuristics rather than analytical decision-making. Their decisions were influenced by overconfidence and intuition biases. Lack of planning resulted in increased timescale in building the manufacturing site and misjudgement of the finances delayed the return on investment. Other internal stakeholders who were not subjected to the same entrepreneurial biases were fearful to confront them on the issue domain 'Manufacturing'.

In this example, both the entrepreneur and MD internal stakeholder overlooked that the MD used the same heuristic decision-making processes as himself. An additional complexity was that the entrepreneur unlike the internal stakeholder switched between analytical and heuristic decision-making (Vermeulen and Curseu, 2008). This led to failed expectations on both sides due to a lack of communication. This finding supported earlier cognitive psychology theories about differences in cognition between management and entrepreneurs (Busenitz

and Barney, 1997; Mitchell et al., 2000; Gaglio and Katz, 2001; Mitchell et al., 2002).

11.5.3 Learning and Expectations Themes

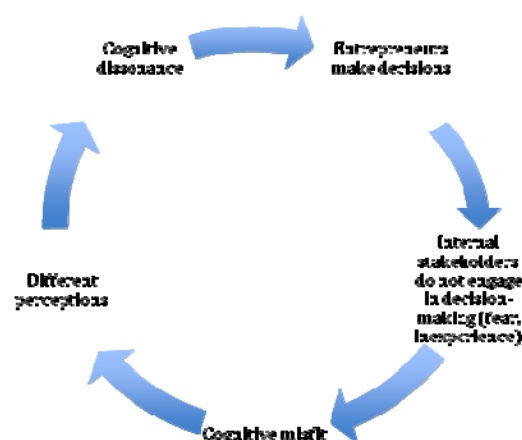
The evidence contradicted the argument that entrepreneurial cognition can be learned (Mintzberg, 2001; Sarasvathy, 2001). The entrepreneur in Cases A and B felt that internal stakeholders “won’t get it anyway”, and in Cases A, B and C the entrepreneurs expected them “to see it”. The entrepreneurs were unaware that sharing their mental models through communication or training (Argyris and Schön, 1975) would have a positive effect on their interaction. This view has implications for entrepreneurs who lack communication skills and the desire to learn how to extract and transfer tacit knowledge to internal stakeholders.

Case C, Internal Stakeholder

He (the entrepreneur) would just say ‘no’ if he thought something was a bad idea.

Figure 11.4 illustrates the evidence of the interaction process between the entrepreneur and internal stakeholders.

FIGURE 11.4 PERPETUAL CYCLE OF AUTONOMOUS DECISION-MAKING



The fact that the cases formed a heterogeneous sample from three varied sectors meant that the similarities between Cases A, B and C are independent of sector

membership and experience. It was not the intention of my research to compare entrepreneurial thinking across different sectors but to highlight the effect of different cognitive processes on the interaction with internal stakeholders. Table 11.2 summarises the cross-case similarities and differences derived from the themes.

TABLE 11.2 COMPARISON ACROSS CASES A, B AND C

Factors	Case A	Case B	Case C
Significance of Age	20 years. Entrepreneurs allow some participative decision-making. Established norms	10 years Entrepreneur making autonomous decisions. Norms still changing	20 years Entrepreneurs allow some participative decision-making. Established norms
Industry and Size	Pharmaceutical +70 employees	Electrical Services +80 employees	Technology Design and Development +350 employees as shareholders
Organizational Culture (Schein, 1998)	Well defined duties with a tendency towards formal systems and processes.	Well defined duties with a tendency towards formal systems and processes.	Relatively flexible structure; lateral rather than hierarchical communications and control.
Incongruent Theme	Internal stakeholder's cognition, perception of timing on OpR is incongruent with entrepreneur. The closer internal stakeholder cognition is to entrepreneurs', plus high level interaction reduces incongruency.	Internal stakeholder's cognition, perception of timing on OpR is incongruent with entrepreneur. The closer internal stakeholder cognition is to entrepreneurs', plus high level interaction reduces incongruency.	Internal stakeholder's cognition, perception of timing on OpR is incongruent with entrepreneur. The closer internal stakeholder cognition is to entrepreneurs', plus high level interaction reduces incongruency.
Communication Theme	Lack of ability to communicate cognitive processes led to cognitive dissonance.	Lack of ability to communicate cognitive processes led to cognitive dissonance.	Lack of ability to communicate cognitive processes led to cognitive dissonance.
Fear Theme	Internal stakeholder's fear to make decisions the further away the communication from the entrepreneur.	Internal stakeholder's fear to make decisions.	Internal stakeholder's fear to make decisions the further away the communication from the entrepreneur.

Success Theme	Evidence of cognition-success-attribution was slowly being diluted as confidence and integration of internal stakeholder increased.	Strong evidence for entrepreneurial cognition-success-attribution. Espoused Theory rather than theory in practice about recognition of internal stakeholder contribution to decision-making.	Evidence of cognition-success-attribution was slowly being diluted as confidence and integration of internal stakeholder increased.
Expectation Theme	Expectation of being the dominant decision-maker beginning to change.	Entrepreneur expected internal stakeholders to accept autonomous decision-making	Slow incorporation of internal stakeholder in decision-making as congruence increased.
Learning Theme	Showed signs of beginning to use cognitive and action learning. Little evidence of double loop learning. Beginning signs of same-different traditional S-R.	Did not use cognitive and action approaches to learning. Single Loop learning rather than double loop learning. S-R was still different-same.	Showed signs of beginning to use cognitive and action learning. Little evidence of double loop learning. Beginning signs of same-different traditional S-R.

The evidence across the themes showed a lack of sensemaking (Weick, 1979) by the entrepreneurs and an expectation that the internal stakeholders aligned with his thinking in spite of experience.

Case B, Internal Stakeholder

I would say “You know I’m concerned about this, how do you feel about it” and, try to get him to make the decision.

Internal stakeholder alignment is characteristic of Miller’s (1992) configurations in corporate organizations where success is partly due to elements fitting together. The analysis illuminates the tension beneath the surface that is eroding growth and performance in spite of the existence of seemingly successful configurations.

Case B, Entrepreneur

That decision-making process once I’ve decided something, and once we’ve gone through it, then I do expect it to be carried out. If somebody goes against it, then the best for them to do is to take a long vacation from the office or out of my vicinity.

This quote is a reflection of the self-centred nature of the entrepreneur that is based on successful decision-making and the expectation that the entrepreneur is in control of decision-making. However, the energy and focus required to build an organization as the entrepreneur had done, required a single-minded approach at the cost of interrelationships (Miller, 1992).

After twelve months entrepreneurial expectations and learning had shifted in Cases A and C. The CEO internal stakeholder had more autonomy and internal stakeholder’s cognitive differences became more acceptable.

11.6 The Contribution of Organizational Learning in Interpreting the Findings

Senge (1990: 3) indicated that learning organizations were “Organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured”. This illustrated that

organizational learning can mediate entrepreneurial and internal stakeholder interrelationships by learning from each other. For this purpose, organizational learning theory offered valuable insights into decision-making and OpR. More specifically, through single and double loop learning, cognitive dissonance was explored in their interrelationships (Argyris and Schön, 1978; Senge, 1990).

The evidence showed that the cognitive capacity and capability of the entrepreneur led to success rather than the explicit transfer of entrepreneurial cognitive processes to internal stakeholders. This finding is in contradiction to the overall premise that organizations are constantly learning and transmitting information. However, the findings showed that the internal stakeholders adopted entrepreneurial thinking in single loop rather than double loop learning which could be an explanation for the success of the organization.

The findings showed an ambiguity between entrepreneurs who are constantly learning (Daft and Weick, 1984) from the environment but resisted learning from the internal stakeholders. This is caused by the underlying assumptions that the entrepreneur has pre-existing experienced mental models, that have led to success and internal stakeholders did not feel experienced enough to question them. Limited examination of mental models familiar to the entrepreneur, and limited learning from internal stakeholders led to the internal stakeholder feeling demotivated and disillusioned with the interrelationship. This evidence supported Miller's (1992) argument that the development of new mental models to replace existing successful mental models is a challenge.

For example the three entrepreneurs would use internal stakeholders to gather and provide information to inform a decision, but would not consider their contribution in the decision itself. This temporal aspect is significant because not having an impact on the decision itself limited internal stakeholder learning (Senge, 1990). A combination of entrepreneurial autonomous decision-making, experience and the influence of biases, contribute to the control of information regarding entrepreneurial cognitive processes.

Case A, Internal Stakeholder

He will have the decision made. He may have the decision a lot earlier than he tells you.

This quote supports Bluedorn's (2002) finding in temporal studies that the entrepreneurs based decision-making on their own direct experience rather than on the experience of internal stakeholders.

Case B, Internal Stakeholder

He tells me what I want to hear and doesn't make changes that make a substantial difference to me.

Ignoring the new input by internal stakeholder in favour of 'accrued experience' (Bluedorn, 2002) moderated the interrelationship. The dominant position of the entrepreneur in organizational learning had an effect on the internal stakeholders who had their own perception of the entrepreneur's OpR decision-making processes. Internal stakeholders were also concerned about seeking new opportunities because the entrepreneur disagreed if the topic was unfamiliar.

Lichtenstein and Lumpkin's (2005) framework of behavioural, cognitive and action learning in Table 11.3 provides an explanation for inconsistencies in the entrepreneur and internal stakeholder interactions.

TABLE 11.3 MODES OF LEARNING THAT GENERATE OPPORTUNITIES IN ENTREPRENEURIAL FIRMS

	Nature of Entrepreneurial Learning	Elements Affected By Entrepreneurial Learning Processes	Potential Opportunities For Entrepreneurial Learning
Cognitive learning	Identify and alter cognitive patterns, generate new opportunities for knowledge and action (Nonaka, 1994; Crossan et al., 1999)	Existing and potential knowledge. Existing and potential resources Systemic processes	Design new products and services Develop new ways of doing business Attract and retain customers Apply proprietary knowledge in unique and innovative ways
Behavioral learning	Alter tangible processes through	Existing and emerging routines	Streamline processes to achieve new

	experience	Adaptive process	efficiencies Integrate learned experience to improve tangible processes
Action learning	Transform the context by questioning assumptions and aligning espoused belief with actual practice (Revan, 1971) Argyris, 1992; Pedler et al. (2005)	Underlying norms and beliefs Interaction, 'Rules of Engagement'	Accelerate innovation process Generate highly productive and creative organizations and collaborations

Source: Lumpkin and Lichtenstein (2005)

The contradiction between learning from the environment and learning from internal stakeholders can be explained through understanding behavioural learning. The entrepreneur would espouse theory by articulating that internal stakeholders had decision-making power, but would veto their decisions. However, the entrepreneur in Case B did eventually streamline the sales and marketing technology process suggested by the internal stakeholder months beforehand. It took a few months for the entrepreneur to integrate existing knowledge with new unfamiliar knowledge.

Case B, Internal Stakeholder

The entrepreneur does not like change.

Through persistence the internal stakeholder demonstrated a desire to achieve higher levels of cognitive learning than the entrepreneur. The entrepreneur's experience and learning from other technology failures potentially moderated organizational performance (Huber, 1991) and showed how the representativeness bias (Tversky and Kahneman, 1982) negatively affected the interaction with internal stakeholders. However, the change increased performance and had a positive effect on their interrelationship.

Revan (1971), the originator of action learning, began by using the process of tackling issues and reflecting on actions with scientists but later used it with managers in a variety of public and private sector organizations by learning through actions and practice. The action learning approach to OpR that focused on alignment between expectations, reality and targeting individual assumptions provided further insight into the interactions between the entrepreneur and internal stakeholders. In Case A there

was an expectation by the entrepreneur that management meetings successfully communicated his thoughts, but the reality was that internal stakeholders did not appreciate what he was thinking. In Case B, the expectation that the internal stakeholder had the freedom to make decisions was very different to the reality that the entrepreneur was the final decision-maker. In Case C, the entrepreneur's assumption was that internal stakeholders were free to bring new opportunities to him, while in reality the internal stakeholders thought that there was an expectation of what was acceptable and what was not.

The frustration felt by internal stakeholders in not knowing what the entrepreneur was thinking and why he made certain decisions reflected a lack of cognitive learning, misalignment of expectations and reality. Cognitive learning is a part of organizational learning that enables tacit knowledge to be activated to increase and share knowledge amongst individuals (Nosek, 2007). The entrepreneurs' sharing of cognitive schemas and mental models were inconsistent across the organizations. It was mentioned previously that when the entrepreneurial mentoring role in Cases A and C with internal stakeholders was more consistent then cognition was more closely aligned. The evidence therefore showed that internal stakeholder cognitive dissonance cannot be generalised across all the interrelationships with the entrepreneur and depends on the level of interaction mentioned earlier. Although the entrepreneurs in limited examples in Cases A and C recognized that they should transfer their knowledge, the internal stakeholders' lack of understanding of OpR illustrated that entrepreneurs were still not sharing their knowledge to improve interactions.

A cognitive and action learning approach (Revans, 1971, 1978) was gradually being adopted in Cases A and C through interactions in which the entrepreneur and internal stakeholders would learn from the decision-making process and exchange thinking on what worked and what didn't. The challenges faced by the entrepreneur about issue domain 'Succession' showed a gradual increase of confidence as the internal stakeholders made more successful decisions. In this way the internal stakeholders in Cases A and C delivered on the entrepreneur's expectations and tested assumptions about their role in decision-making.

Although the finding that acceptance by the entrepreneurs is partly because the internal stakeholders who interact more closely and regularly with them had learnt to think more like the entrepreneurs, learning was slow. The dichotomy in the findings was that the entrepreneur allowed internal stakeholders the freedom to learn and make decisions while their contribution and involvement in decision-making was limited. This reflected the contradiction between Senge's (1990) espoused theory and theory in practice in which the entrepreneur said one thing and behaved in a different way.

These findings supported the proposition that previous entrepreneurial events are related to how experience is transformed into knowledge (Politis, 2005) in Figure 11.5, that either moderated or mediated entrepreneurial decision-making. The frustration of the internal stakeholders to undertake new approaches and decisions to grow was fuelled by the entrepreneur's generalizations in applying the same way of thinking to subsequent issue domains. This is regarded as path dependency and meant that the entrepreneurs in Cases A and B found it a challenge to adapt to new changes in customers, technology and regulation because of the cognitive persistence of previous success (Levinthal and March, 1993). Highlighted earlier, the previous experience of the entrepreneurs in Case A and C was a major contributing factor to the cognitive misfit between the entrepreneur and internal stakeholders.

Case A, Internal Stakeholder

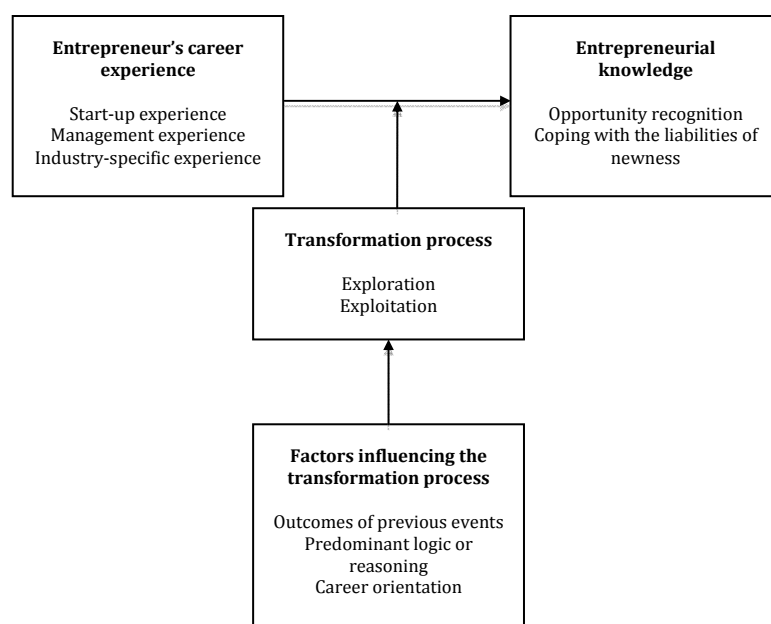
Obviously you wouldn't hand over your baby after 20 years and say there you go, you look after it now and get on with it. I think again it's quite an interesting situation to manage, it requires management of both the founder and the company.

A contradiction to path dependency and Politis' (2005) entrepreneurial learning and OpR framework in Figure 11.5 is seen in Case A. Even though the entrepreneur had 20 years of start-up and specific pharmaceutical industry experience his over-confidence and reasoning led him to explore the new manufacturing opportunity to grow the organization. The evidence from Case B also provided a challenge to Politis' (2005) framework. In Case B there was an opportunity to increase performance but the entrepreneur was reluctant due to the negative outcome of previous sales and marketing technology. This showed that previous experience did

not always lead to the exploration and exploitation of an idea without the interaction with, and intervention by, internal stakeholders in established entrepreneurial organizations.

This was similar in Case C where the transformation process of new opportunities was influenced by the entrepreneur's previous outcomes in the new product development and his early career.

FIGURE 11.5 ENTREPRENEURIAL LEARNING AND OpR



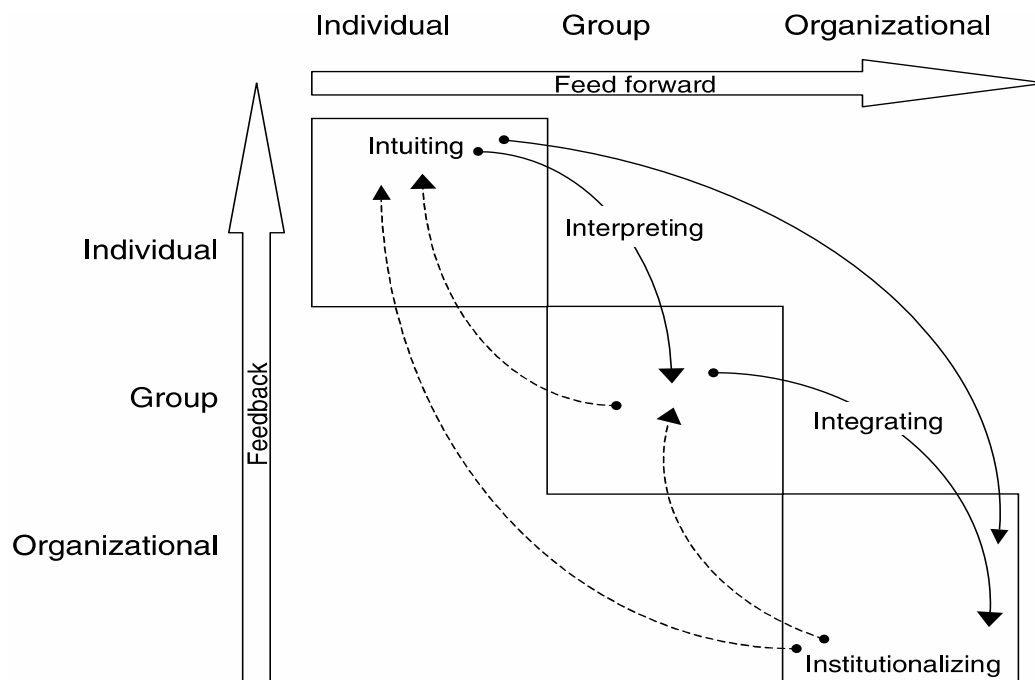
Source: Politis (2005)

The cognitive dissonance therefore between the entrepreneur and internal stakeholders in the cases can also be explained as a difference in the level of prior information and knowledge in recognizing opportunities. This is also explained through the five stages of OpR in which prior knowledge is referred to in the 'preparation' phase (Shane, 2000; Lumpkin and Lichtenstein, 2005).

Crossan et al. (1999) used the influence of intuition and experience as a mechanism for understanding the interaction between individual, group and the organization. In this way, insight into entrepreneurial cognition and internal stakeholder perception is illustrated by their 4I model in Figure 11.6 of intuiting, interpreting, integrating and institutionalizing reflecting organizational learning as a dynamic process. The

entrepreneurs had developed intuition on the basis of their experience and used their existing knowledge to interpret new information. This dynamic process shows that due to different interpretations of what and how entrepreneurs were thinking, the next phase of integrating knowledge was challenging for the internal stakeholders. As a result, a possible shared understanding was undermined.

FIGURE 11.6 ORGANIZATIONAL LEARNING AS A DYNAMIC PROCESS



Source: Crossan et al. (1999)

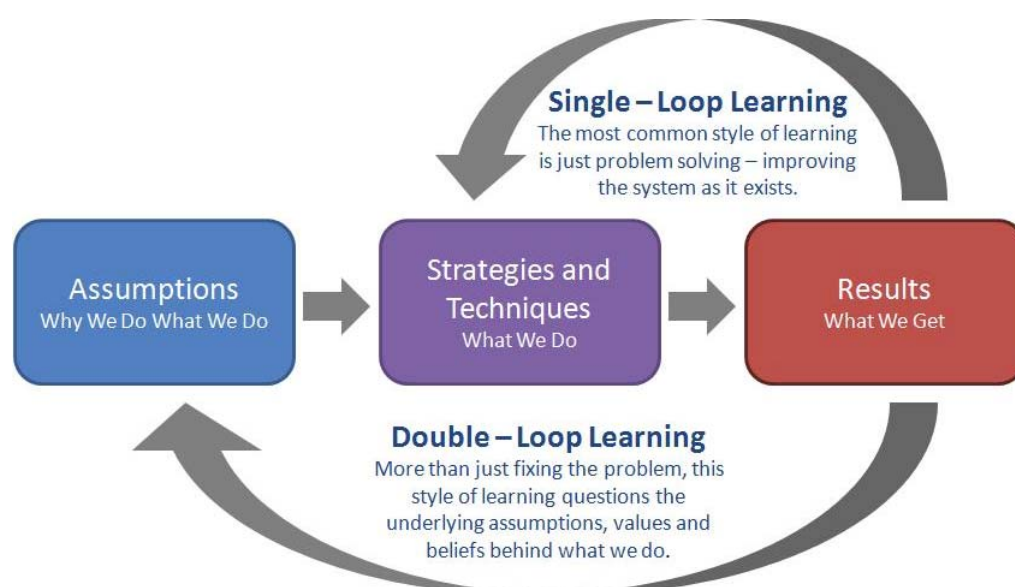
In each case shared practices in terms of strategy development and performance was not institutionalized because of differences in approach to strategy development and growth between the entrepreneur and internal stakeholders. Internal stakeholders proceed through their own learning that they do not share with the entrepreneur for fear of his reactions. However, towards the end of the interviews, entrepreneurs in Cases A and C had identified that their own cognitive processes potentially limited the organization's growth.

Institutionalized learning through consistent internal stakeholder feedback was not embedded since evidence showed inconsistencies and contradictions within and across the cases. The degree to which the 4I process can be applied to the findings

depends on the perception of the internal stakeholders to the entrepreneur's decision-making and exploitation of new opportunities.

The contradictions identified above of entrepreneur and internal stakeholder interrelationship in terms of cognitive differences, biases, communication and organizational learning, can be further explained by exploring individual aspects of learning in more detail. Underpinning organizational learning in the cases is single and double-loop learning (Argyris and Schön, 1978) developed primarily on case study research (Huber, 1991). The Argyris and Schön (1978) model in Figure 11.7 demonstrated how single-loop learning took place and it was possible for the entrepreneurs to think that internal stakeholder decisions were congruent to theirs. Single-loop learning took place because the internal stakeholders improved systems and processes as it existed and was developed by the entrepreneur, rather than changing it radically. A double-loop approach to learning meant that the internal stakeholders would have to fundamentally question entrepreneurial decision-making and OpR processes. The evidence for entrepreneurs and internal stakeholders double-loop learning was limited.

FIGURE 11.7 SINGLE AND DOUBLE LOOP LEARNING



Source: Adapted from Argyris and Schön (1978)

Fear was found to be a barrier to double-loop learning opportunities for entrepreneurs and internal stakeholders. This fear is exacerbated by the lack of internal stakeholder counterfactual bias. The influence of a counterfactual bias meant that the entrepreneur was able to look forward after a failure, rather than spend time thinking about why it happened.

Case A, Internal Stakeholder

He (the entrepreneur) does not look back and reflect on whether he made a wrong or right decision. It is not part of this thinking process.

The evidence for single loop learning was observed in Case B when the entrepreneur found several thousands of pounds worth of sales overlooked in archived client files by the sales force. The entrepreneur's response in telling internal stakeholders to become more efficient can be interpreted as "just fixing the problem", rather than questioning the underlying assumptions of what and why it happened, and how the existing system caused the failure. In addition, internal stakeholders did not communicate their conflicting view about why and how this error occurred which they believed was due to a lack of autonomy and employee motivation. There was no internal stakeholders' participation in the decision to implement the action dictated by the entrepreneur to fix the problem. Using existing systems and processes dictated by the entrepreneur to resolve the problem reflects single loop learning.

The perceptions of the internal stakeholders that the entrepreneurs made decisions with regards to new opportunities only if they were familiar with the area confirmed previous studies that entrepreneurs preferred OpR when they have existing knowledge (Baron and Ensley, 2006; Mitchell and Shepherd, 2010). This approach had a negative influence on their interactions because internal stakeholders wanted to learn and explore new and different opportunities. The entrepreneurs' reluctance was a barrier for expansion and growth. It also meant that change and adopting new processes was a challenge for internal stakeholders in each of the cases.

Another reason for single loop learning is that by making entrepreneurial cognitive processes explicit, entrepreneurs exposed their ideas, intentions and choices, and so could make themselves vulnerable (Argyris, 1992 and 1993) to internal stakeholder

criticisms and perceptions. Entrepreneurs admitted to doing things instinctively without “training” and with a fear that they might get “caught out”. This defensive mechanism meant that internal stakeholders perceived the entrepreneur as controlling, reinforcing their fear of failure and incorrect perceptions. The entrepreneurs seldom cognitively adjusted if they believed they had made the correct decision. This supports the illusion of control bias theory (Langer, 1983), that entrepreneurs looked for confirmation of their hypothesis and ignored disconfirming evidence.

Argyris and Schön (1978) argued that organizations used double loop learning in order to grow. However, double loop learning meant that internal stakeholders questioned underlying principles and successful entrepreneurial decision-making. Instead, single loop learning was more evident than double loop learning in all cases because of established entrepreneurial cognition and practices. In addition, Weick’s (1979) argument that organizational learning was infrequent was evident in the cases.

11.7 Modification of the Conceptual Framework based on Open Systems

Thinking

The original conceptual framework provided an empirically validated model for this research. The entrepreneurial orientation configuration sought to show the interplay between entrepreneurial orientation, performance, organizational and environmental factors. However, it failed to capture the reciprocal relationships between entrepreneurial cognition and internal stakeholder perception, temporality, biases and specific performance measures indicated by the evidence in a conceptual manner.

In order to gain further insight into the implicit causal interrelationship between the entrepreneur and internal stakeholder perception, I referred back to organizational literature. This section shows how the conceptual framework was modified to incorporate the open systems concepts of input, output and transformation in a feedback loop (von Bertalanffy, 1968; Senge, 1990) that reinforced growth as a system of interlinking parts.

Three of the core assumptions of open systems thinking are used to provide insight into the interrelationship between the entrepreneur and the internal stakeholders. The

first assumption is that changes in one variable caused change in another variable, the second is that all components of an organization were interrelated, and the third is the relevance of communication of information with interlinked variables. The evidence shows that individuals interacted with mutual benefit as new information between entrepreneurs and internal stakeholders affected each other. The new information was then fed into the system.

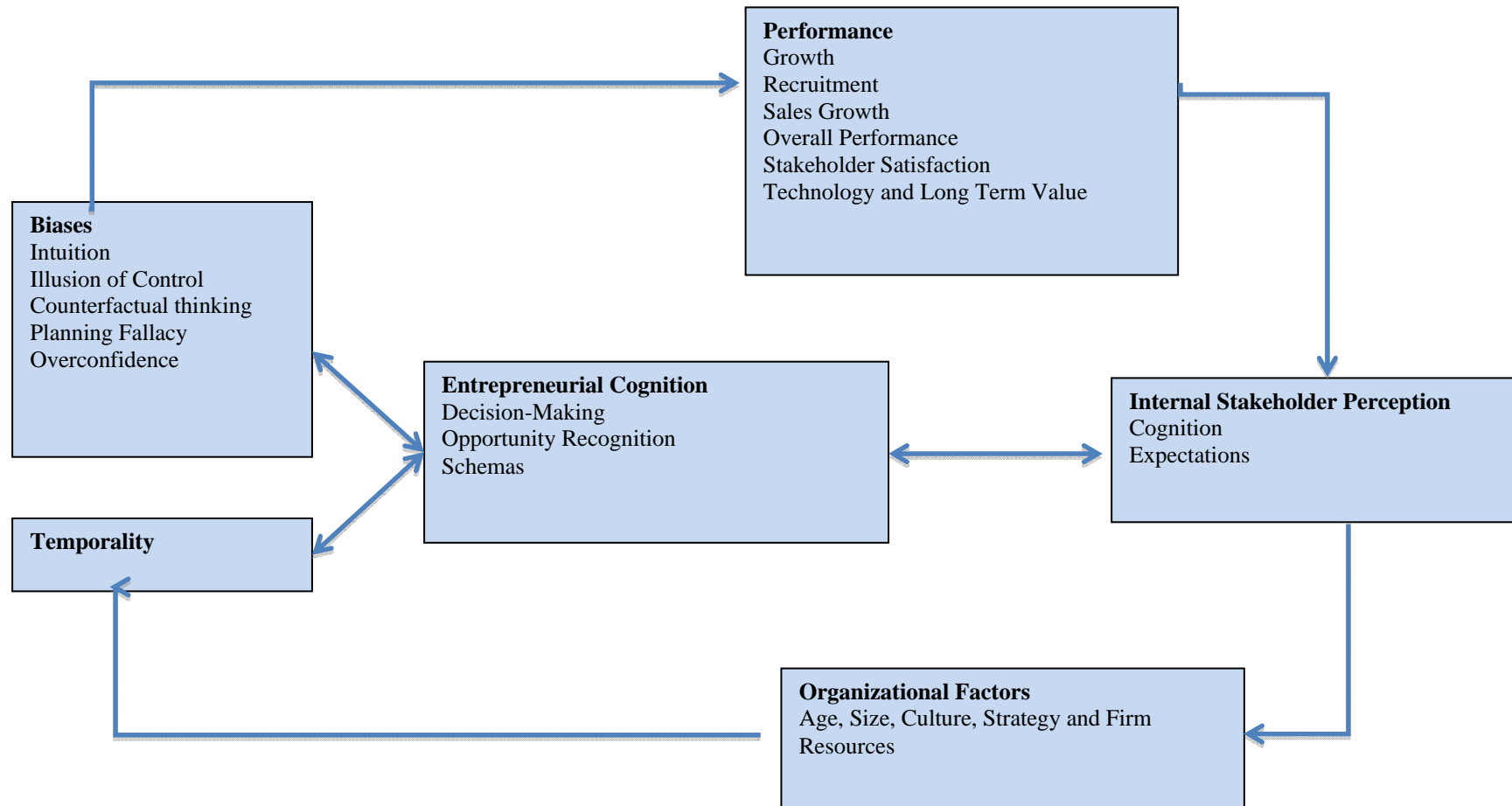
In addition, an open systems approach highlighted how the interrelationships between growth and performance could be recognized by managers, and the effect of longer communication chains as organizations increased in size. In an open system information is input to the organization, interacts with the environment, and ensures the organization's survival because it is able to convert this information and produce an output (von Bertalanffy, 1968). The longer flow of feedback and information in the communication chain in the cases was found to subsequently limit performance. The links in the modified conceptual framework are feedback or causality loops and the interrelationships are dependent on each other.

Open systems thinking reflected how input generated by environment factors are converted into new products and services in the throughput phase in the cases. Through a feedback mechanism with internal stakeholders these outputs were fed back into the system. This exemplified how organizational learning is a key component of an open system and illustrates how new information may be used to create increased growth. In this way, the modified conceptual framework reflected the evidence that feedback processes between the entrepreneurs and the internal stakeholders affected the system and resulted in a change in performance.

The conceptual framework modifications in Figure 11.8 are discussed using the open system characteristics of causality, interdependence and synergy to demonstrate the implicit causal interrelationship between the temporal dimension of entrepreneurial cognition, biases and internal stakeholder perception. The feedback loops in the conceptual framework illustrate the interaction effect between entrepreneurial cognition and internal stakeholder perception. The link between the entrepreneurial cognition and biases to performance and the interdependency between organizational factors are represented in the modified conceptual framework.

The modifications of Figure 4.2 include the performance and organizational factors dimensions in order to represent the findings. In the performance dimension, profitability and market share has been replaced with recruitment, technology and long-term value. In the organizational factors dimension age has been added.

FIGURE 11.8 MODIFIED CONCEPTUAL FRAMEWORK



The entrepreneurial orientation concept was extended to include biases, temporality and entrepreneurial cognition. The original performance concept (Lumpkin and Dess, 1996) included sales growth, market share, profitability, overall performance and stakeholder satisfaction. This empirical research for established entrepreneurial organizations extended the performance concept to include technological advancement and long-term value because they were regarded as important in each case. Industry-specific definitions of growth and performance, such as increased manufacturing (Case A and C) and the acquisition of intangible assets and spin-outs (Case C) have not been included because of the specificity to one case.

Organizational factors have been extended to include the age of the organization, but top management team characteristics were not considered in this research and therefore do not appear in the conceptualisation. However, top management cognition and expectancy was found to affect the interaction, and the conceptual framework has been modified to include this aspect. Age is characteristic of the lifecycle models and the evidence in this research demonstrated that age made a difference in the entrepreneurial cognitive approach to growth and performance. For example, the entrepreneur in Case B had an aggressive sales approach, compared to the entrepreneurs in Cases A and C, indicative of the differences in age and size. Organizational age and size were variables mentioned in 74 of 104 stage models investigated by Levie and Lichtenstein (2010). The evidence also showed that the dynamic tension and entrepreneurial passion to enact an opportunity in pursuing growth is higher for the entrepreneur in Case B than entrepreneurs in Cases A and C, extending the Levie and Lichtenstein's model to established entrepreneurial organizations.

11.7.1 The Interdependence of Temporality and Entrepreneurial Cognition

There are two points here that reflected the systems approach of “circles of causality” (Senge, 1990: 73). The first circle causing conflict between entrepreneurial cognition and internal stakeholder is that entrepreneurs were unaware of the significance of sharing decision-making processes and information with internal stakeholders earlier in the process. The second circle of causality was the entrepreneur's ability to make

quick decisions and lack of desire to indulge in consensus seeking, in case the window of opportunity closed. The example below represents the entrepreneur's thoughts about how the internal stakeholders should be undertaking decisions.

Case A, Entrepreneur

They need to be moving on and moving upwards in terms of their thinking and what they are doing.

So although this interrelationship appeared to be a linear cause-effect process, the influence of the temporal dimension showed how the entrepreneur's cognition reinforced the perception of the internal stakeholder in a downward reciprocal loop.

11.7.2 Interplay between Entrepreneurial Cognition with Internal Stakeholder Perception and Expectation

The entrepreneur's decision-making and OpR in the conceptual framework affected the interaction between the entrepreneur and internal stakeholder perception. Based on the assumption that entrepreneurial OpR consisted of a synthesis of stages (Shane, 2003; Lumpkin and Lichtenstein, 2005), the entrepreneur's OpR process only included internal stakeholders in the information gathering phase and once they had formulated their ideas and not before. Characteristic of open systems thinking, change is represented by the interplay of entrepreneurial cognition and internal stakeholder perception, although the evidence illustrated that it is not at the point when internal stakeholders expect it. These unmet expectations result in dysergy in this dynamic interrelationship.

The open system model of causality can be traced through a sequence of actions. At each step the entrepreneur drew on experience, pre-existing mental models, and knowledge and information from the internal stakeholders. The processes were interrelated, but in some of the evidence the thinking process of the entrepreneur was only partially communicated to internal stakeholders. Because relationships between the entrepreneur and internal stakeholders were nonlinear (von Bertalanffy, 1968), a small change in entrepreneurial decision-making had a large effect on the internal

stakeholder. In other examples, a large change in entrepreneurial decision-making had a nominal effect on internal stakeholders.

These findings illustrated the contrast between internal stakeholders who preferred less uncertainty in favour of planned strategies and entrepreneurs who sought opportunities and made decisions in a non-linear way. These differences are viewed as an emergent strategy and entrepreneurial mode rather than planning mode (Mintzberg and Waters, 1982). The evidence demonstrated the causal effect that these differences had on the interrelationships between entrepreneur and internal stakeholders. Emergent strategy in which patterns are unintentionally realised caused frustration with internal stakeholders who wanted planned progression.

The evidence in the cases supported Mintzberg and Water's (1982) argument that growth in entrepreneurial business occurred as a pattern of sprints and pauses. This was incongruent with internal stakeholders' expectations of more consistent fast growth. Entrepreneurs saw this way of thinking as overextending their resources and finances, and reinforced the internal stakeholder view that the entrepreneurs were risk-averse.

The evidence in Cases A and C revealed that interactions between the entrepreneur and internal stakeholders influenced and possibly changed the assumptions each had derived about the other's cognition. The findings thus supported research that entrepreneurial organizations are not "strategically managed by consensus" but by autocratic entrepreneurial decision-making processes (Covin et al., 2006). Autocratic entrepreneurial decision-making caused cognitive dissonance. This is an example of the 'Pygmalion Effect' (Senge, 1990; Rosenthal and Jacobson, 1992) in which the entrepreneur rewarded the internal stakeholders who thought like him but did not realise that his expectations influenced internal stakeholders who were eager to please.

Equity Theory (Adam, 1965) provided further insight into internal stakeholder cognitive dissonance who perceived their interrelationship to be inequitable and expected that their contributions would be rewarded. The evidence illustrated that cognitive dissonance resulted when the expectations of internal stakeholders were

unmet. The practical components of psychological contracts (Schein, 1987) were traditionally used to explain mutuality of expectations in the relationship between employees and management in organizations. The cases provided evidence for both the mutuality of expectations and the consequences of unmet expectations in interrelationships. In terms of the exchange of technical information and decision-making, tasks and roles, the cases demonstrated a level of mutuality between the entrepreneur and internal stakeholders. Specifically, mutuality that led to a decision was achieved by the horizontal flow of technical information (Handy, 1993) between the entrepreneur and internal stakeholders. However, when decision-making was directly related to growth and OpR, a lack of mutuality was evidenced. This was explained earlier through different cognitive processes of effectual versus causal reasoning (Sarasvathy, 2001), and Likert's (1968) four systems of thinking that are discussed later.

The notion of unwritten psychological expectations was apparent. This was evidenced through entrepreneurs expecting internal stakeholders to perform their roles and responsibilities and internal stakeholders expecting that their working environment would enable them to perform their jobs. The evidence illustrated that internal stakeholders expected entrepreneurs to communicate their thoughts about decisions and opportunities, and to transfer relevant information and expertise in order for them to perform their roles. Unmet expectations resulted when this did not happen. The entrepreneurs in all cases still controlled the flow of information which created an environment that the internal stakeholders perceived to make their jobs more challenging to undertake.

The other aspect of the psychological contract relevant to the interrelationship between the entrepreneur and internal stakeholders is 'charisma' (Schein, 1987). Charisma means that internal stakeholders followed the entrepreneur because the entrepreneur reflected a mystery of success. The evidence in the cases reflected this mystery in that internal stakeholders felt that "people followed him anyway". Entrepreneurial charisma caused a problem with issue domain 'Succession' because as Schein (1987) argued, charisma is not a basis for succession and is only stable for as long as the perceived charismatic leader is the decision-maker.

At this point, it is timely to introduce additional classic organizational theorists who have contributed to our present day understanding of decision-making and organizational behaviour. Simon (1959, 1979) argued that decisions are central to effective organizations and that electronic communication and information processing changed decision-making. Rostow (1960), McGregor (1960), Likert (1967), Schein (1987) and Argyris (1992), each argued for clarity and explicitness of interrelatedness for employee roles and responsibility, decision-making and organizational effectiveness. While another organizational theorist, Handy (1993), suggested that aspects of power through information control offered additional insight into the acceptance of entrepreneurial decision-making by internal stakeholders.

Rostow (1960) claimed that organizations needed to translate from psychological orientation to working organizations with procedures in order to be successful. However, a psychological factor contributing to how this change took place could be self-efficacy, the belief in one's own ability to control and complete a task, which has been shown to be higher in entrepreneurs than non-entrepreneurs. A contemporary view is that entrepreneurs have a bias and perceived that they have the ability to control the outcome, and that following procedures was limiting. Conversely internal stakeholders believed they did not have the same ability to control the task and complete the task successfully in the way the entrepreneur did.

Schein's (1987) degrees of participativeness helped to explain the cognitive dissonance in entrepreneurial and internal stakeholder interactions. In participative decision-making, entrepreneurs still treated internal stakeholder motivation and commitment with suspicion even when internal stakeholders had more information and knowledge to perform their role than the entrepreneur. Likert (1967) and McGregor's Theory Y (1960) supports Schein's argument that allowing employees latitude in their roles and routines is potentially more beneficial to the organization. Handy (1993) supported this argument adding that role strain, overload and misperception, which were all evidenced in this research, contribute to unmet expectations and are therefore dysfunctional features of an organization.

The evidence suggested that an entrepreneur's lack of confidence in the internal stakeholders resisted a participative approach because of cognitive differences. The

evidence contributed new insight to classic organizational theory, by demonstrating that the lack of cognitive understanding and communication in their interrelationship limited the entrepreneur's transition from autocratic to participative (Schein, 1987) decision-making.

McGregor's (1960) Theory Y assumes that employees prefer autonomy in decision-making and have the information to fulfil their role requirements. The evidence demonstrated that the cognitive dissonance between the entrepreneur and internal stakeholders was caused by limited information flow that Simon (1959, 1979) suggested was only ascertainable at the point of decision-making. The entrepreneur's view was thus more characteristic of Theory X that had negative implications for a successful psychological contract and mutually met expectations. It is also worth recalling Likert's (1967) argument that a lack of accurate information is often the cause of systems thinking failure and Handy's (1993) argument that vertical and horizontal information flow represents important features of synergy. In this way, Likert and Handy's arguments could be used to explain the negative impact on the psychological contract caused by the lack of information flow.

Likert (1967) captured the continuum of autocratic and participative theory in Systems 1, 2, 3 and 4 analysis represented in Table 11.4. These four systems can be used to understand the causal effect of the interrelationship between the entrepreneur and the internal stakeholders. Theory Y assumption is that organizations operating in Systems 3 and 4 will have a power base of decision-making that is much broader and included the internal stakeholders. The idea of the entrepreneur relinquishing control in order for internal stakeholders' thinking to be harnessed to organizational goals and not entrepreneurial thinking is not yet visible in the cases. If this shift occurred, the psychological contract between the entrepreneur and internal stakeholder would shift to the entrepreneur providing information and a context for the internal stakeholders, which would reinforce their interrelationship in positive ways. The internal stakeholders' expectations would then be met through consensus with the entrepreneur. The analysis using Theory Y assumptions meant that the misfit in their interaction was caused by internal stakeholders' lowered expectations because they could not challenge the entrepreneur and they had less perceived role autonomy.

Table 11.4 shows Likert's (1967) view of how entrepreneurs in system 1-4 can be either authoritative or participative when interacting with the organizational variables of leadership, communication and decision-making.

TABLE 11.4 FOUR SYSTEMS OF ANALYSIS

Organizational Variable	System 1	System 2	System 3	System 4
	Authoritative		Participative	
	Exploitive Authoritative	Benevolent Authoritative	Consultative	Participative Group
	System 1 and 2 reflects entrepreneurial decision-making in all the cases		System 3 and 4 reflects perceived entrepreneurial decision-making in all the cases	
1. Leadership processes used				
Extent to which superiors have confidence and trust in internal stakeholders.	Have no confidence and trust in internal stakeholders.	Have condescending confidence and trust.	Substantial but not complete confidence and trust.	Complete confidence and trust in all matters.
Extent to which entrepreneurs behave so that internal stakeholders feel free to discuss important things about their jobs.	Internal stakeholders do not feel free at all to discuss things about their job.	Internal stakeholders do not feel very free to discuss things about their job.	Internal stakeholders feel rather free to discuss things about their job.	Internal stakeholders feel completely free to discuss things about their job.
2. Character of communication process				
Amount of interaction and communication aimed at achieving organization's objectives.	Very little	Little	Quite a bit.	Much with both individuals and groups.
Extent to which downward communications are accepted by internal stakeholders.	Viewed with great suspicion.	May or may not be viewed with suspicion.	Often accepted but at times viewed with suspicion; may or may not be openly questioned.	Generally accepted, but if not, openly questioned.
Psychological closeness (how aware is entrepreneur of cognitive dissonance faced by internal stakeholders).	Has no knowledge or understanding of problems.	Has some knowledge and understanding.	Knows and understands problems.	Knows and understands problems.
3. Character of decision-making processes				
At what level are they made.	Bulk of decisions made by the	Policy at top, many decisions within prescribed	Broad policy and general decisions at top, more	Decision making widely done throughout

	entrepreneur (at the top).	frameworks made at lower levels.	specific decisions at lower levels.	organization, well integrated through linking process.
To what extent are entrepreneurs aware of problems.	Often are unaware or only partially aware.	Aware of some, unaware of others.	Moderately aware.	Generally quite well aware.

Source: Adapted from Likert (1967: 4)

The evidence on the imprinting of entrepreneurial cognition in the cases as presented in Table 11.4 supported Likert's (1967) argument that top management System 1 style of leadership resulted in System 1 organizational characteristics. The entrepreneur's cognitive process reflected Likert's continuum of System 1 and 2, but was perceived by them as System 3 and 4. Internal stakeholders' perception and descriptions of entrepreneurial decision-making authority reflected more of System 1 and 2. Internal stakeholders therefore behaved in a way that reflected what they perceived to be correct. The evidence of entrepreneurial leadership is a secondary finding that provides further insight but is outside of the boundaries of my research.

11.7.3 Linking Interplay To Growth and Performance

The modification to the performance concept supported Wiklund and Shepherd's (2005) argument that the EO conceptualisation of performance was incomplete and more complex than the indicators in the original Lumpkin and Dess (1996) model. In addition, the concept now reflects the varied growth definitions of the entrepreneurs and the internal stakeholders, and the growing heterogeneity of entrepreneurial growth in academic literature noted by Wright and Stigiani (2013). The differences in growth definition in Cases A, B and C also support Levie and Lichtenstein's (2010) arguments that patterns and rates of growth varied in entrepreneurial organizations.

When entrepreneurs and internal stakeholders used a sensemaking approach when faced with growth decisions, then the differences between entrepreneurial effectual reasoning and internal stakeholder resulted in cognitive dissonance. This interpretation of the interaction between the entrepreneur and internal stakeholder supported the effectual elements of isotropy, that entrepreneurs were not clear what elements of the environment to pay attention to or to ignore. Consequently, the

development of new mental models such as market, product and organization was approached through an effectual process for entrepreneurs and causal for internal stakeholders.

The central systems thinking argument in this research is that organizational performance is mediated by positive feedback and moderated by negative feedback. The conflict in the interrelationships meant that the organizational system was out of balance because the conversion processes of entrepreneurial decision-making to output affected performance and organizational factors.

Although Cases A and C were not underperforming at the time of this analysis, there was internal stakeholder frustration about the amount of financial resources of one particular project in Case C. This was reflected in organizational theory which suggested that the consequence of technology investment is seldom immediately enjoyed (Senge, 1990). However, the age and maturity of the organization coupled with the experience of the entrepreneur meant that the entrepreneur had a greater awareness than the internal stakeholders of the temporal dimension to success and building value. Cognitive conflict between the entrepreneur and internal stakeholders demonstrated that unless the system was rebalanced and a modified representation of success was established, their interrelationship would affect performance.

Case B displayed a period of underperforming and resorted to autonomous decision-making. The organizational system returned to a balance by reinforcing the same system of autonomous entrepreneurial decision-making. This input was converted into increased sales output.

The entrepreneurs in all cases raised the issue domain 'Recruitment' as a significant contributor to growth. In Case C there was a pattern of different recruitment decisions made by the internal stakeholder in comparison to the entrepreneur. The recognition of the diversity in experience and cognition of the internal stakeholders was more evident in entrepreneurs in Cases A and C. This meant that the dilution of the entrepreneur's recruitment decisions by the internal stakeholders had slowly started to change the thinking created by the entrepreneur and reflected more of the internal stakeholder thinking.

Internal stakeholders perceived that a new cognitive approach to the market, structure, strategy and growth was needed. Organizational learning researchers have argued through action learning, that if organizations are not adapting then they are failing. Revans (1971, 1978) argued earlier that in a situation such as this, then managers needed to be constantly learning from each other. However, the evidence suggested that the entrepreneurs found it a challenge to adapt to internal stakeholder cognition. This research showed that although in the short term the performance of the organization increased with autonomous entrepreneurial decision-making, other elements of performance were reduced, such as overall performance, stakeholder satisfaction and employee numbers.

The question of whose cognitive processes to adopt to increase and maintain performance seemed to underlie the interpersonal conflict that was apparent within the cases although it appeared to be implicit rather than explicit. There was evidence of hidden balancing processes (Senge, 1990) in which the entrepreneur established the norm, with subtle attempts at maintaining the traditional ways of doing things. The balancing processes are a way of interpreting internal stakeholder cognitive dissonance and frustration between what is expected and explicit, and the hidden processes that are expected and implicit by the entrepreneur. In Cases A and C, balancing is being attempted by adopting the entrepreneur's successful cognitive processes.

The evidence in Case A illustrated that the interrelationship was improving because the entrepreneur was starting to encourage shared communication about the strategy that increased performance (Harrison and Leitch, 2005; Wang, 2008) and counteracted the Icarus decline. The quote below demonstrated that the entrepreneur and internal stakeholder were beginning to share performance information.

Case A, Internal Stakeholder

I think there's an interest in how you change pace of growth. Can you do it in a company that is mature? Does the size of the company become naturally limiting at some point?

11.7.4 Linking Interplay to Organizational Factors

The modifications to the conceptual framework included organizational factors that emerged out of the data analysis of age, size, strategy and firm resources. Organizational age was found to have an important influence on performance in all the cases, which in turn had a moderating or mediating effect on the interrelationship between the entrepreneur and internal stakeholders. The concept that age affected performance is also supported by Rosenbusch et al. (2011) meta-analysis of the influencing factors on organizational performance. Entrepreneurial and organizational age is discussed in life-stages' literature on growth (Greiner, 1972; Churchill and Lewis, 1983; Levie and Lichtenstein, 2010) but is not reflected in research on cognitive differences (Mitchell and Shepherd, 2010). The evidence in this research is that the age of the entrepreneur and the organization affected the interrelationship because of the entrepreneurs pre-existing mental models and experience. The cognition-attribution-success cycle discussed earlier was developed over a period of time in which the entrepreneur was making decisions that led to success. Consequently, the older the entrepreneur and the organization were, then the more evident the cognition-attribution-success cycle became. In this way having more experience, and successful decision-making and opportunity, can be attributed to the age of the entrepreneur and the organization.

The entrepreneur in Case B had more of an autocratic cognitive style when changing strategy than the entrepreneurs in Cases A and C who were ten years more experienced and were considering succession. However, the internal stakeholders felt that they did not have the experience to decide strategy without the entrepreneur's consent and participation. The decision to allocate firm resources was made by the entrepreneur and discussed earlier with regards to investment decisions in Case A and issue domain 'Recruitment' decisions in Cases A, B and C.

Case C, Internal Stakeholder

So actually what we want, what excites someone to want to join this company, and what excited people twenty five years ago, will be different.

The increasing size and complexity in Cases A and C also made it difficult for entrepreneurs and internal stakeholders to have as many informal interactions compared to what occurred during earlier stages of the organization's growth. This reinforced how a change in entrepreneurial mindset affected organizational learning. As the size of the organization increased, both in terms of the number of internal stakeholders and the increase in systems and processes, the communication chain between the entrepreneur and internal stakeholders increased. In this way organizational theory offered a valuable insight as these entrepreneurial organizations became more like large classic organizations with more complex systems and processes.

11.8 Summary

The Icarus Paradox demonstrated how the dominance of entrepreneurial cognition was linked to success, which either reinforced the interrelationship of organizational parts in a system or counteracted it. The complexities of these interrelated parts were interpreted by using organizational learning and an open systems thinking approach to illustrate the contradictions between entrepreneurial cognition and internal stakeholder perception.

Through the cognitive psychological perspective, the analysis has demonstrated that established mental models and cognitive differences reinforced the cognition-success-attribution cycle that led to the Icarus demise. Additionally, from an organizational and management perspective, the findings showed that although entrepreneurial cognition was dominant, the interdependency of individual concepts in the conceptual framework all work together to either moderate or mediate the interaction. The final chapter draws conclusions from the empirical findings and discusses the contribution to knowledge.

Chapter 12 Conclusion

12.1 Introduction

In this chapter, conclusions are drawn from the evidence, highlighting their contribution to knowledge. In addition, the research questions are answered and future research opportunities are identified. The chapter also introduces research propositions for others to test as hypotheses in their respective contexts. The significant feature of this research applies to the new ways in which disparate concepts were used to investigate the interrelationship between entrepreneurial cognition and internal stakeholder perception in established entrepreneurial organizations. In this way, the new combination of the concepts that were identified in the conceptual framework provide original insight into how these interrelationships work. The chapter draws on these original insights and the conclusions present factual and conceptual conclusions that highlight the existing configuration in the cases underlined by the dominant cognition of the entrepreneur.

12.2 Contribution to Knowledge

My evidence from investigating the interrelationship between entrepreneurial cognition and internal stakeholder perception makes a contribution to knowledge that bridges entrepreneurial cognition and organizational literature. This contribution to knowledge is based on “combining disparate concepts in new ways to investigate a conventional issue” (Trafford and Leshem, 2008: 141) from a cognitive perspective. The scope and dimensions of the analysis of the linkages between the concepts of entrepreneurial cognition, biases, temporality, internal stakeholder perception, organizational factors and performance provide original empirical evidence. The factual conclusions derived from the evidence that I discovered and analysed, answer my four research questions. A summary of the original contributions to knowledge is presented in Table 12.1.

The conceptual conclusions in Section 12.4 supplement the factual conclusions reflecting the contribution to knowledge by linking the significance of my findings back to the modified conceptual framework.

TABLE 12.1 FACTUAL CONCLUSIONS LINKED TO CONTRIBUTION TO KNOWLEDGE

Research Questions	Factual Conclusions Drawn from Evidence	Contribution to Knowledge
Q1.How and why does entrepreneurial cognition affect the interaction with internal stakeholders perception in the organization?	Changing entrepreneurial cognition moderates the interrelationship.	Advances knowledge that entrepreneur's switching decision-making styles moderates the development of shared cognition.
	Perceivers Expectancy theory explains internal stakeholder perception.	Advances understanding of the moderating effect of cognitive differences on interrelationships, growth and performance.
	Entrepreneurs do not adapt cognitive processes to enable shared cognition.	Advances knowledge that shared cognition is achieved through internal stakeholders alignment and not through consensus.
	A lack of open and honest communication reinforces the cognition-attribution-success cycle.	Extends configuration theory to entrepreneurial organizations highlighting the decline in performance. Advances knowledge that success reduces learning in established entrepreneurial organizations.
Q2.What are the temporal factors regarding the interaction between entrepreneurial cognition and internal stakeholders?	Entrepreneurs engage internal stakeholders late in information gathering and decision-making processes.	Explicitly addresses temporal factors in entrepreneurial cognition and interplay with internal stakeholder perception.
	Short, medium and long-term nature of decisions mean that entrepreneurs switch between different cognitive processes.	Advances knowledge on the temporal nature of entrepreneurial cognition on growth and performance.

	Entrepreneur switch speedily between heuristic and analytical cognition compared to the internal stakeholder.	Confirms individual differences in cognition.
Q3.How do biases affect the interaction between the entrepreneur and internal stakeholders?	There is limited comprehension and awareness that biases cause conflict.	Advances knowledge that different levels of biases affect interrelationships, growth and performance.
	Lack of sensemaking and sensegiving has a negative and implicit causal effect.	Advances knowledge demonstrating that entrepreneurial sensemaking and sensegiving is not used in uncertain and ambiguous interactions with internal stakeholders.
	Entrepreneurial biases have a negative reciprocal effect on internal stakeholder perception.	Reinforces entrepreneurial cognition literature across levels and suggests link between entrepreneurial cognition, biases and internal stakeholder perception.
Q4.How does this interaction occur within the context of organizational growth?	Entrepreneurial cognition demonstrated that internal stakeholder input and feedback is necessary to drive growth and performance is inconsistent.	Advances knowledge on open systems thinking by linking entrepreneurial cognition to growth. Confirms input, conversion, output and feedback loop are positive for growth and performance in established entrepreneurial organizations.
	Different expectations led to differential allocation of resources to achieve growth and performance outcomes.	Advances knowledge on established entrepreneurial organizations confirming differences in experience and expectations. Advances understanding of different definitions of growth and performance on interaction. Contributes to knowledge that entrepreneurial team collective cognition impedes or facilitates performance.

	Similar backgrounds mediate the interaction effect.	Advances knowledge that internal stakeholders align their growth ambitions to entrepreneurs in a cognition-success-attribution cycle.
	Open and honest participation in the integration of new knowledge builds growth and performance appropriate for the lifecycle of the organization.	Confirms the relevance of age to organizational life-stages. Advances knowledge that age affects the interplay between entrepreneurial cognition and internal stakeholder perception because of experience and pre-existing schemas.
	Prevalent authoritative systems mediate growth and performance.	Advances knowledge that the psychological contract is relevant in established entrepreneurial organizations.

In Table 2.1 I have consolidated the relationship between the research questions, the factual conclusions drawn from the evidence and the contributions to knowledge.

12.3 Answers to the Research Questions

This section provides answers to the four research questions showing how the original combination of the concepts provides insight to each interrelationship.

12.3.1 How and why does entrepreneurial cognition affect the interaction with internal stakeholders perception in the organization? (Q1)

Entrepreneurial cognition significantly affects the interaction with internal stakeholder perception in the organization. This research provides two reasons as explanations to the first research question. The first reason is the entrepreneurs' complex cognitive processes that are due to experience and the cognition-success-attribution cycle. The second reason is the impact of the internal stakeholder's perception, expectation and lack of experience of this interrelationship.

Entrepreneurial complex cognitive processes are reflected in how the entrepreneurs in my research switched between heuristic and analytical decision-making (Vermuelen and Curseu, 2008); causal and effectual reasoning (Sarasvathy, 2010); and planning and entrepreneurial modes (Mintzberg, 1978). The duality of these cognitive processes sometimes confused internal stakeholders and resulted in complexity in shared cognition. This confusion led to internal stakeholder perception that entrepreneurs made autonomous decisions by ignoring disconfirming evidence. The contribution of this research is that these perceptions moderate and mediate their interrelationship, depending on the type of the interrelationship and the alignment of internal stakeholder to entrepreneurial cognition.

In addition, through internal stakeholder feedback, the interaction reinforces entrepreneurial cognition because it lacks open and honest communication. This evidence is reinforced by the entrepreneurial and internal perception that their success is attributed to their decision-making. My finding of external attribution to success supports Heider's (1958) external and internal attribution theory, which has previously been used in larger systems before this research. This evidence reflected by Schein's (1987) psychological contract contributed valuable insight into the nature

of unmet expectations and misperception of entrepreneurs and internal stakeholders in the cases.

My findings confirm existing entrepreneurial decision-making literature that entrepreneurs are more prone than other individuals to use heuristic information processes triggered by higher levels of uncertainty and ambiguity and results in automatic information processing (Vermeulen and Curseu, 2008). In addition, my findings extend the understanding of complex cognitive processes acknowledging the impact it has on internal stakeholder interrelationship and shared cognition.

Dane and Pratt (2007) argued that experienced entrepreneurs have pre-existing mental representations. My research extends Dane and Pratt's research demonstrating a contribution to knowledge that the differences between mental representations derived from entrepreneur's experience and less experienced internal stakeholders cause cognitive dissonance. Additionally, the evidence from my research extends Miller's (1992) configuration theory to established entrepreneurial organizational knowledge by showing how the interaction is affected by temporal factors (Miller and Lloyd-Reason, 2013).

However, along with decision-making literature and classic organizational theories, the interplay theories discussed in Chapter 3 have provided some insight into the interdependent concepts of entrepreneurial cognition and biases with internal stakeholders. In particular Mintzberg's (1978) argument regarding configuration, represents the reciprocal and non-linear nature of the interrelationship between the entrepreneur and the internal stakeholders. In the same way, the influence of the interrelated parts in open systems (von Bertalanffy, 1968) reflects how entrepreneurial processes are mutually reinforcing.

In conclusion, the answer to the first research question is that entrepreneurial cognition affects the interaction by switching between decision-making styles and automatic information processing. The reason their interrelationship is affected is because of imbalances in cognitive complexity, entrepreneurs pre-existing mental representations and other interrelated parts discussed in the research questions below.

12.3.2 What are the temporal factors regarding the interaction between entrepreneurial cognition and internal stakeholders? (Q2)

My evidence shows that there are three temporal dimensions that affect the interaction between entrepreneurial cognition and internal stakeholders. This finding applies in similar ways in each of the cases.

The first dimension is the length of time that entrepreneurs take to involve internal stakeholders in their information gathering and decision-making processes reflects Bluedorn's (1987) theory on the entrepreneur's perception of time. My research contributes to knowledge by demonstrating that engaging internal stakeholders late in the decision-making or information gathering process has a moderating effect on their interaction.

The second is that short, medium and long-term decision-making means that entrepreneurs switch between different cognitive processes when making decisions depending on its strategic or operational context. My evidence supports existing literature by Bird (1988), Busenitz and Barney (1997) that there is a contrast between entrepreneurial quick decision-making with incomplete information versus managers who have access to specific and more comprehensive market information. My research contributes to decision-making knowledge by demonstrating that these differences results in entrepreneurial frustration and internal stakeholder misperception.

The third temporal factor affecting the interaction is the speed with which the entrepreneur switches between heuristic and analytical thinking compared to the internal stakeholder. My research shows that the entrepreneurs use mental shortcuts while the internal stakeholders spend more time gathering facts and information which has a negative impact on their interrelationship.

In answering the second research question these three temporal factors of the timing surrounding inclusive entrepreneurial decision-making, short, medium and long-term decision-making and the speed with which entrepreneurs switched offer original insight into entrepreneurial and internal stakeholder interrelationship.

12.3.3. How do biases affect the interaction between the entrepreneur and internal stakeholders? (Q3)

The evidence demonstrates that cognitive biases affect the interplay between entrepreneurial decision-making and internal stakeholders. My evidence supports Tversky and Kahneman (1973) arguments on biases that entrepreneurs making decisions are influenced by over-confidence and intuition biases. The influence of these biases are perceived as a lack of information by internal stakeholders with a moderating effect on their interaction. The entrepreneurs' use of intuition biases cause the internal stakeholders to question their decision-making process because it is in conflict with their use of analytical thinking which is not as affected by biases.

My evidence shows that when entrepreneurs deployed over-confidence in their decision-making it reinforces the cognition-success-attribution cycle with internal stakeholders and has a positive effect on their interaction when growth and performance is positive. Conversely, when the planning fallacy bias is exercised, and entrepreneurs expect internal stakeholders to be quicker at decision-making, their interrelationship is tense. In addition, when entrepreneurs' decision-making is biased with counterfactual thinking they are only looking forward in decision-making, ignoring past mistakes, and this results in cognitive dissonance with internal stakeholders.

The entrepreneurs' lack of cognitive adjustment due to illusion of control bias theory (Langer, 1983) and the search for confirmation of their hypothesis moderates their interaction with internal stakeholders. The evidence shows that the effect of these entrepreneurial biases on internal stakeholders, is that they become lacking in confidence and fearful to make incorrect decisions, or decisions with which the entrepreneur would not agree.. Additionally, the effect of these biases is to produce internal stakeholder confusion about their role and responsibilities. This reciprocal interaction results in a lack of honest and open upward communication.

Therefore, in answering research question three, biases affect the interaction between the entrepreneur and internal stakeholders by influencing entrepreneurial decision-

making, reinforcing internal stakeholder misperception of these entrepreneurial cognitive processes.

12.3.4 How does this interaction occur within the context of organizational growth and performance? (Q4)

Interaction between entrepreneurial cognition and internal stakeholder perception occurs within the context of organizational growth and performance by interrelated concepts influencing each other. The evidence in my research demonstrates that the interaction is dependant on individual perceptions of how the organization is growing and performing. These different perceptions of growth support and contributes to the research that entrepreneurs define and operationalize growth differently to academic researchers (Achtenhagen et al., 2010).

An entrepreneurial decision that leads to positive increase in growth and performance reinforces a positive interaction, but conversely, when the entrepreneur makes a decision that leads to financial and operational losses, their interaction becomes top-down and non-transparent. In both instances the cognition-success-attribution cycle and Miller's (1992) System 1 and 2 thinking is reinforced.

12.4 Conceptual Conclusions

It is now possible to link the relevance of my findings back to the modified conceptual framework that was presented in the previous chapter. The conceptual conclusion is that the interrelationship between the concepts of biases, temporality, performance and organizational factors exhibit reciprocity between entrepreneurial cognition and the perceptions of internal stakeholders. The feedback from the internal stakeholders to entrepreneurial decision-making resulted in a cognition-success-attribution cycle reinforcing the Icarus Paradox. This shows that as entrepreneurial confidence biases increases, internal stakeholder perception and expectations become more aligned with entrepreneurial cognition. Cognitive dissonance is therefore reduced and the integration of internal stakeholder new knowledge and information is limited.

Theories which highlight cognitive differences between entrepreneurs and managers (Markman and Baron, 2003; Curseu and Vermeulen, 2008; Vaghely and Julien, 2011) and biases (Tversky and Kahneman, 1973, 2008; Casson, 2009) on their own do not explain how entrepreneurs and internal stakeholders interact. As a school of thought, they underscore the differences which this research confirms, and form a research basis to explore how it affects communication between them.

Building on cognitive psychology, interplay theories which look at the dynamic interaction of interrelated parts of an organization (von Bertalanffy, 1968; Senge, 1990); organizations as conversation systems (Covin and Slevin, 1991) and person and entrepreneurship fit (Markman and Baron, 2003) underpin this research. In addition, growth stage and dynamic theories (Greiner, 1972; Adizes 1979; Churchill and Lewis, 1983; Levie et al, 2010; Wright and Stigliani, 2013); entrepreneurial mindset and culture (Shepherd et al., 2010); configuration theory (Witmeur and Fayolle, 2011) underscore the combining of different concepts or constructs.

The application of open system theory (von Bertalanffy, 1968; Senge, 1990) to explain the interplay between entrepreneurial cognition and internal stakeholder perception as a system, helped to formulate conceptual explanations for the dominance of entrepreneurial cognition. This approach clarifies the reinforcing interrelationships. The conceptual framework is used as a basis for the conceptual conclusion that the interdependent nature of each concept has an implicit and explicit causal impact. This means that a change in each concept affects the interaction between the entrepreneur and the internal stakeholder, and in turn affects both the input and the output of the organization.

Specifically, the conceptual conclusions are that by linking the individual concepts of biases and temporality to entrepreneurial cognition, the implicit causal impact on internal stakeholder perception is evidenced. In turn, the impact of internal stakeholder perception is fed back and reinforces entrepreneurial thinking. Additionally, the conceptual framework illustrates how the reciprocal causal effect of performance links with organizational factors on the interaction. Existing models on interrelated theories are too general and linear to apply to the interplay of entrepreneurial cognition and internal stakeholder perception in established entrepreneurial organizations. By drawing together disparate concepts, my

conceptual framework underpins the empirical data that provides specific insight into these interrelationships.

The conceptual framework also justifies the underlying assumptions about individual and organizational norms. In this way the conceptual conclusion that entrepreneurial organizations are in a dynamic state of change, and the pattern of interrelationships are always changing, can be made. Thus my conceptual conclusion is that a change in performance and organizational factors affect the interrelationship between the entrepreneur and internal stakeholders.

12.5 Significance for Established Entrepreneurial Organizations

This section highlights the practical implications for established entrepreneurial organizations, experienced entrepreneurs and management. The findings of this research underscore the importance of an open systems thinking approach to explaining and understanding organizational growth and performance. The interdependencies of entrepreneurial cognition with internal stakeholder perception, has direct causality between these two variables for organizational factors and performance. The dominance of entrepreneurial cognition and the aligning of internal stakeholder perception to entrepreneurial cognition have reinforced the cognition-success-attribution cycle.

The significance of this alignment for practice involves communication and feedback, the psychological contract and entrepreneurial leadership. The lack of open and honest communication, that is both top down and bottom up, reinforced cognition-success-attribution that led to organizational decline as shown in my research. The contribution to practice therefore is that when entrepreneurs in established entrepreneurial organizations understand the cause and effect influence of their cognitive processes, they can better manage their interactions with internal stakeholder perception.

In this way, entrepreneurs can focus not only on their individual thinking but can share and transfer crucial mental models and expectations to the internal stakeholders. Senge (2006) calls this process ‘generative learning’ which can help entrepreneurs

and internal stakeholders learn and shift their awareness towards a systems thinking approach.

12.6 Research Propositions

Since I adopted an inductive approach for my research methodology, it is not possible to generalize from my conclusions. Propositions are therefore suggested that others can test as hypotheses in their respective contexts;

- 1 The interplay between entrepreneurial cognition and internal stakeholder perception is directly affected by cognitive complexity and biases;
- 2 A temporal dimension to entrepreneurial cognition affects the interplay between entrepreneurial and internal stakeholder perception;
- 3 The interplay between entrepreneurial cognition and internal stakeholder perception is moderated and mediated by organizational factors;
- 4 The interplay between interdependent concepts of entrepreneurial cognition, internal stakeholder perception and performance are cyclical and reinforcing.

Each proposition is linked to my research questions and the combination of these constructs conceptualizes the interplay between entrepreneurial cognition and internal stakeholder perception.

2.7 Critique of Research

A social constructionist framework and case study methodology was a suitable perspective to adopt to access and collect my data. The research approach I used was appropriate because it's ability to provide insights on a number of complex conceptual issues. This enabled me to make a contribution to knowledge.

Adopting a deductive research approach would have resulted in the derivation of different conclusions that were not part of my intended research design and methodology. Thus, my research approach was appropriate for the investigation and this allowed me to generate evidence that provided answers to my research questions. By adopting an inductive approach, research propositions were developed which other

researchers could use to test the interconnected and interdependent concepts through a deductive approach.

It is also worth noting that my working definitions of the entrepreneur and the established entrepreneurial organization were supported throughout my research.

12.8 Implications for Future Research

At the close of my research it is possible for me to propose four research foci that merit investigation. The significance of both items emerged as my research progressed but each was outside the boundaries of this investigation. Thus, they are proposed as secondary outcomes from my research that warrant investigation.

Firstly, this research demonstrates that internal stakeholders perceive and interpret entrepreneurial cognition in different ways to the entrepreneur. Future research could explore how these differences in background, education and behavior affect not only the interaction, but the other interlinking aspects of performance and organizational factors. This would add value to the issue domains raised in this research such as 'Succession' and 'Recruitment'. It will also add to knowledge of the contribution of internal stakeholders to organizational success and failure in established entrepreneurial organizations in which growth and performance was found in the evidence to be defined differently.

Secondly, this research made a contribution to explaining and understanding the temporal dimension of decision-making and cognition. A perspective for future research is how temporality in cognition affects the configuration of entrepreneurial-led organizations on a larger scale rather than for three cases. In this way established entrepreneurial organizations in which the entrepreneur is still the decision-maker for several industries other than pharmaceutical, electrical services and technology can be studied. The effect on the interrelationships can then be explored further to see how, and if, a different configuration evolves over time from nascent to mature organizations that would increase the generalizability of the findings in a deductive research approach.

Thirdly, a longitudinal approach that follows-up on how these established

organizations continue to grow and perform (Davidsson and Wiklund, 2001) in spite of cognitive misfit, would benefit the literature on dynamic state theories on organizational growth. This inductive study has shown that the entrepreneur and internal stakeholders define growth differently, and yet these organizations are successful. An investigation into how these organizations self-regulate (von Bertalanffy, 1968) could provide this insight.

A longitudinal study that is longer than the 18 months used in my study could examine if the growth trajectory continues or whether the speed and nature of growth and performance could be improved through enhanced communication of entrepreneurial cognition to internal stakeholders. In this way our knowledge of how these entrepreneurial organizations progress through different stages of growth through improved communication and understanding could be examined for a longer period. This would contribute to the research agenda on organizational lifecycles about why and how mature organizations decline into failure.

Fourthly, as a by-product of my research, my secondary findings unveiled entrepreneurial leadership thinking, in Chapter 11 Section 11.6.2, that could form the basis for further exploration in terms of their interrelationship with internal stakeholders. By researching Likert's (1967) System 1 and 2 entrepreneurial leadership in more detail, researchers could add to the knowledge about the influence of personality and behavior on the interrelationship between internal stakeholders, organizational factors, growth and performance. In this way the study could extend our understanding of how individual concepts influence each other in such organizational settings. This in turn could contribute to the entrepreneurial leadership research agenda.

12.9 Research Reflections

This research process has been a demanding and intellectually stimulating journey that has questioned some of my professional assumptions and the assumptions of antecedent research in the area of entrepreneurial cognitive and organization research. The iterative loop of the research process has meant that I revisited these assumptions and some were changed after having studied a particular theory as well as the analyses of the empirical findings. Other theories about cognition and behavior have

confirmed my understanding and experience as a business founder and organizational psychologist with regards to differences in individual thinking and the interdependencies with others.

In particular, the process of developing the conceptual framework gave me confidence that what I was doing had higher conceptual value. It was clear from the beginning of my doctoral journey that the research was new and dynamic. This view was validated by my acceptance as an early-researcher at international conferences and resulting from the RENT 2012 conference my article, entitled 'The interplay of entrepreneurial cognition and internal stakeholders' was published by the *Internal Journal of Entrepreneurship and Small Business* (Miller and Lloyd Reason, 2013).

This research has been presented at conferences over the past three years. In this way, the gap in knowledge, conceptual framework and contribution to knowledge have been modified on the basis of feedback that has strengthened and reinforced the arguments presented in this chapter. Personal reflection on this process is considered in the conclusions chapter and the timetable of conferences can be reviewed in Chapter 5. The following feedback was given on my paper submitted to ISBE, Dublin, 2012:

"An excellent paper on entrepreneurs' cognition and internal stakeholders. The paper commences with a helpful and informative review of the salient literature and some coherent and well conceived propositions. The approach is well documented and justified, and the results are comprehensive, and the implications and value are excellent. Whilst I don't have any specific suggested changes to the paper (which is nearly journal-ready once it has been polished), it looks like being a great refereed paper and presentation/discussion in Dublin."

The research has been received with interest from researchers such as Professor Tripsas from Harvard University and Dr. Levie from Strathclyde whose work I have extended. As well as this academic support for my research, I was appointed to a full time Lectureship at CEDAR (Centre for Enterprise Development and Research), Lord Ashcroft International Business School, Anglia Ruskin University in International Business and Entrepreneurship, September 2012.

As an applied psychologist who in the past has focused on quantitative scientific research, I found that the knowledge gained from an exploratory qualitative approach has enhanced my learning. I am able to contribute with insight to the conversations with academic peers and entrepreneurs that helps them to understand the interrelationships, and how entrepreneurial decisions are perceived by internal stakeholders. My pedagogic approach is more holistic which means that I engage directly with aspects of research and practice to help students understand how, what and why interrelationships form in established entrepreneurial organizations. This includes responding to diverse individual learning and thinking styles, and the evolving needs of students and businesses.

My original contribution of this research is that entrepreneur's interaction with internal stakeholder perception is largely affected by top down communication and autonomous entrepreneurial decision-making, restricted upward feedback, and lack of sense-making. This provides exciting opportunities for my ongoing academic career.

From a practical perspective, the research was validated by entrepreneurs and internal stakeholders who were my respondents. Their observations were significant for me because they were professionals in the field who understood the significance of my findings to the ongoing growth and success of their organizations. Feedback from these entrepreneurs was that they related to my interpretations and had already started using the findings to improve their interactions with positive results. My research has been shown to have impact on the interrelationships that have been confusing for both the entrepreneurs and internal stakeholders. By answering the research questions and reflecting on their answers, the participants had begun to change their thinking and interaction with each other. My research also offered insight into the entrepreneurs' specific concerns about the impact of the different ways of thinking between themselves and the internal stakeholders. As a result of my findings, the feedback from the entrepreneurs is that they have a better understanding of how to conduct succession planning.

The handling of diverse theories and large quantities of data meant a focused, disciplined and tenacious attitude was the only way to reach a meaningful outcome. This meant the difference between superficial and deep learning by embedding myself in a three-year process has significantly increased my intellectual capacity and

capability to critically assess new and existing knowledge. The inductive research approach meant that I was consistently testing my assumptions about entrepreneurial and internal stakeholder thinking, perceptions and expectations. In this way, the process challenged my existing knowledge and contributed to my development of new interpretations as well as consolidated existing knowledge.

Finally, this research provides empirical evidence using cognitive and organizational theory to understand more clearly the interplay between entrepreneurial cognition and internal stakeholder perception.

References

- Acreddo, C. & O'Connor, J., 1991. Difficulty of Detecting Cognitive Uncertainty. *Human Development*, 34, pp. 204-223.
- Achtenhagen, L., Naldi, L. & Melin, L., 2010. "Business Growth" – Do Practitioners and Scholars Really Talk About the Same Thing? *Entrepreneurship Theory and Practice*, 34(2), pp. 289-316.
- Adams, J.S., 1965. *Inequality in Social Exchange in Advances in Experimental Psychology*, L. Berkowitz (ed.), Academic Press: NY.
- Adizes, I., 1979. Organizational Passages –Diagnosing and Treating Life Cycle Problems of Organizations, *Organizational Dynamics* (summer). *Organizational Dynamics*, pp. 3-25.
- Adler, P. & Obstfeld, D., 2006. The Role of Affect in Creative Projects and Exploratory Search. *Industrial and Corporate Change*, pp. 19-50.
- Ahmed, S.U., 1985. Risk-Taking Propensity, Locus of Control and Entrepreneurship. *Personality and Individual Differences*, 6 (6), pp. 781-782.
- Aldrich, H.E., 1999. *Organizations Evolving*. Newbury Park, CA: Sage.
- Aldrich, H.E., 1992. Methods in our Madness? Trends in Entrepreneurship Research. In: Sexton, D. L. & Kasarda, J.D., eds. *The State of the Art of Entrepreneurship*. Boston, MA: PWS Kent Publishing Company.
- Allinson, C.W., 1996. The Cognitive Style Index: A Measure of Intuition-Analysis For Organizational Research. *Journal of Management Science*, 33 (1), pp. 119-135.
- Allinson, C.W., Chell, E. & Hayes, J., 2000. Intuition and Entrepreneurial Behavior. *European Journal of Work and Organizational Psychology*, 9 (1), pp. 31-43.
- Allinson, C.W. & Hayes, J., 1996. The Cognitive Style Index: A Measure of Intuition-Analysis for Organizational Research. *Journal of Management Studies*, 33 (1), pp. 119-135.
- Allison, G.T., 1971. *Essence of Decision: Explaining the Cuban Missile Crisis*. Boston: Addison Wesley Publishing Company.
- Alvarez, S. & Busenitz, L., 2001. The Entrepreneurship of Resource-Based Theory. *Journal of Management*, 27, pp. 755-775.
- Alvarez, S.A. & Barney, J.B., 2006. *Can Organizing a Firm Create New Economic Value*. Oxford: Blackwell Publishing.
- Alvarez, S.A. & Busenitz, L.W., 2001. The Entrepreneurship of Resource Based Theory. *Journal of Management*, 27 (6), pp. 755-775.

- Amit, R., Muller, E. & Cockburn, I., 1995. Opportunity Costs and Entrepreneurial Activity. *Journal of Business Venturing*, 10, pp. 95-106.
- Ancona, D. & Chong, C., 1996. Entrainment: Pace, Cycle and Rhythm in Organizational Behaviour. *Research in Organizational Behaviour*, 18, pp. 251-285.
- Anderson, P., Meyer, A., Eisenhardt, K., Carley, K. & Pettigrew, A., 1999. Introduction to the Special Issue: Application of Complexity Theory to Organization Science. *Organization Science*, 10, pp. 233-236.
- Arabsheibani, G.D., De Meza, D., Maloney, J. & Pearson, B., 2000. And a Vision Appeared unto them of Great Profit: Evidence of Self-deception among the Self-employed. *Economic Letters*, 67, pp. 35-41.
- Argyris, C., 1993. *Knowledge for Action. A Guide to Overcoming Barriers to Organizational Change*. San Francisco, CA: Jossey Bass.
- Argyris, C., 1992. *On Organizational Learning*. Cambridge, MA: Blackwell Publishers.
- Argyris, C. & Schon, D., 1978. *Organizational Learning – A Theory of Action Perspective*. Reading, MA: Addison-Wesley.
- Argyris, C. & Schön, D., 1975. *Theory in Practice: Increasing Professional Effectiveness*. San Francisco, CA: Jossey Bass.
- Asmussen, K.J. & Creswell, J.W., 1995. Campus Response to a Student Gunman. *Journal of Higher Education*, 66, pp. 575-591.
- Atherton, A., 2004. Unbundling Enterprise and Entrepreneurship: From Perceptions and Preconceptions to Concept and Practice. *Entrepreneurship and Innovation*, 5 (2), pp. 121-128.
- Atkinson, P. & Hammersley, M., 1994. Ethnography and Participant Observation. In: Denzin, N.K. and Lincoln, Y.S., eds. 1994. *Handbook of Qualitative Research*. London: Sage.
- Bacharach, S.B., 1989. Organizational Theories: Some Criteria for Evaluation. *Academy of Management Review*, 14 (4), pp. 496-515.
- Balkin, D.B., Markman, G.D. & Gomez-Mejia, L.R., 2000. Is CEO Pay in High-Technology Firms Related to Innovation? *Academy of Management Journal*, 43 (6), pp. 1118-1129.
- Balogun, J., 2003. From Blaming the Middle to Harnessing its Potential: Creating Change Intermediaries. *British Journal of Management*, 14, pp. 69-83.
- Balogun, J. & Johnson, C., 2004. Organizational Restructuring and Middle Manager Sensemaking. *Academy of Management Journal*, 47, pp. 523-549.

- Bandura, A., 1999. Social Cognitive Theory of Personality. In: Pervin, L.A. and John, O.P., eds. 1999. *Handbook of Personality: Theory and Research*. 2nd ed. New York: Guildford Publications.
- Barley, S.R., 1986. Technology as an Occasion for Structuring Evidence from Observations of CT Scanners and the Social Order of Radiology Departments. *Administrative Science Quarterly*, 31, pp. 77-108.
- Baron, R.A., 2007. Behavioural and Cognitive Factors in Entrepreneurship: Entrepreneurs as the Active Element in New Venture Creation. *Strategic Entrepreneurship Journal*, 1, pp. 167-182.
- Baron, R.A., 2006. Opportunity Recognition as Pattern Recognition: How Entrepreneurs "Connect the Dots" to Identify New Business Opportunities. *Academy of Management Perspectives*, 20 (1), pp. 104-119.
- Baron, R.A., 2004. The Cognitive Perspective: A Valuable Tool for Answering Entrepreneurship's Basic "Why" Questions. *Journal of Business Venturing*, 19, pp. 221-239.
- Baron, R.A., 2004. Organizational Restructuring and Middle Manager Sensemaking. *Academy of Management Journal*, 47, pp. 523-549.
- Baron, R.A., 2000. Counterfactual Thinking and Venture Formation: The Potential Effects of Thinking About What Might Have Been. *Journal of Business Venturing*, 13, pp. 275-294.
- Baron, R.A., 1998. Cognitive Mechanisms of Entrepreneurship: Why and When Entrepreneurs Think Differently Than Other People. *Journal of Business Venturing*, 13, pp. 275-294.
- Baron, R.A. & Ensley, M.D., 2006. Opportunity Recognition as the Detection of Meaningful Patterns: Evidence from Comparison of Novice and Experienced Entrepreneurs. . *Management Science*, 52, pp. 1331-1344.
- Baron, R.A. & Markman, G.D., 2000. Beyond Social Capital: The Role of Social Competence in Entrepreneurs. *Academy of Management Executive*, 14 (1), pp. 106-116.
- Baron, R.A. & Ward, T.B., 2004. Expanding Entrepreneurial Cognition's Toolbox: Potential Contributions from the Field of Cognitive Science. *Entrepreneurship Theory and Practice*, 28 (6), pp. 553-573.
- Baron, R.A. & Markman, G.D., 2003. Beyond Social Capital: The Role of Entrepreneurs Social Competence in their Financial Success. *Journal of Business Venturing*, 18, pp. 41-60.
- Bartunek, J., Krim, R. & Necochea, R. & Humphries, M., 1999. Sensemaking and Sensegiving, and Leadership in Strategic Organizational Development. *Advances in Qualitative Organizational Research*. Greenwich, CT.: JAI Press.

- Baumol, W.J., 1993. Formal Entrepreneurship Theory in Economics: Existence and Bounds. *Journal of Business Venturing*, 8 (3), pp. 197-210.
- Baxter, P. & Jack, S., 2008. Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers. *The Qualitative Report*, 13 (4), pp. 544-559.
- Bazeley, P., 2009. Analysing Qualitative Data: More Than 'Identifying Themes'. *Malaysian Journal of Qualitative Research*, 2, pp. 6-22.
- Begley, T. & Boyd, D., 1987. A Comparison of Entrepreneurs and Managers of Small Business Firms. *Journal of Management*, 13, pp.99-108.
- Bellu, R.R. & Davidsson, P. & Goldfarb, C., 1990. Toward a Theory of Entrepreneurial Behaviour: EMpirical Evidence from Israel, Italy and Sweden. *Entrepreneurship & Regional Development*, 2, pp. 195-209.
- Berger, C., 2005. Interpersonal Communication Theory. *Journal of Communication*, 55 (3), pp. 415-447.
- Bernardo, A.E. & Welch, I., 2001. On the Evolution of Overconfidence and Entrepreneurs. *Journal of Economics & Management Strategy*, 10 (3), pp.301-330.
- Berthound, R., 2000. Introduction: The Dynamics of Social Change.. *Seven Years in the Lives of British Families*. In: Gershuny, J. ed. Bristol: Policy Press.
- Berthound, R., 2000. *Seven Years in the Lives of British Families*. In: Gershuny, J. ed. Bristol: Policy Press.
- Bettis, R.A. & Hitt, M.A., 1995. The New Competitive Landscape. *Strategic Management Journal*, 16 (5), pp. 7-19.
- Bhuian, N.S. & Richard, O.C. & Shamma, H.M., 2010. EO and Organizational Performance: The Role of Managerial Traits. *Competition Forum*, 8 (1), pp. 81-85.
- Bird, B.J., 1992. The Operation of Intentions in Time: The Emergence of the New Venture. . *Entrepreneurship Theory and Practice*, 17 (1), pp. 11-20.
- Bird, B.J., 1988. Implementing Entrepreneurial Ideas: The Case for Intention. *Academy of Management Review*, 13, pp. 442-453.
- Bloomberg, L.D. & Volpe, M.F., 2008. *Completing your Qualitative Dissertation: A Roadmap from Beginning to End*. London: Sage.
- Bluedorn, A.C., 2002. *The Human Organization of Time*. Stanford, CA: Stanford University Press.

- Bluedorn, A.C. & Martin, G., 2008. The Time Frames of Entrepreneurs. *Journal of Business Venturing*, 23, pp. 1-20.
- Blumer, H., 1954. What is Wrong with Social Theory? *American Sociological Review*, 19 (1), pp. 3-10.
- Boso, N. & Cadogan, J.W., 2013. Entrepreneurial Orientation and Market Orientation as Drivers of Product Innovation Success: A Study of Exporters from a Developing Economy. *International Small Business Journal*, 31 (1), pp.57-81.
- Bougon, M.G., 1992. Congregate Cognitive Maps: A Unified Dynamic Theory of Organization and Strategy. *Journal of Management Studies*, 29 (3), pp. 369-387.
- Brigham, R.A. & De Castro, J.O & Shepherd, D.A., 2007. A Person-Organization Fit Model of Owner-Managers Style and Organizational Demands. . *Entrepreneurship, Theory and Practice*, 31 (1), pp. 29-51.
- Brockhaus, R.H., 1980. Psychological and Environmental Factors which Distinguish the Successful from the Unsuccessful Entrepreneur: A Longitudinal Study. *Academy of Management Proceedings*, 1, pp. 368-372.
- Brockhaus, R.H., 1975. I-E Locus of Control Scores as Predictors of Entrepreneurial Intentions *Academy of Management Proceedings*, 35, pp.433-435.
- Brockhaus, R.H. & Horowitz, P.S., 1986. The Psychology of the Entrepreneur. In: Sexton, D. & Smilor, R., eds. 1986. *The Art and Science of Entrepreneurship*. Cambridge, MA: Ballinger.
- Bryman, A., 2004. *Social Research Methods*. Oxford: Oxford University Press.
- Buehler, R. & Griffin, D. & Ross, M., 1994. Exploring the Planning Fallacy: Why People Underestimate their Task Completion Times. *Journal of Personality and Social Psychology*, 67, pp. 984-996.
- Bull, I. & Willard, G.E., 1993. Towards a Theory of Entrepreneurship. *Journal of Business Venturing*, 8 (3), pp. 183-195.
- Busenitz, L.W., 1996. Research on Entrepreneurial Alertness: Sampling, Measurement and Theoretical Issues. *Journal of Small Business Management*, pp. 34-44.
- Busenitz, L.W. & Barney, J.B., 1997. Differences Between Entrepreneurs and Managers in Large Organizations, Biases, and Heuristics in Strategic Decision Making. *Journal of Business Venturing*, 12, pp. 9-30.
- Busenitz., L.W., 1992. *Cognitive Biases in Strategic Decision-Making: Heuristics as a Differentiator Between Managers in Large Organizations and Entrepreneurs*. Texas: A&M University.

- Busenitz., L.W. & Lau, C., 1996. A Cross-Cultural Cognitive Model of New Venture Creation. *Entrepreneurship Theory and Practice*, 20 (4), pp. 25-39.
- Busenitz., L.W., West, G.P., Shepherd, D., Nelson, T., Chandler, G.N. & Zacharakis, A., 2003. Entrepreneurship Research in Emergence: Past Trends and Future Directions. *Journal of Management*, 29 (3), pp. 285-308.
- Butler, R., 1995. Time in Organizations: Its Experience, Explanations, and Effects. *Organizational Studies*, 16 (6), pp. 925-950.
- Bygrave, W.D., 1989. The Entrepreneurship Paradigm (I): A Philosophical Look at its Research Methodologies. *Entrepreneurship Theory and Practice*, 14 (1), pp.7-15.
- Cantillon, R., 1734. *Essai sur la nature du commerce en general [Essay on the nature of general commerce]*. London: MacMillan.
- Casson, M., 2010. *Entrepreneurship: Theory, Networks, History*. Cheltenham, UK: Edward Elgar.
- Cecil., A.I., Pearson, S. & Chatterjee, R., 2003. Managerial work roles in Asia: An Empirical Study of Mintzberg's Role Formulation in Four Asian Countries. *Journal of Management Development*, 22 (8), pp. 694-707.
- Chan, D., 1996. Cognitive Misfit of Problem-solving Style at Work: A Facet of Person-Organization Fit. *Organizational Behaviour and Human Decision Processes*, 68 (3), pp. 194-207.
- Charlton, B.G. & Andras, P., 2003. What is Management and What do Managers do? A Systems Theory Account. . *Philosophy of Management*, 3, pp. 1-15.
- Charmaz, K., 2006. *Constructing Grounded Theory*. London: Sage.
- Chell, E., 1991. *Managerial Auditing Journal*. London: Routledge.
- Chell, E., Haworth, J. & Brearley, S., 1991. *The Entrepreneurial Personality: Concepts, Cases and Categories*. London: Routledge.
- Child, J., 1972. Organizational, Structure, Environment, and Performance. The role of Strategic Choice. *Sociology*, 6, pp. 1-22.
- Choi, J.N. & Sy, T., 2010. Group Level Organizational Citizenship Behaviour: Effects of Demographic Faultlines and Group Conflict in Small Work Groups. . *Journal of Organizational Behaviour*, 31 (7), pp. 1032-1054.
- Churchill, G.A., 1999. *Marketing Research: Methodological Foundations*. Fort Worth: The Dryden Press.
- Churchill, N.C. & Lewis, V.L., 1983. Growing Concerns - Five Stages of Small Business Growth. *Harvard Business Review*, 61 (3), pp. 30-50.

- Clegg, S.R. & Bailey, J.R., 2007. *International Studies of Organization Studies*. London: Sage.
- Coffey, A., & Atkinson, P., 1996. *Making Sense of Qualitative Data.*: Thousand Oaks, CA: Sage.
- Collins, O., & Moore, D., 1970. *The Organization Makers*. New York: Appleton, Century.
- Comegys, C., 1976. Cognitive Dissonance and Entrepreneurial Behaviour. *Journal of Small Business Management*, 14, pp. 1-6.
- Cooper, A.C., Folta, T.B. & Woo, C., 1995. Entrepreneurial Information Search. *Journal of Business Venturing*, 10, pp. 107-120.
- Cope, J., 2005. Researching Entrepreneurship through Phenomenological Inquiry: Philosophical and Methodological Issues. *International Small Business Journal*, 23, pp. 163-189.
- Cope, J., 2011. Entrepreneurial Learning from Failure: An interpretative Phenomenological Analysis. *Journal of Business Venturing*, 26 (6), 605-623.
- Corbett, A., 2002. Recognizing High Tech Opportunities: A Learning and Cognitive Approach. *Frontiers of Entrepreneurship Research*, 1, pp. 49-61.
- Corbett, A.C., & Hmieleski, K.M., 2007. The Conflicting Cognitions of Corporate Entrepreneurs. *Entrepreneurship Theory and Practice*, 31 (1), pp. 103-121.
- Corbin, J. & Strauss, A., 1990. *Basis of Qualitative Research: Grounded Theory Procedures and Techniques*. CA: Sage Publications.
- Corley, K.G. & Gioia, D.A., 2004. Identity Ambiguity and Change in the Wake of a Corporate Spin-off. *Administrative Science Quarterly*, 49, pp. 173-208.
- Cornelissen, J. & Clarke, J., 2010. Imagining and Rationalizing Opportunities: Inductive Reasoning and the Creation and Justification of New Ventures. *Academy of Management Review*, 35, pp. 539-557.
- Cornelissen, J.P., Clarke, J.S. & Cienki., A., 2012. Sensegiving in Entrepreneurial Contexts: The use of Metaphors in Speech and Gesture to Gain and Sustain Support for Novel Business Ventures. *International Small Business Journal*, 30 (3), pp. 213-241.
- Courtney, J.F., 2001. Decision making and knowledge management in inquiring organizations: Toward a new decision-making paradigm for DSS. *Decision Support Systems*, 31 (1), pp. 17-38.
- Courtney, J.F., Merali, Y. & Paradice, E.W., 2008. On the Study of Complexity in Information Systems. *International Journal of Information Technologies and the Systems Approach*, 1 (1), pp. 37-47.

- Covin, J.G. & Slevin, D., 1986. The Development and Testing of an Organization-level Entrepreneurship Scale. Ronstradt, R., Hornaday, J.A. & Vesper, K.H., eds. 1986. *Frontiers of Entrepreneurship Research*. Wellesly, MA: Babson College.
- Covin, J.G. & Slevin, D., 1997. High Growth Transitions: Theoretical Perspectives and Suggested Directions. In: Sexton, D. & Smilor, R., ed. 1997. *Entrepreneurship 2000*. Chicago: Upstart Publishing Company.
- Covin, J.G. & Slevin, D., 1991. A Conceptual Model of Entrepreneurship as Firm Behaviour. *Entrepreneurship Theory and Practice*, 16 (1), pp. 7-14.
- Covin, J.G. & Slevin, D., 1989. Strategic Management of Small Firms in Hostile and Benign Environments. *Strategic Management Journal*, 10 (11), pp. 75-87.
- Covin, J.G. & Green, K.M. & Slevin, D., 2006. Strategic Process Effects on the Entrepreneurial Orientation - Sales Growth Rate Relationship. *Entrepreneurship Theory and Practice*, 30 (1), pp. 57-81.
- Craik, K.J.W., 1943. *The Nature of Explanation*. Cambridge: : Cambridge University Press.
- Creswell, J.W., 2007. *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. Thousand Oaks, CA: Sage.
- Crossan, M. M., Lane, H. W. & White, R. E., 1999. An organizational learning framework: From intuition to institution, *Academy of Management Review*, Vol 24 (3), pp 522-537.
- Csikszentmihalyi, M., 1996. *Creativity: Flow and the Psychology of Discovery and Invention*. New York: HarperCollins Publishers.
- Csikszentmihalyi, M., & Sawyer, K., 1995. Creative Insight: The Social Dimension of a Solitary Moment. Sternberg, R.J., & Davidson, J.E., ed. 1995. *The Nature of Insight*. Cambridge, MA: MIT Press.
- Daft, R. & Weick, K., 1984. Toward a Model of Organization as Interpretation Systems. *Academy of Management Review*, 9, pp. 284-295.
- Dane, E. & Pratt, M.G., 2007. Exploring Intuition and its Role in Managerial Decision-making. *Academy of Management Review*, 32 (10), pp. 33-54.
- Das, T.K., 1987. Strategic Planning and Individual Temporal Orientation. *Strategic Management Journal*, 8, pp. 203-209.
- Das, T.K., 1986. *The Subjective Side of Strategy Making: Future Orientations and Perceptions of Executives*. New York: Praeger.
- Das, T.K. & Teng, B.S., 1997. Time and Entrepreneurial Risk Behaviour. *Entrepreneurship Theory and Practice*, 22 (2), pp. 69-88.

- Davidsson, P. & Wiklund, J., 2001. Levels of Analysis in Entrepreneurship Research: Current Practice and Suggestions for the Future. *Entrepreneurship Theory and Practice*, 25 (4), pp. 81-99.
- De Bono, E., 1995. *Serious Creativity: Using the Power of Lateral Thinking to Create New Ideas*. New York: Harper-Collins.
- Deakins, D., O'Neill, E. & Mileham, P., 2000. Executive Learning in Entrepreneurial Firms and the Role of External Directors. *Education and Training*, 42 (4/5), pp. 317-325.
- Deal, T. & Kennedy, A., 1982. *Corporate Cultures*. Boston, MA: Addison-Wesley.
- Deeds, D.L., Decarolis, D. & Coombs, J.E., 1998. Firm-specific Resources and Wealth Creation in High Technology Ventures: Evidence from Newly Public Biotechnology Firms. *Entrepreneurship Theory and Practice*, 22, pp. 55-73.
- Denscombe, M., 2011. *The Good Research Guide*. UK: Open University Press. McGraw Hill Education.
- Denzin, N.K. & Lincoln, Y.S., 2000. *The Handbook of Qualitative Research*. CA: Sage.
- Descombe, M., 2007. *The Good Research Guide*. 3rd ed. England: Open University Press.
- Dess G.D., Newport, S. & Rasheed, A.M.A., 1993. Configuration Research in Strategic Management: Key Issues and Suggestions. *Journal of Management*, 19 (4), pp. 775-795.
- Dess, G.G., Lumpkin, G.T. & Covin, J.G., 1997. Entrepreneurial Strategy Making and Firm Performance: Tests of Contingency and Configuration Models. *Strategic Management Journal*, 18 (9), pp. 677-695.
- DeVoto, B., 1941. *The Easy Chair*. New York: Harper.
- Dew, N., Read, S., Sarasvathy, S.D. & Wiltbank, R., 2009. Effectual versus Predictive Logics in Entrepreneurial Decision-making: Differences between Experts and Novices. *Journal of Business Venturing*, 24, pp. 287-309.
- Dewald, J. & Bowen, F., 2010. Storm Clouds and Silver Linings: Responding to Disruptive Innovations through Cognitive Resilience. *Entrepreneurship Theory and Practice*, 31 (1), pp. 197-222.
- Digman, J.M., 1990. Personality Structure: Emergence of the Five Factor Model. *Annual Review of Psychology*, 41, pp. 417-440.
- Dimov, D., 2007b. From Opportunity Insight to Opportunity Intention: The Importance of Person-Situation Learning Match. *Entrepreneurship Theory and Practice*, 31, pp. 561-584.

- Doherty, D., 1992. Interpretative Barriers to Successful Product Innovation in Large Firms. *Organization Science*, 3 (2), pp. 179-202.
- Donaldson, T. & Preston, L.E., 1995. The Stakeholder Theory of the Corporation: Concepts, Evidence and Implications. *Academy of Management Review*, 20 (1), pp. 65-91.
- Drazin, R. & Van de Ven, A.H., 1985. Alternative Forms of Contingency Theory. *Administrative Science Quarterly*, 30, pp. 514-539.
- Dunford, R. & Jones, D., 2000. Narrative in Strategic Change. *Human Relations*, 53, pp. 1207-1226.
- Dutta, D.K. & Thornhill, S., 2008. The Evolution of Growth Intentions: Towards a Cognition-Based Model. *Journal of Business Venturing*, 23, pp. 307-332.
- Dutton, J.E. & Duncan, R., 1987. The creation of momentum for change through the process of strategic issue diagnosis. *Strategic Management Journal*, 8, pp.279-295.
- Easterby-Smith, M., Thorpe, R. & Jackson, P.R., 2009. *Management Research*. 3rd ed. London: Sage.
- Edmond, V.P. & Wiklund, J., 2010. The Historic Roots of Entrepreneurial Orientation Research. In: Landstrom, H. & Lohrke, F., eds. 2010. *Historical Foundations of Entrepreneurship Research*. Cheltenham, UK: Edward Elgard Publishing.
- Eggers, J.H., Leahy, K.T. & Churchill, N.C., 1994. Stages of Small Business Growth Revisited: Insights into Growth Path and Leadership Management Skills in Low and High Growth Companies. In: Bygrave, W.D., Birley, S., Churchill, N., Gatewood, F., Hoy, Keeley, R. & Wetzels, W., eds. 1994. *Frontiers of Entrepreneurship Research*. Babson Park, MA: Babson College.
- Eisenhardt, K.M., 1989. Building Theories from Case Study Research. *Academy of Management Review*, 14 (4), pp. 532-550.
- Eisenhardt, K.M. & Zbaracki, M.J., 1992. Strategic Decision Making. *Strategic Management Journal*, 13, pp. 17-37.
- Elsbach, K.D., Barr, P.S. & Hargadon, A.B., 2005. Identifying Situated Cognition in Organizations. *Organizational Science*, 16, pp. 422-433.
- Ensley, M.D. & Pearce, C.L., 2001. Shared Cognition in Top Management Teams: Implications for New Venture Performance. *Journal of Organizational Behaviour*, 22, pp. 145-160.
- Ensley, M.D., Pearce, C.L. & Amason, A.C., 2002. Understanding the Dynamics of New Venture to Management Teams: Cohesion, Conflict and New Venture Performance. *Journal of Business Venturing*, 17 (4), pp. 365-386.

- Rogers, E. M. (2003). *Diffusion of innovations* (5th edition). New York, NY: Free Press.
- Festinger, L., 1957. *A Theory of Cognitive Dissonance*. Stanford, CA: Row, Peterson & Company.
- Fiet, J.O., 2002. *The Systematic Search for Entrepreneurial Discoveries*. Westport, CT: Quorum Books.
- Fischer, E.R., Hababou, R.M. & Johnson, L.S., 1997. The Role of Socially Constructed Temporal Perspectives in the Emergence of Rapid Growth Firms. *Entrepreneurship Theory and Practice*, 22, pp. 13-30.
- Fiske, S.T. & Taylor, S.E., 1991. *Social Cognition*. 2nd ed. New York: Random House.
- Forbes, D.P., 2005. Are Some Entrepreneurs more Overconfident than Others? *Journal of Business Venturing*, 20 (5), 623-640.
- Foss, N.J. & Klein, P.G., 2010. Entrepreneurial Alertness and Opportunity Discovery: Origins, Attributes, Critique. In: Landstrom, H. & Lohrke, F., eds. 2010. *The Historical Foundations of Entrepreneurship Research*. Aldershot::Edward Elgar.
- Fredrickson, J.W. & Mitchell, T.R., 1984. Strategic Decision Processes: Comprehensiveness and Performance in an Industry with an Unstable Environment. *Academic Management Journal*, 27 (2), pp. 399-423.
- Freeman, R.E., 1984. *Strategic Management: A Stakeholder Approach*. Boston, MA: Pitman.
- Friedman, A.L. & Miles, S., 2002. Developing Stakeholder Theory. *Journal of Management Studies*, 39 (1), pp. 1-21.
- Friedman, M. & Rosenman, R.H., 1974. *Type A Behavioural and Your Heart*. New York: Alfred A Knopf.
- Gaglio, C.M., 2004. The Role of Mental Simulations and Counterfactual Thinking in the Opportunity Identification Process. *Entrepreneurship Theory and Practice*, 28, pp.533-552.
- Gaglio, C.M., 1997. Opportunity Identification: Review, Critique and Suggested Research Directions. In: Katz, J.A., ed. 1997. *Advances in Entrepreneurship, Firm Emergence and Growth*. Greenwich: JAI Press.
- Gaglio, C.M. & Katz, J.A., 2001. The Psychological Basis of Opportunity Identification: Entrepreneurial Alertness. *Small Business Economics*, 16, pp. 95-111.
- Galbraith, J., 1982. The Stages of Growth. *Journal of Business Strategy*, 3 (4), pp. 70-79.

- Gall, M.D., 1996. *Educational Research: An Introduction*. 6th ed. New York: White Plains.
- Gallen, T., 2006. Managers and Strategic Decisions: Does the Cognitive Style Matter? *Journal of Management Development*, 25 (2), pp. 118-133.
- Gardner, H., 1985. *The Mind's New Science: A History of the Cognitive Revolution*. New York: Basic Books.
- Garud, R. & Nayya, P., 1994. Transforming Capacity: Continual Structuring by Inter-temporal Technology Transfer. *Strategic Management Journal*, 15, pp. 365-385.
- Garvin, D.A., 1993. Building a Learning Organization. *Harvard Business Review*, 7, pp. 78-91.
- Gatewood, A.J., Shaver, K.G. & Gartner, W.B., 1994. A Longitudinal Study of Cognitive Factors Influencing Start-up Behaviours and Success of Venture Creation. *Journal of Business Venturing*, 10 (5), pp. 371-391.
- Gavetti, G. & Levinthal, D., 2000. Looking Forward and Looking Backward: Cognitive and Experiential Search. *Administrative Science Quarterly*, 45, pp. 113-137.
- Gavin, D.A., 1993. Building a Learning Organization. *Harvard Business Review*, 7, pp. 78-91.
- Geertz, G., 1973. *The Interpretation of Cultures*. New York: Basic Books.
- Gene, L. & Chan, K., 1997. *Introducing Nietzsche*. New York: Totem Books.
- Gibbs, R.W., 2006. *Embodiment and Cognitive Science*. Cambridge: Cambridge University Press.
- Gibcus, P. & Vermeulen, P.A.M. & De Jong, J.P.J., 2006. A Taxonomy of Small Business Owners. *International Small Business Journal*, 24, pp. 587-609.
- Gilbert, D.T., McNulty, S.E., Giuliano, T.A. & Benson, J.E., 1992. Blurry Words and Fuzzy Deeds: The Attribution of Obscure Behaviour. *Journal of Personality and Social Psychology*, 62 (1), pp. 18-25.
- Gioia, D.A. & Chittipeddi, K., 1996. Sensemaking in Organizations. *Academy of Management Review*, 21 (4), pp. 1226-1230.
- Gioia, D.A. & Chittipeddi, K., 1991. Sensemaking and Sensegiving in Strategic Change Initiation. *Strategic Management Journal*, 12, pp. 433-448.
- Gioia, D.A. & Poole, P.P., 1984. Scripts in Organizational Behaviour. *Academy of Management Review*, 9 (3), pp. 449-459.

- Gioia, D.A. & Thomas, J.B., 1996. Identity, Image and Issue Interpretation: Sensemaking During Strategic Change in Academia. *Administrative Science Quarterly*, 41, pp. 370-403.
- Gioia, D.A., Thomas, J.B. & Clark, S.M. & Chittipeddi, K., 1994. Symbolism and Strategic Change in Academia: The Dynamics of Sensemaking and Influence. *Organization Science*, 5, pp. 363-383.
- Glaser, B. & Strauss, A., 1967. *The Discovery of Grounded Theory*. Chicago: Aldine.
- Gregoire, A., Corbett, A.C. & McMullen, J.S., 2010. The Cognitive Perspective in Entrepreneurship: An Agenda for Future Research. *Journal of Management Studies*, 48 (6), pp. 1443-1477.
- Greiner, L., 1998. Revolution is Still Inevitable. *Harvard Business Review*, 76, pp. 64-65.
- Greiner, L., 1972. Evolution and Revolution as Organizations Grow. *Harvard Business Review*, 50 (4), pp. 37-46.
- Groves, K.S., Vance, C.M. & Choi, D.Y., 2011. Examining Entrepreneurial Cognition: An Occupational Analysis of Balanced Linear and Nonlinear Thinking and Entrepreneurship Success. *Journal of Small Business Management*, 49 (3), pp. 438-466.
- Guba, E.G. & Lincoln, Y.S., 1994. Competing Paradigms in Qualitative Research. In: Denzin, N.K. & Lincoln, Y.S., eds. *Handbook of Qualitative Research*. Thousand Oaks, CA:, Sage.
- Guest, G., Bunce, A. & Johnson, L., 2006. How Many Interviews are Enough? An Experiment with Data Saturation and Variability. *Field Methods*, 18 (1), pp. 59-82.
- Gupta, V.K., Tuban, D.B., Wasti, S.A. & Sikdar, A., 2009. The Role of Gender Stereotypes in Perceptions of Entrepreneurs and Intentions to Become an Entrepreneur. *Entrepreneurship Theory and Practice*, 33 (2), pp. 397-413.
- Hambrick, D.C. & Crozier, L.M., 1985. Stumblers and Stars in the Management Rapid Growth. *Journal of Business Venturing*, 1, pp. 31-45.
- Handy, C., 1995. Managing The Dream. In: Chawla, S. & Renesch, J., eds. 1995. *Learning Organizations: Developing Cultures for Tomorrow's Workplace*. New York: Productivity Press.
- Handy, C., 1993. *Understanding Organizations*. 4th ed. London: Penguin Books Ltd.
- Hanks, S.H., 1990. The Organizational Life-Cycle, Integrating Content and Process. *Journal of Business Venturing*, 1, pp. 1-12.

- Hanks, S.H., Watson, C.J., Jansen, E. & Chandler, G.N., 1994. Tightening the Life-Cycle Construct: A Taxonomic Study of Growth Stage Configurations in High Technology Organizations. *Entrepreneurship Theory and Practice*, 18 (2), pp. 5-27.
- Hanson, B.G., 1995. *General Systems Theory Beginning with Wholes*. Washington, DC: Taylor & Francis.
- Harmes, R., Kraus, S. & Renscke, C.H., 2007. Configurations of New Ventures in Entrepreneurship Research: Contributions and Research Gaps. *Management Research News*, 30 (9), pp. 661-673.
- Harmes, R., Kraus, S. & Schwarz, E., 2009. The Suitability of the Configuration Approach in Entrepreneurship Research. *Entrepreneurship & Regional Development*, 21 (1), pp. 25-49.
- Harms, R., Kraus, S. & Reschke, C.H., 2007. Configurations of New Ventures in Entrepreneurship Reserach: Contributions and Research Gaps. *Management Research News*, 30 (9), pp. 661-673.
- Harrison, R.T. & Leitch, C.M., 2005. Entrepreneurial Learning: Researching the Interface between Learning and Entrepreneurial Context. *Entrepreneurship Theory and Practice*, 29 (4), pp. 351-371.
- Hasan, E. & Gould E., 2001. Support for the Sense Making Activity of Managers. *Decision Support Systems*, 31 (1), pp. 71-86.
- Hayek, F.A., 1945. The Use of Knowledge in Society. *American Economic Review*, 35 (4), pp. 519-530.
- Hayes, J. & Allinson, C.W., 1998. Cognitive Style and the Theory and Practice of Individual and Collective Learning in Organizations. *Human Relationship*, 51, pp. 847-871.
- Hayes, J. & Allinson, C.W., 1994. Cognitive Style and its Relevance for Management Practice. *British Journal of Management*, 5, pp. 53-71.
- Haynie, J.M., Shepherd, D.A. & McMullen, J.S., 2009. An Opportunity for Me? The Role of Resources in Opportunity Evaluation Decisions. *Journal of Management Studies*, 46, pp. 337-361.
- Haynie, J.M., Shepherd, D.A., Mosakowski, E. & Earley, P.C., 2010. A Situated Metacognitive Model of the Entrepreneurial Mindset. *Journal of Business Venturing*, 25, pp. 217-229.
- Healy, M. & Perry, C., 2000. Comprehensive Criteria to Judge Validity and Reliability of Qualitative Research within the Realism Paradigm. *Qualitative Market Research, An International Journal*, 3 (3), pp. 118-126.

- Heider, F., 1958. *The Psychology of Interpersonal Relations*. New York: John Wiley & Sons.
- Heisenberg, W., 1972. *Physics and Beyond*. New York: Harper and Row.
- Hellstrom, T. & Hellstrom, C., 2002. Time and Innovation in Independent Technological Ventures. *Human Relations*, 5, pp. 407-426.
- Herriott, R.E. & Firestone, W.A., 1983. Multisite Qualitative Policy Research: Optimizing Description and Generalizability. *Educational Researcher*, 12 (2), pp. 14-19.
- Herron, L. & Sapienza, H.J., 1992. The Entrepreneur and the Initiation of New Venture Launch Activities. *Entrepreneurship Theory and Practice*, 17, pp. 49-55.
- Hertwig, R.G., Barron, E.U. & Webb, R., 2004. Decisions from Experience and the Effect of Rare Events in Risky Choice. *Psychological Science*, 15 (8), pp. 534-539.
- Hill, C.W.L. & Jones, T.M., 1992. Stakeholder-Agency Theory. *Journal of Management Studies*, 29 (2), pp. 131-154.
- Hodgkinson, G.P. & Healey, M.P., 2008. Cognition in Organizations. *Annual Review of Psychology*, 59, pp. 387-417.
- Holland, J., 1995. *Hidden Order*. Redwood City, CA: Addison-Wesley.
- Holt, R. & Macpherson, A., 2010. Rhetoric, Sensemaking and the Socially Competent Entrepreneur. *International Small Business Journal*, 28 (1), pp. 20-42.
- Hornsby, J.S., Kuratko, D.F. & Montagno, R.V., 1992. Perception of Internal Factors for Corporate Entrepreneurship: A comparison of Canadian and US Managers. *Entrepreneurship Theory and Practice*, 24 (2), pp. 11-26.
- Hornsby, J.S., Kuratko, D.F. & Zahra, S.A., 2002. Middle Managers Perception of the Internal Environment for Corporate Entrepreneurship: Assessing a Measurement Scale. *Journal of Business Venturing*, 17 (3), pp. 253-272.
- Huang, K.P. Wang, C.H. Tseng, M.C. & Wang, Y.W., 2010. A Study on Entrepreneurial Orientation and Resource Acquisition: The Effects of Social Capital., *African Journal of Business Management*, 4 (15), pp. 3226-3231.
- Huber, G.P., 1991. Organizational Learning. The Contribution Process of the Literatures. *Organizational Science*, 2, pp. 88-115.
- Huff, A.S. and Huff, J.O. & Barr, P.S., 2000. *When Firms Change Direction*. Oxford: Oxford University Press.
- Hussey, J. & Hussey, R., 1997. *Business Research*. Basingstoke: Macmillan.

- Ireland, R.D., Hitt, M.A. & Simon, D.G., 2003. A Model of Strategic Entrepreneurship: The Construct and its Dimensions. *Journal of Management*, 29, pp. 963-989.
- Jack, S.L. & Anderson, A.R., 2002. The Effects of Embeddedness on the Entrepreneurial Process. *Journal of Business Venturing*, 17, pp. 467-487.
- Jayaraman, N., Khorana, A., Nelling, E. & Covin, J., 2000. CEO Founder Status and Firm Financial Performance. *Strategic Management Journal*, 21 (2), pp. 1215-1224.
- Jelinek, M. & Litterer, J.A., 1995. Toward Entrepreneurial Organizations: Meeting Ambiguity With Engagement. *Entrepreneurship Theory and Practice*, 19, pp. 137-168.
- Jennings, P.D. & Greenwood, R., 2003. Constructing the Iron Case: Institutional Theory and Enactment. In: Westwood, R. & Clegg, S., eds. 2003. *Debating Organizations: Point-Counterpoint in Organization Studies*. , pp. 195-207. London: Routledge.
- Johnson, B. & Christensen, L., 2008. *Educational Research: Qualitative, Quantitative, and Mixed Approaches*. Thousand Oaks, CA: Sage.
- Julien, P.A., Joyal, A., Deshaies, L. & Ramangalahy, C., 1997. A Typology of Strategic Behaviour Among Small and Medium-sized Exporting Businesses. A Case Study. *International Small Business Journal*, 15 (2), pp. 33-50.
- Kahneman, D. & Tversky, A., 1979. Prospect Theory: An Analysis of Decision Under Risk. *Econometrica*, 47 (2), pp. 263-291.
- Kahneman, D. & Tversky, A., 1974. Judgement Under Uncertainty: Heuristics and Biases. *Science*, 185, pp. 1124-1131.
- Kahneman, D., Slovic, P. & Tversky, A., 2008. *Judgement Under Uncertainty: Heuristics and Biases*. New York: Cambridge University Press.
- Kaish, S. & Gilard, B., 1991. Characteristics of Opportunity Searches of Entrepreneurs Versus Executives: Sources, Interests and General Alertness. *Journal of Business Venturing*, 6, pp. 45-61.
- Katz, J. & Gartner, W., 1988. Properties of Emerging Organizations. *Academy of Management Review*, 13, pp. 429-441.
- Katz, J.A. & Shepherd, D.A., 2003. Cognitive Approaches to Entrepreneurship Research. In: Katz, J.A. & Shepherd, D.A., eds. 2003. *Advances in Entrepreneurship, Firm Emergence and Growth*. Oxford: JAI Press.
- Kazanjian, R.K., 1988. Relation of Dominant Problems to Stages of Growth in Technology Based New Ventures. *Academy of Management Journal*, 31 (2), pp. 257-279.

- Kazanjian, R.K. & Drazin, R., 1990. A Stage Contingent Model of Design and Growth for Technology Based new Ventures. *Journal of Business Venturing*, 5, pp. 137-150.
- Kazanjian, R.K. & Drazin, R., 1989. An Empirical Test of Growth Progression Model. *Management Science*, 35, pp. 1489-1503.
- Kelly, G.A., 1955. *The Psychology of Personal Constructs*. New York: W.W. Norton & Company.
- Kahneman, D., Slovic, P. & Tversky, A., 1982. *Judgement under Uncertainty: Heuristics and Biases*. New York: Cambridge University Press.
- Kimberly, J.R. & Miles, R.H., 1980. *The Organizational Life-cycle*. San Francisco, CA: Jossey-Bass.
- Kirton, M.J., 2003. *Adaptation and Innovation in the Context of Diversity and Change*. London: Routledge.
- Kirton, M.J., 1989. *Adaption-Innovation*. London: Routledge.
- Kirton, M.J., 1978. Field Dependence and Adaption Innovation Theories. *Perceptual and Motor Skills*, 47, pp.1 239-1245.
- Kirton, M.J., 1976. Adaptors and Innovators: A description and Measure. *Journal of Applied Psychology*, 61 (5), pp. 622-629.
- Kirzner, I., 1979. *Perception, Opportunity and Entrepreneurship*. Chicago, IL: University of Chicago Press.
- Kirzner, I., 1973. *Competition and Entrepreneurship*. Chicago, IL: University of Chicago Press.
- Klein, J.H. & Cooper, D.F., 1982. The Journal of the Operational Research Society. Cognitive Maps of Decision-makers in a Complex Game, 33 (1), pp. 63-71.
- Knetch, J.L. & Thaler, R.H., 1991. Anomalies: The Endowment Effect, Loss Aversion and Status Quo Bias. *Journal of Economic Perspectives*, 5 (1), pp. 193-206.
- Knight, F.H, 1921. *Risk, Uncertainty and Profit*. New York: Augustus Kelly.
- Kolb, D.A., 1984. *Experiential Learning: Experience as the Source of Learning and Development*. Englewood Cliffs, NJ: Prentice Hall.
- Korunka, C., Frank, H., Lueger, M. & Mugler, J., 2003. The Entrepreneurial Personality in the Context of Resources, Environment and the Start-up process-A configuration Approach. *Entrepreneurship Theory and Practice*, 28 (1), pp. 123-138.

- Kozhevnikov, M., 2007. Cognitive Styles in the Context of Modern Psychology: Toward an Integrated Framework of Cognitive Style. *Psychological Bulletin*, 133 (3), pp. 464-481.
- Krauss, S., Kauranen, I. & Reschke, C.H., 2011. Identification of Domains for a New Conceptual Model of Strategic Entrepreneurship using the Configuration Approach. *Management Research Review*, 24 (1), pp. 58-74.
- Krauss, S.E., 2005. Research Paradigms and Meaning Making: A Primer. *The Qualitative Report*, pp. 758-770.
- Krisof, A.L., 1996. Person-organization Fit: An Integrative Review of its Conceptualization, Measurement and Implications. *Personnel Psychology*, 49 (1), pp. 1-49.
- Kropp, F. & Zolin, R., 2008. Technological Entrepreneurship and Small Business Innovation Programs. In: Ghosh, A., ed. 2008. *Impact of Government Policies on Marketing Strategies*. Hyderabad, India: ICFAI Press.
- Krueger, N.F., 2007. What Lies Beneath? The Experiential Essence of Entrepreneurial Thinking. *Entrepreneurship Theory and Practice*, 31 (1), pp. 123-138.
- Kuhn, T.W., 1996. *The Structure of Scientific Revolutions*. 3rd ed. Chicago, IL: University of Chicago Press.
- Kurke, L.B. & Aldrich, H.E., 1983. Note—Mintzberg was Right: A Replication and Extension of The Nature of Managerial Work. *Management Science*, 29, pp. 975-984.
- Landstrom, H. & Lohrke, F., 2010. *Historical Foundations of Entrepreneurship Research*. UK: Edward Elgar Publishing.
- Langer, E., 1983. *The Psychology of Control*. Thousand Oaks, CA: Sage.
- Lant, T.K. & Shapira, Z., 2001. Introduction: Foundations of Research on Cognition in Organizations. In: Lant, T.K. & Shapira, Z., ed. 2001. *Organizational Cognition*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Lather, P., 1992. Critical Frames in Educational Research: Feminist and Post-Structural Perspectives. *Theory into Practice*, 32 (2), pp. 89-99.
- Laverty, S.M., 2003. Hermeneutic Phenomenology and Phenomenology: A Comparison of Historical and Methodological Considerations. *International Journal of Qualitative Methods*, 2 (3).
- Lawrence, P.R. & Lorsch, J.W., 1967. Differentiation and Integration in Complex Organizations. *Administrative Science Quarterly*, 12 (1), pp. 1-47.
- Lawton, D., 1997. *How to Succeed in Postgraduate Study*. London: Routledge.

- Lehman, D.R., Chiu, C.Y. & Schaller, M., 2004. Psychology and Culture. *Annual Review of Psychology*, 55, pp. 689-714.
- Levander, A. & Raccuia, I., 2001. *Entrepreneurial Profiling. A Cognitive Approach to Entrepreneurship*. Stockholm: Stockholm Business School.
- Levie, A., 1986. Second Order Planned Change: Definition and Conceptualization. *Organizational Dynamics*, 15 (1), pp. 5-20.
- Levie, J. & Lichtenstein, B.B., 2010. A Terminal Assessment of Stages Theory: Introducing a Dynamic State Approach to Entrepreneurship. *Entrepreneurship Theory and Practice*, 34 (2), pp. 317-350.
- Levinthal, D. & March, J.G., 1993. The Myopia of Learning. *Strategic Management Journal*, 14, pp. 95-112.
- Li, H., Zhang, Y. & Chan, T.S., 2005. Entrepreneurial Strategy Making and Performance in China's New Technology Ventures: The Contingency Effect of Environments and Firm Competencies. *Journal of High Technology Management*, 16 (1), pp. 37-57.
- Lichtenstein, B. & Brush, C., 2001. How do "Resource Bundles" Develop and Change in New Ventures? A Dynamic Model and Longitudinal Exploration. *Entrepreneurship Theory and Practice*, 25 (3), pp. 37-58.
- Lichtenstein, B. & Plowman, D., 2009. The Leadership of Emergence: A Complex Systems Leadership Theory of Emergence at Successive Organizational Levels. *Leadership Quarterly*, 20, pp. 617-630.
- Lichtenstein, B., Dooley, K. & Gartner, W., 2006. Complexity Dynamics of Nascent Entrepreneurship. *Journal of Business Venturing*, 22, pp. 236-261.
- Lichtenstein, B., Dooley, K. & Lumpkin, T., 2006. Measuring Emergence in the Dynamics of New Venture Creation. *Journal of Business Venturing*, 21, pp. 153-175.
- Lichtman, M., 2006. *Qualitative Research in Education: A User's Guide*. Thousand Oaks, CA: Sage..
- Likert, R., 1967. *The Human Organization*. New York: McGraw-Hill.
- Lim, J.Y. and Busenitz, L.W. & Chidambaram, L., 2013. New Venture Teams and the Quality of Business Opportunities Identified: Faultlines Between Subgroups of Founders and Investors. *Entrepreneurship Theory and Practice*, 37 (1), pp. 47-67.
- Lincoln, Y. & Guba, E., 1985. Naturalistic Inquiry. Lofland, J. & Lofland, L., ed. 1985. *Analysing Social Settings*. 3rd ed. CA:Belmont.

- Lindgren, M. & Packendorff, J., 2009. Social Constructionism and Entrepreneurship: Basic Assumptions and Consequences for Theory and Research. *International Journal of Entrepreneurial Behaviour and Research*, 15 (1), pp. 25-47.
- Lippitt, G.I. & Schmidt, W.H., 1967. Crises in a Developing Organization. *Harvard Business Review*, 47, pp. 102-112.
- Locke, E.A., 2002. The Epistemological Side of Teaching Management: Teaching through Principles. *Academy of Management Learning and Education*, 1, pp. 195-205.
- Loehle, C., 1987. Hypothesis Testing in Econology: Psychological Aspects and the Importance of Theory Maturation. *The Quarterly Review of Biology*, 62 (4), pp. 397-409.
- Low, M.B. & MacMillan, I.C., 1988. Entrepreneurship: Past Research and Future Challenges. *Journal of Management*, 14 (2), pp. 139-161.
- Lumpkin, G.T. & Dess, G.G., 2001. Linking Two Dimensions of Entrepreneurial Orientation performance. *Journal of Business Venturing*, 16 (5), pp. 429-451.
- Lumpkin, G.T. & Dess, G.G., 1996. Clarifying the Entrepreneurial Orientation Construct and Linking it to Performance. *Academy of Management Review*, 21, pp. 135-172.
- Lumpkin, G.T. & Lichtenstein, B.B., 2005. The Role of Organizational Learning in the Opportunity-Recognition Process. 29 (4), pp. 451-472.
- Lumpkin, G.T., Cogliser, C.D. & Schneider, D.R., 2009. Understanding and Measuring Autonomy: An Entrepreneurial Orientation Perspective. *Entrepreneurship Theory and Practice*, 33 (1), pp. 47-69.
- Lythcott, J. & Duschle, R., 1990. Qualitative Research : From Methods to Conclusions. *Science Education*, 74, pp. 449-460.
- Madison, D.S., 2005. *Critical Ethnography: Methods, Ethics and Performance*. Thousand Oaks, CA: Sage.
- Mahnke, V. and Venzin, M. & Zahra, S., 2007. Governing Entrepreneurial Opportunity Recognition in MNEs" Aligning Interests and Cognition Under Uncertainty. *Journal of Management Studies*, 44, pp. 1278-1298.
- Maidigue, M.A. & Hayes, R.H., 1984. The Art of High Technology Management. *Sloan Management Review*, 25, pp. 17-31.
- Maitlis, S., 2005. The Social Processes of Organizational Sense-Making. *Academy of Management Journal*, 48 (1), pp. 21-49.
- Maitlis, S. & Lawrence, T.B., 2007. Triggers and Enablers of Sensegiving in Organizations. *Academic Management Journal*, 50 (1), pp. 57-84.

- Markman, G.D. & Baron, R.A., 2003. Person-Entrepreneurship Fit: Why some People are more Successful as Entrepreneurs than Others. *Human Resource Management Review*, 13, pp. 281-301.
- Markoczy, L. & Goldberg, J., 1995. A Method of Eliciting and Comparing Causal Maps. *Journal of Management*, 21 (5), pp. 305-333.
- Maxwell, J.A., 2005. *Qualitative Research Design: An Interactive Approach*. 2nd ed. Thousand Oaks, CA: Sage.
- McClelland, D.C., 1987a. *Human Motivation*. New York: Cambridge University Press.
- McGregor, D., 1960. *The Human Side of Enterprise*. McGraw-Hill: USA.
- McKelvey, B., 2004. Toward a Complexity Science of Entrepreneurship. *Journal of Business Venturing*, 19, pp. 313-342.
- Merriam, S.B., 1998. *Research Methods in Education and Psychology: Integrating Diversity with Quantitative and Qualitative Approaches*. Thousand Oaks, CA: Sage.
- Merton, R.K., 1948. The Self-Fulfilling Prophecy. *The Antioch Review*, 8 (2), pp. 193-210.
- Messick, S., 1984. Educational psychologists. *The Nature of Cognitive Styles: Problems and Promise in Educational Practice*. 19, pp. 59-74.
- Meyer, A., Tsui, A. & Hinings, C.R., 1993. Configuration Approaches to Organizational Analysis. *Academy of Management Journal*, 36, pp. 1175-1196.
- Meyer, G.D. & Dean, T.J., 1990. An Upper Echelons Perspective on Transformational Leadership Problems in High Technology Firms. *Journal of High Technology Management*, 1, pp. 223-242.
- Miles, M.B. & Huberman, A.M., 1994. *Qualitative Data Analysis: An Expanded Sourcebook*. 2nd ed. Thousand Oaks, CA: Sage.
- Miller, A., 1987. Cognitive Styles: An Integrated Model. *Educational Psychology*, 7, pp. 251-268.
- Miller, D., 1992. *The Icarus Paradox*. New York, NY: HarperCollins.
- Miller, D., 1981. Towards a New Contingency Approach: The Search for Organizational Gestalts. *Journal of Management Studies*, 18 (1), pp. 1-26.
- Miller, D. & Droge, D., 1986. The Relative Determinants of Structure of Small Firms. *Administrative Science Quarterly*, 31, pp. 539-560.

- Miller, D. & Friesen, P.H., 1984b. *Organizations, A Quantum View*. Englewood Cliffs, NJ: Prentice Hall.
- Miller, D. & Friesen, P.H., 1984a. A Longitudinal Study of the Corporate Life Cycle. *Management Science*, 30 (10), pp. 1161-1183.
- Miller, D. & Mintzberg, H., 1983. The Case for Configuration. Morgan, G., ed. 1983. *Beyond Method*. Thousand oaks, CA: Sage.
- Miller, D. & Toulouse, J.M., 1986. Chief Executive Personality and Corporate Strategy and Structure. *Management Science*, 32, pp. 1389-1409.
- Miller, D.T. & Turnbull, W., 1986. Expectancies and Interpersonal Processes. *Annual Review of Psychology*, 37, pp. 233-256.
- Miller, G.A., 1996. The Magical Number Seven, Plus or Minus Two: Some Limits on our Capacity for Processing Information. *Psychological Review*, 63 (2), pp. 81-97.
- Miller, L. & Lloyd-Reason, L., 2013. The Interplay of Entrepreneurial Cognition and Internal Stakeholders. *International Journal of Entrepreneurship and Small Business*, 19 (2), pp. 276-291.
- Mintzberg, H., 1983. *Power In and Around Organizations*. Englewood Cliffs, NJ: Prentice Hall.
- Mintzberg, H., 1978. *Structure et Dynamique des Organisations*. Paris: Editions d'Organisations.
- Mintzberg, H., 1973. Strategy-making in Three Modes. *California Management Review*, 2, pp. 44-53.
- Mintzberg, H. & Waters, J.A., 1985. Of Strategies, Deliberate and Emergent. *Strategic Management Journal*, 6, pp. 257-272.
- Mintzberg, H. & Waters, J.A., 1982. Tracking Strategy in an Entrepreneurial Firm. *Academy of Management Journal*, 25 (3), pp. 465-499.
- Mitchell, J.R. & Shepherd, D.A., 2010. To Thine Own Self be True: Images of Self, Images of Opportunity and Entrepreneurial Action. *Journal of Business Venturing*, 25, pp. 138-154.
- Mitchell, R.K., 1996. Oral History and Expert Scripts: Demystifying the Entrepreneurial Experience. *Journal of Management History*, 2 (3), pp. 50-67.
- Mitchell, R.K., Busenitz, L.W., Bird, B., Gaglio, C.M., McMullen, J.S. & Morse, E.A., 2007. The Central Question in Entrepreneurial Cognition Research. *Entrepreneurship Theory and Practice*, 312 (1), pp. 1-27.

- Mitchell, R.K., Busenitz, L.W., Lant, T., McDougall, P.P., Morse, E.A. & Smith, B., 2004. The Distinctive and Inclusive Domain of Entrepreneurial Cognition Research. *Entrepreneurship Theory and Practice*, 28 (6), pp. 138-518.
- Mitchell, R.K., Busenitz, L.W., Lant, T., McDougall, P.P., Morse, E.A. & Smith, B., 2002. Entrepreneurial Cognition Theory: Rethinking the People Side of Entrepreneurship Research. *Entrepreneurship Theory and Practice*, 27 (2), pp. 93-104.
- Mitchell, R.K., Randolph-Senge, B. & Mitchell, J.R., 2011. Socially Situated Cognition: Imagining New Opportunities for Entrepreneurship Research. *Academy of Management Review*, 36 (4), pp. 774-778.
- Mitchell, R.K., Smith, B. and Seawright, K.W. & Morse, E.A., 2000. Cross-Cultural Cognitions and the Venture Creation Decision. *Academy of Management Journal*, 43 (5), pp. 974-993.
- Mitchell, R.K., Smith, J.B., Morse, E.A., Seawright, K.W., Peredo, A.M. & McKenzie, B., 2002. Are Entrepreneurial Cognitions Universal Across Cultures. *Entrepreneurship Theory and Practice*, 27 (2), pp. 9-29.
- Neergaard, H. & Ulhoi, J.P., 2007. *Handbook of Qualitative Research Methods in Entrepreneurship*. Cheltenham: Edward Elgar Publishing.
- Neisser, U., 1967. *Cognitive Psychology*. New York: Appleton-Century-Crafts.
- Nicholls, A. & Cho, A., 2006. Social Entrepreneurship: The Structuration of a Field. In: Nicholls, A., ed. 2006. *Social Entrepreneurship: New Models of Sustainable Social Change*. Oxford: Oxford University Press.
- Nosek, B., 2007. Explicit and Implicit Relations. *Association for Psychological Science*, 16 (2), pp. 65-69.
- Nosek, J.T. & McNeese, M.D., 1997. Augmenting Group Sense-making in Ill-defined, Emerging Situations: Experiences, Lessons Learned and Issues for Future Development. *Information Technology & People*, 10 (3), pp. 241-252.
- Onken, M.H., 1999. Temporal Elements of Organizational Culture and Impact on Firm Performance. *Journal of Managerial Psychology*, 14, pp. 231-243.
- Palich, I.E. & Bagby, D.R., 1995. Using Cognitive Theory to Explain Entrepreneurial Risk Taking: Challenging Conventional Wisdom. *Journal of Business Venturing*, 10 (6), pp. 425-438.
- Papert, S., 1980. *Mindstorms*. New York: Basic Books.
- Patton, M.Q., 2002. *Qualitative Research and Evaluation Methods*. Thousand Oaks, CA: Sage.

- Pearson, C.A.L. & Chatterjee, S.R., 2003. Managerial Work Roles in Asia: An Empirical Study of Mintzberg's Role Formulation in Four Asian Countries. *Journal of Management Development*, 22 (8), pp. 694-707.
- Pearson, C.A.L. & Chatterjee, S.R., 2003. Managerial work roles in Asia: An empirical study of Mintzberg's role formulation in four Asian countries. *Journal of Management Development*, 22 (8), pp. 694-707.
- Pedler, M., Burgoyne, J. & Brook, C., 2005. What has action learning learned? *Research and Practice*, 2(1), pp. 49-68.
- Penrose, E.T. 1959. *The Theory of the Growth of the Firm*. 3rd ed. New York: Oxford University Press.
- Perren, R.M., 2004. Case Study Method in Small Business and Entrepreneurial Research Mapping Boundaries and Perspectives. *International Small Business Journal*, 22 (1), pp. 83-101.
- Pervin, L.A., 1996. *The Science of Personality*. New York: Wiley.
- Pervin, L.A., 1968. Performance and Satisfaction as a Function of Individual-environment Fit. *Psychological Bulletin*, 69, pp. 56-68.
- Piaget, J., 1967. Cognitions and Conservations: Two Views. *APA Review of Books*, 12 (11), pp. 532-533.
- Plous, S., 1993. *The Psychology of Judgement and Decision-making*. New York: McGraw-Hill.
- Politis, D., 2005. The Process of Entrepreneurial Learning: A Conceptual Framework. *Entrepreneurship Theory and Practice*, 29 (4), pp. 399-424.
- Post, J.E., Preston, L.E. & Sauter-Sach, S., 2002. *Redefining the Corporation: Stakeholder Management and Organizational Wealth*. Stanford: Stanford University Press.
- Punch, K.F., 2000. *Developing Effective Research Proposals*. London: Sage.
- Rauch, A., Wiklund, J. Frese, J. & Lumpkin, T.G., 2004. Entrepreneurial Orientation and Business Performance: Cumulative Empirical Evidence. In: Bygrave, W.D., Brush, C.G., Davidsson, M.L.P., Meyer, G.D., Fiet, J., Sohl, J. Greene, P.G., Zacharakis, A. & Harrison, R.T., eds. 2004. *Frontiers of Entrepreneurship Research*. USA:Wellesley.
- Renko, M., Carsrud, A. & Brannback, M., 2009. The Effect of a Market Orientation, Entrepreneurial Orientation and Technological Capability on Innovativeness: A Study of Young Biotechnology Ventures in the United States and in Scandinavia. *Journal of Small Business Management*, 47 (3), pp. 331-369.
- Revans, R., 1971. *Developing Effective Managers*. London: Longman

- Revans, R., 1978. *The ABC of action learning*. U.K.: Revans.
- Richard, L. & Richards, T., 1991. The Transformation of Qualitative Method: Computational Paradigms and Research Processes. In: Fielding, N.G. & Lee, R.M., eds. 1991. *Using Computers in Qualitative Research*. London: Sage.
- Riding, R.J. & Rayner, S.G., 1998. *Cognitive Styles and Learning Strategies*. London: David Fulton Publishers.
- Roese, N.J., 1997. Counterfactual Thinking. *Psychological Bulletin*, 121, pp.133-148.
- Rosenbusch, N., Brinckmann, J. & Bausch, A. Is Innovation Always Beneficial? A Meta-Analysis of the Relationship between Innovation and Performance in SME's. *Journal of Business Venturing*, 26 (4), pp. 44-457.
- Rosenthal, R. & Jacobson, L., 1992. *Pygmalion in the classroom*. Expanded edition. New York: Irvington
- Rostow, W.W., 1960. *The Stages of Economic Growth*. Cambridge: Cambridge University Press.
- Russell, R.D., 1999. Developing a Process Model of Entrepreneurial Systems: A Cognitive Mapping Approach. *Entrepreneurship Theory and Practice*, 23, pp. 65-84.
- Sadler-Smith, E. & Badger, B., 1998. Cognitive Style, Learning and Innovation. *Technology Analysis and Strategic Management*, 10 (2), pp. 247-265.
- Sarasvathy, D.K. and Simon, H.A. & Lave, L., 1998. Perceiving and Managing Business Risks: Differences Between Entrepreneurs and Bankers. *Journal of Economic Behaviour & Organization*, 33, pp. 207-225.
- Sarasvathy, S.D., 2008. *Entrepreneurship Theory and Practice*. 2008. *Effectuation: Elements of Entrepreneurial*. Cheltenham: Edward Elgar.
- Sarasvathy, S.D., 2004. Making it Happen: Beyond Theories of the Firm to Theories of Firm Design. *Entrepreneurship Theory and Practice*, 28, pp. 519-531.
- Sarasvathy, S.D., 2001. Causation and Effectuation: Toward a Theoretical Shift from Economic Inevitability to Entrepreneurial Contingency. *Academy of Management Review*, 26, pp. 243-264.
- Saunders, M., Lewis, P. & Thornhill, A., 2000. *Research Methods for Business Students*. 2nd ed. Essex: Pearson Education Limited.
- Schein, E.H., 1987. *Organizational Culture and Leadership*. 2nd ed. San Francisco, CA: Jossey-Bass.
- Schneider, S.C. & Angelmar, R., 1993. Cognition in Organizational Analysis: Who's Minding the Score? *Organizational Studies*, 14 (3), pp. 347-374.

- Scholhammer, H., 1982. Internal Corporate Entrepreneurship. Kent, CA., Sexton, In: D.L. & Vesper, K.H., eds. 1982. *Encyclopedia of Entrepreneurship*. NJ: Englewood Cliffs.
- Schumpeter, J.A., 1934. *The Theory of Economic Development*. Cambridge, MA: Harvard University Press.
- Senge, P., 1990. *The Fifth Discipline*. New York: Doubleday.
- Sexton, D. L. & Bowman-Upton, N.B., 1991. *Entrepreneurship: Creativity and Growth*. New York: MacMillan.
- Shane, S., 2007. *A General Theory of Entrepreneurship: The Individual-Opportunity Nexus Approach to Entrepreneurship*. Cheltenham: Edward Elgar.
- Shane, S., 2001. Technology Opportunities and New Firm Creation. *Management Science*, 47, pp. 205-220.
- Shane, S., 2000. Prior Knowledge and the Discovery of Entrepreneurial Opportunities. *Organizational Science*, 11, pp. 448-469.
- Shane, S. & Venkataraman, S., 2000. The Promise of Entrepreneurship as a Field of Research. *Academy of Management Review*, 25, pp. 217-226.
- Shaver, G., 1995. The Entrepreneurial Personality Myth. *Business and Economic Review*, 41 (3), pp. 20-23.
- Shaver, K.G. & Scott, L.R., 1991. Person, Process, Choice: The Psychology of New Venture Creation. *Entrepreneurship Theory and Practice*, 16 (2), pp. 23-42.
- Shepherd, D.A. & DeTienne, D.R., 2005. Prior Knowledge, Potential Financial Reward and Opportunity Identification. *Entrepreneurship Theory and Practice*, 29 (1), pp. 9-112.
- Shepherd, D.A., McMullen, J.S. & Jennings, P.D., 2007. The Formation of Opportunity Beliefs: Overcoming Ignorance and Reducing Doubt. *Strategic Entrepreneurship Journal*, 1, pp. 75-95.
- Shepherd, D.A., Patzelt, H. & Haynie, J.M., 2010. Entrepreneurial Spirals: Deviation-Amplifying Loops of an Entrepreneurial Mindset and Organizational Culture. *Entrepreneurship Theory and Practice*, 34 (1), pp. 59-82.
- Siggelkow, N., 2007. Persuasion with Case Studies. *Academy of Management Journal*, 50 (1), pp. 20-24.
- Simon, H.A., 1979. Information Processing Models of Cognition. *Annual Review of Psychology*, 30, pp. 363-396.
- Simon, H.A., 1959. Theories of Decision-Making in Economics and Behavioral Science. *The American Economic Review*, 49, pp. 253-283.

- Simon, M. & Houghton, S.M., 2002. The Relationship Among Biases, Misperceptions and Introducing Pioneering Products: Examining Differences in Venture Decision Contexts. *Entrepreneurship Theory and Practice*, 27, pp. 105-124.
- Simon, M., Houghton, S.M. & Aquino, K., 2002. Cognitive Biases, Risk Perception and Venture Formation: How Individuals Decide to Start Companies. *Journal of Business Venturing*, 15, pp. 113-134.
- Slater, S.F. & Narver, J.C., 1995. Market Orientation and the Learning Organization. *Journal of Marketing*, 59 (3), pp. 63-74.
- Smith, K.G., Gannon, M.J., Grimm, C. & Mitchell, T.R., 1988. Decision Making Behaviour in Smaller Entrepreneurial and Larger Professionally Managed Firms. *Journal of Business Venturing*, 3, pp. 223-232.
- Snyder, M. & Klein, O., 2005. Construing and Constructing Others: On the Reality and the Generality of the Behavioural Confirmation Scenario. *Interaction Studies*, 6 (1), pp. 53-67.
- Snyder, M. & Stukas, A.A., 1999. Interpersonal Processes: The Interplay of Cognitive, Motivational and Behavioural Activities in Social Interaction. *Annual Review of Psychology*, 50, pp. 273-303.
- Stake, R.E., 2006. *Multiple Case Study Analysis*. New York: Guildford Press.
- Stake, R.E., 2005. Qualitative Case Studies. Denzin, N.K. & Lincoln, Y.S., eds. 2005. *Qualitative Research*. 3rd ed. Thousand Oaks, CA: Sage.
- Stake, R.E., 1995. *The Art of Case Study Research*. London: Sage.
- Stam, W. & Elfring, T., 2008. Entrepreneurial Orientation and New Venture performance: The Moderating Role of Intra- and Extra- Industry Social Capital. *Academic Management Journal*, 51 (1), pp. 97-111.
- Steier, L., 2000. Entrepreneurship and the Evolution of Angel Financial Networks. *Organization Science*, 21 (1), pp. 163-192.
- Stevenson, H.H., Grousbeck, H.I., Roberts, M.J. & Bhidé, A.V., 1999. *The Entrepreneurial Venture*. 5th ed. Irwin, IL: McGraw-Hill.
- Steward, W.H., Watson, W.E. and Carland, J.C. & Carland, J.W., 1999. A Proclivity for Entrepreneurship. A Comparison of Entrepreneurs, Small Business Owners and Corporate Managers. *Journal of Business Venturing*, 14 (2), pp. 189-214.
- Steyaert, C. & Hjorth, D., 2003. Creative Movements of Entrepreneurship. *New Movements in Entrepreneurship*, pp. 3-19.

- Streufert, S. & Nogami, G.Y., 1989. *Cognitive Style and Complexity, Implications for I/O Psychology. International Review of Industrial and Organizational Psychology*. Chichester: Wiley.
- Sue, Z., Xie, E., & Li, Y., 2011. Entrepreneurial Orientation and Firm Performance in New Ventures and Established Firms. *Journal of Small Business Management*, 49 (4), pp. 558-577.
- Taylor, J.R. & Van Every, E.J., 2000. *The Emergent Organization, Communication as Site and Surface*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Tesch, R., 1990. *Qualitative Research*. New York: Falmer Press.
- Thatcher, S.M.B. & Patel, P.C., 2012. Group Faultlines: A Review, Integration and Guide to Future Research. *Journal of Management*, 38 (4), pp. 969-1009.
- Thomas, J.B. & McDaniel, R.R., 1990. Interpreting Strategic Issues: Effects of Strategy and Top Management Team Information Processing Structure. *Academy of Management Journal*, 33, pp. 286-306.
- Tolman, E.C., 1948. Cognitive Maps in Rats and Men. *Psychological Review*, 55 (4), pp.189-208.
- Trafford, V. & Leshman, S., 2008. *Stepping Stones to Achieving your Doctorate: By Focusing on your Viva from the Start*. Maidenhead: Open University Press.
- Tripsas, M. & Gavetti, G., 2000. Capabilities, Cognition and Inertia: Evidence from Digital Imaging. *Strategic Management Journal*, 21 (10/11), pp.1 147-1161.
- Tushman, M.L., Newman, W.H. & Romanelli, E., 1986. Convergence and Upheaval: Managing the Unsteady Pace of Organizational Evolution. *California Management Review*, 19, pp. 29-44.
- Tversky, A. & Kahneman, D., 1973. Availability: A Heuristics for Judging Frequency and Probability. *Cognitive Psychology*, 5, pp. 207-232.
- Vaghely, I.P. & Julien, P.A., 2010. Are Opportunities Recognized or Constructed? An Information Perspective on Entrepreneurial Opportunity Identification. *Journal of Business Venturing*, 25 (1), pp. 73-86.
- Van Den Steen, E., 2004. Rational Optimism and Other Biases. *American Economic Review*, 94, pp. 1141-1151.
- Venkataraman, N., 1989. Strategic Orientation of Business Enterprises: The Construct, Dimensionality and Measurement. *Management Science*, 35, pp. 942-962.
- Venkataraman, S., Van de Ven, A., Buckeye, I. & Hudson, R., 1990. Starting up in a Turbulent Environment: A Process Model of Failure among Firms with High Customer Dependence. *Journal of Business Venturing*, 5, pp. 277-295.

- Vermeulen, P.A.M. & Curseu, P.L., 2008. *Entrepreneurial Strategic Decision-Making: A Cognitive Perspective*. Cheltenham, UK: Edward Elgar.
- von Bertalanffy, L., 1968. *General Systems Theory*. New York: George Braziller, Inc.
- von Bertalanffy, L., 1937b. *Das Gefüge des Lebens*. Teubner, Leipzig:.
- von Bertalanffy, L., 1937a. Biologische Gesetzmäßigkeit im Lichte der organismischen Auffassung 1937a. *Travaux du IXe Congrès International de Philosophie*. Hermann, Paris:.
- von Bertalanffy, L., 1934. Untersuchungen über die Gesetzmäßigkeit des Wachstums I. Allgemeine Grundlagen der Theorie. Mathematisch-physiologische Gesetzmäßigkeiten des Wachstums bei Wassertieren. *Wilhelm Roux' Archiv für Entwicklungsmechanik der Organismen*, 131, pp. 613-652.
- von Bertalanffy, L., 1934. Wandlungen des biologischen Denkens. *Neue Jahrbücher für Wissenschaft und Jugendbildung*, 10, pp. 339-366.
- Walsh, J.P., 1995. Managerial and Organizational Cognition: Notes from a Trip Down Memory Lane. *Organization Science*, 6, pp. 280-321.
- Walter, A., Auer, M. & Ritter, R., 2005. The Impact of Network Capabilities and Entrepreneurial Orientation on University Spin-off Performance. *Journal of Business Venturing*, 21 (4), pp. 541-567.
- Wang, C.L., 2008. Entrepreneurial Orientation, Learning Orientation and Firm Performance. *Entrepreneurship Theory and Practice*, 32 (4), pp. 635-656.
- Warglien, M., 2002. Intraorganizational Evolution. Baum, J.A.C., ed. 2002. *The Blackwell Companion to Organizations*. Malden, MA: Blackwell.
- Weber, E.U., Shafir, S. & Blaise, A.R., 2004. Predicting Risk Sensitivity in Humans and Lower Animals: Risk as Variance or Coefficient of Variation. *Psychological Review*, 111, pp. 430-445.
- Weber, P.S. & Manning, M.R., 2001. Cause Maps, Sensemaking and Planned Organizational Change. *Journal of Applied Behavioral Science*, 37 (2), pp. 227-251.
- Weick, K.E., 2009. *Making Sense of the Organization*. London: Wiley and Sons Ltd.
- Weick, K.E., 1991. The Nontraditional Quality of Organizational Learning. *Organization Science*, 2 (1). pp. 116-124.
- Weick, K.E., 1979. *The Social Psychology of Organizing*. Reading, USA: Random House.
- Welsh, E., 2002. Dealing with Data: Using Nvivo in Qualitative Data Analysis Process. *Forum: Qualitative Social Research*, 3 (2), pp. 1438-5627.

- Wennekers, A.R.M. & Thurik, A.R., 1999. Linking Entrepreneurship and Economic Growth. *Small Business Economics*, 13, pp. 27-55.
- West, G.P., 2007. Collective Cognition: When Entrepreneurial Teams, not Individuals, make Decisions. *Entrepreneurship Theory and Practice*, 31, pp. 77-102.
- West, G.P., 1998. To Agree or not to Agree. Consensus and Performance New Ventures. *Journal of Business Venturing*, 13 (5), pp. 395-422.
- West, G.P., 1997. Temporal Dimensions of Opportunity Change in Technology Based Ventures. *Entrepreneurship Theory and Practice*, 22 (2), pp. 31-52.
- Whetton, D., 1989. What Constitutes a Theoretical Contribution? *Academy of Management Review*, 14, pp. 490-495.
- Wiklund, J., 1999. The Sustainability of the Entrepreneurial Orientation Performance Relationship. *Entrepreneurship Theory and Practice*, 24 (1), pp. 37-48.
- Wiklund, J. & Shepherd, D.A., 2005. Entrepreneurial Orientation and Small Business Performance: A Configuration Approach. *Journal of Business Venturing*, 20 (1), pp. 71-91.
- Williamsen, M.C., Meijer, A. & Jannink, M., 1999. Applying a Contingency Model of Strategic Decision-Making to the Implementation of Smoking Bans: A Case Study. *Health Education Research*, 14 (4), pp. 519-531.
- Wiltbank, R., Dew, N., Read, S. & Sarasvathy, S.D., 2006. What To Do Next? The Case for Non-Predictive Strategy. *Strategic Management Journal*, 27 (10), pp. 981-998.
- Witmeur, O. & Fayolle, A., 2011. Developing and Testing a Typology of Growth Strategies of Entrepreneurial IT Service Firms. In: Raposo, M., Smallbone, D., Balaton, K. & Hortovanyl, L., eds. 2011. *Entrepreneurship, Growth and Economic Development*. UK: Edward Elgar Publishing Ltd.
- Wolcott, H.F., 1994. *Transforming Qualitative Data: Description, Analysis, Interpretation*. Thousand Oaks, CA: Sage..
- Wright, M. & Stigliani, I., 2013. Entrepreneurship and Growth. *International Small Business Journal*, 31 (1), pp. 3-22.
- Ye, Q. and Fitzsimmons, J. & Douglas, E., 2008. Do Effectual Approaches to Entrepreneurship Destroy Value? *Frontiers of Entrepreneurship Research*, 28 (4), pp. Article 2.
- Yin, R.K., 2008. *Case Study Research: Design and Methods*. London: Sage.

- Yong-Kwan Lim, J.Y., Busenitz, L.W. & Chidambaram, L., 2012. New Venture Teams and the Quality Identified: Faultlines Between Subgroups of Founders and Investors. *Entrepreneurship Theory and Practice*, 37 (1), pp. 47-67.
- Zaefarian, G. & Henneberg, S.C., 2010. Configuration Theory Assessment of Business Relationship Strategies: Conceptual Model and Hypothesis Development. *Journal of Consumer Behaviour*, 9 (3), pp. 293-316.
- Zahra, S.A., 2007. Contextualising Theory Building in Entrepreneurship Research. *Journal of Business Venturing*, 22 (3), pp. 443-452.



**Anglia Ruskin
University**

Cambridge & Chelmsford

Appendix 1 Research Consent Form

Part 1: Research Description

Principal Researcher: Lianne Miller

Research Title: WORKING TITLE: ENTREPRENEURIAL PROCESSES-THE INTERPLAY OF ENTREPRENEURIAL THINKING PROCESSES AND THE BUSINESS

You are invited to participate in a research study that explores the way in which entrepreneurial thinking process (cognition) interacts with internal stakeholders and its impact on growth over time. The duration of the interview will be approximately 60 minutes. With your permission, the interview will be audio taped and transcribed, the purpose thereof being to capture and maintain an accurate record of the discussion. Your name will not be used at all. On all transcripts and data collected, you will be referred to only by way of a pseudonym.

Data Storage Confidentiality:

Under no circumstances whatsoever will you be identified by name in the course of this research study, or in the publication thereof. Every effort will be made that all information provided by you will be treated as strictly confidential. All data will be collected and securely stored, and will be used for professional purposes only.

How the results will be used:

This research study is to be submitted to fulfill a Doctorate within Ashcroft International Business School, Anglia Ruskin University, Cambridge, UK. The results of this study will be published as a dissertation. In addition, information may be used for educational purposes in professional presentations (s) or/and educational publication (s).

Part 2: Participant's Rights

- I have read and discussed the research description with the researcher. I have had the opportunity to ask questions about the purposes and procedures regarding the study.
- My participation in this research is voluntary. I may refuse to participate or withdraw from participation at any time without jeopardy to future employment or other entitlements.
- The researcher may withdraw me from her research at her professional discretion.

- If, during the course of the study, significant new information that has been developed becomes available that may relate to my willingness to continue to participate, the investigator will provide this information to me.
- Any information derived from the research that personally identifies me will not be voluntarily released or disclosed without my separate consent.
- If at any time I have any questions I may contact the researcher. The researcher's phone number is 07825225811 and email lianne.miller@anglia.ac.uk.
- Audio taping is part of this research. Only the principal researcher and the members of the research team will have access to written and taped materials. Please complete the following:-

() I consent to be audio taped

My signature means that I agree to participate in this study.

Participant's signature: _____ Date: _____

Name: (Please print) _____

Researcher's Verification of Explanation

I, Lianne Miller, certify that I have carefully explained the purpose and nature of this research to _____.

Researcher's signature: _____ Date: _____

Appendix 2 Ethics Approval



Anglia Ruskin
University

Cambridge & Chelmsford

Cambridge Campus
East Road
Cambridge
CB1 1PT

T: 0845 271 3333
Int: +44 (0)1223 363271
www.anglia.ac.uk

Lord Ashcroft International Business School

Tel No: +44 1245 493131 ext 6846
Fax No: +44 1245 607501
E-Mail: andy.armitage@anglia.ac.uk

9 March 2012

Ms Lianne Miller
130 Wangford Road,
Reydon,
Southwold,
Suffolk,
IP18 6NZ

Dear Lianne

Project Title: Working title: Entrepreneurial cognitive processes and the interplay with internal stakeholders

Principle Investigator: Lianne Miller

Thank you for your recent application for ethics approval. This has now been considered by the Business School according to the University Research Ethics Committee (UREC) procedures, and we are pleased to inform you that ethics approval has been given to your research for a period of three years from **9 MARCH** 2012.

Please note that if your research has not been completed within three years, you will need to apply to UREC for an extension of ethics approval. Similarly, if your research should change significantly in any respect, or if risk or harm or breach of confidentiality becomes likely, you will be obliged to submit a new application.

We wish you every success with your research.

Yours sincerely

Dr Andrew Armitage
For the Faculty Research Ethics Panel

cc Beverley Pascoe



Appendix 3 Phase II Interview Questions (Entrepreneur)

Research Questions for Entrepreneurs				
Interview Questions	<p>1: How do entrepreneurs' cognitive processes interact with stakeholders in the business?</p> <p><i>1a. How do entrepreneurs recognize opportunities?</i> <i>1b. How do you interact with the business with regards to these new opportunities?</i> <i>1c. How does the iterative process of your decision making with the business work?</i></p>	<p>2: What are the temporal issues surrounding the interaction between these cognitive processes and stakeholders?</p> <p><i>2a. How do entrepreneurs perceive time?</i> <i>2b. How does entrepreneurs perception of time interact with key internal stakeholders?</i></p>	<p>3: How do biases affect the interaction between temporal issues and the cognitive processes?</p> <p><i>3a. How does timing affect entrepreneurs biases in spotting opportunities?</i> <i>3b. What role do cognitive biases have entrepreneurial decision making?</i></p>	<p>4. How does the interplay affect growth?</p> <p><i>4a. What are the key factors between the entrepreneur and key internal stakeholders that will affect decision making?</i> <i>4b. How do these factors affect growth?</i></p>
Themes	Cognitive style Decision making (strategic) Opportunity recognition Alertness Schemas Communication Behavior Sense making/giving Cognitive style	Time taken Concept of time Experience of time Perceptions of time	Planning fallacy Over confidence Representativeness Familiarity Optimistic Confirmation bias	Growth intention Growth perception Performance perceived

	Analytical vs holistic Risk averse/conformity vs less risk averse/quantum approach to decision making Heuristic vs analytical thinking Counterfactual thinking			
	1. How do you go about making decisions?	2.1. How confident are you that the decisions you make are made at the right time?	3.1 How optimistic are you in your decision making ability?	4.1. How would you describe your growth strategy now and for this year?
	1.2. How do you gather the necessary information?	2.2. How long do you take when making decisions?	3.2 How optimistic are you? Are you positive all the time?	4.2 How do you define growth for your business?
	1.3. What kind of information do you regard as important when making a decision?	2.3. How do people respond to your timing when you make decisions?	3.3. Do you find you make quicker decisions when you are familiar with the subject? Give me an example?	4.3 How much of are your decisions are affected by the relationship between yourself and key internal stakeholders (KIS)
	1.4. How do you judge new information?	2.4. Do you take the same length of time when making decisions? Which ones differ?	3.4 How confident are you when you spot a new idea that it will successful? Give me an example? (optimistic bias)	4.3. How do you consider economic gains or losses with regards to growth? (prospect theory)
	1.5. What type of information would you need before you make a decision?	2.5 What do you think of the timing of key internal stakeholders (KSI) in the	3.5. To what extent do you think knowing a lot/experience reflects on	4.4. How do you communicate this to the KIS? What factors

		business when it comes to getting things done/decisions?	your decisions?	influence sense giving?
	1.6. How does the way you make decisions influence your environment?	2.6. Talk me through the timing of when you first spot an opportunity and discuss it with your employees and management?	3.6. Do you believe you can achieve more in a given time? In which ways? (planning fallacy)	4..5.How does your decision making affect growth in the business?
	1.7. What are the kinds of opportunities you have identified? How have you identified them?	2.7. How long does it take your key internal stakeholders to take a new idea on board? How do you communicate it to them?	3.7. How much time would you say you spend thinking about how new experience compares with your existing experience?	4.6. What are the factors that contribute to whether KIS adopt your new idea? Does it affect the growth you identified earlier?
	1.8. How has your experience affected your ability to spot new opportunities?	2.8. How do you perceive time?	3.8. What is your thinking process when you become alert to a new product or service?	4.8. How does being alert affect the business growth? What is your part or KIS part in the process?
	1.9. What kind of past experience do you draw on when making decisions?	2.9. In what ways do those around you respond to your perception of time?	3.9. Are there times when you would use your intuition to make a decision ? Can you explain at which stage and how?	4.9. How do KIS reflect your interpretation of growth opportunity? Your ability to give sense?
	1.10. Do you imagine what might have been when making decisions? (counterfactual thinking)	2.10. Is there more time to think careful and analytically or do you have to process information quickly?	3.9. How does you interact with your KIS when you use intuition to make a decision?	4.0 Do you think the flow of events leading to a decision with yourself and KIS affect the business? How?

				(sense making)
	1.11. How do you decide whether a new idea is worth pursuing?	2.11. What process do you go through in making sense of your (business) environment? How long does it take you?	4.0. How does the flow of events leading up to a decision differ between yours and KIS? (sense making)	
	1.12. When you notice change in the market place (disequilibria), how do you go about communication it to your KIS? Are you and others alert to these changes(KIS)?	2.12. Thinking about sense making (organizing, interruption, recovery). What are the factors between yourself and the KIS that hold things together in a crises?		
	1.13. Do you sometimes think 'what might have been' or 'a different outcome' to the one achieved? How do your KIS respond to this?	2.13. How much time communicating what is happening in the (business) environment take? Give me an example? (sense making)		
	1.14. How would you describe your thinking process in decision making? Is this reflected in the business?			

Appendix 4 Phase II Interview Questions (Internal stakeholders)

	Research Questions for Key internal stakeholders			
Research Questions	1: How do entrepreneurs' cognitive processes interact with stakeholders in the business? <i>1a. How do entrepreneurs recognize opportunities?</i> <i>1b. How do you interact with the business with regards to these new opportunities?</i> <i>1c. How does the iterative process of your decision making with the business work?</i>	2: What are the temporal issues surrounding the interaction between these cognitive processes and stakeholders? <i>2a. How do entrepreneurs perceive time?</i> <i>2b. How does entrepreneurs perception of time interact with key internal stakeholders?</i>	3: How do biases affect the interaction between temporal issues and the cognitive processes? <i>3a. How does timing affect entrepreneurs biases in spotting opportunities?</i> <i>3b. What role do cognitive biases have entrepreneurial decision making?</i>	4. How does the interplay affect growth? <i>4a. What are the key factors between the entrepreneur and key internal stakeholders that will affect decision making?</i> <i>4b. How do these factors affect growth?</i>
Themes	Cognitive style Decision making (strategic) Opportunity recognition Alertness Schemas Communication Behavior	Time taken Concept of time Experience of time Perceptions of time	Planning fallacy Over confidence Representativeness Familiarity Optimistic Confirmation bias	Growth intention Growth perception Performance perceived

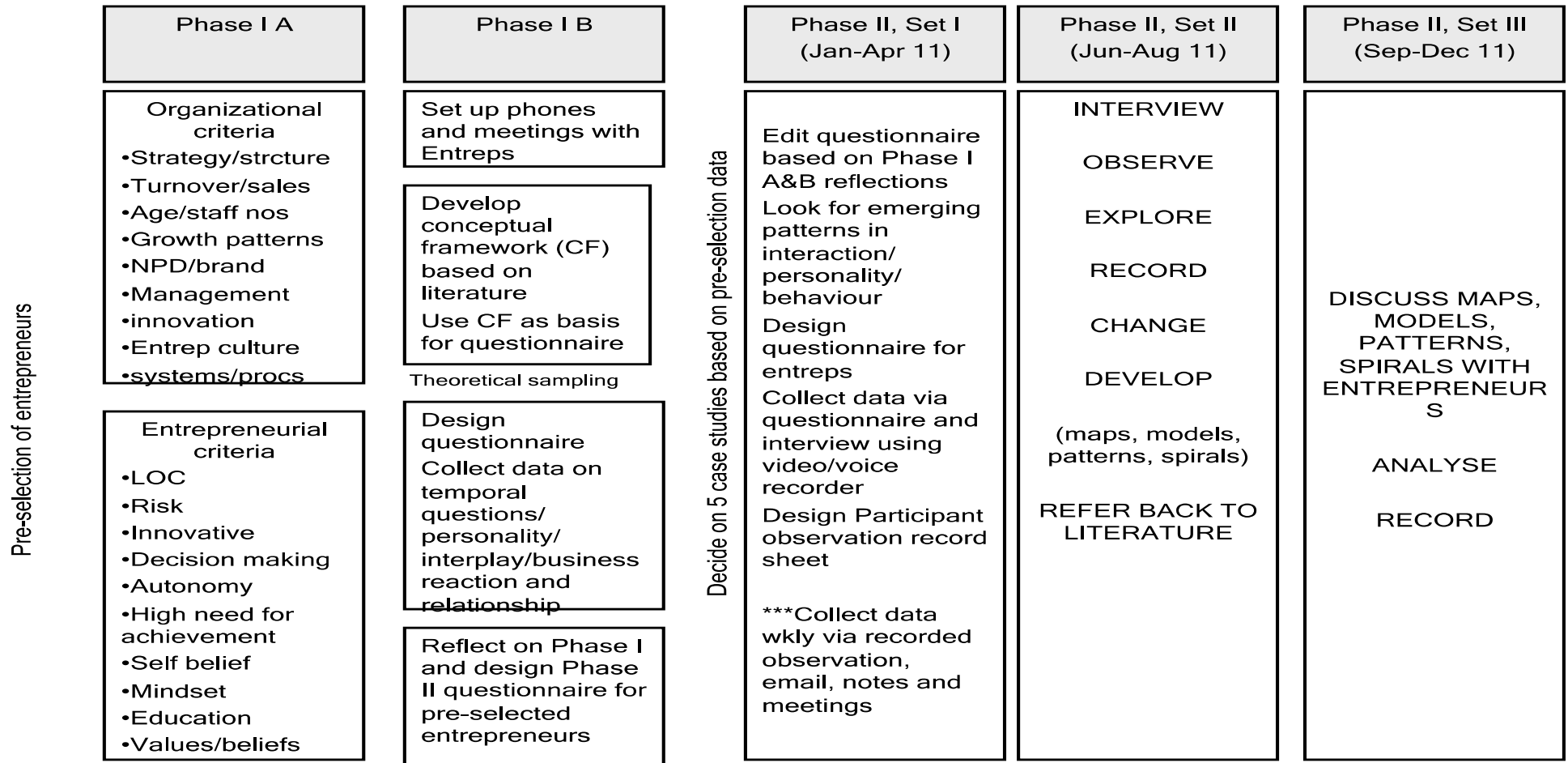
	<p>Sense making/giving Cognitive style Analytical vs holistic Risk averse/conformity vs less risk averse/quantum approach to decision making Heuristic vs analytical thinking Counterfactual thinking</p>			
Interview Questions	1. How do you think (name) goes about making decisions?	2.1. How confident is (name) in making decisions at the right time? Do others have the same time awareness?	3.1 How optimistic is (name) in his decision making ability? How does this come across to kis?	4.1. How would you describe your growth strategy now and for this year? How would (name)? How is this communicated?
	1.2. How does (name) gather the necessary information?	2.2. How long does (name) take when making decisions? How does this compare with kis?	3.2 How optimistic is (name) as a person generally?	4.2 How do you define growth for your business?
	1.3. What kind of information does (name) regard as important when making a decision?	2.3. How do people respond to (name) timing when you make decisions?	3.3. Do you find (name) makes quicker decisions when familiar with the subject? Give me an example? Is kis as familiar?	4.3 How many of (name) decisions are affected by the relationship between himself and kis?
	1.4. How does (name)	2.4. Does (name) take the	3.4 How confident is	4.3. How do you consider

	judge new information?	same length of time when making decisions? Which ones differ?	(name) when spotting a new idea that it will be successful? Give me an example? (optimistic bias)	economic gains or losses with regards to growth? (prospect theory) How does (name) see them?
	1.5. What type of information would (name) need before you make a decision?	2.5 What do you think of the timing of key internal stakeholders (KSI) in the business when it comes to getting things done/decisions?	3.5. To what extent do you think knowing a lot/experience reflects on your decisions? And (name) in your opinion?	4.4. How does (name) communicate this to the kis? What factors influence sense giving? Do kis respond in the same way?
	1.6. How is the environment around (name) influenced by his decisions?	2.6. Talk me through the timing of when you first spot an opportunity and discuss it with (name) and other kis?	3.6. Do you believe (name) can achieve more in a given time? In which ways? Does he? (planning fallacy)	4..5.How does (name) decision making affect growth in the business?
	1.7. What are the kinds of opportunities (name) has identified? How has he communicated these to kis?	2.7. How long does it take your key internal stakeholders to take a new idea on board? How does (name) communicate it to them?	3.7. How much time would you say (name) spends thinking about how new experience compares with his existing experience?	4.6. What are the factors that contribute to whether KIS adopts your new idea? Does it affect the growth you identified earlier?
	1.8. How has (name) experience affected his ability to spot new opportunities?	2.8. How does (name) perceive time? What is his relationship with time?	3.8. What is (name) thinking process when he becomes alert to a new product or service?	4.8. How does being alert affect the business growth? What is your part or KIS part in the process?
	1.9. What kind of past experience do think (name) draws on when making decisions?	2.9. In what ways do those around (name) respond to your perception of time?	3.9. Are there times when (name) would use your intuition to make a decision ? Can you explain	4.9. How does KIS reflect your interpretation of growth opportunity? Your ability to give sense?

			at which stage and how?	
	1.10. Does (name) imagine what might have been when making decisions? (counterfactual thinking)	2.10. Is there more time to think careful and analytically or do you have to process information quickly? What about (name)?	3.9. How does (name) interact with kis when using intuition to make a decision? How do you explain your decision?	4.0 Do you think the flow of events leading to a decision between (name) and KIS affect the business? How? (sense making)
	1.11. How does (name) decide whether a new idea is worth pursuing?	2.11. What process does (name) go through in making sense of your (business) environment? How long does it take?	4.0. How does the flow of events leading up to a decision differ between (name) and KIS? (sense making)	
	1.12. How alert is (name) compared to kis about new ideas? How do people respond to this?	2.12. Thinking about sense making (organizing, interruption, recovery). What are the factors between (name) and the KIS that hold things together in a crises?		
	1.13. Does (name) sometimes think 'what might have been' or 'a different outcome' to the one achieved? Are the people around him the same? If not, how do they responsde?	2.13. How much time communicating what is happening in the (business) environment take? Give me an example? (sense making)		
	1.14. How would you describe (name) thinking			

	process in decision making? Is this reflected in the business?			
	1.15 How would you describe the relationship between yourself and kis?			
	1.16. What factors influence this relationship?			

Appendix 5 Data Collection Process



Appendix 6 Email Exemplar from Case A

From Case A, CEO Internal Stakeholder
To Entrepreneur
Cc
Subject RE: Moving forward???

(Entrepreneur)..

Thanks for this, its brilliant....just what I need, I know that you support me on these and it really helps to vent frustrations with you – I too felt low on Friday but after our meeting had renewed vigour to get this sorted....

I agree it will be slow (and that is what causes a lot of the frustration) but think the time is now here where we have to start making things ‘stick’ and this will take some time..

I think this also leads into the whole planning area and how this probably needs to grow up and be somewhat less flexible than current.

Lets work through the plan the first week May

Cheers, (CEO internal stakeholder)

From: Entrepreneur
Sent: 25 April 2010 10:32
To: CEO internal stakeholder
Subject: Moving forward???

(CEO internal stakeholder)

Firstly we need to identify where forward is? I think both of us have a good idea of the standards to which the company should operate and we need to get there. I have just spent a hour or so going back over some of my old documents which set out the way forward for us to achieve delivery and good communication and response to clients. Some of these you will have received yourself but with one thing and another – distractions such as moving premises and just getting on with growing the business the momentum was lost and these initiatives took a back seat.

The biggest obstacle to achieving the objectives we talked about last Friday is that we have been very successful. Some commentators would say it is not broken so why try to fix it as you may lose something. I think you may have even said similar things a

few years ago. However as we both now understand it will eventually be a barrier to our progress and in that I am convinced, as you are. I will dig the old documents out (unless you still have them) when we chat about this subject when you return. Unfortunately I was a voice of 1 (2 if you count 'internal stakeholder') but we were moving forward so stop complaining comes the plaintive cry, however I think in your new role it is providing you with the clarity required for us to finally get more momentum going. I am very keen to get involved in this and with the extra push we should be able to progress.

Some thoughts on this reveal that we may have to start from the ground up and identify some of the issues, which are fundamental and as we both know may be cultural within the company. Changing this will be relatively slow and methodical and will take planning. But if we don't have an action plan for this then perhaps we have failed to understand what is required – it is the fact that others don't have action plans that is part of the issue!!!

I mentioned time-management courses and instruction and it has been a long-held belief that if we cannot get the fundamentals correct such as how everybody should operate Outlook and set out our criteria for responses then perhaps we should not expect to succeed.

Can I suggest the following. If we understood how key personnel (TLs/SAs and above) operated their Outlook or other time management system then I think we will gain a far better understanding of where we may be going wrong. Do staff have a time management system? Do they know what they need to do? Do they know the standards required?

The first questions could be sent out simultaneously with a timed response request and that will probably reveal a lot of information, although there will be a lot of serendipity involved if someone just happens to be on-line or others are in client meetings. We can then discuss the results and work from there.

Following Friday's meeting I felt quite low, especially as you were coming up with the same issues I had some years earlier. However I have a lot of time to think about matters and now feel quite positive as there is additional momentum and I think we can move forward – it was a rather lonely and frustrating journey – but we were still growing and succeeding !!! let's make this subject the focus of our meetings in the coming weeks and perhaps even devise an agenda and start coming up with an action plan – presumably this will form a cornerstone for the BP?

Have a good trip.

(Entrepreneur)

Appendix 7 Phase I Case A Selection Themes

Phase I: Case A Categories		
Entrepreneur		
	Company information	
	Entreps Background	Lasted 1-2 years at University of Brunell. Told I wasn't bright enough. 6 month placement as trainee manager with building company, then HNC with day release, chartered institute building exams- 5years. Left building company, joined a subcontractor, after 8 months got offered my boss position. Looked after 30 million pounds. Left there to become self employed. Worked as freelance construction manager for 7 years til last recession in 80s-90s. Packed up work for 2 years as market wasn't boyant. Bought a local school and converted into couple of properties. Bought other properties as recession prices fell-bought at fraction of price. Thought after 2 years I should be doing something
	Style	Enjoyed building-its very practical. Can see what you've done at the end of the day. See the progress which if found rewarding.
	Motivation to set up business	I thought about what sort of company would probably be less affected by recession, didn't cost a lot to set up. Hopefully generate a revenue stream fairly quickly.thought about electrical safety testing which I knew nothing about.
	Setting up the business	Put myself on a course. Asked 5 friends, relatives whether they wanted to invest and they all said yes. When it came, people fell away, so I put the lion share of money into the business.
	Business growth	Turned over 17 000 in the first year
	Employees skills	But now we have people that are very very experienced in electrical engineering and electronics.
Entrepreneur Transcript		
	Entrepreneur thinking	I thought we were going to turn over 100 000 in the first year, we turned over 17 000
	Self awareness	I realised I knew very little about sales and marketing. I suppose its traits I wouldn't like to think I have but apparently I have got.
	Problem solving	I found it very difficult to pick up the phone and actually ask people for business. So I developed a system that I never had to do that. It was fax back mailout system.

	Knowledge/skills	I knew very little about electronics, very little about electrical works. I know a little about the legislation. I bought the guidance notes, the health and safety guidance notes.
	Risk	But it was an industry that I looked at, I knew about health and safety, it was compliance. I looked at targeting those sectors that I thought I would have better response, so schools, uni, colleges, the education sector.
	Entreps self perception	Different to how others would describe me. Had psychometrics test. Some of the traits I've got, I wouldn't say are the ones I would be particularly proud of. I think I'm fairly easy going. I don't think I'm as demanding as people think I am. I think I give a lot, I expect a lot. But I also give a lot in all aspects of life. If I'm putting a lot of effort into something, I expect someone to also put the same effort into the other side so that it balances.
	Mothers view	I don't tolerate fools and that was the nicest thing she said about me.
	Others view	But people would say im quite demanding of them.
	Employee relationships	In business I can be very hard. I can be very provocative to get a result. . So I will work 24 hours a day to actually get somebody to get to a stage when for instance that sales manager produces results. The ways of actually getting people to respond and the speed I need people to respond has changed. I must say I can't be that bad cos they all still here after u know its 10 years on. But my main job is to make sure people get paid at the end of the month and the company is successful. What I have learned is that not everybody has had that security in their previous employment.
	Experience /knowing	If something is going right, I know the repercussions of something. To get them to achieve it is not going to benefit me directly, but its going to benefit them by keeping their jobs
	Changes over time	I've mellowed, as the company has and that partly because this company has grown.
	Timing	When a company is very young, you need to have results pretty quickly. If people are wailing around debating whether they are going to follow you or not really its too late by the time...you cant allow that.
	Behaviour	In certain circumstances, I've literally thrown everything up in the air to provoke a reaction, in some

		<p>cases to pull a team together to unite against me. I didn't enjoy doing it, I didn't feel very good, but...my telephone didn't ring for 3 days. No one in the company spoke to me. I think I was a figure of hate.</p> <p>I needed to provoke a situation and be so dramatic that people did actually sit up.</p> <p>But they actually understand more about me and the effect it had on me and that their view is they don't want to see that again, and neither do I.</p>
	Financial performance/productivity	<p>We had the company sales had gone into free fall, the productivity started to unravel, because we weren't being firm enough, managing the business through the different levels. We all knew how to do it, but sometimes people take the path of least resistance. I literally turned out all the final cabinets and said I've asked nicely, I've asked repeatedly, now all the files everything are all scattered across the sales floor. Now pick up each one and telephone the person and see if we can do business with that person. Gradually over the next month everything our sales figures just shot up again and they carried on going up for the next 6 months. They carried on going and going and they were reaching higher and higher levels. We were making more profit than ever making before.</p>
	Communication	<p>After 3 days one of the senior sales managers rang up and said I'd like to come and talk to you. They came over and said the way you dealt with that was outrageous. I let her say exactly what she had to say and ok, you think I enjoy it.</p>

Appendix 8 Phase II Set III Case C Exemplar Transcript

Has anything changed in your interaction with (entrepreneur)?

Not a huge amount. He is distracted on other things right now I think. So largely we've been left to our own devices which is fine actually. So I tend to get him involved when I need to and not when I don't. so he still maintains the same organizational input, when there's a meeting he's there when it includes him. On a day to day interaction is less because he has other things on his plate. But that is sort of part of the general process. When someone backs away from the activities for a given reason or a give time you just fill the gap and that's fine.

In that sense its probably change slightly but that's a temporal blip, but I don't think its changed drastically anyway.

You mean you think he will be back involved more?

What tends to happen is he tends to poke things when he feels he wants to know more about something or ask more questions. Be more proactive and suggestive and when I do ask him something he tends to more comprehensive in his response/discussion. At the minute it is very limited to the specific of what I ask. And sometimes limited in terms of the response at all and also he is not poking so much. So will he go back to being perhaps more involved? Probably yes I think he will. I don't think its an evolution particularly.

I don't really know whats on his mind. You talk about succession and things like that. We don't really have an open succession discussion or anything else. All we have is we sort of both know we running the business and therefore I go and do whatever I want to get on with and he does whatever he wants to do. And if either of us spots a gap then we try and fill it ourselves if either of us wants the opinion of the other person then we ask it. So all that happens at the minute is that his input is reduced so I fill the gap, if he wants to put more input in then that's great I don't have a problem with that actually.

So yeah its interest, its interesting not having him quite so involved in the business at the moment simply because we're surviving. We doing reasonably well. Its always useful having someone to bounce ideas off so I sort of miss a bit of that actually. Because I don't feel like with (internal stakeholder and other group managers that I can bounce quite so many of the more strategic issues off. Sometimes cos its including them and also sometimes because its including their peers. So I don't really want to discuss those with them. So its hard when (entrepreneur) is not so involved to have someone to bounce some of those ideas off. We don't really, you now our board is not really functional in that way. Its (entrepreneur) and me really.

You know the finance director doesn't really have a view. So that...I do think that's temporary blip. I do think he's got other things on his plate right now to deal with.

In terms of growth in terms of growth compared to the beginning of the year?

We are roughly on target in terms of profit. We down on overall revenue, we down on sales but profit we've maintain cos we've handled the costs. We put a reasonably aggressive budget in the beginning of the year. So in the context of the last 5 years we doing very well on a yearly basis. We slightly below on revenue not profit. So ok. In terms of growth our growth will come primarily from recruiting people to get head count growth but it also comes from identify new things and maybe setting it up to be separated or to be something different.

We only have a couple of those activities, they not making great progress primarily because we want to do them in partnership with somebody else and those other people are not really willing to put much money in right now. That will probably change and we taking a relatively cautious approach to how we separate those out. So we don't invest a huge amount in them and lose it all. But we'll get there. But those are the engines of growth for us.

We not looking to double in head count or anything like that. So we doing ok, we still not growing head count as fast as wed like to and we knew that at the beginning of the year and we budgeted for it. we knew that recruitment would be hard and low and behold its been hard. We have not, I think we 10 down on where we should be in terms of head count.

And that's due to?

We just cant' find the recruits. We set an extremely high bar here for recruits, extremely high bar. They have to be technical brilliant and they have to be aware. And they have to show signs of creativity innovation, in a package then you asking quite a lot of somebody. So we see lots of people but they not must haves. So generally if they not a must have we just think we won't bother. Because theres nothing worse than getting somebody in who is average. You know you don't really want that you want to maintain the bar. What we are doing is changing our strategy in terms of how we try and recruit people. So we focusing a lot more on the university departments where we know we want people.

So take specific departments from the university target recruitment activities at that department. So at least if they don't join you after university they still remember you name and so maybe 5 6 years after that you get the best ones joining. That works much better for us than wait for people to get out into industry and then encourage them to join us then. We doing ok, in summary we doing ok. I think we set ourselves hard targets and in the kind of business we are, we don't look to make incremental growth, we look to maximize opportunities. And sometimes that maximization of opportunities means that theres a..you don't chuck it out the business straight away you hold it in and you take a cautious approach to actually realizing it.

And that's sort of where we are right now.

So whose making the decision on recruitment at the moment?

Me. Final decision. Me was probably a bit pompous actually. The company makes the decision on recruitment. Its initiated by people within the groups, the group manager and it comes to me for a final interview. If I think it's the wrong decision then I tend

to steer people away from it. if I think it's the right decision I tend to give it a blessing. And so take James at the minute, he's had a few recruits. I allow him to try and be persuasive on things like recruitment, but also the same time have to, I sometimes have concerns about the directions he takes and .. a few instances recently ive encouraged him not to make a decision. Or I encouraged him to think about it in a different way, so rather than just saying I don't think you should, it almost has the opposite effective than encourage him to try and find reasons why you should and then it becomes a who can win the argument which is bad.

To the way I tackle it right now is to lay out all the reasons positives and negatives and then get him to give a view on that and to give his opinion. If in spite of these things he still wants to recruit then if set up the questions in the right way, then he either answers my concerns in which case I feel happy about the recruitment taking place or actually he convinces himself that actually it's the wrong recruit. So that actually works quite well whereas previously whats happened with him and with some of the other group managers, id just say no I don't think so and we've either had an argument which ive won and they've just felt a bit annoyed about or you know they just accepted the view. In which case its actually a bad thing cos they not really making the decision.

I realize what I want, while I have this notion of final check, I want it to their decision really and I'm really just there to gate keep the standards, the direction of the business. You know that part of it. (entrepreneur) isn't really involved in that anymore. And that's quite an interesting decision for him actually. He gets to see them all when they come in. so when they come in he makes sure he sees them for 15 minutes or something to get to know them. But it's a bit of a fait accompli by then they already in the business.

That's a bit strange that's he's willing to let go of that somehow when he's actually not happy to let go of other things which seem much smaller. Given the fact that you know we a people business. That is the sort of way it goes. If you look at it generally then I have the last say but actually the group themselves should have the ability to make the decision. But you don't want a situation where I disagree. So I guess could I sustain a situation where a group is recruiting someone who I thought was wrong? And the answer has to be no. and then its up to me to influence them rather than just try and wield some kind of axe to say no you cant' recruit.

So are you recruiting the same sort of person that (entrepreneur) would have recruited?

I don't really know actually. Because it's a very interesting question. I think so. But I don't know so. So how do we correlate what..i think we actually recruiting better people. I think im a bit more challenging in the recruitment process.

I think (entrepreneur) was probably more challenging of people, groups that didn't have a strong revenue. Groups that clearly need to recruit. My experience of (entrepreneur) influence on the groups was that for me when I was recruiting for my group at the time, he would be remarkable yeah fine, very easy. He'd focus on what projects are they going to do when they come in and the revenue aspects of it. and

he'd made up his mind from seeing them and him and were very never ever miss aligned on the person themselves.

There were some people he was more enthusiastic than I was, but I wanted them anyway so id go in with someone he was over the moon about and id be thinking mm. they weren't that good. Maybe slightly visa versa. Id be enthusiastic and he'd be accepting of them. So I saw it from that end of things, but when I look at people he let through in other groups there were a number of very poor recruits into one group. That I would never have let in but maybe he was persuaded by that group that it was a reasonable thing.

So I find myself in a situation of being a little bit harsher with people and forcing the group to challenge themselves with is that guy really great you know. What made you think they are going to be the creative inspirational business leader that we want? And I find a lot of the group managers turn around and say yeah you know he's not that good or she's not that good and so we don't recruit. There are very rarely situations that I really like somebody and they don't but that's usually the way the process works. I don't get to see them unless they like them so its never going to be the other way around. The only situation its that way around a sort of a senior recruit sort of business developer that ive spotted or something.

Do I recruit differently, or do I have a different judgement...I don't think so. I think the essence of what the recruits are are probably similar. And probably Peter in my position would be as diligent about things.

The project leaders course they go on when they arrive?

Its not when they arrive. They usually here for a year or two before they go on that course. They often, the training course is our presentation course and then a project leadership course. The project leadership course is usually a year to two years. They have to be running or thinking about running a project.

How much of that course shapes the employee and manager they become?

I think it does do quite a lot of shaping. I would say that it should complement the shaping it shouldn't be the only part of shaping so you could never rely on the training course to drive the culture or to drive what people are about. People should pick how it is to work here and what the key things are from people around them and from how the things go, how works happens and talking to their colleagues. The course should be there to reinforce formalize it.

We have done and are in the process of changing the project leadership, so and this is again part of the thing that (entrepreneur) has delegated to me is the training and we are going through a process of changing. So we have this project leadership course is facilitated by external people but mostly contributed to by people who work in the business. Last year and the years before that it was a few ex employees who ..the old founders and things like that, people who were in the spin outs so I sought of pushed it back to bring a new breed of people in there so the next generation of people. James is one of those whose contributing to it.

And task them with the challenge of saying ok what should the course look like. So they've sat in on the current course that's just run. Starting next year we'll start working out how the course should be reformed and the key thing is for them to actually step back and say how they think it should be. And for me and them to then work up a course that's fit for today and fit for the people we have. Not one that was fit for the people we had 10 years ago and was probably evolved in a slightly different way.

So put in place the right people to control that course. Again it will be externally facilitated but the content will be controlled by us. And you know the group managers and some of the senior people will basically dictate the content. So that's useful in 2 ways. The reason for doing that is mostly to make the people, senior people and group managers think harder about what they want. So asking them to do it rather than me do it, is to make them hard about what they want in their groups and to have the conversation. And then once we've got that conversation we distil what we want.

Actually the course is almost you know another benefit. Another major benefit of actually having that discussion. And for people thinking hard about it. cos it's too easy to drift into doing things how you've done them, how previous people did them or just not think about them. So that will be a very useful learning experience for everyone including myself. We'll have that new course or the revised course and it will filter through so you know talking about new joiners they'll get the benefit of that straight away because everyone will be thinking about what it means to be a project leader, what it means to be a client manager from just the fact that everyone is thinking about that a different way.

You spoke about the course reflecting the changes..what do you mean by that?

If you think of the origins of the business. The business was founded by 20 people who were very well trained. So they were consultants, consultants from up the road. They'd had all the training courses that a very expensive management consultancy can throw at you. So they had a lot of training, they had already done a lot of business so they were very experienced. A lot of chiefs and then they eventually filled in with Indians if you like over time. Now what's happened over time those guys have gone and we find ourselves with a less deeper level of experience in the business.

So we have a group of id say 10 best maybe people who really know which way is up. And then maybe a broader group of 30 who knows roughly which way is up and then you have maybe another 50 who are you know probably on the right track, and then a large bunch of people who view it as a job. And those people who are just too young to really know which way they want to go. So we've less experience within the business and historically we used to learn a lot by just speaking to people.

But if you don't have the high level of understanding within the business with a small number of people just speaking to people doesn't give you quite the same you know knowledge capture than if you had half the business being very experienced people. So there's been quite a reasonable shift in people, the younger generation and that puts an emphasis on making sure the 10 the 30 think hard about things. And you challenge them with the thinking and they develop a view and they try to get better quickly. And then they push it out to people more coherently and they more proactive.

So it's a slightly different business, perhaps a little more forceful communication than otherwise you used to when you had a high density of experienced people. We have more of a traditional density of experienced people, those learning, those who don't care, those that you know will eventually be stars. We had that density of those than this business had when it first started. I think as a result you need to have a slightly different attitude with how you communicate those messages. So one thing I know (entrepreneur) is very aware of concerned about is you know that level of expertise. He wants more people to be off the cuff business people, and we need to push for that.

But that is a symptom of the fact that across the business the expertise level is slightly lower. Were a bit more stratified as an organization than we were when you just shoe horn in 20 people who are very well trained. And you know you grow it from that point. So then again hopefully as an organization cos we relatively young. We not going to have a huge turnover of the senior people, and experienced people. So maybe actually we can get up to speed 50 people who are all seeing, who all have the direction of the business clearly. They understand all the issues clearly. They all you know more experienced and trained in the way that business is done here.

And the way we do business best.

You mentioned speed..is there more pressure, does it have to happen quicker?

I think I mean patience. I think generally here, the difference in speed now than perhaps earlier is there is an impatience to change. If you see a problem then just fix it. or do something about it. I don't think, there isn't a huge change. Again (entrepreneur) and people who founded the business were I guess quite proactive and in a business sense they moved as fast as they wanted. Now do people, people still probably ..progress the business things as fast as possible.

I think historically there probably wasn't the pressure on the structural changes. People didn't think hard about the structure and how you know we get more people up to speed probably cos they just didn't have that issue. We have the issue where we have too may inexperienced people or not enough experienced people. So there is a pressure now on that and to do that. And to do that reasonably quickly. But that was pressure that didn't exist 20 years ago.

So is it different, do you have to think about it quite differently to (entrepreneur)?

I think it is quite different, I think its very different. I think that..this is my interpretation and some discussion with him. I think that he had a bunch of experienced people who were quite well, intrinsically motivated. Don't forget this was a start up business that people were highly invested in. we have an organization now where even the most bought in people of my generation own a small fraction of the business. So are not quite so financially motivated or bonded to the business.

The community spirit is less cos again its not a small founder organization. So peoples engagement with the business is lower. So when you've got the situation when you have a certain level of less expertise less engagement, then you have to

manage in a different way. Just expecting people to be more engaged, expecting people to be bought in and to be good is not a way to run it. so I think when (entrepreneur) was involved, to some extent when (entrepreneur) first started and Gerald was running it then it was one way which was basically (other founder) stopped everyone from killing each other.

Because they were highly competitive and then when (entrepreneur) had taken over he probably kept the blood bath to a minimum. (entrepreneur) was basically largely responsible for the evolving that change of generations of which I'm part and James is part. So (entrepreneur) was doing much more of a transition. But I don't think he gave as much thought and hasn't given as much thought as he will now and I will now to actually how we bring on this next generation. And how we train and engage them in an organization that isn't, we often say we employee owned, and that's true but the vast majority of people don't feel as engaged as they used to do.

Even when I joined it was all about the company and the share price. It was just automatically assumed you'd be buying shares and this kind of thing. It had some momentum of its own, now there's less interest in that side of things. People don't feel quite as engaged. And we need to handle those issues so it has changed. And how we manage has to change with it as well. You know so..question yourself about how you engage people. I don't think the managers typically questioned that in the past. They just said you going to be engaged, you came here to ..get on with it and just be better.

You know the appraisal process is non existent really. Its just a series of questions. So how do we actually performance manage people better.

How do help them to be better, open their eyes a bit more. I think there's a generational change as well. I think today's generation of people are very different from the previous one. So take (entrepreneur) generation and his peers, you know they were thinking very hard about what they were going to do in business and what they wanted to do and you didn't have to sort of open their eyes to things. They scabbled to find things. Even people of my generation we thought hard about being successful in business, it seems the new generation are a little more expectant of the things to be opened to them.

And you know for example and they communicate more freely in less controlled way. An instant about a year ago when one of the new joiners sent around a ..presentation material, including the chairman. It was rubbish. I would never have sent round information to anyone, if I had just joined the business let alone the chairman without making sure that it was spot on. I probably would never have done it actually so there is a generational...and that's not just the person being daft or anything else. Hes probably more extreme but as a generational change of people and how they behave. And I think we've got to change a bit as well to manage that.

Did you have to upward manage (entrepreneur) in that or did he recognize on his own?

There is a recent instance, so the Linkd in thing...disaster. So (entrepreneur) wanted to ban it. and doesn't perceive this private business overlap and ..it must be about a

year ago. It was raised to his attention by one of my helpful colleagues and he sort of had a very allergic reaction to it. and I had to hold him back from that. And to his credit he held back from it. I then had to walk him through how we should do things and it was quite annoying actually and ..he asked our marketing team guys to sort of take leadership of it. In delivering in working what a policy should be and how we should tell people about the policy. And that person is not very much in tune in understanding peoples feelings or you know trying to avoid conflict. He quite likes conflict.

So he was the wrong person to do it. (entrepreneur) appointed him, I didn't like it but it happened. I then tried to work with both of them. (entrepreneur) to his credit was engaged in that process. I pushed more for a guideline than a policy. And we ended up with a guideline. However at the last hurdle I dropped the ball, I let this marketing person just put out some material and it read like a policy as opposed to a guideline. And so it was the wrong thing to do. We should have made the group managers disseminate it more informally within their groups. Maybe with a document attachment.

That would have been the right way to do it. but you know I do ..influenced. In that case I managed to achieve some things I didn't achieve very much when it came to the final dissemination. Since then I've worked to recover it in certain areas. (internal stakeholder) has an interesting point actually cos (internal stakeholder) doesn't believe in the policy and he went along with it eventually. But him and I had quite a few discussions about it.

So I ..having had..(entrepreneur) wanted this policy imposed. He wanted the group managers to sign up to it but it wasn't really accepting the fact that they would disagree. So I spent a long time with each of them getting their concerns out addressing their concerns. Essentially trying to get a consensus and we got to a view of consensus within the group managers. But it was a consensus of the worst, I mean compromise not a consensus. It was compromise about what people would basically accept. But they didn't like it. so it was ok and if that would have been handled correctly it would have been reasonably well done. But he delivery was the poor thing.

And (internal stakeholder) still hasn't quite bonded to ..although he agreed with the consensus he hasn't quite changed his profile.

So he wanted to have freedom with the profile?

No he wanted less of a lock down than we eventually got to. So theres disagreement. I do sit neatly between (entrepreneur) and his view and the other guys in that I don't see linkd as..is see linkd in as a dangerous thing I see it as a thing that doesn't help out business. Broadcasting your background is not helpful both from a recruitment point of view but also it doesn't come across as necessarily right with our clients. You know facebook just doesn't have a place in our business.

So I want to manage it carefully but I want to provide people some individual freedom. (internal stakeholder) wanted much more individual freedom than I did and certainly (entrepreneur) did. The actually point, there are situations of upward

influencing (entrepreneur), there aren't that many cases where I have to upward influence him. Because I said early on his not been very proactive in terms of the business right now and that means I can largely get on with it. however I think what ..we've got a slight confusing situation where is sort of probing somewhere I don't know where he is probing or what he is asking to happen. And this is the situation with linkd in he asks (employee) who is this marketing guy. Can you just do another recruitment brochure, ive no idea its happening.

All of a sudden this recruitment brochure pops up and its rubbish and its like oooh wouldn't have done that. And I can't..had no opportunity to influence.

Where along the process you find out about it you mean?

Exactly and it ..theres not..we're not very cohesive at the moment. That's the point and I think its sometimes hard to be cohesive when your role is not very clear. The delineation of our role is not very clear. Im sort of quite happy with that cos it means I can get on and do what I like but at the same time I suddenly find that something has happened over here and its not the way I would have done it.

But you know (entrepreneur) is very experienced and he has a lot of value and im happy for him to get on with doing some stuff. Like I said at the moment its not that bad.

You hoping that that is going to change at some stage?

I don't want (entrepreneur) not to have an influence on the business. But I think a greater delineation at some point is what needs to happen. And whenever he feels comfortable with that fine. Im not even sure you may find delineation just happens cos he is no longer involved in things or stops commenting on them in which case that side, its not a question about me stop being the deputy and being the managing director, im not even concerned about that anymore. I used to be concerned about that from the point of what it meant.

But actually its more about what I do not what I call myself. So if I feel I have responsibility over the remit and get on with it, then that matters to me more. I don't want a situation where im not controlling things. A situation where you notionally responsible for something but you cant control it or even worse you not sure whether you responsible or not for it so you don't do anything. And then you don't do anything and actually someone thought you were responsible for it and so..so the minute I have notionally no responsibility I just point to (entrepreneur) and say aren't you picking that up?

So actually in principle its quite a nice place to be from that point of view but at the same time there are things happening that I would not necessarily agree with. but not many as I said there aren't that many. Now if he returns to an actively poking suddenly I find all these 4 or 5 streams of new things going on I don't know about I might be a bit annoyed about things. It probably makes me focus on different areas to

...

You do speak about being able to influence his decisions and shift his mindset. Is it with some things and not others?

So that's an interesting point, I've not really thought about..I know his touch points and things he doesn't like. So he has very much a view on individuals. A bit like..the view of how people used to be so he has a very strong view that people should be business builders and things like that. Which is true which is right. But he is very adamant on that. He is a bit black and white about this private personal thing. Private vs business. And he is less influenceable there which is why I tried very hard on the linked in thing and we actually had some success.

He's very influenceable on how we organize the business with..for example the systems we run on databases the systems we run on ..that he is very influenceable, that he abdicates responsibility for. I think he..he is influenced over a large proportion I would say. His not a sort of traditional founder who has got very stuck in the ways on things. I think he has a strong view on what the culture should be. And the way he does see it is that he should be responsible for the maintaining the culture and keeping the culture aligned.

And you know I think that's fine actually. As a someone who has a longevity in the business who understands ..culture is one of those things that adapts over time so you've got to have a reasonably history to know which way it was headed, and how it was.

You just take a snapshot of the culture you can't really get your bearings. So and that's fine. So cultural things, he keeps a very strong hold on facilities, which is just daft. It's just daft so he spent a long time with this lecture theatre. And he dragged me in to that project as well and so I was involved in that project. I think he dragged me in cos he wanted my opinion. And so I gave him my opinion and so we ended up with you know a nice facility but we spent an awful lot of money.

But he's very cautious about things for example if I want to put a building up or something there's material adjustments he's been quite careful about it. He did let me run riot on the area that's been developed down there. Did you walk past it? there's an area at the bottom of this building that's being developed as office space. A new coffee area. He said we want some ..you know area here, (CEO internal stakeholder) I'll leave it up to you. So I spoke to some architects and I kept him in the loop a bit.

And I changed things a bit, and he's not really objected. In fact his not, until last week when I took him down there he said that's not on brief. It really annoyed me actually. He didn't like it...

What were the changes you made?

These long bead things, they not right, I knew they weren't right. And I was in 2 minds about them and (employee) whose assisting she was sort of really liked them so I called (entrepreneur) down to get a judgment and he was just a bit scathing about things. But I think he was in a bad mood but anyway that he did let me get on with it and actually it will be cheaper and nicer than the lecture theatre. (laughs)

He didn't like..given what he spent on the other place, it was 3 times more expensive. Same square foot. Anyway..he has certain strange things he keeps hold of. But I think to some extent he also uses it as an exercise to try and get across the importance of things so he tends to be quite slow to make decisions questions an awful lot when he thinks something is important you should think about. Rather than just saying its your decision he will question you a lots about it. so for example if you want to put up a building he will or put up a new interior space he holds on to it to make sure you think long and hard about it.

Cos he regards it as important so he makes sure you've thought about it. so it's a way of him exercising or transferring what he views as important. And so in the future when I think about interior space I'll spend a long time thinking about it cos ive had to when ive been dealing with him. So even long after he's had actually out of the control he's let go of the control of the interior space, I'll still spend a long time thinking about it.

Because that's what he's made me do. Now I would probably go through an evolution from that and probably impose on it to some extent my view on the priority how much time do I want to spend thinking about that versus the revenue generating aspects of the business.

But you know across the board you learn from people around you and I learn a lot from Peter so when he does say some things like that I tend to pay attention. And think about it and if he wants to spend an hour talking about it I'll spend an hour talking about it. because I'm sure he's got very good reasons and I'll learn from them what I can. I won't sort of say this is a waste of time or I'm only doing it because you my boss and I'll do what you say. I'll do it because I respect his judgment for focusing on those kind of things.

And you know I'll try and get what I can from it. If at the end of the day from our session I ended up walking away saying I'm not sure what I got from that, then ok maybe I will compartmentalize that one and forget it usefully. But ..file that one..i often get things from it.

You spoke about the slowness in decisions? Is that the case across the business?

He doesn't do fast decision-making. (entrepreneur) doesn't do decision making. His method of decision-making is to try and get someone else to make the decision that he wanted.

Does that mean that he has made the decision but he hasn't communicated it?

Often. I think that's the impression he gives. He ..given a situation he thinks he knows the answer. And you remember there's a generational thing here so he does view himself as a different generation and therefore his seen all the problems so given the situation he'll know the answer. He probably doesn't think that completely but he probably thinks he knows roughly which way it lies. But he doesn't like giving you a direct answer.

He likes talking around it and talking about examples and whatever else. It frustrates the hell out of some people. And someone recently went into his office and asked him a question about a contract. And hour and a half came out and he said I should never do that. I've had 15 separate tangential and he hasn't answered a bloody thing. You know I know what he means in that I've had several conversations with Peter and you know you have to work hard sometimes to distill from it you know what he is trying to get at.

With the best will in the world (entrepreneur) has gone off on a tangent. You know cos if you do talk around things sometimes you just go off on a tangent. And so he can lose it and I think you've got to be patient. And again because I have a great deal of respect for him I sort of indulge him his tangent walks and sometimes I find his tangential walk quite useful. Sometimes I find them annoying and think I'm quite busy today you know I've only got. But actually I've got quite used to say actually I've got a meeting in 10 minutes and just drawing to a close.

And you know sometimes I'm doing it as much for information telling him things. So he is aware, in the loop. Generally if I don't get insight from him then either I've already received insight in the past and so I've already got it so that's fine there's not additional new insight to get. Or he doesn't have any insight or he gives it to me quickly. Either way he knows where I'm going he's had an opportunity to influence what I'm doing and he either has or hasn't and so I'll go away and do what I'm going to do.

So its that interaction that is fine. I don't need a decision from him. Some of the group managers look for decisions. And he doesn't give them. Now people have contrasted my style in that I'm more directive sometimes. And I do walk a bit of a line between (entrepreneur) no direction requiring people to get from his conversation the insight to the some partial direction and a lot of questions. And my style has changed in that I do tend to ask a lot more questions. And ask people why they doing this or why they doing that.

What do you think about this and that forces them to think and answer questions. But when they ask me a direct question I do try sometimes to give a direct answer. Does that make me more directive? Probably a little bit. Im trying to balance the two there's a lot of value in what (entrepreneur) does in terms of insight in terms of letting people think and I want to do elements of the same. I think sometimes its useful to have a direct..what you find that with a direct approach you sometimes have an argument so you will maybe have an argument about something cos it's a specific..cos you can actually discuss a specific. So if you're given an opinion, if I give a direct opinion, that's something we should do. And then the other person can dispute it. if you never give a direct opinion no one can dispute it.

So I do find I have a few more arguments with the group managers for example about things. And that's sometimes helpful sometimes not. Some of its frustrating and you can't persuade them, you having an argument you can't persuade them. But that's just life I think. So there's slightly different styles there and I'm not sure whether that is just generational or whether that is just characters.

You said that he doesn't make decisions but later on you said that he just waits for you to get there?

He's made a decision about how he would do it in that circumstance. What he doesn't done is and so he's made the decision about how it would be. So you'll put something in front of him he'll know how he things it should be and he wont necessarily tell you straight away if at all actually. Now but because he is happy for you to go off and do something different anyway, and you know unless it is something critical, health and safety or you haven't done something. If you go and ask him explicitly about a business developer not performing, he won't say what you need to do is this this and this to get them doing more. He'll talk around the subject he'll have in his head what he would do but he won't necessarily tell. He'll let you go away and try whatever you want to do having had the conversation with him and taken from it what you want.

But there'll often be a difference and he'll say why the hell did they not do that. And now on the other hand if he had said to that person you should've done this this and this, in that first meeting. That person would've have gone off done this this and this. Now (entrepreneur) point and I think generally is a influencing style of management. I'm reading this book by Mintzberg that talks about influencing versus directing management stuff and we definitely take the influencing style here we don't take the directing style.

You've got to accept that there's a difference in what you influenced and what was done. And now if that difference is huge your influence is very good and it can be quite frustrating and that's why I do often see when I see (entrepreneur) frustrating about what's going on in other parts of the business that he thinks his influenced and its not responded to. Now in that situation you should be much more directive probably with directive is that often it doesn't help people learn. So if you tell someone what to do, they would just go and do what you told them. And then it doesn't work they come back and say it didn't work.

You tell them again, do a different thing..it doesn't help stimulate the learning process. So theres good logic there and I think theres a balance and knowing when to walk that line between influencing and directing is important.

So why does he do it? do it that way?

Well I think two reasons. He found Mintzberg before I did actually. And he read a paper, ad hocracy term comes from and so he does understand about that. He hasn't read the recent book, in fact I pointed at it. he hasn't read it yet. Why does he do it? he is a strong believer in not directing people that's just his ..i think he does it because historically again he had lots of strong people around him anyway so he couldn't direct them. Actually to tell people to do something he would've found quite hard in a group of peers which essentially they were.

He probably evolved it over that time anyway. I think he also now whether this is a retrospective belief. He believes it is a better way to manage than a more directive approach. Now I agree that we don't want to be overly directive but I also.. so when I first ran a big group it was formed from the one group was split into two. And this

guy called (employee) running one half and I ran the other half and he was completely hands off. Didn't direct anyone didn't do anything really, almost imploded.

I on the other hand got my hands around everything, was controlling this thing that thing, talking to everyone about the way everything was done. So some extend I was a bit micro managing. I was, it was a small group 15 16 people, I was all over it. the other guy was a group of 20, I was reflecting about a few months in and his going to end up with a real easy job cos his going to force everyone to think for themselves what they doing and they going to find the right answers.

And then his got this self sustaining business that people just got better on the other hand I'm going to be telling people what to do and this gets bigger and I have to tell more people what to do so its self limiting as an organization. But its not quite that way cos is imploded basically and started infighting and people just thought he was useless and so it just didn't work. And so I think that's what you've got to get the balance right between knowing when to make clear directive decisions about things and when you ask questions and help people get to the right decision point.

And so come back to your point about recruitment, sometimes you know I will say no because of these reasons this is why we do not want to recruit this person. But most of the time I should be saying these are the attributes of the person I've spotted this is what it might cause and then a discussion with the group manager coming to a conclusion. Or them coming to a conclusion about whether that's the right fit or not and hopefully that conclusion will align with my conclusion or we'll find it together. That's the ideal way it should work but there'll be sometimes those opinions deviate and then if it's a critical deviation then you know as ..if you have a responsibility you have to say no.

And Im not sure (entrepreneur) takes two hands off sometimes. Maybe ..he'll let it..let people wallow around in their own uncertainty not providing people any markers on the path to come to a conclusion. So that they just feel a bit lost and they never come to a conclusion.

Has anybody made him aware of that?

No. (laughs) I wouldn't dare. Imagine going into his office and saying sometimes you just meander around and never get to the point. (laughs). And people come away confused??? When he is doing it with me I tend to punctuate it. and I said sometimes I find the meanders very useful and I have a very respectful ..in the meanderings theres gonna be something interesting.

Is that one of the issues with founders no one really tells them..? no one feeds back how their thinking is affecting others?

I think it's a good point. He does have (other founder) who is chairman is very well, his been in the business longer and ...

But would (other founder) pick this up?

Maybe, I don't know...so if no one feeds back to him? I wonder if its not just a founder, if it's a generational thing actually because the reason people don't argue so (entrepreneur) sort of meanders, they don't feed back to him or if (entrepreneur) puts across a view they don't necessarily strongly argue with him is because there is a generational gap. And is it a founder thing, possibly a founder thing..there is an element of that as well.

Theres also an element of generational gap. So with me and the group managers for example theres not the generational gap.

I've been in the business longer than some of them. And they vary in their robustness in when we arguing about things. Some of them are quite forthright and I simply match them and I'm forthright back. Some of them are very passive in which case I try not to be forthright because of cause it doesn't result in any ..you squash them rather than encourage them. And some of them quite feedback to me.

About what I'm doing and I do get more feedback from people. And I think it's a generational proximity. They feel that they can do that. With (entrepreneur) you know when we were in the business (entrepreneur) was always a senior person, so even when we joined he was always a senior person. Ok? So we've grown up with him being that senior person always. Whereas others we are peers in the business ok? So it's a slightly different arrangement. Does anyone give him that feedback? NO? and is that an issue? It depends on your view.

It depends on if you have someone who is willing to understand and take the time to take the time to understand the founders view points. If they allowed to influence and change the direction as they see fit, so you take the point of the linkd in exercise. I've steered it away a bit from what it would have been so he wasn't effectively forcing action. He was expressing an opinion that was filtered. If you can do similar things and re contextualise what they saying, or convert the knowledge into something that is a bit more communicable to people then its ok.

And if you've got a team that's willing to listen understand and take from it, what you want then its ...

I'm looking at sense making and sense giving, but it sounds like the md, CEO is giving sense more so than the founder?

Again I've only got the context of this business, but I would imagine that you often get people who interface more affectively with them and translate the insight more effectively. There'll be translation but also making it make sense for todays people because this generational gap is an issue as well. There is an issue that I perceive which is ...Stockholm syndrome, because you get very close to that person you can get absorbed into their way of thinking, their way of doing things. So you've gotta to make sure you maintain your external references.

And your other internal references. So I'm ..I attend this Cambridge leaders academy which is this sort of group of CEOs from the Cambridge area who get together once a month and talk about issues you face in the business and its very useful because some of the perceived wisdom that you get here is good to just expose it to the light of day.

And other people say what the hell are you talking about that's rubbish. I mean that's the biggest issue for me. I need to understand (entrepreneur) and what he thinks. And why he thinks that but I then need to challenge it and you know the best way of doing it is with other people.

Then if I then challenge it directly back with him that's a different question. I'm not sure if I would do that or just get on with it doing it differently.

Cos to (entrepreneur) credit if I think it should be done differently and get on with it he probably won't challenge me on it. he would just let it.

It's the fact that the adjustment he makes, whether that is really worth doing?

I don't know, if he is making adjustments. To some extent he has changed over the years. He has become softer, but that I think is just old age. You know people get softer as they get older. So more relaxed.

Any other changes in interaction?

As I said he's not so involved if we met 3 months ago 4 months ago, I think at point I had already changed the recruitment so id already doing the recruitment. Id acquired all the salary information. But then that was nothing to do with him. I just got it. I just asked one of the people in payroll lady she gave me the whole list. And (entrepreneur) asked me one day he said yeah I probably should tell you about this. I said don't worry I already have the list.

The funny thing is it has his pay on it, everyone's pay on it. even people who aren't in the group, in the company.

END.