Anglia Ruskin University

Organizational Culture and Performance: Research on SMEs at Tele-Healthcare Industry, United Kingdom

Saeed Sadighi

A Thesis in fulfilment of the
Requirements of Anglia Ruskin University
For the degree of Doctor of Philosophy

Submitted: March, 2017

ACKNOWLEDGEMENT

I would like to humbly dedicate this very small effort of mine to Imam Reza (p.b.u.h) and Imam Mahdi (a.t.f.s).

I would like to express my special appreciation and thanks to my PhD supervisors, colleagues and friends for their support, advice and guidance which perfectly contributed to the quality of this research: Dr Rob Willis, Dr Greg O'Shea, Dr Nick Drydakis, Dr Swetketu Patnaik, Prof Mary-Yoko Brannen, Prof Terry Mughan, Prof Charles Hampden Turner and Prof Stuart Wall. I would like to express my profound gratitude and appreciation to my mother, my wife and other family members for all supports and helps that they have made during my PhD journey. My beloved father was not physically present during this PhD study, however, I have wholeheartedly felt his prays and impacts every day.

I also declare I took reasonable care to ensure that the work is original, and, to the best of my knowledge, does not breach copyright law, and has not been taken from other sources except where such work has been cited and acknowledged within the text.

Saeed Sadighi, March 2017

ANGLIA RUSKIN UNIVERSITY
ABSTRACT
DOCTOR OF PHILOSOPHY

ORGANIZATIONAL CULTURE AND PERFORMANCE: RESEARCH ON SMES AT TELE-HEALTHCARE INDUSTRY, UNITED KINGDOM

BY SAEED SADIGHI
MARCH 2017

Abstract

Among different key factors, Organizational Culture (OC) has gained a lot of attentions to be influencing SMEs' performance and many authors have linked SMEs' performance and its success to the organisational culture that prevails in the respective organisations. The previous research key findings have shown that there are different OC dimensions which can influence the SMEs' performance. However, there has been no study done on the SMEs involved in the tele-health industry in UK and to investigate the effects of organizational culture on non-financial performance of this industry. So the current study aims to fill this gap by investigating the role of organizational culture on non-financial performance of the SMEs. The research also aims to address the gap by determining the key characteristics of SMEs' organisational culture within tele-health industry in the UK as well as investigating the moderation role of innovation within OC-performance linkage.

The Competing Values Framework (CVF) including four sub-elements (Clan, Adhocracy, Hierarchy and Market) was used as a theoretical bases for cultural measurement and for the non-financial performances measurement the three sub-elements selected: product & service quality, process quality and job satisfaction. In order to investigate the moderation role of Innovation within OC-performance link, two sub-elements was selected: product/service innovation and process innovation. For this current quantitative research, the primary data collected via a structured online survey as well as sent questionnaires to SMEs across the UK; and the 210 acceptable responses were received.

Among the different organizational cultures studied in the case companies, adhocracy/developmental is shown as dominant culture and it is found to have maximum impact on organizational performance. Impact of product and service innovation as a moderator in ensuring organizational performance did not indicate positive correlation. However process quality was found to be improved in terms of product and service innovation in companies which had developmental organizational culture. Process innovation is not a moderating factor between any type of organizational culture and the firm's performance sub-elements. Further, job satisfaction also did not indicate any positive correlation with innovation as a moderator in case of all the cultures within the study.

Key Words: SMEs, Organizational culture, Non-financial performance, Tele-Health

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

COPYRIGHT

Attention is drawn to the fact that copy of this thesis rests with

1) Anglia Ruskin University for one year and thereafter with
2) SAEED SADIGHI

This copy of the thesis has been supplied on the condition that anyone who consults it is bounded by copyright.

Saeed Sadighi, March 2017

1 INTRODUCTION

1.1 Background of the study

1.1.1 Overview of SMEs and their Economic Role in Economic Progress

Both quantitative and qualitative methods are used to define SMEs and thus there is no unique definition for SMEs (Omar, 2009), which can be accepted universally. According to the European Commission which has defined SMEs quantitatively define SMEs as "*the category of micro, small and medium-sized enterprises (SMEs) is made up of enterprise which employ fewer than 250 persons and which have an annual turnover not exceeding 50 million euro and or an annual balance sheet not exceeding 43 million euro.*" (Extract of Article 2 of the Annex of Recommendation 2003/36, European Commission).

Further, different multilateral institutions have used different criteria to define SMEs. The World Bank has again defined SMEs quantitatively as enterprises which have maximum 300 employees and the maximum revenue up to 15000000 USD. On the other hand, the UNDP has defined SMEs as an enterprise which has maximum 200 employees but has not defined in terms of turnover of maximum assets. Similarly, there are other different definitions given by other multilaterals such as MIF-EADB, Asian Development Bank and African development Bank.

Definition of SME also varies according to the geographic area and the purpose of the study proposed. For example, in Norway SMEs are the enterprises which have maximum 200 employees whereas in case of Pakistan the maximum number of employees is restricted to 50. In the UK, SMEs are defined as enterprises whose annual turnover is not more than 25.9 million pounds, a balance sheet total not exceeding 12.9 million pounds and employees not more than 250 (Section 382 and 465, The UK Companies Act, 2006).The UK uses the same definition as given by European Union; however, the only difference is that the SMEs definition in the UK does not have the category of "micro industry".

However, since the research is based in UK, the researcher will adopt the UK definition of SMEs. Effect of SMEs has been debated in the literature with effect as the effect of SMEs on the economic growth has also been different. Theoretically, Tolento (2000) summarizes the impacts of SMEs for the economic benefit of the country, 1) creation of jobs when the capital cost is low, 2) contribution to GDP, 3) opportunity for the

expansion of entrepreneurial base, 4) providing flexibility to changes in market, 5) providing support to the large scale enterprises. SMEs thus have an impact on the industrial growth and well the economic growth of the country. Savlovschi (2011) studied the role of SMEs in the modern economy where he concludes that in the modern economy SMEs not only impact the industrial sector but contribute to the whole economy.

Researchers from various countries have conducted researches on the role of SMEs on economic development different countries. Kongolo (2010) attempted to study the effect of SMEs in economic development of different countries and found that instead of having uniform characteristics and challenges across the world there is difference in the role of SMEs in the economic growth. A study by EIRM Research (2013) shows that in the Netherlands, 98.8 percent private companies are SMEs and these SMEs account for 31.6 percent of GDP. In case of Australia 97 percent of private sector companies are SMEs and 51 percent of the people are employed in these SMEs (Australian Bureau of Statistics 1996).

In the Asian continent, for both developing and developed countries SMEs plays an important role in economic growth. In developed countries the GDP contributed by SMEs varies from 60 percent in China to 47 percent in Malaysia. SMEs also contribute significantly in the total output produced in developed countries. For example 65 percent of the Japan total output and 48 percent of the German total output is produced by their respective SMEs (N. Thomas, 2014). A study done by Hammer (2010) on the role of SMEs in the US export markets found that between 1997 and 2007, SMEs contributed only 30 percent of goods exported from US.

But the number of SMEs in the economy accounts for nearly half of the GDP produced by the economy except for the agriculture sector. When compared to their contribution in UK, out of every 100 businesses in UK, 99 are SMEs and thus are regarded as source of employment for 59 percent of jobs for people involved in private sector. Also out of the total turnover of public sector in UK's economy, SMEs constitute 48.7 percent (Stockwood 2011). One important aspect of UK's SMEs is that more than 18 percent of them are led by females, contributing approximately 50 billion to the economy of UK between FY2006 and FY2012 (The Telegraph, 2012).

SMEs are also critical for the economies which are in the process of transition. They help transitional economies through the indirect way by creating political and social

atmosphere friendly for change management. Further, to increase the overall standard of living and to have sustained growth, the development of SMEs is necessary for any economy (McIntyre 2001). SMEs also help in reducing government spending on unemployment benefits by providing employment to unskilled and semi-skilled people through various training programs. This helps countries to reduce the crowding out of investment (i.e. increase in government spending and reducing the private spending) and also enable channeling of investment towards promising areas of business (Savlovschi 2011).

Despite providing crucial contribution to the economy of UK, not all SMEs are successful. Deshmukh (2006) studied the strengths and weakness of the SMEs in general, and found that on the one hand, SMEs are very flexible in absorbing new technology and innovation with low cost which gives the owner the power to make quick decisions and also have the advantage of the cheap labor force. Most of the SMEs are labor intensive which ensure a high capital-output ratio as compared to big enterprises. On the other hand the SMEs do not give much attention to the quality of the product produced, so SMEs often end up producing low quality products. Apart from that SMEs have to rely on the banking sector for finance and also have poor working environment without enough rules and regulations, which leads to increase in the trained workers leaving the industry more frequently.

Regression analysis done by the IRIS Centre (2008) to check the role of micro, small and medium enterprises in economic growth through the cross country regression analysis (60 countries including OECD and developing countries), there was found to be very little correlation between SMEs and growth of the economy. However the analysis was conducted only for manufacturing firms providing formal employment. In the developing economies where most of the firms are not formal manufacturing-based employers, the correlation may be higher.

So from the various researches on SMEs and their contribution to the economic growth, it can be seen that in most economies SMEs are playing a vital role in creating employment for the unemployed people which has a direct effect in the reduction of poverty and an improvement in the overall standard living of these people. Also they have an advantage over the big firms in terms of flexibility, management and labor productivity. Both in the developing and developed countries the contribution of SMEs in their overall

growth has been significant. So the further study on SMEs and its effects, especially in context of the UK, is necessary.

1.1.2 Assisted Living Technology and Tele-healthcare

There has not been any unique definition for the term "Assisted living technology" (ALT), as researchers explain it in different contexts and eras (Deloitte, 2012). However, in general, ALT can be defined as the product which assists the people in living their life more easily and independently. According to the definition given by Global Assistive Technologies Encyclopedia, Assisted living Technology is defined as "*A generic term that refers to assistive, adaptive, and rehabilitative devices for people with disabilities and includes the process used in selecting, locating and using them. Assistive technologies include mechanical, electronic, and microprocessor – based equipment, non-mechanical and non-electronic aids, specialized instructional materials, services, and strategies that people with disabilities can use either to a) assist them in learning, b) make the environment more accessible, c) enable them to compete in the workplace, d) enhance their independence, or e) otherwise improve their quality of life"* (Leonibus & Bartosva, 2013. P. 5).

In the past fifteen years there have been several advancements in technology which have enabled quality health and social care for patients. The development of new technology in terms of IT in the developed countries has made assisted living more frequently available and thus is becoming increasingly popular, especially among senior citizens who need special care. Assisted living consists of the use of various sensory devices that detect the change in physical environment which is then communicated through IT in order to provide health and support and allows the opportunity to them to live independent (The UKCapabilities And Opportunity Report,2011).

In case of the United Kingdom, the population is growing older with average age of population being 40 years, and government expenditure on the sector is decreasing, hence there is likely to be an increase in the demand for assisted living technology in next 20 years (D. Lewin & Adshead, 2010a). The life expectancy of the people in UK is also expected to increase by average of 4.2 years in next 30 years while the increase in the healthy life will be only about 2.6 years. This will lead to an increase the demand of social and health care by around 44 percent (D. Lewin & Adshead, 2010b).

According to the Recent Age report (2012), the number of people of age more than 80 years in UK will be 2.6 million by 2030, which will lead to an increase in demand for health care services. Also in 2012 the population of age group 60 and above exceed the population of people below 18 (D. Lewin & Adshead, 2010a). Among the European countries, the UK is one of the fastest growing markets for ALT as the UK government is aware of the importance and benefit of it. Consequently, there is expected to be an increase in the adoption of ALT among the people in UK (Lushai & Cox 2012).

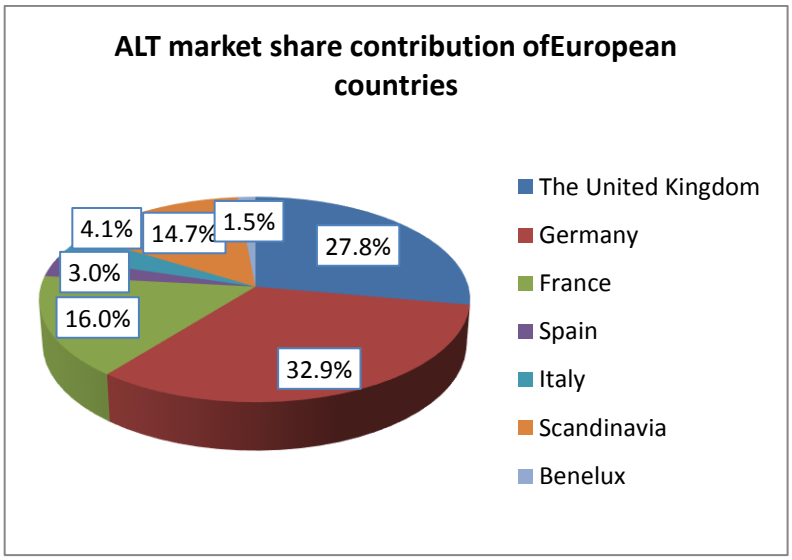

Figure 1.1: ALT market share contribution of EU's countries

Sources: (Frost &Sullivan 2010)

According to the Health report of the government of UK, ALT includes the following services (Deloitte, 2012):

Tele-care: support given to old and disabled people using the information and communication technology and help in reducing the risk such as falling, and also from gas and flood detection.

Tele-health: a service which is provided to assist with the objective of managing the long term health of patients suffering from various health problems.

Environmental control: includes products to control the environment of the patient like the care home service.

Since the present study is concerned only with tele-health segment of ALT, the researcher overviews what all services can be included under tele-healthcare. According to the Department of health of the UK, tele-health is defined as "*monitoring equipment to record and measure patient's physiological status and health conditions. In tandem with individually created chronic disease management regimes, it can significantly enhance an individual's quality of life*" (Department of Health of The UK, n.d). Tele-healthcare is related to the health related assistance which includes delivering medical treatment or monitoring the patient and the old people from the remote location (Lewin & Adshead 2010).

Tele-health is also defined as the service which helps people in long-term issues related to health and for the old and physically disabled people, or the people who are suffering from various chronic diseases. A study by Cruickshank (2012) shows that tele-healthcare has become an important element in recent times, leading to a shift in treatment from hospitals and clinics to home based treatment. This has also helped in reducing the expenditure on health care by decreasing the imbalance between hospitals and primary care.

1.1.3 Overview of Tele-Healthcare and SME Industry

In the UK, the annual spending in tele-healthcare in 2010 was 35.7 million pound out of total 148 million pound spending for the whole Europe. This spending is expected to be 70 million pounds at the end of 2016 (Aktive, 2013). Different regions in the UK have adopted unique strategies to promote the adoption of tele-healthcare. In England many programs and campaigns have been implemented, such as WSD programs and the '3millonlive' campaign; whereas in Wales the government is promoting projects which show the advantages of the tele-healthcare in various chronic conditions. In Northern Ireland the government has adopted one of the biggest tele-healthcare services in the UK, which involves an 18 million pound remote tele-marketing contract (National Population Project, 2010). Such campaigns are expected to provide tele-healthcare services to three million people in England by 2017 (Evenstad 2013)

A study done by Barnes and Chakrohurti (2006) shows that Small and Medium enterprises (SMEs) in the United Kingdom are dominant in manufacturing medical devices which are used by hospitals and have great opportunity of profit. The researchers also

conclude that SMEs in UK can play a vital role in providing e-health services across Europe. With rise in demand of tele-healthcare facilities and reduction in government expenditure due to poor economic performance of UK (British Private Equity, 2012), it is imperative that SMEs can play an important role in providing the tele-health care and can be important drivers of health care (European Commission, n.d.). In this situation the government of UK encourages establishment of new SMEs and makes the environment favorable for the private investment (BIS, 2013).

Research by Lloyd-Reason et al. (2009) shows the innovation-led SMEs in tele-healthcare are vital for the growth of the industry because of their advantage of producing goods at a lower cost than bigger firms. Samantha (2012) further pointed that SMEs which play a vital role in providing tele-healthcare are not directly involved in the process of R&D of new technology; instead, the SMEs adopt the new technologies which are combined with their existing technology to produce a large number of advanced products used in tele-healthcare. Tele-health also helps reduce the cost of healthcare as fewer people will find the need to visit hospitals and clinics (Liddell 2008). In such a scenario, SMEs in the UK have a key role to play in providing tele-healthcare services, as SMEs have the ability to produce various health care products at low cost (Clark & Goodwin 2010).

But despite the advantages and scope for profitability, SMEs are unable to efficiently export their product in the international markets due to various problems like; competition from international market, fluctuating exchange rate and also lack of proper knowledge of the market. A survey was done by the European Commission asking the SMEs about the difficulties faced by these enterprises in the negotiation and project management for the health related research in Europe. The survey shows that the main difficulties in the establishment of SMEs were the European Union jargon, complicated government regulatory websites and forms, and also repeated requests for the same information. Along with this the legal process is also very complex.

The suggestion given by the surveyed SMEs to the European Commission was to increase the number of personnel who are involved in the negotiation and make the process simpler and friendly (European Commission, 2009). To promote the SMEs in the healthcare sector, the European Medicine Agency (EMEA) launched ‘SME office’ program with the aim of providing financial and administrative assistance to the Small and Medium business enterprises. The SME office was also established to promote innovation

and the development of new human and medicinal products by SMEs. Various incentive were announced to encourage the SMEs in health sector like reduction of fees up to 90 percent for scientific advice, scientific services and inspections (Counsel & Association, 2009).

There are several factors which affect the growth and success of SMEs, irrespective of the geographical location. These success factors and performance have been studied by researchers extensively, but the scope of the present study is restricted to the organizational culture and its impact on performance of SMEs in the tele-healthcare industry of the UK. Therefore the meaning of organizational culture will be assessed in the following section.

1.1.4 OC and impact on non-financial performance of SMEs

Importance of organizational culture holds all the more importance in the present time; given that borders are shrinking advent of globalization has ensured multi-cultural employee-interactions within organization. It is one of the elements that are important in sustaining the performance of the employees, leading a company to the path of success (Madu, 2011). According to Johnson (1990) organizational culture is different in different organizations due to the different types of personalities an organization possesses (Johnson, 1990). According to Martin (2003) organizational culture is a system of shared meaning held by member which differ from one organization to another (Martins 2003).

On the other hand, Arnold (2003) defines organizational culture as a distinctive beliefs, norms, principles and ways of behaving that make each organization different from one another. From these two definitions it is evident that 'organizational culture' is one of the elements which distinguish one organization from another organization. Organizational culture is multidimensional, which helps in influencing the members to achieve success in any enterprise (O'Donnell & Boyle 2008).

According to Ginevičius & Vaitkūnaite (2006) the most important dimensions which have direct impact on the performance of the organization are "i*nvolvement, co-operation, learning , care about clients, communication, adaptability*". In the another study on the dimensions of organizational culture in the health care sector by Beshay (2008), indicates that there are six dimensions of organizational culture namely "*Process oriented versus result oriented, employee oriented versus job oriented, open system versus closed system,*

lose control versus tight control, parochial versus professional, normative versus pragmatic".

Businesses today are struggling to strive in today's ever changing dynamic business environment (Fekete & Bocskei 2011) and thus are looking for creative, innovative and competitive strategies to out-perform other firms (Saffold 1998; Peters & Waterman 1982; Cameron & Quinn 2006; Zheng et al. 2010; Fekete & Bocskei 2011; Duke & Edet 2012). As has been discussed in the previous section, a strong organizational culture can have a positive effect on the employees, especially the entry-level employees, ultimately affecting organizational performance, thus importance and implication of same needs to be evaluated Organizational culture affects both the financial and non-financial performance of an organization. Although, a lot of research has been conducted on the impact of organizational culture on financial performance of the organization, however, there are relatively fewer articles on relationship between organizational culture and non-financial performance.

Non-financial performance includes elements such as employee satisfaction, organizational commitment and employee turnover (Abu-jarad et al. 2010). Today, SMEs are not only focused on improving the financial performance of the organization but also on enhancing the non-financial aspects like innovation and customer relationship (Kalpdan 2001). Consequently there have been studies, wherein inconsistent link between the two have been discussed. Therefore, it seems that more research is needed to understand the relationship between two.

1.2 Problem Statement

National Health Service regulator has said that the healthcare system of the UK is on the brink of collapse. Authorities also warned that many patients and aged populace are going to hospitals for emergency services, which should not be the case if they were taken care before (NHS, 2013). This is only one aspect of the healthcare situation in the UK. The growing rate of ageing population and increase in the life expectancy coinciding with the decline in government investment in healthcare has intensified pressure on the authorities to maintain the healthy lifestyle of the people. One solution to this problem, which is also gaining much attention these days, is tele-healthcare.

Tele-healthcare includes the use of information and communication and other sensor device to monitor the health of the patient. Since the government is not increasing their spending in health sector, the Small and Medium Enterprises (SMEs) can play an important role in promoting the tele-healthcare service in The UK. The tele-healthcare market in the UK is already gaining popularity and the SMEs involved in these sectors are performing well not only in the UK but also in international market. The governments in the UK are also encouraging the SMEs to engage in the tele-healthcare sector due to various benefits like lower costs of operations and ease in setting up the business.

For the success of organization organizational culture has an important role to play. Organizational culture helps not only in improvement of financial performance (profits) of the organization but also helps in the improvement in the non-financial performance (job satisfaction, communication between higher and lower level of management). SMEs are also considered as the industries which constantly promote innovation so the role of organizational culture is also important in promoting innovation. In case of the UK no study has been done to check the impact of organizational culture in SMEs in tele-healthcare industry.

Therefore, the involvement of SMEs in tele-healthcare sector of the UK is an area where the detailed analysis is required. This research will focus on the involvement of the SMEs in the tele-healthcare sector in the UK. Also the role played by the organizational culture and organizational performance in SMEs needs to be explored more, in order to understand the role it plays in effective delivery of services and the sector's overall growth. This research will try to find the role of SMEs in the advanced economy, taking the case of tele-health industry in The UK.

1.3 Aim & Objectives

The main aim of this study is to understand the organizational culture and its role in the performance of SMEs in the tele-healthcare industry in the UK.

The objectives of the study are:

- To explore the key characteristics of SMEs and their organizational culture in the tele-healthcare industry in UK.
- To understand the impact of organizational culture on perceived non-financial performance of the SMEs.
- To examine whether innovation plays a role in fostering a relationship between multi-dimensional organisational culture and non-financial performance of the SMEs.

1.4 Research Questions

This research will try to solve the following questions

1) **What are the profile/characteristics of SMEs' organizational culture in the Tele Healthcare Industry in the UK**?

   H1:

   H1a: Clan culture is the SMEs' dominant organizational culture in the tele-Healthcare industry in the UK?

   H1b: Adhocracy culture is the SMEs' dominant organizational culture in the Tele-Healthcare industry in the UK?

   H1c: Hierarchy culture is the SMEs' dominant organizational culture in the Tele-Healthcare industry in the UK?

   H1d: Market (developmental) culture is the SMEs' dominant organizational culture in the Tele-Healthcare industry in the UK?

2) **How does SMEs' multidimensional organizational culture (OC) influence non-financial (perceived) performance?**

   H2:

   H2a: There is a direct and positive influence on the non-financial (perceived) performance from Clan organizational culture?

H2b: There is a direct and positive influence on the non-financial (perceived) performance from Adhocracy organizational culture?

H2c: There is a direct and positive influence on the non-financial (perceived) performance from Hierarchy organizational culture?

H2d: There is a direct and positive influence on the non-financial (perceived) performance from Market organizational culture?

3) **Does firm's innovation (product and process) moderate between multidimensional Organizational Culture and non-financial (perceived) performance?**

H3:

H3a: Innovation (innovativeness) is a moderate between clan culture and the firm's non-financial (perceived) performance?

H3b: Innovation (innovativeness) is a moderate between Adhocracy culture and the firm's non-financial (perceived) performance?

H3c: Innovation (innovativeness) is a moderate between Hierarchy culture and the firm's non-financial (perceived) performance?

H3d: Innovation (innovativeness) is a moderate between Market culture and the firm's non-financial (perceived) performance?

1.5 Purpose/ Significance of the Study

The main purpose of this research is to examine the influence of multidimensional organizational culture (*Clan, Adhocracy, Market and Hierarchical*) on the performance of an organization, which is based on the Competitive Value Framework (CVF). Further the role of innovation as the moderator between these factors has also been evaluated. This research is based on selected SMEs involved in the tele-healthcare industry in the UK.

This research was attempted to determine the characteristics of SMEs' organizational culture in the tele-healthcare industry in the UK. This study is also first attempt, to study the role played by the multidimensional organizational culture on the non-financial performance using various indicators. Within the healthcare industry, service holds utmost importance, however, the service is based on products (medical devices) and processes

(practices which aid service) and thus it was important to study both product and process quality on organizational performance.

Number of studies has been conducted in the past to study the link between organizational culture and its impact on the financial performance of the SMEs in different countries and in different industries. But there has been no study done on the SMEs involved in the tele-health industry in UK and the effect of organizational culture in non-financial performance of these industries. The tele-health industry is one of the emerging industries in the UK and the SMEs are the important contributor to the UK's economy in terms of creating employment and also promoting innovation. Therefore, this study will be useful to practitioners in the industry to understand the workplace culture and innovation dynamics in organizational performance, so that they can devise their strategies more effectively. This study will also add to the existing body of knowledge on the subject, proving significant to academicians and researchers.

1.6 Limitation of the study

This research is trying to answer the question of the influence of multidimensional organizational culture on performance and moderate role of Innovation with taking the case of the SMEs in the tele-health industry in the UK. This study is only limited to the tele-healthcare industry in UK, therefore the findings cannot be generalized to other industry/ country.

1.7 Chapterization plan

The remaining study is divided into the following chapters:

1. ***Introduction***: This chapter lays down the foundation for the research which discusses the background of the research. After which problem statement, aim and objectives and research questions are defined. In the final part, significance of the study and limitations are discussed.
2. ***Literature review***: This chapter explains the review of the existing literature in the field of the study. Role of organizational culture and performance played in case of SMEs has been discussed in the same chapter, along with the explanation of the gaps in existing literature and how this study will be helpful in filling those gaps.

3. ***Research Methodology***: This chapter discusses the research strategy, of data collection and data analysis.
4. ***Data Analysis and Interpretations***: This section has been sb-divided into two chapter with chapter first focusing on descriptive analysis and next section explored findings of inferential analysis. The responses collected from different SMEs within Tele-healthcare sector have been presented in this chapter through descriptive analysis.
5. ***Discussions***: This chapter provides the details about the Academic Contribution and Industrial contribution made by this research. Along with the contributions the limitation of this research has also been discussed in this chapter. Further, the researcher also defines the conclusions based on the objectives of the research and also present recommendations based on the findings of the research.

2 REVIEW OF LITERATURE

2.1 Introduction to Chapter

This chapter explores the underpinning theories and research work in context of small and medium enterprises and their organisational culture and performance with special reference to the tele-healthcare sector. This chapter facilitates formation of a theoretical framework that will be act as the guidance for the primary aspect of the study. The literature has been discussed adopting a critical approach to identify the existing gaps in research.

This chapter probes into the key concepts like small and medium enterprises (SMEs), assisted living technology and tele-healthcare industry, what is the importance of the tele-healthcare sector and how instrumental is the role of SMEs in the sector. Further, the chapter progresses towards success and failure elements of SMEs and how organisational culture is a chief element influencing the same.

Next, in the chapter, the concept of organisational culture in explored extensively. Levels of culture, organisational culture, its relevance and dimensions and how organisational culture is measured. The prominent theories on organisational culture are also explored and discussed at length. The theory selected for the study is Competing Values Framework (CVF) which has been critically analysed for its suitability to the characteristics of SMEs under consideration. Ahead, the linkage between organisational culture and organisational performance has been established. Since the study focuses on the non-financial performance of SMEs, the role of organisational culture in fostering innovation across the SME organisation is expansively studied and the research question and hypothesis based on the underpinning notion is justified.

2.2 Small and Medium Enterprises

2.2.1 Definition and Importance of SMEs

Over the past two decades the concept of Small and Medium Enterprises (SMEs) has gained attention by researchers and practitioners across the world. Most of the research on the subject of small and medium enterprises (SMEs) emphasizes on the role SMEs play in the economic development of a country (Garg & Walia, 2012; International Finance

Corporation, 2012; Mcintyre, 2001), developing and developed. The terminology has evolved over time with researchers offering definitions in different contexts.

These definitions vary across countries and purpose of application and industry/sector (ILO 2000; Müller-Falcke 2002); thus making it difficult to compare them and decide on a universally-applicable definition. In most cases SMEs are defined in terms of asset size, annual turnover, and number of employees. For instance the (USITC 2010) demonstrates the difference in definitions of SMEs in USA, European Union, Australia and Canada by comparing the number of employees and annual turnover whereas (Makhmudov 2004) compares them only by the employee strength. On the other hand, Gibson & van der Vaart, (2008) compare definitions stated by recognized international bodies such as the World Bank, African Development Bank, UNDP, and Asian Development Bank.

Institution	**Maximum Employees**	**Max. Revenues or Turnover ($)**	**Maximum Assets ($)**
World Bank	300	15000000	15000000
MIF-IADB	100	3000000	none
African Development Bank	50	none	none
Asian Development Bank	No official definition. Uses only definitions of individual national governments		
UNDP	200	none	none

Table 2.1: SMEs Definitions Used by Multilateral Institutions

Source: Gibson & van der Vaart, (2008)

The ambiguity in the definition of SME is due to the relative applicability of the term "small" which varies from sector to sector. This is exemplified in the following paragraphs. The earliest definitions of SME can be traced back to The Bolton Committee in 1971 which attempted to overcome the problem of objective measures of organizational size such as number of employees, sales turnover, profitability, etc. by formulating a statistical and economic definition of SME. According to them, SMEs can be defined on the basis of 2 main parameters: sector and criteria upon which the judgment of "smallness" was made (Cruz-Cunha & Varajao 2010).

Following this considerable development in the field of academic took place, leading to a number of interpretations of SMEs, most of them devoted to differentiating SMEs from large scale firms in the United Kingdom (Walker & Petty 1978; Bates & Bell 1973). Thereafter as academic research related to the subject progressed outside the UK, many differentiating criterion for SMEs emerged in different countries. Subsequently today there exist a wide range of definitions of SME, some of which are reviewed below.

According to Fischer & Reuber (2000) definitions accepted in developed countries will have higher size threshold than developing countries. However, they perceive SME as an immensely versatile term that encompasses an assorted group of economic activities, right from self-employed artist to modern technological intensive enterprises serving a distinct market segment. Spence & Painter-Morland (2010) regarded that SMEs are generally defined on the basis of some mutual factors like number of employees, sales, total resources and net investment level. Further, different institutes have their own defined criteria. Following is the tabular representation of the SME definitions proposed by multilateral institutes.

For the study, the definition of SMEs propounded within UK and specific to UK will be applicable wherein most of the SMEs in tele-healthcare industry employ not more than 250 employees.

2.2.2 Role of SMEs in Economic Progress

'*The World Bank Review on Small Business Activities establishes the commitment of the World Bank Group to the development of the small and medium enterprise (SME) sector as a core element in its strategy to foster economic growth, employment and poverty alleviation*' (Ayyagri, Beck, & Demirguc-Kunt, 2007. P. 415).

In the past 20 years, scholars witnessed an explosion in the research about the role of the small and medium sized enterprises (SMEs) within the global context which has resulted in a significant amount of academic literature and thinking (Parker, 2000). There is also an increasing recognition of the key role that SMEs play in domestic and global economy. According to Ibeh, (2000) It has been noticed that the research in this area has been stimulated by growing debates on globalization and its effects on the rising of SMEs and last but not the least entrepreneurial response required by business to cater and deal

with the increasing competition. It is very important to understand the meaning and history of SMEs before we take our discussion any further.

Despite their size, Small and Medium Sized enterprises offer more job than large businesses and are the drivers of innovation and development (Teng, Bhatia, and Anwar, 2011), thus contributing towards economic development. For example, research reveals that SMEs in the USA 'spend almost twice as much of their R&D dollars in fundamental research compared to the large firms' (Yeung and Chew, 2001. P. 433). Parker (2000) also pointed out that governments are getting more interested in small businesses and their support for SMEs is increasing especially in wealthy countries, as it is believed that SMEs are exceptionally innovative and contribute to high quality employment. Some researchers suggest that SMEs are more flexible and responsive to their consumers' needs.

Ellis & Tailor (2011) asserted that the economy of UK has not been able to recuperate from the recessionary economic conditions since the end of 2009. Even until March 2011, UK' GDP was stagnant at 4 percent, short of its pre-recession peak corresponding figure of 2008. To counter this, Government strategically promoted new businesses and start-ups to make up for the cuts in public spending and SMEs are responsible to escalate business activity and employment. SMEs are been critical for boosting the national income over a phase of time. UK government has acknowledged this and promoted UK as a favorable place for business and encouraging SMEs to locate and develop there. The impact of medium, small and micro-sized enterprises (SMEs) can be seen across the European Economy. These SMEs are major sources of innovation, employment and entrepreneurial skills.

Overviewing the European union of 25 countries, there are about 23 million SMEs that provide employment to about 75 million people which represent 99% of the total enterprises. SMEs have played an instrumental role in the economy of UK. Nearly 99.9 percent of the enterprises existent in UK fall into the category of SMEs. Interestingly, SMEs exhibit their importance in the British economy as they are the generators of nearly 59.1 percent of the private sector jobs and account for 48.7 percent of the turnover of the private sector. SMEs have emerged as an indispensable aspect of the British economy as most of the growth is coming from the SMEs even during the prevalent economic slowdown.

This is evident statistically, that in 2011-2012, nearly 450000 new business endeavors were registered which is the highest since the last recession (Gray et al. 2012). Further, BIS (2013) affirmed that SMEs can propel economic growth in UK through invigorating innovation, provocation of competition amongst the existing firms and making a substantial contribution towards employment generation. Innovation is the catalyst of growth and SMEs of UK have considerably contributed towards the same. In 2011, 37 percent of the SMEs with over 10 employees testified innovative practices.

However, innovation is skeptical amidst information failures, constructive externalities and institutional shortcomings. In 2014, the news daily The Telegraph, presented the report that SMEs are crucial for the growth of UK economy through its unique characteristic of being responsive to the dynamic business environment. SMEs have registered a clubbed turnover of 3300 billion pounds. Nearly 34 percent of the sales of SMEs in UK are sourced from international markets (The Telegraph 2014).

However, the SMEs often meet market imperfections. They frequently have difficulty in obtaining capital or credit, particularly during the phase of start-up. They are restricted in terms of the amount of resources they have and thus these restrictions on resources often lead to the lack of innovation and access to new technologies. Thus, the support for Small medium and micro sized enterprises is one of the most important priorities of the European Commission's for economic growth, creation of jobs and social cohesion (European Commission, 2007). Thus, funding is a major concern of SMEs in UK. But since SMEs can create jobs and elevate productivity gains which can gradually increase the national income, earnings and employment across the economy.

Thus, in the subsequent sections, the researcher will be discussing about the factors which can influence the success or failure of SMEs.

2.2.3 Factors responsible for SMEs' success/ failure: Importance of Culture

Like any other large scale organisations, SMEs also have to struggle to survive and excel in the competitive market scenario. The performance of SMEs has attracted the attention of both researchers and practitioners equally. Watson (2010) has explored this area extensively in his book and rejected the myths commonly associated with the SME performance across the globe. Some of the misconceptions attached with SMEs include; being more susceptible to failures, SMEs run by females do not perform as good as their

male counterparts and that growth of SMEs is majorly constrained by lack of funding. SME success and failure has been highly debateable as the data routinely available for large businesses is not available for SME evaluation.

Moreover, there is a dearth of reliable measure of failure for such organisations across the globe (Watson 2010). Laresen et al, (2006) suggest that successful businesses satisfy customer's need by offering high quality services and products. He believes that in business life, success is a concept in management, although it is not always clearly defined. Success and failure may be considered as measure of good or poor management. In business literature success usually is associated with firm's financial performance. However, Foley and Green, (1989) believe that there is no clear definition of success in international business and studies have interpreted firm's success in many ways. According to Mathew (2010), "*firm performance refers to the firm's success in the market', while 'success in general, relates to the achievement of goals and objectives in whatever sector of human life.*"

He believes that success has two important dimensions: financial vs. other success and short term success vs. long term success. Some researchers believe that success can has different forms such as survival, sale growth, profit, number of employed, reputation. Ghosh et al (2001. P.209) also defined key success factors (KSFs) as factors which are essential for excellent performance of the company and critical success factors (CSFs) as those factors that are needed for survival of the firm. According to Lussier, and Pfeifer, (2001 P. 232) a business has to make at least industry-average profit for the previous three years to be considered successful and failure is defined as not having made a profit in the previous three years.

Numerous studies have been focusing on the managerial skills and environmental conditions which impact firm's success (Lussier, 1995). In a survey in 2003, Vientnamese SMEs introduced 'friendliness toward customers' as the main success factor and 'a good product at a good price' as the second (Benzing, Chu, and Bove, 2005), while Romanian SMEs selected 'friendliness to customers', 'a reputation for honesty', and 'good customer service', as the top three success factors (Benzing, Chu, and Bove, 2005). Ibrahim and Goodwin (1986) studied variables contributing to SME's success in Canada and USA and introduced four success factor based on their findings. They are entrepreneurial values, managerial skills, interpersonal skills, and environmental characteristics. The existing

literature shows that researchers do not agree on the variables contributing to success in SMEs. Most of studies focused on a set of variables such as the managerial skills, training of entrepreneurs, psychological and personality of owner managers, and external environment (Benzing, Chu, and Kara, 2009).

Clemson (2014) analysed the SMEs in context of EU with the underpinning relevance that SMEs are the backbone of the European economy and provide the maximum employment opportunities in the region. SMEs in EU stimulate economic growth, innovation, employment and social integration. However, there are a few reasons for failure of SMEs identified in his research. *Firstly*, SMEs tend to lose the competitive edge acquired when their best talent is head hunted or poached by other SMEs or large-scale organisations. This negatively impacts the R&D function and innovation is retarded. Gradually the business begins suffering losses. As a result, many a times SMEs refrain from investing into workforce training which again hampers the employee efficiency. *Secondly*, another reason that is responsible for SME failure can be that these firms are usually financed through bank loans or other borrowings which often runs as a lifetime stigma and fear of failure prevails as the intrinsic responsibility of loan repayment hinders the risk taking capacity of the SMEs.

However, it is not that all SMEs are destined to fail. There are many factors that promote SME growth and success. Ghosh et al. (2001) studied the top SMEs in Singapore and deduced that it is the strategy dynamics that lead to success. The six different strategic components identified were, "*1) A committed, supportive, and strong management team. 2) A strong, visionary, and capable leadership. 3) Adopting the correct strategic approach. 4) Ability to identify and focus on market. 5) Ability to develop and sustain capability and 6) a good customer and client relationship."* Further, Hoffmann & Schlosser (2001) analysed the success factors of strategic alliance of SMEs and concluded that meticulous strategic planning and beneficial partnership arrangement is indispensable for alliance success.

However, a combination of "soft" factors like mutual trust and "hard" factors like strategic compatibility and appropriate governance mechanisms have a lasting impact on the success of alliances of SMEs. Unfortunately, these studies do not identify the basis of assessing the success of any SME. This was done by Huang et al. (2004) during the study on Australian SMEs. The researchers found that there are four parameters to adjudge the

organisational success: "*customer acceptance, customer satisfaction, product performance and quality*."

With the rise of e-commerce and upsurge of SMEs in this sector globally compelled Gengatharen & Standing (2005) to comprehend the factors that analyse the success or failure of SMEs in Regional Electronic Marketplaces (REM). The study focused on government aided e-commerce SMEs. Thus the factors responsible for success were innovativeness of the entrepreneur, REM ownership structure and governance, establishment of business tie-ups, REM development and benefits that are leveraged by SMEs.

All the studies analysed above lay special focus on organisational characteristics. These characteristics are mostly bloomed or promoted through a favourable organisational culture. Zaheer et al. (2006) studied the SMEs in Pakistan and highlighted that the SME culture in developing countries lacks creativity, innovation and risk-taking capacity. However, there is a deep-rooted desire to change. Further, SMEs showcase a market centric culture based on outcomes, competition scenario and accomplishments.

More recently, Wilderom et al. (2012) laid emphasis on leadership as an influence on change management necessary to promote innovation at SMEs. It was concluded that good leadership fosters a stable organisational culture and instils a feeling of trust amongst the employees and lower the resistance to change and encourage innovation at work. Thus, organisational culture is an underlying foundation of most of the factors determining the success or failure of SMEs. Organisational culture is briefly explained in the subsequent section.

2.3 Assisted living Technology and Tele-Healthcare

Assisted living facilities are emerging and being adopted very fast across the globe. Assisted living technologies comprise of many long-term care facilities like housing, personal support services and healthcare. The demand for the same is increasing due to the changing demographic, social, economic and technological environments. Information, Communication and Technologies have dramatically evolved during the last decade. This has prompted the healthcare services to adapt to the technological advancements to enhance

the quality, commitment and reach of the services to the needy people (Lazakidou & Konstantinos M. Siassiakos 2010).

Rocker & Ziefle, (2012) expressed that e-health technologies are gaining relevance and shall become an integral part of healthcare services in the approaching time. Tele-healthcare is one of the critical aspects of the assisted living technology. Technological developments have enhanced the potential of telecommunications in healthcare sector and it can work as a process enabler for augmenting healthcare-delivery systems (Lockamy & Douglas L. 2009; Akber & Gough 2003).

Industry experts foresee an explosive growth of the global tele-health market over the next few years. In 2010, the global shipment of tele-health was 163.3 million USD which is forecasted to be 990 million USD in 2015 and by 2020, 6.28 billion USD. The biggest market is the US but UK is gradually catching up (Terry 2011). More recently, RNCOS Business Consultancy Services reported an estimated annual growth of 18.5 percent for tele-healthcare industry.

2.3.1 Assisted Living Technology

Although humans have been using tools in their daily life in many cultures around the world throughout the history, it seems that using technology as a tool for people with disabilities is almost a recent phenomenon. James, and Thrope, (1994), described some assistive devices people have been using since 6th century B.C. The devices they mentioned include artificial legs or hands, drinking tubes or straws. Doughty et al, (2007 P. 6) referred to the traditional form of assistive technology as '*low-tech portable devices'* such as walking sticks, spectacles and tap turners, or more expensive fixed systems such as stair-lifts, ramps and level-access showers.

The passage of the Technology-Related Assistance for Individuals with Disabilities Act (Tech Act) in 1988 was a turning point as attention increased on the role that assistive technology (AT) can have to improve the life of people with disabilities, and improving their functional needs (Alper, and Raharinirina, 2006). According to Wallace et al, (1995) Tech Act of 1988 contributed to public awareness of the curtail role that using assistive technology can play in daily life of people with disabilities.

'*Assistive technology has been defined by the European Commission's Technological Initiative for Disabled and Elderly persons (TIDE, 1992) as the total of*

technologies provided directly to elderly and/or disabled people, to enable them to live more independent lives and become integrated in all the activities of their communities, preferably outside of institutional care' (Young and Sandhu,1995. p.183).

Assistive technology market is broad, providing thousands of products for individuals, elderly or disabled. This market is dominated by SMEs. It is believed that this market will grow and the demand for assistive technology will increase as users will get familiar with AT and European population will grow older (Young, and Sandhu, 1995). According to Doughty et al, (2007) European Community has the largest market for assistive technology products in the world. Reports in 1995 show that assistive technology users will be about 32 million European in 2020. The vast number of AT users emphasizes the importance of the market and competitive environment particularly for SMEs.

Business in this industry usually belongs to industry grouping related to different disabilities such as physical, cognitive, sensory, or communication (Bauer, 2003). He also pointed out that in US this market is dominated by small enterprises and a very few larger companies supporting assistive technology market. Stone, (2003) believes that assistive technology industry which is mostly small businesses has significant barriers such as limited resources and high cost which are unique to AT market. SMEs active in assistive technology experience a different entrepreneurial climate. Some of them start-off family business and some are run by people who have suffered disabilities. However, the number of users of AT are really high with nearly 600 million people suffering from different forms of disabilities around the world (Alper, and Raharinirina, 2006). According to Alper, and Raharinirina, (2006), assistive technology has great potential for improving the capabilities of people who suffer from disabilities.

2.3.2 Tele-Healthcare Services as a part of AT

The role and application of ICT tools in different sectors have been highly researched upon and tele-healthcare services are no exception. Different research scholars have analysed the tele-healthcare services from different perspectives. However, disability and old age are the commonest grounds of contextual research.

Nehmer et al. (2006) attempted to unveil the need and challenges of tele-healthcare systems while Parker & Thorson (2008) attempted to highlight the advantages of the tele-healthcare in their research. According to their research, tele-healthcare is a boon for the

people who are located at considerable geographical distance from the healthcare services providers or are unable to travel to the medical institutes. Tele-healthcare comprises of a wide range of services including the low-technology modus like telephonic interaction, teleconferencing among multiple medical experts or patients or transmission of medical reports or other related information through technology. Tele-healthcare can be highly useful in connecting the rural consumer with the specialists and up-scale service providers that render their services only in the urban areas. Further, it can also enable continuation of medical education, healthcare courses, research and business through technological aid and set-ups (Nehmar *et al*., 2006; Parker & Thorson, 2008).

Likewise, Maniatpouos et al. (2008) also, expressed that the on-going developments in the field of ICT have opened many new avenues for the development and usage of tele-healthcare application in multiple sub-domains of medical treatment and services. This amalgamation of ICT and tele-healthcare will facilitate cost-optimized medical practices rendered to people even in the remote areas. Apart from medicine, even general health and social care can be easily provided on a large scale with an impending cost and management burden. These may include services for the disabled people, patients who took early discharge from the hospital, community healthcare services and special provision for the elderly members of the society. Maniatpouos et al. (2008) focused on the health needs of the elderly people and commented that the population of almost all EU countries is aging and there has been a considerable rise in the elderly people living alone.

A critical challenge was highlighted in study that healthcare providers work independently under respective domains, like; intensive care, primary care and social services. Thus, the coordination between these is to be consolidated before promoting an integrated tele-healthcare system under assisted living technology. Ziefle et al.(2011) further added that while tele-healthcare systems have resulted in minimized hospitalization and empowering patients to lead an independent life within the comfort of their homes, these systems are highly intricate and make behavioural, communication and technology acceptance sceptical.

While the earlier study focused on the comprehensive needs of the aging population, Hu (2013) exemplified the role of assisted living technology in the pretext of physical and mental human disability. There are nearly 32 million people across the globe surviving with serious disability.

Thus, it is the responsibility of the governments to design and develop an expedient living environment for the disabled people. This is where technology can aid. Thus, assisted living technology can be instrumental in all these aspects and radical improvement in the medical care can be facilitated through tele-healthcare services. Darkins and Cary (2000) stated that the tele-health market in Europe is still in a nascent stage. In a comparative statement between UK and USA, they pointed that importance of tele-healthcare industry in Europe can be understood from the fact that in UK there are only 6.3 Computer Tomographic Scanners (CT scanners) per million inhabitants in comparison to 26 per million in USA (Darkins and Cary, 2000).

The below table provides for a growth scope of tele-health service industry in UK based on a comparative analysis between USA and UK.

Measure relating to spending on health care	**United Kingdom (UK)**	**United State (US)**
Spending on health care as % of GDP in 1996	6.9%	14.2%
Per capita spending on health care in 1996	$1304	$3708
Median age of the population in 1995	37 year	35 year
Percentage of the population over 65 years old in 1995	15.8 %	12.2%
GDP per capita (adjusted for purchasing power) 1995	$ 17,923	$25,635
Inpatient hospital beds per 1000 population in 1995	4.7	4.1
Average length of stay in hosp0ital by patients in 1995	9.9 days	8.0 days
Percentage of the population admitted to hospital in 1995	20.8 %	12.4 %
Population eligible for public funded hospital care (1995)	100 %	46 %
Infant mortality per 1000 live births (1995)	6.0/1000	8..0 %
Life expectancy of males at birth	74.3 year	72.5 year
Life expectancy of females at birth	79.7 year	79.2 year

Table 2.2: Measure relating to spending on health-care in UK and USA
Source: Hu (2013)

Technological advancements across the world have changed the way heath care system operates. Tele-health service is one such contemporary industry that is emerging at

an accelerating pace. This industry growth is attributed to higher demands by older and disabled people (Pulli et al, 2007).

According to 2013 European tele-medicine Conference, European economies are developing infrastructures to support tele-healthcare facilities mainly as they are able to penetrate within the markets covering larger consumer segments which traditional mechanisms fail to serve (HIMSS, 2013).Terry (2013) asserted that the economies of EU especially, UK and France are indulged in making huge expenditures to bring about structural changes in healthcare industry. This was done by investing in development of tele-healthcare industry which is considered to be a cost optimization approach.

A report by Deloitte, 2014, forecasted that expenditures related to health care in UK are expected to be to $292 billion by 2017 from $235 billion in 2012. But the report also sighted that there has been a very meagre increase in medical spending by United Kingdom that is only 0.1% since 2011 instead of the desirable 4 %. In order to achieve this desired level, UK has been challenged to resort to cost effective measures of delivering health care services along with cost minimization methods like cutbacks in employee compensations, decreasing expenditures related to pharmaceutical and medical technology and quota allocation of specific services.

The Deloitte (2014) report believes that tele-health care industry has huge growth potentials in UK as demands for GP appointments have intensified due to maturing workforce /population and declining total funding for National Health Services. According to Deloitte, 2014, tele-healthcare will prove to be an innovative model that would not only help the economies to deliver services efficiently but also cover a wide range of customers. Along with this healthcare service providers are able to cater to patients from across the world though effective use of web thus further geographically diversifying their business and enhancing revenue (Bichindaritz et al, 2010).

The review of the studies indicate that most of the researchers have viewed tele-healthcare services as an integrated part of the assisted living technology and it has an impending impact on the overall lives of the people and is not confined merely to physical well-being.

2.3.3 Characteristics of SMEs in tele-healthcare industry, particularly in Europe

According to Millis et al (2012), European SMEs to a large extent help needed for the growth and success of tele-healthcare industry. These organizations are characterized by innovative technological development that would provide easy access to wireless tele-healthcare services to people not only in Europe but across the world. The same research outlines that these SMEs have directed their resources and work round the clock to achieve this objective.

Koch (2006), in a research outlined that European SMEs play a dominant role in assistive technology industry. The primary reason is the scope of providing better and hands-on services to people without pinching their pockets. According to a report by Stack et al (2009), SMEs in tele-healthcare industry that operate in areas related to assistive technology are mainly unorganized. SMEs have taken a plunge in this tele-healthcare industry primarily as they are able to provide for quality health care services with the aid of advanced and innovative technologies like electronic sensors, video monitoring, remote health monitoring, door monitors, bed alarms, pressure mates, smoke and heat alarms (Koch, 2006; Miskelly, 2001). SMEs particularly those in Europe are able to provide customized tele-health services even with their limited resources thus enabling them to benefit from the same.

Cura-B evaluation report (2014) stated that the growth and characteristics of SMEs in tele-healthcare services industry is attributed to environmental factors like getting old populace, flinching labour groups, increasing requirements for health services especially for critical diseases, conditions, higher rural settlements and budget constraints.

The same was also agreed upon by Koch (2006) who also stated that along with the above mentioned problems, recruitment and retention of quality health care professionals was another issue that aided growth of tele-healthcare services thus providing for a lucrative opportunity to various SMEs. It is mainly because the assistive technology adopted by European SMEs along with Advance AT can be applied to various areas related to tele-healthcare services like Tele-health, Tele-medicine, Tele-care or Tele-homecare thus widening their scope of operations (Steventon et al, 2012).

The tele-health care system has been introduced in limited numbers in the UK, but the system is gradually rising. In the initial period the tele-health care system in the UK

information technology has played an important role. In the UK the more focus was given for providing safety and security for the people whereas in other countries like US more focus is on the management of the chronic disease (Gustafson, Hawkins, Boberg, & Owens, 2001; Gustafson et al., 2001). Author also stated that the introduction tele-health in the UK will have impact on the system of care delivery which is able to transform an unsuitable condition/environment to a safe environment for the patients.

This section provided an overview of the key theories that shall lay the foundation of the research paper. The tele-healthcare industry with special reference to SMEs the UK has been discussed significantly in the section. This enables a comprehensive understanding of the theoretical framework that shall be guiding the further research. However, the concept of organisational culture requires an extensive analysis that will be undertaken in the subsequent section and hypotheses formed shall be justified through application of findings from the literature and scope for unique research shall be exemplified.

2.4 Organisational Culture

Organisation culture is perhaps one of the most researched concepts in both academia and practice. This is because the cultural aspect of an organisation is indispensable in any aspect to be reviewed. The way an organisation or its employees function is determined by the organisational culture as it unconsciously builds a set of implied values that guide the organisation.

It is the responsibility of the senior-level management to establish, promote, maintain and change the organisational culture with the changing business dynamics. Organisational culture has gained a lot of relevance in the modern organisation where amalgamation of individual goals with organisational ones is necessary and employees are required to relate to organisational values (Alvesson 2012). After understanding its relevance, it is important to understand how organisational culture is formed or built. Witte & Muijen (2000) developed a conceptual framework to understand how different elements together make up or change the organisational culture.

The culture of any organisation has multiple factors influencing it like the macro environment factors, the interaction between employees and organisation, also the various organisational processes like HR functions, R&D, maintenance process etc. Following is the diagrammatic representation of the same.

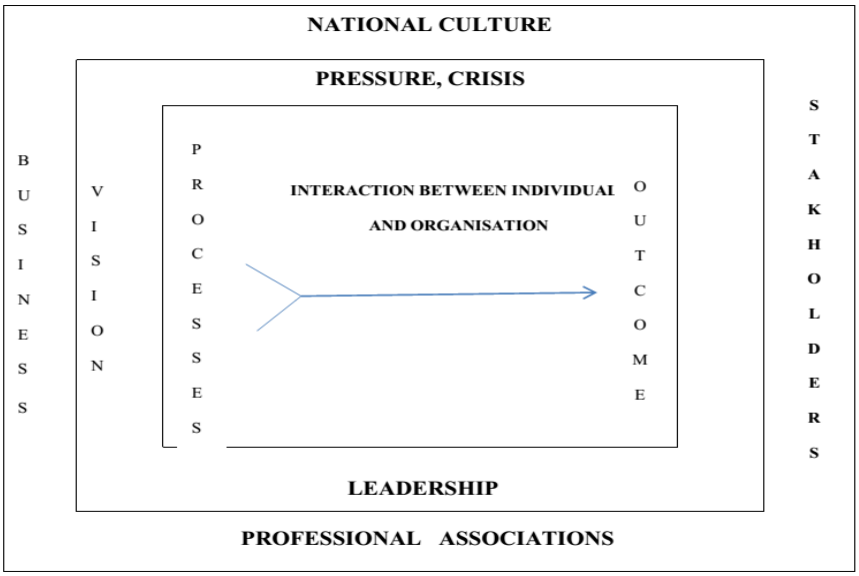

Figure 2.1: A Conceptual Framework of Understanding Organizational Culture

Source: Schein (2010)

It is wise to note that the different types of culture like national, ethnic, professional, organizational and microsystem issues are inter-related and exert considerable influence on each other (Schein 2010). Thus, it can be inferred that organizational culture can be viewed as a model of mutually accepted assumptions and values by a group in order to solve problems of adaptability to external environment and internal integration and is valid in approach and therefore is imbibed across the organization and even taught to new employees to ensure synchronization.

2.4.1 Defining Culture

Culture is a highly complex term and is difficult to define as it is not static but dynamic. In common parlance, culture is interpreted as the mutual preferences for foods, music, attire, lifestyle, etc. by a set of people. In fact, it is the culture that forms the various sets of people in the society. Also, culture is seen as comprehendible traditions and customs followed by people from different ethnicities. However, from a deeper perspective, culture covers numerous aspects apart from race or ethnicity we are born in. Culture is highly impressionable and humans tend to adopt from gender, social class, physical and mental capabilities, religious and spiritual inclinations, age and other external and internal factors. With the rise of globalisation, individuals are exposed to multiple cultures and gradually

distinct culture is developed (Zion & Kozleski 2005). Further, Maraña (2010) defines culture as, *"culture is that which offers the context, values, subjectivity, attitudes and skills on which the development process must take place".*

Culture, due to its variable nature, tends to get reconstructed persistently as people interrogate, alter and redefine their value system and actions after being exposed to changes and exchange of ideas. Thus, there cannot be one fixed definition of culture. Different authors have adopted diverse approach to define culture. A culture has an explicit and implicit influence of every element of the society, people, organisations etc. by way of mutually shared ideas, beliefs, values, attitudes or typical behavioural patterns.

Hall (1976) view culture has not a legacy that passes from generation to generation and nor it exists as a distinct identity but it is always shared and developed by the members of a society. Hofstede (1980) rejects this approach and see culture as a differentiating factor and pens culture as, *"the collective programming of the mind which distinguishes the members of one group from another"* and it is observed by generations but with each generation, some modifications are bound to happen. People tend to be particular about their culture as they have been imbibed with certain cultural values right from childhood and it is observed in every action of professional or personal nature.

This was further developed by Mulholland (1991) who acknowledges the intricacy of the term "culture" and also the incompetence of any single definition that has mutual consensus from both academia and practice. Mulholland (1991) interprets culture as a collection of communal and continuing implications, values and beliefs that define national ethnic, organisational or other groups and impact their behaviour. Since the study at hand is based on the concept of organisational culture, it is appropriate to understand the impact of culture on organisations.

Spencer-Oatey (2012) defines culture as *"culture is a fuzzy set of basic assumptions and values, orientations to life, beliefs, policies, procedures and behavioural conventions that are shared by a group of people, and that influence (but do not determine) each member's behaviour and his/her interpretations of the 'meaning' of other people's behaviour"*. This definition is applicable to organisational culture to a great extent as employees make considerable contribution towards establishment and sustenance of organisational culture.

Further analysis of culture can be on the basis of levels. The culture seems to mould into different shapes at different levels. This adds conformity to its dynamism yet again. The simplest demarcation of the levels can be national, organisational and personal. This analysis holds a lot of weightage in today's globalized dynamic business platform as culture plays a vital role in the organisational performance.

2.4.2 National Culture

National culture is the paramount level of culture that dominates all the other cultures. From the business perspective, assessing national culture is essential to understand the cultural niceties and behavioural patterns to make strategic decisions related to exploration of a new market for product or service offerings or even talent hunting; comprehending the composition, characteristics and expectancies of the labour market and internationally outsourcing relationships. However, with the intensifying migration of labour, universal demographic shifts are making cultural boundaries meaningless to a certain extent. (TMC, www.tmcorp.com, 2009).

McSweeney (2002) explored the Hofstede's model of national cultural differences and consequences and deduced that national culture is not a single entity but a set of multiple cultures existing within a nation or country but is viewed as a single set of cultural traits that distinctively characterizes residents of one country from another. Though the population of a country can be classified into various subsets on certain concrete grounds however, Hofstede asserts that in spite of these sub-divisions, the population of every country represents a unique culture as a whole.

This is a blended approach of both centrifugal and unifactory outlooks. However there can be contradictions. For instance, the "Great Britain" comprises of at least three nations: England, Scotland and Wales but represent a single "national" culture, the "British" culture. Thus, according to Hofstede, national culture may denote the culture of a country or state and not a nation alone.

Mutschink (2007) explored the influence of national culture on the managers and their decision making process. It is observed that leaders/managers of organisations take organisational decisions like recruitment, structure, strategy etc. only on the bases on what they feel is "right". This is an outcome of cultural inheritance along with other rational

organisational aspects. Managers hailing from strong cultures tend to play an active role in shaping the organisational culture and employee culture as well.

The rise of multinational organizations has encouraged the research of impact of national cultures on the organisational variables that have caught the attention from both academia and practice. Li & Harrison (2008) explored the impact of national culture on organisational structure and leadership. The study was conducted in context of the growing number of multinational companies. Researchers opined that institutional rationality proposes that companies tend to pursue legitimacy within a society by abiding by the respective prevalent societal values and customs. Since, societal traits are an integral aspect of national culture, it is obvious that corporate governance of an organisation will have an implied influence on the national culture.

Thus, it can be deduced that national culture is a vital influencer on organisational culture and its understanding is imperative to ensure better organisational performance and employee satisfaction is achieved.

2.4.3 Organizational Culture: Concept, Relevance and Importance

Organizational Culture has emerged as a concept that is highly explored and studied by experts from both the academics and practice. Organizational culture has been studied in context with a variety of concepts like organizational change, human resource management and its strategic relevance has been explored considerably (Brown 1998).

Parker (2000) explored the concept of organizational culture with identity and expressed that organizations are the results of intricate sequences of local interactions which can never be acclaimed by any one of the influencing forces like economic, social structure, technological implications etc. Since no one attribute is responsible for organizational characteristics, comprehending organizational culture tends to include consideration of both specificity and generality which makes an organisation both unique and similar to the other organizations.

Though Parker (2000) agrees that organizational culture is a collective set of beliefs, values, norms, protocols etc. that are mutually adhered to by all belonging to a particular organisation, yet the author asserts that even the organizational culture has multiple divides like functional, generational and professional.

These divides are explained as below:

Spatial/Functional		Geographic and/or departmental divides - 'them over there, us over here'
Generational		Age and/or historical divides - 'them from that time, us from this time'
Occupational/Professional		Vocational and/or professional divides - 'them who do that, us who do this'

Table 2.3: Three Divisions of Culture

Source: M. Parker, (2000)

Witte & Muijen (1999) opined that organizational culture is a complex phenomenon demonstrated through behavioral traits, implicit conventions and human tendencies. However, examining organizational culture on various levels like creation, values and fundamental assumptions is essential in order to foster or promote a favorable organizational culture across the entity. For developing a favorable organizational culture, managers have to first bring about changes in their behavior and then motivate their subordinates to follow the suit. Development of an organizational culture can decrease conflicts, improve coordination and control, lessen uncertainty and enhance employee motivation across the organization. It is the amalgamation and alignment of organizational culture with the vision and strategy that promotes an effectual and competitive organization.

Thus, as different countries have their own distinct cultures, likewise companies have their own unique organizational culture. Organizational culture is a structure for inter-personal relationships and organization's relationship with its environment. Cultures are highly dynamic in nature and are constantly evolving as employees keep on improving themselves. Also, each change in the environmental factors of an organization has an obvious implication on the organizational culture (Katrin 2011)

Schein (1990) presented organisational culture as, *"(a) a pattern of basic assumptions, (b) invented, discovered, or developed by a given group, (c) as it learns to cope with its problems of external adaptation and internal integration, (d) that has worked well enough to be considered valid and, therefore (e) is to be taught to new members as the (f) correct way to perceive, think, and feel in relation to those problems"* (p.111). However,

Willcoxson & Millett (2000) asserts that organizational cultures emerge from the more expansive cultural contexts like national or ethnic groups. Like these broader cultural sets, organizational culture is also a set of protocols, beliefs and behavior that provides organization to have unique traits. Organizational culture is highly dynamic in nature and changes, many a times, are concealed. Thus, to manage such culture is a challenging task for the managers.

Relevance: Ogbonna & Harris (2000) through an extensive literature review and subsequent empirical study established the relationship between leadership style and organizational performance, chiefly influenced by organizational culture. Schein (2004) further asserted that organizational culture is fundamental for sustainable organisational performance and competitive advantage. The major reason for companies succumbing to unethical practices is that though most leaders acknowledge the potential of culture but only few are able to tackle it strategically.

Rhyne et al. (2002) studied the influence of national culture on new product innovation and deduced that as even small high-technology firms expand and venture into the globalized market, the impact of national culture on the firm's success is significant. Another key relevance of culture, the impact of organisational culture on employee behaviour was explored by Nacinovic et al. (2010) who believe that culture fosters innovation only when it is backed by HR practices : training to enhance knowledge, skills and abilities of the employees; performance based reward system (acknowledging employee contribution); and team development through leadership and team based activities.

Further, Liao et al. (2012) apart from innovation, explored the relationship between organisational culture, knowledge acquisition and organisational learning and found out that organisational learning has an obvious impact on the knowledge acquisition and organisational innovation. Most of the studies explored so far focus majorly on one dimension of organizational performance i.e. innovation as the consequent of organizational culture. None of these have explored the underpinning cultures that foster several elements of quality and innovation performance simultaneously.

This gap was filled by Prajogo & McDermott (2011) who studied different culture types with performance dimensions like product quality, process quality, product innovation, and process innovation. Through an empirical study it was found that

predominantly organizational culture contrasts between control and flexibility orientations which have a diverse impact on the firm's quality and innovation, external and internal orientations which is replicated in products and processes. For product innovation, level of novelty, adoption of contemporary technologies, promptness of market entry and number of innovative products launched.

On the other hand, process innovation also includes the promptness in adapting to contemporary technologies, technological efficiency of the firm, innovative process technology and pace of technology renewal. Thus, it is important that firms strive to strike a balanced fit between the cultural dimensions and performance measures. It is the analogy of this fit that enables organisational culture to be used as an asset to accomplish performance objectives. For the study at hand, the perspective of organizational culture proposed by Prajogo & McDermott (2011) presents a perfect base as the study intends to analyse the role of organizational culture on non-financial dimensions of organisational performance.

Importance: Culture of an organization is its soul, molded through success and impediments. There are various characteristics of high performance culture. In such organization, people are passionate about their roles and responsibilities and are eager to fulfill them. The employees of such organization are focused towards exterior environment of their organization such as client, opponents and groups. Such environment also foster training programs for the employees including managers (Meehan et al. 2006).

If an organization is having strong corporate culture, they are more prone to high performance by the employees and have greater suppleness to alter themselves according to the changing demands of the market. Organizations which manage their culture efficiently perform comparatively better than those who did not. A customer is highly satisfied with the organizations which makes continues efforts in developing and handling vigorous corporate culture. Schein in Desson & Clouthier (2010) cited the significance of organization culture. Some of the advantages of having effective culture are as follows:

- It helps an organization in taking right decisions.
- It demonstrates the appropriate behavior of the employees and their interaction with their peers.
- It exhibits the way task should be accomplished.
- It also express the pace and effectiveness with which job has to be done.

- It also molds the attitudes of the stakeholder outside the organization.

Uppalli & Alabee (2013) through their study asserted organizational culture as an indispensable element of an organization demonstrating the viewpoints of the employees pertaining to their organizational responsibilities and satisfaction with their respective jobs. In the highly competitive and global environment, leading managers and decision makers utilize their knowledge about the organization and its bearing on various areas for making critical decisions. While most of the scholars presented the impact of organization culture on employee productivity and competitive advantage, none have thrown light on its impact on organizational commitment and job satisfaction of the employee. This gap was bridged by (Silverthorne 2013). He stated that resemblance between the employee and organization are crucial for organizational success. A study conducted in Taiwan exhibited that a favorable environment increases the satisfaction among employees with their jobs and leads to their enhanced commitment. Mubin et al in (2014) stated the relationship of organization culture with the employees in terms of weak and strong culture.

They are of the view that if a culture of an organization is strong, it will be pleasant for the employees and they will adjust well with the policies and guidelines of the organization. However, if there is weak culture prevalent in an organization, the employees are reluctant and take responsibilities out of compulsion. They feel detached and to them organization is just a source of earning. Furthermore, the culture of an organization also plays important role in encouraging salubrious competition among the employees (Mubin et al. 2014).

2.4.4 Personal Culture

Personal culture is the last tier of the multi-level model of culture. Miriam Erez & Gati (2004) discussed the structural dimensions of culture with most macro level being the global culture, downing to national, organisational and team cultures and finally to personal culture. Culture is highly versatile in nature and adopts both top-bottom and bottom- top approach where one cultural level make a substantial impression on the other resulting in a significant change and brings behavioural change in the participants of various cultures. Conversely, individual behavioural changes also escalate through the structural ladder and

gradually become mutually accepted behavioural norms that mould the macro level cultures eventually.

Matsumoto (2007) further explicated the personal culture. The behaviour of a person is the result of the interface between culturally dependent social roles and individually varied role identities. Social roles consist of the expectancies and normative behaviour arising from the mental interpretations of the situations. These interpretations are a part of culture. Culture also derives from the interaction between a person's behaviour and environmental factors in which the group to which the individual belongs exist. In a way, culture is the way an individual learns how to live, react to situations and meet the physical and social needs.

Nall & Aull (2011) elaborated personal culture in context of the contemporary globalized world and stated that in modern global world, culture is nothing but "global" disparities. With globally expansive technology being used, people from diverse cultural backgrounds are coming closer and interacting at multiple levels. Though with this, a lot of understanding of various cultures is being fostered in general but still an individual makes decisions or behaves majorly on the basis of individual customary beliefs, values and goals. This is the most important aspect of the personal culture.

The research at hand has explored the organizational culture of tele-healthcare industry in the previous section. Most of the studies explored discussed about the concept of organizational culture, its relevance, importance and concept of personal culture, it evident that the study on tele-healthcare industry is absent. The studies presented in the above sections either talks about organizations in general or taking only large enterprises into purview, making this concerned study a first to fill the gap. Thus, in order to focus on the role of organizational culture within SMEs, the present research will be undertaken. Different dimensions to organizational culture have been explored in the consecutive section.

2.4.5 Dimensions of Organizational Culture

Over the years, organisational culture has attracted the attention of numerous scholars who have developed several integrative frameworks. It is ironical that even with the immense research work done in the field of organisational culture, there is no consensus established to a general theory. Culture is regarded as a highly intricate phenomenon

encompassing underpinning beliefs and presumptions to identifiable structures and practices. Due to this characteristic, many scholars are sceptical about whether culture is "measurable" in a relative sense (Rai 2011; Pahl-Wostl et al. 2008; Denison 1996; Dauber et al. 2012; Fey & Denison 2003).

Organisational culture has been determined as a critical influential factor in terms of organisational performance and acquiring competitive advantages. Thus, it is essential to review the prominent established theories. This section focuses on a few major theories of organisational culture.

2.4.6 Theories of Organizational Culture

2.4.6.1 Organisational Culture Inventory

Traditionally the organizational culture was assessed by qualitative methods, now with the help of *Organizational Culture Inventory* as an instrument the organizational culture can be assessed quantitatively. The quantitative approach of assessing the organizational culture is useful in both the cross sectional organizational research and data base for the cultural change in the organization. Organizational culture inventory is a measurement instrument which is designed to use within the organization and also across the organization in research and also useful in the promotion of culture change which are guided by various programs of organizational development.

Organizational Culture inventory as an Instrument

"The organizational culture inventory was designed as a part of self-scoring, multilevel diagnostic system for individual change and organizational development"(Cooke, Rousseau, & Lafferty, 1987, pp 815).

The organizational Culture Inventory consists of 120 items which are developed to produce 12 scales and each of the scale with 10 items. Each of these items explains the behaviors which are expected by any organization from its members. The 12 scales of the culture patterns are as follows:

i) **A Humanistic Helpful culture**- expects its members to be supportive and constructive.

ii) **An Affiliative culture** –focus more on building the interpersonal relationship and the members are expected to become more friendly and open in nature

iii) **An Approval culture-** make sure that there are no conflicts and the interpersonal relation are pleasant.

iv) **A conventional culture**- This culture is more conservative and traditional and the peoples in the organization are expected to follow the rule and the regulation of the organization.

v) **A Dependent culture-** expected to do only what the central decision makers have told them to do.

vi) **An Avoidable culture -** organization which does not know how to reward the success but never forget to punish comes under this kind of culture. There is no incentive for initiating new thing among the employee in this kind of organization.

vii) **An Oppositional culture –**the employees of the members of the organization can gain reward by being critical to the ideas to make it safe.

viii) **A Powerful culture- in** organization which has powerful culture, the members thinks that they will be rewarded if they take the initiative and being responsible to the higher authority.

ix) **A competitive culture-** where outperforming each other in the performance is the main motive of the members and if they succeed they will be awarded.

x) **A Competence/ Perfectionistic culture-** organizations which have this kind of culture, the members should avoid making mistakes and work extra to meet the target.

xi) **An Achievement culture- the** hard work of the members is recognized and awarded. Members also respond by putting up a challenging targets and put full effort to achieve them.

xii) **A Self-Actualization culture-** focuses more on quality then quantity and accomplish the growth of every member in the organization (Cooke & Rousseau, 1988)

Owing to the vastness in the types of culture identified by this theory– 12 scales with 10 items each, the researcher has explored various other theories which explicitly brings out the prominence in organizational functioning of the case SMEs of healthcare sector, within limited timeframe.

2.4.6.2 Schein's 1985 model of organisational culture

Edger Schein in 1984 perceived organisational culture as the "glue" of an organisation, facilitating a distinct entity and forte for the respective organisation. Author approved that organisational culture as the set of values, norms, beliefs and behaviour that are mutually agreed by most of the people of an organisation and gradually is passed on to the newly joined employees. Schein also posit organisational culture as the particular behaviour pattern that is observed in a particular organisation for augmenting the performance and problem resolution. Schein presents organisational culture to be made of three layers as represented below:

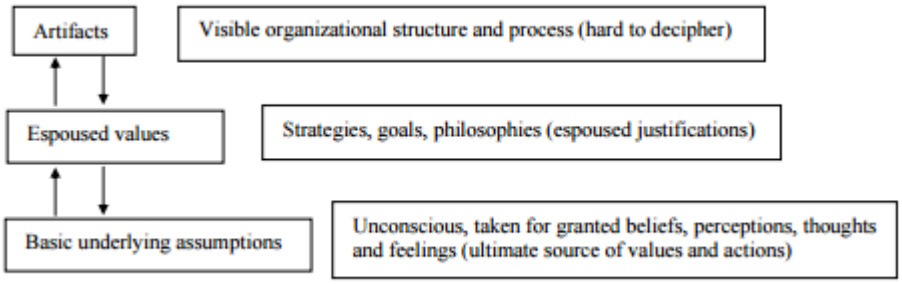

Figure 2.2: Structural Model of Culture Indicating different levels of Culture
Source: Edgar Schein, (1984)

Artifacts comprise the first level of culture that encompasses all the noticeable and detectable organizational processes and structure. Artifacts like mascots, jingles, punch lines and facilities are easy to identify and distinguish but the underpinning significance of these elements is not always precisely comprehended (Schroeder 2010; Schein 1984).

The next level includes espoused values which can be inferred as *"norms that provide the day-today operating principles by which members of the group guide their behavior"* (Schein 1984)..

The third layer is the basic assumptions. To understand the organizational culture, it is imperative to unleash the underlying assumptions. These assumptions are the real basis for scrutinizing the organizational behavior as they provide the stakeholders with the mental maps of organizational culture that navigate their opinion, emotions and actions within the cultural framework (Kong 2003; Schroeder 2010; Schein 1984).

Highlighting the drawback of the model, Hatch (1993) is of the view that Schein's model of layers of organizational culture like artifacts, values and basic assumptions does neglect the evolution of the culture as symbols and processes, and hence inappropriate for the study.

2.4.6.3 Hofstede's culture dimensions

i) Mean oriented vs Goal oriented

In mean oriented the work to be done is identified as "how", whereas in goal oriented culture the employees are motivated to achieve some particular target or goals and the work to be done is identified in term of "what". The mean oriented culture involve minimum risk and limited amount of effort while in the goal oriented culture require much more efforts and also involve risks.

ii) Internally driven versus externally driven

The employees in internally driven culture are well aware about the requirements of the customers and how to treat them. Whereas in case of the externally driven culture the one and only focus is on meeting the requirements of the customers, here results are more important than the ethics.

iii) Easy going versus strict work discipline

The easy going culture shows a loose structure which is lacking in predictability and there is little control and the lack of proper discipline. In case of the strict organizational culture there is maximum control and proper discipline..

iv) Local vs professional

In local organization employees identified with their boss where they work but in case of professional organization the identification of the employees are only determined by the employee's profession on which he/she works..

v) Open versus closed systems

Organizations which have open culture welcome the new comers immediately and they are open to both the outsiders and insiders of the work place. On the other hand in the closed organization it will be difficult for the outsiders to adjust and they are not open to the other employees of the organization.

vi) Employees oriented vs work oriented

In a very employee culture the employees of the company feel that the personal issues are taken into consideration whereas in the work oriented culture there is huge pressure to achieve the given target and there is no space for the personal issues (Khastar et al. 2011)

Hofstede's cultural dimension theory is deemed inappropriate for the study owing to its generalized view. The dimensions discussed in this section are more of situationally specific cultures and therefore lacks permanency, owing to which the theory will fail to bring in the exact organizational culture which impact the non-financial performance of the case SMEs.

2.4.6.4 Charles Handy 1999 model of organization culture

There are four types of organizational culture that an organization follows as propounded by Charles Handy. These cultures are used by Handy to portray functionality of organizations. These are as follows:

Power/Club Culture: It is manifest in the organizations where power rest in the hands of a dominant and chief leader who is often charismatic and all other people often report to this centralized person(Thomas 2006).

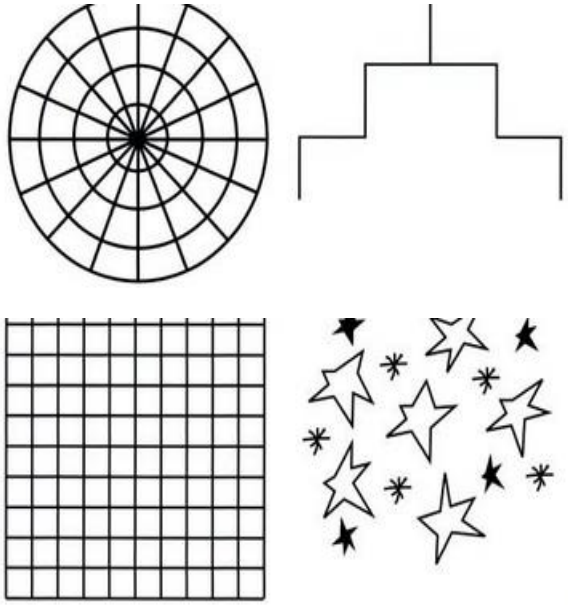

Figure 2.3: Handy's Classification of Organizational Culture (a. The Club Culture, b. The Role Culture, c. The Task Culture, and d. The Person Culture)

Source: (Thomas 2006)

Role Culture: It is culture wherein roles and responsibilities are delegated to the employees as per their qualification and specialization so that they can outperform their job (Bowyer & Martinell 2004).

Task Culture: Presently, this culture is in vogue among competitive organizations. This culture place emphasis on getting job done and is commonly known as job centered, project centered culture and team culture. In this culture proficiency is more valued than position and lays emphasis on team efforts thereby being highly elastic and can adapt itself to the diverse environment.

Person Culture: This type of culture is somewhat difficult to handle as it has nominal structure. This culture is concerned with individuals who have service and facility such as workplace, area, apparatus or support by personal assistant in common(Bowyer & Martinell 2004).

Highlighting the drawback of Handy, Schien advocated the levels of Organization culture which Handy failed to explain and hence is deemed inappropriate to base the study by the researcher.

2.4.6.5 Hatch & Cunliffe (2006) organisational culture model

The generic model of organizational culture proposed by Hatch and Cunliffe provide better-off visions in culture changing aspects in organization. They made a distinction between the four areas which are as follows:

1. Organizational Strategy
2. Organizational Design
3. Structure and processes
4. Organizational Behavior and performance (Dauber et al. 2010)

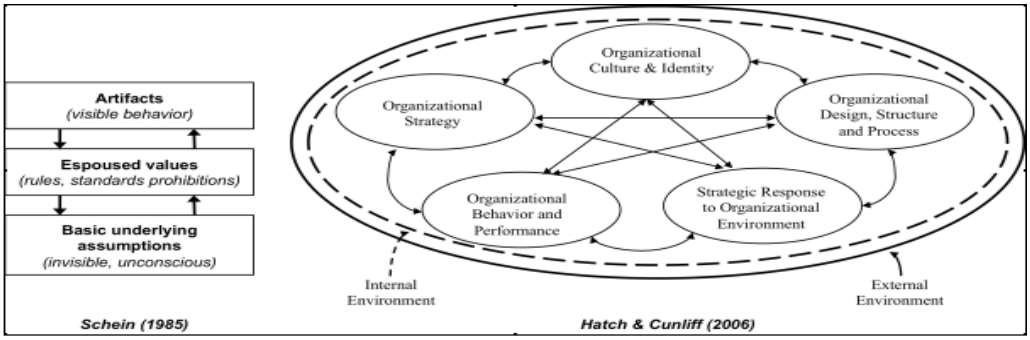

Figure 2.4: Models of Organizations by Schein (1985) and Hatch & Cunliffe (2006)
Source: (Fink et al. 2010)

Hatch and Cunliffe model advocates which areas seem to be of extreme prominence when organizations are being analyzed. However this model lacks in the sense that it does not encompass the information about relatedness of these domains and how they change with the passage of time. As a consequence, there is requisite for a supple organization theory structure, which outlines areas and procedures of organizations in a comprehensible and understandable universal perspective (Organization Orientation Group 2011). Owing to this lack in relatedness in domains, the model of Hatch and Cunliffe is deemed inappropriate by the researcher.

2.4.6.6 Denison Theory

Impact of organizational culture on organizational performance was assessed by Denison using both quantitative and qualitative methods. About 30 individuals from two diverse organizations were interviewed for the purpose. A hypothesis was developed connecting cultural features to organizational functioning. The suppositions are as follows:

- Involvement Hypothesis: One of the aspects of culture is organizational involvement and it will be certainly linked to the performance. According to the researcher, high level of involvement, and participation in organizational function gives a sense of ownership and responsibility. With ownership, comes commitment and increases employee's capacity to work under greater autonomy. This in turn improves the decision making process increasing the quality of decisions. Thus application of these principles result in organizational culture known as "clan"
- Consistency Hypothesis: Consistency and degree of shared standards is also an essential feature of culture and it will be definitely linked with the performance. The hypotheses emphasizes on the importance of strong culture in ensuring effectiveness of the organization. It also emphasizes on the importance of internal controls i.e. system which includes, beliefs, values, symbols such that members are able to achieve consensus in order to achieve coordinated actions.
- Adaptability Hypothesis: Capability to react to the exterior environment by making alterations internally is also the aspect of the culture and it will be clearly related to the performance. This hypothesis holds the belief that organizations hold a set of beliefs and norms in order to interpret and translate signals received from external environment. However, in case of new situations, organizations needs to hold the

capacity to unlearn the old code and create a new one with the adaptation process. Thus, adaptability within the organization is dependent on three aspects, i.e. 1) ability to respond to external stimuli, 2) ability to respond to internal customers (employees) and 3) react to both internal and external stimuli and restructure and tr-institutionalize set of behaviors in order to adapt to the organizational change.

- Mission Hypothesis: Mission of the organization is also an imperative aspect as it will certainly linked to the performance. Importance of mission is that it ensure shared vision and direction for the members of organization such that it provides meaning and purpose to the organization, and also clearly defines the goals and directions (Brown, 2007). Success is more likely to be achieved with clear direction and strong sense of mission.

The model proposed by Denison is built on about twenty years of investigation associating culture to performance measures such as productivity, progress, eminence, invention, and client and worker satisfaction. This model basically answers four key questions about the organization which are pertaining to the mission, adaptability, involvement and consistency. It states about the awareness of the organization about where they are going and regarding to their responsiveness to the market they are serving to. It also answers about the queries about the capability, engagement and alignment of the employees about the values and process required to execute their plans (Denison Publishing 2009).

Mission, adaptability, consistency and basically are the traits which are further configured into three indexes. These indexes define precise conducts in corporate dialect to make the outcomes pertinent as well actionable in the organization(Denison 2011).

There has been much debate for the suitable and appropriate model of organization culture. Different authors and researches have given different measurements and dimensions for organizational culture (Detert et. al., 2000). Detert el al recommends eight common dimensions for the organizational culture, namely, *the basis of truth and rationality in the organization, the nature of time and time horizon, motivation, stability versus change/innovation, orientation to work/coworkers, isolation versus collaboration, control versus autonomy* and *internal versus external.* Other models of organizational culture includes the Organizational culture survey (includes 6 items), the organizational

cultured inventory (Cooke and Rousseau, 1988), the multidimensional model of organizational cultures (Hofstede et al 1990) etc.

Among the existing models of organizational culture the CVF model has advantages over other models. First it has only few dimensions but the implication is very broad. The two dimensions of this model incorporate essence of all the eight dimension discussed in previous sections above.

Secondly, the CVF model of organizational culture is empirically valid in the cross – culture research and also this is the only model which has been extensively used in China. Finally the CVF model is most succinct, which includes only 24 items in the questionnaire which are very convenient for real world practices (Yu & Wu 2009). A comprehensive table of all the theories on organizational culture discussed and presented in appendix 1.1

After exploring the various dimensions of organizational culture through the various renowned theories of organizational culture discussed in this section, it is consequential that the methodology or the framework suitable for the measurement of organizational culture should be explored in depth. For the study under consideration, the Competing Value Framework is being used which has been critically reviewed in the upcoming section.

2.4.6.7 CVF theory

An organizational culture framework was developed Cameron and Quinn which has its foundation upon the theoretical model known as Competing Values Framework. This agenda denotes if an organization is focusing internally and externally predominantly or not. It also states whether an organization is attempting for suppleness and independence or constancy and regulation. Apart from this an Organizational Culture Evaluation Device was developed for identifying the profile of the culture prevailing in the organization. This profile is based on the basic values, suppositions, elucidations, and methodologies that portray organizations (Berrio 2003).

This framework helps leaders in intense understanding and aids them to perform efficiently in creation of values. It also helps leaders in developing potentials at the time of tension in organization. In the history of business, this framework is of utmost importance and has been studies and tested by various scholars from prominent schools and organizations (Cameron 2006). This framework focuses the integral tensions and

incongruities faced by the organization as they sail across intricate and ever changing environment (Walsh 2009).

This model is associated with the organizational effectiveness. Quinn and Rohrbaugh (1983) stated in Sirotiak (2008) that one dimension is linked to an organization's innermost effectiveness and another to the exterior concentration of the organization. This tool is being enjoyed in numerous organizational perspectives. It is capable of assessing administration, regulation, headship roles and philosophy and scrutinizes organizational performance, procedures and observes gap.

CVF is a notion that permits the imagining of multiple management theories such as internal process, open systems, rational goal and human relations. When four quadrants are formed on two axes, these models fit into each individual quadrant.

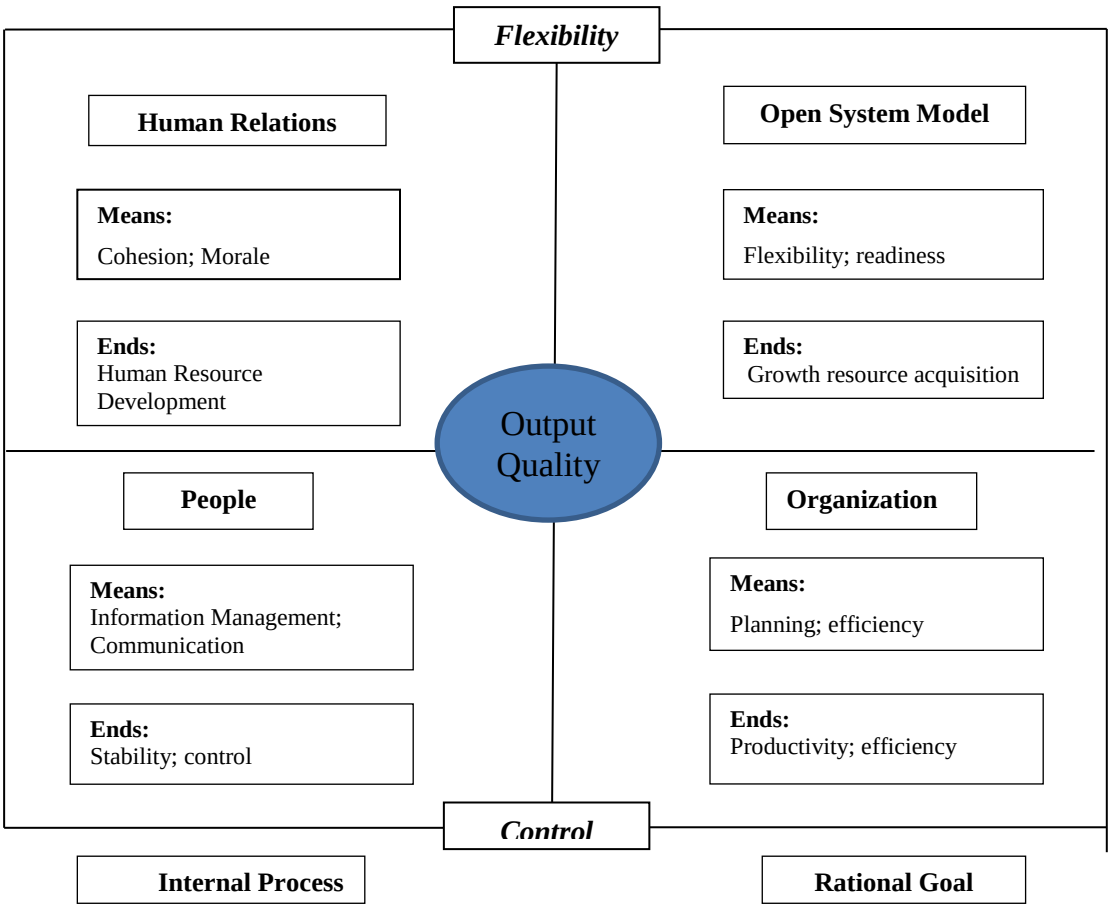

Figure 2.5: The Competing Values Framework (Quinn & RohrBaugh, 1981)

Source: (Sirotiak 2008)

As can be seen in figure 2.6, flexibility appears at the top and control occupies the bottom position. The right hand side position is occupied by external and left side is occupied by internal, human resource model stresses on inner suppleness, unity, self-confidence and personnel development and fits in the upper left quadrant of CVF model.

Open system model fits in the upper right hand quadrant and features the importance of exterior suppleness, willingness, progress and acquisition of resources. The internal process model fits in the lower left quadrant of the CVF model and stress on inner control, constancy, data management and interaction.

Conclusively the rational goal model fits in the lower right quadrant and emphasizes the significance of exterior control, development, setting of goals, output and efficacy. The importance of these four quadrants lies in the fact that they signify how over period of time these organizational standards have become linked with diverse forms of organization (Pierce 2010).

The cultural view of CVF gives up four types of orientations of culture namely a group culture, a developmental/Adhocracy culture, a rational culture and hierarchical culture. The upper left quadrant of the model exhibits the clan culture which comes under the human relation model. It is characterized by suppleness and inner focus. The leaders of this culture are often participative, thoughtful and helpful and inspire communication through collaboration.

The upper right quadrant exhibits the adhocracy culture under open system model. This culture is characterized by flexibility and focus towards external environment. The leaders of such culture concentrate on discernibility, lawfulness, external sustenance. The lower left quadrant exhibits hierarchy culture and comes under Internal Process model.

This culture is characterized by inner efficacy, consistency, synchronization and assessment. The leader of this culture are traditional and vigilant (Butch 2008).

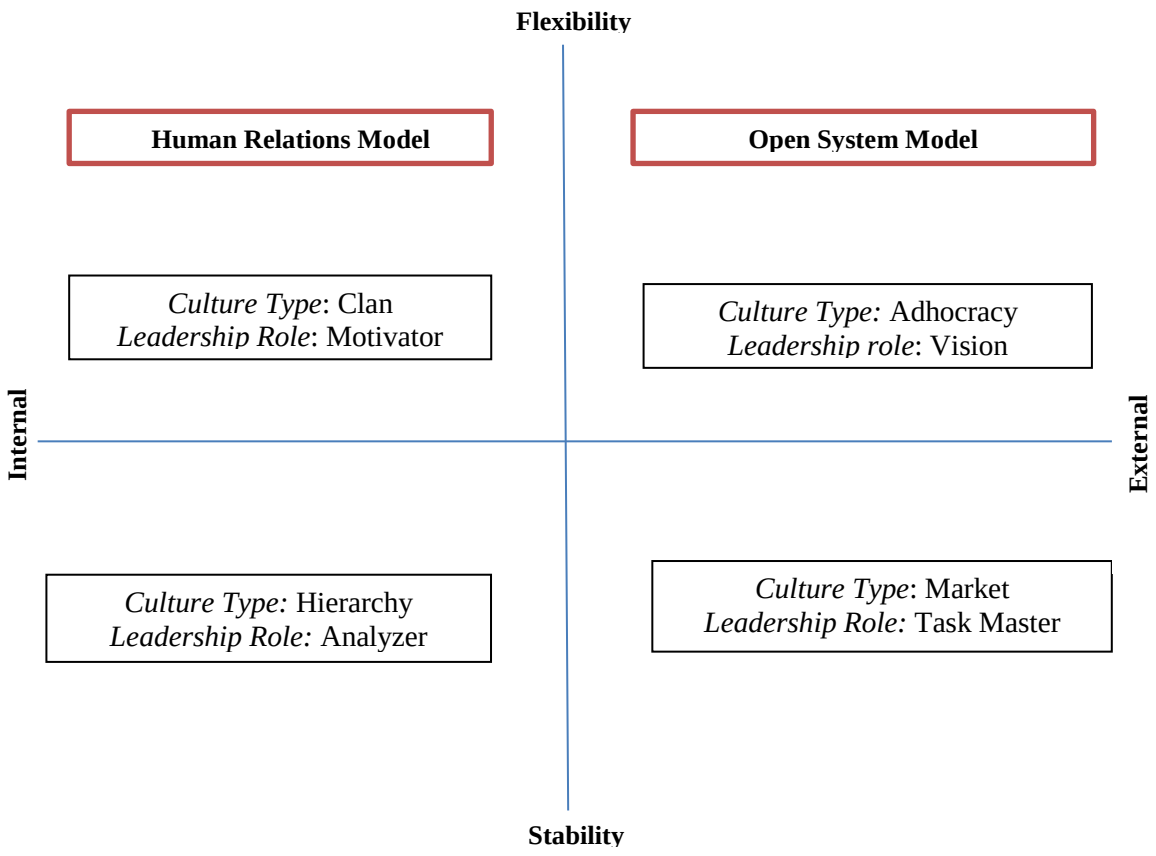

Figure 2.6: Organizational Culture Types in the CVF

Source: (Butch 2008)

The lower right quadrant displays the market culture under the rational Goal model. It is categorized by focus on external environment and maintaining stability. The leaders of such culture have orientation towards goal and are active and practical (Butch 2008). The clan culture is about sharing values and common goals and emphasizes on the importance of employee engagement and empowerment within the organization.

Clan culture according to Wilkins and Ouchi (2006, p. 28) can be developed within organizations with long history, stable membership, and strong interactions among employees. Adhocracy on the other hand is a temporary institution which ends with the end of organizational tasks and thus can be seen in filming, consulting, development industries. Market culture is more concerned with external environment wherein the organization is concerned with tapping market competition to generate profit. Finally, the hierarchical culture is concerned with standardized rules, strict controls and well defined responsibilities such the constant environment within maintain within the organization.

There has been an extensive research done to determine the relationship between CVF and its impact on organizational performance. Lund, (2003), in their research have pointed at the relationship between organizational culture and key organizational variables which ultimately impact the organizational performance like employee satisfaction.

The findings of the research indicated that employee satisfaction is positively related with clan and adhocracy cultures and negatively linked with market and hierarchy culture. Prajogo & McDermott (2011) explored the relationship between the four cultural dimensions proposed by the CVF and its impact on performance dimensions: quality and innovation pertaining to product and process.

These dimensions are essential for an organization's survival. However, it is worth noticing that an enterprise has several strategic options for competitive performance. Thus, it becomes imperative for managers to strike a perfect fit of organizational culture and subsequent performance. There is ample of literature supporting the role of organizational culture on quality and innovation.

The authors used CVF as a tool to establish a relationship between culture and quality and innovation. CVF portrays four contrasting cultural dimensions: control axis with two contrasting orientations flexibility (spontaneity and development) and control (stability and continuity); internal-external axis that focuses on maintenance and improvement of the prevalent organization and otherwise on adaptation and interaction with the external environment.

Although a lot of studies have been conducted to discuss the role of culture towards organizational effectiveness, review of studies conducted in the past reflects that clan culture is the most consistent culture reflecting on organizational effectiveness. Clan culture (Hartnell et al 2011; Dyer and Reeves, 1995; Gregory et al 2009; Have et al, 2003; Lund, 2003; Schgens, Bausch & Balkin, 2013) has been found to contribute towards quality and product and service innovation, when compared to market, hierarchical and adhocratic culture.

These two axis and four quadrants result in four diverse culture types: group, developmental, hierarchical and rational as shown in the diagram below:

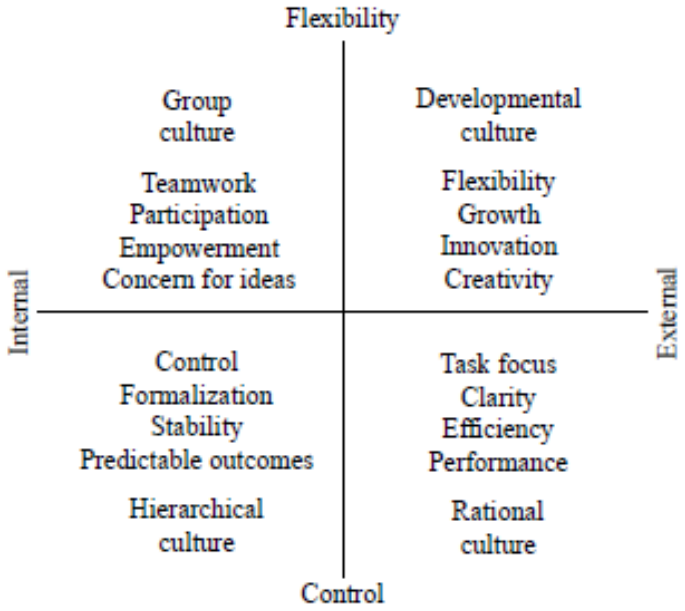

Figure 2.7: Adapted CVF model of Organizational Culture

Source: (Prajogo & McDermott 2011)

These contrasting values of control versus flexibility and external and internal orientation makes it the most appropriate organizational culture model for the study as it leaves no stone unturned while analyzing the role of culture in promoting organizational performance (Prajogo & McDermott 2011). Suitability of the model is further explained in the next section.

2.4.6.8 Suitability of Competing Values Framework (CVF) Model

It is evident from the studies explored that organizational culture is extremely important for the sustainability and longevity of organizations, especially, SMEs (Hatch & Schultz 1997). However, with several theories and models of organizational culture discussed in the preceding section, it becomes essential to identify one comprehensive model that can work as the foundation for the study at hand and the basis for seeking solution for the problem at hand.

The Competing Values Framework proposed by Quinn and Rohrbaugh is appropriate for studying organizational culture amongst SMEs because it enables a significant structure for the several aspects of organizational culture and leadership styles. The model explicates value systems based on two key dimensions: pairs of contrary values (flexibility versus

control and internal versus external orientation). The analysis on the basis of this model can elucidate similarity of various cultures with the organizational goals of innovation. Control theory explains the inter-relationship of organizational culture and innovation while culture focuses on the ideational aspects of the organizational values (Büschgens et al. 2013).

Over the years, the inter-connection between organizational culture and innovation has been widely explored but the arrays of cultural variables that have been analyzed have resulted in a formation of a disintegration set of literature positing culture for innovation. There is ample of scope for building a comprehensive and all-encompassing management theory. This will help the management practitioners to identify which culture type will befittingly promote innovation in their organization and how it can be instrumented (Büschgens et al. 2013).

Martin & Staines (1994) attempted to identify the reason for the high failure rate of the small and medium sized enterprises in UK and found that though there is insufficient trustworthy evidence about which factors are responsible for the success or failure of the firms. However, the key finding was the organizational culture was the chief underpinning phenomenon that influences the managerial competencies.

The importance of organizational culture in small and medium enterprises was further explored by Wooldridge & Minsky (2002) who asserts that synchronization of the various business functions is imperative for constructing a sustainable competitive advantage. Authors affirm that it is organizational climate and socialization process that promotes such synchronization and thus, impacting the firm's performance. The managers of SMEs can amalgamate the organizational culture, market orientation, climate, socialization processes with the help of the CVF model and gradually impact the market standing of the organization.

In the same year, Zaheer et al. (2006) explored a sample of 162 SMEs in two Pakistani cities, Rawalpindi and Islamabad to find the inter-relationship between organizational culture and organizational performance using the organizational culture assessment instrument and the CVF theory. The authors inferred that SMEs cannot be considered to be high performing entities if they intensely accentuate only one culture type. On the other

hand, the high performing SMEs are focused to develop their employees (Clan) along with ensuring a commanded output and performance from them (Market).

Thus, SMEs with flexible culture register better performance. Further, the study reaffirmed the need of adaptive organizational culture for a firm to be able to confront environmental factors and progress in the aggressive competitive market. Thus, the managers and leaders of SMEs which follow a resilient market culture have to face struggles in endurance in situations that require adaptability, creativity, innovation and entrepreneurial skills.

Similar views were presented by Duréndez & Garcia (2008) who maintain that culture is the primary distinguishing factor for genuinely high-performing organizations from the lot. There are two elements that companies in today's world are persistently looking for are to acquire sustainable competitive advantage and to enhance innovation to excel growth and performance. With an experimental study of 89 "young" SMEs, the study, based on the CVF model, established that usually the newly set-up SMEs have clan as their prevalent culture while adhocracy culture is least applicable.

Innovative culture is a combination of clan and adhocracy culture, which along with the implementation of management control systems can have a constructive impact on the firm's performance. On the other hand, a hierarchical culture has a negative impact on the internal process model of organizational performance. This is built on the notion that management control systems are critical for decision making and organizational culture has a major influence on MCS which can be developed into a sustainable competitive advantage.

Although most of the studies discussed in this section focus on innovation as the measure of performance in order to gain competitive advantage necessary for sustainability and longevity of the organization, there are a few studies that emphasize the impact of organizational culture on leadership behaviors and employee attitudes amongst SMEs. One such study was conducted by Liu (2013) amongst the Chinese SMEs. Based on the sample of 515 employees of 23 SMEs in the city of Chengdu and maintained that in contemporary scenario, it is ardent to develop a multicultural environment in an SME to accomplish pre-determined organizational intentions.

Though multiple cultural styles can co-occur in an establishment, stressing upon any culture type can result in dysfunctional culture which may return into a weakness. It is

obvious that organizational culture influences leadership behavior which in turn influences employee attitude. It was found that transformational leadership is the most effectual leadership behavior while transactional is rejected by most of the employees. In the same year, Liu (2013) used the CVF framework to understand the dominant paternalistic leadership in Chinese SMEs and found all four cultures, group, developmental, hierarchical and rational have a constructive relationship with benevolent leadership. Thus, SMEs need to foster a multi-cultural environment.

This section explored several studies that have used the Competing Values Framework to analyze organizational culture amongst the SMEs in various countries. Some discussed national culture while others discussed leadership traits and employee behavior and their inter-relationship with organizational culture. On the performance front, most studies concluded that supportive organizational culture fosters innovation and creativity which leads to better organizational performance both monetary and non-monetary. However, the CVF model hasn't been used ever for SMEs in the tele-health sector especially in the UK. The study attempts to make up for this research gap and apply the CVF model to evaluate the organizational culture of these tele-health care SMEs as an indicator of the changes in the overall organizational performance through organizational culture.

2.4.7 Research Question 1: What are the characteristics of SMEs' organizational culture in the Tele-Healthcare industry in UK?

The research question of the study contributes significantly to the existing data as it is the first time that CVF model is being tested in the context of the tele-Healthcare industry in UK. Further, it is the first time the characteristics of organizational culture of the tele-healthcare industry of UK are being measured. The study also intends to make up for the mixed and inconclusive conclusions of empirical findings from the previous studies and also contribute significantly to the inadequately researched field.

In the previous section, extensive review of literature has been done about organizational culture and highlighted its role in influencing the organizations and its employees to achieve better performance through innovation and creativity. SMEs need to develop a multi-cultural environment in order to focus on customers, employees, organizational growth and overall productivity collectively. Only this way, SMEs can survive in this cut-throat competitive business scenario. When organizational culture is right, the firm can escalate to greater height while on the other hand, if the culture is negative and non-supportive of innovation, then the firms can witness considerable failure. However, Ng & Kee (2013) is of the view that organizational culture obscures change management in an intensely competitive market scenario. Thus, firms need to foster an appropriate and constructive organizational culture that promotes growth but downsides of the same needs to be equally considered.

European SMEs have been studied by a lot of research scholars and has been discussed in the initial parts of the study. However, the organizational culture of SMEs based on CVF has not been explored much. Brooksbank (2007) found that in many UK SMEs, internal values (clan and hierarchy culture) are highly stressed upon as majority of these firms operate in the comparatively restricted local market. However, it is observed that firms with external culture tend to outdo internal culture with respect to customer orientation and innovation. Thus, venturing into the international business arena will be difficult for these European SMEs. Likewise, Duréndez & Garcia (2008) expressed the importance of organizational culture as the key for survival of young Spanish SMEs.

These firms exhibit strong clan culture that promotes team work, accord and participation while adhocratic culture which is more innovative is avoided. An innovative culture can be developed through merger of clan and adhocratic culture while a hierarchical

culture exerts a negative impact on the internal process model of performance. Kaufmann et al. (2012) deduced that SMEs across the whole of Europe tend to exhibit more or less similar organizational culture in terms of empowerment, infrastructure, rewards and recognitions, training and teamwork etc.

Even there is no significant difference in companies acknowledging their employees as creative or skilled. Organizational culture is considered indispensable for innovation by and large by all firms across the continent.

Coming to the focus sector of the study, tele-healthcare, not much of research work has been conducted in regards to organizational culture and its impact on the performance as it's still in incandescent stage with more focus on development of products and services rather than implicit aspects of organizational functioning.

Karopka et al. (2012) posits that tele-medicine is the sector that is trying all sorts of innovation: product, process and organizational. Thus, it warrants a supportive organizational culture that can promote and adapt change management at all the levels for a successful and sustainable growth. Organizational culture needs to cater the needs of all stakeholders. Following is the table of the various studies that helped in formulating this hypothesis and its sub-hypotheses:

Following is the table of the various studies that helped in formulating this hypothesis and its sub-hypotheses:

Authors	**Year**	**Sample Size**	**Impact as per the Hypotheses**
Brooksbank, R.	2007	225 SMEs	In many UK SMEs, internal values (clan and hierarchy culture) are highly stressed upon as majority of these firms operate in the comparatively restricted local market. However, it is observed that firms with external culture tend to outdo internal culture with respect to customer orientation and innovation. Thus, venturing into the international business arena will be difficult for these European SMEs

Domingo García-Pérez-de-Lema Antonio Duréndez	2008	89 Young Spanish SMEs	These firms exhibit strong clan culture that promotes team work, accord and participation while adhocratic culture which is more innovative is avoided. An innovative culture can be developed through merger of clan and adhocratic culture while a hierarchical culture exerts a negative impact on the internal process model of performance
Kaufmann, H. Tsangar,H. Vrontis, D.	2012	204 SMEs from across Europe	SMEs across the whole of Europe tend to exhibit more or less similar organizational culture in terms of empowerment, infrastructure, rewards and recognitions, training and teamwork etc. Even there is no significant difference in companies acknowledging their employees as creative or skilled. Organizational culture is considered indispensable for innovation by and large by all firms across the continent.
Karopka, T. Frank, P. Blank, W.	2012	Generalist Paper	The tele-medicine is the sector that is trying all sorts of innovation: product, process and organizational. Thus, it warrants a supportive organizational culture that can promote and adapt change management at all the levels for a successful and sustainable growth. Organizational culture needs to cater the needs of all stakeholders.

Table 2.4: Empirical Studies of the Organizational Culture in SMEs

Source: Scholar

Thus, it becomes essential to understand what kind of organizational culture prevails in the tele-healthcare SMEs in UK. For this, the Hypothesis 1 is formulated. It aims in identifying the culture from the four types of culture explicated in the CVF framework:

H1a: Clan culture is the SMEs' dominant organizational culture in the Tele-Healthcare industry in UK?

The clan culture views an organization as a one big family. Such firms lay immense focus on teamwork, employee involvement, empowerment, unity, employee participation

and organizational commitment towards the employees and work is usually carried out by self-managed work teams. Here the organizational is built on the foundation of commitment, loyalty and practices and customers. Here, the leaders of the firms are perceived as mentors or regarded equal to parents by the employees.

The leaders are responsible for promoting employee empowerment and gaining their loyalty and commitment (Lincoln 2010; Cameron & Quinn 1999). The underpinning postulations for this type of culture are that the organizational environment can be most suitably managed by teams and employee development; customers need to be regarded as partners; one of the important roles of firms is to establish a humanitarian work environment; and managers' key role is to empower employees and encourage them to participate, be loyal and committed (Cameron & Quinn 2011; Cameron et al. 2006).

H1b: Adhocracy culture is the SMEs' dominant organizational culture in the Tele-Healthcare industry in UK?

This culture is highly dynamic, entrepreneurial and creative in nature and usually adopted by organization existing in an unstable, indefinite and raging industrial scenario. The values associated with this culture are innovation, malleability, flexibility, risk taking, experimentation and creativity. Leaders of such organizations are anticipated to be visionary, out-of-the box thinkers and risk takers (Lincoln 2010; Cameron & Quinn 1999). Such firms are the modern firms who strongly believe that it is innovation and being pioneers can result in success; adopting a proactive approach leads to development of new product and service offerings is about securing the future; and managers' core responsibility is to imbibe creativity, entrepreneurship and revolutionary thinking across the organization (Cameron & Quinn 2011; Cameron et al. 2006).

H1c: Hierarchy culture is the SMEs' dominant organizational culture in the Tele-Healthcare industry in UK?

This is the traditional culture type where an organization follows a bureaucracy which is formal and well-structured. Such culture seeds values like efficiency, dependability, certainty and regularization. The leaders of organizations with the hierarchy culture maintain that the business operations can be done swiftly and efficiently when stern obedience to the several rules and regulations, policies and procedures is maintained. The

employees do not have much of authority and autonomy. Leadership is more of organization and coordination responsibilities and minimizing costs (Lincoln 2010; Cameron & Quinn 1999). This culture was adopted in the past where the business environment was more stable and products and services offered were more or less coherent. Due to the wide spread stability, managers were able to have better integration and coordination of functions and processes. Clear direction of command and decision making was done and standardized rules and procedures were adopted. The focus of this culture was a smooth running organization and organizations aim at stability, dependability and effectuality (Cameron et al., 2006; Cameron & Quinn, 2011).

H1d: Market culture is the SMEs' dominant organizational culture in the Tele-Healthcare industry in UK?

This culture is observed in firms that are aggressively competitive and highly goal oriented. The emphasis is on productivity, profitability, market acquisition and venturing into new markets successfully. Leaders of such firms are highly motivated, tough, and demanding (Lincoln 2010; Cameron & Quinn 1999). This culture is more oriented towards the external environment in place of the internal orientation. The emphasis is on transactions with external parties like suppliers, customers, contractors, licensees, unions and regulators. Under this culture the firm operates mainly by way of economic market mechanisms especially monetary exchange. Managers are more focused on profitability, bottom-line outcomes, standing in the niche markets and loyal customer bases. The orientation of the organization is based on competitiveness and productivity (Cameron & Quinn 2011; Cameron et al. 2006).

2.5 Organizational Culture and Firm's Performance

Financial (Objective) Organizational Performance Measurement

The primary objective of each and every firm is to attain the desired level of profitability and sustainable financial performance. Though the study focuses on non-financial performance factors, it is important to understand the impact of organisational culture on financial performance as well.

For accomplishing the financial objectives, several measures have been adopted by firms across the globe. Strategies like restricting, mergers and acquisitions, benchmarking, business process reengineering, adoption of total quality management initiatives, employee training and development are a few measures adopted by firms to get desired financial performance. However, even after adopting extensive measures, many a times firms are unable to achieve the projected outcomes and even the performance levels is not escalated considerably.

Many authors have linked financial performance and its success to the particular organizational culture that prevails in the respective organizations. Scholars over the time have posited that no modification or transformation can foster a sustainable growth oriented performance unless and until the culture of the organisation and the employees are willing to bring in the change and relate with it. Culture is the key differentiating factor for the high-performing firms (Zakari et al. 2013; Davidson et al. 2007). Organisational culture has gained a lot of importance and considered as an asset that ensures survival even during the economic recession. Though technology advancements are viewed as the key differentiating factor, organisational culture has a more crucial role to play in capturing market share. Merely technology is not enough, it needs to be backed with supportive organisational culture as well (Musante 2001). Kotter and Heskett (1992) cited in (Musante 2001) assert that culture is one of the key factors to evaluate organisational success or failure of an enterprise as cultures have the potential to make or mar the long-term financial strength of an organisation.

The Denison model of organisational effectiveness was also adopted by Karim (2010) to study the impact of corporate culture on the financial performance of Jordan's telecom company Zain. The Denison model was preferred for its ability to present the relationship with utmost clarity. It also helps in understanding the levels of organisational effectiveness. A survey was conducted amongst 50 employees to gather information on the various

dimensions of organisational culture. The data analysis showed that corporate culture has a constructive impact on the financial results of the firm and also other effectiveness indices. Zain Telecom has overtaken the market leadership from its key counterpart, Jordan Telecom in terms of all the financial dimensions: product development, market share, profitability ratio, liquidity and investment ratio. Thus, it was established that there is a positive association between organisational culture and organisational effectiveness that can be measured in financial terms as well.

In the same year, Jing et al. (2011) applied the Litwin and Stringer's (1968) organisational climate questionnaire (OCQ) to explore the relationship between organisational climate and performance amongst the small businesses. The study was interesting as the climate exerts a different influence on performance in smaller firms as compared with larger firms.

This is primarily because, SMEs have a more austere and cohesive social system, with lesser number of people and lesser hierarchical levels. The empirical study was conducted amongst 100 retail pharmacies in the city of Sydney, Australia where both employees and customers of each pharmacy were interviewed. To evaluate the performance, both financial and non-financial indicators were used. Financial indicators used were net profits, sales turnover and controllable costs.

The non-financial measures were staff turnover; employee satisfaction and customer satisfaction. The study shows a positive relationship between organisational climate and all performance measures of the SMEs. The results show that organisational climate has a positive impact on organisational performance. The results were consistent with findings from previous studies that revealed a link between climate and performance in large enterprises.

Likewise, Jacobs et al. (2013) adopted the CVF model to assess the inter-relationship between senior management team culture and performance in English acute hospitals (NHS Trusts). The influence of organizational culture on hospital performance was evaluated through using probity and multinomial logit models. The performance measures used for the study are size of hospital, teaching, specialist and Foundation Trust (FT) which led to the star rating by using national longitudinal study.

The sample consisted of nearly 140 NHS hospitals. The study highlights the testimony for relationship between culture and performance cross-sectional and few of these

relationships endure with time. It was also found that over the time, there was variation in the organizational culture and this evolution can be accredited to constant and expectable several organizational characteristics and customary measures of performance. Also, it was observed that hospitals are progressing towards more competitive culture archetypes that reflect the prevalent policies along with a more robust amalgamation of cultures.

Most of the research scholars acknowledged and confirmed that organizational culture does impact the financial performance of the organization.

Non-Financial (perceived) organizational performance measurement

Organisational culture is the invisible force that drives any organisation. It infiltrates through every aspect of the organisation and smears an overpowering and extreme influence on the organisational success or let downs. If organisational culture is left unattended or is ineffectively managed or an inappropriate culture is being nurtured purposely, the organisation heads towards a sure catastrophe.

The world is full of real life examples where companies have presented examples of excelling through mastering the art of managing the organisational culture while others have succumbed to poor culture. Corporate culture has an explicit or implicit influence on each dimension and element of business.

Organisational culture can be righteously employed to emerge as a competitive advantage and also enhance the bottom line. Through supportive organisational culture, a firm can reap magnificent outcomes (Ranganayakulu 2005). At the most elementary level, culture is presumed to have an impact on the organisational performance. This proposition is based on certain notions.

Firstly, culture facilitates accomplishment of business goals and objectives. This implies that firms with strong cultures stand more chances of accomplishing their goals as compared with their weak counterparts. These strong culture based firms enjoy higher success which is measurable in terms of market value or other financial indicators as explored in the preceding sections.

However, the underpinning postulation is that strong cultures promote better performance because they generate an impeccable amount of employee motivation (Flamholtz & Randle 2011). This presumption was earlier explored by Ahmad & Darzi (2008) who viewed organisational culture as a interceding variable. The employees of the

organisation build perception of the organisation individually based on factors like focus on team work, collaborative nature of the peer groups, degree of risk tolerance and management's ability to stand conflict. All this is an integral aspect of corporate culture.

It the favourable and unfavourable perceptions that influence employee performance and satisfaction as depicted in the following diagrammatic representation:

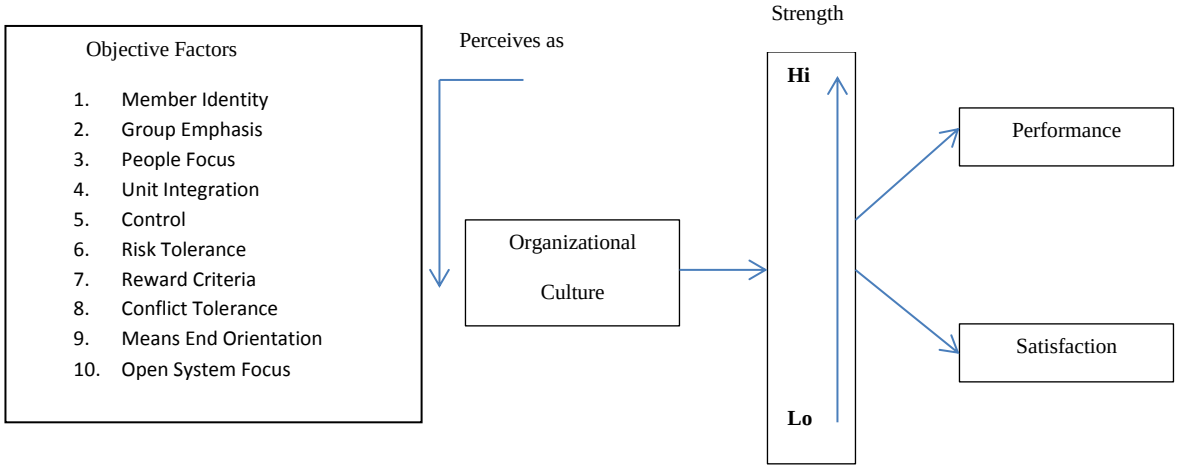

Figure 2.8: How organizational culture impacts Performance and Satisfaction

Source: Ahmad & Darzi, (2008)

In the previous section, the financial implications of the impact of organisational culture on various aspects like innovation, entrepreneurship and organisational effectiveness were explored. Now it is logical to explore the implicit effects of organisational culture on the organisational performance. This section presents an account of several empirical studies reviewed with this purpose.

The implied relevance of organisational culture has been explored time and again. Hatch & Schultz (1997) explored the association between organisational culture, identity and image. The authors assert it is important of the modern organisations to build their corporate identity as a linkage between the external position of the firm in various environments and internal interpretations deduced within the corporate culture. This shows that there should a synchronization of the image portrayed to the world and the perceived image of the firm by the internal stakeholders. Corporate identity and image is a highly valuable asset and be acknowledged as a non-monetary organizational performance measure.

Allen (2001) explored the worldwide employee perceptions linked with the degree to which their employer company is family-supportive. This is also an element of organisational culture and thus, can be seen as the impact of organisational culture on employee perception. The perception of family support is directly connected to the number of such initiatives promoted by the organisation, benefit and usage, and perceived similar support from seniors. This perception has an obvious impact on work-life balance, conflicts, job satisfaction, work commitment and turnover intentions. This perception is important as it significantly helps in shaping the employees' overall perception about the organisation.

Employee perception was also analysed by Sempane et al. (2002) in context of job satisfaction and organizational culture of a service organization, a government welfare organization with a sample of 160 employees. Organizations are highly intricate structures and employees are perhaps, the most dynamic assets of the organisation. It is only through the intensity of employee commitment and involvement that an organization can achieve competitive job satisfaction. Through the empirical study it was observed that there was a discrete relationship between organizational culture and job satisfaction. In fact, both exert considerable influence on each other.

Job satisfaction has a positive impact on employee perception about organizational culture. It was noticed that employees exhibited judicious level of satisfaction with facets like customer orientation, organizational integration, performance inclination and reward tendency. On the other hand, factors like conflict resolution, temperament towards change, locus of authority, management style etc. are comprehended more pessimistically. It is worth noticing that these factors are largely linked with management and leadership styles.

Likewise, job satisfaction and organisational commitment were investigated as a function of organisational culture and leadership style by Lok & Crawford (2004) through an empirical study amongst the managers of Hong Kong and Australia. Though due to diverse national cultures, there was a considerable difference between the two samples, it was collectively concluded that innovative and accommodating cultures and a compassionate leadership style exert positive impact on both job satisfaction and employee commitment. This was higher amongst the Australian managers. However, initiating structure kind of leadership style adversely influences the job satisfaction for all the managers. Further, national culture was identified as temperate the impact of managers'

age on satisfaction of the Hong Kong managers. Thus, it shows that national culture temperate the influence of age on satisfaction. This was observed more amongst Hong Kong managers.

In the same year, Deshpandé & Farley (2004) conducted an exploratory study stressing upon the influence that organizational culture, market orientation and innovativeness applies on the organizational performance in business-to-business markets and developed an extended model of competing values framework which was first tested in Japan. Many countries were studied and the national cultures influenced the variables of the study (organisational culture, hierarchy, adhocracy, market, innovativeness, organizational climate, market orientation and performance) considerably.

It was deduced that open organisational cultures (market and adhocracy), robust market orientation and innovativeness has constructive impact on performance. Thus, market orientation and innovativeness can be viewed the implicit measurable indicators of organizational culture.

Another non-monetary impact that can be adjudged through the influence of organisational is change management which was explored by Jones et al. (2005b) was change management. It was posit that employee perception in a culture that lays a lot of emphasis on strong human relations and has open systems fosters higher willingness to accept change. Likewise, reshaping capabilities can ensure the effective implementation of change through its impact on employee perception for change.

From a sample of 67 employees of a state government department, it was found that employees who harboured strong emotional and relational values in their division exhibited higher levels of readiness for change prior to implementation. This pre-implementation readiness for change smears a constructive influence on employee satisfaction related to the change being implemented. Thus, employee satisfaction can be regarded as one of the essential indicators which can be measured in non-monetary aspect.

This was further evident from the study conducted by Lau & Ngo (2004) through a survey study of 332 firms in Hong Kong to testify the crucial role of organizational culture in the linkage between the HR system and innovative product and service offerings. The study fills the gap in literature by pinpointing that a developmental culture is the lacking nexus between HR system and innovative consequences.

This warrants HR practices that are focused on all-embracing training, performance based incentive and reward mechanism and team development are the integral aspects of the organizational culture of the firm that is keen on innovation. The study serves as a testimony for the need of innovative climate during the innovation process and the role of organizational culture as a facilitator for the same. Thus, innovation is also an implied measure of organizational culture performance measurement.

More recently, Wilderom et al. (2012) examined the conjoined impact of charismatic leadership and organizational culture over the performance of a large Dutch bank. The survey was done amongst 1214 employees from 46 branches. It was noticed that charismatic leadership did led to better financial results while culture did not. However, culture and leadership are majorly interconnected.

Another author who explored innovation and organisational culture in the banking sector was Uzkurt et al. (2013) who conducted a survey study amongst 154 branches of major Turkish banks and evaluated the inter-connection between organizational culture, performance and innovation. Culture has been observed to have a constructive influence of innovativeness of the bank which in turn as an immediate effect on performance aspects and culture. Innovation is here seen as the chief driver of performance as it promotes competitive edge over the counterparts and services need innovation too.

The studies discussed so far did not explore the inter-relationship between organizational culture and management style. This was done by Salau et al. (2014) who conducted an empirical study amongst 97 respondents of Abeokuta Metropolis, Ogun State, South-West Nigeria with the intention of inhibitions and management styles of promoting organizational values, norms and beliefs amongst the employees and encourage augmented performance. The findings indicate that management style has a direct impact on the employee performance as it encompasses equipment handling, employee behaviour at work place and values, beliefs and notions.

Thus employees' attitudinal behaviour and management style share a concrete inter-connection. Also, culture encourages cooperation and compatibility amongst employees. For this, the culture needs to nurture employee participation, commitment, team work and synchronisation that results in employee performance enhancement and self- improvement initiatives. This will gradually led to high performing organization that can be evident from profitability and lower attrition rate.

In the segment, the implicit aspects of the influence that organizational culture exerts on organizational performance were reviewed. Most of the studies were focused on the implied measureable facets of organisational performance like innovation, corporate image and identity, job satisfaction, organizational commitment, management style etc. All these are measureable in underwritten terms.

Though can be measured but cannot be valued in monetary terms. Moreover, all the studies are centred majorly in large firms and multiple industries. This review of literature highlights that non-monetary measures of performance due to organizational culture have not been done for small and medium sized enterprises much neither industry specific nor country specific. This opens a whole new avenue for the study at hand that explores the influence of organizational culture on performance in the tele-healthcare sector of UK.

2.5.1 Research question2: how Organizational Culture influence on the SMEs' non-financial (perceived) organizational performances?

H2a: There is direct influence on the non-financial (perceived) performance from Clan organizational culture?

H2b: There is direct influence on the non-financial (perceived) performance from Adhocracy organizational culture?

H2c: There is direct influence on the non-financial (perceived) performance from hierarchy organizational culture?

H2d: There is direct influence on the non-financial (perceived) performance from market organizational culture?

In the preceding segment, an extensive review of literature has been done to identify the direct influence of organizational culture on the non-financial or perceived performance of the employees. However, there is little work done in identifying the type of culture that fosters the non-financial performance in context of tele-healthcare SMEs in UK more significantly. Further, every firm, industry or country tends to exhibit diverse culture. So it is essential to identify which culture promotes the non-financial performance the most. For gauging this for tele-healthcare sector, Hypothesis 2 is developed. This hypothesis is based on substantial theoretical backing.

Dadzie et al. (2012) studied the effect of competitive strategy on the organizational culture and performance relationship amongst 185 firms of Accra, Ghana. It was concluded that organizations with chiefly clan or market culture exhibited high direct linkage with performance while companies showcasing inclination for adhocracy or hierarchy culture exhibited more implicit relationship of organization culture with the performance subject to the firms' orientation with differentiation strategy or cost leadership strategy. However, differentiation strategy was observed mostly in companies with dominant market performance. Adhocracy culture can also be positively associated with differentiation strategy while hierarchy culture has inclination towards cost leadership strategy.

Clan culture did not exhibit any linkage with differentiation strategy as differentiation strategy is more suitable for firms with high innovativeness and entrepreneurial orientation rather than firms with family oriented culture or high collectivistic value system. The cost leadership strategy is suitable for companies with market culture type but not with companies with hierarchy culture.

Likewise, Acar & Acar (2012) reviewed the role of organizational culture and innovativeness on organizational performance in healthcare industry through an empirical study amongst 332 employees from 65 Turkish hospitals. Theoretically, clan (cooperative) culture is developed through organization focus and dynamism. Hierarchy (control) culture lies amidst internal organizational focus and consistency factors. Market (competitive) culture is nurtured through consistency and control. Firms having these cultures are success centric. Adhocracy (creative) culture deals with the external orientation and self-motivated organizational structure in terms of entrepreneurship, adaptability, innovativeness and creativity.

The study found the prominent culture type in health care sector of Turkey is hierarchy, subsequently by clan and adhocracy cultures. The innovation types prevalent in the industry are product innovation, behavioural and marketing innovations. The study at hand aims to understand the impact of organizational culture on organisational performance. Since the study is based in tele-healthcare SMEs of UK, it is obvious that the dominant culture type shall vary and so will its influence on organizational performance. Since in the hypothesis 2, financial performance is intended to be gauged, it is logical to assess the implicit performance of the organization in context of cultural type dimensions.

Following is the table of the various studies that helped in formulating this hypothesis:

Authors	**Year**	**Sample Size**	**Impact as per the Hypotheses**
Mary Jo Hatch, Majken Schultz	1997	General Review	It is important of the modern organisations to build their corporate identity as a linkage between the external position of the firm in various environments and internal interpretations deduced within the corporate culture.
Tammy D. Allen	2001	522 Employees	The study posits family support as an element of organisational culture and thus, can be seen as the impact of organisational culture on employee perception. The perception of family support is directly connected to the number of such initiatives promoted by the organisation, benefit and usage, and perceived similar support from seniors. This perception has an obvious impact on work-life balance, conflicts, job satisfaction, work commitment and turnover intentions.
Sempane, M. Rieger, H. Roodt, G.	2002	160 Employees	There was a discrete relationship between organizational culture and job satisfaction. Job satisfaction has a positive impact on employee perception about organizational culture. It was noticed that employees exhibited judicious level of satisfaction with facets like customer orientation, organizational integration, performance inclination and reward tendency. On the other hand, factors like conflict resolution, temperament towards change, locus of authority, management style etc. are comprehended more pessimistically.

Peter Lok, John Crawford	2004	Managers from Hong Kong and Australia	Innovative and accommodating cultures and a compassionate leadership style exert positive impact on both job satisfaction and employee commitment. This was higher amongst the Australian managers. However, initiating structure kind of leadership style adversely influences the job satisfaction for all the managers.Also, it shows that national culture temperate the influence of age on satisfaction.
Rohit Deshpande, John U. Farley	2004	General Review	Open organisational cultures (market and adhocracy), robust market orientation and innovativeness has constructive impact on performance. Thus, market orientation and innovativeness can be viewed the implicit measurable indicators of organizational culture.
1. Renae A. Jones, 2. Nerina L. Jimmieson 3. Andrew Griffiths	2005	67 Employees of PSU	It was posit that employee perception in a culture that lays a lot of emphasis on strong human relations and has open systems fosters higher willingness to accept change. Likewise, reshaping capabilities can ensure the effective implementation of change through its impact on employee perception for change.
Lau, CM 4. Ngo, HY	2004	332 firms from Hong Kong	A developmental culture is the lacking nexus between HR system and innovative consequences. This warrants HR practices that are focused on all-embracing training, performance based incentive and reward mechanism and team development are the integral aspects of the organizational culture of the firm that is keen on innovation.

Wilderom, C. P.M. Van den Berg, P. T. Wiersma, U. J	2012	1214 From 46 branches of a Dutch Bank	Charismatic leadership did led to better financial results while culture did not. However, culture and leadership are majorly interconnected.
Uzkurt, Cevahir Kumar, R Kimzan, Halil Semih Eminoglu, Gozde	2013	154 Branches of a Turkish Bank	Culture has been observed to have a constructive influence of innovativeness of the bank which in turn as an immediate effect on performance aspects and culture. Innovation is here seen as the chief driver of performance as it promotes competitive edge over the counterparts and services need innovation too.
Salau, Comfort Oyafunke Paul, Odunayo Olumuyiwa, Fadugba Oludayo	2014	97	Management style has a direct impact on the employee performance as it encompasses equipment handling, employee behaviour at work place and values, beliefs and notions. Thus employees' attitudinal behaviour and management style share a concrete inter-connection. Also, culture encourages cooperation and compatibility amongst employees.

Table 2.5: Studies of Organizational Culture and Non-Financial Performance Measures

Source: Scholar

2.6 Organizational Culture and Innovation

Over the years, innovation is repeatedly being considered as the sole key for survival in this intensifying competitive business landscape. Firms are striving harder to foster innovation in their organizations with an intention of not only enhancing market offerings but also improvise organizational performance, effectiveness and acquire competitive advantage which is not easily imitable by the competing firms. Several authors have reaffirmed this notion time and again (Damanpour et al. 2009; Noble et al. 2002; Subramanian & Nilakanta 1996; Walker 2004). Further, it is not only the large firms that have to innovate but also the small and medium sized enterprises who aspire to become big one day and cross local boundaries and create a niche market for them in the international business arena.

Small and medium enterprises (SMEs) need to constantly acquire and build on their innovative competencies (Lynch et al. 2010; Liao et al. 2012). Regrettably, the SMEs across the world have not been able to inter-weave innovation into the organizational culture in order to encourage innovative human capital and the phenomenon is still in its primitive stages. This may be because the top managers lack foresightedness to apprehend the prosperous times ahead propelled by the power of innovation entrenched into the organizational culture to develop knowledge and human capital as key assets (Halim et al. 2014).

Organizational culture has a considerable role to play in SMEs. It is through organizational culture that employee motivation can be promoted enabling them better understanding, control, decision making, resource allocation and communication. This is because culture has a lasting effect on the thought process of the people and how they think, feel and perform. However, fostering favorable culture requires a complementary leadership that can steer the organization during change management, enabling SMEs to confront issues like technological advancements, globalized economies, denationalization and deregulation (Wilderom et al. 2012; Ratam & Mazzarol 2004).

2.6.1 What is innovation? Meaning and relevance

In order to confront the dynamic challenges of the modern society, there is a much deeper and intense innovation that is required rather than merely making unique products and selling them profitably. Today innovations need to deliver the diverse value

requirements of different participants of the ecosystem: people, organisations and society as a whole. Today there is an impending concern over the environmental conservation, mounting healthcare expenditure for the aging population or societal peace and unity. It is believed that innovation in products and services can only work when they bring about a change in the people's behaviour (Ouden 2011). Thus, it is clear that innovation is imperative for any society as a whole but there is a dearth of universally accepted and applied definition of innovation. There is a gamut of definitions given by several authors. However, each definition is given in context of a certain issue or criteria. Even from the business perspective, there is a lack of unanimously accepted definition of innovation and each firm has its own interpretation of the concept.

Even the employees of the same department have difference of opinion about innovation and often confuse it with invention (Herzog 2011). Most of the definitions of innovation is based on the postulation that innovation means "*qualitatively new products or processes which markedly differ…. from the preceding status"* (p.265) (Herzog 2011). Moreover, an invention cannot be considered an innovation unless it is commercially viable. Thus an invention needs to launched into the market as a new product or a breakthrough business process (Herzog 2011).

In this section, the several approaches for defining the concept of innovation has been explored.

Rogers (1998) asserted that innovation can be explicated as the adoption of unique concepts, designs and thoughts to products, activities or any other facets of business operations. Innovation is basically linked with commercialization or economic viability of the novel ideas. This rejects the fundamental postulation of invention that it may or may not be directly linked with profit earning. According to Schumpter (1930), innovation is of five types:

- Launch of novel products or augmentation of the already present product or service.
- Radical reengineering of a business process for the industry.
- Unleashing a new market opportunity.
- Creation of new-fangled supply points of the requisite resources and other essentials.

- Change in the organisational structuring.

Building further on the underpinning postulation of the definition given by Schumpter, Brown & Ulijn (2004) assert that innovation is about developing something unique and getting economic success out of it in the market. Innovation surpasses the pursuit of products and encompasses services, processes and technology. Thus, innovation that the imperative element of entrepreneurship with it

Tiwari (2008) also added conformity to the definitions discussed so far and elucidated innovation as the presentation of a new or radically improvised product or service or process, unique marketing strategy or tactic, or a breakthrough in the conventional business activities, organisational structure or external relations. All the innovative endeavours are scientific in nature and use considerable amount of technology, organisation and finances and are commercially worthwhile. Also, innovations many a times include a lot of research and development which may or may not be applicable directly to the respective innovation. Correspondingly, a firm is regarded as an innovative enterprise when it has instigated an innovation within a stipulated time frame under consideration. Based on this definition, innovation can be categorized into four categories:

- **Product innovation:** involves launching a new product or service or bringing a fanatic change in the existing market offerings of the company in terms of technique, equipment or software through application of newly acquired knowledge.
- **Process Innovation:** aims at cost optimization and lowering the "factory to market" time, augment the quality of the products and services and related processes.
- **Marketing Innovation:** involves improvement in the product design, packaging, positioning, promotion and pricing. Such innovations are better equipped to cater to modified customer expectancies and unexplored markets.
- **Organisational Innovation:** brings optimization to costs like administrative or transactional, elevating employee satisfaction thereby, improving productivity, knowledge creation and management and lowering the cost of supplies.

Baregheh et al. (2009) viewed innovation from the strategic perspective and proclaims that innovation and its management needs a strategic outlook. This is because organisations

need to be proactive in responding to the changing marketing conditions especially customer demands and lifestyles, leverage the advantages offered by technology and altering market dynamics. In the contemporary scenario where markets are nearing saturation, innovation is righteously regarded as the lifeline of corporate sustainability and growth. Innovation is fundamental in value creation and fostering competitive edge over the counterparts. Innovation can be understood as a principal restitution activity undertaken at any level and for any purpose of the organisation.

Firms need to constantly innovate because it needs to constantly improve its offerings and business processes in order to ensure sustaining in the cut-throat competitive industry scenario and grow in the global recessionary times. Innovation can also be seen as tool used by the organisation to exert influence to the environmental circumstances of both internal and external vertices. It is worth noting that innovation is subject to the availability of resources, capabilities, strategies and expectations.

While all the discussion done so far focuses much upon the importance of innovation and how firms are inculcating innovation into their daily practices, Amit & Zott (2010) threw light upon how challenging it is to foster innovation in present day scenario. Companies realise the importance of making purposeful efforts to bringing innovation into practice for improving profit margins and market capitalization. Innovation involves augmenting products and process and thus, requires a lot of time and resources.

Innovation indeed is an expensive and tedious task. Extensive research and development is carried out with specific resources, new assets and even separate business entities at times. Moreover, the uncertainty about the future returns on the product or processes emerging from such extravagant endeavours is very high. These considerations hold higher relevance in the turbulent economic times like the global recession phase of 2008-2009.

This phase was a tough time for firms across industries and countries. The revenues were dwindling, profit margins were getting skewed and firms were compelled to adopt severe and strict cost-cutting measures to survive the economic down-turn. For the purpose of cost-cutting, firms put a hold on the research and development practices, market expansions were also curtailed. Firms had to down-sized considerably to reorganise and improve efficiency along with cutting down on the labour costs. Though such cost-cutting attempts are done only when absolutely essential and help the firms to establish a solid

economic base. But these extensive cost savings many a times generate a lot of anxiety amongst the employees, dropping their motivation, devotion and productivity along with hampering the long-term competitive advantage of a few firms (Amit & Zott 2010).

To summarize, innovation can be righteously defined as "a significant positive change" (Berkun 2013).

After understanding the relevance and meaning of innovation, it is important to see its impact on the organizational performance. This is discussed in the next section.

2.6.2 Innovation, non-financial & financial performance

Hudson et al. (2001) explored the performance measurement systems in small and medium enterprises and emphasized on the alignment of these systems with the strategic intentions of the firm, be it large or small. Since measuring the performance is essential for any organisation, there have been several performance measurement systems developed. The most widely used system is the balanced scorecard proposed by Kaplan and Norton in 1992. This system strikes a balance between the adoption of financial and non-financial measures in order to attain the strategic objectives of the firm. Small and medium enterprises (SMEs) have distinct characteristics and thus, need a different performance measurement approach. The author identified six dimensions of performance measurement as quality, time, flexibility, finance, customer satisfaction and human resources.

The role of innovation in any firm's performance is highly inevitable. It improves the quality of not only products and services offered but also the process of how they are offered. It is only through innovation that time management can be optimized and product innovation and flexibility can be fostered. Innovations help in lowering costs and improving financial returns. When products are innovative and processes are quick, customer satisfaction is bound to elevate. Thus, the role of innovation is very crucial in boosting the overall performance of any organisation especially SMEs as it is only through innovation that SMEs can expand their business and presence.

While the earlier study focused on the overall dimensions of performance measurement, Tatikonda (2007) viewed innovation in new product development as a measure of organisational performance. New product development can be applied as a performance measure which needs to address three fundamental dimensions, faster, better and cheaper. It's only through innovation that new products or services or processes can be

developed and enhance the overall organisational performance. In the contemporary scenario of collaborative supply chains and strategic partnerships, companies are also getting involved in collaborative innovation.

This produces outcomes in forms of co-development, outsourcing, joint ventures, alliances and open innovation networks. These allow the firms to foster innovation on the basis of shared resources, thus optimizing costs. Such innovations help the organisations to develop new and varied skill sets for technology hunting, entering into strategic partnerships, contract development, copyrighting the intellectual property, relationship management and alignment and coordination of resources, customs and cultures.

Marques & Ferreira (2009) investigated the factors that boost a firm's innovative capacity through an empirical study amongst nearly 1307 SMEs from the manufacturing industry in the Beira Interior Region of Portugal. The study also gauges the impact of innovation on organisational performance. The authors proposed a conceptual model centred on five distinct dimensions: the firm; the entrepreneur, the external business environment, the firm's innovative capacity and the firm's performance.

The results of the data analysis show that the factors that influence the firm's competency to innovate and eventually strengthen its competitive advantage which improve the organisational performance. But innovation has its share of risk and uncertainty. If the innovation is successful, it exerts a considerable bearing on the firm's economic results and financial measures. Thus, the firm amidst the environmental uncertainties and internal risks needs to identify the underlying need for innovation and gradually build it into competitive advantage that can be sustained for a long duration. Accordingly strategies have to be formed for new product development catering to the changing customer requirements. Innovation is the tool that allows firms the ability to compete successfully in both the domestic and international markets. In modern times, innovation is perhaps the most important aspect of a firm's strategy as the firm can only deliver better results consistently if it is able to create an inimitable differentiation through innovative behaviour.

Crossan & Apaydin (2010) through their academic research paper analysed the literature pertaining to organisational innovation over the past 27 years and reconfirmed that a firm's capacity is the most vital determining factor of organisational performance. However, the authors stressed that leadership at all levels plays a crucial role in

commanding innovation as a process and uphold it till innovation delivers an appropriate outcome. Innovation is supreme in the contemporary business environment that is exemplified by way of intense competition which forces the firms to come up with innovations at regular intervals to create advantages in the market. This reasserts innovation as the fundamental source of competitive edge which must be corresponding with the vibrant nature of the environmental factors. It is through the organisational dynamism that upkeep the augmenting process innovation and often results in cost-reduction ideas and unique product offerings.

Camisón & Monfort-Mir (2012) explored the tourism firms of Spain in context of innovation behaviour and its impact on the firms' performance. Innovation has been regarded as the key source of competitive advantage but it is still not sufficiently explored in the tourism sectors across the globe. However, the tourism firms have been highly prompt in adapting to the technological advancement. Technological innovations help the tourism companies to provide better customer service and be able to market and develop product and service offerings in a better and far-reaching manner.

Moreover, tourism companies require a lot of information and communication technologies to keep their services up-to-date like for back office operational chores and for front office, customer relationship management technologies. Tourism today is highly internet centric, so web based technologies have become an integral aspect of the industry. Innovation in the industry is also instrumental in setting up eco-friendly and energy efficient hotels and alike.

However, it is observed that innovation in this industry is very limited and small and medium firms are not very innovative in nature. These firms also face the impending limitations of the external environmental factors. Thus, renewal and expansion of the portfolio of products and services offered is limited, market expansion is highly regularized. Alteration in the working style, organisational structure and working conditions are the areas where innovation can be applied to enhance the overall organisational performance.

Like most services sectors, tourism sector is also not as technologically advanced as compared to the manufacturing industries and no-technological innovations are not significantly registered. Moreover, there is highly disparity in the nature of services due to which the essence of innovation especially of non-financial nature is lost. Further, tourism

firms carry out incremental innovation centric on the already existing knowledge with the firm and also allow its counterparts to copy adopt it easily. Thus, firms exhibit heterogeneous behaviour for innovation and its subsequent outcome.

2.6.3 Innovation as a moderator between OC and performance

The influence of organizational culture on organizational innovation has been well-researched. There is an extensive literature that posits that organisational culture has a tremendous impact on the organisational innovativeness. Since each firm has its distinct culture and ability to innovate, hence, it was imperative to study innovation in context of each culture style. Ashraf et al. (2013) investigated the relationship between organisational culture and organizational innovativeness existing in the private Iranian universities. Through a sample of 485 full time faculty members, it was established that there is a positive relationship between three types of organisational culture and organisational innovativeness: adhocracy, market and clan cultures. It was only hierarchy culture that didn't exhibit any positive relationship with innovativeness. Further, it was the adhocracy culture that supported organisational innovativeness the maximum.

Since, each firm has distinct organisational culture; managers need to mould the culture in order to promote innovativeness. Similarly, Duygulu & Özeren (2009) analysed leadership styles and organisational culture on innovation in a firm. The sample comprised of 113 employees from 6 firms of Turkey. The empirical study explored the mutual influence of leadership in terms of employee orientation, product orientation, change centred leadership and the organisational culture types (market, hierarchy, adhocracy and clan) on the firm's competence to innovate. It was found that generally adhocracy culture has been identified the most promising culture to promote innovation. However, individually some firms showed that market culture also promotes innovation.

There is little literature that presents a direct relationship between the impact of organisational culture types on financial performance and innovativeness as the key moderating factor. Davidson et al. (2007) explored the inter-relationship between the organisational culture and financial performance in a South African investment bank through a sample of 327 employees. Income statement ratio analyses were adopted to analyse the financial performance correlations between cultural dimensions and financial

ratios like return on assets, return on investment, sales volume and market share. The dimensions of culture that exhibited a substantial impact on the financial performance are consistency, adaptability, learning orientation, empowerment, strategy and entrepreneurship. Organisational culture when coupled with continuous learning and innovativeness, it has a sustainable impact on the financial performance that reaps economic gains for over a period time.

Nybakk (2012) examined the wood industry in Norway with 241 CEOs as the samples. The empirical study establishes relationships between learning orientation, firm innovativeness and financial performance. Learning orientation is a part of organisational culture. Learning orientation of the organisation has a constructive impact on the degree of innovation adopted by firm. Also, learning orientation share a positive impact of the financial performance through innovation as the underlying current. The study also presents innovation as an independent influencer on financial performance while no direct impact is registered by learning orientation on financial performance. Adding to this, Lwamba et al. (2013) explored innovativeness as an aspect of corporate entrepreneurship on financial performance.

Through the sample of 186 manufacturing firms of Kenya, the significant impact of product innovativeness, process innovativeness and organisational innovativeness on financial performance in the Kenyan manufacturing entities was established. Organisational innovativeness is aimed at augmenting financial performance of a firm through lowering administrative costs, improving employee satisfaction and productivity, knowledge creation and lowering costs of production. Organisational culture fosters learning and knowledge sharing and betters the chances of innovation. Thereby financial performance is improvised consistently through innovative organisational culture.

Behram & Özdemirci (2014) conducted an empirical study amongst 203 middle and large level companies from Istanbul, Turkey with the intention of investigating the impact of environmental conditions and organizational culture on corporate entrepreneurship and the intermediary influence of entrepreneurship on environmental factors, organizational culture and firm performance. The results of the data analysis propose that culture types, market and adhocracy have positive and strong influence on all the considered dimensions, while clan culture influences innovativeness but do not impact new business venturing or preemptive approach much. Further, hierarchy culture also doesn't influence business

entrepreneurship. Thus, only adhocracy and market cultures exert a positive influence on entrepreneurship. Also, it was found that hierarchy culture promptly, intensely and constructively influence the sales, financial results and market share in spite of not making any remarkable impact on entrepreneurship.

Since the study focuses more extensively on the influence of organizational culture and innovation on non-financial performance, the literature on financial performance is explored restrictedly.

The study at hand aims to understand the impact of organizational culture on organisational performance of non-financial nature and innovation as the key moderator.

Agarwal et al. (2003) presented that market oriented organisational culture is widely linked with improvised organisational performance. The study analysed the inter-relationship between market oriented culture and performance from the data of 201 international hotels and concludes that such culture promotes innovation which constructively enhances the objective performance in terms of service quality, customer satisfaction and employee satisfaction and the elevated judgemental performance levels can be gauged by occupancy rate, gross operating profit and market share. It the culture that induces innovation into the organisation that improves the judgemental performance which eventually elevates the levels of objective performance dimensions.

This was further averred by Kirca et al. (2005) through a meta-analysis of the empirical studies done so far. The study explored the relationship between market orientation and performance and found that the inter-relationship between market oriented culture and organisational performance mediated by innovation is much more convincing in the manufacturing sector especially in low power-distance and uncertainty-avoidance cultures and where performance is subjectively assessed. The authors also assert that market oriented culture and performance is stronger for both cost-based and revenue based performance measurement practices for the manufacturing entities as compared to their service counterparts.

The above two studies explored the conventional manufacturing and the service sector. Distinct from such approach, Carmen & María José (2008) surveyed 276 museums from Spain and France to establish a relationship between market orientation, culture and

performance mediated by technological and organisational innovation. The researchers found that there is a substantial relationship between market orientation and the economic and social performance of the museums. However, this relationship holds value when it is based on technological and organisational innovation. Thus, innovation acts as the moderator between organisational culture based on market orientation and organisational performance. The authors propose that museums can improve their performance through adopting innovation into the marketing models and achieve the desired economic and social performance. The study presents innovation as one of the chief moderators.

Similar findings were presented by Wang & Ahmed (2004) through the survey of nearly 1500 companies situated in England, Wales and Scotland. The study involved investigation of innovation practices and their linkages where one or more types of innovation was presented as the dependent variable and was seen in association with a particular trait of the organisation, the individual employee or the innovation by itself.

The types of innovation explored in the study are product innovativeness, market innovativeness, process innovativeness, behavioural innovativeness, and strategic innovativeness. It is the behavioural innovativeness that is linked with the organisational culture. It is exhibited through employees independently, teams and management as well. It allows development of an innovative culture which helps in the general acceptance of the new ideas and innovation created. Behavioural innovativeness is the critical factor that accentuates innovative outputs. Thus, culture backed with behavioural innovation serves as a stimulus for innovations while absence of such culture reduces the chances of innovation.

The relationship of market-orientation culture and firm's performance was also substantiated by Yoon & Lee (2005) through an empirical study amongst 120 local businesses in the city of Seoul. The authors have presented the marketing function as the echo of the organisational culture and the degree to which it addresses the requisites of customer's values and beliefs. Market- oriented culture encompasses orientations linked with customers, competitors and inter-departmental teamwork.

This culture induces innovation into the group culture to elevate the firm's performance to a greater higher by effectual and efficient implementation of marketing strategies to deliver maximum customer value. From the resource-based perspective as

well, marketing is viewed as a culture wherein the key potentiality lies in the sources of competitive edge over the competing firms. This is possible only through putting the available resources to the best possible innovative use. The firms need to adopt a proactive culture to promote innovation and position it in the market in manner that it entices the competing brands to catapult the competitive advantage through acquisition, replication, substitution and attempting better innovation.

The moderating role of innovation is the influence of organisational culture on firm performance in the banking sector was further explored by Salau et al. (2014) amongst the sample of 97 respondents comprising of the staff and managers of the banks in Abeokuta Metropolis, Ogun State, South-West Nigeria. The authors regard organisational culture as obligatory and imperative aspect of the survival and success of any organisation and also inculcating values in the employees. However, it is rightly argued that organisational culture is not the sole factor responsible for the success of any firm. It doesn't serve as the means to the desired ends.

Organisational culture is one the chief catalysing factors that promotes innovation which in turn boosts the firm's performance both financially and non-financially. Hence, organisational culture should not be perceived as an implicit and intangible facet of a firm but rather as a key stimulus for accomplishing managerial effectuality. Managers are responsible for change management and encouraging innovation. Thus, managers need to be adaptive towards changes, respect workplace diversity, reject uniformity and respond appropriately to the environment. Organisational culture also places a key role in helping the firm and its employees to adapt external and internal changes, thereby leading to maximize value creation for employees by way of organisational learning, knowledge management and creativity. All these result in innovation and better performance for the firm.

Another interesting study on assessing the role of innovation as a moderator between organisational culture and performance was carried out by Jenatabadi (2014) through an extensive survey study done on 168 Chinese, Taiwanese and Malaysian companies operative in the food production industry of Asia. Through structural equation modelling method, the data was analysed. It was found that in the sector for food production, the organisational culture and organisational innovation have a direct constructive influence on the firms' performance. The study implicates that the firms involved in food production

can successfully capture larger market segments and also easily adapt to the environmental alterations through effectual utilizations of innovation.

The study also found that the methodologies and practices employed to kindle and enhance organisational innovative culture will gradually make the process of developing and diffusing innovation into practice much easier and this will automatically help the performance levels to improve. It is the innovative products and services that can serve the strategic purpose of cost-optimization, better performance, better productivity and sustenance with growth. However, this is highly dependent on the manner in which innovation is managed. Organisational culture and innovation leads to better performance which in turn is critical for the over economic growth and competition. It only through innovation that stable organisational performance can be attained.

2.6.4 Gaps in previous studies related to innovation and OC

There has been a considerable amount of research work done over the years over innovation and organisational culture in context of small and medium sized enterprises. A lot of empirical studies have been done to understand the relevance of innovation and organisational culture in the SMEs. Salavou (2002) studied market orientation and firm's performance amongst the SMEs of Greece and found that product innovation is partially responsible for the same. Further, Salavou et al. (2004) explored the determinants of organisational innovation in pursuit of SMEs of Greece. The study ranked market orientation and learning as the chief determinants along with industry traits.

The market orientation and learning coupled with the intense competition forces the SMEs to innovate. On one hand, Liao et al. (2003) emphasised on organisational responsiveness as the intermediary between innovative organisational culture and performance of the SMEs. SMEs have diverse capacity to adapt to external knowledge and blend it with internal knowledge. On the other hand, Caputo et al. (2002) studied the methods adopted to make the SMEs adopt technological and managerial innovation developed by several other research groups like universities, companies, government etc.

Likewise, Demirbag et al. (2006) investigated the relationship between TQM practices and organisational performance in Turkish SMEs and deduced that TQM has a stronger impact on non-financial performance as compared to the financial performance. All these

practices are made effective only through a supportive organisational culture. However organisational culture and innovation is treated as secondary stimulators in these regard.

The more precise inter-relationship between organisational culture and innovation was explored by Demirbag et al. (2006) who views innovation as an on-going augmentation throughout the organisation and not restricted to research and development only that delivers results periodically. Further, Rhee et al. (2010) analysed the relationship between drivers of innovation and conciliation impact of learning orientation through survey of 333 small firms of South Korea. It was observed that market orientation and entrepreneurial orientation impacts learning orientation which is a part of organisational culture and influences the innovativeness of an organisation which in turn impacts organisational performance.

Moreover, Rosenbusch et al. (2011), through a meta-analysis deduced that in SMEs, the relationship between organizational innovation and performance is highly subjective and facets like age, nature of innovation and organizational culture. Naranjo-Valencia et al. (2011b) studied 471 Spanish firms and found that organisational culture is an obvious and explicit element of the innovation strategy. It was presented that adhocracy cultures promote innovation while hierarchical cultures promote imitation.

Yeşil & Kaya (2012) presents innovation as the key for survival for any organisation. There are several factors responsible for the degree of innovation done by an organisation and organisation culture is perhaps the most important one as it influences the behaviour of the employees. Tajudin et al. (2012) further accentuated the influence of organisational culture, market orientation and innovation on the launch of new products and their performance in the market. The sample for the study comprised of 65 SMEs of Malaysia. The study indicated that organisational culture impacts new product performance wherein innovation serves as a moderator while entrepreneurial culture exerts an obvious impact. Moreover, the impact of organisational culture on innovativeness is mediated by market orientation.

Olori & Mark (2013) researched corporate innovation and found that organisational culture plays a crucial role and innovation is possible only through alignment of various business attributes like skills, knowledge, structures and processes. Culture can encourage or discourage innovation considerably. Thus, for innovation, managers need to foster a supportive culture.

All the studies discussed in this section have highlighted the relevance of innovation for up surging the organisational performance and how culture has an important role to play. Though SMEs have been explored in context of the inter-relationship between organisational culture and innovation and innovation and performance, there is a dearth of research work done in context of the influence of organisational culture on the firm's performance with innovation as a moderator. Moreover, the SMEs of tele-healthcare sector have not been explored in this context at all. The study at hand attempts to make considerable contribution in this area along with paving the way for further investigative endeavours.

2.6.5 Research question 3: Does firm's innovation (Innovativeness: product and process) moderate between multidimensional Organizational culture and non-financial (perceived)

H3a: Innovation performance (innovativeness) is a moderator between clan culture and the firm's non-financial performance?

H3b: Innovation performance (innovativeness) is a moderator between adhocracy culture and the firm's non-financial performance?

H3c: Innovation performance (innovativeness) is a moderator between hierarchy culture and the firm's non-financial performance?

H3d: Innovation performance (innovativeness) is a moderator between market culture and the firm's non-financial performance?

In order to test the moderating effect of innovation performance between culture and non-financial performance of the firm, one needs to first understand the meaning of moderator. Here moderator is the third variable i.e. innovation which strengthens the relationship between the dependent and the independent variable which in this case is organizational culture and non-financial performance of the organization. In the preceding sections, the association between organisational culture and innovativeness has been presented by way of an in-depth literature review.

There is an extensive literature that posits that organisational culture has a tremendous impact on the organisational innovativeness which in turn enhances the organisational performance. But there is no literature available on the influence that the organisational

culture has on organisational performance mediated by innovativeness in context of tele-healthcare SMEs in UK. Since each firm has its distinct culture and ability to innovate, hence, it was imperative to study innovation in context of each culture style and how it influences the firm's performance. To assess the impact of innovation on the non-financial performance of tele-healthcare SMEs having distinct culture types, Hypothesis 3 is developed. This hypothesis is based on the impact of organisational culture on non-financial performance with innovativeness as the media

There is insufficient documented literature available that presents a direct relationship between the impact of organisational culture types on non-financial performance and innovativeness as the moderator.

Through a general review, Low & Siesfeld (1998) posits that investor decisions are majorly based on the non-financial performance of the firms. These non-financial performance measures account for nearly one third of the weightage that investors usually give to overall factors before making any decision. Remaining is obviously for financial performance. These non-financial attributes are based on the key areas which are recognized to be the key markers of future performance of the firm especially revenue generation. Also, the strategic outlook of the firm and the firm's competence to take decisions beyond its pursuit, credibility of the management, innovativeness of the firm and how learning and knowledge management is done and how competent is the firm to attract and retain talented workforce.

Further, (Matear et al. 2002) conducted a general review to assess the relationship between market orientation and firm's performance and found that market orientation backed with innovation leads to a significant contribution the performance of the service firms. Through an empirical study of 231 firms delivering unique services, it was deduced that innovation acts as a moderator in weaving market orientation into the organisational culture and gradually impact the overall performance of the firm.

While this is from the marketing perspective, Chung-Ming Lau & Ngo (2004) adopted the HR perspective and established the link between the HR system and development of the unique market offerings. For the study, a sample 332 firms in Hong Kong were studied. HR system undoubtedly forms the integral aspect of the organisational culture and thus,

when mediated with innovation, results in better performance especially of non-financial nature like better training, performance-based reward, team development and innovation in product, process and organisational structure. It is observed that innovation fosters a development culture that links the HR system to firm's performance.

With the evolution of firms into knowledge-centric entities, Darroch (2005) conducted a survey of 443 CEOs of medium to large firms of New Zealand, and found that firms that have adopted robust knowledge management competence are able to use the resources more efficiently and thus will be able to be innovative and perform in a better manner in all respect. However, knowledge creation, learning orientation and knowledge management are an essential part of the organizational culture. All this needs supportive organizational culture. Thus, it can be said in a way that organizational culture does influence non-financial performance with innovation as a medium.

More recently, Škrinjar et al. (2008) explored the notion that firms can augment their performance by viewing business from the process perspective. The study deduced that business process orientation can result in better non-financial performance and eventually escalate financial performance. Business process orientation can be fostered only through a supportive organizational culture and through innovation, business processes can be improvised for better overall performance which is reflective in the financial performance as well.

This linkage between organizational culture and organizational performance was further established by Abu-Jarad et al. (2010) through a review paper. It is the organizational culture that exerts a considerable influence on every aspect and participants involved. The cultural traits are usually not very obvious but still when it comes to performance enhancement, this is the core area to be worked upon. Although profitability is regarded as the universal indicator of the righteousness of the firm's decision and actions and the firm is earning consistent profits, it is regarded as a successful firm; there are several non-financial factors that are equally important. Innovation and supportive culture are the key determiners of firm's performance. Other non-financial performance indicators stimulated by culture and innovation encompass job satisfaction, organizational commitment and employee turnover.

Another non-financial performance dimension, organisational learning was explored by Imran et al. (2014). The author proposes that with the constantly evolving business markets, firms need to adapt to changes to remain competitive. Organisational learning and innovative culture are the bases of enhancing organisational performance.

Innovation when stimulates the organisational culture, desire to learn, shared vision, out of the box thinking, knowledge creation and sharing becomes the integral aspects of culture which in turn has a positive impact on the organisational performance. These findings were based on the sample of 120 respondents from NGOs of Pakistan.

The study at hand aims to understand the impact of organizational culture on organisational performance and innovation is a key indicator. Thus, this hypothesis is developed to analyse the impact of innovative organisational culture on non-financial performance of the firm. Since the study is based in tele-healthcare SMEs of UK, it is obvious that the dominant culture type and innovativeness shall vary so will the influence on non-financial performance.

Since most of the studies indicate that innovative organisational culture does have a positive impact on non-financial performance but do not clearly identify the culture type, it will be interesting to learn which culture types promotes innovativeness to influence non-financial performance for the case SMEs of the tele-healthcare sector of UK.

Following is the table of the various studies that helped in formulating this hypothesis:

Authors	**Year**	**Sample Size**	**Impact as per the Hypotheses**
Jonathan Low Tony Siesfeld	1998	General View	The non-financial performance measures account for nearly one third of the weightage that investors usually give to overall factors before making any decision. Remaining is obviously for financial performance. These non-financial attributes are based on the key areas which are recognized to be the key markers of future performance of the firm especially revenue generation. Also, the strategic outlook of the firm and the firm's competence to take decisions beyond its pursuit, credibility of the management, innovativeness of the firm and how learning and knowledge management is done and how competent is the firm to attract and retain talented workforce.

Sheelagh Matear, Phil Osborne, Tony Garrett, Brendan J. Gray	2002	231 service firms	Market orientation backed with innovation leads to a significant contribution the performance of the service firms. It was deduced that innovation acts as a moderator in weaving market orientation into the organisational culture and gradually impact the overall performance of the firm.
Chung-Ming Lau, Hang-Yue Ngo	2004	332 firms	Established the link between the HR system and development of the unique market offerings. HR system undoubtedly forms the integral aspect of the organisational culture and thus, when mediated with innovation, results in better performance especially of non-financial nature like better training, performance-based reward, team development and innovation in product, process and organisational structure. It is observed that innovation fosters a development culture that links the HR system to firm's performance.
Jenny Darroch	2005	443 CEOs of medium to large firms of New Zealand	Knowledge creation, learning orientation and knowledge management are an essential part of the organizational culture. All this needs supportive organizational culture. Thus, it can be said in a way that organizational culture does influence non-financial performance with innovation as a medium
Rok Škrinjar Vesna Bosilj-Vukšić Mojca Indihar-Štemberger	2008	General View	Business process orientation can result in better non-financial performance and eventually escalate financial performance. Business process orientation can be fostered only through a supportive organizational culture and through innovation, business processes can be improvised for better overall performance which is reflective in the financial performance as well
Ismael Younis Abu-Jarad, Nor'Aini Yusof, Davoud Nikbin,	2010	Review paper	It is the organizational culture that exerts a considerable influence on every aspect and participants involved. The cultural traits are usually not very obvious but still when it comes to performance enhancement, this is the core area to be worked upon. Although profitability is regarded as the universal indicator of the righteousness of the firm's decision and actions and the firm is earning consistent profits, it is regarded as a successful firm; there are several non-financial factors

			that are equally important. Innovation and supportive culture are the key determiners of firm's performance. Other non-financial performance indicators stimulated by culture and innovation encompass job satisfaction, organizational commitment and employee turnover.
Asma Imran, Qasim Ali Nisar, Samra Ashraf	2014	120 respondents from NGOs of Pakistan	With the constantly evolving business markets, firms need to adapt to changes to remain competitive. Organisational learning and innovative culture are the bases of enhancing organisational performance. Innovation when stimulates the organisational culture, desire to learn, shared vision, out-of – the- box thinking, knowledge creation and sharing becomes the integral aspects of culture which in turn has a positive impact on the organisational performance.

Table 2.6: Studies on Innovativeness as a moderator between Organisational culture and financial performance
Source: Compiled by Researcher

2.6.6 Research Gaps

Research on Small and Medium Sized Enterprises (SMEs) has grown drastically during the last few years as a huge number of businesses around the world are SMEs and they have significant impact on the economy of the countries. "*There is a broad consensus that a vibrant SME sector is one of the principal driving forces in the development of a market economy. SMEs stimulate private ownership and entrepreneurial skills, are flexible and can adapt quickly to changing market demand and supply situations, generate employment, help diversify economic activity, and make a significant contribution to exports and trade"* (UNECE, 2003. P.291).

The contribution of SMEs in economy of nations emphasizes the importance of focusing on the studies about possible ways which can improve business, however, success in Small and Medium Enterprises is one of the subjects on which few comprehensive and in-depth studies have been conducted (Ramana, Aryasri, and Nagayya, 2008). In the preceding sections, the importance of SMEs has been explicated sufficiently. Since majority of the innovative businesses initially start as SMEs, it is interesting to study SMEs in the case industry of Tele-healthcare which calls for high levels of innovation. Also, the

UK economy is heavily dependent on the success of SMEs, they provide a perfect choice for the study.

Tele-healthcare industry has the potential to address diverse problems, in modern healthcare and it does so in terms of quality, efficiency, effectiveness, and accessibility of healthcare with the added advantage of overall cost reduction. However, despite the potential of tele-healthcare services, with the common aim is to improve quality and accessibility of healthcare services, the success rate and adoption of tele-healthcare services is disappointing (Bashshur et al. 2000; Yellowlees 2005; Broens et al. 2007; Handler 2007) . Damage to the reputation of tele-healthcare service providing organizations is mainly because of research gaps.

Firstly, the tele-health services were proved successful in pilot phase, were not able to perform and thus could not sustain themselves in the implementation phase. Secondly, another obstacle which is being repeated over and over again is there are very few good practices within the industry which can be replicated, thus there are many implementation mistakes. The researcher have also discussed on the importance of complexities involved in the tele-healthcare service delivery.

Among the different factors which contribute towards such complexities are; issues related to infrastructure, legislation, non-definition business models, cultural management. Organizations often exhibit different organizational culture and practices and due to the need of multidisciplinary role within the organization, importance of organizational culture further increases. The purpose of this paper is thus to determine a framework for the implementation of tele-healthcare services within the SME industry in order to contribute towards the success rate of future endeavors. Organizational culture has been identified by the researcher as an important parlance contributing towards the performance of the organization. Culture is an abstraction and is thus hard to define. Each person and organization has its own understanding of culture and different research scholars have defined culture in different ways.

However, it should be noted that organizational culture influences the way employees behave which in turn impacts competitive advantage and performance of the organization. Although a number of research models related to organizational culture have been discussed in the study, the researcher has applied Cameron and Quinn (1999), the Competing Values Framework (CVF), as it has been established that it is among the most

extended and comprehensive model. The model is based on two dimensions i.e. stability vs flexibility and internal focus vs external position and thus defines 4 organizational culture, i.e. hierarchy, clan, market and adhocracy.

Only a few studies have tried to highlight the culture in SME industry, however, none of studies have focused on same in terms of tele-healthcare industry, thus leaving a research gap. Since the main objective for any organization is to achieve performance and profitability, it is important to determine the role organizational culture plays in ensuring financial and non-financial performance.

Many research scholars have linked culture with organizational performance as it acts a differentiating factor for the organization. However, although there is lot of research being done to measure the financial performance of the organization and role of organizational culture in same, there is dearth of knowledge about its role in non-financial performance in terms of job satisfaction, work-life balance, organizational commitment, turnover intention among other variables.

Although, these variables have been explored in terms of large and multinational firms, there is a dearth of information with respect to small and medium sized enterprises, which further opens a whole new avenue for the study, in exploring the role of organizational culture on performance in tele-healthcare industry within UK.

Since the present study is multidimensional, the researcher proposes to determine the role of innovation as a moderator within the research in aiding effective organizational culture and improved organizational performance. Innovation has been considered as a precursor in ensuring competitive business landscape and thus organizations are striving to foster innovation. More specifically, SMEs have not been able to inter-weave innovation within their culture leading to their poor performance specifically in the healthcare sector.

However, in order to confront the dynamic changes within the organization, adoption of innovative strategies is imperative in terms of product, services, marketing and organization as a whole in order to ensure organization's performance. Since there is little literature research on the direct role of organizational culture and organizational performance, thus, innovation's role as a moderator will be studied in the present research will be used to fill this research gap.

In conclusion, although there has been a significant amount of research work on SMEs, there is dearth of research on SMEs in the tele-healthcare sector. This study attempts to bridge that gap. Moreover, organizational cultural and its impact on the performance on SMEs is little explored. This study shall be a valuable contribution in this field. Now it is consequential to explore the sector of assisted living technology and tele-healthcare and understand the fundamental characteristics and traits of these contemporary healthcare practices. This is presented in the next segment.

2.7 Research Developed Model

Based on the theoretical exploration, the following research model has been developed. The scholar attempts to seek answers to the three following questions:

- **H1**: What are the profile/characteristics of SMEs' organisational culture in the Tele-Healthcare industry in the UK? (on the left)
- **H2**: How does SMEs' multidimensional Organizational Culture (OC) influence non-financial (perceived) performance? (OC on the left hand influencing performance on the right hand)
- **H3**: Does firm's innovation (Innovativeness: product and process) moderate between multidimensional Organisational culture and non-financial (perceived) performances?

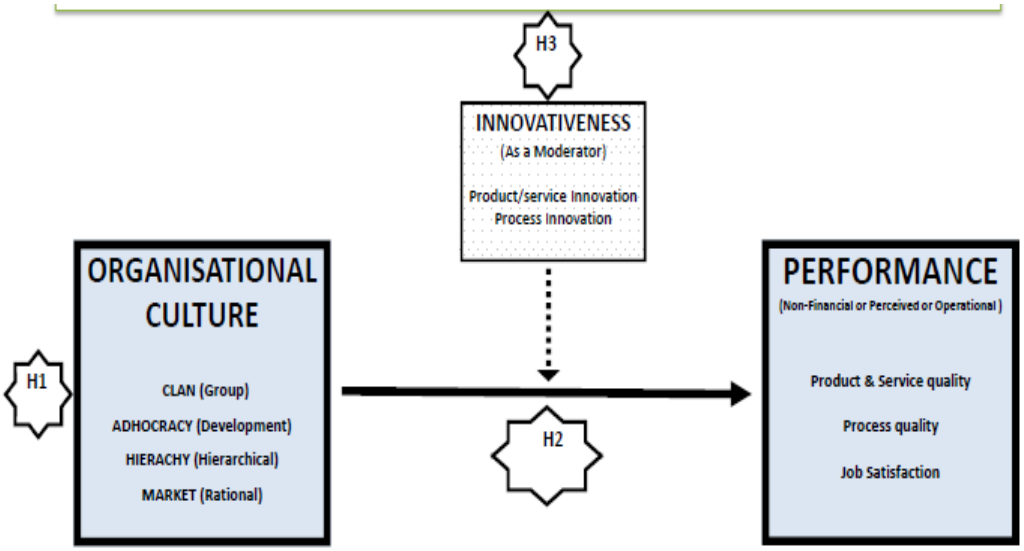

Figure 2.9: Research Model
(Source: Compiled by Researcher)

2.8 Summary

There was an extensive literature review carried out for this study. It was observed that there was unanimous consent amongst the scholars that the functionality of the commercial entities is majorly influenced by the prevalent organisational Culture. A vast literature has been reviewed on the concept of organisational culture and most of it fortifies the postulation that organisational culture can be regarded as a vital factor for the effective and efficient execution of business activities and registering better outcomes. Thus, constructive organisational culture can be regarded as a factor that indeed catalyses performance augmentation.

Though, a lot of research work has been done in the field of organisational culture, there is relatively less literature on the inter-connectivity between organisational culture and non-financial performance of the firms. Moreover, empirical studies linking these two are minimal in the field of tele-healthcare, where organisational culture and performance are analysed in context of tele-healthcare or the Assistive technology sector of UK.

The study at hand intends to investigate the relationship between the four cultural dimensions proposed by the CVF model: Clan, or group, adhocracy or development, hierarchy or hierarchical and market or rational cultures and SME performance. The CVF model helps in measuring the organisational culture and it shall be applied to the sample of the tele-healthcare SMEs of UK. This shall help in testing the research question, what is the organisational culture profile of UK's SMEs involved in AT industry? The CVF model has been widely used and its validity and reliability has been confirmed in multiple studies and research papers. But it has not been applied to the tele-healthcare sector so far. This chapter has established the theoretical framework pertaining to the CVF model and the primary data will be used to test the research question, how does multidimensional organisational culture influence SMEs' Performance? Does innovation plays the role of a moderator?

The performance indicator constructs identified are: product and service quality, process quality and job satisfaction. The innovativeness indicator constructs identified are: product and service innovation and process innovation. The hypotheses presented in the research model have been developed on the basis of the literature review and shall be tested using the primary data in the subsequent chapters.

3. RESEARCH METHODOLOGY

3.1 Researcher's Project in Tele-healthcare Industry

The researcher worked as a research assistant and project coordinator in one of the European Union's flagship research projects, CURA-B, which related to the accurate business in the cure and care market in the EU, UK. The £2.7million project was funded by the European Union and run by ten partners across four European countries. These countries included France, the UK, the Netherlands and Belgium. The partners included, UK Partners: Anglia Ruskin University, HEE (Health Enterprise East) providers of advice, funding and support to local NHS innovators, WSH (West Suffolk Hospital), and SCC (Suffolk County Council), France Partner: Eurasante (regional economic development agency specialized in the health sector), West Flanders (Belgium): In-HAM knowledge center for assistive technology, KATHO University research group, POM West-Flanders Development Agency, and RESOC (Regional Socio-Economic Development Committee), The Netherland (Zeeland): Economische Impuls Zeeland- regional economic development agency.

These ten partners partnered with a view to strengthen their regional health economies by way of working collectively. While on the one hand, they filled the gaps between businesses in their regions; on the other hand, they focused on bridging the gaps between the world of healthcare and social care in their regions. The ultimate desire of these partners was to meet the health needs of their people and at the same time, help their regional SMEs to grow and develop their businesses. In this way, their participation in the CURA-B project was aimed at achieving higher efficiency within their regional healthcare markets.

At this point, it is imperative to note as to why there was a need for these countries to improve or enhance the efficiency in their healthcare markets. The answer to this lies in the demographic profile of the population in these countries. These countries inhabit a large number of dependent old people who require high quality care and optimal conditions to meet their health needs. Coupled with a shrinking work force, this means that these people need these services at an affordable cost. Needless to say that due to high costs of personal attendants and unavailability of family members for the purpose, there is an even greater need for old dependent people to depend on themselves for their health needs. For this,

what is needed is their self-empowerment and personalized care by involving them in their own care.

Further, issues like crises arising out of sub-optimal management of chronic health conditions with focus majorly directed towards the prevention of these conditions call for efficient health services in these regions. This increases the pressure on health care market even more. In order to meet these challenges, various innovative products and services as well as new organizational concepts have been introduced in the healthcare industry of UK.

In view of the need of better healthcare in the regions, many companies recognized tele-healthcare as a great business opportunity with a lot of scope in the future. However, what was needed was a new market approach so that all parties within this business chain gain from it and the market flourishes and sustains in the long run. At the same time, it was also important that the purpose of the business, i.e., providing health assistance to dependent and elderly, be accomplished.

Thus, this project was started with an aim to improve the wellbeing of people via Assistive Technology. The CURA-B project, thus, brought together these ten partners which included organizations in the area of economic development, providers of health and social care and universities in the 4 different European countries. The project developed and tested new business models, conducted communicative interactions and devised strategies for smooth and win-win implementation of innovation products and services on the social care market. The CURA-B project found newer ways to optimize participation and collaboration of three stakeholders groups including social care providers, health care providers and private industry (SMEs). Thus, the project was successful in adding value to the area of study.

The researcher worked for the CURA-B project as project coordinator, research assistant and data analyst and gained experiences with the CURA-B and the network developed in the process has helped the successful conduct of the current study in more ways than one. Most importantly the researcher obtained data about the SMEs in UK tele-health industry for the current research by using the CURA-B network of SMEs in the UK. His participation in CURA-B project enabled him to gain access to the TSA which is the only formal database to provide SME details in UK. Further, since he worked as a research assistant (RA) and data analyst in CURA-B project, he gained practical insights into the

research process. This included conducting the survey to gather primary data as well as data analysis.

3.2 Research Philosophy

Johnson & Christensen (2010) define research philosophy as '*a perspective that is based on the set of shared assumptions, values, concepts and practices'*. The term research philosophy refers to the way a researcher views the world of research wherein knowledge is developed and the nature of that knowledge may be anywhere between development of a new theory and answering specific problems for a specific institution (Saunders et al. 2009).

Research philosophy has been classified into three different philosophies, namely, ontology, epistemology and axiology (Blaikie 2009). While some researchers are of the view that a single philosophy may be chosen for a study, other researchers vote for pragmatism, which means that different questions of a single study may require the adoption of different research philosophies (Tashakkori & Teddlie 1998).

The present research is based on epistemological branch of philosophy. The epistemology philosophy pertains to the composition of acceptable knowledge for the purpose of a study. It is further classified into ***positivism, interpretivism and realism***. The positivism philosophy refers to observing the observable social realities and arriving at law like generalizations as the result of the study.

In this, the sample selected is usually large and quantitative data is used for the analysis. Also, when positivism philosophy is used, the study is likely to involve formulation and testing of hypotheses with the help of such quantitative data (Remenyi et al. 1998). The interpretivism philosophy takes into consideration the way human beings interpret the world and realities of the world around them and the way they act on the basis of such interpretation. In this, the sample selected may be smaller and qualitative data is used for the analysis such that the analysis is aimed at interpreting human attitudes and their meanings.

This philosophy does not advocate law like generalizations and assumes that the social world is too complex to be generalized (Bhaskar 1989). The realism philosophy, as the name indicates, is much closer to reality than the two philosophies of positivism and

interpretivism. This is because this philosophy helps in focusing on independent existence of the objects rather than relying solely on human mind (Bhaskar 1989).

Choice for current study

The central objective of positivism philosophy is that researcher take scientific perspective when observing social behavior in order to objectify the analysis. Although researchers have also argued that positivism and science are not synonyms reflecting on the differences between positivism philosophy and scientific approach. Nonetheless, the present research observes positivism philosophy in order to deduce the theory i.e. organizational culture impacts the non-financial performance of a SME.

Further, considerable data has been used in the present research to analyze this large scale phenomenon within the tele-healthcare industry. Within the quantitative framework, the positivist stance has been adopted by the researcher in order to identify the role of organizational culture within SMEs in Tele-HealthCare sector on their non-financial performance.

3.3 Research design strategy

In this section, the three elements of the research design strategy have been explained in detail. These elements include the research method, research approach and the research strategy. First, the various types of each of these elements are discussed, and thereafter the most suitable research design strategy for the current study is chosen keeping in mind the aims and objectives of the study.

3.3.1 Research Methods

The research methods pertain to the purpose for which a study is undertaken. The research methods have been classified into three types, namely, exploratory, descriptive and explanatory (Robson 2002).

The exploratory research method aims at understanding *'what is happening; to seek new insights; to ask questions and to assess phenomena in a new light'* (Robson 2002). This method explores a less-researched phenomenon and tries to assess whether it is feasible to indulge in a deeper study about the topic. The descriptive research method aims *'to portray an accurate profile of persons, events or situations'* (Robson 2002). As noted

by (Hedrick et al. 1993), this method provides a clear picture of a phenomenon and describes the personal characteristics of people as well as their opinions, views and attitudes. The explanatory research method attempts to establish causal relationships between variables. This method provides explanations for the information provided through description.

Choice for current study

For the purpose of the current study, the researcher has chosen a combination of two research methods, i.e., descriptive and explanatory research methods. The exploratory research method is not suitable for this study because the topic of the study is well-researched and there is plethora of literature available in this topic. Based on the literature, the variables in the study have been identified which eliminates the need for using exploratory method. However, the task of assessing the applicable ones and establishing relationships between them is to be accomplished by the current study. The study thus uses a combination of descriptive and explanatory research methods. The descriptive method has been used to assess the variables which are applicable to the study and explanatory method has been used to determine relationships between these variables.

Further, the descriptive research method has been chosen because the study needs to identify the characteristics of organizational culture in SMEs in the tele-healthcare industry. Thereafter, the explanatory research method has been used to determine the relationship between the organizational culture in SMEs and the non-financial performance of these organizations. Also, the role of innovation as a moderator between culture and non-financial performance has been assessed using the explanatory research method.

3.3.2 Research Approach

There are two ways in which research approach has been classified. On the basis of the flow of research, a research approach has been classified into inductive and deductive research approach. On the other hand, on the basis of data collection and analysis methods, a research approach has been classified into qualitative and quantitative research approach. In this section, both the classifications and the choice of approaches for the study have been duly explained, one by one.

3.3.2.1 Inductive vs. Deductive

In case of inductive approach, the flow of the research is downwards from upwards. This means that the data collection and data analysis help in arriving at patterns which may suggest relationships between variables, if any. This approach helps in arriving at generalizations, relationships and theories about the topic (Yin 2003). In case of deductive approach, the flow of the research is upwards from downwards. This means that the research moves in the direction of hypothesis testing and the results of such testing lead to acceptance, modification or rejection of the phenomenon or relationship. Initially, a generalized view is adopted which is then followed back in the reverse direction to assess whether it is applicable.

Choice for current study

For the purpose of the current study, the researcher has found deductive approach to be most suitable since the study attempts to test hypotheses formulated in the context of organizational culture and its impact on non-financial performance and innovation as a moderator. With research positivism philosophy, and aim to measure the impact of organizational quantitatively, the researcher adopted deductive approach. Each hypothesis proposed, is assumed which is then tested to assess whether it is accepted or rejected. This means that the generalized views regarding the organizational culture in SMEs in tele-healthcare industry are traced back.

3.3.2.2 Qualitative vs. Quantitative

In case of qualitative approach, the researcher attempts to understand a phenomenon in the present context by adopting a naturalistic approach. Rather, the researcher gathers data using qualitative techniques like ethnographic interviews and ethnographic observations and the data gathered is usually in the form of words or images (Smith & Manning 1982).

On the other hand, in case of quantitative research, the researcher attempts to determine, predict and generalize the findings of a study by adopting a traditional scientific approach. This means that the researcher uses experimental methods and statistical data to test hypotheses based on generalized views. Such an approach emphasizes on measurement, comparison and objectivity. In this approach, the data is gathered using

quantitative techniques like structured observations and standardized interviews and the gathered data is in the form of numbers which is then analyzed using statistical techniques (Dodds et al. 1994).The proponents of the quantitative approach claim that their approach is *'inherently preferable'* to other approaches (Kember & Dekkers 1987; Osman & Wagner 1987). On the contrary, (Smith & Manning 1982) stress that qualitative approach is a better choice for initial exploratory research when venturing into an unfamiliar phenomenon.

Choice for current study

For the purpose of the current study, the researcher chose the quantitative approach. The quantitative approach was adopted in lieu of the fact that study was intended to measure the relationship between various variables which have been pre-identified Similar method involving quantitative approach have been used by many researchers in the past in order to study the impact of organizational culture on performance of companies (Lau & Ngo 1996; Deshpandé et al. 1993). The quantitative approach selected for the study allows the researcher to collect quantitative primary data using surveys conducted with the help of close-ended questionnaires. This data is coded in numerical terms and thus can be analyzed using statistical tools and techniques. The researcher has applied these techniques to the collected data and tested hypotheses formulated.

3.3.3 Research Strategy

Ary et al. (2009) have classified research strategies into two broad categories, namely, experimental and non-experimental research strategies. An experimental research strategy is one wherein it is possible to manipulate one or more factors. These include field experiments and laboratory experiments. On the contrary, a non-experimental research strategy is one wherein there is no explicit manipulation. These include observation, case study, surveys, focus group interviews, archival research and correlational research (Yin 2003).

According to him, the research strategy should be chosen depending not only on research questions and objectives but also on the existing literature available, the monetary and time resources available and the researcher's philosophical outlook towards the study. He also noted that a research study may use one or a combination of more than one research

strategy as per the needs of the research. Further, in this section, the various research strategies are explained one by one:

Experiment strategy is useful when the researcher aims to study the causal relationship between variables involved (Hakim 2000), and is generally applicable in case of exploratory and explanatory research designs. ***Survey*** according to Fowler (2009) is based on primary data collected from a segment of target population and is mostly quantitative in nature. Robson (2002), defines ***Case study*** strategy as a strategy which is involved in empirical investigation of contemporary phenomenon based on real life context using multiple sources of evidence. Next strategy i.e. ***Action Research*** is based on the opinions of practitioners and is repetitive in nature wherein the process, diagnosis, planning, taking action and evaluation is repeated over and over again in order to present a theory at the end of the research. In case of ***Grounded theory***, the analysis is based on series of observations which is not based on existing theories, but is developed to make predictions based on the data tested (Suddaby 2006). In the ***ethnography*** research strategy, the research is conducted strictly within the specific context in which it is intended to be conducted (Atkinson et al. 2007). Finally, archival research strategy uses administrative records and official documents for the purpose of data collection (Bryman 1989)

Choice for current study

The researcher selected the survey research strategy for the current study. This is because the research aims to conduct quantitative analysis to determine and understand the organizational culture in SMEs as perceived by the employees working in those organizations. The target population is huge however, the sample to be selected is limited owing to lack of a reliable data bases, as it's an emerging industry and almost young . As noted earlier, surveys help in collecting data within limited financial resources from a large sample. In addition, the study aims to examine the relationship between organizational culture in these organizations and their non-financial performance with innovation as a moderator. This is possible by way of conducting statistical analysis of the data obtained from survey.

3.4 Data Collection Means and Protocols

3.4.1 Data Type

In general, a combination of primary and secondary data is able to answer the research questions. However, sometime, in case of less-explored topics, there is lack of secondary data and such research study must rely on primary data for answering the research questions. In the present research, both primary and secondary research data has been used. For the present research study, documentary secondary data has been used in the form of book, journals and many other types of written materials for the purpose of reviewing the existing literature. Further, in case of primary data, the data collected from quantitative questionnaires.

The choice of study has been gained by following similar works on organizational culture conducted by Agarwal et al. (2003) Kirca et al. (2005) Carmen & María José (2008)Davidson et al. (2007) Nybakk (2012) and Lwamba et al. (2013) who selected structured and close ended questionnaires for studying the interrelationship between innovation, organizational culture and non-financial performance.

For the current study, the researcher has selected questionnaire for the purpose of primary data collection. This close-ended questionnaire has been used to conduct surveys among the respondents from the target population. This data collection tool has been used because the study is descriptive and explanatory in nature. Descriptively, the nature of organizational culture in SMEs in tele-healthcare industry has been determined by including questions related to the various factors pertaining to organizational culture. Explanatorily, the relationship between such organizational culture and the non-financial performance of these organizations has been analyzed by including questions based on such relationship. Also, the innovation factor in these organizations has been studied as a separate section in the questionnaire.

3.4.2 Sampling Plan

A research study is almost always constrained by limited time, access and resources which do not allow the researcher to collect data from all members of the target population. Sampling comes to the rescue of such researchers by allowing them to select a relatively small representative sample out of the target population from which data can be collected within the available time and resources (Singh 2003; Cochran 1963). Sampling techniques

have been classified into two types, namely, probability sampling and non-probability sampling. Further, in this section, both these techniques are explained along with their sub-classifications:

Probability sampling techniques are those wherein there is an equal and known chance for each subject to be selected out of the population. Samples drawn using these techniques are usually a good representative of the target population and thus it becomes easy to generalize the findings of such a study and are used in quantitative research approaches (Daniel 2011). On the other hand, ***Non-probability sampling techniques*** are those wherein there is unequal and unknown chance of each subject to be selected out of the population (Daniel 2011). Both probability and non-probability sampling techniques are sub-divided into different types.

For the current study, simple random sampling technique has been used to select sample. It may be noted that there is acute lack of databases providing data regarding the SMEs in tele-healthcare sector in UK. The Tele-care Service Association (TSA) is the only big umbrella with formal and reliable database regarding tele-health, tele-care, and tele-medicine and in general for E-health companies in UK. Therefore, TSA has been taken as the major source for the purpose of this study from where details like names and contact numbers of the SMEs were obtained.

As discussed earlier, for the purpose of this study, small companies are considered to have 10 to 49 employees and medium sized companies have 50 to 249 employees. Also, these companies have an annual turnover not exceeding 50 million euro and an annual balance sheet not exceeding 43 million euro. This is duly in line with the UK definition of SMEs as discussed in the literature review. According to TSA, there are 313 companies in the tele-healthcare industry in the UK, out of which 105 companies are private and non-governmental. Thus, the employees working in 105 SMEs in tele-healthcare industry of UK are the target population for the purpose of this study.

The sample comprised of employees across all levels within the organization including labor class, supervisors, middle level managers, administrators and senior level managers. This is because the purpose of the study is to understand the nature of organizational culture and related aspects in these organizations and employees of all levels are likely to experience such culture and its impacts in their respective organizations. However, it is

difficult to articulate the average participation rate per company owing to prevalence of anonymity within the survey. 210.

Further, since the researcher has close relations with the TSA because of his past work in CURA-B project due to which they agreed to help and support the researcher in data collection. The researcher contacted 105 small and medium sized companies in the tele-healthcare industry of UK and requested for submission of filled questionnaires by as many respondents as possible from each of the companies. The researcher sent the questionnaires to the SMEs by e-mail using university facilities as well as posting hard copies upon the companies' request, and successfully obtained the required responses.

3.4.3 Questionnaire and its administration

Questionnaire construction

As discussed by (Dillman 2007), a questionnaire may include opinion variables, behavioral variables or/and attribute variables. The questionnaire constructed for the current study uses behavior variables to ask questions regarding the respondents' behavior and attitude to determine the organizational culture of these organizations. Further, opinion variables have been used to analyze the non-financial performance of these companies as perceived by the respondents. Here, the respondents' perceptions regarding product and service quality, process quality and job satisfaction are analyzed to establish relationship between them and organizational culture, if there lays any such relationship. Lastly, opinion variables are used to study their opinions regarding the product and service innovation and process innovation in these firms. Again, innovation has been studied as a moderator between organizational culture and non-financial performance of these SMEs.

The questionnaire used for conducting the surveys contains close-ended questions. The researcher has ensured that the questionnaire has been designed keeping in mind the research objectives, research questions and research hypotheses formulated for the study. Also, it was ensured that the layout of the questionnaire was pleasant for the respondents.

The questionnaire included list of questions to obtain information regarding the demographic profile (age, gender, work experience, education level and role in the company) of the respondents and regarding the general information of their companies. Similarly, company information like location, employees and working was also obtained using list questions. The questionnaire also included rating questions to identify the

characteristics of organizational culture in these organizations. The concepts related to organizational culture are based on the 'Competing Values Framework' developed by (Prajogo & McDermott 2011) in his paper 'The relationship between Multidimensional organizational culture and performance'.

They examined multidimensional relationships between different types of organizational culture and organizational performance and found significant correlations. They considered four cultural dimensions, namely, group (clan), developmental (adhocracy), hierarchical (hierarchy), and rational (market). Similarly, the questionnaire includes questions based on these four cultural dimensions. The questions in this section used Likert scale for responses. As noted by (Dillman 2007), in case of multiple statements, it is important that the responses are kept in the same order so that the respondents do not get confused. Thus, to ensure this, Likert scale was used from 'Strongly disagree' to 'strongly agree' for all the statements throughout the questionnaire.

Further, the next section focused on analyzing the non-financial performance of these SMEs. Prajogo & McDermott, (2011) analyzed the impact of organizational culture on four types of performance, namely, product quality, process control, product innovation, and process innovation. The current study used similar measures of organizational non-financial performance, namely, product and service quality, process quality and job satisfaction. This section includes matrix questions. Matrix questions are questions which pertain to the same category or are similar to each other and all of them require responses on a scale.

In the questionnaire, for example, all statements related to one of the factors of non-financial performance of the SMEs, product and service quality, are required to be rated on a Likert scale. Similarly, other two factors, process quality and job satisfaction, also used matrix questions. In the last section related to innovation capabilities of SMEs, the two factors, product and service innovation and process innovation also used matrix questions with Likert scale for responses. Before administration of the questionnaire for final survey, a pilot test on 10 employees of every selected SMEs were conducted to understand the validity of the questions posed.

3.4.4 Questionnaire administration

As already noted, the main source of companies is the TSA database. Also, due to his past involvement with the CURA-B project, the researcher was in touch with most of these SMEs and was able to successfully convince them to answer the questionnaire. A cover letter and participant information page, which was carefully drafted, was sent across to the SMEs informing them about the purpose of the research. The importance of cover letter and information sheet has been noted by (Dillman 2007). He noted that a well-drafted cover letter can help in increasing the response rate in surveys.

The companies were requested to encourage as many employees to participate as possible, regardless of their position or designation in the company. Next, the questionnaire was sent to them via web link and also, the hard copies of the questionnaire were sent across to their registered offices of the selected 105 SMEs upon their request for the hard copies. Next, the researcher tried to ensure that the questionnaires were duly filled by chasing the companies and repeatedly requesting for the same. The researcher mailed the first follow-up one week after sending out the questionnaire to all recipients. The respondents who had filled the questionnaires were thanked for being quick and the remaining respondents were reminded to answer it. The second follow-up was sent another two weeks later to those respondents who had not yet responded. They were requested for their time to fill the questionnaire. There was no need of a third follow up mail since the required sample size was achieved. Lastly, the researcher duly thanked the participants and the participating companies for their support towards the research. The entire process of data collection for primary research took a period of about 6 weeks (Mid July to End August).

3.5 Data Analysis procedures

The primary data collected for the study has been obtained from survey using close-ended questionnaire and is thus quantitative in form. Prior to analysis, quantitative data does not make much sense. It must be processed and analyzed to convert it into meaningful and useful information. In general, analysis techniques like frequency analysis and correlation and regression and charts, graphs and tables are used to present such data.

3.5.1 Quantitative Analysis

The data obtained from the filled questionnaires was first coded and converted to numerical form. Thereafter, it was transferred to Microsoft Excel 2010 file from where it was transferred to SPSS 20.0 data file. This data includes nominal data as well as ordinal data. After obtaining all data in SPSS data file, it was analyzed using statistical techniques including frequency analysis and correlation and regression analysis. These statistical techniques have been chosen on the basis of the research questions, research objectives and research hypotheses formulated for the study (Gaur & Gaur 2006). These tests provided results in tabular form which were then presented using charts, graphs or tables for better and clearer understanding. The researcher has conducted descriptive and inferential analysis of these results.

3.6 Verifying Data Accuracy

In order to verify data accuracy, two things must be ensured, namely, data validity and data reliability. Both these aspects of data accuracy verification are explained one by one in this section.

3.6.1 Validity

Validity refers to ensuring that the study has been able to measure or find what it claims to measure or find (Bollen 1989). Since the current study is quantitative in its approach, further discussion on validity is specifically focused on validity as applicable in quantitative studies.

According to Newman & Benz, (1998), ensuring measurement validity implies ensuring that the measuring instrument used to collect primary data has been able to measure what was required to be measured. According to them, design validity comprises of internal validity and external validity. While internal validity aims at determining whether independent variable has a cause-and-effect relationship with the dependent variables; external validity refers to the ability to generalize the results of a study to similar situations. However, they noted that for a study design to be internally valid, it must first have measurement validity. Thus, measurement validity is a part of internal validity.

Ensuring validity for current study

For the purpose of the current study, the researcher has ensured all the above types of validity. Statistical conclusion validity has been ensured by testing the null hypotheses formulated for the study which pertained to the relationship between organizational culture and non-financial performance of the SMEs and also tested the role of innovation as a moderator.

Internal validity has been ensured by conducting a pilot study among 30 samples to test the efficacy and adequacy of the measuring instrument. This was done to assess whether the questionnaire was capable of giving valid and reliable results. Also, it helped in ensuring that the respondents do not face any issues while answering the questionnaire. Bell, (2005) noted the importance of pilot testing and stated that *'however pressed for time you are, do your best to give the questionnaire a trial run'*. He insisted that for a questionnaire to be successful in providing required results, it must go through a pilot testing.

In addition to the above, it was ensured that the measuring instrument, quantitative close-ended questionnaire, is valid and concrete. This was done by developing the questionnaire based on previously tested questionnaire by other scholars and researchers. The questionnaire for the study used the framework already used and successfully implemented by Prajogo & McDermott, (2011).

3.6.2 Reliability

Reliability measures the extent to which the data collection and data analysis tools, techniques and procedures chosen for a study will result in similar findings if research is conducted by some other researcher, at a different point of time in different situations (Easterby-Smith et al. 2008). Thus, reliability refers to the robustness of the questionnaire.

Ensuring reliability for current study

For the current study, the researcher has tested reliability of the data by ensuring internal consistency. For this, the researcher has used Cronbach's alpha coefficient. As noted by Cronbach & Gleser, (1957), the results of a study are reliable if the value of the coefficient alpha is more than 0.70. The researcher conducted this reliability test using SPSS 20.0 and the coefficient value was found to be 0.87 which means that the data is reliable.

3.7 Limitations of the methodology

Every research study has its limitations and it is very important to mention them so that the results of the study can be considered in full view of these limitations. Also, it helps in reflecting maturely on the extent to which the results of the study can be treated as true. However, they should not be viewed as weaknesses of the study since it is not possible to conduct a study without any limitations. Following are the limitations faced during the conduct of this study:

1. The current study is based in UK only. Thus, the study is limited from being universal in nature. Yet it may be noted that it was virtually impossible to conduct the study across all geographical locations of the world, thus, the researcher has chosen UK as the research area where the tele-healthcare industry is booming more than most other locations.
2. The study is time bound and resources bound. This means that the researcher had limited time available to complete the study. Similarly, there were limited financial resources which could be used to complete the study due to which the researcher had to limit the scope of the study.
3. The study is quantitative in nature and ignores the qualitative aspect of understanding organizational culture. Since organizational culture is concerned with behavior, attitudes and perceptions of people, a qualitative study could help in deeper understanding of these attributes. However, it has been noted previously that past studies also use quantitative approach rather than qualitative approach which validates the usage of the same for the current study.

3.8 Ethical Considerations

Cooper & Schindler, (2008) defined ethics as the *'norms or standards of behavior that guide moral choices about our behavior and our relationships with others'*. Ethics in research may be understood as the responsibility that falls on researcher towards the subjects or respondents wherein the researcher must ensure protection of their rights throughout the process of research.

For the purpose of the current study, the researcher has adopted the deontological approach wherein it has been ensured that the research design, conduct of survey and data

analysis have been conducted ethically and the results have thus been derived from a fully ethical research study.

Ethical issues

Further, various ethical issues which have gained attention of researchers have been discussed. Also, their applicability in the current study has also been indicated. The ethical issues faced during the study included the following:

1. ***Voluntary nature of participation:*** As noted by (Sekaran 2003; Robson 2002), it is important that the participants consent to participate voluntarily and there is no pressure on them to participate in the research. Also, they must be allowed to withdraw from the research as and when they wish to.

   For the current research, the researcher obtained prior consent from the respective organizations. Thus, it was ensured that full consent of the participants was obtained regarding their participation in the research.

2. ***Possible deception of participants***: Sekaran, (2003) & Zikmund, (2000) noted that despite obtaining the consent of the participants, there are chances that their informed consent may not have been obtained. This means that it is necessary that the participants are well-informed about the nature and purpose of the research and the way the data obtained from them is going to be analyzed by the researcher in the later stages.

   For the current study, the researcher duly informed the participants regarding the nature and purpose of the research via a cover letter which detailed these aspects. Thus, the researcher obtained informed consent of the research participants.

3. ***Confidentiality and anonymity***: Penslar, (1995) noted that it is important to maintain confidentiality of the data that the research participants provide. At the same time, it is also required as per ethical code of conduct that the names and identities of the participants are not revealed and anonymity is ensured.

   For the current study, the researcher ensured that the data was kept as confidential and anonymity of the research participants was duly maintained.

4. ***Comfort-ability and harmless nature of data collection process:*** It is important that the data collection means used by the researcher do not cause any type of

discomfort, harm, stress or embarrassment to the research participant (Cooper & Schindler 2008).

For the current study, the researcher ensured that the data collection process (survey using questionnaire) did not cause any of the above to the respondents. Since the questionnaires were mailed to them, they were at the liberty of filling them as and when they felt comfortable and relaxed.

5. ***Comfort-ability and harmless nature of data analysis process:*** Cooper & Schindler, (2008) noted in this regard that the data analysis procedures used for a study should not in any way cause harm, embarrassment, stress or discomfort to the research participants.

For the current study, the researcher ensured that the data analysis procedures which included statistical techniques did not cause any of the above to the respondents of the survey.

3.9 Summary of the chapter

In this chapter, it has been discussed that the participation of researcher in the CURA-B project has been very helpful for the study. The research philosophy chosen for the study is epistemology-positivism philosophy. The research design strategy chosen for the study includes the research methods descriptive and explanatory research methods as a combination, deductive approach coupled with a quantitative approach and the research strategy of a survey. Further, documentary secondary data and primary data collected using questionnaires have been used for the study.

Sampling has been done using simple random sampling technique wherein employees across all levels are included in the sample. Further, questionnaire comprised of close-ended questions which included list questions, rating questions and matrix questions which was duly administered by the researcher. The data obtained from survey was analyzed using statistical techniques using the SPSS 20.0 software. Further, the researcher ensured validity of data by conducting a pilot study prior to actual survey.

Reliability was also duly ensured by testing internal consistency by way of calculating Cronbach's alpha coefficient using SPSS 20.0 software. Further, the limitations of the study have been mentioned. The researcher chose deontological approach towards ethics and

ensured that all ethical issues were addressed. All research ethics were duly observed throughout the research process.

4. DATA ANALYSIS AND INTERPRETATIONS

4.1 Introduction to Chapter

This research aims to study the organizational culture of the Small and Medium Enterprises in the tele-health care industries in the UK. In addition to this, the effect of the organizational culture on the non-financial performance of the SMEs in the tele-health sector has also been examined. In order to study this effect, primary data was collected from selected 210 employees working in various SMEs in UK providing various goods and services related to tele-healthcare sector.

This chapter provides a detailed analysis of the primary research adopted for this study, i.e. survey of the 210 employees in UK's tele-healthcare sector. Frequency analysis has been performed on all the variables in the questionnaire. The frequency analysis provides a general overview about the profile of the respondents as well the SMEs in the UK which provide the background for the further analysis. Data has been represented in the tabular, graphical and text form.

In order to determine the reliability of the measuring instrument, cronbach alpha analysis was conducted on each of the four sections within the study. Next the demographics of the sample population were presented in terms of age, gender, working experience within the organization, marital status, education qualification, role in the company. Further, once the demographic profile of the respondents was determined the researcher discussed about the overall company profile of the participating SMEs in terms of engagement in terms of goods and services, age of the company, number of employees within the company, involvement in the overseas business, and location within UK.

Further, the researcher conducted descriptive analysis to assess the organizational culture within the participating organizations. Since there are four cultures which can exist within the organization, influence of each of the cultures has been studied in the next section. Frequency analysis for every culture i.e. Clan/group, developmental/adhocracy, hierarchical and rational/market culture was conducted and presented using tables and figures.

Finally, the performance of the organization was assessed descriptively in terms of goods and services. The outcomes of organizational performance i.e. process quality, job

satisfaction and innovation capabilities were reviewed descriptively. Overview of product and process innovation was also determined with respect to competitors in order to determine the market leaders within the case organizations.

4.2 Reliability of Study

Before analyzing the data it is important to check the reliability and validity of the data which has been collected using the primary survey. The reliability of measuring instrument, i.e. the questionnaire will enable the researcher to draw accurate inferences from the findings of the study. To check the reliability of the data the Cronbach's α for the variables explaining the organizational performance has been calculated. The four sections for which the reliability test was conducted include Group/clan, Developmental/adhocracy, Hierarchical and Rational/Market. Similar variables were used by (Prajogo 2011) to study the relationship between multidimensional organizational culture and performance. The results for the Cronbach's α are shown in the table below.

Scales	Statement	Cronbach's α **
Group/Clan	Participation and open discussion	**0.887**
	Empowerment of employees to act	
	Assessment of employees' concerns and ideas.	
	Human relations, teamwork and cohesion	
Developmental/Adhocracy	Flexibility, decentralization	**0.781**
	Expansion, growth, and development	
	Innovation and change	
	Creative problem solving processes	
Hierarchical	Routinisation, formalization and structure	**0.654**
	Stability, continuity, order	
	Predictable performance outcomes	
	Control and centralization	
Rational//Market	Task focus accomplishments and goal	**0.75**
	Direction, objective setting and clarity of goal.	
	efficiency, productivity and profitability	
	Performance Outcome excellence and quality	

Table 4.1 checking the reliability of the data

α** The values of Cronbach's α has been calculated for each of the organizational culture after aggregating the sub elements in each culture. Each organizational culture consists of four sub elements and the Cronbach's α was calculated on the aggregate value, so that the results can be presented only on four organizational culture.

The results presented in the table shows that all the values are more than the minimum criteria of 0.6, so the data are reliable and the data can be used for the further analysis. The validity of the data has also been checked on Cronbach and in line with previous researches and studies which has been used the same way. So it was found that the collected data are valid and the results from the analysis can be generalized.

4.3 Demographic Profile of the respondents

4.3.1 Age of the Respondents

Since the study is based on the Small and Medium Enterprises (SMEs) in the UK the data has been collected among 105 SMES operational in the UK and are providing business solutions in the tele healthcare sector. According to the TSA there are in total 313 companies which are in the business of tele health care in the UK and among 313 companies 105 Small and Medium Sized companies are either private or non-governmental. The close ended questionnaire was sent to 105 selected SMEs employees from 38 companies responded to the survey. The Table below presents the findings of the study.

Age of the respondents					
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	18-24 years	29	13.8	13.8	13.8
	25-34 years	54	25.7	25.7	39.5
	35-44 years	79	37.6	37.6	77.1
	45-54 years	19	9.0	9.0	86.2
	55-64 years	23	11.0	11.0	97.1
	Prefer N	6	2.9	2.9	100.0
	Total	210	100.0	100.0	

Table 4.2: Age of the respondents

As indicated in the table, most of the respondents (37.6%) were in the age group 35-44 years. Further, 25% of respondents in the sample were aged between 25 – 34 years. The

proportion of the employees who were more than 50 years and between 18 to 24 years were less compared to the other age group 11 % and 14 % (approximately) respectively. Around 3 % of the respondents did not disclose their age group. This shows that most of the employees in the tele-health sector in UK are young reflecting on the dynamism of the sample within the study.

According to the report of the Business Statistics till 2014 there were 5.2 million businesses in the UK and among them 99 % of the business are SMEs (Stockwood 2011). The SMEs in UK are those businesses where the number of employment is less than 250 people. The average age of the worker in these SMEs is between 24- 35 years. So the result from the current study is in line with the previous studies done on SMEs in the UK. Similarly another study conducted by the CIPD on the age diversity of employees in the SMEs in UK. The report shows that 44 % of the employees in the SMEs in the UK are between the age group 21-44 and only around 20 % are above the age of 50 (The Telegraph, 2012).

Therefore, it should also be noted that the number of respondents in above 50 years age group is small since Tele-healthcare is a relatively new industry and not many people would be aware of same. The same report has also find out that the age diversity in SMEs are important and the main advantage of having age diversification in SMEs includes Knowledge sharing, improved problem solving and enhanced customer service. With diversification in the age there is more probability of having employees with different work experience and knowledge (The Telegraph, 2012). The young people in the organization are usually more enthusiastic towards the work while older employees can provide the efficient plan and ideas to the organization. The mixture of these experience and enthusiasm may have significant positive effect for any organization.

4.3.2 Gender

In terms of gender, the results from the primary survey shows that among the 210 respondents around 66 % are male and around 31 % are female. Rest of respondents i.e. 3% did not disclose their gender. This shows that the most of SMEs in UK are male dominated culture with less emphasis on female population. According to the index Mundi the out of the total population in UK 50.79 % are females and 49.2 % are men in 2014.

Similarly a study shows that there has been improvement in the female's participation in the UK but it is still behind other European countries (Department for Business 2014).

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	66	31.4	31.4	31.4
	Male	138	65.7	65.7	97.1
	prefer n	6	2.9	2.9	100.0
	Total	210	100.0	100.0	

Table 4.3: Gender of the respondents

According to the report of Department for Business (2014), in terms of the female led SMEs in the UK, the statistics reflect an alarming 20 % SMEs in the UK are only led by female, further, the statistics also indicated that women occupy only 23% in the board of SMEs. Inferences based on both primary and secondary indicate that the SMEs in the UK is still male dominated however the participation of females in SMEs is increasing.

A study by Woldie et al. (2008) on factors influencing the small and medium enterprises shows that the proportion of the male owned SMEs is higher than the female owned SMEs and also the failure probability of the SMEs owned by female is higher when compared to male owned SMEs. Reasons given by author for high female failure in SMEs include the stringent collateral, limited access to credit and the double responsibility of women in office and home. This study is also supported by the finding of from Carter & Jones-Evans (2000).

4.3.3 Working experience within the company

Next the respondents were asked about their working experience in their current company. The results indicated that more than 65 % of the respondents have less than 5 years of experience in the current company with most of employees with one year of experience in the present company. The proportion of employees working in the company for more than 5 years is only around 25 % and only 10 % of the employees are working for more than 10 years. The results are in sync with the findings of the age of the respondents,

since the working population in Tele-healthcare marketing company is young, the years of experience which they have is small.

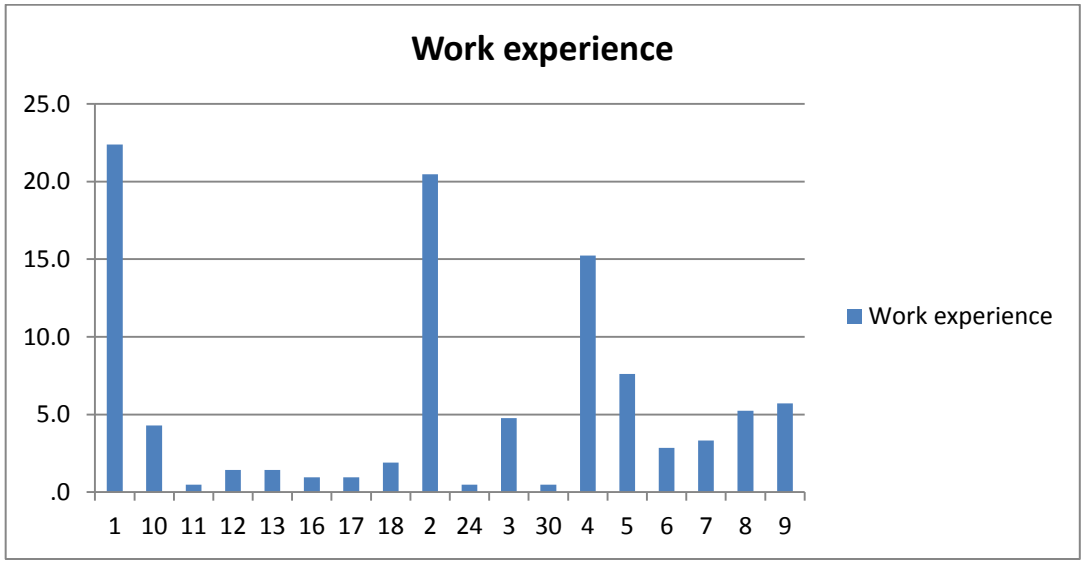

Figure 4.1: Work Experience of the respondents

One of the reasons for the short working experience of the employees in the SMEs in the tele-healthcare industry is may be because the tele-health industry is a new industry. Another reason can be explained from the report of the business statistics of the UK according to which only in 2013 there were around 346000 business birth and around 238000 business deaths in the UK (Business Statistics 2013). This shows that the entry and exit of SMEs in UK is very frequent so the employees also do not get chance to serve longer term in the same company either because it shut down or may be because they keep changing their job for better opportunities.

A report by The Telegraph (2015) also shows that most of the employees in SMEs in the UK do not highly engage in their work. According to the report only one third of the employees in the small business in UK are highly engaged in their work. Similarly, the productivity of the UK employees is around 20 percent which is less than the average of G7 countries and the employment engaged in the UK needs to be seriously addressed.

4.3.4 Marital Status

The results of the marital status of the respondents are shown in the table below. The results show that more than half of the employees (54%) in the SMEs in tele-health sector are married while 41 % are single. Rest of the 5 % did not answer.

Are you currently:					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Married	115	54.8	54.8	54.8
	No Answer	9	4.3	4.3	59.0
	Single	86	41.0	41.0	100.0
	Total	210	100.0	100.0	

Table 4.4: Marital Status of the respondents

4.3.5 Educational Qualification

Educational qualification of the employees is one of the most important factor which can have significant impact on the organizational performance of the company and also on the overall success of the company. The data collected for the current study in terms of educational qualification of the employees is shown in the following table.

Educational qualification of the respondents					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bachelor	59	28.1	28.1	28.1
	Doctorate	15	7.1	7.1	35.2
	High school	30	14.3	14.3	49.5
	Master's	61	29.0	29.0	78.6
	Some col	40	19.0	19.0	97.6
	Some high School	5	2.4	2.4	100.0
	Total	210	100.0	100.0	

Table 4.5: Educational qualifications of the respondents

Results indicate that most of the employees (57 %) in the sample population have at least a bachelor degree (29 % master degree and 28 % bachelor degree). Also 7 % of the employees in these companies hold doctorate degree. Proportion of employees holding some college degree and higher secondary degree is only 19 % and 5 % respectively. The results for the educational qualification show that major proportion of respondents in the sample population was well educated to participate and understand the aim and objectives of the study.

This results are in the line with the fact that the literacy rate (for above 15 years) in the UK is around 99 %.

Carter & Jones-Evans (2000) reflect on the importance of employees and employer education on the growth of SMEs. The research findings indicate that that the education has huge influence on the overall functioning of the company and in the SMEs as it contributes to overall increase in the longevity of the company.

4.3.6 Role in the company

In the primary survey, the respondents were also asked about their role in the company. This will help the research to know about the different types of role played by the employees in SMEs which are engaged in the tele-health sector in the UK. The results in the primary survey are presented in the table below.

Which of the following best describes your role in your company?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Administration	31	14.8	14.8	14.8
	Consultant	19	9.0	9.0	23.8
	Junior Management	9	4.3	4.3	28.1
	Middle Management	39	18.6	18.6	46.7
	Support Staff	82	39.0	39.0	85.7
	Upper Management	30	14.3	14.3	100.0
	Total	210	100.0	100.0	

Table 4.6: Role of the respondents in the company

As shown in the above table among the 210 respondents included in the primary survey most of the employees (39%) were working as support staff while 14 % of the employees indicated to be working in administration and same percentage of the employees were involved in upper management role. Similarly, around 18 % of respondents indicated that they were part of the middle level management whereas only 4 % of them were employed as junior management.

One possible reason for more number of the employees working as the support staff in the SMEs is may be because in the collection of data more of the support staff responded to the study when compared to the higher level officers. Further, in the tele health industry the main aim of the company is to provide the health care service to patients either offline or online, so the company requires more supporting staff to handle the patients.

4.4 Company's general information

This section will provide the overview of the SMEs which were included in the primary survey based on the information given by the responses of the employees. This will help the researcher to understand the basic structure of the SMEs that are engaged in providing the tele- health services in the UK.

Also with the structure of the company it will be easy to analyze the results based on the various characteristic of the SMEs such as location, number of employees, goods and services offered etc.

4.4.1 Whether engaged in the production of goods or services (or both)

There are different categories of SMEs in the tele-health services. Some of them are engaged in only providing goods (such as production of various assisted living technology) or only providing services (such as Tele-medicine, web-based services, software and so on) or providing both goods and services.

To understand the distribution of the SMEs in terms of activities the employees were asked to provide the information related to the same. Results obtained from the survey are presented in the following table:

Product or service provided					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Production of goods	84	40.0	40.0	40.0
	Providing of services	64	30.5	30.5	70.5
	Production of goods and providing services (Both)	62	29.5	29.5	100.0
	Total	210	100.0	100.0	

Table 4.7 Distribution of SMEs in terms of the production and services or both

As shown in the table 40 % of the respondents working in SMEs were are only engaged in production of goods and around 31 % of the workers are from those SMEs which are engaged in providing services only related to tele-health. Similarly, 29 % of the workers included in the survey are from those SMEs which are engaged in both the production of goods and services.

4.4.2 Age of the company

According to the report of Office for National Statistics (2012) tele-health care industry has been promoted in the UK in the recent years because of the growing old age population.

It has been seen that during the period 2006-2008 the authorities in the UK had received more than 80 million dollars in the form of the preventative technology grants with the aim of setting up the innovation related to the tele-health. This has also been promoted by the UK government so that the medical services to the patient can be provided in their residence which will reduce the avoidable admission in the hospitals and residential care.

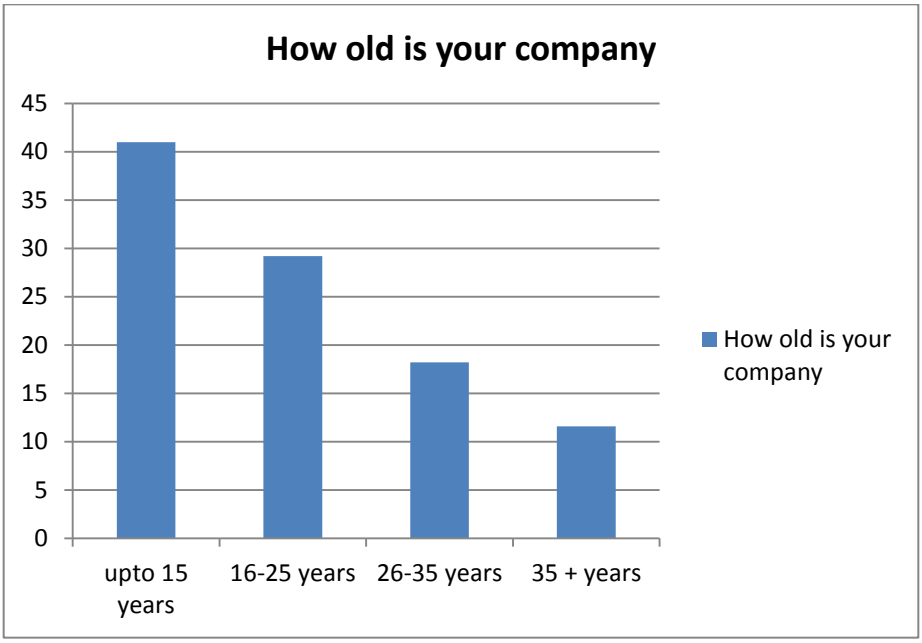

Figure 4.2: Age of the company

For this research, the respondents were asked about the age of the company in which they are currently employed in order to determine the years from when the growing importance of SMEs in tele-healthcare industry has been initiated. The results of the survey indicated that most of the SMEs are in the business for more than 10 years but less than 15 years. Only a few numbers of the SMEs are in the business for than 15 years. This results match with the previous results that rise of the SMEs in the tele-health sector has increased only in the recent years.

The age of the company and the success of the SMEs are also closely related as shown by the study of Storey, (1994) & Barkham et al., (1996). Authors show that the new firms grow fastest as compared to the old companies in The United States and The United Kingdom.

4.4.3 Number of employees in the company

In the UK one of the criteria to define the SMEs is that the number of employees in the company should be less than 250 and if the number of employees is 250 and above then it is not considered as a SME. In the survey conducted for this research, the respondents were also asked about the total number of employees in their company. This will help to segregate between Small and Medium Enterprises in the UK (however in the definition of

SME in the UK micro industry is not included, which is included in the definition given by European Union).

The responses of the respondents are shown in the following table:

How many employees are working in your company?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-49 employees	5	2.4	2.4	2.4
	1-9 employees	12	5.7	5.7	8.1
	10-49 employees	99	47.1	47.1	55.2
	250+ employees	3	1.4	1.4	56.7
	50-249 employees	91	43.3	43.3	100.0
	Total	210	100.0	100.0	

Table 4.8: number of employees in the company

According to the SMEs definition followed by the UK any company which has less than 50 employees and the total turnover is below £ 2 million then it is known as the small business. Further, the medium business is that business where the number of employees is less than 250 and the total turnover is under £ 50 million. As shown in the table most of the companies in the tele-health industry in the UK are small businesses and the proportion of the medium business is around 44 %. The proportion on micro business (with less than 10 employees) is only around 5 %.

According to the report from Department of Business Skill and Innovation (2014) indicates that most of businesses in the UK are small business which account for around 48 % of the total employment. However in terms of turnover the small business only accounted for 33 % of the total turnover. The proportion of the medium sized industry is significantly less when compared to small businesses. Also the medium-sized industry only creates the 12 % of the employment and the contribution in turnover is just above 13%.

The large industries in the UK are only 0.1 % of the total business in the UK. However, the contribution in employment and turnover is significantly higher 40 % and 53 % respectively. The report also shows that the distribution of the business in terms of size has

changed after 2000. There has been 91 % growth in the business without employment since 2000 and the total number of non-employing business has increased to 4 million in early 2014 from 1.6 million in 2000 with increase of 68%.

4.4.4 Involvement in the overseas business

In the recent study by KPMG (2014) on the overseas opportunities captured by the SMEs in the UK shows that around 36 % of the SMEs are not interested in exploring the business outside the UK. The survey was conducted among 1100 SMEs and the main reasons cited for not opting for overseas businesses were; long and complex business procedures, lack of contacts in foreign countries and lack of tax incentives (Country Financial Group 2014).

The reports also indicate that only 20 % of the SMEs in the UK are generating the revenue outside the country which is less than the 30 % in Italy and 25 % in Germany. However, the government in the UK is encouraging the SMEs to invest in the overseas market and the government is expected to provide support and advice to the SMEs to enter the overseas market.

The current research is mainly based on the SMEs in the tele-healthcare sector in the UK. To know the status of these companies in the overseas market the respondents involved in the sample were asked whether their company is engaged in the overseas business or not. The results indicate that around 60 % greed that they have set-up outside UK and around 40 % denied same. This indicates that nearly half of the SMEs are comparatively new and thus have not ventured into overseas market.

Is your company involved in any kind of overseas activity? (Such as Exporting, Importing, Service outsourcing, etc.)					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	85	40.5	40.5	40.5
	Yes	125	59.5	59.5	100.0
	Total	210	100.0	100.0	

Table 4.9: Involvement in overseas business

As already mentioned in the previous paragraphs, the main barriers for the SMEs to not get involved in overseas market can be attributed to the legal and procedural delay in foreign country. Similarly, the tele-health sector is basically providing services to the older age population who requires special care. The SMEs which are involved in the production of the tele-health products may face problems related to the patent of the technology and other legal service. It can also be inferred that the tele-healthcare industry is currently a emerging industry which may not be popular in other countries and wherever it is popular there may be the local SMEs who are already operating in those countries which may have cost and preference advantage over the SMEs based in the UK.

4.4.5 Location

To examine the distribution of the SMEs in the tele-health sector across the employees in the survey were asked about the location of their companies. The question was asked to determine the areas where the concentration of SMEs is higher in order to draw inferences about the demographic profile of patients situated in the area and economic condition of the area, such that tele-healthcare is affordable in the city. The results from the survey are presented in the following diagram.

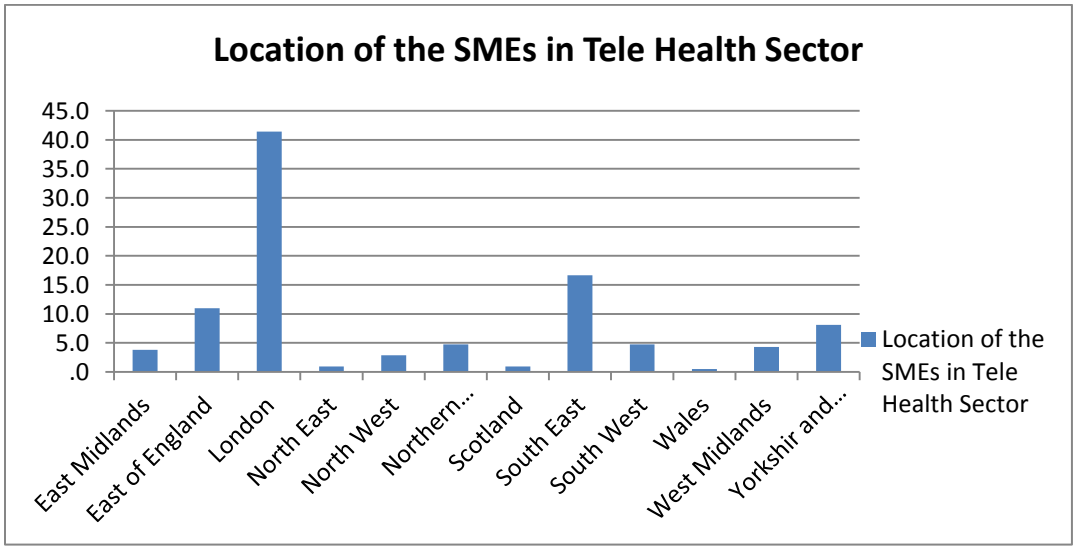

Figure 4.3: Location of the SMEs

As shown in the figure above most of the SMEs in tele-health care sector are located in London which is followed by South East region. Other location includes, South West

(5 %), East midlands (6 %), Northern Ireland (5 %), North West (4 %), West Midlands (5 %), North East (1 %) and Scotland (1 %). There were no SMEs located in the Wales.

According to the Business Statistics reports (2014) there were 1007 business per 10000 residents in the UK and one third of the businesses in the UK are based on London which is located in the eastern side of the UK. Similarly the Northern Ireland has around 119,000 businesses and the numbers of business in the North East were 151,000. The report also shows that during 2014 there was decline in number of SME businesses in Scotland whereas London there was increase of around 11 % during the same period.

4.5 Organizational culture Assessment

Performance of any organization is highly dependent on the organizational culture. The importance of organizational culture has increased significantly in the recent period for all types of companies whether it is a big multinational firm or the small local business. Many researcher have identified that the culture within an organization can have influence on various aspects in the firm such as the macro environmental factors, employees and organizational interaction, and other process related to the internal functioning of the organization such as Human resources and research and development.

To measure the relationship between multidimensional organizational culture and performance Prajogo (2011) identified four different scales to measure the relationship. The four factors are *Group, Developmental, Hierarchical* and *Rational*. For each scale there are certain points on the basis of which the scale can be measured. In this research also the same four scales have used to measure the organizational performance based on the survey conducted among the 210 employees working in the SMEs in the tele-health sector in the UK.

4.5.1 Group/Clan Culture

In the group/clan organizational culture there are mainly four aspects which help to examine the status of the group/clan culture in any organization. The four aspects are: *participation and open discussion, empowerment of employees to act, assessment of employees' concerns and ideas and human relation teamwork and cohesion.* Many scholars have argued that the existence of the group/clan culture is one of the important factors affecting the overall organizational culture.

The involvement of the flexibility and the internal focus in the human relation model which involve the training and broader development of human resource can be utilized to improve the morale of the employees. This will help in improving the productivity of the employee and hence overall success of the organization.

	Participation and open discussion	Empowerment of employees to act	Assessment of employees' concerns and ideas.	Human relations, teamwork and cohesion.
Strongly disagree	0.5	2.4	0.5	-
Disagree	7.1	5.2	2.4	4.3
Neutral	15.7	27.6	27.6	14.8
Agree	41.4	48.1	53.8	57.1
Strongly agree	35.2	16.7	15.7	23.8

Table 4.10: Frequency results of Group/Clan culture

For this research the employees in the SMEs in tele-healthcare sector in the UK were asked question based on the above mentioned factors of group/clan culture. The results of the respondents are presented in the following diagram.

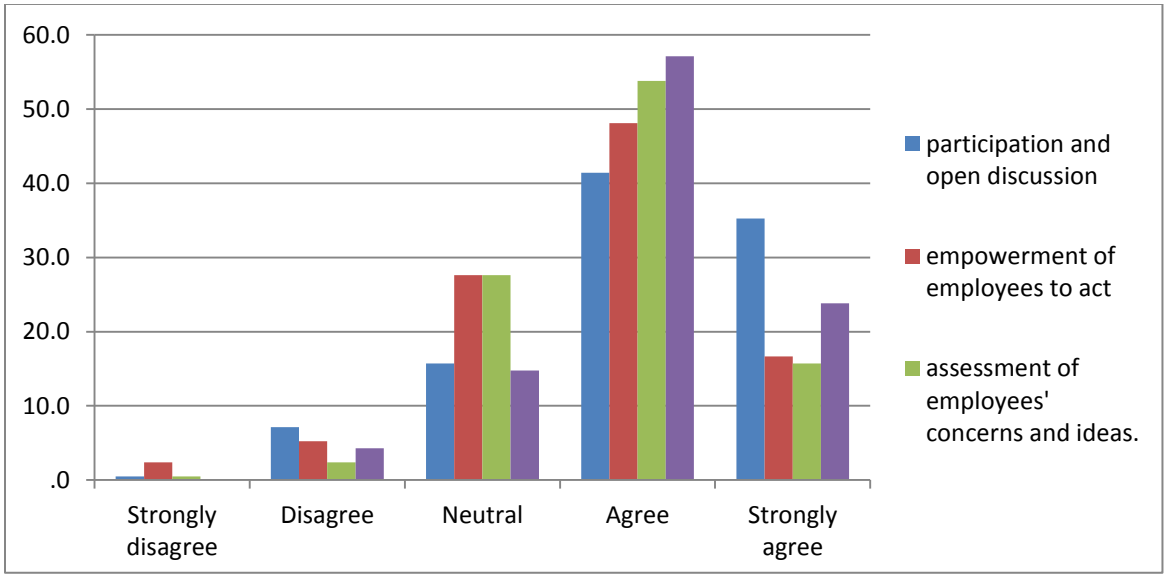

Figure 4.4: Results showing the group/clan culture in SMEs

As shown in the above diagram for all the factors included in the group/clan culture scale most of the responses are positive which means that most of the respondents agree with the fact that their company fosters the above mentioned factors. The results indicate that 53 % respondents agree and 23% strongly agreed that their companies foster the human relation, team work and cohesion. Similarly, 14 % of the employees were neutral, which means that they neither agreed nor disagreed with the statement. The proportion of employees who disagreed with the statement was found to be only 4.3 % while no one in the sample strongly disagreed. These results indicate that the SMEs in tele-healthcare sector in the UK foster the human relation and try to promote team work which will help in building a positive group/clan culture in the organization.

Another factor in the group/clan culture was the "*assessment of the employees concern and ideas*", which also examines how the companies deal with the problems related to their employees and whether the company incorporates the ideas given by the employees or not. The sample survey shows that around 54 % of the employees agree that their company foster the assessment of the employees concern and ideas and 15 % of them strongly agree with the statement totaling 69% of the total sample population. The proportion of employees who were found neutral in this regard was around 27 % and only around 3 % of the employees disagreed with the statement and employees who strongly disagree were negligible.

The "*empowerment of employee's act*" is another important factor of the group/clan culture which was studied within the study. The results from the primary data analysis indicate that 48 % of the employees agree and 15 % strongly agree that their company fosters the empowerment of employees act totaling 63% of the total sample population. The proportion of the employees who were found neutral about the statement was around 27 % of the total employees in the survey indicating that there could be a possibility they didn't agree with same, but chose to not reflect their opinion. The results also show that around 5 % of the employees disagree and around 3 % employee strongly disagree which is a meagre percentage of respondents who agree with the statement.

The fourth factor included to measure the group/clan culture in the companies is the "*participation of the employees in the organization and open discussion*". This factor helps to examine the relation between the employees and the organization and the ability of the organization to incorporate the employees views and ideas thorough open discussion the

results shows that the 35 % of the employees strongly agreed and 42 % agree with the statement that their company foster the empowerment of the employees and they are involved in the open discussion process in the company totaling 77% of the total sample population which is like 1/3rd of the sample population was in agreement. The proportion of people who did not think that their company takes any steps to empower the employees is around 7 % and rest of the employees was neutral.

So from the findings of primary data analysis it can be interpreted that majority of the employees agreed that their company fosters to improve the group/clan culture in their organization and the proportion of employees who does not agree that their company is not promoting group/clan culture is significantly less. However, it was also noted that in case of some statement, the respondents indicated a neutral opinion.

Previous studies on the organizational culture in SMEs in the UK also show that the organizational culture is one of important driving factor in the success of SMEs in the UK. A study by Peel, (2006) on the organizational culture in the SMEs in the UK and the impact in the coaching and mentoring shows that the organizational culture in SMEs is well balanced and the employees in these companies are able to perform well and they have identified their clear role in the organization and there is no difficulty in the communication with the other employees and the higher management also take into consideration the ideas and suggestion given by the employees.

4.5.2 Developmental/Adhocracy culture

The developmental/Adhocracy culture is one the four dimensions of the organizational culture which is used in this research. Similar, to the group/clan culture, four factors have been identified to measure the developmental/Adhocracy culture within the SMEs operational in tele-healthcare sector. These factors has also used by Prajogo, (2011) in his research to find the relation of organizational culture and the performance of organization.

The four factors included are; *flexibility and decentralization, expansion growth and development; innovation and change, and creative problem solving process.* The importance of the decentralization, innovation, problem solving and growth has been identified as important factors for the organizational culture in many researches. A study by Rasmussen, (2013) on organizational culture and innovation in the SMEs shows that the organizational culture has significant impact in the innovation process in the SMEs and

also the leadership in the SMEs have important role to play in establishing organizational culture in any firm.

The leader should focus on communicating the required change in the organization and how the people in will be affected with same. According to the author this will reduce the anxiety in the employee and also lead to the process of decentralization.

	Flexibility and decentralization	Expansion, growth, and development	Innovation and change	Creative problem-solving processes
Strongly disagree	0.5	3.3	3.3	NA
Disagree	9.5	1	8.1	2.9
Neutral	18.1	20	17.1	12.4
Agree	52.9	55.2	44.8	57.6
Strongly agree	19	20.5	26.7	27.1

Table 4.11: Frequency Results showing the developmental/Adhocracy culture in SMEs

To examine the developmental/adhocracy dimension of the organizational culture in the SMEs in the tele-healthcare sector in the UK the employees were asked about the above mentioned four factors. The analysis of the responses received from the employees is shown in the subsequent paragraphs.

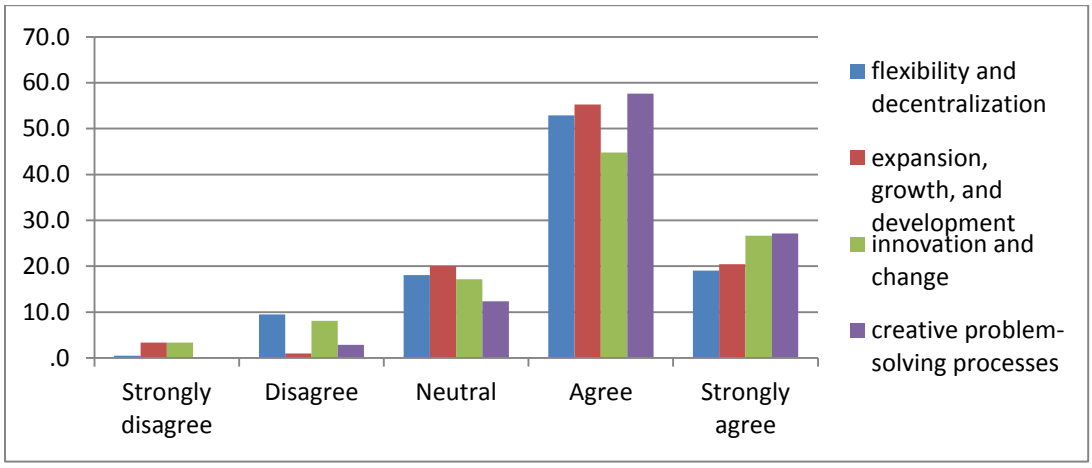

Figure 4.5: Results showing the developmental/Adhocracy culture in SMEs

As shown in the above figure it can be seen that for most of the factors related to the developmental/adhocracy culture in the organization, the majority of the responses were positive. It can be seen that most of employees agree with the statement given which were in the support of the organizational culture in the company.

The first factor in the developmental/adhocracy culture is flexibility and decentralization in the organization. This will help to examine how flexible is the organization in terms of the employees related issues and the also to check whether there is concentration of power in few hands or is well distributed within the organization. It is generally believed that the "*decentralization of power"* to some extent is good for the overall functioning of the organization the results from the survey indicate that 53 % of employees agree and 19 % strongly agree that there is flexibility and decentralization in their company totaling 72% of the total population. The proportion of employees who were having opposite view that there is no flexibility and decentralization in their company was found to be 10 % however the proportion of employees strongly opposing the statement were found to be very less. Remaining 18 % of the employees gave neutral opinion.

Every organization wants to "*expand and grow*" and but the companies should focus on the growth and development of the employees also along with the growth of the company. So the employees in these SMEs were asked whether their companies foster expansion, growth and development in the company. The results show that 55 % of the employees agree and that their company foster growth, expansion and development and around 20 % strongly agree with the same. Similarly, 20 % of the employees remained neutral who are not able to decide or they do not want to disclose their opinion. The proportion of the employees who strongly disagree that their company promotes growth and development is around 4 %.

"*Innovation and change*" is one of important factor for any kind of business to succeed and for the SMEs it is more important because without innovation they cannot compete with other big firms and other competitors in the market. To examine how much the SMEs in the UK promote or encourage innovation and the required change in the organization the responses were collected for the same. The analysis of the collected data shows that 26 % of the employees strongly agree that their company foster expansion, growth and development in the 45 % agree with the same. In this case 17 % of the employees were

neutral and the proportion of employees who do not agree that their company foster expansion, growth and development was around 5% out of which 3 % strongly disagreed.

The results shows that majority of the SMEs in the UK promote innovation and change and some researcher have identified that the SMEs are able to innovate more frequently than the big firms and also that the survival and the success of the SMEs also depend on how frequently they can innovate.

One of the characteristics for the success of an organization is their "*ability to handle the problems*" in the organization. If the companies are not able to solve the problem in the efficient way then it becomes very difficult to compete in the market. To know the problem solving ability of the SMEs in the tele-healthcare sector in the UK the employees were asked about whether their company encourages the employees to find out the creative ways to solve the problem in the organization or not. As shown in the above figure 58 % of the respondent agreed and 27% strongly agreed that their company promotes creative problem solving totaling 85% of the total sample population. Only around 3 % of the employees responded with the disagreement however no one strongly disagree that the SMEs promote the creative problem solving. Rest of the employees remains neutral.

Previous research has also focused on the importance of the innovation and growth in the tele-healthcare sector. According to the study of the tele-health application have become increasingly important in providing health education, so as to provide the education, research activities and education innovation in the tele-health sector should be fostered and the companies involved in this sector focus more on the creative ways to provide the services to its customers. The training and development of skill among the employees is also a key area where the tele-health sector industries should focus.

4.5.3 Hierarchal Culture

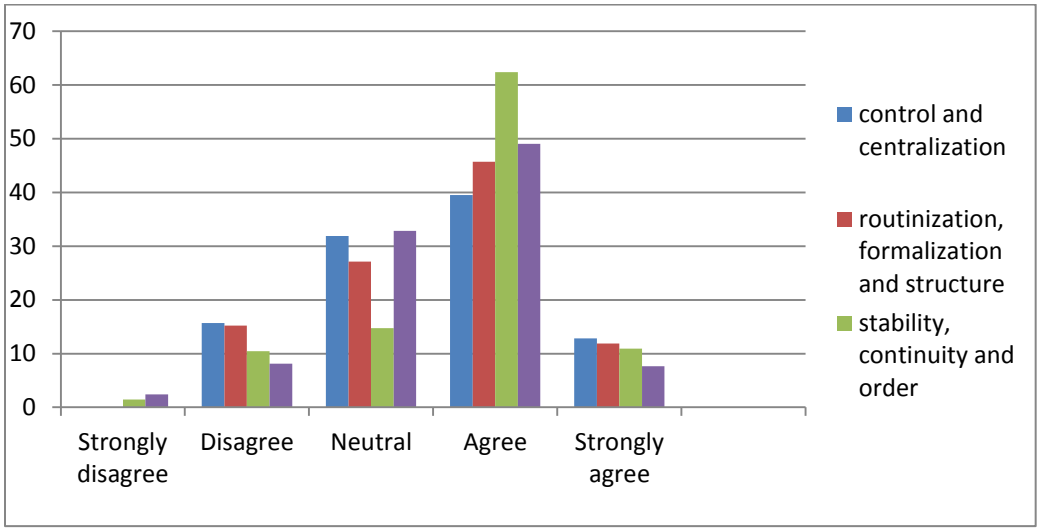

Figure 4.6: Results showing Hierarchical culture in SMEs

As shown in the above figure majority of the respondents have responded positively which means that they have agreed with the statements which support the existence of the hierarchal culture in the company. In the hierarchical culture also there are four factors on the basis of which the hierarchical culture is measured in any organization. These factors have been used by (Prajogo 2011) to measure the hierarchical culture . The four factors included in this scale are; *control and centralization; formalization and structure, stability, continuity and order and predictable performance outcomes*.

In case of the first factor which is related to the "*control and centralization*" around 40 % of the employees agree that their company fosters control and centralization and 12 % of the respondents strongly agreed with same. Among the remaining around 32 % maintained neutral stand. The proportion of employees who disagreed was around 16%. However, nobody strongly disagreed with the statement. Response from the employees shows that the SMEs do not focus strictly on the control and centralization. However control of some extent is necessary to improve the organizational performance of the company.

	Control and centralization	Routinization, formalization and structure	Stability, continuity and order	Predictable performance outcomes
Strongly disagree	NA	NA	1.4	2.4
Disagree	15.7	15.2	10.5	8.1
Neutral	31.9	27.1	14.8	32.9
Agree	39.5	45.7	62.4	49
Strongly agree	12.9	11.9	11	7.6

Table 4.12: Frequency values showing Hierarchical culture in SMEs

With respect to the next factor which was used to measure the hierarchal culture in the organization i.e. "*routinization, formalization and structure*", 47 % of the respondents agreed and 12 % of the respondents strongly agreed that their company fosters routinization, formalization and structure. However, around 27 % of the employees remained neutral. The proportion of the employees who do not agree with the statement was nearly 16% however no one strongly disagreed with the statement. The need of the proper structure in the organization and formalization has been identified as important factor for the better organizational structure by various scholars.

A recent study by Hann (2012) to examine the employment relation in SMEs taking the SMEs in the UK shows that most of the employees in the SMEs showed strong preference towards more informal employment which are based on the communication and also there were few cases which shows strong hierarchical structure of management. Similarly, author also showed that the employers in the SMEs in the UK are concerned about the wellbeing of the employees and try their best to accommodate to provide personal circumstance and they also expect that their employees minimize the other disruption related to the personal issues in the job. This has helped to improve the overall productivity of the employees in the SMEs in the UK (Hann 2012).

The third factor in the hierarchical culture is "*ability of the organization to promote stability, continuity and order*". The results based on the primary data collected for this research shows that 62 % of the employees agree that their company promotes stability, continuity and order. Similarly, 11 % of the respondents strongly agreed with the statement. As shown in the above figure around 15 % of the employees were neutral either because they do not want to disclose their views or because they are not able to decide whether their company promote this factor or not. Among the 210 employees included in

the sample 11 % of them disagree with the fact the company promote the hierarchical culture in terms of fostering stability, continuity and order and around 2 % of the employees strongly disagree with the same. In any organization stability is one of the key factor which all the employees want in their job (Burchell & Kolb 2006).

The fourth factor which is included in the hierarchical culture is predictable performance and the outcomes. As shown in the above figure 49% of employees included in the sample agreed that the organizational culture in their company foster the predictable performance and the outcome and 8% of the employees strongly agree with the same. The proportion of the employees who remain neutral is around 33% which is highest as compared to the other factors. Around 8% of the employees do not agree that the organizational culture in their workplace foster the predictable performance and outcomes and around 2% of the employees strongly disagree with the same statement.

4.5.4 Rational/Market Culture

The final scale of the organizational culture included in this research is the rational. Earlier research by Prajogo (2011) has also used the same scale to find the relation between multidimensional organizational culture and the performance of the organization. Like the other scale this scale also include four factors; *task focus, accomplishments and goal achievement; direction, objective setting and clarity of goal; efficiency productivity and profitability; and performance, outcome excellence and quality.*

To examine the rational/Market culture in the SMEs in the tele-healthcare sector which are operating in the UK, a sample survey was collected and 210 employees in these SMEs respond. While collecting the sample the employees were also asked to give their response to the statements related to the rational/Market culture in their organization. Results from the analysis based on the primary survey are presented below;

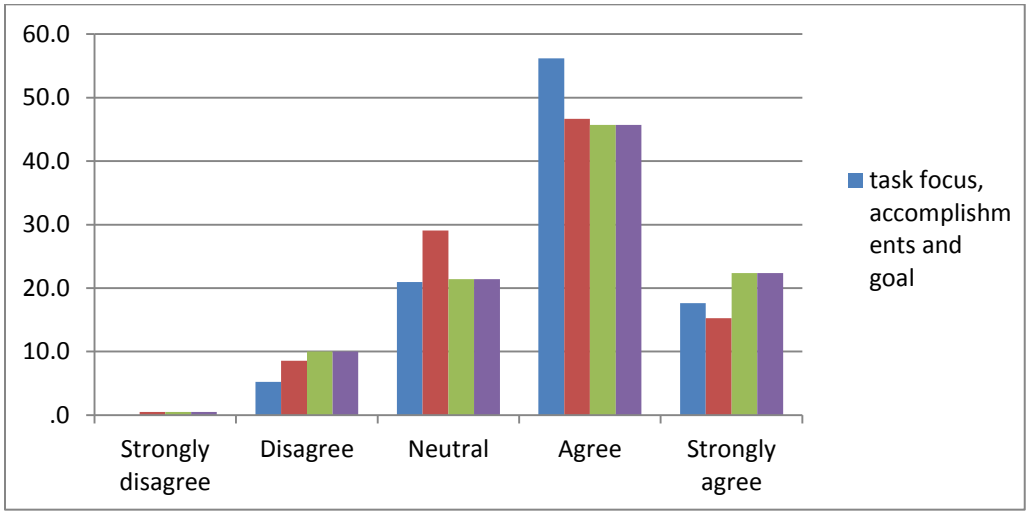

Figure 4.7: Results showing Rational/Market culture of SMEs

As shown in the above figure majority of the employees included in the sample agreed with the given statements. The proportion the employees who disagree are very less and those who strongly disagree are negligible in number. In terms of different factors of the rational culture the first one is related to task focus, accomplishment and goal. Results shows that 56 % of the employees in SMEs in the tele-healthcare sector agree that the organizational culture foster focus on the task accomplishment and are goal oriented. Similarly, 18% of the employees strongly agree with the same statement. Employees who remain neutral are 21% of the total surveyed employees. Employees who showed disagreement were around 5 % but no one in the survey strongly disagrees with the statement.

	Task focus, accomplishments and goal	Direction, objective setting and clarity of goal	Efficiency, productivity and profitability	Performance outcome excellence and quality
Strongly disagree	-	0.5	0.5	0.5
Disagree	5.2	8.6	10	2.4
Neutral	21	29	21	21
Agree	56.2	46.7	45.7	57.6
Strongly agree	17.6	15.2	22.4	18.6

Table 4.13: Frequency Results showing Rational/Market culture of SMEs

In the second factor which states that the organizational culture in their "*workplace fosters direction, objective setting and clarity and goal*". As shown in the above figure 15% of the employees strongly agreed while 47 % of the employees agreed with the statement. The number of employees who remain neutral is also quite high (29%). Similarly, 9 % of the employees disagree with the statement. This shows that majority of the employees feel that the SMEs in which they are working focus on achieving the goal and also set the target which has to be achieved.

In case of the "*promoting efficiency, productivity and profitability*" as a part of organizational culture in the SMEs in the UK, 45 % of the employees working in these SMEs agreed and 22 % strongly agreed with that this task are promoted by their organization. Similarly 21 % remain neutral and 10 % disagree with statement. From the analysis it can be said that the SMEs in the UK want to ensure that the efficiency and productivity is maintained which will eventually lead to increase in the profit and improve the performance of the organization.

The last factor in the rational culture is related to the "*performance outcome and quality*" of work in the SMEs. The results shows that 22 % of the employees strongly agree and around 46% agree with the statement which state that the organizational culture in their work place foster performance outcome and also the quality. 10 % of the employees do not agree with the statement while 22 % of the employees remain neutral.

4.6 Organizational performance assessment

Organizational performance in this research is measured on the basis of the quality of the goods and services provided by the SMEs as compared to its competitors. Employees included in the sample were asked to compare the goods and service provided by their companies and decides where their company stands as compared to their competitors. Five options were given: significantly behind, behind, comparable, almost leader and leader. The data was separated for the SMEs who provide goods from those who provide services.

4.6.1 SMEs which provide goods as their product

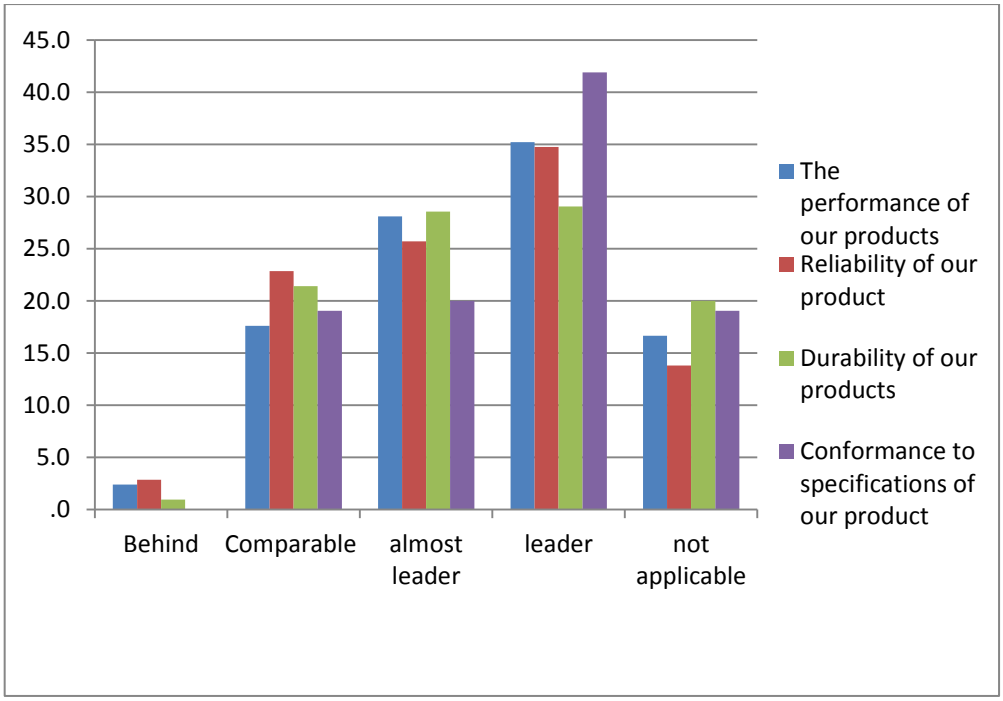

Figure 4.8: Results showing organizational performance assessment in SMEs

As shown in the above figure when asked about the performance of the product provided by the SMEs 35 % of the employees said that the goods produced by their companies is leader in the market whereas 28 % of the employees said that they are almost leader.

Around 18 % of the respondents feel that their products are comparable with their competitors and only 3 % said they are behind their competitors.

	The performance of our products (goods)	Reliability of our products (goods)	Durability of our products (goods)	Conformance to specifications of our products (goods)
Behind	2.4	2.9	1	-
Comparable	37	22.9	21.4	19
Almost leader	59	25.7	28.6	20
Leader	74	34.8	29	41.9
Not applicable	35	13.8	20	19

Table 4.14: Frequency Results showing organizational performance assessment in SMEs

Similarly, in terms of reliability of the goods produce by the SMEs in the tele-health sector, the results shows that 34 % of employees said that they are leader in the market and 26 % said their product are almost leader in terms of reliability. Among rest of the respondents, 23 % indicated that their goods were comparable while 2 % indicated that their goods are behind their competitors.

In terms of the durability of the goods 29 % said that they are leaders in the market while 28 % are almost leader reflecting that nearly 50% of the respondents were working in companies wherein the products were market leaders. The proportion of employees who said that their goods are comparable with other competitors is 21% and only 1 % of them feel that their goods are behind the other goods in terms of durability. With respect to the specification of the product the most of the responses indicate their products are leader (42 %), almost leader (20 %), and comparable (19 %). In the above figure employees who work in the SMEs which do not provide goods as their product are shown as not applicable.

From the results it can be said that the tele-healthcare sector in the UK is quite competitive and majority of the SMEs in this industry are not far behind of each other in terms of quality, reliability and durability.

4.6.2 SMEs which provide service

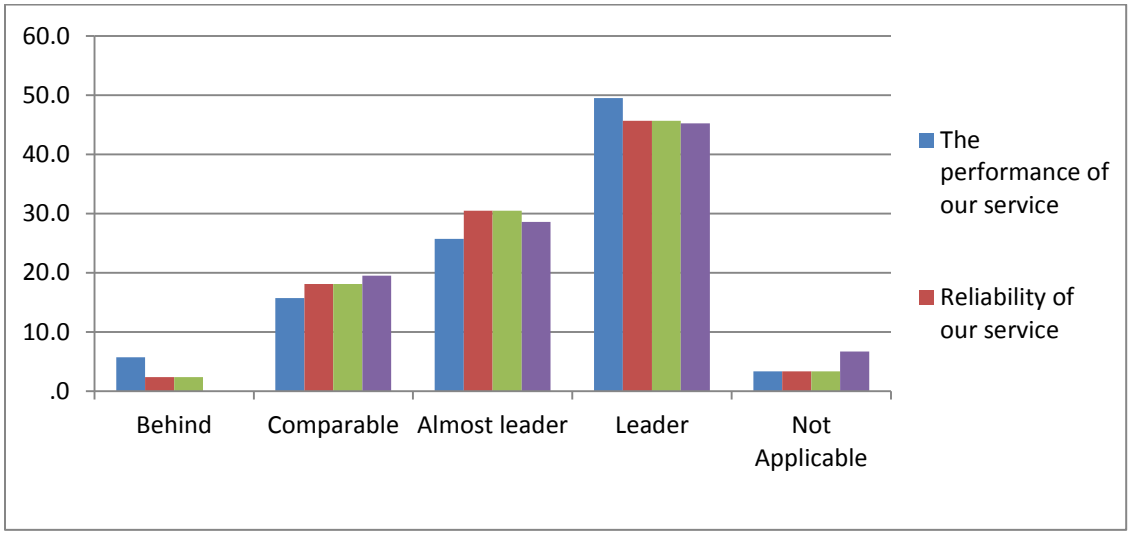

Figure 4.9: Results showing organizational performance assessment for service providing SMEs

As shown in the above figure in terms of the performance of the services provided by the SMEs in the tele-health sector, the responses of the employees shows that almost 50 % of employees said they are leader in the tele-health industry in terms of performance and 26 % said that they are almost leaders.

	The performance of our service	Reliability of our service is	Durability of our service is	Conformance to specifications of our service is
Behind	5.7	2.4	2.9	-
Comparable	15.7	18.1	21.4	19.5
Almost leader	25.7	30.5	28.6	28.6
Leader	49.5	45.7	41	45.2
Not applicable	3.3	3.3	6.2	6.7

Table 4.151: Frequency Results showing position of companies

When asked about the position of their company in terms of the reliability of the services provided the responses indicated that whole 45% agreed that their services were market leader, remaining 30% indicated that they were almost leaders and remaining 18% indicated that their products were comparable with the competitors. Further, only 3%

indicated that their reliability was behind the competitors. Similarly, the results in terms of the durability of the services provided indicates 45% leaders, 27% almost leader, and 18% comparable with competitors.

However, only 2% indicated that their services were behind the others. Finally the results for the specification of the service provided by the SMEs, 45 % said that they are leader in the market in terms of conformance to specification of the service and 29 % said almost leader. The proportion of employees who said that the service provided by their company is comparable to the other competitors is 19 % while no one believes that they are behind their competitors in terms of the specification of the services.

The results shows that majority of the SMEs in the tele-health sector claim to be the leader in providing services with respect to quality, reliability, durability and specification of the product. This can be either the tele-health market is more competitive so that that every company is focusing on providing quality service or the response given by the employees can be biased.

4.7 Process quality

The process quality is one of the important factors which has direct impact on the performance of any organization. For SMEs which are engaged in providing goods and services in tele-health sector the process quality becomes more important because products are the people who have health issues and any kind of fault in the process can have major damage on the growth and expansion of the company. So to examine the process quality of the SMEs, the responses were taken from the employees and the result of the responses is shown in the figure below.

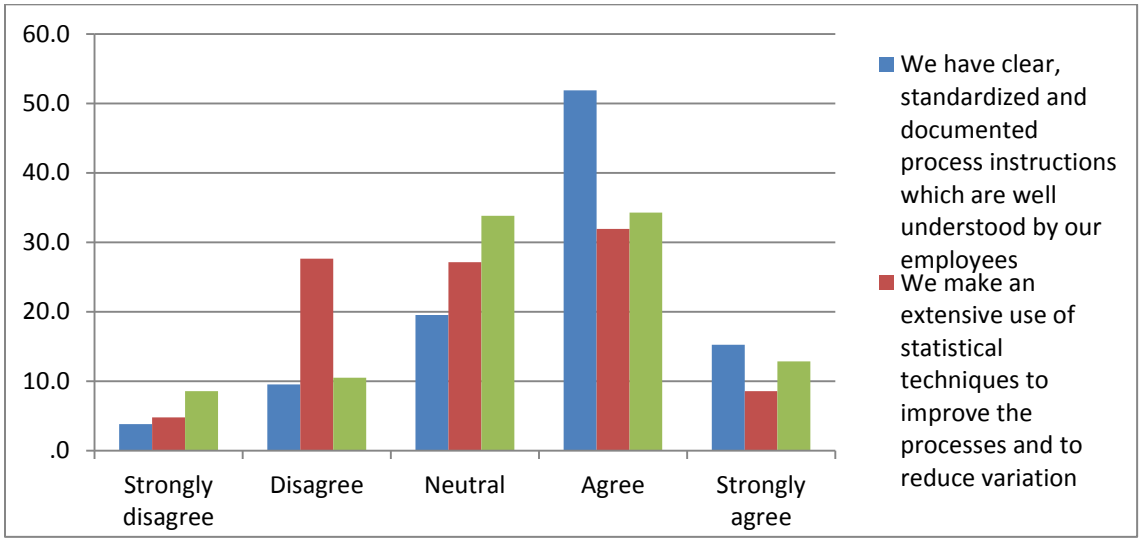

Figure 4.10: Results showing the Process quality of SMEs.

As shown in the figure above, around 52 % of the employees agreed that their company has clear standardized and documented process instructions. 15 % of the employees strongly agree with the statement. The total proportion of employees who disagreed was found to be 13 % out of which around 4% strongly disagreed. Rest of the employee remained neutral.

	We have clear, standardized and documented process instructions which are well understood by our employees	The process in our company are designed and operationalized to be "fool-proof" (preventive oriented)	We make an extensive use of statistical techniques to improve the processes and to reduce variation
Strongly disagree	3.8	8.6	4.8
Disagree	9.5	10.5	27.6
Neutral	19.5	33.8	27.1
Agree	51.9	34.3	31.9
Strongly agree	15.2	12.9	8.6

Table 4.16: Frequency Results showing the Process quality of SMEs.

When asked about the use of the statistical techniques to improve the process and reduce the variation in the process around 9 % strongly agreed and 32 % agreed that their company uses the statistical technique. Among the remaining employees, 27% maintained

neutral stand and in totality 32% indicated to disagree with the statement. Similarly 13 % of the respondents strongly agreed and 35 % agreed that the process in their companies are designed and operationalized to be fool proof. Other responses include neutral (33%) disagree (12 %) and strongly disagree (around 9 %).

4.8 Job Satisfaction

To know the satisfaction level of the employees working in the tele-heathcare sector in the UK, the response was collected from employees during the primary survey. Employees were given five different options to show the level of satisfaction of their job; extremely dissatisfied, dissatisfied, neutral, satisfied and extremely satisfied. The result from the analysis is shown in the figure below:

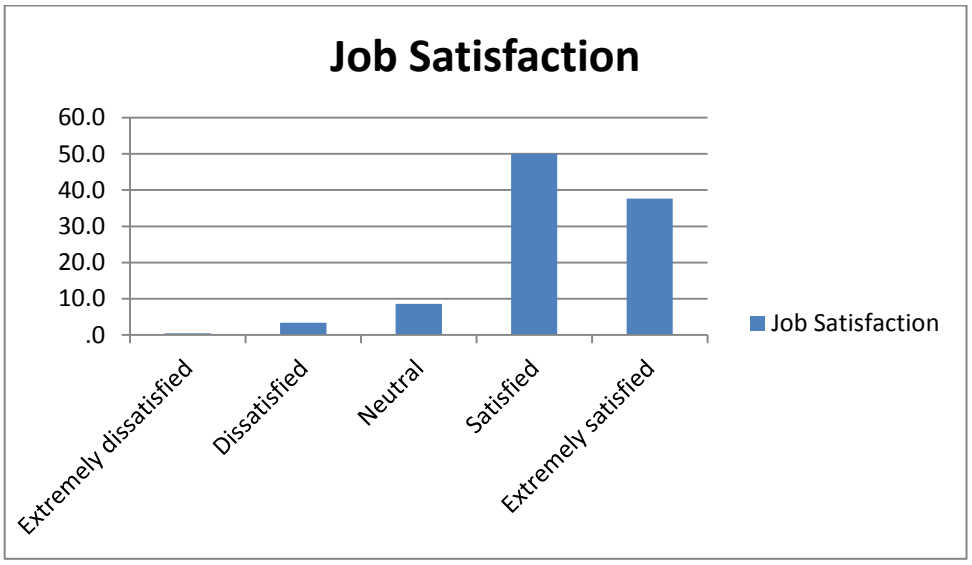

Figure 4.11: Results showing job satisfaction of employees in SMEs

As shown in the above figure half of the employees (50%) said that they are satisfied with their current job in the SMEs whereas around 38 % were extremely satisfied totaling to 88% of the total sample size. Only 3 % of the employees were not satisfied with their job however the proportion of employees who were extremely dissatisfied with the job was negligible. Rest of the employees were neutral about the job satisfaction level.

Job Satisfaction	Percentage
Extremely Dissatisfied	0.5
Dissatisfied	3.3
Neutral	8.6
Satisfied	50
Extremely satisfied	37.6

Table 4.17: Results showing job satisfaction of employees in SMEs

4.9 Innovation capabilities

Innovation is considered to be one of the key elements for the survival of all types of business in the competitive world. Every firm wants to promote the innovation in their organization which will not only enhance the market offering but also improve the organizational performance and also facilitate the competitive advantage for that firm (Damanpour et al. 2009). However the previous studies have shown that the SMEs are not able to foster the innovation proces in to their organisational culture and encourage the innovative human capital. Studies also shows that the innovation process in the SMEs are in the initial stage (Halim et al., 2014).So to examine the innovative capabilities of the SMEs in the UK the data has been collected. Responses were collected separately for *Product and Service Innovation* and *Process Innovation*.

4.9.1 Product and Service Innovation

According to the report of Smeal College of Business, (2006) SMEs can introduce process innovation which will enhance the process of the production and also in the supply chain through increasing reliability and reduction in the cost. report also state that the SMEs can introduce the product and service innovation in the form of introduction new functions , added features to the existing product of enhanced performance.

For this research responses have been collected to examine the product and service innovation among the SMEs in the UK. To examine the level of innovation in the product and service various statement related to the innovation was asked and the responses have been collected in terms of the position of the firm as compared to their competitors. Five options were given to indicate the position of their firm in terms of product and service innovation; significantly behind, behind, comparable, almost leader and leader. The result from the survey is presented in the following table:

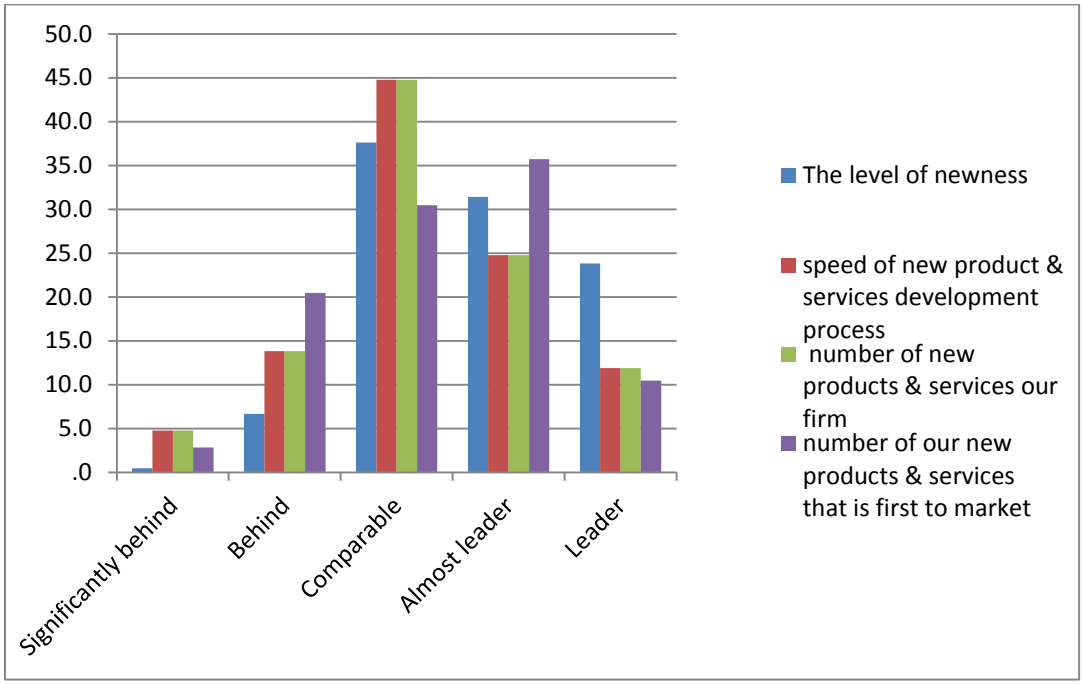

Figure 4.12: Results showing product and service innovation in SMEs

Four factors have identified to examine the level of the product and service innovation in the SMEs in the UK. The first one is the level of newness or the production of new goods or new service by the SMEs. For this factor most of the respondents said that their firs are comparable with the other firms while 31 % said they are almost the leader in terms of launching new product or service. Similarly the proportion of the respondents who said they are leader in this respect is around 24 %. Only 7% of the respondents said they are behind other competitors and the responses for significantly behind is negligible.

	The level of newness (novelty) of our firm's new products & Services	The speed of new product & services development process	The number of new products & services our firm has introduced to the market is	The number of our new products & services that is first to market (early market entrants)
Significantly behind	0.5	4.8	6.7	2.9
Behind	6.7	13.8	11.9	20.5
Comparable	37.6	44.8	34.8	30.5
Almost leader	31.4	24.8	27.1	35.7
Leader	23.8	11.9	19.5	10.5

Table 4.18: Results showing product and service innovation in SMEs

The second factor is the speed of the new product and service development. In this respect almost 45 % said that their developmental process of new product and service is comparable with the other competitors while 24 % said they are almost leader and the proportion which said they are leader is around 12 %. Similarly 13 % of the responses said they are behind other competitors and only 5 % said they are significantly behind their competitors.

In terms of the number of new products and services 45 % said they are comparable and on the other hand 25% and 12% respectively indicated that their product is almost a leader and leader respectively. Only 13 % of responses said that their firm is behind other competitors and only 5 % said that they are significantly behind their competitors.

The last factor is the early market entrance, which means the number of product and services in the market before other competitors. Around 30 % said their products are comparable with their competitors and around 36 % said they are almost leader in the market while only 10 % said they are leader. The proportion who said they are behind is around 21 % and 3 % of the respondents said that their company is significantly behind their competitors.

The result from the primary survey shows that the product and service innovation in the SMEs in the UK are almost in the same level and for most of the indicators there are very few clear leaders. Also the response which shows that they are behind their competitors is very less and majority of the responses comes out to be comparable.

4.9.2 Process innovation

Similar to the product and service innovation for the process innovation also four factors were identified and the responses were collected for those factors. Results for the Process innovation are shown in the following figure;

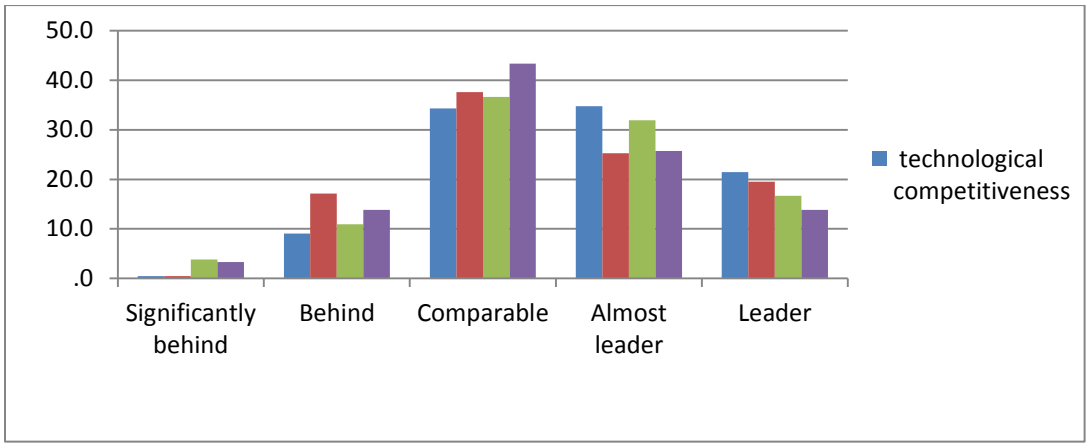

Table 4.19 Results showing Process Innovation in SMEs

The first factor is the technological competitiveness of the firm as compared to their competitors in this respect around 35 % of the respondents said that their firm is almost leader in the technological competitiveness while 34 % said their firm is comparable. 21 % of the responses respond that the firm in which they are working is leader in the market. Only 9 % feels that their firm is behind their competitors.

	The technological competitiveness of our company	The speed with which we adopt the latest technological innovations in our processes	The updated-ness or novelty of the technology used in our processes	The rate of change in our processes, techniques and technology
Significantly behind	0.5	0.5	3.8	3.3
Behind	9	17.1	11	13.8
Comparable	34.3	37.6	36.7	43.3
Almost leader	34.8	25.2	31.9	25.7
Leader	21.4	19.5	16.7	13.8

Table 4.20: Results showing Process Innovation in SMEs

In terms of the adoption of latest technology most of the responses (37 %) were that their firm is comparable with other competitors and only 19 % said their firm is leader while 25 % feel that their firm is almost leader in terms of adoption of latest technology. A significant proportion (17 %) said they are behind against their major competitors.

With respect to the updated-ness or the novelty of technology the results shows comparable (37 %), almost leader (32 %), leader (16 %), behind (11%) and significantly behind (4 %). this shows that the most of the SMEs are in the same stage in terms of updated –ness or novelty of the technology.

The fourth and final factor identified was the rate of change in the process, technique and technology in the firm. The results shows that 43 % respond that their firm is comparable with their main competitors and around 26 % said that their firm is almost leader in this respect and only 13 said their firm is leader. The responses which said their firm is behind the competitors in this respect is around 14 % while only 3 % said they are significantly behind their major competitors.

Like in the product and service innovation he results for the process innovation shows that SMEs in tele-health sector in the UK are in almost in the same position. However some firm have little ahead as compared to its competitors in terms technological competitiveness and adoption of new technology.

4.10 Summary to the Chapter

The main focus of this chapter was to analyze the data collected from the 210 employees in the tele-Health care sector in the UK and the frequency analysis was conducted. In terms of demographic profile of the respondents nearly 40% of the respondents were below 34 years of age, and nearly 66% of the industry was male dominated. Since most of the SMEs were relatively new, the total working experience for the respondents was less. In terms of position of respondents within the organization, nearly 40% of the participants were working as service support staff indicating towards high demand for on-site services in the tele-healthcare industry. Further, in terms of company profile, most of the companies were comparatively new less than 15 years of experience and were growing with increase in the tele-healthcare industry. Nearly similar percentage of organizations were working individually on goods and services and together reflecting on importance of both the industries.

The main objective of this research was to reflect on the organizational culture profile of the SMEs in the UK. To determine the existence of each culture in the SMEs four sub-elements were identified for each organizational culture and the results shows that most of the respondents agree that the sub-elements included correctly represents the given organizational culture. Nearly 70%-72% respondents indicated that they have clan and developmental culture within their organization, followed by 50% respondents indicating towards hierarchical culture73% indicting Rational/Market culture. The results from the performance assessment show that most of the employees think that their company is leader in the industry in terms of production of goods and service. Similarly majority of the respondents agreed that their company follow the standardized documents process and make use of the statistical techniques to improve the process quality.

One of the major indicators of the organizational culture in any industry is the satisfaction of employees from their job, process quality, and innovation capabilities. In this research the results shows that most of employees seems satisfied with their current job. In terms of innovative capabilities, the primary data analysis shows that most of the employees think that their company is in comparable position with other SMEs in terms of launching new products and services and also in level of newness. Similarly, in the case of process innovation the most of the employees think that their company is almost leader in terms of technological competiveness and at least comparable with other competitors in terms of rate of changes in the process techniques and technology.

5. DATA ANALYSIS AND INTERPRETATION: INFERENTIAL ANALYSIS

5.1 Introduction to the Chapter

This chapter is an extension of the previous chapter on analysis of the data collected from the primary survey among the 210 employees working in the SMEs in tele-healthcare sector in the UK. The previous chapter has mainly focused on providing the general overview about the respondents participated in the survey and the SMEs included in the study. This chapter will focus on answering the research question which were proposed and on the basis of the results tests the hypothesis.

In the first section of this chapter the correlation and regression analysis has been performed separately for each of the organizational culture and its sub-elements. In the later section of the chapter the results are presented to test each of the hypothesis proposed based on the research questions and the results have been shown whether the hypothesis has been accepted or rejected.

The first section within the organization is focused on profile or characteristics of SMEs within, clan, adhocracy, hierarchical and rational culture. Next the dominance of culture within the organization was also determined. Further, the role of multi-dimensional organizational culture in influencing non-financial performance as determined in terms of process quality, job satisfaction, and quality of goods and innovative capabilities of the organization.

Further, next innovation was kept as a moderator to determine the non-financial performance of the SMEs. In this section the innovation (both product innovation and process innovation) will be used as the mediator between the organizational culture and the non-financial performance of the SMEs in the UK.

5.2 Correlation and regression analysis

The correlation shows how the variables included in the model are related with each other. High correlation among the variable may lead to the problem of multi co-linearity whereas low correlation coefficient among the variables indicates towards a bad model. Similarly the regression results show how much the independent variable change with one

unit change in the dependent variable. Both the regression and correlation coefficient can be positive or negative in value. Positive coefficient means the two variables are positively related and negative coefficient means that the variables are negatively related with each other. For this paper also the correlation and regression results among the different variables has been conducted and the results are shown below.

5.2.1 RQ1: What are the profile/characteristics of SMEs' organizational culture in the Tele Healthcare Industry in the UK?

The main aim of conducting the analysis is to check whether the sub-elements included each of the organizational culture are correlated or not and the correlation analysis was conducted. The regression analysis was also conducted for each of the organizational culture to show that how much variation in the organizational culture are explained by the sub-elements included. This will also show that whether the sub-element have positive or negative impact on the given organizational culture. Once the correlation and regression analysis shows significant results then in the later section the sub-elements can be aggregated and used for further analysis.

5.2.1.1 Clan culture

Clan culture is similar to the family like culture where the main focus is on consensus and communality about the goals and the values of the organization. For this research four components have been included in the clan culture: participation and open discussion among the employees; empowerment of employees to act; assessment of employees' concern and ideas; human relations, teamwork and cohesion. The results for the correlation coefficients are presented in the following table:

Correlations					
		Participation and open discussion	Empowerment of employees to act	Assessment of employees' concerns and ideas.	Human relations, teamwork and cohesion.
Participation and open discussion	Pearson Correlation	1	.532**	.574**	.123
	Sig. (2-tailed)		.000	.000	.076
	N	210	210	210	210

Empowerment of employees to act	Pearson Correlation	.532**	1	.595**	.189**
	Sig. (2-tailed)	.000		.000	.006
	N	210	210	210	210
Assessment of employees' concerns and ideas.	Pearson Correlation	.574**	.595**	1	.155*
	Sig. (2-tailed)	.000	.000		.025
	N	210	210	210	210
Human relations, teamwork and cohesion.	Pearson Correlation	.123	.189**	.155*	1
	Sig. (2-tailed)	.076	.006	.025	
	N	210	210	210	210

***. Correlation is significant at the 0.01 level (2-tailed).*
**. Correlation is significant at the 0.05 level (2-tailed).*

Table 5.1 Correlation coefficients for clan culture

As shown in the above table all the variables are significantly correlated with each other except for the participation and open discussion and the human relation, team work and cohesion. This shows that the variables included for the clan culture are statistically significant with each other, which is a good indication for further analysis. All the correlation coefficients are significant at 0.05 level of significance.

Regression analysis

The regression analysis was conducted taking the clan culture as the dependent variable and the four components of the clan culture as the independent variable.

The results from the regression analysis are shows the value of R-square of 0.85 which means that the independent variable in the model are able to explain 85 % of the variation in the dependent variable and rest of the 15 % are explained by the variable which are not included in the model.

Model Summary[b]										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.926[a]	.857	.855	.342	.857	307.978	4	205	.000	1.976

a. Predictors: (Constant), human relations, teamwork and cohesion. Participation and open discussion, empowerment of employees to act, assessment of employees' concerns and ideas.
b. Dependent Variable: Clan culture

Table 5.2: Summary of the model for Clan Culture

Similarly, the Anova table shows that the value of the F value is 307.978 and also the cumulative effect is significant (p value is 0.000). This shows that the model in good and further analysis can be conducted. Also the value of Durbin Watson test shows the value of 1.976 which shows that there is no autocorrelation among the independent variables.

ANOVA[b]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	144.114	4	36.028	307.978	.000[a]
	Residual	23.982	205	.117		
	Total	168.095	209			

a. Predictors: (Constant), human relations, teamwork and cohesion. Participation and open discussion, empowerment of employees to act, assessment of employees' concerns and ideas.
b. Dependent Variable: Clan culture

Table 5.3: ANOVA table for clan culture

From the regression results it can be said that all the independent variable included in the model are statistically significant even at 1 % significance level. Similarly, all the independent variables have positive impact on the clan culture. The regression coefficient

of 0.318 can be interpreted as, when participation and open discussion among the employees increase then the clan organization culture increases by 0.318 the in the organization. Similarly, other coefficients can also be interpreted.

Coefficients[a]								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-.037	.155		-.239	.812	-.343	.269
	participation and open discussion	.318	.032	.338	10.040	.000	.256	.380
	empowerment of employees to act	.311	.031	.344	9.956	.000	.250	.373
	Assessment of employees' concerns and ideas.	.361	.032	.403	11.356	.000	.299	.424
	Human relations, teamwork and cohesion.	.055	.032	.046	1.704	.090	-.009	.119
a. Dependent Variable: Clan culture								

Table 5.4: Coefficient value of various factors of Clan culture

5.2.1.2 Adhocracy culture

Another type of culture is the adhocracy organizational culture which is mainly based on the ability to adapt in the quickly changing environment. The main focuses of this kind of culture is on the empowerment of employees, flexibility and also encourages individual initiative. For this research the four components used for adhocracy organizational culture are flexibility and decentralization; expansion, growth, and development; innovation and change; creative problem solving processes.

To check the correlation among the variable the correlation analysis was conducted and the results is shown in the following table:

Correlations					
		Flexibility and decentralization	Expansion, growth, and development	Innovation and change	Creative problem-solving processes
Flexibility and decentralization	Pearson Correlation	1	.175*	.259**	.176*
	Sig. (2-tailed)		.011	.000	.011
	N	210	210	210	210
Expansion, growth, and development	Pearson Correlation	.175*	1	.685**	.135
	Sig. (2-tailed)	.011		.000	.050
	N	210	210	210	210
Innovation and change	Pearson Correlation	.259**	.685**	1	.239**
	Sig. (2-tailed)	.000	.000		.000
	N	210	210	210	210
Creative problem-solving processes	Pearson Correlation	.176*	.135	.239**	1
	Sig. (2-tailed)	.011	.050	.000	
	N	210	210	210	210

**. Correlation is significant at the 0.05 level (2-tailed).*
***. Correlation is significant at the 0.01 level (2-tailed).*

Table 5.5: Correlation values of various factors of Adhocracy culture

As shown in the above table all the correlation coefficients are significant at 0.01 level which means that the variables included in the model are suitable for the analysis. Also all the coefficients have positive sign which means that all the components affect each other positively.

To find the individual impact of the each component on the adhocracy organizational culture regression analysis was conducted. The developmental organizational culture was taken as the dependents variable while the four components were taken as the independent variable. The results indicate that the value of R –square is 0.858 which means that 85 % of the variation in the dependent variable is due to the independent variable included in the model and rest is due the unobserved variable.

Model Summary [b]										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.926[a]	.858	.855	.332	.858	309.630	4	205	.000	1.728

a. Predictors: (Constant), creative problem-solving processes, flexibility and decentralization, expansion, growth, and development, innovation and change

b. Dependent Variable: Developmental culture

Table 5.6: Summary of the model for developmental culture

The F-value of 309.630 is also significant at 0.01 levels, which shows that the model is good. Similarly, the value of Durbin -Watson is 1.728 which is close to 2. This shows that there is no multi-collinearity among the variables included in the model.

ANOVA[b]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	136.416	4	34.104	309.630	.000[a]
	Residual	22.580	205	.110		
	Total	158.995	209			

a. *Predictors: (Constant), creative problem-solving processes, flexibility and decentralization, expansion, growth, and development, innovation and change*

b. Dependent Variable: Developmental culture

Table 5.7: ANOVA table for developmental culture

ANOVA table given above also shows that the cumulative effect is also significant at 0.01 levels.

The details results of the regression coefficients are shown in the table below

Coefficients [a]								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.130	.107		1.215	.226	-.081	.341
	flexibility and decentralization	.243	.027	.289	8.914	.000	.189	.297
	expansion, growth, and development	.255	.028	.295	9.051	.000	.199	.310
	innovation and change	.299	.029	.342	10.220	.000	.241	.356
	creative problem-solving processes	.216	.026	.264	8.372	.000	.165	.266
a. Dependent Variable: Developmental culture								

Table 5.8: Regression coefficients results for developmental culture

As shown in the above table all the independent variable in model were found significant at 0.01 level of significance. Also all the independent variables have positive impact on the developmental organizational culture. The coefficient of 0.216 can be interpreted as, with increase in the encouragement to employees for creative problem solving process leads to 0.216 increases in the developmental culture. Similarly other regression coefficient can also be interpreted.

5.2.1.3 Hierarchical organizational culture

Hierarchical organizational culture is mainly based on model where the level and structure are clearly defined in the organization. The main focus on this type of culture is on the efficiency, stability and doing thing in the correct way.

There are many components which reflect the existence of the hierarchical organization culture, for this research four components are included namely; control and centralization; routinization, formalization and structure; stability, continuity and order; predictable performance outcomes. To check whether the selected variables are correlated with each other or not the correlation analysis was conducted and the results are present in the table below:

Correlations					
		Control and centralization	Routinization, formalization and structure	Stability, continuity and order	Predictable performance outcomes
Control and centralization	Pearson Correlation	1	.342**	.421**	.433**
	Sig. (2-tailed)		.000	.000	.000
	N	210	210	210	210
Routinization, formalization and structure	Pearson Correlation	.342**	1	.342**	.357**
	Sig. (2-tailed)	.000		.000	.000
	N	210	210	210	210
Stability, continuity and order	Pearson Correlation	.421**	.342**	1	.432**
	Sig. (2-tailed)	.000	.000		.000
	N	210	210	210	210
Predictable performance outcomes	Pearson Correlation	.433**	.357**	.432**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	210	210	210	210
**. *Correlation is significant at the 0.01 level (2-tailed).*					

Table 5.9: Correlation coefficients for Hierarchical culture

The table shows that the all the correlation coefficient values are between 0.3 to 0.6 and all the variables are statistically significant at 0.01 level of significance. Similarly, the results show that all the variables are positively correlated with each other.

Model Summary[b]										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.912[a]	.832	.829	.376	.832	253.583	4	205	.000	1.988

a. Predictors: (Constant), predictable performance outcomes, routinization, formalization and structure, stability, continuity and order, control and centralization

b. Dependent Variable: Hierarchical culture

Table 5.10: Summary of the model for hierarchical culture

As shown in the table above the adjusted R –square came out to be 0.829 which means that the model considered for the analysis is good as 82 % of the variation in the dependent variable is explained by the independent variable included in the model and the remaining variation is due to other unobserved variable. Also the Durbin- Watson test show the value of 1.988 which is found close to 2 indicating that there is no multi-collinearity among the variables included in the model.

ANOVA[b]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	143.494	4	35.874	253.583	.000[a]
	Residual	29.001	205	.141		
	Total	172.495	209			

a. Predictors: (Constant), predictable performance outcomes, routinization, formalization and structure, stability, continuity and order, control and centralization *b. Dependent Variable: Hierarchical culture*

Table 5.11: ANOVA table for hierarchical culture

The ANOVA table shows the F-value of 253.583 which is statistically significant at 0.01 significance level and shows that the cumulative effect is also significant for the model. The regression coefficients are shown in the table below:

Coefficients[a]								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-.167	.118		-1.414	.159	-.400	.066
	Control and centralization	.293	.030	.329	9.760	.000	.234	.353
	Routinization, formalization and structure	.230	.027	.269	8.416	.000	.176	.284
	Stability, continuity and order	.284	.030	.322	9.571	.000	.225	.342
	Predictable performance outcomes	.282	.030	.317	9.328	.000	.223	.342
a. Dependent Variable: Hierarchical culture								

Table 5.12: Regression coefficients for hierarchical culture

The regression coefficient were obtained by running the linear regression model by taking the hierarchical culture as the dependent variable and the four components of the

hierarchical culture as the independent variable. The regression analysis enabled the researcher to examine whether the four components included in the model has any impact on the hierarchical culture or not. The results show that the entire independent variable are statistically significant at 0.01 level of significance and all the independent variable positively affect the dependent variable. The regression coefficient of 0.284 can be interpreted as, with one unit increase in the stability, continuity and order the hierarchical culture is increased by 0.284 units. Other regression coefficient can also be interpreted similarly.

5.2.1.4 Rational culture

The rational culture involved the controlling where the planning and setting the goal are the main tools to achieve efficiency and productivity. This culture is called rational culture because the main focus of this king of organizational culture is on outcome and fulfillment of the targeted goal. In this paper the four components of the rational culture have been identified which are task focus, accomplishments and goal achievements; direction, objective setting and clarity of the goal; efficiency, productivity and profitability, performance outcome excellence and quality.

To examine whether the included variable are correlated with each other or not the correlation analysis was conducted and the results are presented below:

Correlations					
		Task focus, accomplishments and goal	Direction, objective setting and clarity of goal	Efficiency, productivity and profitability	Performance outcome excellence and quality
Task focus, accomplishments and goal	Pearson Correlation	1	.369**	.314**	.252**
	Sig. (2-tailed)		.000	.000	.000
	N	210	210	210	210
Direction, objective setting and clarity of goal	Pearson Correlation	.369**	1	.370**	.305**
	Sig. (2-tailed)	.000		.000	.000
	N	210	210	210	210

Efficiency, productivity and profitability	Pearson Correlation	.314**	.370**	1	.251**
	Sig. (2-tailed)	.000	.000		.000
	N	210	210	210	210
Performance outcome excellence and quality	Pearson Correlation	.252**	.305**	.251**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	210	210	210	210
**. *Correlation is significant at the 0.01 level (2-tailed).*					

Table 5.13: Correlation coefficient values of rational culture

The correlation matrix shows that all the variables included in the model are correlated with each other and all the correlation coefficients are statistically significant which shows that the included variables affect each other significantly and the model considered is reliable for further analysis. Also all the correlation coefficients are positive which means that all the variables are positively related with each other.

Model Summary [b]										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.883[a]	.780	.776	.360	.780	182.219	4	205	.000	1.892
a. Predictors: (Constant), performance outcome excellence and quality, efficiency, productivity and profitability, task focus, accomplishments and goal, direction, objective setting and clarity of goal										
b. Dependent Variable: Rational culture										

The summary of the model table shows that the value of adjusted R-square as 0.776, which means that 77% of the variation in the dependent variable is due to the independent variable included in the model whereas remaining of the variation is due to the unobserved variable which is not considered in the model. The value of R-Square above 0.6 is

considered to be the good model. Similarly, the Durbin Watson value of 1.976 confirms that there is no multi-collinearity among the independent variables in the model. Existence of multi-collinearity among the independent variable may lead to biased results.

ANOVA [b]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	94.435	4	23.609	182.219	.000[a]
	Residual	26.560	205	.130		
	Total	120.995	209			

a. Predictors: (Constant), performance outcome excellence and quality, efficiency, productivity and profitability, task focus, accomplishments and goal, direction, objective setting and clarity of goal
b. Dependent Variable: Rational culture

Table 5.14: ANOVA table for rational culture

Similarly, the ANOVA table shows that the value of F is significant at 0.01 level of significance. This shows that the cumulative effect of the all the independent variable is also significant.

Linear regression was conducted by taking the rational culture as the dependent variable and other components of the rational culture were found to be independent variable. The results obtained from the regression analysis are presented below:

The results show that all the regression coefficients are statistically significant and positive, which shows that all the independent variable included in the model have significant impact on the dependent variable. The entire regression coefficients were found significant at 0.01 significance level.

Coefficients [a]								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
	(Constant)	.505	.128		3.952	.000	.253	.756
	Task focus, accomplishments and goal	.223	.027	.305	8.392	.000	.171	.275
	Direction, objective setting and clarity of goal	.283	.028	.380	10.137	.000	.228	.338
	Efficiency, productivity and profitability	.234	.027	.317	8.736	.000	.181	.287
	Performance outcome excellence and quality	.184	.025	.259	7.384	.000	.135	.233
a. Dependent Variable: Rational culture								

Table 5.15: Regression coefficients for rational culture

The regression coefficient of 0.234 can be interpreted as, with one unit increase in the efficiency, productivity and profitability in the organization the ration culture increase by 0.23 units. Other coefficient can also be interpreted in the similar way.

In this section the correlation and regression analysis was conducted to find whether the sub-elements included in each organization culture are correlated with each other or not. The results shows that for clan culture all the sub-element included are correlated with

each other and the correlation coefficients are significant at 5 % significance level except for the human relation, team work and cohesion. Similarly, the regression results also shows that the all the regression coefficients are significant even at 1 % significance level except for last variable (the human relations, teamwork). This shows that this variable does not have any impact on the clan organizational culture. So this variable can be dropped for the further analysis and other three variables can be aggregated to represent the clan organizational culture.

The second organizational culture is the Adhocracy or the Developmental culture. The results for this organizational culture shows that the sub-elements included to represents the adhocracy culture are significantly correlated and the results from the regression analysis also shows that each of the elements have significant impact on the adhocracy organizational culture. Similarly the correlation and regression analysis for the other two organizational culture; the hierarchical organizational culture and the rational organizational culture also shows that the sub elements included in each of the organizational culture are significantly correlated and also each of the elements have significant impact for the respective organizational culture.

5.3 The profile/characteristics of SMEs' organizational culture in the Tele-Healthcare Industry in the UK and Dominant Organizational Culture in the UK

As shown in the earlier section, all the organizational culture shows significant results and all the components of the four organizational cultures have significant and positive impact on their respective organizational culture. To find the dominant organizational culture among the SMEs in the tele-health sector in the UK the frequency analysis was conducted to find out which organizational culture existed in the SMEs. The results were obtained on the basis of the information provided by the respondent.

Statistics					
		Clan culture	Developmental culture	Hierarchical culture	Rational culture
N	Valid	210	210	210	210
	Missing	0	0	0	0
Mean		3.76	3.80	3.50	3.66
Median		4.00	4.00	4.00	4.00

Table 5.16: Mean and Median of the Organizational culture in the SMEs in the UK

Hypothesis H1a; Clan culture is the SMEs' dominant organizational culture in the tele-healthcare industry in the UK.

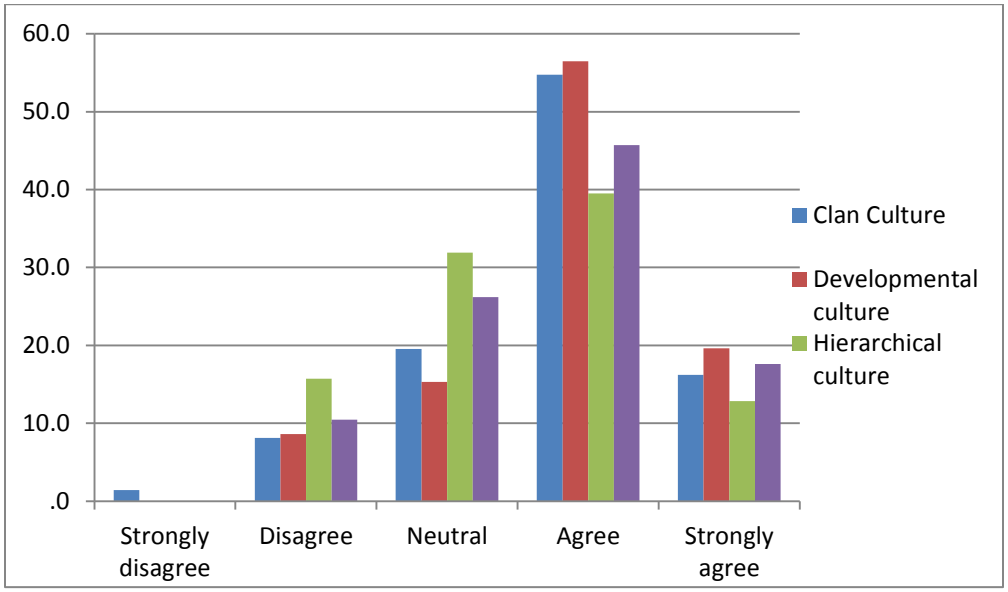

Figure 5.1: Existence of the various organization culture in the SMEs in the UK

As shown in the table above the mean value of the existence of the clan culture in the SMEs in the UK is 3.76 and which is less than the mean value of the developmental organizational culture. And the figure also shows that, although most of the respondents agree that clan culture exists in their organization but the number is less than that of the developmental organizational culture.

So the hypothesis that clan culture is the dominant organizational culture in the SMEs in the UK is **rejected.**

H1b: Adhocracy/ Developmental culture is the SMEs' dominant organizational culture in the Tele-Healthcare industry in the UK.

The statistical table above shows that the developmental culture has the mean value of 3.80, which is the highest among all the four organizational culture. The figure also shows that highest number of the respondents agree for existence of the developmental culture. So on the basis of the above results it can be said that the developmental culture is the dominant organizational culture in the SMEs in the UK.

So the hypothesis that the developmental/adhocracy culture is dominant organizational culture in the tele-healthcare industry in the UK is **accepted**.

H1c: Hierarchy culture is the SMEs' dominant organizational culture in the Tele-Healthcare industry in the UK.

The results from the frequency analysis shows that the mean value for the hierarchical culture is 3.50 which is less than the mean value of the developmental culture and the figure above also confirms that hierarchical culture is not the dominant organization culture.

So the hypothesis that hierarchy culture is the SMEs' dominant organizational culture in the tele-healthcare industry in the UK is **rejected.**

H1d: Market/rational culture is the SMEs' dominant organizational culture in the Tele Healthcare industry in the UK.

For the market/rational culture the mean value is 3.66 which is less than the mean value f the developmental culture and also the above figure shows that the number of respondents who agree for the existence of the rational culture in their organization is less than that of the developmental culture.

So the hypothesis that the rational culture is the SME's dominant organizational culture in the Tele Healthcare industry in the UK is **rejected**.

Hypothesis	Outcomes
Clan culture is the dominant organizational culture in the SMEs in the UK	Rejected
Adhocracy/Developmental culture is the SMEs' dominant organizational culture in the Tele-Healthcare industry in the UK	**Accepted**
Hierarchy culture is the SMEs' dominant organizational culture in the Tele-Healthcare industry in the UK	Rejected
Market/rational culture is the SMEs' dominant organizational culture in the Tele-Healthcare industry in the UK	Rejected

Table 5.17: Summary of Results

5.3.1 RQ 2: How does SMEs' multidimensional organizational culture (OC) influence non-financial (perceived) performance?

In the previous section we have conducted the analysis to examine the dominant organizational culture in the SMEs involved in the tele-healthcare industry in the UK. The results indicate that the developmental organizational culture is the dominant culture in the SMEs. In this section the impact of the four organizational cultures in the non-financial performance will be conducted.

The main aim of this study is also to find the impact of various organisational cultures on the non-financial performance of SMEs in the UK which are involved in the tele-health sector. For this research, the non-financial performance was measured in terms of three indicators; process quality, job satisfaction, quality of the goods and service provided by the SMEs. Regression analysis was conducted to find the impact of each culture on the non-financial performance. For the regression analysis four organisational cultures were used as the independent variables and the separate regression were run for each element which were used to measure the non-financial performance of the SMEs.

Organizational culture is an important aspect of any organization which has influence on the success of the organization. According to Ranganayakulu, (2005) organizational culture can have explicit or implicit influence on every dimension of the business. Therefore, supportive organisational culture can lead to significant positive outcomes for the organisation. Organisation which have strong culture have more chance of having success in terms of the financial indicators and market value and are also able to achieve

their goals as compared to those organisation which does not have strong organisational culture.

.

5.3.1.1 Impact of organizational culture on process quality

The process quality is a key element of any organisation which directly affects the non-financial performance of the organisation. To find the impact of the different organisational culture in the process quality four organisational cultures were taken as the independent variable and the process quality as the dependent variable.

The results from the regression analysis shows that the value of adjusted R square is 0.359 which shows that around 36 % variation in the process quality is being explained by the four organisational culture included in the model . The low value of the adjusted R square is may be due to the fact that there are other important factors which affect the process quality in the SMEs which are not included in the current model.

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.610[a]	.372	.359	.782	1.767

a. Predictors: (Constant), Rational culture, Clan culture, Developmental culture, Hierarchical culture

b. Dependent Variable: Process Quality

Table 5.18: Summary of the model for the Process quality

However, the ANOVA table given below shows that the F value is 30.316 which is significant at 1% significance level which means that the cumulative effect of the variables on process quality is significant. The value of Durbin – Watson which is close to two, shows that there is no problem of multi- collinearity among the variables.

ANOVA[b]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	74.195	4	18.549	30.316	.000[a]
	Residual	125.429	205	.612		
	Total	199.624	209			

a. Predictors: (Constant), Rational culture, Clan culture, Developmental culture, Hierarchical culture

b. Dependent Variable: Process Quality

Table 5.19: ANOVA table for process quality

The results for the regression coefficient are shown in the table below. The results shows that the all the organizational cultures have significant impact on the process quality of the SMEs except for the clan culture.

Coefficients [a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.423	.428		-.988	.324
	Clan culture	.113	.064	.101	1.782	.076
	Developmental culture	.212	.064	.189	3.316	.001
	Hierarchical culture	.373	.062	.347	5.972	.000
	Rational culture	.420	.063	.382	6.630	.000

a. Dependent Variable: Process Quality

Table 5.20: Results of regression coefficient for the process quality

The regression coefficient for the three organizational culture (Development, Hierarchical and rational) are positive and significant even at 1 % level of significance. The coefficient 0.212 can be interpreted as, with one unit increase in the development culture the process quality improves by 0.212 units holding all others things constant. Similarly the coefficient for all independent variable can be interpreted.

Testing of the hypotheses

On the basis of the above results it can be concluded that:

Hypothesis 2a: There is a direct and positive influence on the non-financial performance **(process quality)** from Clan organizational culture.

The regression coefficient does not show significant results so we **reject** this hypothesis.

Hypothesis 2b: There is a direct and positive influence on the non-financial (**process quality**) performance from Adhocracy/Developmental organizational culture.

The regression coefficient for developmental culture shows positive and significant results, so we **accept** this hypothesis.

Hypothesis 2c: There is a direct and positive influence on the non-financial (**process quality**) performance from Hierarchy organizational culture.

The regression coefficient for Hierarchical culture shows positive and significant results, so we **accept** this hypothesis.

Hypothesis 2d: There is a direct and positive influence on the non-financial (**process quality**) performance from Rational organizational culture.

The regression coefficient for rational culture shows positive and significant results, so we **accept** this hypothesis.

Hypothesis	Outcomes
There is a direct and positive influence on the non-financial performance **(process quality)** from Clan organizational culture	Rejected
There is a direct and positive influence on the non-financial (**process quality**) performance from Adhocracy/Developmental organizational culture	Accepted
There is a direct and positive influence on the non-financial (**process quality**) performance from Hierarchy organizational culture	Accepted
There is a direct and positive influence on the non-financial (**process quality**) performance from Rational organizational culture	Accepted

Table 5.21: Summary of Research Findings

The results from the regression analysis show that the clan organizational culture does not positively influence the non-financial performance of the SMEs in the UK. However remaining three organizational culture which includes developmental organizational culture, hierarchical culture and the rational organizational culture positively influence the non-financial performance of the SMEs in the UK.

Various previous studies have analyzed and shows the impact of the various organizational culture on non-financial performance of the SMEsA study by Yeşil & Kaya (2012) on the 54 firms of Gaziantep city of Turkey shows that the developmental culture and the innovativeness of the organisation are positively related. Similarly the study of Naranjo-Valencia et al. (2011b) also conclude that the developmental culture promote the innovation in the organisation and make firms more competitive in the market.

5.3.1.2 Impact of organizational culture on job satisfaction

Job satisfaction was also used as one of the indicator to measure the non-financial performance of the SMEs in the UK. To find the impact of the organizational culture on the job satisfaction among employees, regression analysis was conducted taking job satisfaction as the dependent variable and the four organizational cultures as the dependent variables.

The results from the regression results shows that the value of adjusted R square is 0.217 which means that around 21 % of the variation in the job satisfaction can be attributed to change in the organizational culture within the SMEs. There are various other factors which affect the job satisfaction and mainly the financial aspect are considered to be the driving factor for the job satisfaction, so the low value of adjusted R square for the job satisfaction was expected.

Model Summary [b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.482[a]	.232	.217	.684	1.990

a. Predictors: (Constant), Rational culture, Clan culture, Developmental culture, Hierarchical culture

b. Dependent Variable: Job Satisfaction

Table 5.22: Summary of the model for job satisfaction

Similarly, from the following ANOVA table it can be seen that the F value is 15.496 which is significant at 1 % significance level. From these results it can be concluded that the cumulative effect of the organization cultures on job satisfaction is significant. Also the value of the Durbin-Watson test shows the value close to two which rejects the existence of the multi-collinearity among the variables included in the model.

ANOVA[b]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	28.970	4	7.243	15.496	.000[a]
	Residual	95.811	205	.467		
	Total	124.781	209			

a. Predictors: (Constant), Rational culture, Clan culture, Developmental culture, Hierarchical culture

b. Dependent Variable: Job Satisfaction

Table 5.23: ANOVA table for job satisfaction

The results for the regression coefficient are shown in the below table:

Coefficients [a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.153	.374		8.432	.000
	Clan culture	.077	.056	.087	1.383	.168
	Developmental culture	.214	.056	.241	3.826	.000
	Hierarchical culture	-.248	.055	-.292	-4.545	.000
	Rational culture	.224	.055	.258	4.047	.000
a. Dependent Variable: Job Satisfaction						

Table 5.24: Regression Coefficients for job satisfaction

The results shows that the except for the clan culture remaining three culture (developmental, hierarchical and rational) have significant effect on the job satisfaction of the employees in the SMEs in the UK. However, the negative coefficient of Hierarchical organizational culture shows that the hierarchical culture have negative and significant impact on the job satisfaction of the employees. The coefficient (-) 0.248 can be interpreted as, with one unit increase in the hierarchical culture the job satisfaction reduces by 0.248 units.

On the other hand the developmental and the rational organizational culture indicates positive and significant impact on the job satisfaction. The coefficient of 0.224 can be interpreted as, with one unit increase in the rational culture in the organization the job satisfaction among the employees in the SMEs increase by 0.224 units. The coefficient of the developmental culture can also be interpreted in the similar way. The clan culture does not show any significant results.

Testing of the hypothesis

Hypothesis 2a: There is a direct and positive influence on the non-financial performance **(job satisfaction)** from Clan organizational culture.

The regression coefficient does not show any significant results so we **reject** this hypothesis.

Hypothesis 2b: There is a direct and positive influence on the non-financial performance **(job satisfaction)** from Adhocracy/ Developmental organizational culture.

The regression coefficient shows positive and significant results for Development culture so we **accept** this hypothesis.

Hypothesis 2c: There is a direct and positive influence on the non-financial performance **(job satisfaction)** from Hierarchical organizational culture.

The regression coefficient shows significant but negative results for the Hierarchical culture, so we **reject** this hypothesis

Hypothesis 2d: There is a direct and positive influence on the non-financial performance **(job satisfaction)** from rational organizational culture.

The regression coefficient shows positive and significant results for rational culture so we **accept** this hypothesis.

Hypothesis	Outcomes
There is a direct and positive influence on the non-financial performance **(job satisfaction)** from Clan organizational culture	**Rejected**
There is a direct and positive influence on the non-financial performance **(job satisfaction)** from Adhocracy/ Developmental organizational culture	**Accepted**
There is a direct and positive influence on the non-financial performance **(job satisfaction)** from Hierarchical organizational culture	**Rejected**
There is a direct and positive influence on the non-financial performance **(job satisfaction)** from rational organizational culture	**Accepted**

Table 5.25: Summary of Research Findings

Various earlier studies have also conducted to determine the satisfaction level among employees in the job. Sempane et al. (2002) analysed the employee perception in the context of the job satisfaction and organisational culture among the government welfare organisation with the sample of 160 employees. The results show that there is discrete relationship between organisational culture and job satisfaction.

According to the author job satisfaction has a positive impact on the employee perception about the organisation culture. Similarly, another study by Lok & Crawford (2004) among the managers of the Hong Kong and Australia was conducted to examine the job satisfaction and organisation commitment with respect to the organisation culture and leadership style.

The results show that innovative and accommodating culture and a compassionate leadership style exert positive impact on both job satisfaction and employee commitment. Another study by Muhammad Llyas (2011) on the impact of the organisational culture on the job satisfaction of the teachers in universities in Lahore shows that organisational culture has positive and significant effect on job satisfaction. Authors categorised organisational culture in two groups; organisational culture related to managers and organisational culture related to employees. Both types of organisational culture show positive and significant results.

The results from the primary analysis shows that the clan and the Hierarchical organisational culture does not have positive relationship with the job satisfaction of the employees working in SMEs in the tele-health sector in the UK. However the developmental and the rational organisational culture have positive and significant impact on the job satisfaction of the employees.

5.3.1.3 Impact of organizational culture in quality of goods and services provided

One of the indicators to examine the non-financial performance of the SMEs is the quality of goods provided by the SMEs, which is used in this research. Quality of goods is a key area for any organisation and the organisational culture can play an important role in maintaining certain level of standard of goods. To examine the impact of organisational culture on the quality of goods and services provided by the SMEs in the UK, the regression analysis was conducted. For the analysis purpose, the quality of goods and service provided was taken as the dependent variable after aggregating all the sub elements which were used

as the indicator of the quality of goods and service, and the four organisational cultures were used as the independent variable.

As shown in the table below the value of adjusted R –square is 0.401 which shows that 41 % variation in the dependent variable is explained by the independent variable included in the model. The R adjusted R square of 40 % is good as compared to the results for the earlier section. However the quality of goods and service provided mainly depends on the other factor such as the quality of the input, the process used etc. which are not included in the current model. This regression was conducted only to know the impact of the organisational culture on the quality of goods and service provide.

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.642[a]	.412	.401	.78618	2.190
a. Predictors: (Constant), Rational culture, Clan culture, Developmental culture, Hierarchical culture *b. Dependent Variable: Quality of goods and services*					

Table 5.26: Summary of the model for the quality of goods and service provided

The ANOVA table below shows the F value of 35.926 which is significant at 1 % significance level. This shows that the cumulative effect of the independent variable on the dependent variable is significant. Similarly the results show that the value of Durbin-Watson test is near two which means that there is no multi- collinearity among the variables included in the model.

ANOVA [b]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	88.819	4	22.205	35.926	.000[a]
	Residual	126.705	205	.618		
	Total	215.524	209			
a. Predictors: (Constant), Rational culture, Clan culture, Developmental culture, Hierarchical culture						
b. Dependent Variable: Quality of goods and services						

Table 5.27: ANOVA table for quality of goods and service provided

The regression coefficient is shown in the table below.

Coefficients [a]						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.650	.430		1.512	.132
	Clan culture	-.074	.064	-.063	-1.154	.250
	Developmental culture	.749	.064	.643	11.644	.000
	Hierarchical culture	.035	.063	.031	.560	.576
	Rational culture	.075	.064	.066	1.183	.238
a. Dependent Variable: Quality of goods and services						

Table 5.28: Regression coefficients for quality of goods and service provided

As shown in the table above only the developmental culture have significant and positive impact on the quality of goods and services provided by the SMEs in the UK. The remaining three organizational cultures (clan, hierarchical and the rational) do not show any significant impact. The regression coefficient of 0.749 can be interpreted as; with one unit increase in the developmental culture in the SMEs the quality of goods and service provided increase by 0.749 units.

Testing of the hypothesis

Hypothesis 2a: There is a direct and positive influence on the non-financial (quality **of goods and service provide)** performance from Clan organizational culture.

The regression result does not show significant and positive results for the clan culture, so we **reject** this hypothesis.

Hypothesis 2b: There is a direct and positive influence on the non-financial (quality **of goods and service provide)** performance from Developmental organizational culture.

The regression coefficients show significant and positive results for the developmental culture, so we **accept** this hypothesis.

Hypothesis 2c: There is a direct and positive influence on the non-financial (quality **of goods and service provide)** performance from Hierarchical organizational culture.

The regression results do not show significant results for the hierarchical culture, so we **reject** this hypothesis.

Hypothesis 2d: There is a direct and positive influence on the non-financial (quality **of goods and service provide)** performance from Rational organizational culture.

The regression results do not show significant results for the rational culture, so we **reject** this hypothesis.

Hypothesis	Outcomes
There is a direct and positive influence on the non-financial (quality **of goods and service provide)** performance from Clan organizational culture	Rejected
There is a direct and positive influence on the non-financial (quality **of goods and service provide)** performance from Developmental organizational culture	Accepted
There is a direct and positive influence on the non-financial (quality **of goods and service provide)** performance from Hierarchical organizational culture	Rejected
There is a direct and positive influence on the non-financial (quality **of goods and service provide)** performance from Hierarchical organizational culture	Rejected

Table 5.29: Summary of Findings

The reason behind the insignificant effect of the clan/market organisational culture is may be because in the clan culture the main concern is to look at the internal control within the organisation and also make sure that there is flexibility in the organisation. This may not be the case in the SMEs in the UK.

Deshmukh (2006) examine the strength and weakness of the SMEs in terms of technological adoption and also the quality of the product. Author conclude that the SMEs are very flexible in adopting and absorbing new technology and innovation in one hand , whereas on the other hand the SMEs do not give much attention to the maintain the quality of the product produced and they end up producing the low quality products. The results from the current study are also in line with the previous studies about the impact of the developmental organizational culture in the quality of the goods provided by the SMEs.

The hierarchical organizational culture is mainly focused on defining the ranks of the employees according to the level of importance in the organization. This type of culture contains control and rigidity which can discourage the initiatives about the creativity of the employees. This may be the reason that the more rigid hierarchical cultural less the durability of the product.

The results from this analysis shows that the different organizational culture have effect on different aspect of the quality of the goods in the SMEs and some have positive effect on the same component while some have negative effect.

Various researches have also been conducted earlier to examine the effect of the organizational culture on the non-financial performance of the SMEs. Deshpandé & Farley (2004) study the effect of the organisational culture on the organisational performance using the extended model of completing valued framework which was first used in Japan. The results show that the open organisational culture, such as developmental and adhocracy have direct impact on both the financial and non-financial performance of the organisation.

Another study was conducted by Jones et al. (2005b) to examine the effect of organisational culture taking the change management as the indicator for the non-financial performance form the sample of 67 employees of state government. The results show that the employees who harboured strong emotional and relational values in their division exhibited higher levels of readiness for change prior implementation. Similarly the study by Wilderom et al. (2012) examined the impact of the organisation culture and leadership on the performance of the Banks in Dutch using the sample of 1214 employees.

The results show that leadership leads to better financial results whereas the organisational culture has significant impact on the non-financial performance as compared to the financial performance. Dadzie et al. (2012) examined the effect of the competitive strategy and the organisational culture on the performance using the relationship among 185 firms in Ghana. The results shows that the organisations which have clan or developmental culture exhibited significant linkage with the performance while companies which possess adhocracy or hierarchy culture shows more implicit relationship with the performance. However the performance also depends on the orientation and the leadership strategy of the organisation.

One of the main objectives of this research was to examine the impact of the organisational culture on the non-financial performance of the SMEs in the UK. To measure the non-financial performance of the SMEs three indicators were used; process quality, job satisfaction and the quality of the goods and service provided. To obtain the results four organisation culture (clan, developmental, hierarchical and rational) were used as the independent variables and three separate regression were run with taking three indicators of the non-financial performance as the dependent variables.

The results for the process quality show that except for the clan culture, remaining three organisational cultures have significant and positive impact. This shows that the process quality of the SMEs in the UK is significantly and positively affected by the developmental, hierarchical and rational culture. Similarly the regression results which was conducted to examine the impact of the organisational culture on the job satisfaction, shows that clan culture does not have any significant impact whereas the hierarchical culture have significant and negative impact.

The remaining two cultures (developmental and rational) show positive and significant impact on the job satisfaction. The last regression which measures the impact of the organisational culture on the quality of goods and service provided by the SMEs shows that only the developmental culture have significant and positive impact and other three cultures do not show any significant result.

	PROCESS QUALITY	PRODUCT & SERVICE QUALITY	JOB SATISFACTION
CLAN	REJECTED	REJECTED	REJECTED
ADHOCRACY	**ACCEPTED**	**ACCEPTED**	**ACCEPTED**
HIERACHY	**ACCPETED**	REJECTED	REJECTED*
RATIONAL	**ACCEPTED**	REJECTED	**ACCEPTED**

*The Hierarchical organisational culture has Negative Significant influence.

Table 5.30: Summary of Hypothesises testing of influences of organisational Culture on Performance

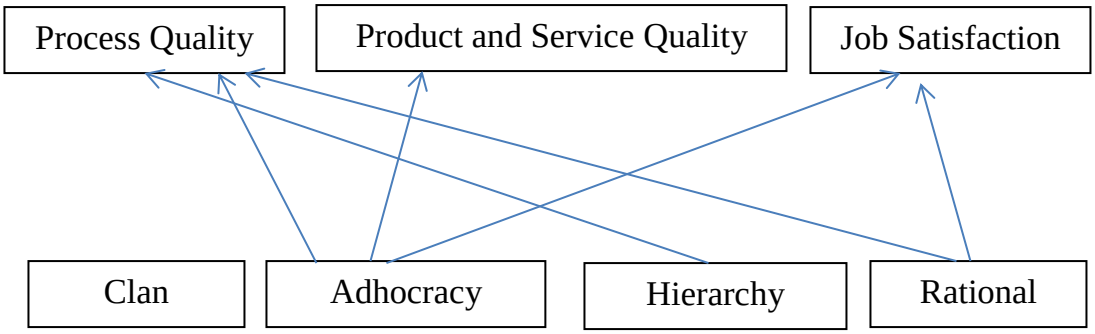

Figure 5.2: Influence of different Organizational Cultures on Performance

As can be seen in the Figure above, while Adhocracy culture contributes to all the three parameters which have been used to study Organizational performance i.e. Process quality, product and service quality and Job Satisfaction. Further, Clan has been found to not contribute to any of the parameters. Further, While Hierarchy contributes to Process quality, rational culture was found to contribute towards process quality and job satisfaction.

5.3.2 RQ3: Does firm's innovation (innovativeness) product and process moderate between multidimensional Organizational Culture and non-financial (perceived) performance?

Moderator variable

Moderator variable is a third variable which affects the relationship between the independent variable and the dependent variable. In simple regression analysis if X is the predictor or independent variable and Y is the outcome or dependent variable , then Z can be the moderator variable that effect the casual relationship of X and Y. The significant moderator variable can cause a weakening or amplifying effect between the dependent and independent variable.

On the other hand the mediator variable is used to measure the extent of relation between the criterion and the predictor. In other words the mediators are used to explain how the external physical events take on the psychological significance.

The difference between the moderator and the mediator variable can be seen as, moderator variable is one which can influence the strength of a relationship between two other variables (X and Y) whereas the mediator variable is one which explains the relationship between the two other variables.

5.3.2.1 Impact of innovation on the non-financial performance of the SMEs

Innovation has been continuously used as the key tool for the survival of the organization in the competitive world. Most of the organizations are focusing on the innovation in their organization with the main focus on enhancing market offerings with improved organizational performance. Similarly, innovation also helps to acquire the competitive advantage which cannot be imitated easily by the other competing firms.

Many research scholars have emphasized on the role of innovation in the organization (Damanpour et al. 2009; Noble et al. 2002; Subramanian & Nilakanta 1996; Walker 2004). The process of innovation is essential for every type of firm whether it is big or small. According to (Lynch et al. 2010; Liao et al. 2012) small and medium enterprises (SMEs), should continuously acquire on their innovative competencies to survive in the market. Authors also said that it is not only the big organizations which have to innovate but also the SMEs which needs to focus on innovation so that they can grow and become large firms

in the future. Previous studies have shown that the SMEs all over the world have not been able to focus more on the innovation related to the organizational culture.

In this section the innovation (both product innovation and process innovation) will be used as the mediator between the organizational culture and the non-financial performance of the SMEs in the UK. Study by (Prajogo 2011) in his study about the organizational culture and the performance has also recommended that the innovation can play a moderator or mediator between the organizational culture and the performance. Also the existing literature also highlighted that the innovation is one of important fundamental factor for the success of the SMEs. On the basis of the studies in the following section, innovation will be tested as the moderator between the organizational culture and the non-financial performance.

5.3.2.2 Impact of Innovation on the non-financial performance of the SMEs

Hypothesis 3a: Product and Service Innovation is a moderate between clan culture and the firm's non-financial (quality of goods and services) performance.

To examine whether the Product and Service innovation is the moderator between clan culture and the quality of goods and services the new variable was introduced which is the interaction between the product and service innovation and the clan culture. The regression was run taking the quality of goods and service as the dependent variable and the interaction variable and the clan culture as the independent variable.

The results show that the value of the adjusted R square is very low and standard error is also high, which shows that the variables included in the model are not able to explain the variation in the dependent variable.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.131[a]	.017	.003	1.01403
a. Predictors: (Constant), Clan culture, product and service innovation, Clan _innovation				

Table 5.31: Summary of the model for clan culture

Similarly the F value is also not significant. The results for the regression coefficient shows that neither the clan culture nor the interaction term have any significant effect on the quality of goods and services.

ANOVA [b]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.701	3	1.234	1.200	.311[a]
	Residual	211.823	206	1.028		
	Total	215.524	209			
a. Predictors: (Constant), Clan culture, product and service innovation, Clan _innovation						
b. Dependent Variable: Quality of goods and services						

Table 5.32: ANOVA table for clan culture

Coefficients [a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.423	1.355		1.051	.295
	Clan _innovation	-.109	.086	-.528	-1.267	.207
	product and service innovation	.515	.344	.496	1.495	.137
	Clan culture	.479	.337	.410	1.422	.157
a. Dependent Variable: Quality of goods and services						

Table 5.33: Regression results for clan culture

Since the coefficient of the interaction term is not significant so the hypothesis that the product and service innovation is the moderator between the clan culture and the quality of goods and service provided has been **rejected.**

Hypothesis 3b: Product and Service Innovation is a moderate between developmental culture and the firm's non-financial performance ((quality of goods and services).

To test this hypothesis the regression was run taking the quality of goods and services as the dependent variable and the interaction of the developmental culture and the product and service innovation as the independent variable. The development culture has also included in the independent variable.

The adjusted R square shows that around 40 % of the variation in the dependent variable is explained by the independent variable included in the model and rest of the variation is due to the other factors.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.642[a]	.413	.404	.78393
a. Predictors: (Constant), developmental _innovation, Developmental culture, product and service innovation				

Table 5.34: Model Summary for Developmental culture

Results from the ANOVA table shows that the F value is significance which shows that the cumulative effect of the independent variable is also significant.

ANOVA[b]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	88.928	3	29.643	48.235	.000[a]
	Residual	126.596	206	.615		
	Total	215.524	209			
a. Predictors: (Constant), developmental _innovation, Developmental culture, product and service innovation *b. Dependent Variable: Quality of goods and services*						

Table 5.35: ANOVA table for Developmental culture

Results for the regression coefficients are shown in the table below. The results show that the product and service innovation does not have any significant impact on the quality of goods and service provided. Similarly the coefficient for the interaction term is also not significant at 5 % significance level.

Coefficients [a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.413	.873		2.764	.006
	product and service innovation	-.446	.234	-.430	-1.903	.058
	Developmental culture	.328	.224	.282	1.463	.145
	Developmental _innovation	.113	.059	.595	1.912	.057
a. Dependent Variable: Quality of goods and services						

Table 5.36: regression results for Developmental culture

Since the interaction term also does not show any significance results we **cannot accept** the proposed hypothesis, so we reject the hypothesis. However the interaction terms seem more close to significance than the other individual variables included in the model.

Hypothesis 3c: Product and Service Innovation is a moderate between hierarchical culture and the firm's non-financial performance ((quality of goods and services).

Similar to the previous hypothesis to test whether the product and service innovation is moderate between the hierarchical culture and the quality of goods and services provided by the SMEs the interaction variable was created using the hierarchical culture and the product and service innovation.

The results show that the value of R square is low which shows that the variable included in the model are not able to explain the variation in the dependent variable.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.091[a]	.008	-.006	1.01861
a. Predictors: (Constant), Hierar_innovation, Hierarchical culture, product and service innovation				

Table 5.37: Summary of the model for Hierarchical culture

Similarly the ANOVA table shows that the F value is not significant which means that the cumulative effect on the dependent variable is not significant.

ANOVA [b]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.785	3	.595	.574	.633[a]
	Residual	213.739	206	1.038		
	Total	215.524	209			
a. Predictors: (Constant), Hiercy _innovation, Hierarchical culture, product and service innovation						
b. Dependent Variable: Quality of goods and services						

Table 5.38: ANOVA table for Hierarchical culture

The following table shows the results for the regression coefficient and as shown in the table none of the independent variable shows any significant effect on the quality of goods and services in the SMEs,

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.635	1.229		2.957	.003
	product and service innovation	.041	.319	.039	.128	.898
	Hierarchical culture	-.092	.329	-.082	-.279	.781
	Hierar _innovation	.012	.085	.061	.142	.887
a. Dependent Variable: Quality of goods and services						

Table 5.39: Regression results for hierarchical culture

The interaction variable which was created to check whether the product and service innovation plays a role of moderator between hierarchical culture and the quality of goods and service, shows statistically insignificant results. So on the basis of the results we **reject t**he hypothesis that Product and Service Innovation is a moderate between hierarchical culture and the firm's non-financial performance ((quality of goods and services).

Hypothesis 3d: Product and Service Innovation is a moderate between rational culture and the firm's non-financial performance ((quality of goods and services).

To test this hypothesis the regression analysis was conducted by taking the quality of goods and service as the dependent variable and the independent variables included in the model were; product and service innovation, rational culture and the interaction term of product and service innovation and the rational culture.

As shown in the table below the adjusted R square does not show any impressive result which means that the variables included in the model were not able to explain the variation in the dependent variable.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.147[a]	.022	.007	1.01176
a. Predictors: (Constant), Rational culture, product and service innovation, rat _innovation				

Table 5.40: Summary of the model for rational culture

The results from the ANOVA table also shows that the cumulative effect of the variable is not significant as the F value is not significant.

ANOVA[b]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.651	3	1.550	1.515	.212[a]
	Residual	210.873	206	1.024		
	Total	215.524	209			

a. Predictors: (Constant), Rational culture, product and service innovation, rat _innovation

b. Dependent Variable: Quality of goods and services

Table 5.41: ANOVA table for rational culture

The results for the individual effect on the dependent variable also show that none of the variables have significant impact on the quality of goods and service provided.

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.388	1.114		2.144	.033
	product and service innovation	.201	.303	.194	.664	.508
	rat_innovation	-.038	.077	-.203	-.489	.626
	Rational culture	.274	.290	.240	.945	.346

a. Dependent Variable: Quality of goods and services

Table 5.42: Regression results for rational culture

As the interaction term does not show statistically significant results, we **reject** the hypothesis that product and Service Innovation is a moderate between rational culture and the quality of goods and services provided by the SMEs in the UK.

Hypothesis	Outcomes
Product and Service Innovation is a moderate between Clan culture and the firm's non-financial performance (quality of goods and services)	**Rejected**
Product and Service Innovation is a moderate between Developmental/Adhocracy culture and the firm's non-financial performance (quality of goods and services)	**Rejected**
Product and Service Innovation is a moderate between Hierarchical culture and the firm's non-financial performance (quality of goods and services)	**Rejected**
Product and Service Innovation is a moderate between Rational culture and the firm's non-financial performance (quality of goods and services)	**Rejected**

Table 5.43: Summary of Research Findings

Product and Service innovation and the Process quality

Now in this section the hypothesis that the product and service innovation is moderator of the organizational culture and the process quality of the SMEs will be tested. In total four hypothesis will be tested for each of the four organizational culture.

Hypothesis 3(1a): Product and Service Innovation is a moderate between clan culture and the firm's non-financial performance (process quality).

To test this hypothesis the new independent variable was created using the interaction product and service innovation and the clan culture. The dependent variable is the process quality. The regression results shows that the value of adjusted R square of 0.024 which means that around 3 % variation in the dependent variable is explained by the independent variable included in the m model and rest of the variation is due to the other factors.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.196[a]	.038	.024	.965
a. Predictors: (Constant), Clan culture, product and service innovation, Clan_innovation				

Table 5.44: Summary of the model for clan culture

However the ANOVA table as shown below indicates that the F value of 2.736 is significant at 5 % significance level. This shows that even the R Square is low the cumulative effect is significant.

ANOVA [b]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.649	3	2.550	2.736	.045[a]
	Residual	191.975	206	.932		
	Total	199.624	209			

a. Predictors: (Constant), Clan culture, product and service innovation, Clan_innovation

b. Dependent Variable: Process Quality

Table 5.45: ANOVA table for clan culture

The results for the individual effect of the independent variable on the dependent variable show that, only the clan culture shows significant effect on the process quality. However the main variable of interest the interaction term of clan culture and product and service innovation does not show statistically significant results.

Coefficients [a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.717	1.289		.556	.579
	product and service innovation	.629	.328	.630	1.917	.057
	Clan_innovation	-.133	.082	-.673	-1.631	.104
	Clan culture	.654	.321	.582	2.040	.043

a. Dependent Variable: Process Quality

Table 5.46: regression results for clan culture

Since the effect of the interaction term is not significant we **reject** the hypothesis that Product and Service Innovation is a moderate between clan culture and the process quality of the SMEs in the UK.

Hypothesis 3(1b): Product and Service Innovation is a moderate between developmental culture and the firm's non-financial performance (process quality).

To test whether the product and service innovation is moderator between the developmental culture and the process quality, a new interaction variable was created using the interaction of the product and service innovation and the developmental culture and included in the independent variable. The process quality was used as the dependent variable.

The results shows that adjusted R square is 0.055 which means that around 5.5 % of the variation in the dependents variable is explained by the independent variable and rest of the variation is due to the other factors.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.262[a]	.068	.055	.950
a. Predictors: (Constant), developmental_innovation, Developmental culture, product and service innovation				

Table 5.47: Summary of the model for developmental culture

Even the adjusted R square is low the ANOVA table shows that the F value is significant at 5 % significance level which means that the cumulative effect is significant.

ANOVA [b]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.663	3	4.554	5.045	.002[a]
	Residual	185.961	206	.903		
	Total	199.624	209			
a. Predictors: (Constant), developmental_innovation, Developmental culture, product and service innovation *b. Dependent Variable: Process Quality*						

Table 5.48: ANOVA table for developmental culture

The results for the regression coefficient are shown in the table below. The results shows that the interaction variable has significant and positive effect on the process quality.

Coefficients [a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.988	1.058		4.713	.000
	product and service innovation	-.590	.284	-.591	-2.078	.039
	Developmental culture	-.416	.272	-.371	-1.530	.128
	developmental_innovation	.171	.072	.936	2.388	.018
a. Dependent Variable: Process Quality						

Table 5.49: Regression results for developmental culture

Since the interaction variable is statistically significant at 5 % significance level we **accept** the hypothesis that the Product and Service Innovation is a moderate between developmental culture and the firm's process quality.

Hypothesis 3(1c): Product and Service Innovation is a moderate between Hierarchical culture and the firm's non-financial performance (process quality).

To test the hypothesis the new variable was created by the interaction of the hierarchical culture and the product and service innovation and included in the independent variable. The dependent variable is the process quality.

The results from the regression analysis show that adjusted R square is 0.151 which means that the 15 % variation in the dependent variable is being explained by the independent variable included in the model.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.404[a]	.163	.151	.900
a. Predictors: (Constant), Hierarchical culture, product and service innovation, Hierar_innovation				

Table 5.50: Summary of the model for the Hierarchical culture

Similarly the results from the ANOVA table show that the F value is significant even at one percent significance level, which shows that the cumulative effect is significant.

ANOVA[b]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	32.631	3	10.877	13.418	.000[a]
	Residual	166.993	206	.811		
	Total	199.624	209			
a. Predictors: (Constant), Hierarchical culture, product and service innovation, Hierar_innovation						
b. Dependent Variable: Process Quality						

Table 5.51: ANOVA table for Hierarchical culture

The results for the individual effect are shown in the table below. The results shows that the main variable of interest i.e. the interaction variable does not show statistically significant results. However the Hierarchical culture has significant effect on the process quality.

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.226	1.087		1.129	.260
	product and service innovation	.256	.282	.256	.907	.366
	Hierar_innovation	-.048	.075	-.252	-.640	.523
	Hierarchical culture	.602	.290	.559	2.071	.040
a. Dependent Variable: Process Quality						

Table 5.52: Regression results for Hierarchical culture

Since the interaction variable does not have any significant impact on the process quality we **reject** the hypothesis that the Product and Service Innovation is a moderate between Hierarchical culture and the firm's process quality.

Hypothesis 3(1d): Product and Service Innovation is a moderate between rational culture and the firm's non-financial performance (process quality).

In this hypothesis also the interaction variable was created by the interaction the product and service innovation with the rational culture and the process quality was used as the dependent variable.

The results from regression analysis shows that the adjusted R square as 0.226 which shows that 26 % of the variation in the process quality was explained by the independent variable included in the model while the rest of the variation is due to other factors.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.487[a]	.237	.226	.860
a. Predictors: (Constant), Rational culture, product and service innovation, rat_innovation				

Table 5.53: Summary of the model for rational culture

Similarly, the ANOVA table shows that the F value of 21.352 is significant at even 1 % significance level which shows that the cumulative effect of the independent variable is significant.

ANOVA [b]						
Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	47.349	3	15.783	21.352	.000[a]
	Residual	152.275	206	.739		
	Total	199.624	209			

a. Predictors: (Constant), Rational culture, product and service innovation, rat_innovation

b. Dependent Variable: Process Quality

Table 5.54: ANOVA table for rational culture

The results for the individual effect on the dependent variable are shown in the table below. The results show that, the rational culture have positive and significant effect on the process quality; however, the interaction term does not show statistically significant results.

Coefficients [a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.441	.946		1.522	.129
	product and service innovation	.069	.258	.069	.268	.789
	rat_innovation	-.020	.065	-.110	-.300	.764
	Rational culture	.608	.247	.553	2.465	.015

a. Dependent Variable: Process Quality

Table 5.55: Regression results for rational culture

Since the interaction variable does not show significant results so we **reject** the hypothesis that the Product and Service Innovation is a moderate between rational culture and the firm's process quality.

Hypothesis	Outcomes
Product and Service Innovation is a moderate between Clan culture and the firm's non-financial performance (process quality)	**Rejected**
Product and Service Innovation is a moderate between Developmental/Adhocracy culture and the firm's non-financial performance (process quality)	**Accepted**
Product and Service Innovation is a moderate between Hierarchical culture and the firm's non-financial performance (process quality)	**Rejected**
Product and Service Innovation is a moderate between Rational culture and the firm's non-financial performance (process quality)	**Rejected**

Table 5.56: Summary of Research Findings

5.3.2.3 Impact of Process innovation on non-financial performance of SMEs

Process Innovation includes the implementation of new process of production or method of delivery using the new technique, software, model etc. Process innovation also includes the promptness in adapting to latest technology, technological efficiency of the firm and also innovation in the process technology. This paper is aimed to find the impact of the organizational culture on the non-financial performance of the SMEs in the UK. Similarly the innovation is also an integral part of most of the SMEs, so this section will examine the role of organizational culture as the moderator between the innovation and the non-financial performance of the SMEs.

Hypothesis 3(2a): Process Innovation is a moderate between clan culture and the firm's quality of goods and services.

To test whether the process Innovation is moderate between clan culture and the quality of goods and service provided by the SMEs the interaction variable was created with the interaction of process innovation and the clan culture. The dependent variable is quality of goods and service provided.

The results shows the Adjusted R square as 0.004 which is very low so the variables include in the model are not able to explain much variation in the dependent variable.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.135[a]	.018	.004	1.01350
a. Predictors: (Constant), Clan culture, Process innovation, Clan_pro.inno				

Table 5.57: Summary of the model for clan culture

Similarly the ANOVA table shows that the F value is not significant which indicates that the cumulative effect is not significant.

ANOVA[b]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.925	3	1.308	1.274	.284[a]
	Residual	211.599	206	1.027		
	Total	215.524	209			
a. Predictors: (Constant), Clan culture, Process innovation, Clan_pro.inno						
b. Dependent Variable: Quality of goods and services						

Table 5.58: ANOVA table for clan culture

The results for the individual regression coefficient are shown in the table below. The results show that the interaction variable does not show statistically significant results.

Coefficients [a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.062	1.019		4.965	.000
	Process innovation	-.474	.281	-.462	-1.684	.094
	Clan_pro.inno	.138	.076	.690	1.807	.072
	Clan culture	-.432	.281	-.370	-1.538	.126
a. Dependent Variable: Quality of goods and services						

Table 5.59: Regression results for clan culture

Since the interaction term does not have significant impact on the dependent variable which means that the process innovation is not the moderate between the clan culture and the quality of goods and services. So we **reject** the hypothesis.

Hypothesis 3(2b): Process Innovation is a moderate between developmental culture and the firm's quality of goods and services.

Similarly to test this hypothesis the interaction variable was created with interaction of the developmental culture and the process innovation. The regression was run taking the quality of the goods and service as the dependent variable.

The results shows that the 40 % of the variation in the dependent variable was explained by the change in the independent variable in the model and rest or the variation is due to the other factors not included in the model.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.639[a]	.408	.400	.78680
a. Predictors: (Constant), Developmental culture, Process innovation, Dev_pro.inno				

Table 5.60: Summary of the model for developmental culture

Similarly the F value is also significant even at 1 % significance level. This means that the cumulative effect is significant.

ANOVA[b]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	87.997	3	29.332	47.382	.000[a]
	Residual	127.526	206	.619		
	Total	215.524	209			

a. Predictors: (Constant), Developmental culture, Process innovation, Dev_pro.inno

b. Dependent Variable: Quality of goods and services

Table 5.61: ANOVA table for developmental culture

The results for the regression coefficients are shown in the table below. The results shows that the interaction variable does not have any significant effect on the quality of goods and service provided by the SMEs. In fact none of the independent variable shows the significant effect on the dependent variable.

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.056	.918		2.239	.026
	Process innovation	-.343	.244	-.334	-1.404	.162
	Dev_pro.inno	.091	.062	.455	1.467	.144
	Developmental culture	.408	.233	.351	1.750	.082

a. Dependent Variable: Quality of goods and services

Table 5.62: Regression results for developmental culture

Since the interaction variable does not show statistically significant results so the hypothesis that the Process Innovation is a moderate between developmental culture and the firm's quality of goods and services is **rejected.**

Hypothesis 3(2c): Process Innovation is a moderate between hierarchical culture and the firm's quality of goods and services.

Similarly to test this hypothesis the interaction variable was created by the interaction of the hierarchical culture and the process innovation. To run the regression the quality of the goods and service was taken as the dependent variable.

The results from the regression analysis shows that the adjusted R square is in in fact negative which shows that the model considered for the regression is not good and the independent variable are not able to explain the variation in the dependent variable.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.073[a]	.005	-.009	1.02010
a. Predictors: (Constant), Hierarchical culture, Process innovation, hie_pro.inno				

Table 5.63: Summary of the model for hierarchical culture

As shown in the ANOVA table below the F value is not significant which means that the cumulative effect is not significant.

ANOVA[b]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1.160	3	.387	.372	.774[a]
	Residual	214.364	206	1.041		
	Total	215.524	209			
a. Predictors: (Constant), Hierarchical culture, Process innovation, hie_pro.inno						
b. Dependent Variable: Quality of goods and services						

Table 5.64: ANOVA table for the hierarchical culture

The individual effect of the independent variable on the dependent variable is shown in the table below. The results show that no variable shows the statistically significant effect on the quality of the goods and service provided.

Coefficients [a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.462	1.050		4.248	.000
	Process innovation	-.191	.286	-.186	-.669	.504
	hie_pro.inno	.063	.078	.317	.799	.425
	Hierarchical culture	-.272	.292	-.243	-.930	.353
a. Dependent Variable: Quality of goods and services						

Table 5.65: Regression results for hierarchical culture

Since the interaction variable is not statistically the hypothesis that the Process Innovation is a moderate between hierarchical culture and the firm's quality of goods and services is **rejected**.

Hypothesis 3(2d): Process Innovation is a moderate between rational culture and the firm's quality of goods and services.

The interaction variable for this hypothesis was created with the interaction of the rational culture and the process innovation and was used as the independent variable. The dependent variable was the quality of the goods and services provided.

Results from the regression analysis shows that the value of adjusted R square is

0.010 Which means that only 1 % variation in the dependent variable is explained by the independent variable included in the model and the rest is explained by the other factors which are not included in the model.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.154[a]	.024	.010	1.01060
a. Predictors: (Constant), Rational culture, Process innovation, rat_pro.inno				

Table 5.66: Summary of the model for rational culture

Similarly the results from the ANOVA table show that the F value is not significant which shows that the cumulative effect is not significant.

ANOVA[b]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	5.132	3	1.711	1.675	.174[a]
	Residual	210.392	206	1.021		
	Total	215.524	209			
a. Predictors: (Constant), Rational culture, Process innovation, rat_pro.inno						
b. Dependent Variable: Quality of goods and services						

Table 5.67: ANOVA table for rational culture

The results for the regression coefficient are shown in the table below. The results indicate that the effect of each of the independent variable including the interaction variable is not statistically significant.

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.320	1.133		3.812	.000
	Process innovation	-.347	.301	-.338	-1.153	.250
	rat_pro.inno	.090	.081	.506	1.114	.267
	Rational culture	-.180	.316	-.158	-.570	.569
a. Dependent Variable: Quality of goods and services						

Table 5.68: regression results for rational culture

Since the effect of the interaction variable is not significant, hypothesis that Process Innovation is a moderate between rational culture and the firm's quality of goods and services is **rejected.**

Hypothesis	Outcomes
Process Innovation is a moderate between clan culture and the firm's quality of goods and services	**Rejected**
Process Innovation is a moderate between development/adhocracy culture and the firm's quality of goods and services	**Rejected**
Process Innovation is a moderate between hierarchical culture and the firm's quality of goods and services	**Rejected**
Process Innovation is a moderate between rational culture and the firm's quality of goods and services	**Rejected**

Table 5.69: Summary of Research Findings

5.3.2.4 Impact of the process innovation on the process quality in the SMEs

In the previous section hypothesis were tested whether the process innovation is a moderator between the organization culture and the quality of the goods and service provided by the SMEs. In this section the hypothesis that whether the process innovation is the moderator between the organizational culture and the process quality will be tested. In total four hypotheses will be tested each for the four organizational culture.

Hypothesis 3(3a): Process innovation is a moderate between clan culture and the firm's process quality.

To test whether the process innovation is a moderate between the clan culture and the process quality of the SMEs the interaction variable was created with the interaction of the clan culture and the process innovation. The dependent variable used in this hypothesis is the process quality.

The results from the regression analysis shows that adjusted R square is 0.031 which means that the 3 % of the variation is explained by the independent variable used in the model and the rest of the variation is due to other factors.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.212[a]	.045	.031	.962
a. Predictors: (Constant), Clan culture, Process innovation, Clan_pro.inno				

Table 5.70: summary of the model for clan culture

Similarly the results from the ANOVA table show that the F value is not significant which shows that the cumulative effect is not significant.

ANOVA[b]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.946	3	2.982	3.222	.024[a]
	Residual	190.677	206	.926		
	Total	199.624	209			
a. Predictors: (Constant), Clan culture, Process innovation, Clan_pro.inno						
b. Dependent Variable: Process Quality						

Table 5.71: ANOVA table for clan culture

Results for the regression coefficient for each of the independent variable are given in the table below. The results show that none of the independent variable shows the statistically significant results including the interaction variable.

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.325	.968		3.436	.001
	Process innovation	-.032	.267	-.033	-.121	.904
	Clan_pro.inno	.055	.073	.287	.763	.446
	Clan culture	-.085	.267	-.076	-.319	.750
a. Dependent Variable: Process Quality						

Table 5.72: Regression results for clan culture

Since the interaction variable shows statistically insignificant results so the hypothesis that the Process innovation is a moderate between clan culture and the firm's process quality is **rejected.**

Hypothesis 3(3b): Process innovation is a moderate between Development culture and the firm's process quality.

The interaction variable was created with the interaction of the developmental culture and the process innovation. The dependent variable used was the process quality.

The results from the regression analysis show that the value of adjusted R square as 0.069 which shows that around 7% variations in the dependent variable is explained by the independent variable included in the model.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.287[a]	.082	.069	.943
a. Predictors: (Constant), Developmental culture, Process innovation, Dev_pro.inno				

Table 5.73: Summary of the model for development culture

Similarly the results from the ANOVA table shows that the F value is significant event at 1 % significance level which shows that the cumulative effect of the variables on the dependent variable is significant.

ANOVA[b]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	16.466	3	5.489	6.173	.000[a]
	Residual	183.158	206	.889		
	Total	199.624	209			
a. Predictors: (Constant), Developmental culture, Process innovation, Dev_pro.inno						
b. Dependent Variable: Process Quality						

Table 5.74: ANOVA table for development culture

The results for the regression coefficient are shown in the table below. The results show that none of the independent variables show statistically significant results including the interaction term.

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.022	1.100		3.655	.000
	Process innovation	-.325	.292	-.329	-1.111	.268
	Dev_pro.inno	.130	.074	.676	1.749	.082
	Developmental culture	-.258	.280	-.231	-.924	.357
a. Dependent Variable: Process Quality						

Table 5.75: Regression results for development culture

Since the interaction term is not statistically significant, the hypothesis that the Process innovation is a moderate between Development culture and the firm's process quality is **rejected**.

Hypothesis 3(3c): Process innovation is a moderate between hierarchical culture and the firm's process quality.

In this case the interaction variable was created by the interaction of the hierarchical culture and the process innovation and as in the earlier hypothesis the process quality was used as the dependent variable.

The results from the regression analysis show that the adjusted R square is 0.162 which shows that the 16 % of the variation in the dependent variable is due to change in the independent variable in the model and rest of the variation is due to other factors not included in the model.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.417[a]	.174	.162	.895
a. Predictors: (Constant), Hierarchical culture, Process innovation, hie_pro.inno				

Table 5.76: Summary of the model for hierarchical culture

Similarly the results from the ANOVA table show that F value is significant at 1 % significance level which means that the cumulative effect is significant.

ANOVA[b]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	34.791	3	11.597	14.493	.000[a]
	Residual	164.833	206	.800		
	Total	199.624	209			
a. Predictors: (Constant), Hierarchical culture, Process innovation, hie_pro.inno						
b. Dependent Variable: Process Quality						

Table 5.77 ANOVA table for hierarchical culture

The results for the regression coefficient are shown in the table below. The results show that none of the independent variable have statistically significant effect on the dependent variable.

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.363	.921		1.480	.140
	Process innovation	.241	.251	.244	.961	.337
	hie_pro.inno	-.030	.069	-.159	-.441	.660
	Hierarchical culture	.515	.256	.479	2.011	.046
a. Dependent Variable: Process Quality						

Table 5.78: regression results for hierarchical culture

Since the interaction variable does not have significant effect on the process quality so the hypothesis that Process innovation is a moderate between hierarchical culture and the firm's process quality is **rejected.**

Hypothesis 3(3d): Process innovation is a moderate between rational culture and the firm's process quality

With the interaction of the rational culture and the process innovation the interaction variable was created for this hypothesis. The dependent variable for the regression analysis was the process quality.

The regression results show that the value of Adjusted R square is 0.227 which means that 22 % of the variation in the dependent variable is explained by the independent variable.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.487[a]	.238	.227	.860
a. Predictors: (Constant), Rational culture, Process innovation, rat_pro.inno				

Table 5.79: summary of the model for rational culture

The results from the ANOVA table shows that the F value is significant even at 1 % significance level which means that the cumulative effect of the independent variable on the dependent variable is significant.

ANOVA[b]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	47.437	3	15.812	21.404	.000[a]
	Residual	152.187	206	.739		
	Total	199.624	209			

a. Predictors: (Constant), Rational culture, Process innovation, rat_pro.inno

b. Dependent Variable: Process Quality

Table 5.80: ANOVA table for rational culture

Results for the individual effect are shown in the table below. The results shows that the all the independent variable shows insignificant results including the interaction variable.

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.900	.964		1.971	.050
	Process innovation	-.047	.256	-.048	-.184	.854
	rat_pro.inno	.020	.069	.114	.285	.776
	Rational culture	.453	.269	.412	1.686	.093

a. Dependent Variable: Process Quality

Table 5.81: Regression results for rational culture

Since the interaction variable does not have significant impact on the process quality so the hypothesis that the Process innovation is a moderate between rational culture and the firm's process quality is **rejected**.

Hypothesis	Outcomes
Process innovation is a moderate between clan culture and the firm's process quality	**Rejected**
Process innovation is a moderate between developmental/adhocracy culture and the firm's process quality	**Rejected**
Process innovation is a moderate between hierarchical culture and the firm's process quality	**Rejected**
Process innovation is a moderate between rational culture and the firm's process quality	**Rejected**

Table 5.82: Summary of Research Findings

In terms of the innovation in process quality and the organizational culture the previous studies have shown that there is significant effect of the organizational culture in the innovation process in any organization, however some studies have shown that the SMEs do not give much attention to the innovation process.

A study by Liao et al. (2012) on the relationship between the organisational culture and the innovation related to the process which includes the acquisition of knowledge and organisational learning shows that the organisational learning acts as a fractional intermediary between organisational innovation and organisational culture. The study was based on the insurance companies in the Taiwan. Another study by Prajogo & McDermott (2011) who examined the different types of the culture and the performance dimension such as process quality, product quality, process innovation and product innovation.

The results shows that the predominantly there is contrast between control and flexibility in the organisation culture and this can have diverse impact on the firm's innovation and also in the internal and external orientation which is replicated in the various products and process.

5.4 Summary to the section

In this section the Organizational Culture Dominance, impact of organizational culture on the non-financial performance and the moderation role of Innovation has been examined. Innovation has been taken as the moderator variable between the organizational culture and non-financial performance of the SMEs in the UK. For innovation two types of innovation has been taken into consideration namely the Product and service innovation and the process innovation. Similarly the non-financial performance of the SMEs was measured by quality of goods and services and the process quality.

In conclusion, among all the cultures, developmental/adhocracy was found to be the most dominant culture in the tele-Healthcare SMEs. Further, impact of different cultures on the organizational performance of the organization in terms of process quality, product and service quality and job satisfaction was analyzed. Among all the cultures, the developmental/adhocracy model was found to have the maximum impact on organizational performance followed by rational and hierarchical culture. Clan culture was found to have no impact on organizational performance.

Further, in terms of moderator's impact on organizational performance parameters, the results from the analysis, indicate that product and service innovation was taken as the moderator between the organizational culture and the non-financial performance (measured by process quality) does not show any significant results for all the four cultures (clan, developmental, hierarchical and rational). This shows that the product and service innovation is not the moderator between the organizational culture and the non-financial performance of the SMEs in the UK.

The second set of hypothesis were tested taking the interaction of the product and the service innovation and the four organizational culture (separate for each of them) as the independent variable and process quality (measure of non-financial performance as the dependent variable. Four separate hypotheses were tested for four different organizational culture and the results shows that only for the developmental culture the coefficient of the moderator was significant and for remaining organizational culture the results were not significant. This shows that only in case of the developmental culture product and service innovation is the moderator between the organizational culture and the non-financial performance of the SMEs in the UK.

Similarly, the regression analysis was conducted to check whether the process innovation is the moderator between the organizational culture and the non-financial performance of the SME. In this case the moderator variable was created with the interaction of the process innovation and the organizational culture separately for each of the organizational culture. The results show that none of the coefficients shows significant results, which means that the process innovation is not the moderator between the organizational culture and the non-financial performance of the SMEs (measured by the quality of goods and services). Another set of hypothesis were tested with the same interaction variable but by taking the process quality as the dependent variable. The results show that in this case also none of the variables shows any significant results. This shows that the process innovation is not the moderator between the organizational culture and the non-financial performance of the SMEs in the UK.

Another indicator of the non-financial performance of the SMEs, job satisfaction, has not been tested whether the innovation is the moderator between the organizational culture and the non- financial performance. This is because the on the results from the correlation does not show and significant correlation between the job satisfaction and the moderator variable.

Many research scholars have examined the effect of the organizational culture on the innovation of the firms. A recent study by Ashraf et al. (2013) where the authors examine the relationship between organisational culture and organisational innovativeness among the private universities in Iran using the sample of 485 faculty members. The results show that there exist positive relationship between the three types of organisational culture (adhocracy, market and clan) and organisational innovation. However the hierarchical culture and the innovation do not show any positive relationship.

Authors also concluded that among the four cultures, the adhocracy culture shows maximum positive results. However the effect of various organisational cultures may have different effect with different types of industry and also different types firms. Similarly the study by Yeşil & Kaya (2012) on 54 firms in Turkey shows that innovation is an important mechanism for the survival of the firms in the competitive world and the organisational culture has significant influence on the innovativeness of the firm. The results also shows that the adhocracy culture have positive relationship with the innovation process in the organisation whereas clan and hierarchy does not show any significant relationship.

In terms of impact of organisational culture types on the non-financial performance and the innovativeness as the key moderation factor there has not been much work done in the past. A study by Davidson et al. (2007) to find the relationship between the organisational culture and the financial performance in the South African investment bank using the sample to 327 employees shows that the dimensions of the cultural which shows significant effect on the performance of the organisation includes adaptability , empowerment, entrepreneurship, adaptability, consistency and strategy. When the organisational culture was coupled with the continuous learning and innovativeness then the results shows significant impact on performance of the organisation.

6. DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction to chapter

Small and Medium Enterprises' (SMEs) role in the process of economic growth has been one of the debatable topic among the researchers. Different multilateral institutions have used different criteria to define SMEs. Further, despite providing crucial contribution to the economy of UK, not all SMEs are successful. The main reason for failure of SMEs is the weakness in management and also the problem in leadership. Also, newly-established SMEs are not able to adopt the various training schemes recommended for them due to budgetary constraints.

It is in this context the present study analyzed the key elements of organizational culture existing within SMEs of UK, with special reference to tele-health care, owing to minimal number of studies focused on the area, along with exploring the impact of organizational culture on various perceived non-financial performances and role of innovation, which is crucial behind formation of SMEs, in fostering a relationship between multi-dimensional organizational culture and non-financial performances of these enterprises. In the past fifteen years there has been massive improvement in the technology for providing quality health and social care. The development of new technology in the developed countries in the area of information and communication has made assisted living more frequently available and thus is becoming increasingly popular, especially among senior citizens who need special care.

Based on the academic and industrial contribution presented in the last chapter, it has been observed that organizational culture in the small and medium size enterprises (SMEs) of United Kingdom based on tele-healthcare sector plays a significant role while determining their functional efficiency along with that of their employees. Various authors such as, Witte & Muijen (2000), Alvesson (2012), Schein (2010) have identified the importance of organizational culture with special reference to clan and hierarchical culture, building the internal values of the SMEs.

Further, findings of primary analysis conducted, indicated that adhocracy outdoes the clan or hierarchy by strengthening the external values through customer orientation and innovation. Similarly, while evaluating the role of organizational culture on the non-

financial performances of SMEs, it is observed from academics that, firms with strong cultures perform effectively owing to their generating of impeccable amount of employee motivation, which is evidently based on innovation. Primary analysis stretches the academic contribution by highlighting the significance of developmental culture on encouraging innovation within the organizational structure.

Furthermore, while evaluating the role of innovation on the non-financial organizational performance, academic sources failed to bring out a particular culture which is effective in thriving innovation. Various studies pointed towards varied organizational culture, thereby leading the researcher to conduct the concerned study for definite answer.

The primary study reflected in the industrial contribution therefore, brought out developmental culture as significant, which not only leads to organizational innovation but also enables innovation specifically in terms of product to play the role of moderator between the culture and non-financial performance. Having reached to the understanding that developmental culture out of all the four, deems to be significant in upholding an organizations and its employees' performance through cultivation of innovation, it is now necessary to answer the specific research objectives identified at the initiation of the study.

The objectives established therefore, will be answered through exploration of the secondary sources, thereby bringing out the gap and filling out those gaps through primary findings carried out in previous chapter. Later, upon answering all the objectives established through secondary and primary sources exploration, certain recommendations have been presented, which are specific to the organizations surveyed. The sole purpose of the recommendations here is to strengthen the existing weaknesses identified through the study, both within the organizational structure and with existing policies, so as to boost the performance of the tele-healthcare SMEs based in the UK. Following the recommendations, future scope of research on similar ground has been discussed, which, due to certain limitations, this concerned study failed to address, concluded by a brief summary of the contents of this chapter.

6.2 Discussion

Objective 1: To explore the key characteristics of SMEs and their organizational culture in the tele-healthcare industry in UK.

Owing to flexible organizational structure and strategic management practices, Small and Medium Enterprises (SMEs) are on the rise, across the globe and has thus become an indispensable element for economies. This rising predominance of SMEs is due to their specific characteristics, has been brought out by various scholars over a considerable period of time (Holátová & Březinová 2013). Small and medium enterprises revealed the competitive advantages they enjoy over their rivals besides having ***quality of labor, flexibility in their functioning, effective know-hows, customer satisfaction and range of products and services offered***.

These characteristics present efficient characteristics in terms of guaranteeing significant performances and market stronghold (Harvie et al. 2010; Holátová & Březinová 2013). Study conducted by Gibson & van der Vaart (2008) on SMEs of developing countries present that characteristics like ***pro-employee facilities in terms of leaves, provision of formal skills training to its employees for further development, organizing and contribution of local community projects, focus towards quality production through employee upliftment and establish efficient relationships between management and workforces and also between customers and management***. These characteristics, though not all, but essentially reflects the identified features of the case SMEs.

These key characteristics are essentially based on certain organizational cultures, which is essential in framing the internal structure of SMEs, as found from the primary analysis. Although the primary research conducted did not essentially focused on bringing forth the characteristics of SMEs, based in UK, yet, its exploration of the internal organizational culture and its impact on the non-financial organizational performance projected features such as, ***stability, quality, development and profit making***. Frequency analysis of the case SME's based on tele-healthcare in UK projected a multidimensional organizational culture, which according to the Institute of Business Ethics, (2007) helps them build trust and good relationships with customers, encourages employees to be dedicated to their work, and fosters a positive environment which results in good performance.

All the selected SMEs of UK reflected four prominent organizational culture, in their functioning which justifies the study of Zaheer et al. (2006). The authors made assertions through their study that SMEs cannot be considered to be high performing entities if they intensely accentuate only one culture type. On the other hand, the high performing SMEs are focused to develop their employees (Clan) along with ensuring a commanded output and performance from them (Market). Thus, SMEs with flexible culture register better performance. Further, the study reaffirmed the need of adaptive organizational culture for a firm to be able to confront environmental factors and progress in the aggressive competitive market.

Thus, the managers and leaders of SMEs which follow a resilient market culture have to face struggles in endurance in situations that require adaptability, creativity, innovation and entrepreneurial skills. For instance in the primary findings, nearly half of respondents from organizations with clan culture agreed that clan culture is important in fostering human relation, team work and cohesion, assessment of the employees concern and ideas, empowerment of employee's act with majority of them strongly agreeing with participation of the employees in the organization and open discussion.

Similarly, with ***adhocracy, majority of the respondents strongly agreed with their company promoting creative problem solving within the organization***. Other significant features exerted by the concerned culture in the SMEs are– flexibility and decentralization with distribution of power in the organization, fostering of growth, expansion and development, and promotion of innovation and change. SMEs with hierarchical culture on the other hand reflects, control and centralization, formalization and structure, stability, continuity and order and, predictable performance outcomes.

And rational culture lastly withheld features like, task focus, accomplishments and goal achievement; direction, objective setting and clarity of goal; efficiency productivity and profitability; and performance, outcome excellence and quality. However, among all the four organizational cultures, majority of the case SMEs projected a propensity towards adhocracy, with more than 57% of the selected respondents agreeing for the same over 52% of rational, 50% of clan and 49% of hierarchical culture. Such a finding finds similarity with the study of Rasmussen, (2013), who observed the organizational culture

having significant impact in the innovation process in the SMEs and also the leadership in the SMEs having important role to play in establishing organizational culture in any firm which according to the author, reduces the anxiety in the employee and also lead to the process of decentralization. Besides, innovation, one of the key features of adhocratic organizational culture (as has been identified through the study), leads to gain in competitive advantage which is necessary for sustainability and longevity of the organization, besides, leadership behaviors and employee attitudes amongst SMEs (Karopka et al. 2012; Liu 2013).

However, from the secondary analysis, it has been observed that ***market culture is the most significant one to enable the SMEs in gaining various performance achievements***, as this culture is aggressively competitive and highly goal oriented. The emphasis is on productivity, profitability, market acquisition and venturing into new markets successfully. Leaders of such firms are highly motivated, tough, and demanding (Lincoln 2010; Cameron & Quinn 1999). This culture is more oriented towards the external environment in place of the internal orientation.

The emphasis is on transactions with external parties like suppliers, customers, contractors, licensees, unions and regulators. Under this culture the firm operates mainly by way of economic market mechanisms especially monetary exchange. Managers are more focused on profitability, bottom-line outcomes, standing in the niche markets and loyal customer bases. The orientation of the organization is based on competitiveness and productivity (Cameron & Quinn 2011; Cameron et al. 2006).

Therefore, minimal presence of this culture affects the overall organizational functioning and gaining of perceived non-financial performance such as process quality, product quality and such others. The next objective in such a scenario will gain the researcher the answer towards the impact exerted by the organizational culture on the case SMEs of UK.

Objective 2: To understand the impact of organizational culture on perceived non-financial performance of the SMEs.

As observed in the previous objective, according to primary research the most favored and preferred cultural arrangement in SMEs is ***adhocracy***. Further, it has been noted during the secondary research that organizational culture impacts performance of organizations non-financially. Study conducted by Deshpandé & Farley (2004) extended model of completing valued framework and showed that open organisational culture, such as developmental/adhocracy culture has direct impact on the non-financial performance of the organisation. Another study was conducted by Jones et al. (2005b) to examine the effect of organisational culture taking the change management as the indicator for the non-financial performance form the sample of 67 employees of state government.

The results show that the employees who harbored strong emotional and relational values in their division exhibited higher levels of readiness for change prior implementation. Similarly the study by Wilderom et al. (2012) examined the impact of the organisation culture and leadership on the performance of the Banks in Dutch and the results showed that organisational culture has significant impact on the non-financial performance as compared to the financial performance. This objective focuses on determining whether different types of organizational cultures have an effect on various indicators of perceived non-financial performance of SMEs, namely, process quality, job satisfaction and quality of products and services provided.

With respect to the impact of organizational culture on process quality, the primary research revealed that ***rational culture has the maximum impact on process quality*** with the coefficient value of 0.420; which means that with one-unit increase in rational culture, the process quality improves by 0.420 units, holding all others things constant. This impact was found to be positive as well as significant at 1% level. Further, there was found to be positive and significant impact of ***hierarchical culture and adhocracy/developmental culture as well***, with coefficient values of 0.373 and 0.212, respectively.

However, the analysis revealed that ***clan culture does not*** have a significant impact on process quality. Thus, except for the clan culture, remaining three organisational cultures have significant and positive impact on process quality of SMEs in UK. The process innovativeness has been directly linked with developmental culture by Yeşil &

Kaya (2012) who noted that organizations that follow developmental culture are more innovative than those who don't. Similar findings were observed by Naranjo-Valencia et al. (2011b) in their study.

Further, with respect to impacts of various cultures on job satisfaction, the primary research revealed that ***rational culture and developmental culture have positive and significant impact on the job satisfaction*** with correlation values 0.224 and 0.214, respectively. On the other hand, there was found to be negative and significant impact of hierarchical culture on the job satisfaction of the employees in SMEs in the UK, with the negative coefficient value of (-) 0.248. This means that with one-unit increase in hierarchical culture, job satisfaction reduces by 0.248 units. However, clan culture was found to have insignificant impact on job satisfaction among employees. A study conducted by Sempane et al. (2002) noted a discrete relationship between organizational culture and job satisfaction wherein both impact each other. Their study linked positive job satisfaction with facets like customer orientation, organizational integration, performance inclination and reward tendency and job dissatisfaction with factors like conflict resolution, temperament towards change, and locus of authority and management style.

Similarly, Muhammad Llyas (2011) also noted a positive and significant relationship between organisational culture and job satisfaction. However, these studies failed to refer to different organizational cultures and their specific impacts on job satisfaction. This gap was addressed by Lok & Crawford (2004) who found that innovative and accommodating cultures like developmental culture impact job satisfaction and employee commitment positively. They also noted that hierarchical culture negatively influences job satisfaction for employees in SMEs.

Lastly, the relationship between organisational culture and third indicator of non-financial performance, i.e., the quality of goods and service provided by the SMEs has been discussed with reference to primary as well as secondary research. In this regard, the primary research revealed that out of the four different cultures considered for the study, only ***adhocracy/developmental culture has a significant and positive impact on quality of goods and services***, with a correlation value of .749 which is quite high. However, the remaining three cultures show insignificant impact on goods and service quality.

A study conducted by Deshmukh (2006) noted that while on the one hand, SMEs are very flexible in adopting and absorbing new technology and innovation; on the other hand,

SMEs do not give much attention to maintain the quality of the product produced and they end up producing low quality products. This is in contrast to the findings of the current study where it has been found that an organization following developmental culture and focusing on absorption of innovation is capable of producing high quality goods and services.

These SMEs thus lag behind in terms of quality of goods and services due to lack of attention towards quality. It has also been noted that the hierarchical organizational culture is mainly focus on the defining the ranks of the employees according to the level of importance in the organization and thus, this type of culture contains control and rigidity which can discourage the initiatives about the creativity of the employees. This may be the reason that the more rigid hierarchical cultural, less the quality and durability of the product.

A study conducted by Dadzie et al. (2012) examined the effect of the competitive strategy and the organisational culture on the performance in organizations and showed that the organisations which have clan or developmental culture exhibited significant linkage with performance while companies which possess adhocracy or hierarchy culture shows more implicit relationship with the performance. However, the performance also depends on the orientation and the leadership strategy of the organisation.

The study thus found that developmental, rational and hierarchical cultures impact process quality positively. Further, while rational and developmental cultures impact job satisfaction positively; hierarchical culture impacts job satisfaction negatively. The quality of goods and services is impacted only by developmental culture. It may be noted that there is no impact of clan culture on any of the indicators of non-financial performance.

Objective 3: To examine whether innovation plays a role in fostering a relationship between multi-dimensional organisational culture and non-financial performance of the SMEs.

This objective focuses on determining whether innovation is crucial in establishing a relationship between various types of organizational cultures and indicators of non-financial performance of SMEs. For this, innovation has been considered in terms of product and service innovation and process innovation and its impact on quality of goods and services and process quality has been measured using regression analysis technique. In context of SMEs, Kaufmann & Tödtling (2002) noted that the innovation capacity of SMEs is immense given their heterogeneous character; however, such capacity is hampered due to lack of financial and human resources available with SMEs.

A study conducted by Ashraf et al. (2013) showed that there exist positive relationship between the three types of organisational culture (adhocracy, market and clan) and organisational innovation, the strongest relationship being with adhocracy culture. Another study conducted by Yeşil & Kaya (2012) stated that adhocracy organisational culture has significant influence on the innovativeness of the firm. (Rosenbusch et al. 2011) stated that SMEs which are flexible in their approach towards accepting changes in the external environment, are more likely to reap full benefits of innovation. Thus, the success of innovation depends on the cultural differences in organizations.

The primary research revealed that ***product and service innovation is not a moderating factor between any type of organizational culture and the firm's quality of goods and services***. ***However, it is a moderating factor between developmental culture and the firm's process quality*** (coefficient value=.171 at significance=.018), while the relationship with other cultures, namely, clan culture, hierarchical culture and rational culture was not established.

With respect to ***process innovation, the primary research revealed that it is not a moderating factor between any type of organizational cultures and the firm's quality of goods and services***. Similarly, process innovation is not a moderating factor between any of the cultures and the firm's process quality. The secondary research revealed that while there is significant effect of the organizational culture in the innovation process in any organization, SMEs do not give much attention to the innovation process.

A study by Liao et al. (2012) on the relationship between the organisational culture and the innovation related to the process which includes the acquisition of knowledge and organisational learning shows that the organisational learning acts as a fractional intermediary between organisational innovation and organisational culture. (Syauta et al. 2012) noted that an innovative culture in organizations leads to employees thinking freely, expressing their views and inspiring to come up with something unique, in terms of ideas for products and processes. Innovative culture leading to quality goods and services leads to better non-financial performance in an organization.

A study conducted by Kirca et al. (2005) explored the relationship between market orientation and performance and found that the inter-relationship between market oriented culture and organisational performance mediated by innovation is much more convincing in the manufacturing sector especially in low power-distance and uncertainty-avoidance cultures and where performance is subjectively assessed.

The authors also assert that market oriented culture and performance is stronger for both cost-based and revenue based performance measurement practices for the manufacturing entities as compared to their service counterparts. Carmen & María José (2008) attempted to establish a relationship between market orientation, culture and performance mediated by technological and organisational innovation. However, this relationship holds value when it is based on technological and organisational innovation. Thus, innovation acts as the moderator between organisational culture based on market orientation and organisational performance.

The authors propose that firms can improve their performance through adopting innovation into the marketing models and achieve the desired economic and social performance. The study presents innovation as one of the chief moderators. Similar findings were presented by Wang & Ahmed (2004) who investigated innovation practices and their linkages where one or more types of innovation was presented as the dependent variable and was seen in association with a particular trait of the organisation, the individual employee or the innovation by itself. The types of innovation explored in the study are product innovativeness, market innovativeness, process innovativeness, behavioral innovativeness, and strategic innovativeness.

The relationship of market-orientation culture and firm's performance was also substantiated by Yoon & Lee (2005) wherein they presented the marketing function as the

echo of the organisational culture and the degree to which it addresses the requisites of customer's values and beliefs. Market- oriented culture encompasses orientations linked with customers, competitors and inter-departmental teamwork. This culture induces innovation into the group culture to elevate the firm's performance to a greater higher by effectual and efficient implementation of marketing strategies to deliver maximum customer value.

From the resource-based perspective as well, marketing is viewed as a culture wherein the key potentiality lies in the sources of competitive edge over the competing firms. This is possible only through putting the available resources to the best possible innovative use. The firms need to adopt a proactive culture to promote innovation and position it in the market in manner that it entices the competing brands to catapult the competitive advantage through acquisition, replication, substitution and attempting better innovation.

While Yoon & Lee (2005) established a relationship between market-oriented culture and firm's performance, Hassan et al. (2012) studied the influence of organisational culture on the employee performance through organisational innovativeness. The study laid emphasis on the notion the contemporary organisations are evolving to be knowledge-centric organisations. This gradual change can be accredited to the depleting resources, vibrant business environment, deepening competition and dynamic customer expectations for better service and product quality. The moderating role of innovation is the influence of organisational culture on firm performance in the banking sector was further explored by Salau et al. (2014) who found organisational culture as obligatory and imperative aspect of the survival and success of any organisation and also inculcating values in the employees.

The firms thus, need to subject their functioning to high level of creativity, innovation and invention. Organisational culture plays the role of the thread that sews the mutually shared values and beliefs across all the members of the organisation and ensures that everybody is working in the same direction. It is also one of the key determinants of innovation. Innovation, in turn, is centrally about implementation of an idea that helps to better the employees' performance. Apart from organisational culture, innovation has other determinants too like the role of information technology, firm strategy, organisational design, organisational learning and knowledge management.

6.3 Conclusions

Organizational Culture of the SMEs in Tele-healthcare Industry, UK

Academic Lens

Secondary sources consisting of scholarly articles and research works project the significant presence of SMEs in the market economy of the United Kingdom and its role in fostering the functioning of tele-health care in the country, thereby assisting the elderly population, bringing health care at their doorstep. SMEs, in the wake of decreasing government expenditure in health care sector and increasing responsibility of the healthcare sector to aid the ageing population in their health-related needs, has the scope of playing a pivotal role in providing tele-health care, thereby becoming significant drivers of health care (European Commission, n.d.). Samantha (2012) pointed out that SMEs which play a vital role in providing tele-healthcare are not directly involved in the process of R&D of new technology; instead, the SMEs adopt the new technologies which are combined with their existing technology to produce a large number of advanced products used in tele-health care.

Organizational culture plays a significant role when determining the efficiency of functioning of an organization and its employees as it unconsciously builds a set of implied values that guide the organisation. It is the responsibility of the senior-level management to establish, promote, maintain and change the organisational culture. Organisational culture has gained a lot of relevance in the modern organisation where amalgamation of individual goals with organisational ones is necessary and employees are required to relate to organisational values (Alvesson 2012). Schein (2010) asserted that varied culture like national, ethnic, professional, organizational and microsystem issues are inter-related and exert considerable influence on each other which renders the model of organizational culture as mutually accepted assumptions and values by a group in order to solve problems of adaptability to external environment and internal integration and is valid in approach and therefore is imbibed across the organization and even taught to new employees to ensure synchronization.

In the present study, the organizational culture across SMEs in UK have been analyzed using the Competing Values Framework (CVF) developed by Quinn and Rohrbaugh. The model explicates value systems based on two key dimensions: pairs of contrary values

(flexibility versus control and internal versus external orientation). The model explicates value systems based on two key dimensions: pairs of contrary values (flexibility versus control and internal versus external orientation). The analysis on the basis of this model can elucidate similarity of various cultures with the organizational goals of innovation. The analysis on the basis of this model can elucidate similarity of various cultures with the organizational goals of innovation.

The managers of SMEs can amalgamate the organizational culture, market orientation, climate, socialization processes with the help of the CVF model and gradually impact the market standing of the organization. Rhyne et al. (2002) opined that technology centric firms need permutation of physical capital, human capital and organization capital so as to survive the competition and organizational culture is an indispensable aspect. For this, his study was centralized on evaluating the influence of national culture on new product innovation.

Zaheer et al. (2006) through their study on SMEs of Pakistan further noted that SMEs cannot be considered to be high performing entities if they intensely accentuate only one culture type. The present study also indicates that there is an influence of more than one culture on the case SMEs, however, the dominant culture was found to be Adhocracy. On the other hand, the high performing SMEs are focused to develop their employees (Clan) along with ensuring a commanded output and performance from them (Market). Thus, SMEs with flexible culture register better performance.

Similar views has been echoed by Duréndez & Garcia (2008), Naranjo-Valencia et al. (2011) and Liu (2013), who based on their in different countries, emphasized on the multicultural approach of organizational culture as one of the key characteristic of SMEs, which further thrives, performance, creativity, innovation and competitive advantage in the market. Similar yardsticks are significant for SMEs based on tele-health care sector of UK which is significant from the results obtained in the study.

Industrial Lens

The findings of the primary analysis are in sync with the findings of the secondary data analysis. Although the literature extensively discusses the organizational culture, it fails to identify similar pattern in case of SMEs based in tele-health care sector.

According to the findings of statistical analysis, most of the SMEs in the country are operational for 10 years with most of their core functioning related to production of goods and services related to ALT.

Furthermore, based on Prajogo's (2011) scales of measuring multi-dimensional organizational culture and performance involving *Group, Developmental, Hierarchical* and *Rational* factors, frequency analysis of Organizational culture project that, Group (clan) culture is significant in maintaining– participation and open discussion (77%), empowerment of employees to act (63%), assessment of employees' concerns and ideas (69%) and, human relation teamwork and cohesion (76%), within the organizational structure and functioning. Developmental (adhocracy) culture results in *flexibility and decentralization* (72%), *expansion growth and development* (75%)*; innovation and change* (71%)*, and creative problem solving process* (84%).

Maintenance of developmental culture along with effective leadership and innovation reduce the anxiety in the employee and also lead to the process of decentralization. Supporting the elements exerted by developmental culture within SMEs of tele-health care, Conde et al. (2010) stated that the tele-health application have become increasingly important in providing health education, so to provide the education, research activities and education innovation in the tele-health sector should be fostered and the companies involved in this sector focus more on the creative ways to provide the services to its customers.

Hierarchical culture measured through the elements of control and centralization ; routinization , form alienation and structure, stability ; continuity and order and predictable performance outcomes, showed that most of the employees though agreed that this culture ensured functional stability and order within the SMEs, yet, it failed to foster innovation and job satisfaction within its workforces, implying that, although its advantages cannot be denied, yet it is less effective than other cultures in fostering organizational performance in context of UK. Rational culture reflected elements like, task focus, accomplishments and goal achievement ; direction, objective setting and clarity of goal; efficiency productivity and profitability ; and performance, outcome excellence and quality, in organizational context. More than 72% of the respondents agreed that rational organizational culture is effective in fostering the above elements within SMEs of UK, thereby developing the overall performance of the enterprises in tele-healthcare sector.

Based on the findings of primary research, all the cultures are evident in fostering individual efficiency and performance, however, adhocracy was found to influence the most and indicated to be a dominant culture within UK's SMEs. The results from the analysis contribute towards the industries to focus on their overall culture and define their policies such that innovation, effective leadership, stability and creativity can be maintained within the industry. Adhocracy fosters all the four elements mentioned above, each having a significant correlation with the organizational performance. The findings are in sync with the findings of previous research studies, wherein developmental culture has been stated evidently by past researches, as one of the crucial factor behind effective organizational performance of SMEs.

Organizational Culture and Non-financial performance of SMEs

Academic Lens

Every organization comprises of financial as well as non-financial performances, which are measured to understand the overall organizational performance and to understand the effect of organizational culture on these elements. If organisational culture is left unattended or is ineffectively managed or an inappropriate culture is being nurtured purposely, the organisation heads towards a sure catastrophe. Organisational culture can be righteously employed to emerge as a competitive advantage and also enhance the bottom line. Primarily, most popularly held notion about organizational culture is that it exercises significant impact on organizational performance. This implies that firms with strong cultures stand more chances of accomplishing their goals as compared with their weak counterparts. However, the underpinning postulation is that strong cultures promote better performance because they generate an impeccable amount of employee motivation (Flamholtz & Randle 2011).

This presumption was earlier explored by Ahmad & Darzi (2008) who viewed organisational culture as a interceding variable. Further, organizational culture accordingly to employees is dependent on team work, collaborative nature of the peer groups, degree of risk tolerance and management's ability to stand conflict. Study conducted by Hatch & Schultz (1997) explored the association between organisational culture, identity and image, and asserted the importance of the modern organisations to build their corporate identity as

a linkage between the external position of the firm in various environments and internal interpretations deduced within the corporate culture.

This shows that there should a synchronization of the image portrayed to the world and the perceived image of the firm by the internal stakeholders– corporate image. Such image acts as a highly valuable asset, and is acknowledged as a non-monetary organizational performance measure. The findings of the secondary research are based on extensive research conducted which clearly reflects on the relationship between organizational culture and non-financial performance. The findings from employee perspective further ads to the academics on a global scenario.

Further, the researcher also indicates that employee perception of the organizational culture has impact on work-life balance, conflicts, job satisfaction, work commitment and turnover intentions and thus, is significant in shaping the employees' overall perception about the organisation. A number of studies in the literature indicated that job satisfaction is linked with organizational culture since employee perception is important to maintain the dynamism of the organization (Allen 2001; Sempane et al. 2002; Lok and Crawford 2004;). Also performance of the organization is also linked with organizational culture. Exploratory study conducted by Deshpandé & Farley (2004) deduced that open organisational cultures (market and adhocracy), robust market orientation and innovativeness has constructive impact on performance.

However, a moderator was also identified to be contributing towards organizational performance of the organization which was not explored in the previous academic research on the topic i.e. change management. It was posit that employee perception in a culture that lays a lot of emphasis on strong human relations and has open systems fosters higher willingness to accept change.

The study established that employees who harboured strong emotional and relational values in their division exhibited higher levels of readiness for change prior to implementation. This pre-implementation readiness for change smears a constructive influence on employee satisfaction related to the change being implemented. Lau & Ngo (2004) echoed similar results, thereby pinpointing that a developmental culture is the lacking nexus between HR system and innovative consequences. The study serves as a testimony for the need of innovative climate (through HR practices) during the innovation process and the role of organizational culture as a facilitator for the same.

Thus, innovation is also an implied measure of organizational culture performance measurement. Uzkurt et al. (2013) too, rest their view on similar perspective, pointing out that culture have a constructive influence of innovativeness of an enterprise which in turn as an immediate effect on performance aspects and culture. Innovation is here seen as the chief driver of performance as it promotes competitive edge over the counterparts and services need innovation too. Further the literature also explored the importance of management style in influencing employee performance and in turn the overall organizational performance (Salau et al. 2014). The findings from the secondary research indicate that the culture needs to nurture employee participation, commitment, team work and synchronisation that results in employee performance enhancement and self-improvement initiatives. This will gradually led to high performing organization that can be evident from profitability and lower attrition rate. Thus, management style, change management and innovation has been identified to foster organizational performance and job satisfaction as non-financial performance of the organization.

Industrial Lens

Although the literature extensively discusses the organizational culture, it fails to identify similar pattern in case of SMEs based in tele-health care sector. Owing to their recent rise, this filed is yet to be explored in-depth. Also country-wise studies highlighting the role of innovation on culture and non-financial performance of SMEs of tele-healthcare is also relatively minimal, rendering importance to the current study, which focuses on the specific organizational culture among the four which has heavy contribution to effective performance of these case companies.

In the present study, organizational performance was measured on the basis of the quality of the goods and services provided by the SMEs as compared to its competitors. The results indicated that 63% of the respondents' SMEs were somewhere in between leader and almost leader in providing goods (performance), 61% believed that their enterprises were somewhere in between leader and almost leader in terms of reliability, durability of goods reflected similar response, with 57% of the employees' enterprises being within leader and almost leader and product specification too yield result of 62% of respondents' SMEs to be in between leader and almost leader. Such an analysis project that

although, the heavier side is leading the market of goods, yet, the value is not that high, thereby reflecting evident scope of development of these SMEs in tele-health care sector.

Analysis of the SMEs providing services reflect that, nearly 50% are leaders and 26% are almost leaders in terms of performance, which is appreciable when compared to SMEs providing goods. Furthermore, in terms of reliability, 75% of respondents' organizations fall in between leaders and almost leaders; durability reflected 72% of SMEs within leaders and almost leaders and, specification of service provision reflected 74% falling in between leaders and almost leaders. Such reflection implies that most of the SMEs providing services work for development and maintenance of quality of their products. Also, another reason behind such reflection owes to high market competitiveness among SMEs providing both goods and services thereby enriching the quality of products delivered to their customers in tele-health care sector, and projecting an efficient organizational culture & performance.

The non-financial performance including, process quality, job satisfaction, innovation of products & services and innovation of processes, within SMEs and the level of impact organizational culture exerts upon them can be understood through the following discussion.

As per the findings, the process quality of goods and services since tele-healthcare industry deals with healthcare related products and it becomes all the more important to ensure that there are no problems such that the process quality is not hampered. The importance of standardized documented process is well understood by the participating organizations which indicated to have proper documentation. Further nearly 40% of the respondents indicated that they adopted statistical techniques to improve the overall process and reduce variations in the process reflecting majority were affirmative about the quality of the overall process.

Such a response indicates towards the stability and order prevalent within the functioning of the SMEs, ensured by strong organizational culture which will give cue to the other companies to follow suite and incorporate these policies in order to improve their overall performance. Further in terms of job satisfaction, nearly 50% of the respondents indicated that they were satisfied with their job responsibilities. The 3% respondents who indicated that they were not satisfied can be considered negligible. Such a response verily exerts the significant impact of culture on job satisfaction of employees. This further

explains the importance of organizational culture on the overall employee's job satisfaction. Therefore, the companies will have to work to improve their organizational in order to ensure job satisfaction of its employees.

Another important non-financial indicator influenced by the presence of organizational culture is innovation both in terms of products and services. Previously explored scholarly studies have shown that the SMEs are not able to foster the innovation proces in to their organisational culture and encourage the innovative human capital. Studies also shows that the innovation process in the SMEs are in the initial stage (Halim et al. 2014). Such a notion has been refuted by the present analysis which reflects that, nearly 45% of the respondents' firms are comparable with their competitors in terms of innovation capability, with 55% responding that their firms are between leader and almost leader.

Minimal respondents view their firms to be lagging behind in fostering innovative policies in terms of products and services, thereby making innovation as one of the major yardstick influenced by culture, though evident scopes are present for further improvement. Various factors measuring process innovation such as, technological competitiveness, adoption of latest technological innovation, novelty of technology and rate of change in processes, techniques and technology reflect that SMEs in tele-health sector in the UK are in almost in the same position.

The results from the inferential analysis indicate that culture lacks a dominant role in process quality. Hierarchical culture has predominance on full-proof designing and operationalization within SMEs, projecting its major role pointed out by previous researchers– stability and order. Similarly clan culture, one of the favoured culture among eminent studies, too project insignificant impact on process quality, deploying all is influence over employee empowerment and growth. Only developmental culture yield positive and significant results through, regression and correlation analysis.

Each of the four cultures has a significant correlation with any one or two factors associated with process quality and not all of the factors. Taking the yardstick of job satisfaction, regression analysis reflects a discrete relationship with organisational culture. Developmental culture related to managers and employees thereby influencing job satisfaction show positive and significant results. Exploring the impact of culture on quality of goods, it is reflected that, developmental culture has significant influence on two factors

associated with the quality– namely the performance of the goods and the reliability of the goods; however, clan culture and others yielded negligible significance.

Besides, developmental culture exerts a negative correlation with reliability of goods, which contradicts the impact exerted by hierarchical culture on the same. Lastly, developmental culture exerts a significant impact on the performance and reliability of goods too, over other three cultures, although performance is negatively correlated with the concerned culture, despite being significant. Regarding the influence exerted by organizational culture on quality of service provided, regression analysis projected a negligible impact of clan culture on any factors associated with service provision. Rest, hierarchy and rationality exert influence on two factors, influencing each of the other aspect of service provision of the SMEs.

Only developmental culture reflecting positive correlation with all the factors of process quality, job satisfaction, quality of goods and quality of services, thereby emerging as the most significant of all cultures.Thus, the present research presents useful insights about the role organizational culture in influencing the non-financial performance of the organization.

Moderation Role of Innovation between Organisational Culture and Non-Financial Performance of SMEs

Academic Lens

As has been explored in the previous sections, the moderation role of innovation is imperative between organizational culture and non-financial performance of SMEs. Despite innovation being a significant imperative for any society as a whole, there is a dearth of universally accepted and applied definition of innovation. Even from the business perspective, there is a lack of unanimously accepted definition of innovation and each firm has its own interpretation of the concept.

However, different research scholars have done research in determining the definition of innovation. Rogers (1998) asserted that innovation can be explicated as the adoption of unique concepts, designs and thoughts to products, activities or any other facets of business operations. Innovation is basically linked with commercialization or economic viability of the novel ideas. Brown & Ulijn (2004) assert that innovation is about developing something

unique and getting economic success out of it in the market. Innovation surpasses the pursuit of products and encompasses services, processes and technology.

However, according to Brown and Uljin (2004) innovation is a group effort in case of organisations and can be portrayed through its multi-dimensional facets and restricted controllability (Brown & Ulijn 2004). Further, Tiwari (2008) elucidated innovation as the presentation of a new or radically improvised product or service or process, unique marketing strategy or tactic, or a breakthrough in the conventional business activities, organisational structure or external relations. Baregheh et al. (2009) viewed innovation from the strategic perspective and proclaims that innovation and its management needs a strategic outlook.

This is because, organisations need to be proactive in responding to the changing marketing conditions especially customer demands and lifestyles, leveraging the advantages offered by technology and altering market dynamics. In present times, Atkinson (2013) discounted the general perception of innovation being exclusively technological in nature that brings new products into existence or innovation is centrally research and development work that is carried on at universities, science laboratories and companies.

Thus, from all the definitions it can be concluded that firms need to constantly innovate because it needs to constantly improve its offerings and business processes in order to ensure sustaining in the cut-throat competitive industry scenario and grow in the global recessionary times. Innovation can also be seen as tool used by the organisation to exert influence to the environmental circumstances of both internal and external vertices.

It is worth noting that innovation is subject to the availability of resources, capabilities, strategies and expectations. This research on innovation enables the academic researchers to further develop the definition of innovation. However, the present researcher further connected the dots between innovation, organizational culture and non-financial performance of the firm. The role of innovation in any firm's performance is highly inevitable. It improves the quality of not only products and services offered but also the process of how they are offered. It is only through innovation that time management can be optimized and product innovation and flexibility can be fostered. Innovations help in lowering costs and improving financial returns. When products are innovative and processes are quick, customer satisfaction is bound to elevate.

Thus, the role of innovation is very crucial in boosting the overall performance of any organisation especially SMEs as it is only through innovation that SMEs can expand their business and presence (Tatikonda (2007), Marques & Ferreira (2009), Carmona-Lavado et al. (2010), Crossan & Apaydin (2010), Pullen et al. (2012), and Camisón & Monfort-Mir (2012)). Furthermore, various studies conducted over time (e.g. Syauta et al. (2012), Ashraf et al. (2013), Duygulu & Özeren (2009), Yeşil & Kaya (2012), Behram & Özdemirci (2014)**)** pointed out the positive relationship between innovation and organizational culture, which exercises significant impact on non-financial performance of SMEs, through evolved leadership styles and entrepreneurial role.

However, all the studies explored do not provide a definite concept of culture, which enables innovation to influence positive the non-financial performances of organizations. The culture varies in different organization and therefore, it will be interesting to explore the industrial contribution to understand the particular of culture existing in SMEs of UK, thereby influencing innovation and shaping its performance.

Industrial Lens

Although the literature extensively discusses the organizational culture, it fails to identify similar pattern in case of SMEs based in tele-health care sector. Owing to their recent rise, this field is yet to be explored in-depth. Also country-wise studies highlighting the role of innovation on culture and non-financial performance of SMEs of tele-healthcare is also relatively minimal, rendering importance to the current study, which focuses on the specific organizational culture among the four which has heavy contribution to effective performance of these case companies. The inferential analysis for the present research was done using sub-sections within innovation i.e. product innovation and service innovation.

While, **product and service innovation** is a moderate between Developmental/Adhocracy culture and the firm's non-financial performance (process quality), on the other hand, **process innovation** does not have any significant impact on the non-financial performance of the SMEs at least in the UK. The results are in sync with the previous research studies, wherein although innovation has been discussed as an important moderator, however, there is no segregation of innovation with respect to product and process innovation. Further, according to Syauta, Troena, Setiawan, & Solimun, (2012) innovative culture helps the employees to take initiative in the entire process and they can

However, it is rightly argued that organisational culture is not the sole factor responsible for the success of any firm; rather it is one of the chief catalyzing factors that promotes innovation which in turn boosts the firm's performance both financially and non-financially. Hence, organisational culture should not be perceived as an implicit and intangible facet of a firm but rather as a key stimulus for accomplishing managerial effectuality. Managers are responsible for change management and encouraging innovation.

Thus, managers need to be adaptive towards changes, respect workplace diversity, reject uniformity and respond appropriately to the environment. Organisational culture also places a key role in helping the firm and its employees to adapt external and internal changes, thereby leading to maximize value creation for employees by way of organisational learning, knowledge management and creativity. All these result in innovation and better performance for the firm.

Thus, the study derived that product and service innovation is a moderating factor between developmental culture and the firm's process quality. However, it is not a moderating factor for any other culture and for none of the cultures with regards to quality of goods and services. Further, process innovation is not a moderating factor for any of the cultures in both the cases, process quality and quality of goods and services.

6.4 Recommendations

There has been a steady growth of the tele-health care industry in the UK which has been fueled by a steady increase in the population of elders which in turn is a result of the fertility transitional phase the United Kingdom is undergoing presently. Further, over the next two decades, there is likely to be an increase in the demand for assisted living technology in the UK (Mcintyre 2001). As noted by (Savlovschi 2011), the life expectancy of the people in UK is also expected to increase by average of 4.2 years in next 30 years while the increase in the healthy life will be only about 2.6 years which would also lead to an increase in the demand of social and health care by around 44 percent. In light of these circumstances, it is important that the financial as well as non-financial performance of these tele-healthcare units is focused up on. The study thus came up with certain recommendations which may be followed to ensure the success of these units. The recommendations are based on findings of the study including both primary research as well as secondary research. The following recommendations have been made for the study in hand:

1. The study found that SMEs lag behind with regards to proper knowledge about international markets, due to which they are unable to tap the large demand for their products in international markets and fail to export their products efficiently. The primary research revealed that about 40% of SMEs are not operating in overseas market due to lack of resources or the cumbersome legal and procedural formalities involved about which SMEs have less information and knowledge. It may thus be recommended that SMEs focus on gaining knowledge about these markets by exploring them through the internet platform as well as personal visits so that the potential demand in these markets can be tapped by the SMEs, leading to their good performance.

2. The importance of good organizational culture has been reiterated throughout the study as the study notes that good and healthy organizational culture enables an organization to efficiently sustain itself and also come up with innovative products and services which can be offered at reasonable cost to the customers. Thus, it may be recommended that organizations aim at developing an organizational culture wherein there is proper amalgamation of individual goals with organisational ones is necessary and employees are able to relate to organisational values. Also, the various elements

influencing its maintenance or development, such as, the macro environment factors, the interaction between employees and organisation, also the various organisational processes like HR functions, R&D, maintenance process must be well-integrated with each other.

3. The secondary research found that SMEs cannot be considered to be high performing entities if they intensely accentuate only one culture type. For a SME to register high performance, it is important that the organization focuses on developing their employees (Clan) along with ensuring a commanded output and performance from them (Market). Thus, it must be a combination of cultures and SMEs must promote flexible culture to register better performance. It was also found that in many UK SMEs, internal values (clan and hierarchy culture) are highly stressed upon as majority of these firms operate in the comparatively restricted local market. However, it is observed that firms with external culture tend to outdo internal culture with respect to customer orientation and innovation.

The primary research indicated that out of the four cultures, adhocracy or developmental culture emerges as the dominant one existing within the SMEs of UK in tele-health care sector, having a mean value of 3.80. The primary research also showed that all the cultures were favored by the respondents, adhocracy being their first preference. However, all the cultures were favored nevertheless. It may thus be recommended that SMEs adopt a combination of cultures within their organizations and focus on developing a flexible culture.

4. The study found that in the tele-healthcare sector, there is a need for product innovation, process innovation and organizational innovation. However, in order to be conducive to innovation, it is important for the SME to imbibe a supportive organizational culture that can promote and adapt change management at all the levels for a successful and sustainable growth. Thus, it may be recommended that the SMEs foster a culture supporting innovation at all levels in the organization.

5. It was found that organizational culture exercises significant impact on organizational performance and firms with strong cultures stand more chances of accomplishing their goals as compared with their weak counterparts. This is because strong cultures promote better performance because they generate an impeccable amount of employee motivation. It may thus be recommended that the morals and motivation of employees be enhanced through strong cultural background so that the focus of the

organization is on team work, collaborative nature of the peer groups, degree of risk tolerance and management's ability to stand conflict. Also, the organization culture should be such that it nurtures employee participation, commitment, team work and synchronization that results in employee performance enhancement and self- improvement initiatives.

6. There has been found to be an association between organisational culture, identity and image. Also, there is high importance of the modern organisations building their corporate identity as a linkage between the external position of the firm in various environments and internal interpretations deduced within the corporate culture. Thus, it may be recommended that there should a synchronization of the image portrayed to the world and the perceived image of the firm by the internal stakeholders– corporate image. Such image acts as a highly valuable asset, and is acknowledged as a non-monetary organizational performance measure.

7. The study found that innovation is an implied measure of organizational culture performance measurement and a chief driver of performance as it promotes competitive edge over the counterparts and services need innovation too. Also, it was found that there is a need of innovative climate (through HR practices) during the innovation process and the role of organizational culture as a facilitator for the same. Thus, it may be recommended that it is ensured within the SME that organizational culture has a constructive influence on innovativeness of an enterprise which in turn has an immediate effect on performance aspects and culture.

8. The primary research noted that about 50% to 60% of the respondents felt that their SMEs were leaders when it came to offering products high in quality, reliability and durability to the customers. Thus, about half of the respondents still did not feel the same about the quality of products and services offered by them. Thus, it may be recommended that these organizations pay attention towards reasons for their perceptions and try to improve the quality of their market offerings accordingly.

6.5 Limitations of the Study

This research is trying to answer the question of the influence of multidimensional organizational culture on performance and moderate role of innovation within the SMEs in the tele-health industry in the UK. This study is only limited to the tele-healthcare industry in UK, therefore the findings cannot be generalized to other industry/ country. Other limitations revolving around the study includes,

1. The study is only limited to the functioning of SMEs of UK, limiting the scope of knowledge observation only to a particular country. As pointed out by various researchers, market scenario regarding the functioning of the SMEs are similar in UK and the rest of Europe, therefore such a limited perspective stagnates the study from evolving as a comparative analysis, stating the scenario of SMEs, organizational culture and innovation in UK and rest of the Europe, thereby presenting a broader vision to its future researchers.
2. Limitations exist in terms of respondents too. Despite a considerably huge market existence of SMEs in the United Kingdom, only a handful of respondents have been surveyed, providing the researcher a limited perspective. A broader view of the internal environment of the SMEs and their functioning would have let the researcher to analyze the elements of organizational culture, non-financial performances and innovation and other associated elements in an effective manner and would have pointed out to other cultures and broader role of innovation as well.
3. Besides, survey of only middle and junior level executives and absence of qualitative data involving the higher echelons of the organizations have also provided the researcher a one-sided perspective. Role of leadership, its influence of non-financial performance and the extent to which it is impacted by culture and innovation would have yielded better and informative results, had the views of the actual leaders been taken and analyzed.
4. Lastly, survey was conducted over email and not in person, which limits the authenticity of the views collected.

6.6 Summary and future scope

The study attempted to focus on determining the role of various types of cultures on non-financial performance in SMEs in tele-healthcare industry of the UK, with a special emphasis on process innovation and product innovation. The study found that all the types of cultures, adhocracy, rational, clan and hierarchical, have significant positive impacts on performances of SMEs. Thus, it is important that SMEs follow a combined approach using an optimum combination of all these cultures. This is necessary to ensure employee motivation and commitment and at the same time, promote innovation in the organization, ultimately leading to good performance of SMEs.

Further, it was found that developmental and rational cultures impact process quality and job satisfaction positively. Hierarchical culture was found to impact process quality positively but it also led to lesser job satisfaction among employees. However, developmental culture was found to impact all indicators of non-financial performance positively while clan culture had no impact on any of the indicators of non-financial performance. Also, the study summarised that product and service innovation plays a role when there is developmental culture in SMEs and impacts the firm's process quality positively. However, process innovation did not play any role.

The future scope of the study may include research conducted in other countries since the current study is only limited to the functioning of SMEs of UK, limiting the scope of knowledge observation only to a particular country. Also, future studies may focus on large sized enterprises within tele-healthcare industry of UK and other countries so as to enable a comparative analysis between situation of SMEs and large companies. Since the market scenario regarding the functioning of the SMEs are similar in UK and the rest of Europe, therefore future studies may provide a broad perspective rather than stagnating the study from evolving as a comparative analysis.

Further, since the current study used a small number of respondents out of a considerably huge market existence of SMEs in the United Kingdom, the study provides a limited perspective. Future studies may thus include a larger number of respondents representing the population better and thus provide a broader view of the internal environment of the SMEs and their functioning so that the researcher is able to analyze the elements of organizational culture, non-financial performances and innovation and other

associated elements in an effective manner and point out to other cultures and broader role of innovation as well. At the same time, future studies may involve executives across the organization including the senior officials as well unlike the current study which involves only middle and junior level executives. This would also enable the researcher to understand the perspectives of senior officials rather than the study providing a one-sided perspective. The senior officials would be in a better position to explain the role of leadership, its influence of non-financial performance and the extent to which it is impacted by culture and innovation and thus the study would have yielded better and informative results, had the views of the actual leaders been taken and analyzed.

REFERENCES

1. Abousaber, I. & Papazafeiropoulou, A., 2011. The impact of organisational culture on WiMax adoption by Saudi SMEs. In *European, Mediterranean & Middle Eastern Conference on Information Systems 2011*. Brunel: Brunel University. Available at: http://bura.brunel.ac.uk/handle/2438/8451 [Accessed January 31, 2015].
2. Abu-Jarad, I.Y., Yusof, N. & Nikbin, D., 2010. A Review Paper on Organizational Culture and Organizational Performance. *International Journal of Business and Social Science*, 1(3), pp.26–46. Available at: http://faculty.mu.edu.sa/public/uploads/1360859629.8126organizational cult199.pdf [Accessed April 18, 2015].
3. Acar, a. Z. & Acar, P., 2012. The Effects of Organizational Culture and Innovativeness on Business Performance in Healthcare Industry. *Procedia - Social and Behavioral Sciences*, 58, pp.683–692. Available at: http://linkinghub.elsevier.com/retrieve/pii/S1877042812045089 [Accessed December 8, 2014].
4. Acar, a Z. & Acar, P., 2014. Organizational Culture Types and Their Effects on Organizational Performance in Turkish Hospitals. *EMAJ: Emerging Markets Journal*, 3(3), pp.18–31. Available at: 10.5195/emaj.2014.47\nhttp://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=95396273&site=ehost-live.
5. Achanga, P. et al., 2006. Critical success factors for lean implementation within SMEs. *Journal of Manufacturing Technology Management*, 17(4), pp.460–471. Available at: http://www.emeraldinsight.com/doi/abs/10.1108/17410380610662889 [Accessed October 2, 2014].
6. Adams, G. & Schvaneveldt, J., 1991. *Understanding Research Methods.* 2nd ed., New York: Longman.
7. Agarwal, S., Erramilli, M.K. & Dev, C.S., 2003. Market orientation and performance in service firms: role of innovation. *Journal of Services Marketing*.

Available at: http://www.emeraldinsight.com/doi/abs/10.1108/08876040310461282 [Accessed April 15, 2015].

8. Ahmad, S.F. & Darzi, N.A.G.& J.A., 2008. *Organisational Behaviour*, New Delhi: Atlantic Publishers & Dist. Available at: https://books.google.com/books?id=BfpuQXfOkiEC&pgis=1 [Accessed February 6, 2015].
9. Ailon, G., 2008. Mirror, Mirror on the Wall: Culture's Consequences in A Value Test of its Own Design. *Academy of Management Review*, 33(4), pp.885–904.
10. Akber, A. & Gough, T., 2003. TeleHealth paradigm for Kuwait's healthcare: Logistics Information Management: Vol 16, No 3/4. *Logistics Information Management*, 16(3/4), pp.229–245. Available at: http://www.emeraldinsight.com/doi/full/10.1108/09576050310483826 [Accessed September 12, 2014].
11. Alanazi, T.M.B., 2013. *THE INTERRELATIONSHIPS AMONG BUSINESS ETHICS , ORGANISATIONAL CULTURE AND ATTITUDES TOWARDS STRATEGIC GROWTH ALTERNATIVES OF MUSLIMS ' SMES IN THE UK BY*. University of Birmingham.
12. Al-Khalifa, K.M. & Aspinwall, E.M., 2001. Using the competing values framework to investigate the culture of Qatar industries. *Total Quality Management*, 12(4), pp.417–28
13. Allaire, Y. & Firsirotu, M., 1984. Theories of Organisational Culture. *Organisation Studies*, 5(3), pp.193–226. Available at: http://organisationsethnologie.de/index_htm_files/Allaire_1984.pdf [Accessed January 29, 2015].
14. Allen, T.D., 2001. Family-Supportive Work Environments: The Role of Organizational Perceptions. *Journal of Vocational Behavior*, 58(3), pp.414–435. Available at: http://www.sciencedirect.com/science/article/pii/S0001879100917743 [Accessed October 16, 2014].

15. Alper, S., and Raharinirina, S., 2006. Assistive Technology for Individuals with Disabilities: A Review and Synthesis of the Literature. Journal of Special Education Technology. 21 (12). PP. 47-66.
16. Altizer, L., 2013. *Turn Culture Into Competitive Advantage* LIFE SCIEN., Berlin: Baltzer Science Publishers.
17. Alvesson, M., 2012. *Understanding Organizational Culture* 2nd ed., London: SAGE Publications. Available at: http://books.google.com/books?id=BDsV8eHp0_MC&pgis=1 [Accessed September 13, 2014].
18. Amit, R. & Zott, C., 2010. *Business Model Innovation: Creating Value in Times of Change*, Barcelona. Available at: http://www.iese.edu/research/pdfs/di-0870-e.pdf [Accessed April 13, 2015].
19. Ary, D. et al., 2009. *Introduction to Research in Education*, Cengage Learning.
20. Arnold, K., 2003. Reconceptualizing research on college student peer culture. *Journal of Higher Education*, pp.261–291.
21. Ashraf, G. et al., 2013. Relationship Between Organizational Culture and Organizational Innovativeness in Private Universities in Iran. *World Applied Sciences Journal*, 22(6), pp.882–885. Available at: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.388.6122&rep=rep1&type=pdf [Accessed April 16, 2015].
22. Atkinson, R.D., 2013. *Competitiveness, Innovation and Productivity: Clearing up the Confusion*, Washington D.C.: Information Technology and Innovation Foundation. Available at: http://www2.itif.org/2013-competitiveness-innovation-productivity-clearing-up-confusion.pdf [Accessed April 13, 2015].
23. Atkinson, P. et al., 2007. *Handbook of Ethnography*, SAGE.
24. Baregheh, A., Rowley, J. & Sambrook, S., 2009. Towards a multidisciplinary definition of innovation. *Management Decision*, 47(8), pp.1323–1339.
25. Barnett, V., 1991. *Sample Survey Principles and Methods*, London: Edward Arnold.
26. Barnes, B.R Chakrohurti, R., &Palihawadana, 2006. Investigating the export matketing activity of SMEs operating in International healthcare markets. *journal of medical marketing*, 6 (3), pp.209–221.

27. Bauer, 2003. Demand pull technology transfer applied in the field of assistive technology. Journal of Technology Transfer. 28. (3- 4). PP. 258-303.
28. Bates, J. & Bell, M., 1973. Small Business Manufacturing in Northern Ireland. *Journal of the Statistical and Social Inquiry Society of Ireland*, 22(5), pp.162–187.
29. Baumüller, M., 2007. *Managing Cultural Diversity: An Empirical Examination of Cultural Networks and Organizational Structures as Governance Mechanisms in Multinational Corporations*, Bern: International Academic Publishers. Available at: https://books.google.com/books?id=QQ0EUYlU9ZgC&pgis=1 [Accessed January 29, 2015].
30. Behram, N.K. & Özdemirci, A., 2014. The Empirical Link between Environmental Conditions, Organizational Culture, Corporate Entrepreneurship and Performance: The Mediating Role of Corporate Entrepreneurship. *International Journal of Business and Social Science*, 5(2), pp.264–276. Available at: http://ijbssnet.com/journals/Vol_5_No_2_February_2014/30.pdf [Accessed February 6, 2015].
31. Behruzi, R. et al., 2013. Understanding childbirth practices as an organizational cultural phenomenon: a conceptual framework. *Pregnancy and Childbirth*, 13(205), pp.1–10. Available at: http://www.biomedcentral.com/content/pdf/1471-2393-13-205.pdf [Accessed January 29, 2015].
32. Bell, J., 2005. *Doing Your Research Project* 4th ed., Buckingham: Open University Press.
33. Benzing, C., Chu, H. M., and Bove, R., 2005. The motivation, problems, and perceived success of entrepreneurs in Romania. Journal of the Academy of Business Administration. 10 (1/2). PP.73-88.
34. Berkun, S., 2013. The best definition of Innovation |. Available at: http://scottberkun.com/2013/the-best-definition-of-innovation/ [Accessed April 13, 2015].
35. Berrio, A.A., 2003. An Organizational Culture Assessment Using the Competing Values Framework: A Profile of Ohio State University Extension. *Journal Of Extension*, 41(2).
36. Beshay, M., 2008. Dimensions of Culture : A Project Perspective. , 5, pp.82–88.

37. Bhaskar, R., 1989. *Reclaiming Reality: A Critical Introduction to Contemporary Philosophy*, London: Verso.
38. Bichindaritz, I., Vaidya, S., Jain, L. & Jain, A., 2010. Computational Intelligence in Healthcare 4: Advanced Methodologies, Berlin Heidelberg: Springer Science & Business Media.
39. BIS, 2013. *SMEs: The Key Enablers of Business Success and the Economic Rationale for Government Intervention*, London: Department for Business, Innovation and Skills. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/266304/bis-13-1320-smes-key-enablers-of-business-success.pdf [Accessed March 3, 2015].
40. Blaikie, N., 2009. *Designing Social Research*, Polity.
41. Bless, C., Higson-Smith, C. & Kagee, A., 2006. *Fundamentals of Social Research Methods*, Juta and Company Ltd.
42. Blumberg, B., Cooper, D.R. & Schindler, P.S., 2008. *Business Research Methods*. (internati., Maidenhead: McGraw-Hill Education.
43. Boak, G., 2007. ORGANISATIONAL CULTURES.
44. Bodine, C., 2003. What is assistive technology? EP Magazine. PP. 32-38.
45. Bollen, K.A., 1989. *Structural Equations with Latent Variables.*, John Wiley & Sons, Inc. New York.
46. Bowyer, J. & Martinell, S., 2004. *Organisational Management T-kit*, Strasbourg: Council of Europe.
47. Brooksbank, R., 2007. Ways That High-Performing UK Manufacturers Build A Marketing-Led Company Culture. *Innovative Marketing*, 3, pp.93–101. Available at: http://marketing.conference-services.net/resources/327/2958/pdf/AM2012_0226_paper.pdf [Accessed February 2, 2015].
48. Brown, A.D., 1998. *Organisational Culture*, London: Financial Times. Available at: https://books.google.com/books?id=IvfFQgAACAAJ&pgis=1 [Accessed January 22, 2015].

49. Brown, E.M., 2007. *An Examination of the Link Between Organizational Culture and Performance: A Study of Three County Public Health Departments*, Michigan: ProQuest LLC.
50. Brown, T.E. & Ulijn, J.M., 2004. *Innovation, Entrepreneurship and Culture: The Interaction Between Technology, Progress and Economic Growth*, Massachusetts: Edward Elgar Publishing. Available at: https://books.google.com/books?id=nLvjQkBajocC&pgis=1 [Accessed April 12, 2015].
51. Bryman, A., 1988. *Quantity and Quality in Social Research*, London: Unwin Hyman.
52. Bryman, A., 1989. *Research Methods and Organisation Studies*, London: Unwin Hyman.
53. Burchell, N., & Kolb, D. (2006). Stability and change for sustainability. *Business Review*, 8(2), 33–41.
54. Büschgens, T., Bausch, A. & Balkin, D.B., 2013. Organizational Culture and Innovation: A Meta-Analytic Review. *Journal of Product Innovation Management*, 30(4), pp.763–781. Available at: http://doi.wiley.com/10.1111/jpim.12021 [Accessed August 18, 2014].
55. Butch, S., 2008. *A Study of Organizational Culture in Campus Recreation: A Competing Values Approach*, Michigan: ProQuest.
56. Cameron, D., 2009. Unravelling the complexity of organizational and occupational culture through an exploration of eight cultural schools: a case study of chefs working in luxury hotels and restaurants. In *18th CHME Annual Hospitality Research Conference*. Brighton. Available at: http://eprints.hud.ac.uk/8523/1/DSC_-_123_0_art_0_kmv7sf_-_CHME_Univeristy_of_Brighton_-_v2.pdf [Accessed January 29, 2015].
57. Cameron, K. et al., 2006a. *Competing Values Leadership: Creating Value in Organizations*, Massachusetts: Edward Elgar Publishing. Available at: https://books.google.com/books?id=1jOPVVAFNeEC&pgis=1 [Accessed February 2, 2015].
58. Cameron, K., 2011. *An Introduction to the Competing Values Framework*, New York.

59. Cameron, K.S., 2006b. *Competing Values Leadership: Creating Value in Organizations*, Massachusetts: Edward Elgar Publishing.
60. Cameron, K.S. & Quinn, R.E., 1999. *DIAGNOSING AND CHANGING ORGANIZATIONAL CULTURE based on The Competing Values Framework*, Upper Saddle River: Prentice Hall Series in Organizational Development. Available at: http://fbemoodle.emu.edu.tr/pluginfile.php/42586/mod_resource/content/1/CULTURE BOOK-CHAPTER 1.pdf [Accessed February 2, 2015].
61. Cameron, K.S. & Quinn, R.E., 2011. *Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework*, New Jersey: John Wiley & Sons. Available at: https://books.google.com/books?id=65xS_eRwC_gC&pgis=1 [Accessed February 2, 2015].
62. Camisón, C. & Monfort-Mir, V.M., 2012. Measuring innovation in tourism from the Schumpeterian and the dynamic-capabilities perspectives. *Tourism Management*, 33(4), pp.776–789. Available at: http://linkinghub.elsevier.com/retrieve/pii/S0261517711001816 [Accessed September 3, 2014].
63. Caputo, A.C. et al., 2002. A methodological framework for innovation transfer to SMEs. *Industrial Management & Data Systems*, 102(5), pp.271–283. Available at: http://www.emeraldinsight.com/doi/abs/10.1108/02635570210428302 [Accessed April 16, 2015].
64. Carmen, C. & María José, G., 2008. The role of technological and organizational innovation in the relation between market orientation and performance in cultural organizations. *European Journal of Innovation Management*, 11(3), pp.413–434. Available at: http://www.emeraldinsight.com/doi/abs/10.1108/14601060810889035 [Accessed April 15, 2015].
65. Carmona-Lavado, A., Cuevas-Rodríguez, G. & Cabello-Medina, C., 2010. Social and organizational capital: Building the context for innovation. *Industrial Marketing Management*, 39(4), pp.681–690. Available at: http://linkinghub.elsevier.com/retrieve/pii/S0019850109001679 [Accessed January 6, 2015].

66. Carter, S., & Jones-Evans. (2000). *Enterprise and Small Business – Principles, Practice and Policy*. Harlow: FT Prentice Hall.
67. Chowdhury, D.D., 2009. *Structured Approach to Improve Passive Aggressive Organizational Behavior: an Empirical Research*, Liverpool: Dhiman Deb Chowdhury. Available at: https://books.google.com/books?id=L28h-OPPl1sC&pgis=1 [Accessed January 29, 2015].
68. Chang, F.S. & Wiebe, H.A., 1996. The ideal culture profile for total quality management: a competing values perspective. *Engineering Management Journal*, 8(2).
69. Clark, M. & Goodwin, N., 2010. Sustaining innovation in telehealth and telecare - WSDAN briefing paper. , pp.1–35. Available at: wsdnetwork@kingsfund.org.uk.
70. Clemson, B., 2014. *Sweet Success*, Bloomington: Author House. Available at: http://books.google.com/books?id=nALoAgAAQBAJ&pgis=1 [Accessed September 13, 2014].
71. Cochran, W.G., 1963. *Sampling Techniques*, John Wiley & Sons, Inc. New York. Available at: http://cs.fit.edu/~jpmcgee/classes/CSE5800/SamplingTechniques.pdf.
72. Collis, J. & Hussey, R., 2003. *Business Research: A Practical Guide for Undergraduate and Postgraduate Students* 2nd ed., Basingstoke: Macmillan Publishers Ltd.
73. Converse, J.M. & Presser, S., 1986. *Survey Questions: Handcrafting the Standardized Questionnaire, Issue 63*, SAGE.
74. Cook, T.D. & Campbell, D.T., 1979. *Quasi-Experimentation: Design & Analysis Issues for Field Settings.*, Boston: Houghton Muffin Company.
75. Cooper, D.R. & Schindler, P.S., 2008. *Business Research Methods* 10th ed., Boston, MA and Burr Ridge, IL: McGraw-Hill.
76. Cooke, R. A., & Rousseau, D. M. (1988). *Behavioral Norms and Expectations*. *Group & organisational Studies* (Vol. 13, pp. 245–273). London: SAGE Publication.
77. Country Financial Group. (2014). Over a Third of UK SMEs Ignoring Overseas Opportunities. Retrieved October 15, 2015, from http://countyfinancegroup.co.uk/third-uk-smes-ignoring-overseas-opportunities/

78. Counsel, T.S. & Association, C.B., 2009. *Small and Medium Sized Enterprises*, Brussels.
79. Cronbach, L.J. & Gleser, G.C., 1957. *Psychological tests and personnel decisions.*, Urbana: University of Illinois Press.
80. Crossan, M.M. & Apaydin, M., 2010. A Multi-Dimensional Framework of Organizational Innovation: A Systematic Review of the Literature. *Journal of Management Studies*, 47(6), pp.1154–1191. Available at: http://iic.wiki.fgv.br/file/view/A+Multi-Dimensional+Framework+of+Organizational.pdf [Accessed November 9, 2014].
81. Cruz-Cunha, M.M. & Varajao, J., 2010. *E-business Managerial Aspects, Solutions and Case Studies*, New York: IGI Global.
82. Cruickshank, J., 2012. *from experience at the US Veterans Health Administration ?*, London.
83. Cura-B, 2014. Self Evaluation Report. Available at: http://www.cura-b.eu/sites/all/themes/curab/reports/CURA-B%20Self%20Eval%20Chs%201-5%20Final.pdf [Accessed Sept 13, 2014]
84. Dadzie, C., Winston, E. & Dadzie, K., 2012. Organisational Culture, Competitive Strategy and Performance in Ghana. *Journal of African Business*, 13(3), pp.172–182.
85. Damanpour, F., Walker, R.M. & Avellaneda, C.N., 2009. Combinative Effects of Innovation Types and Organizational Performance: A Longitudinal Study of Service Organizations. *Journal of Management Studies*, 46(4), pp.650–675. Available at: http://doi.wiley.com/10.1111/j.1467-6486.2008.00814.x [Accessed November 19, 2014].
86. Daniel, J., 2011. *Sampling Essentials: Practical Guidelines for Making Sampling Choices*, SAGE.
87. Darroch, J., 2005. Knowledge management, innovation and firm performance. *Journal of Knowledge Management*, 9(3), pp.101–115. Available at: http://www.emeraldinsight.com/doi/abs/10.1108/13673270510602809 [Accessed October 22, 2014].
88. Darkins, A. and Cary, M., 2000. Telemedicine and Telehealth: Principles, Policies, Performance, and Pitfalls. New York: Springer Publishing Company.

89. Dauber, D., Fink, G. & Yolles, M., 2012. A Configuration Model of Organizational Culture. *SAGE Open*, 2(1), p.2158244012441482–. Available at: http://sgo.sagepub.com/content/2/1/2158244012441482 [Accessed October 31, 2014].
90. Dauber, D., Fink, G. & Yolles, M., 2010. A generic theory of organizational culture. *Southern Management Association …*, (1985), pp.28–33.
91. Davidson, G., COETZEE, M. & VISSER, D., 2007. Organisational culture and financial performance in a South African investment bank. *SA Journal of Industrial …*, 33(1), pp.38–48. Available at: http://reference.sabinet.co.za/sa_epublication_article/psyc_v33_n1_a5 [Accessed April 17, 2015].
92. Dellana, S.A. & Hause, R.D., 1999. Toward defining the quality culture. *Engineering Management Journal*,, 11(2), pp.11–15.
93. Deloitte, 2014. 2014 Global health care outlook: Shared challenges, shared opportunities. Available at: https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Life-Sciences-Health-Care/dttl-lshc-2014-global-health-care-sector-report.pdf [Accessed Sept 12, 2014]
94. Deloitte, 2012. *Primary care : Working differently Telecare and telehealth – a game changer for health and social care*, London. Available at: http://www.deloitte.com/assets/Dcom-Angola/Local Assets/Documents/uk-ls-telehealth-telecare.pdf.
95. Demirbag, M. et al., 2006. An analysis of the relationship between TQM implementation and organizational performance P. H. Ketikidis, ed. *Journal of Manufacturing Technology Management*, 17(6), pp.829–847. Available at: http://www.emeraldinsight.com/doi/abs/10.1108/17410380610678828 [Accessed April 13, 2015].
96. Denscombe, M., 2007. *The Good Research Guide* 3rd ed., Buckingham: Open University Press.
97. Denison, 2011. Denison Overview: Introduction to the Denison Model. *Denison Consulting*, 1(4), pp.1–4.

98. Denison, D. et al., 2012. *Leading Culture Change in Global Organizations: Aligning Culture and Strategy*, New Jearsy: John Wiley & Sons.

99. Denison, D.R., 1996. WHAT IS THE DIFFERENCE BETWEEN ORGANIZATIONAL CULTURE AND ORGANIZATIONAL CLIMATE? A NATIVE'S POINT OF VIEW ON A DECADE OF PARADIGM WARS. *Academy of Management Review*, 21(3), pp.619–654. Available at: http://amr.aom.org/content/21/3/619.full [Accessed January 29, 2015].

100. Denison Publishing, 2009. *Getting Started with Your Denison Organizational Culture Survey Results*, Toronto: Denison Publisher.

101. Department of Business Skill and Innovation. (2014). *Business Population Estimates For The Uk And Regions 2014*. Sheffield.

102. Deshpande, R. & Farley, J.U., 1993. Corporate culture, customer orientation, and innovativeness in Japanese firms: a quadrad analysis. *Journal of Marketing*, 57(1), pp.23–7.

103. Deshpandé, R. & Farley, J.U., 2004. Organizational culture, market orientation, innovativeness, and firm performance: an international research odyssey. *International Journal of Research in Marketing*, 21(1), pp.3–22. Available at: http://linkinghub.elsevier.com/retrieve/pii/S0167811603000612 [Accessed September 6, 2014].

104. Desson, K. & Clouthier, J., 2010. Organizational Culture – Why Does It Matter? , pp.1–9.

105. Dillman, D.A., 2007. *Mail and Internet surveys--The tailored design method.* 2nd ed., Hoboken, NJ: John Wiley & Sons, Inc.

106. Dodds, A.E., Lawrence, J.A. & Guiton, P., 1994. University students' perceptions of influences on external study. *Distance Education*, 5(2), pp.174–185.

107. Doughty, K. & Williams, G., 2001. Practical solutions for the integration of community alarms, assistive technologies and telecare. *Quality in Ageing and Older Adults*, 2(1), pp.31–47. Available at: http://www.emeraldinsight.com/doi/pdfplus/10.1108/14717794200100006 [Accessed September 12, 2014].

108. Doughty et al, 2007. Telecare, telehealth and assistive technologies- do we know what we're talking about? Journal of Assistive Technologies. 1 (2). PP. 6-21.

109. Drever, E., 2003. *Using Semi-structured Interviews in Small-scale Research: A Teacher's Guide*, Scottish Council for Research in Education.

110. Driscoll, D.L., 2011. Introduction to Primary Research: Observations, Surveys, and Interviews. In *Writing Spaces: Readings on Writing*. Library of Congress. Available at: http://www.parlorpress.com/pdf/driscoll--introduction-to-primary-research.pdf.

111. Drost, E.A., 2011. Validity and Reliability in Social Science Research. *Education Research and Perspectives*, 38(1).

112. Duréndez, A. & Garcia, D., 2008. INNOVATIVE CULTURE, MANAGEMENT CONTROL SYSTEMS AND PERFORMANCE IN YOUNG SMEs. *Doctoral Track and Conference ENTREPRENEURSHIP, CULTURE, FINANCE AND ECONOMIC DEVELOPMENT*. Available at: http://www.unicaen.fr/colloques/Entrepreneurship_Conference_2008/Innovative_culture_management_control_systems_and_performance_in_young_smes.pdf [Accessed January 31, 2015].

113. Duygulu, E. & Özeren, E., 2009. The effects of leadership styles and organizational culture on firm's innovativeness. *African Journal of Business Management*, 3(9), pp.475–485. Available at: http://www.academicjournals.org/article/article1380553644_Duygulu and Ozeren.pdf [Accessed April 16, 2015].

114. Easterby-Smith, M. et al., 2008. *Management Research* 3rd ed., London: SAGE.

115. EC Martins, F.T., 2003. Building organisational culture that stimulates creativity and innovation. *European Journal of Innovation Management*, Vol. 6(Iss: 1,), p.pp.64 – 74.

116. Eden, C. & Huxham, C., 1996. Action research for management research. *British Journal of Management*, 7(1), pp.75–86.

117. EIM Business Policy, 2009. *ERIM Report Series Research in Management*, Rotterdam.

118. Ellis, C. & Tailor, D., 2011. *The role of entrepreneurs and SMEs in driving the recovery*, London: BVCA. Available at: http://www.bvca.co.uk/Portals/0/library/Files/News/2011/2011_0012_sme_entrepreneurs_june.pdf [Accessed March 3, 2015].

119. Elliott, D. & Stern, J.E., 1997. *Research ethics: A reader.*, UPNE.

120. Erez, M. & Gati, E., 2004. A Dynamic, Multi-Level Model of Culture: From the Micro Level of the Individual to the Macro Level of a Global Culture. *APPLIED PSYCHOLOGY: AN INTERNATIONAL REVIEW*, 53(4), pp.583–598. Available at: http://ie.technion.ac.il/~merez/papers/change_paper_APIR.pdf [Accessed September 18, 2014].

121. Erez, M. & Gati, E., 2004. A Dynamic, Multi-Level Model of Culture: From the Micro Level of the Individual to the Macro Level of a Global Culture. *Applied Psychology*, 53(4), pp.583–598. Available at: http://doi.wiley.com/10.1111/j.1464-0597.2004.00190.x [Accessed January 22, 2015].

122. European Commission (EC), 2007. Supporting the Internationalisation of SMEs', final report of the Expert Group, DG Enterprise and Industry, Brussels.

123. European commission. Available at: http://ec.europa.eu/index_en.htm [Accessed July 7, 2015a].

124. European Commission, 2005. *The new SME definition User guide and model declaration*, London. Available at: http://ec.europa.eu/enterprise/policies/sme/files/sme_definition/sme_user_guide_en.pdf [Accessed May 20, 2014].

125. Evenstad, L., 2013. SMEs key to redefining 3millionlives. *digitalhealth.net*. Available at: http://www.digitalhealth.net/news/ehi/8996/smes-key-to-redefining-3millionlives/ [Accessed July 7, 2015].

126. Falkenreck, C., 2009. *Reputation Transfer to Enter New B-to-B Markets: Measuring and Modelling Approaches*, New York: Springer Science & Business Media.

127. Filstead, W.J., 1970. *Qualitative Methodology*, Chicago: Markham.

128. Fey, C.F. & Denison, D.R., 2003. *Organizational Culture and Effectiveness: Can American Theory Be Applied in Russia?*, Michigan. Available at: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.202.5968&rep=rep1&type=pdf [Accessed January 29, 2015].

129. Fels, I. D., and Gredeon, S. A., 2011. Understanding motivations of entrepreneurs in the assistive technology market. Technology and Disability. 23. PP. 53-64.

130. Fink, G., Dauber, D. & Yolles, M., 2010. ‘Understanding organisational culture as a trait theory. In *“Understanding organisational culture as a trait theory” for IACCM 2010 at UCLAN, Preston, UK*. Preston.

131. Fischer, E. & Reuber, R., 2000. *Industrial Clusters and SME Promotion in Developing Countries*, London: Commonwealth Secretariat. Available at: http://books.google.com/books?id=sGliMcf3KPcC&pgis=1 [Accessed May 20, 2014].

132. Flamholtz, E. & Randle, Y., 2011. *Corporate Culture: The Ultimate Strategic Asset*, Stanford: Stanford University Press. Available at: https://books.google.com/books?id=PBh45Euvp9UC&pgis=1 [Accessed February 6, 2015].

133. Foddy, W., 1994. *Constructing Questions for Interviews and Questionnaires*, Cambridge: Cambridge University Press.

134. Foley, P., and Green, H., 1989. Small business success. London: Chapman.

135. Fowler, F.J., 2009. *Survey Research Methods*, SAGE Publications Ltd.

136. Fricker, J.R.D. & Schonlau, M., 2002. Advantages and Disadvantages of Internet Research Surveys: Evidence from the Literature. *Field Methods*, 14(4), pp.347–367.

137. Gall, M., Borg, W. & Gall, J., 1996. *Educational research: An introduction* 6th ed., New York: Longman.

138. Garg, I. & Walia, S., 2012. Micro, Small and Medium Enterprises (MSMEs) in Post Reform India: Status & Performance. *International Journal of Latest Trends in Engineering and Technology (IJLTET)*, 1(3), pp.134–141.

139. Gaur, A.S. & Gaur, S.S., 2006. *Statistical Methods for Practice and Research: A Guide to Data Analysis Using SPSS*, Response Books, Sage Publications India, New Delhi. Available at: https://books.google.co.in/books?id=wuH0Ik9zeYoC&dq=Gaur,+A.+and+Gaur,+S.+2006.+Statistical+Methods+for+Practice+and+Research+pdf&hl=en&sa=X&ei=EevkVIrSMNOLuwSmvoDwBA&ved=0CBwQ6AEwAA.

140. Gagliardi, P.M.D., 2013. *Annual Report on European SMEs 2013 / 2014 – A Partial and Fragile Recovery Final Report -July 2014 SME Performance Review 2013 / 2014*, Brussels.

141. Germain, R. & Spears, N., 1999. Quality management and its relationship with organizational context and design. *International Journal of Quality & Reliability Management*, 16(4)

142. Gengatharen, D.E. & Standing, C., 2005. A framework to assess the factors affecting success or failure of the implementation of government-supported regional e-marketplaces for SMEs. *European Journal of Information Systems*, 14(4), pp.417–433. Available at: http://www.palgrave-journals.com/ejis/journal/v14/n4/abs/3000551a.html [Accessed September 8, 2014].

143. Ghauri, P. & Grønhaug, K., 2005. *Research Methods in Business Studies: A Practical Guide* 3rd ed., Harlow: Financial Times Prentice Hall.

144. Ghosh, B.C., Liang, W. T., Meng, T. T., and Chan, B., 2001. The key success factors, distinctive capabilities, and strategic thrusts of top SMEs in Singapore. Journal of Business Research. 51. PP. 209-221.

145. Gibson, T. & Vaart, H.J. van der, 2008. *Defining SMEs: A Less Imperfect Way of Defining Small and Medium Enterprises in Developing Countries*, Washington D.C. Available at: http://www.brookings.edu/~/media/research/files/papers/2008/9/development gibson/09_development_gibson.pdf [Accessed May 20, 2014].

146. Ginevičius, R. & Vaitkūnaite, V., 2006. Analysis of organizational culture dimensions impacting performance. *Journal of Business Economics and Management*, 7(4), pp.201–211. Available at: http://www.tandfonline.com/doi/abs/10.1080/16111699.2006.9636141.

147. Gill, J. & Johnson, P., 2002. *Research Methods for Managers* 3rd ed., London: SAGE.

148. G, J.., 1990. Mannaging Strategic Action: The role of Symbolic action. *British Journal of Management*, 1, pp.183–200.

149. Glaser, B. & Strauss, A., 1967. *The Discovery of Grounded Theory*, Chicago: IL: Aldine.

150. Goulding, C., 2002. *Grounded Theory: A Practical Guide for Management. Business and Market Researchers.*, London: SAGE.

151. Goupy, J.L., 1993. *Methods for Experimental Design: Principles and Applications for Physicists and Chemists*, Elsevier.

152. GovernmentofUk, 2013. Department of Health. *Department of Health*. Available at: https://www.gov.uk/government/organisations/department-of-health [Accessed July 7, 2015].

153. Graham, J., 2013. Top Health Trend For 2014: Telehealth To Grow Over 50%. What Role For Regulation? *Forbes*. Available at: http://www.forbes.com/sites/theapothecary/2013/12/28/top-health-trend-for-2014-telehealth-to-grow-over-50-what-role-for-regulation/ [Accessed September 12, 2014].

154. Gray, D.E., Saunders, M.N. & Goregaokar, H., 2012. *Success in challenging times: Key lessons for UK SMEs*, Surrey: University of Surrey. Available at: http://www.surrey.ac.uk/sbs/files/Success_in_Challenging_Times_Report .pdf [Accessed March 3, 2015].

155. Groves, R.M. et al., 2011. *Survey Methodology*, John Wiley & Sons.

156. Gustafson, Hawkins, Boberg, E., & Owens, F. (2001). ten years of research and development in consumer health informatics for broad populations, including the underserved. *International Journal of Medical Information*, 169–177.

157. Halim, H.A. et al., 2014. The Growth of Innovative Performance among SMEs: Leveraging on Organisational Culture and Innovative Human Capital. *Journal of Small Business and Entrepreneurship Development*, 2(1), pp.107–125. Available at: http://aripd.org/journals/jsbed/Vol_2_No_1_March_2014/6.pdf [Accessed January 30, 2015].

158. Hakim, C., 2000. *Research Design: Successful Designs for Social and Economic Research* 2nd ed., London: Routledge.

159. Hakim, C., 1982. *Secondary Analysis in Social Research*, London: Allen & Unwin.

160. Hammer, A., 2010. Introduction. *Small and Medium-Sized Enterprises: Overview of Participation in U.S. Exports*, (332), pp.1–6. Available at: http://www.usitc.gov/publications/332/pub4125.pdf.

161. Hann, A. (2012). *Employment relations in SMEs: Day-to-day advice-seeking and the role of intermediaries.* London.

162. Hansen, J.C., 1999. *Assisted Living: Quality-Of-Care and Consumer Protection Issues in Four States*, Darby: DIANE Publishing. Available at: http://books.google.com/books?id=BobJc0Jl7YoC&pgis=1 [Accessed September 12, 2014].

163. Hassan, M. ul et al., 2012. Interrelations between Organizational Culture, Innovation and Employee Performance: Evidence from Banking Sector of Pakistan. *Pakistan Journal of Social Sciences*, 32(2), pp.339–355. Available at: http://www.bzu.edu.pk/PJSS/Vol32No22012/Final_PJSS-32-2-05.pdf [Accessed April 15, 2015].

164. Hatch, M. & Schultz, M., 1997. Relations between organizational culture, identity and image J. M. T. Balmer, ed. *European Journal of Marketing*, 31(5/6), pp.356–365. Available at: http://www.emeraldinsight.com/doi/abs/10.1108/eb060636 [Accessed January 13, 2015].

165. Hatch, M.J., 1993. THE DYNAMICS OF ORGANIZATIONAL CULTURE. *Academy of Management Review*, 18(4), pp.657–693. Available at: http://amr.aom.org/content/18/4/657.full [Accessed January 30, 2015].

166. Hedrick, T.E., Bickmann, L. & Rog, D.J., 1993. *Applied Research Design: A practical guide*, Newbury Park, CA: SAGE.

167. Henry, G.T., 1990. *Practical Sampling.*, London: SAGE Publications Ltd.

168. Heron, J., 1996. *Co-operative Inquiry: Research into the Human Condition*, London: SAGE.

169. Herzog, P., 2011. *Open and Closed Innovation: Different Cultures for Different Strategies* 2nd ed., Heidelberg: Springer Science & Business Media. Available at: https://books.google.com/books?id=fzzinmWAZuIC&pgis=1 [Accessed April 12, 2015].

170. Hill, M.R., 1993. *Archival strategies and techniques*, SAGE.

171. Hughes, J. & Sharrock, W., 1997. *The Philosophy of Social Research.*, New York: Longman.

172. HIMSS, 2013. 2013 European Telemedicine Conference. Available at: http://www.ehealthnews.eu/events/3588-2013-european-telemedicine-conference [Accessed Sept 12, 2014]

173. Hoffmann, W.H. & Schlosser, R., 2001. Success Factors of Strategic Alliances in Small and Medium-sized Enterprises—An Empirical Survey. *Long Range Planning*, 34(3), pp.357–381. Available at: http://www.sciencedirect.com/science/article/pii/S0024630101000413 [Accessed September 12, 2014].

174. Hooijberg, R. & Denison, D., 2012. LEADING CULTURE CHANGE IN GLOBAL ORGANIZATIONS.

175. Hu, F., 2013. *Telehealthcare Computing and Engineering: Principles and Design*, Boca Raton: CRC Press. Available at: http://books.google.com/books?id=bal7AAAAQBAJ&pgis=1 [Accessed September 12, 2014].

176. Huang, X., Soutar, G.N. & Brown, A., 2004. Measuring new product success: an empirical investigation of Australian SMEs. *Industrial Marketing Management*, 33(2), pp.117–123. Available at: http://www.sciencedirect.com/science/article/pii/S0019850103000348 [Accessed September 3, 2014].

177. Hudson, M., Smart, A. & Bourne, M., 2001. Theory and practice in SME performance measurement systems. *International Journal of Operations & Production Management*, 21(8), pp.1096–1115. Available at: http://www.emeraldinsight.com/doi/abs/10.1108/EUM0000000005587.

178. Ibeh, K., 2000. Internationalisation and the small firm. Harlow: Pearson.

179. IFAC. 2010. The Role of Small And Medium Practices in Providing Business Support to Small-And Medium-Sized Enterprises. Information Paper. Small and Medium Practices Committee International Federation of Accountants, New York, USA.

180. Ihua, U., 2009. SMEs key failure-factors: A comparison between the United Kingdom and Nigeria. *journal of social science*, 18, pp.199–207.

181. ILO, 2000. Micro and Small Enterprises. *International Labour Organisation*.

182. Imran, A., Nisar, Q.A. & Ashraf, S., 2014. Exploring Relationship among Organizational Learning Practices, Innovativeness and non-financial performance: A descriptive study on NGOs Sector. *International Journal of Academic Research in Business and Social Sciences*, 4(10), pp.193–209. Available at: http://hrmars.com/hrmars_papers/Exploring_Relationship_among_Organizational_Learning_Practices,_Innovativeness_and_non-financial_performance_A_descriptive_study_on_NGOs_Sector.pdf [Accessed April 30, 2015].

183. Institute of Business Ethics, 2007. *Business Ethics for SMEs*, London.

184. International Finance Corporation, 2012. *Micro, Small and Medium Enterprise Finance in India*, New Delhi.

185. Jacobs, R. et al., 2013. The relationship between organizational culture and performance in acute hospitals. *Social science & medicine (1982)*, 76(1), pp.115–25. Available at: http://www.ncbi.nlm.nih.gov/pubmed/23159305 [Accessed December 19, 2014].

186. James, P., and Thrope, N., 1994. Ancient inventions. New York: Random House.

187. Jenatabadi, H.S., 2014. Situation of Innovation in the Linkage between Culture and Performance: A Mediation Analysis of Asian Food Production Industry. *Contemporary Engineering Sciences*, 7(7), pp.323–331. Available at: http://www.m-hikari.com/ces/ces2014/ces5-8-2014/jenatabadiCES5-8-2014.pdf [Accessed April 15, 2015].

188. Jing, F., Avery, G.C. & Bergsteiner, H., 2011. Organizational climate and performance in retail pharmacies. *Leadership & Organization Development Journal*, 32(3), pp.224–242. Available at: http://www.emeraldinsight.com/doi/abs/10.1108/01437731111123898 [Accessed February 5, 2015].

189. Johnson, P. & Clark, M., 2006. *Business and Management Research Methodologies.*, London: SAGE.

190. Johnson, B. & Christensen, L., 2010. *Educational Research: Quantitative, Qualitative, and Mixed Approaches.*, SAGE Publications Ltd., London.

191. Johnson, R.B. & Christensen, L., 2013. *Educational Research: Quantitative, Qualitative, and Mixed Approaches*, SAGE.

192. Jones, R.A., Jimmieson, N.L. & Griffiths, A., 2005a. The Impact of Organizational Culture and Reshaping Capabilities on Change Implementation Success: The Mediating Role of Readiness for Change. *Journal of Management Studies*, 42(2), pp.361–386.

193. Jones, R.A., Jimmieson, N.L. & Griffiths, A., 2005b. The Impact of Organizational Culture and Reshaping Capabilities on Change Implementation Success: The Mediating Role of Readiness for Change. *Journal of Management Studies*, 42(2), pp.361–386. Available at: http://doi.wiley.com/10.1111/j.1467-6486.2005.00500.x [Accessed January 15, 2015].

194. Joshi, M.A., 2012. ORGANIZATIONAL CULTURE - A CRITICAL DRIVER FOR PERFORMANCE. *DMIETR JOURNAL ON MANAGEMENT OUTLOOK*, (ISSN 2249-9253(e-Journal)).

195. Kalpdan, R.. and N., 2001. *The strategy focused Organisational, How Balanced Scorecard Companies Thrive in the New Business Environment*, Boston: Harverd Business School Press.

196. KANE-URRABAZO, C., 2006. Management's role in shaping organizational culture. *Journal of Nursing Management*, 14, pp.188–194.

197. Kara, H., 2013. *Collecting primary data: A time-saving guide*, Policy Press.

198. Karim, M., 2010. Relationship between Corporate Culture and Organizational Effectivenss: A Case Study on Zain Telecommunication Limited. *SSRN Electronic Journal*. Available at: http://papers.ssrn.com/abstract=1624690 [Accessed February 4, 2015].

199. Karopka, T., Frank, P. & Blank, W., 2012. Innovation policies and macro-regional development in health care: Impact on Telemedicine and eHealth. Available at: http://www.scanbalt.org/files/graphics/ScanBalt member documents/For all members/Medetel2012_TK.pdf [Accessed February 2, 2015].

200. Katrin, O., 2011. *Organisation Culture - An insight in organisation culture of the Audi AG: What are the indicators and measures of the culture in a company?*, Verlag: GRIN Verlag. Available at: https://books.google.com/books?id=TaN0uQrBrT8C&pgis=1 [Accessed January 22, 2015].

201. KAUFMANN, H.R., TSANGAR, H. & VRONTIS, D., 2012. Innovativeness of European SMEs: Mission not yet accomplished 1. *Economic Research*, 25(2), pp.333–360.

202. Kember, D. & Dekkers, J., 1987. The role of study centres for academic support. *Distance Education*, 8(1), pp.4–17.

203. Kerlavaj & Temberger, M.I., 2007. Organizational learning culture – the missing link between business process change and organizational performance". *International Journal of Production Economics*, 106(2), pp.346–67.

204. Kervin, J.B., 1999. *Methods for Business Research* 2nd ed., New York: Harper Collins.

205. Khastar, H., Kalhorian, R., Khalouei, G. A., & Maleki, M. (2011). Levels of Analysis and Hofstede ' s Theory of Cultural Differences : The Place of Ethnic Culture in Organizations. *International Conference on Financial Management and Economics*, *11*, 320–323.

206. Kirsch, G.E. & Rohan, L., 2008. *Beyond the Archives: Research as a Lived Process*, SIU Press.

207. Kirca, A.H., Jayachandran, S. & Bearden, W.O., 2005. Market Orientation: A Meta-Analytic Review and Assessment of Its Antecedents and Impact on Performance. *Journal of Marketing*, 69(2), pp.24–41. Available at: http://journals.ama.org/doi/abs/10.1509/jmkg.69.2.24.60761 [Accessed April 15, 2015].

208. Kong, S.-H., 2003. A PORTRAIT OF CHINESE ENTERPRISE THROUGH THE LENS OF ORGANIZATIONAL CULTURE. *Asian Academy of Management Journal*, 8(1), pp.83–102. Available at: http://web.usm.my/aamj/8.1.2003/aamj 8-1-6.pdf [Accessed January 30, 2015].

209. Koch, S., 2006. Home telehealth-Current state and future trend. International Journal of Medical Informatics. 75. PP.565-576.

210. Koch, S., 2006. Home telehealth-Current state and future trend. International Journal of Medical Informatics. 75. pp.565-576.

211. KPMG. (2014). Export Week: 36% of UK small businesses shun overseas expansion. Retrieved October 15, 2015, from http://www.kpmg.com/uk/en/issuesandinsights/articlespublications/newsreleases/pages/export-week-36-of-uk-small-businesses-shun-overseas-expansion.aspx

212. Larsen, P., Lewis, A., Brown, R., and Tonge,R., 2006. Key features in the success of SMEs: a comparison of service and manufacturing. Journal of General Management. 31 (3). PP. 31-47.

213. Lau, C. & Ngo, H., 2004. The HR system, organizational culture, and product innovation. *International business review*, 13(6), pp.685–703. Available at: http://linkinghub.elsevier.com/retrieve/pii/S0969593104000794 [Accessed February 7, 2015].

214. Lau, C. & Ngo, H., 2004. The HR system, organizational culture, and product innovation. *International Business Review*, 13(6), pp.685–703. Available at:

http://www.sciencedirect.com/science/article/pii/S0969593104000794 [Accessed April 29, 2015].

215. Lazakidou, A.A. & Konstantinos M. Siassiakos, K.I., 2010. *Wireless Technologies for Ambient Assisted Living and Healthcare: Systems and Applications*, New York: IGI Global. Available at: http://books.google.com/books?id=WGG9zzehx-MC&pgis=1 [Accessed September 12, 2014].

216. Lee, R.M., 1993. *Doing Research on Sensitive Topic*, London: SAGE.

217. Lewin, K., 1946. Action Research and Minority Problems. *Journal of Social Issues*, 2(4), pp.34–46.

218. Lewin, D. & Adshead, S., 2010a. *Assisted living technologies for older and disabled people in 2030*, London. Available at: http://stakeholders.ofcom.org.uk/binaries/research/technology-research/Assisted.pdf.

219. Lewin, D. & Adshead, S., 2010b. Assisted living technologies for older and disabled people in 2030. *A final report to …*, 44(March). Available at: http://stakeholders.ofcom.org.uk/binaries/research/technology-research/Assisted.pdf.

220. Li, J. & Harrison, J.R., 2008. National Culture and the Composition and Leadership Structure of Boards of Directors. *The Authors Journal compilation*, 16(5), pp.375–385. Available at: http://www.bm.ust.hk/mgmt/staff/papers/JT/corg_697.pdf [Accessed September 18, 2014].

221. Liao, J., Welsch, H. & Stoica, M., 2003. Organizational Absorptive Capacity and Responsiveness: An Empirical Investigation of Growth-Oriented SMEs. *Entrepreneurship Theory and Practice*, 28(1), pp.63–85. Available at: http://doi.wiley.com/10.1111/1540-8520.00032 [Accessed April 16, 2015].

222. Liao, S.-H. et al., 2012. Relationships among organizational culture, knowledge acquisition, organizational learning, and organizational innovation in Taiwan's banking and insurance industries. *The International Journal of Human Resource Management*, 23(1), pp.52–70. Available at: http://www.tandfonline.com/doi/abs/10.1080/09585192.2011.599947.

223. Liddell, et al, 2008. Technology in the NHS: Transforming the patient's experience of care. *The King's Fund*. Available at: http://www.kingsfund.org.uk/ [Accessed July 7, 2015].

224. Lincoln, S., 2010. From the Individual to the World: How the Competing Values Framework Can Help Organizations Improve Global Strategic Performance. *Emerging Leadership Journeys*, 3(1), pp.3–9. Available at: http://www.regent.edu/acad/global/publications/elj/vol3iss1/Lincoln_ELJV3I1_pp3-9.pdf [Accessed February 2, 2015].

225. LIU, Y., 2013. Exploring the Impact of Organizational Culture on Paternalistic Leadership in Chinese SMEs. In *Proceedings of 3rd Asia-Pacific Business Research Conference*. Kuala Lumpur: 3rd Asia-Pacific Business Research Conference, pp. 1–21. Available at: http://www.wbiworldconpro.com/uploads/malaysia-conference-2013/management/457-Yu_Liu.pdf [Accessed February 2, 2015].

226. Liu, Y., 2013. Organizational Culture, Leadership Behaviors, and Employee Attitude in Chinese SMEs: Empirical Evidence. *China-USA Business Review*, 12(11), pp.1085–1095. Available at: http://www.davidpublishing.com/davidpublishing/upfile/1/15/2014/20140115839907 61.pdf [Accessed February 2, 2015].

227. Lockamy, A. & Douglas L., S., 2009. Telemedicine: a process enabler for enhanced healthcare delivery systems. *Business Process Management Journal*, 15(1), pp.5–19. Available at: http://www.emeraldinsight.com/doi/full/10.1108/14637150910931433 [Accessed September 12, 2014].

228. Lohr, S., 2009. *Sampling: Design and Analysis*, Cengage Learning.

229. Lok, P. & Crawford, J., 2004. The effect of organisational culture and leadership style on job satisfaction and organisational commitment. *Journal of Management Development*, 23(4), pp.321–338. Available at: http://www.emeraldinsight.com/doi/abs/10.1108/02621710410529785 [Accessed February 6, 2015].

230. Low, J. & Siesfeld, T., 1998. Measures that matter: Non-financial performance. *Strategy & Leadership*, 26(2), pp.24–38. Available at: http://www.emeraldinsight.com/doi/abs/10.1108/eb054615 [Accessed April 18, 2015].

231. Lunenburg, F.C., 2011. Organizational culture-performance relationships: Views of excellence and theory Z. *National Forum of Educational Administration and Supervision Journal*, 29(4), pp.1–10.

232. Lushai, G. & Cox, T., 2012. *Assisted Living Technology: A market and technology review*, Bristol. Available at: www.inets-sw.co.uk.

233. Lussier, R. N., 1995. A non-financial business success versus failure prediction model for young firms. Journal of Small Business Management. 33 (1). PP. 8-20.

234. Lussier, R. N., and Pfeifer, S., 2001. A cross-national prediction model for business success. Journal of Small Business Management. 39 (3). PP.228-239.

235. Lwamba, N.M., Bwisa, H. & Sakwa, M., 2013. Exploring Innovativeness Dimension of Corporate Entrepreneurship on Financial Performance of Manufacturing Firms in Kenya. *International Journal of Business and Social Science*, 4(17), pp.87–95. Available at: http://ijbssnet.com/journals/Vol_4_No_17_Special_Issue_December_2013/11.pdf [Accessed April 17, 2015].

236. Lynch, P., Walsh, M.M. & Harrington, D., 2010. Defining and Dimensionalizing Organizational Innovativeness Defining and Dimensionalizing.

237. Madu, B.C., 2011a. Organization culture as driver of competitive advantage. *Journal of Academic & Business Ethics*, 5, p.1.

238. Madu, B.C., 2011b. Organization culture as driver of competitive advantage. *Organization*, pp.1–9.

239. Mahrokian, S. et al., 2010. Corporate culture: a lasting competitiveadvantage. *Review Of Business Research*, 10(1).

240. Makhmudov, N., 2004. *Adoption Process and Impacts of Information and Communication Technologies in Small and Medium Size Enterprises in Central Asia: Evidence from Uzbekistan*, Gottingen: Cuvillier Verlag.

241. Management Journal. 43(2). PP. 24-32.

242. Mangal, S.K. & Mangal, S., 2013. *RESEARCH METHODOLOGY IN BEHAVIOURAL SCIENCES*, PHI learning pvt. ltd.

243. Maniatpouos, G. et al., 2008. Developing Telehealthcare Systems in Complex Multi-Agency Service Settings: The OLDES Project. In *The 8th European Conference on E-Government: Eceg 2008*. Academic Conferences Limited, p. 546. Available at: http://books.google.com/books?id=KjALtIPW14AC&pgis=1 [Accessed September 12, 2014].

244. Maraña, M., 2010. *Culture and Development: Evolution and Prospects*, Bilbao. Available at: http://www.unesco.or.kr/eng/front/programmes/links/6_CultureandDevelopment.pdf [Accessed September 18, 2014].

245. Marques, C. & Ferreira, J., 2009. SME innovative capacity, competitive advantage and performance in a'Traditional'industrial region of Portugal. *Journal of technology management & ...*, 4(4), pp.53–68. Available at: http://www.scielo.cl/scielo.php?pid=S0718-27242009000400005&script=sci_arttext&tlng=pt [Accessed April 14, 2015].

246. Martin, G. & Staines, H., 1994. Managerial Competences in Small Firms. *Journal of Management Development*, 13(7), pp.23–34. Available at: http://www.emeraldinsight.com/doi/abs/10.1108/02621719410063396 [Accessed January 31, 2015].

247. Matear, S. et al., 2002. How does market orientation contribute to service firm performance? *European Journal of Marketing*, 36(9/10), pp.1058–1075. Available at: http://www.emeraldinsight.com/doi/abs/10.1108/03090560210437334 [Accessed April 30, 2015].

248. Maxwell, J.A., 1996. *Qualitative Research Design: An Interactive Approach*, SAGE Publications Ltd.

249. Matsumoto, D., 2007. Culture, Context, and Behavior. *Journal of Personality*, 75(6), pp.1285–1320. Available at: http://davidmatsumoto.com/content/2007 Matsumoto JOP.pdf [Accessed January 22, 2015].

250. Mathew, P., 2010. Factors Affecting Business Success of Small and Medium Enterprises (SMEs). Asian Pacific Journal of Research in Business Management. 1 (2). Pp. 1-15.

251. McDermott, C.M. & Stock, G.N., 1999. Organizational culture and advanced manufacturing technology implementation. *Journal of Operations Management*, 17(5), pp.521–533.

252. McIntyre, R., 2001. *The Role of Small and Medium Enterprises in Transition: Growth and Entrepreneurship*, Helsinki.

253. McLean, L.D., 2005. Organizational Culture's Influence on Creativity and Innovation: A Review of the Literature and Implications for Human Resource

Development. *Advances in Developing Human Resources*, 7(2), pp.226–246. Available at: http://adh.sagepub.com/cgi/doi/10.1177/1523422305274528 [Accessed December 20, 2014].

254. McMillan, J.H. & Schumacher, S., 1993. *Research in Education: A Conceptual introduction* 3rd ed., Happer, Collins College Publishers.

255. McSweeney, B., 2002. Hofstede's model of national cultural differences and their consequences: A triumph of faith – a failure of analysis. *Human Relations*, 55(1), pp.89–118. Available at: http://www.uk.sagepub.com/managingandorganizations/downloads/Online articles/ch05/4 - McSweeney.pdf [Accessed September 18, 2014].

256. MEEHAN, B.P., GADIESH, O. & HORI, S., 2006. Culture as Competitive Advantage. , pp.55–61.

257. Milis, M., Michaelides, K., Kounoudes, A., Ansaloni, G., Atienza, D., Giroud, F., & Masson, F., 2012. IcyHeart: Highly integrated ultra-low-power SoC solution for unobtrusive and energy efficient wireless cardiac monitoring: Research project for the benefit of specific groups (FP7, Capacities). In Bioinformatics & Bioengineering (BIBE), 2012 IEEE 12th International Conferenc, pp.105-109. IEEE.

258. Miller, P.G., Strang, J. & Miller, P.M., 2010. *Addiction Research Methods*, John Wiley & Son, Inc.

259. Mitchell, V., 1996. Assessing the reliability and validity of questionnaires: an empirical example. *Journal of Applied Management Studies*, 5(2), pp.199–207.

260. Miskelly, G., 2001. Assistive technology in elderly care. British Geriatrics Society. 30. pp. 455-458.

261. Michelle Cini, 1995. Administrative Culture in the European Commission: the case of competition and environment. In *the European Community Studies Association (ECSA), Fourth Biennial International Conference*. Charleston: European Community Studies Association. Available at: http://aei.pitt.edu/6909/1/cini_michelle.pdf [Accessed January 29, 2015].

262. Miller, C.Z., 2008. *Formalization and Innovation: An Ethnographic Study of Process Formalization*, Ann Arbor: ProQuest. Available at: https://books.google.com/books?id=aPsMK2t1wcYC&pgis=1 [Accessed January 29, 2015].

263. Miner, J.B., 2005. *Organizational Behavior: From theory to practice. 4*, New York: M.E. Sharpe. Available at: https://books.google.com/books?id=VQnwRk7HTxAC&pgis=1 [Accessed January 30, 2015].

264. Mobbs, C.W., 2010. *Why is Innovation Important?*, Oxfordshire: Innovation for Growth Limited. Available at: http://www.innovationforgrowth.co.uk/whyisinnovationimportant.pdf [Accessed April 13, 2015].

265. Morris, T. & Wood, S., 1991. Testing the survey method: continuity and change in British industrial relations. *Work Employment and Society*, 5(2), pp.259–282.

266. Mubin, M. et al., 2014. Cultural Mapping and Its Ascertainment: A Case Study of PTCL. *European Journal of Business and Management*, 6(14), pp.83–94.

267. Müller-Falcke, D., 2002. Use and Impact of Information and Communication Technologies in Developing Countries' Small Businesses. *Development Economics and Policy*, 27.

268. Musante, L., 2001. Better Living Through Culture. *Echo Strategies*. Available at: http://wp.echostrategies.biz/wp-content/uploads/2011/07/Organizational-Culture-Financial-Performance-.pdf [Accessed February 3, 2015].

269. Mutschink, J.M., 2007. *Managers' National Culture and Its Impact on Response Styles in a Global Multinational Company*, Ann Arbor: ProQuest. Available at: http://books.google.com/books?id=o3FcjChezAcC&pgis=1 [Accessed September 18, 2014].

270. Nacinovic, I., Galetic, L. & Cavlek, N., 2010. Corporate Culture and Innovation : Implications for Reward Systems. *International Journal of Human and Social Sciences*, 5(1), pp.32–37.

271. Nall, M. & Aull, M., 2011. *The Influence of Personal Characteristics*, Lexington: UNIVERSITY OF KENTUCKY COLLEGE OF AGRICULTURE. Available at: http://www2.ca.uky.edu/agc/pubs/cld1/cld19/cld19.PDF [Accessed January 22, 2015].

272. Naranjo-Valencia, J.C., Jiménez-Jiménez, D. & Sanz-Valle, R., 2011a. Innovation or imitation? The role of organizational culture. *Management Decision*, 49(1), pp.55–

72. Available at: http://www.emeraldinsight.com/10.1108/00251741111094437 [Accessed July 11, 2014].

273. Naranjo-Valencia, J.C., Jiménez-Jiménez, D. & Sanz-Valle, R., 2011b. Innovation or imitation? The role of organizational culture. *Management Decision*, 49(1), pp.55–72. Available at: http://www.emeraldinsight.com/doi/abs/10.1108/00251741111094437 [Accessed July 11, 2014].

274. Neelankavil, J.P. & Rai, A., 2014. *Basics of International Business*, New York: Routledge.

275. Nehmer, J. et al., 2006. Living assistance systems. In *Proceeding of the 28th international conference on Software engineering - ICSE '06*. New York, New York, USA: ACM Press, p. 43. Available at: http://dl.acm.org/citation.cfm?id=1134285.1134293 [Accessed September 12, 2014].

276. Neuman, W.L., 2005. *Social Research Methods* 6th ed., London: Pearson.

277. Newman, I. & Benz, C.R., 1998. *Qualitative-quantitative Research Methodology: Exploring the Interactive Continuum*, SIU Press.

278. Ng, H.S. & Kee, D.M.H., 2013. Organisational Culture can be a Double-edged Sword for Firm Performance. *Research Journal of Business Management*, 7(41-52). Available at: http://www.scialert.net/fulltext/?doi=rjbm.2013.41.52&org=10 [Accessed February 2, 2015].

279. Noble, C.H., Sinha, R.K. & Kumar, A., 2002. Market Orientation and Alternative Strategic Orientations: A Longitudinal Assessment of Performance Implications. *Journal of Marketing*, 66(4), pp.25–39. Available at: http://journals.ama.org/doi/abs/10.1509/jmkg.66.4.25.18513 [Accessed January 30, 2015].

280. Nybakk, E., 2012. Learning orientation, innovativeness and financial performance in traditional manufacturing firms: a higher-order structural equation model. *International Journal of Innovation Management*, 16(5), pp.28–62. Available at: http://www.skogoglandskap.no/filearchive/learning_orientation_innovativeness_and_financial_performance_in_traditional_manufacturing_firms_2.pdf [Accessed April 17, 2015].

281. O'Donnell, O. & Boyle, R., 2008. *Understanding and managing organisational culture*, Dublin. Available at: https://saylor.longsight.com/handle/1/5600.

282. Oduntun, K.O., 2014. The role of SMEs in Economic Development: The Nigerian Case. In *international conference on Arts, Economics and Management*. UAE.

283. OECD, 2012. *THE FUTURE OF ECO-INNOVATION: The Role of Business Models in Green Transformation*, Copenhagen: OECD. Available at: http://www.oecd.org/innovation/inno/49537036.pdf [Accessed April 13, 2015].

284. OECD Working Party on SMEs and Entrepreneurship, 2009. *Top barriers and drivers to SME internationalisation*, Paris. Available at: http://strathprints.strath.ac.uk/15845/.

285. Office of National Statistic, 2010. National Population Projects. *Government of Uk*. Available at: http://www.ons.gov.uk/ons/index.html.

286. Office for National Statistics. (2012). *Population Ageing in the United Kingdom, its Constituent Countries and the European Union*. London.

287. Ogbonna, E. & Harris, L.C., 2000. Leadership style, organizational culture and performance: empirical evidence from UK companies. *International Journal of Human Resource Management*, 11(4), pp.766–788. Available at: https://www.hs-fulda.de/fileadmin/Fachbereich_SW/Downloads/Profs/Wolf/Studies/england_UK/uk_leadership_style.pdf [Accessed February 7, 2015].

288. Olori, W. & Mark, J., 2013. Organizational Culture and Corporate Innovation. *African Research Review*, 7(31), pp.49–65. Available at: http://www.ajol.info/index.php/afrrev/article/view/96672 [Accessed April 16, 2015].

289. Omar, S.A.L.& I., 2009. The Backgroud and Challanges Faced by the Small Medium Enterprises: A Human Resources Development Perspective. *Journal of business and management*, 4.

290. Organization Orientation Group, 2011. A CYBERNETIC MODEL OF ORGANIZATIONS CONNECTING ORGANIZATION AND CULTURE THEORY.

291. Oppenheim, A.N., 2000. *Questionnaire Design, Interviewing and Attitude Measurement*, London: Continuum International.

292. Osman, R. & Wagner, G.A., 1987. New Zealand management students‘ perceptions of communicationtechnologies in correspondents education. *Distance Education*, 8(1), pp.47–63.

293. Ouden, E. den, 2011. *Innovation Design: Creating Value for People, Organizations and Society*, London: Springer Science & Business Media. Available at: https://books.google.com/books?id=PzqUQi_VWe4C&pgis=1 [Accessed April 12, 2015].

294. P.Uma, D., 2013. Role of Smes in Economic Development of India. *Asia Pacific Journal of Marketing & Management Review*, 2(6), pp.120–126.

295. Pahl-Wostl, C. et al., 2008. The importance of social learning and culture for sustainable water management. *Ecological Economics*, 64(3), pp.484–495. Available at: http://www.sciencedirect.com/science/article/pii/S092180090700434X [Accessed November 26, 2014].

296. Parker, J.C. & Thorson, E., 2008. *Health Communication in the New Media Landscape*, New York: Springer Publishing Company. Available at: http://books.google.com/books?id=VkTgy3zr104C&pgis=1 [Accessed September 12, 2014].

297. Parker, M., 2000. *Organizational Culture and Identity: Unity and Division at Work*, London: SAGE Publications. Available at: https://books.google.com/books?id=Y98pmxr1wlsC&pgis=1 [Accessed January 22, 2015].

298. Parker, J., 2000. Structuration. Buckingham: Open University Press.

299. Parker, J., 2000. Structuration. Buckingham: Open University Press.

300. Patton, M.Q., 1990. *Qualitative evaluation and research methods* 2nd ed., Newbury Park, CA: SAGE.

301. Peel, D., 2006. An Analysis of the Impact of SME Organisational Culture on Coaching and Mentoring. *International Journal of Evidence Based Coaching and Mentoring*, 4(1), pp.9–19.

302. Penslar, R.L., 1995. *Research Ethics: Cases and Materials*, Indiana University Press.

303. Phipps, E.E. and J., 2013. *SMEs: The Key Enablers of Business Success and the Economic Rationale for Government Intervention*, London.

304. Pierce, J.G., 2010. *Is the Organizational Culture of the U.S. Army Congruent with the Professional Development of Its Senior Level Officer Corps?*, Pennsylvania: Strategic Studies Institute.

305. Prajogo, D.I., 2011. The relationship between multidimensional organizational culture and performance. *International Journal of Operations & Production Management*, 31(7), pp.712–735.

306. Prajogo, D.I. & McDermott, C.M., 2011. The relationship between multidimensional organizational culture and performance. *International Journal of Operations & Production Management*, 31(7), pp.712–735. Available at: http://www.emeraldinsight.com/doi/abs/10.1108/01443571111144823 [Accessed January 15, 2015].

307. Preda, O., 2013. HOFSTEDE'S DIMENSIONS IN PORTUGAL. *Romanian Economic and Business Review*, 7(4), pp.62–69.

308. Pullen, A. et al., 2012. SME Network Characteristics vs. Product Innovativeness: How to Achieve High Innovation Performance. *Creativity and Innovation Management*, 21(2), pp.130–146. Available at: http://doi.wiley.com/10.1111/j.1467-8691.2012.00638.x [Accessed April 13, 2015].

309. Pulli, P., Zheng, X., Antoniac, P., Hickey, S., Manninen, T., Martikainen, O., & Kuroda, T., 2007, June. Design and development of mobile services platform for senior citizens. In Proceedings of the 13th International Conference on Concurrent enterprising (ICE2007). France: Sofia Antipolis, pp. 4-6.

310. Punch, K.F., 2013. *Introduction to Social Research: Quantitative and Qualitative Approaches*, SAGE.

311. PwC, 2014. *A Perspective on Organizational Culture*, London: Pricewaterhouse Coopers. Available at: http://www.strategyand.pwc.com/media/file/Strategyand-Perspective-on-Organizational-Culture.pdf [Accessed January 23, 2015].

312. QUinn, R.E., 1988. *Beyond Rational Management: Mastering the Paradoxes and Competing Demands of High-performance*, San Francisco: Jossey-Bass.

313. Rai, R.K., 2011. Knowledge management and organizational culture: a theoretical integrative framework. *Journal of Knowledge Management*, 15(5), pp.779–801. Available at: http://www.emeraldinsight.com/doi/abs/10.1108/13673271111174320 [Accessed January 7, 2015].

314. Ramana, C.V., Aryasri, R., and Nagayya, D., 2008. “Entrepreneurial Success in SMEs based on Financial and Non-Financial Parameters,” Icfai Journal of Entrepreneurship Development. pp 32-48.

315. Ranganayakulu, K.C.S., 2005. *Organisational Behaviour*, New Delhi: Atlantic Publishers & Dist. Available at: https://books.google.com/books?id=dzUO6hO9rLYC&pgis=1 [Accessed February 6, 2015].

316. Rasheed, A., 2013. The Innovation Triangle--Defining a Culture of... - GE Ideas Lab. *Ideas Lab*. Available at: http://www.ideaslaboratory.com/post/93440859193/the-innovation-triangle-defining-a-culture-of-success [Accessed April 13, 2015].

317. Rashid, M.Z.A., Sambasivan, M. & Rahman, A.A., 2004. The influence of organizational culture on attitudes toward organizational change. *Leadership & Organization Development Journal*, 25(2), pp.161–179.

318. Rasmussen, S. (2013). *Organisational Culture in Innovative Small to Medium Sized Enterprises (SMEs)*. KTH Industrial Engineering and Management.

319. Ratam, D.A. & Mazzarol, T., 2004. A Model of Leadership, Strategy and Company Structure in Innovative Indonesian SME. In *Australia and New Zealand Academy of Management (ANZAM) Annual Conference*. Dunedin: Australia and New Zealand Academy of Management. Available at: http://www.cemi.com.au/sites/all/publications/ANZRATAMMAZZ.pdf [Accessed January 30, 2015].

320. Reeves, C.A. & Bednar, D.A., 1994. Defining quality: alternatives and implications. *Academy of Management Review*, 19(3), pp.419–45.

321. Reichman, C.S., 1962. *Use and Abuse of Statistics*, New York: Oxford University Press.

322. Remenyi, D. et al., 1998. *Doing Research in Business and Management: An Introduction to Process and Method*, London: SAGE.

323. Rhee, J., Park, T. & Lee, D.H., 2010. Drivers of innovativeness and performance for innovative SMEs in South Korea: Mediation of learning orientation. *Technovation*, 30(1), pp.65–75. Available at: http://www.sciencedirect.com/science/article/pii/S0166497209000625 [Accessed March 23, 2015].

324. Rhyne, L.C., Teagarden, M.B. & Panhuyzen, W. Van Den, 2002. Technology-based competitive strategies The relationship of cultural dimensions to new product innovation. *Journal of High Technology Management Research*, 13, pp.249–277.

325. Robson, C., 2002. *Real World Research. A Resource for Social Scientists and Practitioner Researches* 2nd ed., Blackwell Publishing: Oxford.

326. Rocker, C. & Ziefle, .Martina, 2012*E-health, Assistive Technologies and Applications for Assisted Living: Challenges and Solutions*, New York: Medical Information Science Reference. Available at: http://books.google.com/books?id=aqj1RfsK5GoC&pgis=1 [Accessed September 12, 2014].

327. Rogers, M., 1998. *The Definition and Measurement of Innovation*, Victoria. Available at: http://melbourneinstitute.com/downloads/working_paper_series/wp1998n10.pdf [Accessed April 12, 2015].

328. Rogers, R., 2001. *Handbook of Diagnostic and Structured Interviewing*, Guilford Press.

329. Rosenbusch, N., Brinckmann, J. & Bausch, A., 2011. Is innovation always beneficial? A meta-analysis of the relationship between innovation and performance in SMEs. *Journal of Business Venturing*, 26(4), pp.441–457. Available at: http://www.sciencedirect.com/science/article/pii/S0883902609001232 [Accessed July 10, 2014].

330. Rosenthal, R. & Rosnow, R.L., 1991. *Essentials of Behavioral Research: Methods and Data Analysis.* 2nd ed., McGraw-Hill.

331. RT (UK), 2013. UK healthcare on brink of collapse – NHS regulator. *Russia Today*. Available at: http://rt.com/news/uk-nhs-health-crisis-049/ [Accessed July 7, 2015].

332. Samantha, M. and, 2012. Stakeholders: essentially contested or just confused? *Journal of Business Ethics*, 108 (3), pp.285–298.

333. Saunders, M., Lewis, P. & Thornhill, A., 2009. *Research methods for business students* 5th ed., England: Pearson Education.

334. Saunders, M., Lewis, P. & Thornhill, A., 2007. *Research Methods for Business Students*, Pearson Education.

335. Savlovschi, L.I., 2011. The Role of SMEs in Modern Economy. *Economia, Seria Management*, 14(1).

336. Salau, C.O., Paul, O. & Olumuyiwa, F.O., 2014. Perceived Influence of Organizational Culture and Management Style on Employees Performance in Nigerian Banking Sectors. *European Journal of Business and Management*, 6(20), pp.62–71.

337. Salavou, H., 2002. Profitability in market-oriented SMEs: does product innovation matter? *European Journal of Innovation Management*, 5(3), pp.164–171. Available at: http://www.emeraldinsight.com/doi/abs/10.1108/14601060210436736 [Accessed April 16, 2015].

338. Salavou, H., Baltas, G. & Lioukas, S., 2004. Organisational innovation in SMEs. *European Journal of Marketing*, 38(9/10), pp.1091–1112. Available at: http://www.emeraldinsight.com/doi/abs/10.1108/03090560410548889 [Accessed April 16, 2015].

339. SBA, 2009. The Small Business Economy: A Report To The President, [online], Available at: http://archive.sba.gov/advo/research/sb_econ2009.pdf [Accessed September 11th 2014]

340. Schein, E., 1999. *Process Consultation Revisited: Building the Helping Relationship.*, MA: Addison-Wesley.

341. Schein, E., 1984. Coming to a New Awareness of Organisational Culture. *Sloan Management Review*, 25(2), pp.3–16. Available at: https://blog.itu.dk/SFOL-F2013/files/2013/03/culture_schein.pdf [Accessed January 30, 2015].

342. Schein, E., 2006. Defining Organizational Culture. Available at: http://www.carlsemmler.com/resources/Learner/5743/Schein PP.pdf [Accessed January 23, 2015].

343. Schein, E.H., 1990. Organizational Culture. *American Psychologist*, 45(2), pp.109–119. Available at: http://www.machon-adler.co.il/readers/reader56.pdf [Accessed January 23, 2015].

344. Schein, E.H., 2010. *Organizational Culture and Leadership* 4th ed., San Francisco: John Wiley & Sons. Available at: http://books.google.com/books?id=kZH6AwTwZV8C&pgis=1 [Accessed September 13, 2014].

345. Schein, E.H., 2004. *Organizational Culture and Leadership* 3rd ed., California: Jossey-Bass.

346. Schein, E.H., 2004. *Organisational Culture and leadership* 3rd ed., San Francisco: Jossey-Bass. Available at: http://www.untag-smd.ac.id/files/Perpustakaan_Digital_2/ORGANIZATIONAL CULTURE Organizational Culture and Leadership, 3rd Edition.pdf.

347. Schroeder, P.J., 2010. A Model for Assessing Organizational Culture in Intercollegiate Athletic Departments. *Journal of Issues in Intercollegiate Athletics*, 3, pp.98–118. Available at: http://csri-jiia.org/documents/puclications/research_articles/2010/JIIA_2010_3_6_98_118_ICA_culture_model.pdf [Accessed January 30, 2015].

348. Sekaran, U., 2003. *Research Methods for Business: A Skill-Building Approach* 4th ed., New York: Wiley.

349. Sempane, M.E., Rieger, H.S. & Roodt, G., 2002. JOB SATISFACTION IN RELATION TO ORGANISATIONAL CULTURE. *SA Journal of Industrial Psychology*, 28(2), pp.23–30.

350. Sharifirad, S.M. & Ataei, V., 2012. Organizational culture and innovation culture: exploring the relationships between constructs. *Leadership & Organization Development Journal*, 33(5), pp.494–517. Available at: http://www.emeraldinsight.com/doi/abs/10.1108/01437731211241274 [Accessed January 5, 2015].

351. Sherwood-Parkin, R., 2011. TELEHEALTHCARE: A MARKET ANALYSIS IN A DARLINGTON CONTEXT. Available at: http://www.darlington.gov.uk/PublicMinutes/Joint Adult and Housing, Health and Partnerships and Place Scrutiny Committees/February 21 2012/Item 3a.pdf [Accessed September 12, 2014].

352. Singh, S., 2003. *Advanced sampling theory with applications.*, Springer.

353. Silverthorne, C., 2013. The impact of organizational culture and person-organization fit on organizational commitment and job satisfaction in Taiwan. *Leadership & Organization Development Journal*, 25(7), pp.592–599.

354. Sirotiak, T.L., 2008. *The Effect of Problem/Project-Based Learning on a Desired Skill Set for Construction Professionals*, Michigan: ProQuest.

355. Škrinjar, R., Bosilj-Vukšić, V. & Indihar-Štemberger, M., 2008. The impact of business process orientation on financial and non-financial performance. *Business Process Management Journal*, 14(5), pp.738–754. Available at: http://www.emeraldinsight.com/doi/abs/10.1108/14637150810903084 [Accessed April 18, 2015].

356. Smeal College of Business. (2006). *Product and Service Innovation in Small and Medium-Sized Enterprises.* Pennsylvania.

357. Smircich, L., 1983. Concepts of culture and organisational analysis. *Administrative Science Quarterly*, 28(3), pp.339–358.

358. Smith, R.B. & Manning, P.K., 1982. *A Handbook of social science methods, volume 2: Qualitative methods.*, Cambridge, MA: Ballinger.

359. Spence, L. & Painter-Morland, M., 2010. *Ethics in Small and Medium Sized Enterprises: A Global Commentary (Google eBook)*, New York: Springer. Available at: http://books.google.com/books?id=sQWw6TQMiJAC&pgis=1 [Accessed May 20, 2014].

360. Spicer, D.P., Lane, E. & Yorkshire, W., 2004. Organizational Learning & Performance In SMEs. In West Yorkshire: Academy of Management Conference, pp. 1–36.

361. Som, R.K., 1995. *Practical Sampling Techniques* 2nd ed., CRC Press.

362. Spencer-Oatey, H., 2012. *What is culture? A compilation of quotations*, Available at: http://www2.warwick.ac.uk/fac/soc/al/globalpad/openhouse/interculturalskills/global_pad_-_what_is_culture.pdf [Accessed September 18, 2014].

363. Stack, J., Zarate, L., Pastor, C., Mathiassen, N. E., Barberà, R., Knops, H., & Kornsten, H., 2009. Analysing and federating the European assistive technology ICT industry. Final Report. Robotiker-Tecnalia.

364. Statistics for The Uk, 1999. Small and Medium Enterprise (SME) Statistics for the UK, URN 00/92. *Government of Uk*. Available at: https://www.gov.uk/government/statistics/business-population-estimates-2014 [Accessed July 7, 2015].

365. Stewart, D.W. & Kamins, M.A., 1993. *Secondary Research: Information Sources and Methods* 2nd ed., Newbury Park, CA: SAGE.

366. Strauss, A. & Corbin, J., 2008. *Basics of Qualitative Research* 3rd ed., Thousand Oaks, CA: SAGE.

367. Steventon, A., Bardsley, M., Billings, J., Dixon, J., Doll, H., Hirani, S. & Newman, S., 2012. Effect of telehealth on use of secondary care and mortality: findings from the Whole System Demonstrator cluster randomised trial. BMJ: British Medical Journal, 344, pp. 1-15.

368. Stock, G.N. & McFadden, K., 2007. Organizational culture, critical success factors, and the reduction of hospital errors. *International Journal of Production Economics*, 106(2), pp.368–92.

369. Stockwood, J., 2011. Why SMEs are key to the UK's economic recovery. *The start up Donut*. Available at: http://www.startupdonut.co.uk/blog/2011/08/why-smes-are-key-uks-economic-recovery [Accessed July 7, 2015].

370. Stone, V. I., 2003. Systematic technology transfer. A case study in assistive technology. Journal of Technology Transfer. 28. PP. 319-332.

371. Subramanian, A. & Nilakanta, S., 1996. Organizational innovativeness: Exploring the relationship between organizational determinants of innovation, types of innovations, and measures of organizational performance. *Omega*, 24(6), pp.631–647. Available at: http://www.sciencedirect.com/science/article/pii/S030504839600031X [Accessed January 30, 2015].

372. Suddaby, R., 2006. From the editors: what grounded theory is not. *Academy of Management Journal*, 49(4), pp.633–642.

373. Sullivan, F.&, 2010. European market for Assisted Living Technology. Available at: Sullivan, F.&, 2010. European market for Assisted Living Technology, [Accessed July 8, 2015].

374. Sunil V. Deshmukh, A.C., 2012. "Six Sigma and SMEs: a critical review of literature. *Journal of Lean Six Sigma*, 3(2), pp.157–167.

375. Syauta, J.H. et al., 2012. The Influence of Organizational Culture, Organizational Commitment to Job Satisfaction and Employee Performance (Study at Municipal Waterworks of Jayapura, Papua Indonesia). *International Journal of Business and Management Invention*, 1(1), pp.69–76. Available at: http://www.ijbmi.org/papers/Vol(1)1/H116976.pdf [Accessed April 15, 2015].

376. Tajudin, M., Musa, O. & Musa, N., 2012. Effects of Organizational Culture, Market Orientation, and Innovativeness toward New Product Performance amongst. ... *Journal of Innovation and Business …*, 01(December), pp.24–48. Available at: http://www.ibs.utm.my/ijibs/issue/vol1-no1/22-effects-of-organizational-culture-market-orientation-and-innovativeness-toward-new-product-performance-amongst [Accessed April 16, 2015].

377. Tashakkori, A. & Teddlie, C., 1998. *Mixed Methodology: Combining Qualitative and Quantitative Approaches.*, Thousand Oaks, CA: SAGE.

378. Tatikonda, M. V, 2007. *Product Development Performance Measurement* C. Loch & S. Kavadias, eds., Oxford: Elsevier.

379. Technology Strategy Board, 2011. *Assisted Living UK Capabilities and Opportunities Report UK Assisted Living Strengths and Opportunities Technology Strategy Board*, London. Available at: https://connect.innovateuk.org/documents/3301954/3710039/AssistedLivingUKCap.&OppReportLo-Res.pdf.

380. Tees Valley Unlimited, 2011. Telehealthcare: A Market Analysis in a Darlington Context. Available at: http://www.darlington.gov.uk/PublicMinutes/Joint%20Adult%20and%20Housing,%20Health%20and%20Partnerships%20and%20Place%20Scrutiny%20Committees/February%2021%202012/Item%203a.pdf [Accessed Sept 12, 2014]

381. Teng, S. S. H., Bhatia, S. G., and Anwar, S., 2011. A success versus failure prediction model for small businesses in Singapore. American Journal of Business. 26 (1). PP. 50-64.

382. Terry, K., 2013. Telehealth To Grow Six-Fold By 2017. Information Week, Available at: http://www.informationweek.com/mobile/telehealth-to-grow-six-fold-by-2017/d/d-id/1108328? [Accessed Sept 12, 2014]

383. Terry, K., 2011. Telehealth Market To Hit $6.28 Billion By 2020 - InformationWeek. *Information Week*. Available at: http://www.informationweek.com/mobile/telehealth-market-to-hit-$628-billion-by-2020/d/d-id/1100218 [Accessed September 12, 2014].

384. The Telegraph, 2014. The importance of SMEs to the UK economy. Available at: http://www.telegraph.co.uk/sponsored/business/sme-home/10906920/business-infographic.html [Accessed March 3, 2015].

385. The Telegraph. (2015, June 24). How small businesses can engage staff. *The Telegraph*. New York. Retrieved from http://www.telegraph.co.uk/sponsored/business/sme-home/news/11691611/sme-staff-engagement.html

386. The British Private Equity and Venture Capital Association, 2012. *The role of entrepreneurs and SMEs in driving the recovery*, London. Available at: http://www.bvca.co.uk/Portals/0/library/Files/News/2011/2011_0012_sme_entrepreneurs_june.pdf.

387. Thomas, J., 2006. *Understanding and Supporting Professional Carers*, Buckinghamshire: Radcliffe Publishing.

388. Thomas, N., 2014. The Role of SMEs in Employment Creation and Economic Growth in Selected Countries. *International Journal of Education and Research*, 2(12), pp.461–472.

389. Thomas, J., 1993. *Doing Critical Ethnography*, SAGE.

390. Thompson, S.K., 2012. *Sampling*, John Wiley & Sons.

391. Thornhill, A., Saunders, M.N.K. & Stead, J., 1997. Downsizing, delayering but where's the commitment? The development of a diagnostic tool to help manage survivors. *Personnel Review*, 26(1/2), pp.81–98.

392. Trochim, W.M.K., 2006. *Introduction to Validity. Social Research Methods*, Available at: www.socialresearchmethods.net/kb/introval.php.

393. Tiwari, R., 2008. *Defining Innovation*, Hamburg: University of Hamburg. Available at: http://www.global-innovation.net/innovation/Innovation_Definitions.pdf [Accessed April 12, 2015].

394. TMC, 2009. Introducing the Six Levels of Culture. Available at: http://www.berlitz.com/SiteData/docs/Introducin/ae909a9ae724c216/Introducing the Six Levels of Culture.pdf [Accessed September 18, 2014].

395. Trauth, E.M., 2006. *Encyclopedia of Gender and Information Technology*, Hershey: Idea Group Inc (IGI). Available at:

https://books.google.com/books?id=q77NODq8VsMC&pgis=1 [Accessed January 29, 2015].

396. Twati, J.M. & Gammack, J.G., 2006. The impact of organisational culture innovation on the adoption of IS/IT: the case of Libya. *Journal of Enterprise Information Management*, 19(2), pp.175–191. Available at: http://www.emeraldinsight.com/doi/abs/10.1108/17410390610645076 [Accessed January 31, 2015].

397. Uddin, M.J., Luva, R.H. & Hossian, S.M.M., 2013. Impact of Organizational Culture on Employee Performance and Productivity: A Case Study of Telecommunication Sector in Bangladesh. *International Journal of Business and Management*, 8(2), pp.63–77.

398. UNECE, 2003. Conclusions And Recommendations of the Expert Meeting On How To Become Suppliers Of Large Enterprises And Transnational Corporations, held in Geneva. 20-21 March 2003. P. 289-298.

399. Uppalli, M.S.D. & Alabee, M.N., 2013. A Study on Organisational Culture and its Relationship with Job Satisfaction in Engineering and Management Institutes. *Indian Journal of Research in Management, Business and Social Sciences*, 1(1), pp.31–37.

400. USITC, 2010. *Small and Medium-Sized Enterprises: U.S. and EU Export Activities, and Barriers and Opportunities Experienced by U.S. Firms*, Washington DC: DIANE Publishing.

401. Usaid, 2008. the Role of Micro , Small , and Medium Enterprises in Economic Growth: a Cross-Country Medium Enterprises in Economic Growth : a Cross-Country. , (September).

402. Uzkurt, C. et al., 2013. Role of innovation in the relationship between organizational culture and firm performance: A study of the banking sector in Turkey. *European Journal of Innovation Management*, 16(1), pp.92–117. Available at: http://www.emeraldinsight.com/doi/pdf/10.1108/14601061311292878 [Accessed February 7, 2015].

403. Valerie de Leonibus, R.B., 2013. *ALT market in the UK AKTIVE market report : Initial overview*, London. Available at: https://www.gov.uk/government/organisations/department-of-health [Accessed July 7, 2015].

404. Vecchi, A. & Brennan, L., 2009. A cultural perspective on innovation in international manufacturing. *Research in International Business and Finance*, 23(2), pp.181–192. Available at: http://linkinghub.elsevier.com/retrieve/pii/S027553190800024X [Accessed January 28, 2015].

405. Waarts, E. & Van Everdingen, Y., 2005. The Influence of National Culture on the Adoption Status of Innovations: *European Management Journal*, 23(6), pp.601–610. Available at: http://linkinghub.elsevier.com/retrieve/pii/S0263237305001118 [Accessed January 9, 2015].

406. Walker, E. & Petty, W., 1978. Financial differences between Large and Small firms. *Financial Management*, 7(4), pp.61–66

407. Walker, R.M., 2004. *Innovation and Organisational Performance: Evidence and a Research Agenda*, Warwick University. Available at: http://papers.ssrn.com/abstract=1306909 [Accessed January 30, 2015].

408. Walsh, W.B., 2009. *The Evaluation of Leadership Styles in Relationship to Job Performance*, Michigan: ProQuest.

409. Wallace et al, 1995. Legislative foundation of assistive technology policy in the United States. In Flipo, K, F., Inge, J. K., and Barcus, M. J., Assistive Technology: A resource for school, work, and community. PP. 3-21. Baltimore: Brookes.

410. Wang, C.L. & Ahmed, P.K., 2004. The development and validation of the organisational innovativeness construct using confirmatory factor analysis. *European Journal of Innovation Management*, 7(4), pp.303–313. Available at: http://www.emeraldinsight.com/doi/abs/10.1108/14601060410565056 [Accessed March 8, 2015].

411. Watson, J., 2010. *SME Performance: Separating Myth from Reality*, Massachusetts: Edward Elgar Publishing. Available at: http://books.google.com/books?id=WOrbMwl4x3UC&pgis=1 [Accessed September 13, 2014].

412. Wilderom, C.P.M., Van den Berg, P.T. & Wiersma, U.J., 2012. A longitudinal study of the effects of charismatic leadership and organizational culture on objective and perceived corporate performance. *The Leadership Quarterly*, 23, pp.835–848.

413. Willcoxson, L. & Millett, B., 2000. THE MANAGEMENT OF ORGANISATIONAL CULTURE. *Australian Journal of Management & Organisational Behaviour*, 3(2), pp.91–99. Available at: http://faculty.mu.edu.sa/public/uploads/1360754270.5705organizational cult53.pdf [Accessed January 23, 2015].

414. Williams, M. & May, T., 1996. *Introduction to the Philosophy of Social Research.*, London: University College London Press.

415. Winter, G., 2000. A Comparative Discussion of the Notion of "Validity" in Qualitative and Quantitative Research. *The Qualitative Report*, 4(3, 4). Available at: http://www.nova.edu/ssss/QR/QR4-3/winter.html.

416. Witte, K. De & Muijen, J. Van, 2000. *Organizational Culture*, Hove: Psychology Press. Available at: http://books.google.com/books?id=6PuB7CYmO-4C&pgis=1 [Accessed September 13, 2014].

417. Witte, K. De & Muijen, J. Van, 1999. Organizational Culture P. Herriot, ed. *European Journal of Work and Organisational Psychology*, 8(4), pp.497–502. Available at: https://books.google.com/books?id=6PuB7CYmO-4C&pgis=1 [Accessed January 22, 2015].

418. Woldie, A., Leighton, P., & Adesua, A. (2008). Factors influencing small and medium enterprises (SMEs): an exploratory study of owner/manager and firm characteristics. *Banks and Bank System*, 3(3)

419. Wooldridge, B. & Minsky, B.D., 2002. The role of climate and socialization in developing interfunctional coordination. *The Learning Organization*, 9(1), pp.29–38. Available at: http://www.emeraldinsight.com/doi/abs/10.1108/09696470210414809 [Accessed January 31, 2015].

420. Yeşil, S. & Kaya, A., 2012. THE ROLE OF ORGANISATIONAL CULTURE ON INNOVATION CAPABILITY: AN EMPIRICAL STUDY. *International Journal of Information Technology and Business Management*, 6(1), pp.11–25. Available at: http://www.jitbm.com/6thVolumeJITBM/Salih yasil.pdf [Accessed April 16, 2015].

421. Yeung, H. W.C. and Chew, Y.T., 2001. The SME advantage: adding local touch to foreign transnational corporations in Singapore. Regional Studies. 35 (5). PP.431-448.

422. Yin, R.K., 2003. *Case Study Research: Design and Methods* 3rd ed., Thousand Oaks, CA: SAGE.

423. Yin, R.K., 1984. *Case Study Research: Design and Methods*, Beverly Hills, California: SAGE.

424. Yoon, S.-J. & Lee, S.-H., 2005. Market-Oriented Culture and Strategy: Are They Synergistic? *Marketing Bulletin*, 16(4), pp.1–20. Available at: http://marketing-bulletin.massey.ac.nz/V16/MB_V16_A4_Yoon.pdf [Accessed April 15, 2015].

425. Young, C., and Sandhu, S., 1995. An examination of British assistive technology SMEs and their potential within the single European market. Special Needs Research Unit. University of Northumbria. Newcastle.

426. Yu, T. & Wu, T.Y.和 N., 2009. A Review of Study on the Competing Values Framework. *International Journal of Business and Management*, 4, pp.37–42. Available at: http://pku.summon.serialssolutions.com/link/0/eLvHCXMwA20DBtYZySaJ5ilGlqnJKckpBsbJQJBolpSSaJKSCB6DjPK18AkwcnM19UIqzd1EGdzcXEOcPXRBK8PiCyDHLcSDDkAGC8CWisUnppkkpZinmJgamZumJJkYJxmbJ5oaJCebgCfqUiwMxRhYgJ3nVAA9lybI.

427. Zaheer, A., Rehman, K. ur & Ahmad, A., 2006a. Organisational Culture Assessment of Small and Medium-Sized Enterprises. *The Lahore Journal of Economics*, 11(2), pp.155–167. Available at: http://www.lahoreschoolofeconomics.edu.pk/JOURNAL/Vol-11NoII/Arshad Zaheer.pdf [Accessed September 13, 2014].

428. Zaheer, A., Rehman, K. ur & Ahmad, A., 2006b. Organizational Culture Assessment of Small & MediumSized Enterprises. *The Lahore Journal of Economics*, 11(2), pp.155–167. Available at: http://www.lahoreschoolofeconomics.edu.pk/JOURNAL/Vol-11NoII/Arshad Zaheer.pdf [Accessed January 31, 2015].

429. Zahra, S.A., Hayton, J.C. & Salvato, C., 2004. Entrepreneurship in Family vs. Non-Family Firms: A Resource-Based Analysis of the Effect of Organizational Culture. *Entrepreneurship Theory and Practice*, 28(4), pp.363–381.

430. Zakari, M., Poku, K. & Owusu-Ansah, W., 2013. Organizational Culture and Organisational Performance: Empirical Evidence from the Banking Industry in Ghana. *International Journal of Business, Humanities and Technology*, 3(1), pp.95–107.

Available at: http://www.ijbhtnet.com/journals/Vol_3_No_1_January_2013/12.pdf [Accessed February 3, 2015].

431. Zhou, K.Z. & Yang, G.Y., 2005. Developing strategic orientation in China: antecedents and consequences of market and innovation orientations. *Journal of Business Research*, 58(5), pp.1049–58.

432. Zikmund, W.G., 2000. *Business Research Methods* 6th ed., Fort Worth, TX: Dryden Press.

433. Ziefle, M. et al., 2011. *E-Health, Assistive Technologies and Applications for Assisted Living* C. Röcker & M. Ziefle, eds., IGI Global. Available at: http://www.igi-global.com/chapter/health-assistive-technologies-applications-assisted/51384 [Accessed September 12, 2014].

434. Zion, S. & Kozleski, E., 2005. Understanding Culture. Available at: http://www.urbanschools.org/pdf/understanding.culture.LETTER.pdf [Accessed September 18, 2014].

APPENDIX I: Comparative Theoretical Review

Theory Name	Author and Year	Key Points
Alliare's Conceptual Framework of Organizational Culture	Yvan Allaire and Mihaela Firsirotu (1984)	A comprehensive analysis of the organizational culture based on three key posits: cultural system; socio-structural system and the individual actors. The culture system is based on shared symbols, society and organizational history, while socio-structural system consists of management strategies and policies and formal structures. The individual actors add in their own experiences, personality and inheritance to the organization through their respective contributions
Schein's 1985 Model of Organizational Culture	Edger Schein (1984)	Oorganisational culture as the "glue" of an organisation, facilitating a distinct entity and forte for the respective organisation. This way, organisational culture is viewed as a critical facilitator for bring about radical transition within the organisation to imbibe new forms of business practices. Learned outcome of the collective experiences of the organisation most of which is passive learning. Schein presents organisational culture to be made of three layers: Artifacts; Espoused Values and Basic Underlying assumptions
Hofstede's Culture Dimension	Geert Hofstede (1965)	Hofstede dimensions of national culture are located to be effective, dependable and coherent with previous findings, and constant over time. It has extreme exterior legitimacy and meaningful relationships with monetary, communal and topographical indicators. Hofstede ascertained five aspects along which countries can be classified such as Power Distance Index, Individualism, Uncertainty Avoidance Index, Masculinity and Long term Orientation
Charles Handy 1999 model of Organization Culture	Charles Handy (1999)	There are four types of organizational culture that portray functionality of organizations: Club Culture; Role Culture; Task Culture; Person Culture
Hatch & Cunliffe (2006) Organizational Culture Model	Hatch and Cunliffe (2006)	The generic model of organizational culture proposed by Hatch and Cunliffe provide better-off visions in culture changing aspects in organization. Hatch and Cunliffe made a

		distinction between the four areas which are as follows: • Organizational Strategy • Organizational Design • Structure and processes • Organizational Behavior and performance
Denison Theory	Daniel R. Denison (1990)	The model proposed by Denison is built on about twenty years of investigation associating culture to performance measures such as productivity, progress, eminence, invention, and client and worker satisfaction. This model basically answers four key questions about the organization which are pertaining to the mission, adaptability, involvement and consistency. It states about the awareness of the organization about where they are going and regarding to their responsiveness to the market they are serving to. It also answers about the queries about the capability, engagement and alignment of the employees about the values and process required to execute their plans

APPENDIX II: Research Questionnaire

Q1. Personal Information

Please provide the information requested in each question:

- 1.1 How old are you?
  18-24 years old
  25-34 years old
  35-44 years old
  45-54 years old
  55-64 years old
  65-74 years old
  75 years or older
  Prefer not to say

- 1.2 What is your sex?
  Male
  Female
  Prefer not to say

- 1.3 How many years have you worked in this company?

- 1.4 Are you currently:
  Married
  Single
  Prefer not to say

- 1.5 What is the highest degree or level of school you have completed? If currently enrolled, highest degree received.
  No schooling completed
  Nursery school to 8th grade
  Some high school, no diploma
  High school graduate, diploma or the equivalent
  Some college credit, no degree
  Bachelor's degree
  Master's degree
  Doctorate degree

- 1.6 Which of the following best describes your role in this company?
  Upper Management team
  Middle Management team
  Junior Management team
  Administration team
  Support staff (Normal employee)
  Consultant

Q2. Company's general information

Please provide the information requested in each question:

- 2.1 Please indicate category that is especially applicable to your company's activities in Tele-healthcare industry?

  Production of goods (blood pressure meter, glucometer, any kind of devices…..)
  Providing of services (Web based services, software…)
  Production of goods and providing services (Both)

- 2.2 How old is this company?

- 2.3 How many employees are working in this company?
  1-9 employees
  0-49 employees
  50-249 employees
  250+ employees

- 2.4 Is your company involved in any kind of overseas activity? (Such as Exporting, Importing, and operating office out of the UK…)
  Yes
  No

- 2.5 Which part of the UK your company located?
  East
  East Midlands
  London
  North East
  North West
  Northern Ireland
  Scotland
  South East
  South West
  Wales
  West Midlands
  Yorkshire and the Humber

Q3. Organizational culture assessment

Please assess the extent to which the following statements characterize the behaviour and attitude of people in your organization

(1 – Strongly disagree, 2- Disagree, 3 – neutral, 4-agree, 5 – strongly agree)

3.1 Participation, open discussion.

1 – Strongly disagree, 2- Disagree, 3 – neutral, 4-agree, 5 – strongly agree

3.2 Empowerment of employees to act.

1 – Strongly disagree, 2- Disagree, 3 – neutral, 4-agree, 5 – strongly agree

3.3 Assessing employee concerns and ideas.

1 – Strongly disagree, 2- Disagree, 3 – neutral, 4-agree, 5 – strongly agree

3.4 Human relations, teamwork, cohesion.

1 – Strongly disagree, 2- Disagree, 3 – neutral, 4-agree, 5 – strongly agree

3.5 Flexibility, decentralization.

1 – Strongly disagree, 2- Disagree, 3 – neutral, 4-agree, 5 – strongly agree

3.6 Expansion, growth, and development.

1 – Strongly disagree, 2- Disagree, 3 – neutral, 4-agree, 5 – strongly agree

3.7 Innovation and change.

1 – Strongly disagree, 2- Disagree, 3 – neutral, 4-agree, 5 – strongly agree

3.8 Creative problem-solving processes.

1 – Strongly disagree, 2- Disagree, 3 – neutral, 4-agree, 5 – strongly agree

3.9 Control and centralization

1 – Strongly disagree, 2- Disagree, 3 – neutral, 4-agree, 5 – strongly agree

3.10 Routinization, formalization and structure.

1 – Strongly disagree, 2- Disagree, 3 – neutral, 4-agree, 5 – strongly agree

3.11 Stability, continuity, order.

1 – Strongly disagree, 2- Disagree, 3 – neutral, 4-agree, 5 – strongly agree

3.12 Predictable performance outcomes.

1 – Strongly disagree, 2- Disagree, 3 – neutral, 4-agree, 5 – strongly agree

3.13 Task focus, accomplishment, goal achievement.

1 – Strongly disagree, 2- Disagree, 3 – neutral, 4-agree, 5 – strongly agree

3.14 Direction, objective setting, goal clarity.

1 – Strongly disagree, 2- Disagree, 3 – neutral, 4-agree, 5 – strongly agree

3.15 Efficiency, productivity, profitability.

1 – Strongly disagree, 2- Disagree, 3 – neutral, 4-agree, 5 – strongly agree

3.16 Outcome excellence, quality.

1 – Strongly disagree, 2- Disagree, 3 – neutral, 4-agree, 5 – strongly agree

Q4. Performance

Please provide the information requested in tables below.

4.1-Product & Service quality: Depends on what your company activity (Production of goods or providing Service or both) please assess the following statements for your organization ''against the major competitors'' in your industry:

1 Very behind 2 Behind 3 comparable 4 Almost leader 5 Leader

Statements	1 Very behind	2 Behind	3 Comparable	4 Almost leader	5 Leader
The performance of our **products (goods)** is [. . .].					
Reliability of our **products (goods)** is [. . .].					
Durability of our **products (goods)** is [. . .].					
Conformance to specifications of our **products (goods)** is [. . .].					
The performance of our **service** is [. . .].					
Reliability of our **service** is [. . .].					
Durability of our **service** is [. . .].					
Conformance to specifications of our **service** is [. . .].					

4.2-Process quality: Please assess to what extent to following statements reflects what your organization has been practicing so far.

1 Strongly Disagree 2 Disagree 3 Neutral 4 Agree 5 Strongly Agree

Statements	1 Strongly disagree	2 Disagree	3 neutral	4 Agree	5 Strongly Agree
We design processes in our company to be "fool-proof" (preventive oriented)					
We have clear, standardized and documented process instructions which are well understood by our employees					
We make an extensive use of statistical techniques to improve the processes and to reduce variation					

4.3- Job Satisfaction: please tick scales from extremely dissatisfied to extremely satisfy to indicate how satisfied you are overall with your job.

1 Extremely dissatisfied 2 Dissatisfied 3 Neutral 4 Satisfied 5 Extremely satisfied

Statements	1 Extremely dissatisfied	2 Dissatisfied	3 neutral	4 Satisfied	5 Extremely satisfied
My Job Satisfaction					

Q5. Innovation capabilities (Innovativeness)

Please provide the information requested in tables below.

5.1-Product & Service innovation: Please assess the relative performance of your organization ''against the major competitors'' in your industry with regards to the following:

1 Very behind 2 Behind 3 comparable 4 Almost leader 5 Leader

Statements	1 Very behind	2 Behind	3 Comparable	4 Almost leader	5 Leader
The level of newness (novelty) of our firm's new products & Services is [. . .].					
The speed of new product & services development process is [. . .].					
The number of new products & services our firm has introduced to the market is [. . .].					
The number of our new products & services that is first to market (early market entrants) is [. . .].					

5.2-Process innovation: Please assess the relative performance of your organization against the major competitors in your industry with regards to the following:

1 Very behind 2 Behind 3 comparable 4 Almost leader 5 Leader

Statements	1 Very behind	2 Behind	3 Comparable	4 Almost leader	5 Leader
The technological competitiveness of our company is [. . .].					
The speed with which we adopt the latest technological innovations in our processes is [. . .].					
The updated-ness or novelty of the technology used in our processes is [. . .].					
The rate of change in our processes, techniques and technology is [. . .].					