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THE IMPACT OF NATIONAL CULTURE ON ENTREPRENEURIAL PROCESSES

Preliminary evidence from Turkey and the United Kingdom

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“The entrepreneur is the pivot on which everything turns (Schumpeter, 1939).”

I agree with Joseph Schumpeter, one of the fathers of entrepreneurship stream and among the most influential scholars in this field whose works are broadly quoted and used till this very day. This sentence also reflects my viewpoint towards and interest in entrepreneurship which have led me to numerous entrepreneurial attempts and finally to obtain my Master of Science degree in Business Administration with a specialization of ‘Innovation Management & Entrepreneurship’ at the University of Twente.

Under the curriculum of this specialization, one of the most interesting courses to which I looked excitedly forward was the Principles of Entrepreneurship instructed by Dr. Rainer Harms and throughout this course I believe to have gained a very key set of elements, knowledge and insights about Entrepreneurship and its research. Thus, my utmost gratitude goes to Dr. Rainer Harms who did not only enthusiastically pull me into the EPICC project of which this thesis is a part, but also being my primary supervisor, helped me out immensely throughout the whole process of an academic research with meaningful advice, teaching me to work independently towards finding the solutions, insights and kind consideration at all times. Martin Stienstra, MSc, another co-founder of the EPICC and my secondary supervisor, who consulted me in the absence of Dr. Harms during the first couple of meetings, deserves also a great deal of appreciation from initiating such a well-structured and organized project to which more than 25 students like me participate.

I’d also like to express my thankfulness to all of the 22 Turkish student entrepreneurs who each voluntarily spent 2 hours of their time and utmost effort in their busy agenda to participate to my research and provided with exceptional input. Beyond the frame of the interviews, I have enjoyed a priceless chance of getting to know these people, their perspectives and business ideas; which has surely created a valuable network for the future. Last but not least, I’d very much like to thank my beloved fiancée Debbie Verhoeff who day in and day out bore with my groans, listened to my moans and did her outermost best to motivate me by standing unconditionally by me without a moment of exception. And needless to say, to my parents, from a thousand miles away, who never ever abstain from their moral support, motivation and confidence in me, I couldn’t have been where I am today without them.

This present thesis is not only a comprehensive academic research but also a meaningful piece in my educational career since it is the final step towards attaining my MSc. degree and for both reasons it is of grand importance to me.

Kaan BULAKERI

June, 2013; Urla, Izmir/Turkey

Management Summary:

"*In the game of entrepreneurship, the process is more important than the goal. When you start building a business, you begin a journey, a process. This process has a beginning and an ending and between the beginning and end lays a lot of challenges. You will win only if you remain faithful to the process.*" – Rich Dad.

As can be understood from the title, this thesis, under the umbrella of the EPICC project, is a research study focusing on the understanding of the influence of national culture on entrepreneurial processes. There is no need to say that national culture of each country has an influence on almost all aspects of life starting from people's mentality, mindsets and behaviors. As the world turns into a global village, national cultures are paid more and more attention in business arenas. Entrepreneurial processes, with a growing attention within the entrepreneurship research, deal with entrepreneurs' decision making mechanisms, reasoning and logics throughout the course of turning a business idea into a new venture creation. With Sarasvathy's fresh theory of effectuation as opposed to already existing causation theories, a new trend has been established in the field of entrepreneurial processes. In contrast to conventional methods such as entrepreneurship education, business plan developments, business courses, market research etc. the scholars of this new stream assert that entrepreneurs start off with three basic questions: "Who am I? What I know? Whom I know?". which serves as the fundamentals of an effectual thinking.

Despite an aggregated attempt to investigate culture's impact on entrepreneurship in the course of recent decades, research on the influence of culture directly on entrepreneurial processes is lacking. This theoretical gap between two very important concepts is the set-off point for this project. In this study, 22 student entrepreneurs from both Turkey and the UK are researched. With the think-aloud methods, verbal protocols are collected and coded based on Sarasvathy's schema. Subsequently, the hypotheses are constructed upon Hofstede's national culture dimensions and a possible link is sought after between these dimensions and the components of entrepreneurial processes. Results however show, with single exception, no significant difference between two sample groups with respect to the tested elements; therefore there is insufficient evidence to conclude a positive correlation between culture and entrepreneurial processes. Yet, a number of discussion points are found and there is a lot of room for improvement in further research.

Key Words: *National Culture, Hofstede's cultural dimensions, Entrepreneurial Processes, Sarasvathy's effectuation theory, student entrepreneurs, Turkey, the UK.*

1. Introduction:

This chapter aims to lay the basis for this research study. Firstly, background information is provided to create interest for the reader and draw attention to the topic. The EPICC project (Entrepreneurial Processes in Cultural Context), which this thesis is a part of, is introduced. Then, the research design follows consisting of research objective, question(s) and strategy; where the central issues and the purpose of this study are discussed.

1.1 Background

In a comprehensive survey covering more than 1.000 entrepreneurs across the G20 countries, it turned out that 76% of the sample population believe that the culture in their country encourages entrepreneurship (G20 Young Entrepreneur Summit, October 2011). According to the same report, having a culture supporting entrepreneurship is fundamental for entrepreneurs and that said, countries with stronger entrepreneurial cultures do more to promote entrepreneurship success stories in universities and the media. A strong entrepreneurial culture means there is less off a stigma associated with failure; while they recognize the crucial role of entrepreneurs in creating new jobs, they are more tolerant and understanding of business failure and don't perceive this as a barrier to entry but as an opportunity to learn.(G20 Entrepreneurship Barometer, 2011)

On the other hand, according to an article in worldwide recognized newsmagazine The Economist, it is claimed that the low rate of 'early-stage' entrepreneurs in Europe (Global Entrepreneurship Monitor, 2010) can be explained by its culture deeply inhospitable to entrepreneurs, and the chronic failure to encourage ambitious entrepreneurs (July 28th, 2012). As the gap between two continents America and Europe is extremely growing in terms of number of big companies founded at given dates; a study by Ernst & Young confirming this fact showed that German, Italian and French entrepreneurs were far less confident about their country as a place for start-ups than those in America, Canada or Brazil. When giving a speech, Konrad Hilbers, the former CEO of Napster asked: "Why was Google not made in Germany?" A major part of his answer included the lack of risk-taking entrepreneurial culture in the old continent. [1]

At the other side of the world there is a similar issue. An interview given by Willam Saito, founder and CEO of InTecur, complains that decline of entrepreneurship in Japan is caused by its conformist culture that frowns upon failure and doesn't allow second chances. Saito believes that Japan has simply lost its entrepreneurial spirit because of these taboos and woes that don't accept failure (Yuri Kagayema, June 29, 2012). [2]

[1] (http://www.economist.com/node/21559618)

[2] (http://www.delawareonline.com/viewart/20120807/BUSINESS08/308070037/Decline-entrepreneurship-blamed-Japan-woes)

Ronen Shilo, the founder and CEO of Conduit claims that such social and professional networking websites like Facebook and LinkedIn couldn't have been founded anywhere else than United States of America thanks to its culture that considers networking as an art; elsewhere in the world it's often seen as pushy (Forbes, March 8th, 2012). [3]

Moreover, the young Korean entrepreneur Kelvin Dongho Kim founder of IDIncu, stresses how the Korean culture based on Confucian ideology is incompatible with startup culture. 'It was a culture shock' he recalls; when a teacher at San Jose State University in US asked how many of the students had already started their own companies, about 90 percent raised hands. [4]

In their research paper (2008) Alice de Koning and Sarah Drakapoulou Dodd examines: "… for the United Kingdom and Canada, the entrepreneur, although necessary for economic development, is a dangerous outsider, a greedy, shady and selfish transgressor of social norms. In Australia, he is portrayed as a swash-buckling hero… In the U.S. the emphasis is on the morally perfect legend of the little guy who wins out against the large-scale by dint of his vision, hard-work and integrity, combined with magical skills. The Indian perception… places more weight on the need for external support… on collective action. Failure is a just punishment in the U.K. and Canada, a heroic defeat in Australia, one of the inevitable pitfalls of enterprise in India, and a risk well worth taking in the U.S."

These real-life examples point out that among several factors such as political and economical structure, availability of resources and funding, education & training, market conditions etc.; (Schumpeter, 1934; Gartner, 1985; Gnyawali & Fogel, 1994; Wennekers et. al., 2003; Baker, et al., 2005; Alvaro et. al., 2007; Baron, 2008) culture arguably plays a key role in existence and development of entrepreneurship within a country.

Or does it, really?

This issue is of grand importance for rapidly-growing domain of entrepreneurship research, particularly for entrepreneurial processes; a very popular theme of today in this field which is also in the center of this research project. Although it has been widely asserted that entrepreneurship behavior might be strongly linked to cultural values and suggested that values and beliefs are factors that encourage or discourage entrepreneurship (Schumpeter, 1934; Weber, 1956; McClelland, 1961), the empirical link between national culture and entrepreneurial activity hasn't been sufficiently hypothesized and tested (Hofstede, 1998: Hayton et.al., 2002). This indicates a significant theoretical gap between national culture and its influence on entrepreneurial processes.

It is evident that the interest in entrepreneurship for the last two, three decades is paramount in the academic world. A large attention has been given to the entrepreneur

[3] (http://www.forbes.com/sites/groupthink/2012/08/03/actually-culture-does-shape-entrepreneurs/2/)
[4] (http://pandodaily.com/2012/07/04/the-curse-of-culture/)

as ‘the person’ and the environmental and cultural factors that make that person an entrepreneur. Scholars have been enthusiast to figure out the reasons for substantial differences across countries at the level of entrepreneurial processes and activities. It has been argued that in today’s global world, entrepreneurs from all over the planet share universally mutual traits and cognitive capabilities such as need for achievement (McClelland, 1961; Winter et.al.., 1969; Komives,1972) locus of control (Liles, 1974; Shapero, 1975; Nord et.al., 1979; Brockhaus, 1980a; Hull et.al., 1982) and risk taking (Palmer, 1971; Liles, 1974; Mancuso 1975; Brockhaus, 1980b; Hull et.al., 1982). Furthermore, in his research, Hermann Brandstätter (2011) investigated the Big Five personality traits (OCEAN) that entrepreneurs commonly possess. However, the fundamental question still remains in controversy, whether there are characteristics specific to national culture that distinguish entrepreneurs from each other throughout their entrepreneurial processes.

1.1.1 The EPICC Project:

This question mentioned above lays in the center of EPICC project (Entrepreneurial Processes in Cultural Context) which this master thesis is a part of. EPICC is an extensive research project conducted under the body of NIKOS (Netherlands Institute for Knowledge Intensive Entrepreneurship) at University of Twente. The project is overseen by Dr. Rainer Harms & Martin Stienstra, Msc (project leaders EPICC & staff members of NIKOS) and executed so far by 26 participating Master students at the University of Twente, undertaking this research study in a wide range of countries all over the world. (e.g. Vietnam, Mexico, Turkey, the Netherlands, USA, Macedonia etc.)

As the name suggests, EPICC project is interested in the relationship between cultural influences and entrepreneurial processes. The idea of EPICC project was born when Saras D. Sarasvathy, who is a leading academic in fields of entrepreneurship and effectuation and did a huge case-study research in the U.S.A to investigate whether entrepreneurs focus more on the logic of effectuation or causation, claimed that cultural context would have a rather slight influence on her findings, which then triggered Stienstra and Harms to challenge this assertion and go deeper into the role that culture plays on decision-making processes of local entrepreneurs.

Its focus on improving the understanding of processes in new venture creation combined with such a broad international data is expected to contribute largely to the Entrepreneurship Literature. In today’s more and more globalized world, national differences determining entrepreneurial processes play significant role within international markets. Therefore it’s of importance both for academicians and practitioners to find out the extent to which national culture influences entrepreneurial processes.

1.2 Research Objective: WHY?

As introduced above, there is a theoretical and empirical gap present in the literature concerning the relationship between national culture and entrepreneurial activities. Starting off by attempting to fill this gap, this research aims to find out similarities and differences in entrepreneurial processes across countries, the extent to which entrepreneurs are influenced by their backgrounds and cultures of their countries. Moreover, the central focus is on the emerging concept of effectuation, thus another main objective of this research is to detect whether entrepreneurs utilize the notion of effectuation in their path to composing successful enterprises. To briefly describe, effectuation deals with the transaction of actual means into goals and creating a strategy based on such transaction which eventually result in actual attempts in new venture creation (Sarasvathy, 2001). That is; entrepreneurs start off by answering the questions “Who am I?”, “What do I know?”, and “Who do I know?” and thereby setting personal goals: “What can I do?” As clearly seen, this theory of effectuation is also highly clinched to the practical implications. (Much more detailed review will be given later on)

The goal of this research project is to expand and compare the findings of previously done research of Saras Sarasvathy that has been bounded to the United States of America, into a much larger domain of countries, cultures and entrepreneurs worldwide. In specific, I am interested in how Turkish entrepreneurs use effectuation processes in comparison with their English counterparts and which cultural dimensions result in possible differences between two groups. The results are then expected to reflect to what extent differences in the use of effectuation and/or causation can be explained by cultural dimensions specific to a country’s national culture.

1.2.1 Theoretical Relevance:

Entrepreneurship research has received an increasing attention from scholars from different scientific disciplines such as management, psychology and sociology. The EPICC research project and this particular master thesis are examples of this growing interest on the management side. Undoubtedly, this research aims to contribute to the cumulative knowledge and in-depth understanding within this research area.

The main purpose is to raise awareness to this topic and to fill up the theoretical gap introduced above, which has a major academic relevance in the field of Entrepreneurship. Within the boundaries of this project, this master thesis endeavors to carry the discussed topics one step further with empirical data and meaningful outcomes. Moreover, a broader attention is to be drawn upon expanding the existing research studies and result in widely accepted academic findings.

The outcomes of this thesis and more broadly of the EPICC project are targeted to shed light on missing links within entrepreneurship literature, specifically between national culture and its influences on entrepreneurial processes. The results are therefore theoretically relevant and are anticipated to give direction to future research and contribute to the conceptual development of the field.

1.2.2 Practical Relevance:

Besides the academic relevance, this project also has a significant practical relevance. The central topic of this research, namely entrepreneurial processes, is strictly relevant to teaching, training and execution of entrepreneurship and is therefore of grand importance.

Entrepreneurship education was first pioneered by Shigeru Fijii, who started teaching in this field in 1938 at Kobe University, Japan. Courses in small business management began to emerge in the 1940s (Alberti et. al., 2004). Since the first known American entrepreneurship courses taught at Harvard University by Myles Mace in 1947 and at New York University by Peter Drucker in 1953; academic interest in entrepreneurship has grown to include more than 2200 courses offered at 1600 colleges and universities. (Brush et. al. , 2003; Kuratko, 2005) These worldwide education programs are mainly oriented to teach students how to become an entrepreneur, the processes from having an idea, chasing the opportunities to creating new ventures.

There is however a great deal of debate going on in the area of Entrepreneurship Education (Storey, 1994; Shepherd & Douglas, 1997; Solomon et. al., 1998; Alberti et. al., 2004; etc.). For instance, Shepherd and Douglas (1997) asserted that business case studies mislead entrepreneurial thinking because most of the time their start and end points are known or defined, whereas in entrepreneurial thinking these may be often vague, open and unclear. Furthermore, in similar types of programs, much emphasis is put on analysis, understanding and logic in order to achieve the goals on an error-free path of entrepreneurship (DeBono, 1978). Nevertheless; this passive, descriptive and contemplative type of thinking contradicts the real life situations that entrepreneurs encounter where unpredictable future, constantly changing environment and uncertain market conditions are present (Shepherd & Doubles, 1997).

Parallel to these standpoints, in her effectual theory Sarasvathy (2001 a) asserts, as inversion to causality, entrepreneurs rely less on business plans, market research and competitive analyses, such fundamental concepts that have been core elements of management and entrepreneurship education programs. As the theory suggests; entrepreneurship based on effectuation, is more about self-reflection, networking and availability of resources and on the other hand less about prediction, commitment and planning (Sarasvathy, 2005).

The EPICC project and in particular this thesis investigate the use of effectual thinking. The results of this extensive study may lay support on effectuation literature and that is highly relevant to practical aspects of entrepreneurship. As discussed above, this notion could lead to radical modifications on such education systems and training programs. A shift could be foreseen as less attention on planning (i.e. business plans), predicting (i.e. market research) and more attention on personal development, experience, learning by doing and network building. Besides the educational perspectives, effectuation theory also has major implementations on how entrepreneurship is exercised and executed. With a better understanding on how entrepreneurs think, act and make decisions; there could be improvements not only on the way of doing business and interaction among entrepreneurs but also encouraging and organizing entrepreneurship within countries.

Concerning the second core component, namely the effect of national culture; this research is again of important practical relevance. If the hypotheses are empirically proven regarding the influence of national culture on entrepreneur's way of thinking, the results could alter the viewpoint on manageability of entrepreneurship across borders. In the growing global markets of today's world, entrepreneurs operate all over the world in international contexts; they do business overseas, they set up ventures in various countries, and they work with diverse cultures. Thus, improved understanding of cultural similarities and differences in the entrepreneurial context would largely help develop corporate relations.

The findings of this study and of EPICC project on a bigger picture will certainly raise attention and awareness on such practical issues put forth above.

1.3 Research Question: WHAT?

Based on the phenomena introduced above and in order to fill up the gap in the Entrepreneurship Literature; the following central research question is articulated in a way to cover the key aspects of this research study and meet the research objective:

''To what extent does the national culture of Turkey influence the entrepreneurial processes – specifically whether or not to employ effectuation logic of thinking – in comparison with the national culture of United Kingdom?''

Definitions:

- Entrepreneurial Processes: The most broadly accepted definition by Bygrave and Hofer (1991, p14.) is as follows:
  "all the actions, activities and actions all the functions, activities, and actions associated with the perceiving of opportunities and the creation of organizations to pursue them"

- Opportunity: those situations in which new goods, services, raw materials and organizing methods can be introduced and sold at greater than their cost of production (Shane and Venkataraman, 2000 p.220).

➢ National Culture: Set of beliefs, values, norms, customs and other collective elements of a nation that distinguishes it from another. (e.g. Hofstede 1994, p.65; Hayton et.al., 2002 pg.33)

➢ Effectuation: A process that takes set of means as given and focuses on selecting between possible effects that can be created with that set of means. (Sarasvathy, 2008)

1.4 Research Strategy: HOW?

In order to pursue answering the research question, a well-defined research strategy is followed. It is first of all important to mention that the aim of this research project is not to create new theories but rather test hypotheses formulated based on already existing theories. Therefore, a deductive approach is applied which starts with a comprehensive literature review (chapter two). A group of related articles, theses and books from several sources including respected academic journals, internet resources and catalogues is collected and thoroughly examined. This literature review concentrates on the two core components of this thesis; entrepreneurship and culture. Under the theme of entrepreneurship, the focus is on entrepreneurial processes and in particular the concept of effectuation. On the other hand, a closer look is taken over culture, cultural aspects and in specific the literature about national culture and business culture is researched. After a generic introduction to these concepts related to culture, the attention is dedicated to national and business cultures of Turkey and the United Kingdom since the comparison is made between the two. These two cultures are closely researched to have a better insight of similarities and differences that may originally influence entrepreneurs to think and act in certain ways.

After an extensive literature review, the composed theoretical framework is expected to lead the research to the next step; hypothesis formulation (chapter three). Since this project investigates the influence of national culture on entrepreneurial processes; the model is formed of the use of logic (i.e. effectuation vs. causation) throughout the entrepreneurial processes as dependent variable and national culture as independent (predictor) variable. The formulated hypotheses enable the researcher to break down this investigated relationship into sub-elements and thereafter deliver results to detect whether or not there is a significant correlation between the variables.

To test the hypotheses, a well-established methodology is exercised (chapter four). This method is standard for all the participating theses of the EPICC project. It consists of interviewing 'nascent entrepreneurs' who are either students or fresh graduates from universities and engage themselves in various entrepreneurial activities to realize their business ideas and start up a venture. Throughout the interviews, interviewees are asked to think-aloud while answering series of typical problems of a fictional business case about opening a coffee shop at a university. Particularly for this thesis, 22 novice entrepreneurs from Turkey and 22 novice entrepreneurs from the United Kingdom are interviewed. As the next step, the interview protocols are coded based on a coding schema introduced for EPICC project. This coding schema is constituted according to the 5 principles of Sarasvathy's comparison between effectuation and causation (Sarasvathy, 2001a) (further details about the methodology will be given in the relevant chapter).

The results of the analyses of these interviews are exhibited and used to statistically test the significance of the hypotheses (chapter five). Based on these findings, this thesis is able to come to an answer to the research question. Subsequently these are described and discussed (chapter six), limitations are indicated and the conclusions are drawn along with recommendations for future research (chapter seven).

2. Literature Review:

In this second chapter, a profound review of the existing literature on two fundamental concepts that stand in the center of this research is provided, namely literature on entrepreneurship and literature on culture. Herewith, the most important phenomena that are relevant to this study are expansively presented. To do this, a broad collection of scientific and academic sources concerning entrepreneurship and culture is carefully selected and deeply looked into. Conducting a wide literature review is very crucial because it enables the researcher to gain an ample understanding of the state of a research area by scrutinizing what has been researched in order to set up a necessary theoretical foundation upon which the hypotheses are built and subsequently empirically tested.

2.1 Entrepreneurship Research

Entrepreneurship is a relatively new and quite broad field of research that is very challenging to tackle due to its complex but at the same time appealing nature. Especially starting from mid 70s and early 80s, entrepreneurship was referred as a considerable research area with a mounting interest giving rise to number of academic courses being taught, conferences organized and journals published. Today, entrepreneurship and the impacts of entrepreneurship on society are the subject of a growing body of research primarily in the disciplines of economics, geography, management, finance, strategy, psychology and sociology. (Acs & Audretsch, 2003). Davidsson (2005) provides a comprehensive definition of this research domain and its content:

> "Starting from the assumptions of uncertainty and heterogeneity, the domain of entrepreneurship research encompasses the study of processes of (real or induced, and completed as well as terminated) emergence of new business ventures, across organizational contexts. This entails the study of the origin and characteristics of venture ideas and their contextual fit; of behaviors in the interrelated processes of discovery and exploitation of such ideas, and of how the ideas and behaviors link to different types of direct and indirect antecedents and outcomes on different levels of analysis." (Davidsson, 2005)

Especially in the last two decades, the rapidly growing attention to field helped produce a big amount of academic papers, articles and these being published in respected academic as well as business related journals, conferences and other organizations. However, it is still a highly fragmented and immature field that is far from conceptual convergence (Gregorie et al., 2006). It is widely acknowledged that the field of entrepreneurship lacks even a well-accepted definition (e.g. Sexton & Smilor, 1986; Carsrud, Olm and Ely 1986; Mitton, 1989; Gartner, 1989, 1990; Cunningham & Lischeron, 1991; Bygrave & Hofer, 1991; Bull & Willard, 1993; Venkataraman, 1997; Shane & Venkataraman, 2000). This is mainly because of, according to Low et al. (2001), the field's eclectic nature, the lack of substantial theory driven research and the fact that most of the research is conducted by scholars from various disciplines. Most of the articles only focus on one aspect of entrepreneurship or a specific phenomenon from a wide-ranging set of topics that researchers have borrowed from other popular disciplines; which makes it difficult to include all of them under the umbrella of entrepreneurship research (Zahra, 2006).

Yet, this fairly novice research area remains highly relevant in several aspects and in various contexts. Besides its social and cultural relevancy, the focus of entrepreneurship and entrepreneurship research lays essentially on economical perspectives. The major attention of research and literature has been set upon the analysis of the relationship between entrepreneurship and economical growth (e.g. Schumpeter, 1911; Kirzner, 1973; Romer, 1986; Birch, 1987; Audretsch, 1995, and Wenneker & Thurik, 1999). Furthermore, it has been analyzed in a scope ranging from local ventures to international enterprises, from domestic chains to global corporations. Its main actors also range from student entrepreneurs to worldwide known millionaires, from novice entrepreneurs to experienced businessmen. Nevertheless, as mentioned earlier, this massive attention upon economical aspects has caused a lack of interest in theoretical and empirical studies, for instance, on cultural aspects. This gap in the entrepreneurship literature, namely the impacts of culture on entrepreneurship and entrepreneurial processes, forms the leitmotiv of this research study.

There have been numerous developments in the domain of entrepreneurship research over the past decades and the field has witnessed a shift within its central topics. Acs and Audretsch (2003) categorize these developments and shifts in four segments. First of all, the concentration on 'the person', the entrepreneur himself including the traits, personality etc. has left its place to 'the opportunity'; creating, discovering, development and exploitation of opportunities are nowadays some of the main issues. Moreover, a focus has been introduced on the long-neglected environment and environmental factors that affect venture formation (Thornton, 1999).

Secondly, the relationship between nascent entrepreneurs, organization/firm births, and economic growth is a vital area of research, according to Acs and Audretsch (2003). The third development is that the research on economic growth has shifted to the study of new growth theory with an emphasis on endogenous technical change (Romer, 1990). Nowadays entrepreneurship is seen as a source of innovation, creativeness and R & D activities. In the following section, the phenomena that have constituted the core of entrepreneurship research throughout the years will be covered in depth.

2.1.1 Entrepreneurship and the phenomena:

The term 'entrepreneur' is etymologically originated from the French word *entreprendre* which literally means to begin something, to undertake (Cunningham & Lischeron, 1991) or between-taker, go-between (Hisrich & Peters, 1988). During the mediaeval times, this word was being used to describe an active working person (Gündoğdu, 2012). In the early 16th century it was applied to a person engaged in military expeditions and extended to cover construction and civil engineering activities in the 17th century, and finally during the 18th century the word entrepreneurship was used to refer the economic activities. This term first appeared in the French Dictionary "Dictionnaire Universal de Commerce" of Jacques des Bruslons published in 1723 (Corbett, 2008).

It dates back to the 18th century when the Irish-French economist Richard Cantillon initiated the use of the term entrepreneur for the first time in the economics literature (Cantillon, 1755). He portrayed the entrepreneurship as the act of bearing the risk by buying products at a certain price and selling at unpredictable and uncertain price, especially in early forms of insurance industry and in consumer markets (Casson, 2010). Another early reference to entrepreneurship was made by Jean-Baptiste Say in 1803; he described the entrepreneur as an economic agent who combines the factors of production; namely the land, the labor and the capital. In his extended definition, an entrepreneur is a broker taking risk by uniting these three means in order to create a product and shifting economic resources out of an area of lower and into an area of higher productivity and greater yield (Carton et al., 1998). In 1921 in his classical analysis of risk and uncertainty, Frank Knight expands these definitions that associate the entrepreneur with risk and asserts that entrepreneurs creating organizations in new populations face uncertainty, not simply risk, in making their decisions (Aldrich & Martinez, 2003). Knight’s ideas that fundamentally make a distinction between risk, ambiguity and uncertainty are particularly important because they form one of the bases for Sarasvathy’s effectuation theory which will be thoroughly analyzed in the respective section.

Despite these early developments, entrepreneurship remained fairly unnoticed for a couple of centuries; it was not before the late 19th and early 20th centuries that it began theoretically to be studied and only in the last 40 years it gained reappearance in business and economics when empirical research was started. It was Joseph A. Schumpeter (1934) who established the role of entrepreneur in the economics research. He defined an enterprise as the carrying out of new combinations and an entrepreneur as the individual whose function is to carry them out. Furthermore, he viewed the entrepreneur as an economical contributor and the source of economical growth and innovation who build new premises in the markets by creating disequilibrium in the economy through what he named ‘creative destruction’ (Schumpeter, 1963). In opposition to this idea, Kirzner later discussed that this key figure brings economy from disequilibrium back to equilibrium (Kirzner, 1979). To this day, these basic ideas of entrepreneur and his economical activities shape the basis of many authors’ work under the domain of entrepreneurship research.

From those days, increasing attention on entrepreneurship has motivated scholars to come up with distinct definitions of what entrepreneurship is. It is that complex nature of the phenomenon as stated above, which makes it difficult to have just one specific definition that the entire population of entrepreneurship researchers agrees upon. Van der Veen and Wakkee (2004) provide a selection of most cited definitions of entrepreneurship.

To mention some of them;

- Weber defines entrepreneurship as taking over and organization of some part of an economy, in which people's needs are satisfied through exchange, for the sake of making a profit and at one's own economic risk (Swedberg, 2000).
- Peter Drucker (1964) discusses that entrepreneurs actively search for change, react to it and exploit opportunities. Innovation is a specific tool of an entrepreneur, thus an effective entrepreneur translate a source into a resource.
- Cole (1965) defines entrepreneurship as the purposeful activity to initiate, maintain and develop a profit-oriented business.
- Stevenson, Roberts and Grousbeck (1989) define entrepreneurship as a process through which individuals - either on their own or inside organizations – pursue opportunities without regard to the resources they currently control.
- Wiklund (1998) combines the definitions of Schumpeter and Stevenson et al and defines entrepreneurship as a process which takes advantage of opportunities by novel combinations of resources in ways that have an impact on the market.
- Eckhardt and Shane (2003, p. 336) define entrepreneurship as the discovery, evaluation, and exploitation of future goods and services by creation or identification of new ends and means previously undetected or unutilized by market participants.

It is interesting and also important to see these particular definitions from various authors because it clearly gives the researchers a comprehension of how the field has been wrought throughout the course of time. As early definitions suggest, the focus was first on the entrepreneur himself as a ‘super hero’ while scholars later on realized the importance of opportunities in entrepreneurship research, and nowadays the attention is largely laid on the entrepreneurial process which is also the pivotal point of this very paper. In the following part the first two phenomena, namely the person and the opportunity in entrepreneurship research will be further tackled, and in the next section, the entrepreneurial processes will be reviewed.

2.1.1.1 The Entrepreneur:

‘The person’ has evidently been under the spotlights in entrepreneurship research since the entrepreneur stands in the center of the whole process. A nascent entrepreneur is defined as someone who initiates serious activities that are intended to culminate in a viable business startup (Reynolds and White, 1997). Starting from Cantillon in early 1700’s as stated before, who described entrepreneur as risk-bearer; researchers have been interested in the special qualities that entrepreneurs presumably have (Cole, 1946). Although in the 1970s and 1980s, personality approach to studying entrepreneurial behavior was discredited; it gained new momentum in the 1990s

(Brandstätter, 2011). Thereafter, a lot of research has been done over who the entrepreneur is, what kind of personality traits and attributes he possesses and what distinguishes him from non-entrepreneurs (Stevenson & Jarillo, 1990). For instance, Mueller and Thomas (2000) assert that successful entrepreneurs have certain indispensable characteristics that are nonexistent not only in non-entrepreneurs but also in unsuccessful entrepreneurs.

A vast literature examining entrepreneurial personality and unique characteristics indicated that a package of traits seems to be possessed by entrepreneurs that enable them to seize opportunities and realize them by starting up their own enterprises. Such a tradition in entrepreneurship research was initiated by David McClleland (1961) who argued that entrepreneurs are persons with high 'need for achievement' (n-Ach) on top of tendency to take risks. On the one hand, these personality traits were told to be the initial drive of an individual in becoming an entrepreneur. Entrepreneurs are believed to take initiative, accept risk of failure and have an internal locus of control (Shapero, 1975). The other traits most frequently cited as being characteristic of entrepreneurs include the desire for independence (Collins & Moore, 1964), locus of control (Brockhaus, 1975; Brockhaus, 1980; Shapero, 1975), competitiveness and creativity (Wilken, 1979), risk taking propensity (Begley & Boyd, 1987; Brockhaus, 1980; Wilken, 1979), tolerance for ambiguity (Begley & Boyd, 1987; McClelland, 1961), and credible role models (Bygrave, 1995; Shapero, 1975).

On the other hand, there are certain characteristics that make entrepreneurs unique and distinctive from the rest. The characteristics that have been suggested as significant in literature are prior managerial experience (Chandler, 1996; Hoad & Rosko, 1964; Lant & Mezias, 1990; Roure, 1986; Roure & Maidique, 1986), prior startup experience (Lamont, 1972; MacMillan, 1986), prior management team experience (Lumpkin & Dess, 1996; MacMillan, Seigel & Narasimha, 1985; McGee, Dowling & Megginson, 1995; Roure & Maidique, 1986; Roure & Keeley, 1990; Stuart & Abetti, 1990), knowledge, skills and abilities (Bull & Willard, 1993; Chandler & Hanks, 1994; Dutton & Jackson, 1987; Mitchell, 1994), and prior experience in the line of business (Chandler, 1996; Hoad & Rosko, 1964; Roure & Maidique, 1986; Sandberg, 1986). It is important to note that these unique characteristics are empirically proposed to have more significant links to venture performance and successful venture formation than those entrepreneur traits. The most significant determinants of new venture performance that have been shown are venture strategy and industry structure (Kunkel, 1991; Robinson, 1995; Sandberg, 1986). Finally, it is critical as well to remark that while traits and characteristics do not specifically determine who is an entrepreneur, they do influence the propensity for individuals to become entrepreneurs and the choices they make that lead to their performance (Carton et. al., 1998).

Rooted on specific trait theories, a Big Five system has been introduced. The acronym OCEAN stands for O: Openness to experience, C: Conscientiousness, E: Extraversion, A: Agreeableness, and N: Neuroticism (Brandstätter, 2011). A number of empirical studies have utilized this system to test the personality differences that distinguish entrepreneurs from the others. Moreover, while Nicolou et al. (2008) suggest that genetic factors may determine a person's entrepreneurial being, Delmar and Davidsson (2000) propose that even gender may have a significant influence.

At this point, it is noteworthy to refer to the popular ongoing debate: *Born or Made*? This discussion remains one of the most interesting phenomena in the entrepreneurship domain. The trait's approach endeavors to provide support the former claim that those individuals are born to be entrepreneurs, and above mentioned findings clearly propose that entrepreneurs possess certain personality traits from birth which the others don't. Nevertheless, 'trait's research' has also encountered sharp criticism, the validity of such studies has been questioned and there have been studies in opposition to this approach (Cooper, 2003). For instance, Brockhaus (1980) found that the risk-taking propensity of entrepreneurs was about the same as for managers or the population as a whole and thus it may not be a distinguishing trait of an entrepreneur. Gartner (1988) argued that the focus should be on entrepreneurial behaviors and not on traits. Davidsson (2005) support this idea by stating that behaviors of an entrepreneur are rather decisive throughout the process than his or her personality aspects. Zhao and Seibert (2006) argued that not all entrepreneurs utilize the same set of traits and the type of personality may determine the type of ventures established. Parallel to this, Read (2011) convincingly states that it is not realistic to distinguish entrepreneurs based on set of traits and to find such traits that are favorable for entrepreneurs at all times. Conclusively, these scholars oppose to the existence of the 'super person' being the entrepreneur and deem that anyone can be made, trained and taught to be an entrepreneur (e.g. Shepherd & Douglas, 1997; Alvarez & Barney, 2007; Sarasvathy, 2009).

The difference between entrepreneurs and usual managers has been another point of interest within the entrepreneurship literature. The focus of this research does not lay on this phenomenon, yet some discussion can be interesting in the light of effectuation and causation with regard to the entrepreneurial processes. It is crucial to understand that within the lifespan of most organizations, a transition from entrepreneurship to general management takes place, as Schumpeter indicated. This idea of transition is further developed by Carton et al. (1998) in their analysis of the entrepreneurship paradigm; they state that management begins when entrepreneurship ends and that occurs at a point of time when the new venture becomes self-sustaining. As every firm first needs be founded to come into existence, they also need to be managed in order to continue their spin in order to sustainably maintain their existence. This paradigm is demonstrated in Figure 1.

What is here interesting for this research is that within entrepreneurial processes (i.e. lifespan of organizations) a similar transition could be monitored from effectuation to causation. A further discussion follows when explaining these concepts more in-depth.

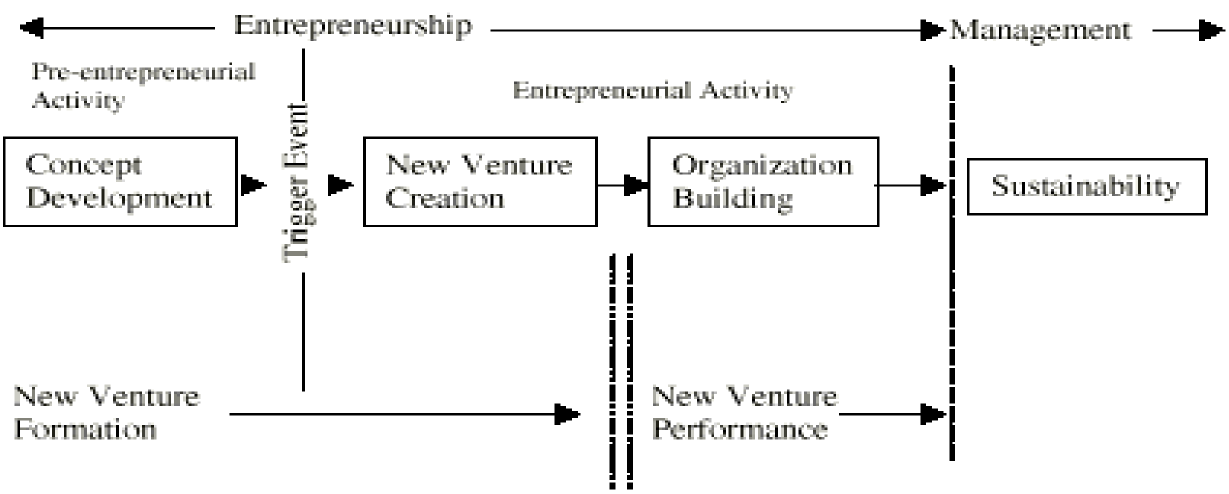


Figure 1: The Entrepreneurship paradigm

Now that some of the key concepts evolving around 'the person' in entrepreneurship research have been scrutinized, in the following section the topics related to 'the opportunity' will be investigated.

2.1.1.2 The Opportunity:

In the last decade the attention has significantly shifted from only viewing the entrepreneur to how he handles and deals with opportunities in order to create enterprises. Scholars moved beyond the historical roots of entrepreneurship in economic theory and applied the concept to innovative opportunity-seeking activity (Gedeon, 2010). Shane and Venkataraman (2000) stress the importance of opportunity by saying, to have entrepreneurship you must first have entrepreneurial opportunities. It is clear that the place of opportunity is central in the equation of turning a row idea into a successful economical entity.

Although the term is regularly employed, there are only a few rigid definitions of opportunity (Van der Veen & Wakkee 2004). McMullen et al (2007) pointed out that not much attention has been given to the nature and source of opportunity itself. In their rather generic definition, Stevenson and Jarillo (1990) see opportunities as a desirable future state that is different from the current state and that is deemed feasible to achieve. In the business context, the opportunity is most often solely considered as source of profit generation. To name a few examples, Christensen et al. (1994) stated that opportunity is a possibility for new profit potential to either found a new venture or make substantial improvement in an existing one. In his widely quoted definition, Casson (1982) elaborates on this possibility by defining opportunities as situation in which new goods, services, raw materials and organizing methods can be introduced and sold at a greater price than it costs to produce them. Finally, to make a distinction between opportunities in business context and entrepreneurial context, Kirzner (1997) discusses that entrepreneurial opportunities require discovery of new means-end relationships, whereas business opportunities also involve optimization within existing means-end relationships.

Peter Drucker (1985) categorized the opportunities in three different ways: (1) creating new information from invention of new technologies, (2) exploiting market inefficiencies resulting from information asymmetry, and (3) reacting to shifts in the relative uses of resources. As obviously seen from Drucker's ideas, existence of opportunities is highly tied to 'change', occurring in several ways; politically, regulatory, geographically, demographically, technologically and so forth. Another group of researchers added to this with the notion of opportunities existing primarily because different members of the society have different beliefs and relative value of resources or when resources are turned from inputs into outputs (i.e. Kirzner, 1997; Alvarez and Busenitz, 2001). This heterogeneity gives the entrepreneur the possibility to generate profit and create new markets. This notion is related to previously mentioned arguments of combining three elements in a market, the land, the labor and the capital.

Shane & Venkataraman (2000) pioneered the three-step process of opportunities. That is, (1) opportunity recognition/identification, (2) opportunity discovery, (3) opportunity exploitation. As a first step, the potential opportunities should be recognized. However, not all members of the society or not even all entrepreneurs recognize each upcoming opportunity. So what makes it possible for certain entrepreneurs to recognize certain opportunities while others neglect them? According to Robert E. Baron (2006), entrepreneurs recognize opportunities by using their cognitive frameworks that is composed of active search, alertness and prior knowledge. He also describes the process what he calls pattern recognition as 'connecting the dots', that is, entrepreneurs collecting as much information as possible from his network sources and combines them to create a meaningful pattern which enables him to identify opportunities.

Upon recognition, as a second step, opportunities should be further discovered and developed to maturity before they can fully be exploited by entrepreneurs. The original 'idea' of capturing opportunities needs to be refined at this stage in order to be translated into a new business. Sarasvathy (2003) explains; if only one side exists - i.e., demand exists, but supply does not, and vice versa - then, the non-existent side has to be discovered before the match-up can be implemented. In practice, opportunity discovery is the elaboration of a general and broad idea (i.e. the recognized opportunity) into a more detailed business concept (Van der Veen & Wakkee, 2004). Finally, the exploitation of opportunity requires accessing necessary resources and the entrepreneur becomes gradually more and more committed to starting an eventual business. Several scholars addressed why and how some individuals are able to translate recognized opportunities into products or services and sell them to the market. As also previously mentioned in the present paper; psychological attributes, traits, knowledge and experience, and cognitive processes drive actual entrepreneurial behavior and lead to successful exploitation of a business idea (i.e. opportunity) (Van der Veen & Wakkee, 2004).

After having reviewing the two important phenomena in entrepreneurship research, in the subsequent section the entrepreneurial processes literature will be detailed.

2.1.2 Entrepreneurial Processes:

Entrepreneurship is the process by which new organizations come into existence (Gartner, 1988). Scholars have lately been interested in examining entrepreneurial processes to a greater extent and this made entrepreneurial processes one of the most central topics in entrepreneurship research (Moroz & Hindle, 2011); which is also the core component in this present research.

Bygrave and Hofer (1991) have led the growing attention on entrepreneurial process research. They proposed that the focus of the field of entrepreneurship should shift from the characteristics and functions of the entrepreneur and the many definitions of what constitutes an entrepreneur to the nature and characteristics of the entrepreneurial process. By focusing on the process, entrepreneurs are identified by their participation in the process, not by a unique set of characteristics; which was the previous central topic. They also indicated the criteria for modeling the entrepreneurial processes. They listed the important elements of entrepreneurial processes: (1) it is initiated by an act of human volition. (2) It occurs at the level of the individual firm. (3) It involves a change of state. (4) It involves a discontinuity. (5) It is a holistic process. (6) It is a dynamic process. (7) It is unique. (8) It involves numerous antecedent variables. (9) It generates outcomes that are extremely sensitive to the initial conditions of those variables (Bygrave and Hofer, 1992). According to them, any process model should include this set of parameters, and mathematical models with linear, incremental thinking should be avoided, such as regression models, because alternative models can better deal with such entrepreneurial processes as discontinuities and changes of state.

A recent research conducted by Moroz and Hindle (2011) extensively examined 32 entrepreneurial process models that are thus far existent in the literature; in order to observe the generic and distinct features of entrepreneurial processes and present a better understanding for both scholars and practitioners. In other words, their purpose was to find out how entrepreneurial processes differentiate themselves from others and how these entrepreneurial processes are linked to one another. Of the 32 models, 20 were conceptual and 12 empirical. Upon their analyses, Moroz and Hindle found out that only four of these 32 process models are fully equipped by the elements that make entrepreneurial processes generic and distinct at the same time. These are namely; Gartner's (1985) four-facet framework that is intended to explain differences between new ventures created by entrepreneurs, Bruyat and Julien's (2000) study of investigating the dialogic between the entrepreneur and value creation, Shane's (2003) complex model of combining individual attributes and environmental variables to the execution, and lastly Sarasvathy's (2001 & 2006) theory of effectuation and entrepreneurial expertise. Each model will be briefly elaborated below.

First of these models, in his noteworthy research, Gartner (1985) provides a framework for describing new venture creation. He categorizes the factors that are essential to new venture creation in four key areas: individual(s), organization, environment, and process. Moroz and Hindle (2011) find out six generic elements within Gartner's model:

(1) locating business opportunities, (2) accumulating resources, (3) marketing products and services, (4) producing products, (5) building organizations, and (6) responding to government and society. However, these generic components do not necessarily describe behaviors only specific to entrepreneurs. Still, Gartner put an emphasis on the emergence of a new venture in order to speak of entrepreneurship because only entrepreneurs start new ventures. While Gartner's model was found to be useful for classifying and generalizing, the use of 'the concept of emergence' was weakened by an inability to successfully incorporate either innovation or temporality and was further limited by the necessity of outcomes being attached to the creation of a profit oriented new venture (Moroz & Hindle, 2011). His model can be found in Figure 2.

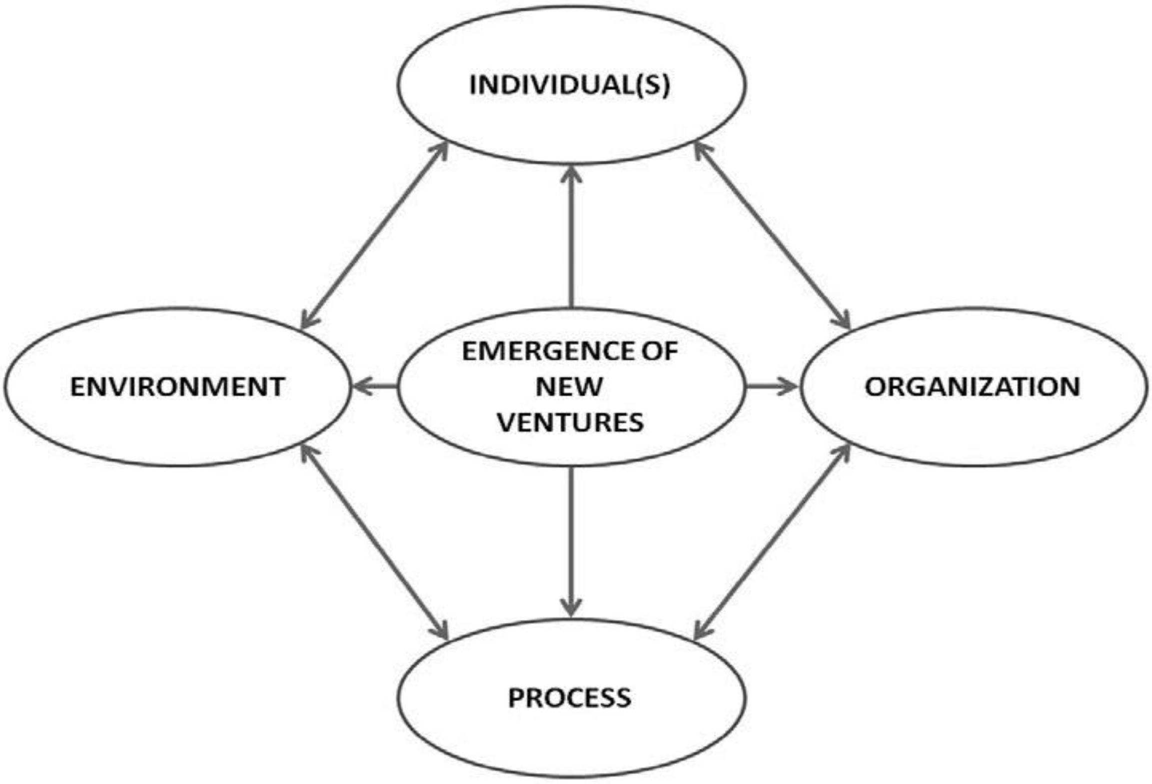


Figure 2: Gartner's Static Framework Model of New Venture Emergence (1985)

Second model formed by Bruyat and Julien (2000) focuses on value created by an individual. They define this individual creating value as 'developing entrepreneur'. Although their model also encompasses the four dimensions introduced by Gartner (1985), they differentiate in a way that they do not bound entrepreneurship only to the emergence of a new venture and take 'the concept of temporality' into consideration as well. As a result, they come up with a four-quadrant diagram to illustrate the outcomes of Individual-New Value Creation dialogic. In spite of addressing the issue of temporality, their model was too simplistic and lacked fully accommodating the concept of innovation (Moroz & Hindle, 2011). In Figure 3, their model is shown.

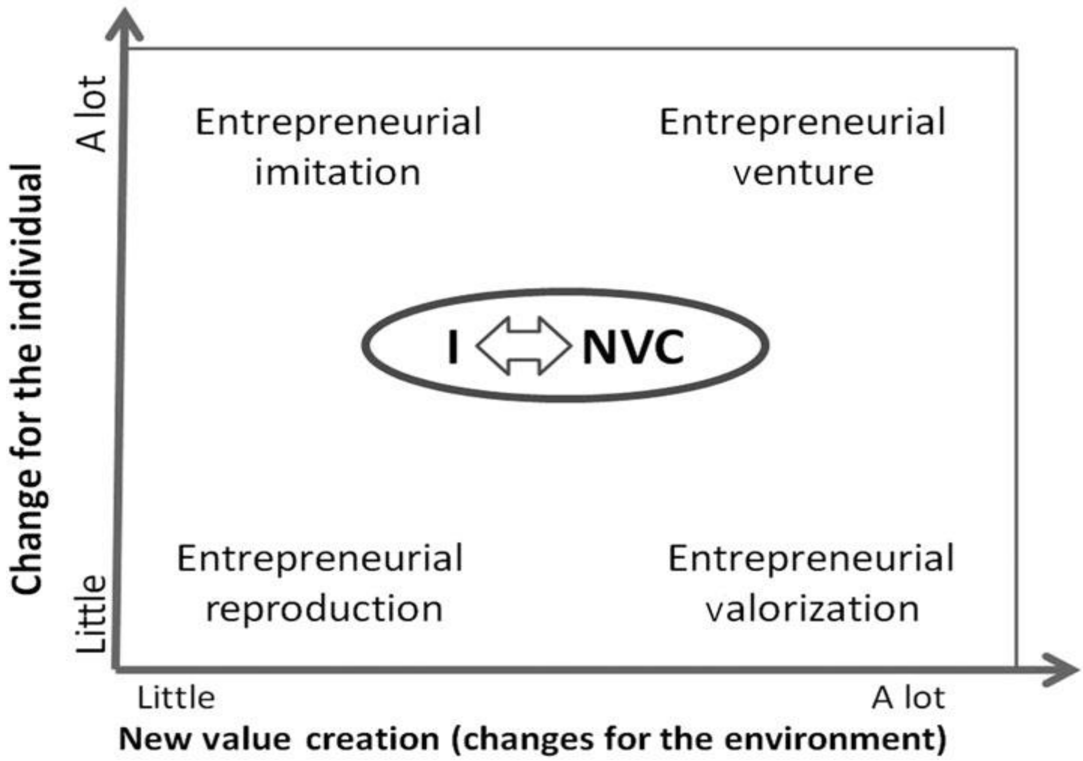


Figure 3: Bruyat and Julien's Model of the Entrepreneurial Process (2000)

Thirdly, Shane's (2003) model tends to focus on the relationship between individual and opportunity. He places the three-stage opportunity span in the center of his model; that is opportunity recognition, discovery and exploitation as thoroughly discussed above. The model integrates individual attributes and environmental denominators into these steps of opportunity process, which then leads to execution of actual outcomes. In addition, Shane is intensely interested in distinctiveness between entrepreneurial processes and managerial processes by stating that entrepreneurs chase not only profit delivering opportunities but also opportunities creating new means-end relationships. His model, seen in Figure 4, serves as a unifying theory of entrepreneurship.

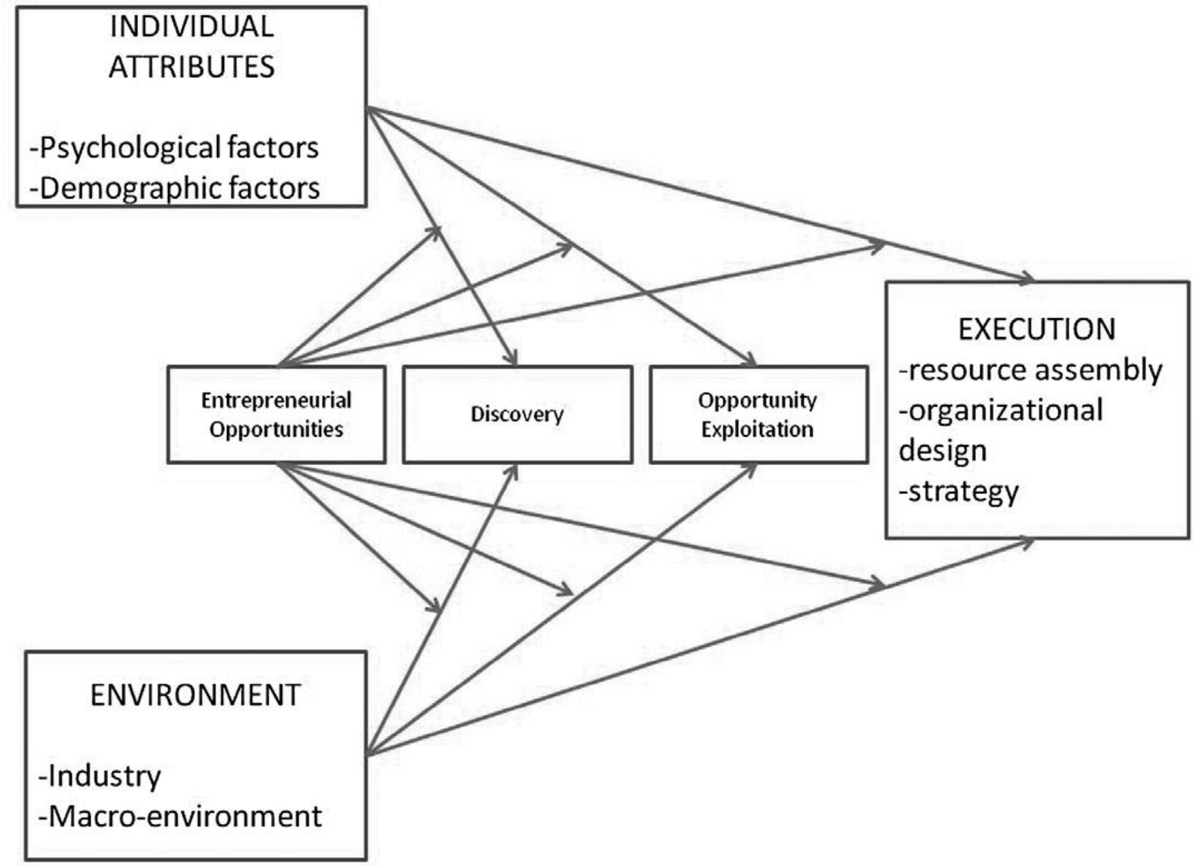


Figure 4: Shane's Model of the Entrepreneurial Process (2003)

Last but not least, Sarasvathy's model of effectuation complies with the criteria set by Moroz and Hindle in order to outline what makes entrepreneurship generic and distinct. According to them, this model has a high practical value although it contains several complexities. This model shall be comprehensively analyzed in its own section of the present paper. (2.1.4)

Appendix A provides a summary of comparison among these four models presented here in order to give the reader the idea of how these entrepreneurial process models have evolved throughout the time.

In the following section, another important phenomenon will be investigated, which is the debate between two fundamental schools of thought that prepare the basis of and give direction to the research on entrepreneurial processes.

2.1.3 Schools of Thought: Planning vs. Emerging

Scholars studying entrepreneurship and entrepreneurial processes seem to have been split into two main perspectives; those following a planning school of thought and those following an emerging school of thought. Such a distinction is rooted on Henry Mintzberg's analysis of strategic patterns (Mintzberg, 1978). He puts forth the formation of different strategies evolving throughout a process. He states that there are not only intended and deliberate strategies that are foreseen and planned in advance but also emergent strategies that come into existence over time. A blend of deliberate and emergent strategies eventually lead to the realized strategy, in other words the outcome.

A similar approach has been adopted within the entrepreneurship research. First group of researchers assert that entrepreneurs start up new ventures by trailing beforehand developed and pursued strategies and plans. The planning process is a controlled, conscious process; it applies a formal approach that decomposes the process into distinct steps accompanied with checklists and techniques. The optimal strategies emerge full blown to be converted to detailed objectives, budgets, programs etc. (Shepherd & Douglas, 1997). It has been argued that planning comprises the thinking activities necessary to obtain resources and organizing them to achieve a goal. Some authors such as Ansoff (1991) discuss that planning improves effectiveness of the use of these resources, human action and thus facilitates a higher goal achievement. Advantages of such a strategy include minimizing risk by forecasting and predictions based on market research and past performance; taking intentional steps that can be later tested and evaluated such as writing a business plan; and increasing overall efficiency by standardizing processes and business activities. Such components of the planning school, as mentioned earlier in the introduction chapter 1.2.2, constitute the basis of most business courses taught all over the globe today, among which entrepreneurship education also takes place. However, it has also been counter argued that fixedness and inflexibility of this approach by its nature hinders the free and creative spirit of entrepreneurship.

The second school of thought takes into account the uncertain character of the entrepreneurial process, thus opts for a bigger room for changes and learning. This viewpoint recognizes the complexity and improbability of the environment and assumes a great dependency of entrepreneurial behavior on the environment. Therefore, scholars supporting this stream of thought state that such unpredictable environments cannot be strictly controlled; hence ability to respond to and capture the emerging opportunities is essential for successful entrepreneurs (Shepherd & Douglas, 1997). As those who stick to the predefined plans and goals inevitably miss these opportunities; those who can adapt to the changes will grasp them and enjoy the profitable outcomes. The members of this school of thought put utmost emphasis on constantly learning instead of planning. It is also asserted that the nature of entrepreneurship that is rather based on intuition, creativity and unsteadiness matches better to this second school of thought.

Both strategies have naturally advantages and disadvantages. Therefore the trade-off between deliberate strategies that assume full control over the process and emerging strategies that allow for learning remains an interesting discussion point among academicians. On the other hand, empirical evidence has been found by Brinckmann et al. (2010) that planning has positive impact on performance but it is even more beneficial when combined with learning. Mintzberg, who somewhat initiated this discussion, later on stated that it is optimal when a subtle balance is found between thought and action, control and learning, stability and change (Mintzberg, 1990).

This fundamental debate leads the way to analyze Sarasvathy's effectuation model which is the central entrepreneurial process model that will be used in this thesis. Below, effectuation theory will comprehensively be dealt with.

2.1.4 Effectuation vs. Causation

Effectuation theory of Saras Sarasvathy is one of the most popular, tackled and also approved entrepreneurial process models of the last decade. Earlier in this paper, the process models were introduced and analyzed based on Moroz and Hindle's framework. Sarasvathy's effectuation theory is one of the only four models that fulfill the criteria introduced by Moroz and Hindle (2011) in order to find out what is both generic and distinct about the entrepreneurial processes. According to them, she associates a higher use of effectuation with greater entrepreneurial expertise and a higher probability of success, while highlighting the complexity of the concepts of success/failure within the entrepreneurial domain (Moroz & Hindle, 2011). They discussed that the concept of effectuation contains several ontological difficulties but it was the only one of the models that presented a direct practical focus.

The phenomenon of effectuation has come to existence when Sarasvathy was determined to understand how great entrepreneurs think, especially concentrated on tackling the causal way of thinking and introducing the effectual reasoning. To test this notion empirically, she conducted a cognitive research based on the criteria of having at least 15 years of entrepreneurial experience, having started multiple companies ranging in size from $200M to $6.5B (gone through both success and failures) in industries as diverse as toys and railroads and having taken at least one company public. She identified 245 entrepreneurs across U.S.A who met her criteria and 45 of them agreed to participate. In her first publications, she uses 27 of them in her studies. The results yielded a remarkably high %89 of the entrepreneurs used effectuation more than causation (Sarasvathy, 2001). From these analyses, it was clear that a distinction between causal and effectual reasoning had to be made in order to explain differences between entrepreneurs and consequences of using effectual thinking rather than causal thinking. She was convinced that what makes great entrepreneurs isn't genetic or personality traits, risk-seeking behavior, money, or unique vision. Effectuation research has found that there is a 'science' to entrepreneurship and great entrepreneurs across industries, geographies, and time use a 'common logic' or thinking process, to solve entrepreneurial problems.

While constructing her effectual model, Sarasvathy utilized some of the fundamental theories and concepts from the past research in order to create the fundamental principles of her theory. Sarasvathy (2001b) indicates herself that the three set-out points of her theoretical work are based on Knightian uncertainty (Knight, 1921), Marchian goal ambiguity (March, 1982) and Weickian enactment (Weick, 1979). According to Knight, risk is statistically measurable, ambiguity is rather hard to measure statistically and Knightian uncertainty, also called True Uncertainty refers to the impossibility to estimate or predict statistically what is going to happen. On the other hand, March proposed ideas that oppose predefined goals and display a disbelief in decisions made on predictions that can only be knowable in the future. March's essential point is that organizations are good at adaptive processes that result in efficient exploitation of existing opportunities, but are poor at exploring for new opportunities owing to the uncertainties involved (Sarasvathy, 2010). Lastly, Weick emphasized on the importance of enactment and encouragement of living forward. He argues that decision makers in organizations intervene between the environment and its effects inside the organizations, which means that selection criteria become lodged more in the decision-makers than in the environment (Weick, 1979). Sarasvathy therefore blend these conceptualizations of Knight, March, and Weick and develops effectual reasoning with techniques that provide a new, but theoretically fully funded alternative to causal thinking (Sarasvathy, 2001a). Before comparing these two inverse decision-making styles, the principles of Sarasvathy's effectuation theory as opposed to causation theory are briefly presented (quoted from Sarasvathy, 2001a):

Means Based vs. Goals Based: The emphasis of effectual thinking here is on creating something new with existing means rather than discovering new ways to achieve given goals as causal thinking suggests. When effectual entrepreneurs set out to build a new venture, they start with their means: who I am, what I know, and whom I know. Then, the entrepreneurs imagine possibilities that originate from their means.

Affordable loss vs. Expected Returns: Causation models focus on maximizing the potential returns for a decision by selecting optimal strategies. Effectuation predetermines how much loss is affordable and focuses on experimenting with as many strategies as possible with the given limited means. The effectuator prefers options that create more options in the future over those that maximize returns in the present.

Strategic Alliance vs. Competitive Analysis: Causation models, such as the Porter model in strategy, emphasize detailed competitive analysis (Porter, 1980). Effectuation emphasizes strategic alliances and pre-commitments from stakeholders as a way to reduce and/or eliminate uncertainty and to erect entry barriers.

Exploitation of Contingencies vs. Exploitation of Pre-existing Knowledge: When pre-existing knowledge such a expertise in a particular new technology, forms the source of competitive advantage, causation models might be preferable. Effectuation, however, would be better for exploiting contingencies that arose unexpectedly over time.

Control an unpredictable Future vs. Predict an uncertain Future: Causation processes focus on the predictable aspects of an uncertain future. The logic for using causation processes is: To the extent we can predict the future; we can control it. Effectuation however, focuses on controllable aspects of an unpredictable future. The logic for using effectuation processes is: To the extent we can control the future; we do not need to predict it.

Effectuation theory is focused on the early start-up phases as Sarasvathy herself describes as the first and second gears to take the car from standing to a flow. She also indicates that entrepreneurs need effectuation logic especially to start your business but eventually it's expected that entrepreneurs shift away from this logic. Based on these five basic principles, an effectual cycle is established to capture the entire process. It's considered to be a cycle because entrepreneurship is believed not to be static, one-time exercise; instead a continuous process as discussed above at entrepreneurial process theories. Effectual logic happens in mind of an individual, where it provides a way of thinking about making decisions when non-predictive control is required. The effectual cycle represents the thinking process in a form used in creating products, markets, and ventures.

The cycle starts with individuals asking to themselves 3 questions: who I know, what I know and whom I know. These are so called 'inventory of own means' from which the entrepreneur creates his own goals asking to himself; what can I do? Within these goals, the essential point is that entrepreneurs don't take only pure risks that can yield maximum return but instead get involved in those ideas where they have an understanding of maximum lost. Next, the entrepreneur starts building up networks by interacting with those people whom he knows. These interactions and networking result in high commitment of stakeholders. At this point he is rather focused on creating valuable partnerships instead of fighting in competition. Finally the continuous process is carried on forming new means and new goals to benefit from new opportunities. This effectuation cycle is demonstrated in Figure 5:

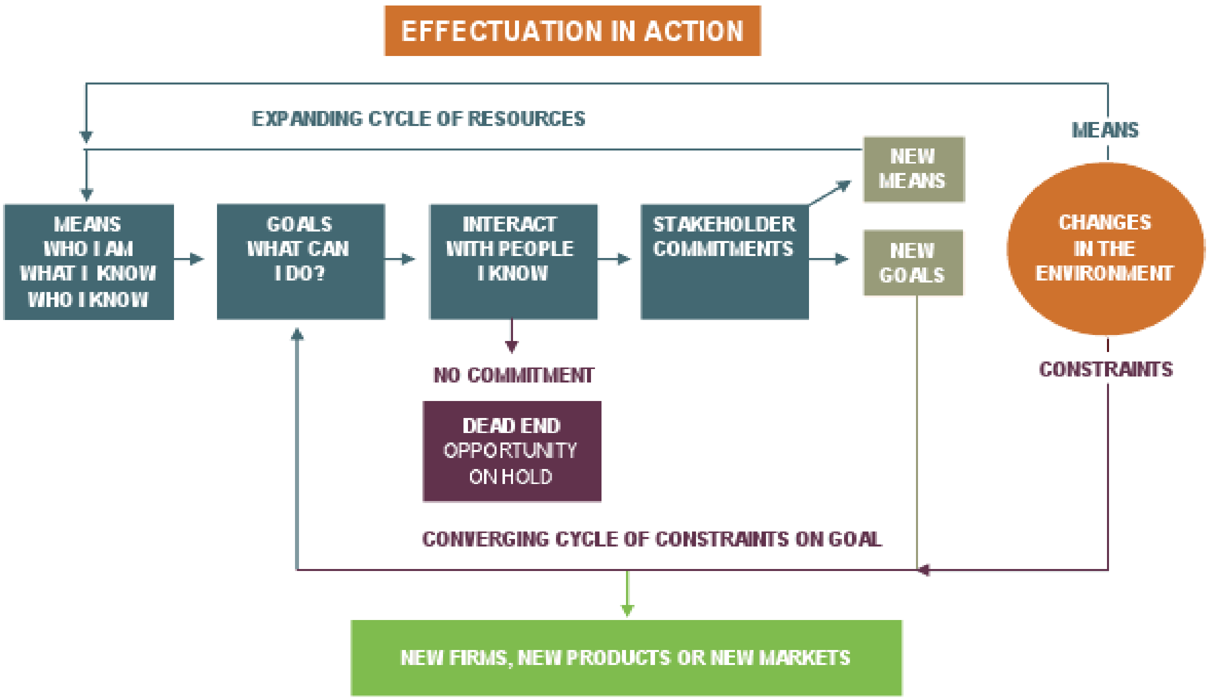


Figure 5. The Effectuation Cycle (source: http://effectuation.org/learn/effectuation-101)

Furthermore it is crucial to look into the differences between effectual and causal logics as effectual logic was born as an inversion to causal. Causal logic focuses on predicting the future and starts off with goals shaped by these predictions. Its main belief is "If I can predict the future, I can control it" whereas effectual thinkers suggest *"To the extent we control the future, we don't need to predict it"* (Sarasvathy, 2001b). Setting up pre-defined goals, causal thinkers must collect those means and resources required to accomplish that goal as opposed to effectual thinkers. Effectuation is on the other hand especially applicable to the complex environments where the future is so uncertain that it is impossible to predict, while causation can be used in predictable situations. Effectual logic is based on the premise: *''To the extent we can control the future, we do not need to predict it''* (Sarasvathy, 2001b).

To understand the fundamental difference between causation and effectuation, an example from a very common daily life situation is of practical use. Imagine someone who comes home hungry and wants to cook something; he can follow two different ways. He can decide on what he wants to eat, a certain meal or a special dish (i.e. pre-defined goal) and then he has to find out the receipt (i.e. roadmap) of this dish which includes necessary ingredients (i.e. resources, means) to make this dish. Then he has to go to the supermarket to obtain those ingredients and following the instructions on the receipt he can finally complete the dish he originally wanted to eat. This is an example of causal logic. On the other hand, he as hungry and tired, reaches out to his fridge to see what kind of food or ingredients (i.e. resources, means) he's got in there and then can decide on what he can create with these (i.e. all possible ends). This is the effectual logic. This example, though oversimplified from a daily life situation, reflects the main differences between causal and effectual thinking. Table 1 illustrates the differences from a theoretical perspective:

Categories of Differentiation	Causation Processes	Effectuation Processes
Givens	Effect is given	Only some means or tools are given
Decision-making selection criteria	Help choose between means to achieve the given effect Selection criteria based on expected return Effect dependent: Choice of means is driven by characteristics of the effect the decision maker wants to create and his or her knowledge of possible means	Help choose between possible effects that can be created with given means Selection criteria based on affordable loss or acceptable risk Actor dependent: Given specific means, choice of effect is driven by characteristics of the actor and his or her ability to discover and use contingencies
Competencies employed	Excellent at exploiting knowledge	Excellent at exploiting contingencies
Context of relevance	More ubiquitous in nature More useful in static, linear, and independent environments	More ubiquitous in human action Explicit *assumption* of dynamic, nonlinear, and ecological environments
Nature of unknowns	Focus on the predictable aspects of an uncertain future	Focus on the controllable aspects of an unpredictable future
Underlying logic	To the extent we can predict future, we can control it	To the extent we can control future, we do not need to predict it
Outcomes	Market share in existent markets through competitive strategies	New markets created through alliances and other cooperative strategies

Table 1. Effectuation vs. Causation (Sarasvathy, 2001a)

As stated before, Sarasvathy has conducted an extensive research in order to observe the differences between those entrepreneurs who use causal logic and those who use effectual thinking. However, her research was done only in the USA and her sample consisted of only American entrepreneurs. Although results showed that in 90 of the time, entrepreneurs used effectual logic, which reveals quite a significant conclusion; this can be said only in the context of American entrepreneurs, and not to be generalized to all nations. Furthermore, the cultural component of influence cannot be observed within this research study. This is, as explained earlier, the main drive of this research project, to take the concept of effectuation to an international context and by adding the cultural component, to be able to observe whether different cultures have impacts on the use of effectuation.

In order to proceed on this line, a literature review on 'Culture' is of essence. In the following section, the literature on culture will be briefly introduced; the cultural dimensions that help determine characteristics of different cultures will be tackled. Furthermore a closer overview on the culture of Turkey and the United Kingdom will take place since these are the two cultures on spot lights within the domain of this master thesis.

2.2 Culture

If we want to detect the influence of national culture on entrepreneurial processes, we need to have a firm understanding of what culture is, what national culture is and which elements have potentially a deep relation to entrepreneurship. Culture is again one of those popular topics in literature that has been dealt with by many authors from diverse disciplines, ranging from sociology and psychology to economics and management. What makes culture and studying culture interesting is that it is considered as a living thing that evolves and shapes throughout the time. This dynamic nature of culture has also attracted scholars in the entrepreneurship domain. Before handling the interaction between culture and entrepreneurship, first some basic concepts will be touched upon; then a focus will be laid upon national and business culture, and cultural dimensions.

2.2.1 Basics of Culture

The word 'culture' originates from Latin words colere or cultura which literally mean cultivation (Harper, 2001). This term was first used in Roman times and appeared in its current sense in Europe in the 18th and 19th centuries. In the 19th century, the term was developed to refer first to the betterment or refinement of the individual, especially through education, and then to the fulfillment of national aspirations or ideals. Later, some scientists used the term to refer to universal human capacity. Yet to this day, the term culture has been used in several different contexts. For some it refers to an appreciation of good literature, music, art, and food. For a biologist, it is likely to be a colony of bacteria or other microorganisms growing in a nutrient medium in a laboratory. However, for anthropologists and other behavioral scientists, culture is the full range of learned human behavior patterns. And for business scholars, an organizational culture is a term that is used very often. Nevertheless, just like in entrepreneurship, one single definition of culture that is widely accepted is hard to make due to its complexity and many different forms and elements that it consists of (Cohen, 2009).

Kroeber and Kluckhohn (1952) define culture exclusively: "Culture consists of patterns, explicit and implicit, of and for behavior acquired and transmitted by symbols, constituting the distinctive achievements of human groups, including their embodiment in artifacts; the essential core of culture consists of traditional (i.e. historically derived and selected) ideas and especially their attached values; culture systems may be considered on the one hand as products of action and on the other hand as conditional elements of future action"(Kroeber & Kluckhohn 1952: 181). From this definition, the cyclic nature of culture can be deduced as the interaction between peoples and their culture continue being influenced from one another; cultures influence the behavior of people and the outcomes of people's behavior reshape the culture. Deeply embedded, unconscious, and even irrational shared values shape political institutions as well as social and technical systems, all of which simultaneously reflect and reinforce values and beliefs (Eroglu & Picak, 2011). Hofstede's concise definition of culture captures what different uses of culture have in common: “Culture is the ‘collective programming of the mind’ that distinguishes members of one group from another” (Hofstede, 2001, p. 1). In other words, culture is a main component of the ‘software’ that goes into human beings and determines their actions, behavior and mindset, which varies among groups. Spencer-Oatey (2000) identifies culture in a similar way stating that culture is a set of attitudes, beliefs, behavioral norms, and basic assumptions and values that are shared by a group of people, and that influence each member’s behavior and his/her interpretation of the ‘meaning’ of other people’s behavior. From these definitions, it is clear to derive that culture is, if not the most, one of the most influential factors that is responsible for shaping of an individual. And it is therefore not difficult to deduce that it has most probably a huge impact on whether that individual becomes an entrepreneur and on what kind of entrepreneur he eventually may be.

2.2.2 National Culture:

Since culture is a very broad concept, there is a need to break it down for the purpose of clarity. National culture is considered to be the best unit of analysis in this regard (Hofstede, 2002). Trompenaars (2011) also stresses on this point stating that national culture is at the highest level of analysis followed by corporate and professional cultures.

When talking about culture in general, as mentioned above, there is a certain belonging of an individual to a larger group. According to Hofstede et al (2005), national culture is the largest level of a group that an individual can belong to. National culture is most frequently used to address a full package of beliefs and manners; customs and traditions; symbols and rituals, and basically every tangible and intangible values that a nation has been accustomed itself to throughout its past. Doney et al (1998) points out that it is not specific to the characteristics of a certain country or individuals but rather to the characteristics of a large group of people in many ways showing similarity to each other.

In the bigger picture, it is fair to claim that all these components of the national culture to a large extent determine ‘the mentality’ of a nation’s people. Since it is believed that national culture leads to learned behavior of those people (Dahl, 2004); which helps construct the decision making mechanisms used in everyday life situations. It can hence be asserted that national culture influences entrepreneurial behavior and processes, and decision making style of entrepreneurs. Furthermore, cultural values indicate the degree to which a society considers entrepreneurial behaviors, such as risk taking and independent thinking, whether or not to be desirable (Eroglu & Picak, 2011). National cultures that appreciate such entrepreneurial behavior endorse a propensity to develop and introduce radical innovation, whereas cultures that reinforce conformity, group interests, and control over the future are not likely to show risk-taking and entrepreneurial behavior (Herbig & Miller, 1992).

Yet the question is, to what extent is this influence of culture on entrepreneurial thinking significantly the case? Although there may be traced some variation among the individuals of the same nation, the variation is much greater when compared to other nations and peoples. Therefore it is further interesting to investigate not only the extent to which national culture influences the entrepreneurs and also the extent to which this varies between diverse nations.

2.2.3 Cultural Dimensions:

Being an abstract concept, culture is difficult to measure or analyze. When comparing two or more cultures, researchers need to have a 'reference point' in order to make this comparison valid. For this reason, culture scholars have developed models to be used as variables in cross-cultural studies. The emergence of cultural dimensions made it possible to construct values of qualitative studies on quantitative scales (Fink et al, 206).

In order to operationalize cultural studies, the use of cultural dimensions is based on the existence of universalism, so that these dimensions are not only limited to certain cultures but also are applicable in all countries. Kluckhohn (1962) dragged attention to this point and assumed the existence of universals or near universals that cut across cultural boundaries. The cultural dimensions based on these assumptions quantitatively measure cultural values and therefore serve to assess the difference and distance in cross-cultural interaction. It also helps to categorize different cultures within clusters (House et al, 2002).

Many academics have utilized cultural dimensions to conduct intercultural research. The pioneer researchers in the field of national culture are Kluckhohn and Strodtbeck (1961), Hofstede (1980), Hall & Hall (1990), Schwartz (1992), Trompenaars and Hampden-Turner (1993), and House et. al. (2004 – GLOBE). The key elements of these most -cited research on national culture will be elaborated below.

2.2.3.1 Kluckhohn and Strodtbeck (1961):

In their psychological study of values, Florence Kluckhohn and Fred Strodtbeck (1961) proposed that all human societies must answer a limited number of universal problems, that the value-based solutions are limited in number and universally known, but that different cultures have different preferences among them. They conducted a research dealing with value orientation profiles of five cultural groups in Southwest United States. Suggested questions included humans' relations with time, nature and each other, as well as basic human motives and the nature of human nature. Kluckhohn and Strodtbeck suggested alternate answers to all five issues: *(1) What is the character of innate human nature? (human nature orientation), (2) What is the relation of man to nature (and supernature)? (man-nature orientation), (3) What is the temporal focus of human life? (time orientation), (4) What is the modality of human activity? (activity orientation), (5) What is the modality of man's relationship to other men? (relational orientation)* (Kluckhohn & Strodtbeck, 1961. p 10-11).

As a result they developed culture-specific measures of each issue and collected their findings under Value Orientation Theory. Their theory has served as a foundation for further research and has since been tested in many other cultures, and used to help negotiating ethnic groups understand one another, and to examine the inter-generational value changes caused by migration (Hills, 2002).

Question	Orientation	Description
Time	Past	We focus on the past (the time before now), and on preserving and maintaining traditional teachings and beliefs.
	Present	We focus on the present (what is now), and on accommodating changes in beliefs and traditions.
	Future	We focus on the future (the time to come), planning ahead, and seeking new ways to replace the old.
Humanity and Natural Environment	Mastery	We can and should exercise total control over the forces of, and in, nature and the super-natural
	Harmonious	We can and should exercise partial but not total control by living in a balance with the natural forces
	Submissive	We cannot and should not exercise control over natural forces but, rather, are subject to the higher power of these forces.
Relating to other people	Hierarchical ("Lineal")	Emphasis on hierarchical principles and deferring to higher authority or authorities within the group
	As equals ("Collateral")	Emphasis on consensus within the extended group of equals
	Individualistic	Emphasis on the individual or individual families within the group who make decisions independently from others
Motive for behaving	Being	Our motivation is internal, emphasising activity valued by our self but not necessarily by others in the group
	Being-in-becoming	Motivation is to develop and grow in abilities which are valued by us, although not necessarily by others
	Achievement ("Doing")	Our motivation is external to us, emphasising activity that is both valued by ourselves and is approved by others in our group.

Table 2. Kluckhohn and Strodtbeck's Values Orientation (Hill, 2002)

2.2.3.2 Hofstede (1980):

Geert Hofstede is one of the most influential social-psychologist researchers recognized worldwide in the areas of organizational studies and culture; he's mainly been interested in investigating the influence of culture on people's behavior. His most notable work on cultural dimensions is if not the most, one of the most regarded, cited and applied studies in this area. Sivakumar and Nakata (2001) denoted that only in the decade between 1987 and 1997, Hofstede's word was cited more than 1,100 times. His first best-known book Culture's Consequences (1980) revealed his comprehensive research on how values in the workplace are influenced by culture. For this study, he analyzed a large database of employee values scores collected by IBM between 1967 and 1973 covering more than 70 countries, from which he first used the 40 largest only and afterwards extended the analysis to 50 countries and 3 regions. Currently there is a list of approximately 100 countries with scores on Hofstede's five cultural dimensions.

The first dimension 'Power Distance Index (PDI)' is defined as "the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally" (Hofstede, 1994, p. 28). A high power distance culture prefers hierarchical bureaucracies, strong leaders and a high regard and submission to authority. High PDI cultures (ex. Malaysia, Panama, Guatemala) usually have centralized, top-down control and the people know 'their place' in the system. The institutions or organizations where less powerful members accept power is distributed unequally will have a high PDI. Those countries will be more likely not to allow significant upward mobility of its citizens, because they accept autocratic and paternalistic relations. Low PDI implies greater equality and empowerment. A low power distance culture (ex. Austria, Denmark) tends to favor personal responsibility and autonomy. In such countries as opposed to high PDI, the power is shared and well dispersed. It also suggests that society members view themselves as equals.

The second dimension 'Individualism vs. Collectivism (IDV)' is probably the most often discussed and studied concept. Hofstede defines IDV as: "Individualism pertains to societies in which the ties between individuals are loose: everyone is expected to look after himself or herself and his or her immediate family. Collectivism as its opposite pertains to societies in which people from birth onwards are integrated into strong, cohesive in-groups, which throughout people's lifetime continue to protect them in exchange for unquestioning loyalty" (Hofstede, 1994, p. 51). In other words, it is the degree to which the ties between the members of a society are strong or weak and as to what extent the members are integrated into groups. In an individual environment the individual person and their rights are more important than groups that they may belong to. In an individual culture (ex. USA, Australia, Canada) free will is highly valued. A high individualism ranking indicates that people are expected to develop and to be proud of their personalities and their choices. People often tend to form a higher number of looser relationships in those societies. Collectivism on the other hand, represents a preference for a tightly-knit framework in society in which individuals can expect their relatives or members of a particular in-group to look after them in exchange for unquestioning loyalty. In a collective culture (ex. Venezuela, Indonesia, Japan) personal needs are less important than the group's needs. There is strong group cohesion, often extended-families and people take responsibility for each other's well-being.

The third dimension "Masculinity vs. Femininity (MAS)" is defined by Hofstede as follows: "masculinity pertains to societies in which social gender roles are clearly distinct (i.e., men are supposed to be assertive, tough, and focused on material success whereas women are supposed to be more modest, tender, and concerned with the quality of life and caring for home and family); femininity pertains to societies in which social gender roles overlap (i.e., both men and women are supposed be modest, tender, and concerned with the quality of life)" (Hofstede, 1994, p. 82-3). It is also a measure of a society's goal orientation: a masculine culture emphasizes status derived from wages and position; a feminine culture emphasizes on human relations and quality of life. High MAS societies (ex. Japan, Austria, Venezuela) give a high importance to ambition, accumulation of wealth and power and there is a bold distinction between genders and their roles. In these cultures, males generally dominate a significant portion of the society while females are under domination. Low MAS countries (ex. Netherlands, Costa Rica, Guatemala) do not reverse the gender roles. In a low MAS society, the roles are simply blurred. You see women and men working together equally across many professions. Men are allowed to be sensitive and women can work hard for professional success. Society at large is more consensus-oriented and balanced.

The fourth dimension “Uncertainty Avoidance Index (UAI)” is defined as "the extent to which the members of a culture feel threatened by uncertain or unknown situations; the extent to which a culture values predictability and tolerates uncertainty and ambiguity" (Hofstede, 1994, p. 113). It also reflects the aversion of people to risk-taking and questions whether individuals require pre-set boundaries and clear structures. A high uncertainty culture (ex. Greece, Russia, Argentina, Chile) allows individuals to cope better with risk and innovation. They have strong traditions and rituals and tend toward formal, bureaucratic structures and rules. High UAI-scoring nations try to avoid ambiguous situations whenever possible. They are governed by rules and order and they seek a collective ‘truth’. On the other hand, low uncertainty cultures (ex. Singapore, India, Norway) enjoy novel events and values differences. There are very few rules and people are encouraged to discover their own truth, therefore they are less rigid in their expectations for instructions and will typically be more generalist in reports and responses to requests.

The fifth dimension “long term vs. short term orientation (LTO)” was added later based on the research by Michael Bond who conducted the study in 23 countries in 1991. This dimension relates to Confucian dynamism and its time orientation. It is the cultural trait that focuses on to what extent the group invests for the future, is persevering, and is patient in waiting for results. A high LTO characterizes countries (ex. China, Taiwan, Hong Kong) where people value the behaviors that affect the future, such as perseverance, thrift and shame. Delivering on social obligations and avoiding loss of face are considered very important. Those societies are often superstitious or based on many truths or faiths. Low LTO countries (ex. USA, Nigeria, Philippines) on the other hand believe in absolute truth. They have a concern for personal steadiness and stability, high respect for tradition and reciprocation of favors and gifts. They are rather normative in their thinking patterns.

2.2.3.3 Hall and Hall (1990):

Based on 180 interviews conducted with top German, French, and American executives and on extensive research in intercultural relations, Edward T. Hall and Mildred Reed

Hall offer insights to each country's unique approach to business and practical advice on day-to-day transactions in international business exchanges. Edward Hall, in his earlier studies, already came up with three cultural dimensions: High and Low Context, space and time. In addition to these, the study of Hall and Hall (1990) delivered another cultural dimension, that is fast and slow messages.

Their first dimension, the concept of high and low context deals with communication, the way in which information is transmitted (Dahl, 2004). In a high-context culture, there are many contextual elements that help people to understand the rules. As a result, much is taken for granted. This can be very confusing for person who does not understand the 'unwritten rules' of the culture. In a low-context culture, very little is taken for granted. Whilst this means that more explanation is needed, it also means there is less chance of misunderstanding particularly when visitors are present.

The second concept is concerned with the ways in which cultures structure their time. Monochronic time is referred to as doing one thing at a time. It assumes careful planning and scheduling and is a familiar Western approach that appears in disciplines such as 'time management'. Monochronic people tend also to be low context. In cultures with polychronic time, human interaction is valued over time and material things, leading to a lesser concern for getting things done within strict deadlines. Polychronic people tend also to be high context.

For the third concept, space, he introduced the term of proxemis which he defines as the interrelated observations and theories of man's use of space as a specialized elaboration of culture (Hall, 1966). It is basically 'the personal space' that each individual claims for his or her own physical territory. In high territorial cultures, people are more territorial than others with greater concern for ownership, while in low territoriality people care less about boundaries and ownership. People with low territoriality tend also to be high context whereas people with high territoriality to be low context.

The last cultural dimension has to do with the information flow especially at the workplace. In low-context countries information is highly focused, compartmentalized, and controlled; therefore not apt to flow freely. This is because there is a greater need for guarding individual territory and it brings along more bureaucracy and less information sharing. In high-context countries, on the other hand, information spreads rapidly and moves almost as if it had a life of its own. People tend to be more in contact and share information more freely. (Hall and Hall, 1990)

2.2.3.4 Schwartz (1992):

Shalom H. Swartz is a cross-cultural researcher concerned with composing a theory that covers the basic human values. Using his 'SVI' (Schwartz Value Inventory), Schwartz asked respondents to assess 57 values as to how important they felt these values are as 'guiding principles' in their life (Dahl, 2004). From data collected in 63 countries, with more than 60,000 individuals taking part, Schwartz derived a total of 10 distinct value types (power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity and security) at an individual-level analysis (Schwartz, 1992 & 2005b).

As seen in Figure 6, Schwartz subcategorized these 10 values into four higher-order value types forming two bipolar conceptual dimensions: On the one side, "Openness to Change" combines stimulation, self-direction and a part of hedonism, "Self-Enhancement", combines achievement and power as well as the remainder of hedonism. On the opposite side, "Conservation" combines the value orientations of security, tradition and conformity and “Self-Transcendence, which combines universalism and benevolence (Schwartz, 2006).

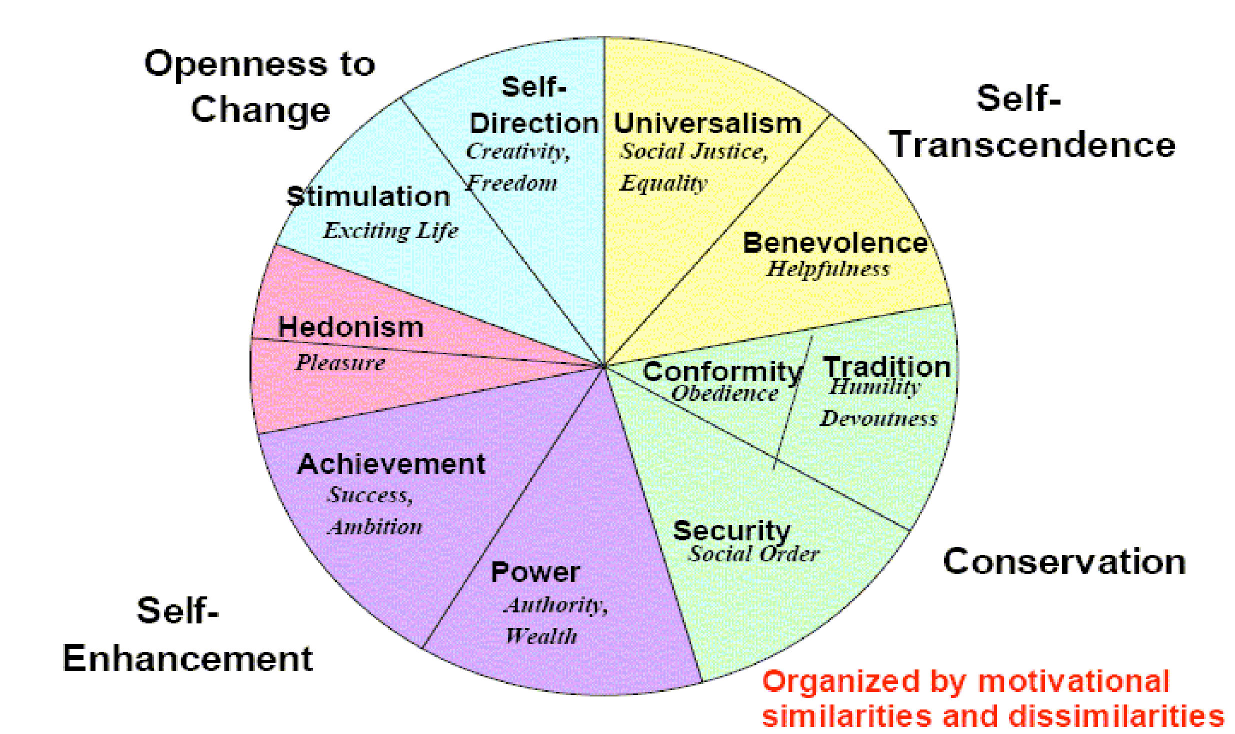


Figure 6. Theoretical Model of ten motivational types of values (Swartz, 2006)

Swartz’s model has been designed to operate as a culturally unbiased assessment of values as it has been applied to many countries and religions around the world. The SVI has been tested for construct bias, method bias and item bias. The results concluded that the SVI can provide valid analyses concerning life satisfaction and values orientation across cultural groups (Hofer et al., 2006).

2.2.3.5 Trompenaars and Hampden-Turner (1997):

These researchers carried out a study combining national culture and corporate cultures in which they developed a model after spending 10 years researching the preferences and values of people in dozens of cultures around the world. As part of this, they sent questionnaires to more than 46,000 managers in 40 countries. At least 500 usable responses per country were received, enabling the two authors to make substantiated distinctions between national cultures. Some of the data collected has been derived from questionnaires submitted to these managers on the choices, views and ethical dilemmas faced by them in their work and their daily lives. Such choices, views and ethical dilemmas are designed to draw out the underlying paradigms, or sets of assumptions, that people hold and that vary significantly from country to country. As a result of this wide-ranging research, their model brought up 7 dimensions of culture that are used to distinguish people from one culture compared with another (Trompenaars & Hampden-Turner, 1997).

The first dimension “universalism versus pluralism” tackles the degree of importance a culture assigns to the rules or to personal relationships. In a universalistic culture, people share the belief that overall codes, values and standards are considered superior to the needs and claims of friends and other relationships. In a pluralistic culture, people see culture in terms of friendship and intimate relationships. While rules do exist in a pluralistic culture, they are regarded as to how people manage their relationships with one another.

The second one “individualism versus communitarisnism” concerned with whether people function more as a community or as an individual. In an individualistic culture, people place the individual on top of the community. This means that individual happiness, fulfillment and welfare prevails and people take their own initiative and take care of themselves. In a communitarian culture, people place the community above the individual. It’s the individual’s own responsibility to act in ways conforming to the society as a whole. It is believed that individual needs are automatically attended.

The third dimension “specific versus diffuse” is associated with the degree to which responsibility is specifically assigned or is diffusely accepted. In specific cultures, people first analyze the elements individually and then gather them; the whole is the sum of its parts. Interactions between people are very well-defined. Specific individuals concentrate on hard facts, standards and contracts. On the other hand, a diffusely oriented culture begins with the whole and sees individual elements from the perspective of the total. All elements are related to one another. Relationships between elements are more important than individual elements.

The fourth dimension “affectivity versus neutrality” is interested in how members of a society display their emotions. In an affective culture, people display their emotions and it is not deemed necessary to hide feelings. However, in a neutral culture, people are taught not to display their feelings overtly. The degree to which feelings become manifested is therefore minimal. While emotions are felt, they are controlled.

The fifth one “inner vs. outer directed” investigates whether people think the environment can be controlled or environment controls them. In an inner-directed culture, people have a mechanistic view of nature; nature is complex but can be predicted and controlled with the right expertise. People believe that humans can dominate nature. In an outer-directed culture, people have a rather organic view of nature. Mankind is viewed as one of nature’s forces and should therefore live in harmony with the environment. People must therefore adapt themselves to external circumstances.

The sixth dimension "achieved vs. ascribed status" questions whether individuals believe they have to prove themselves to reach the desired status or the status is simply given to them. In a culture with achieved status, people gain status from their accomplishments. Achieved status must be proven time and time again and status will be given accordingly. In a culture with ascribed status, people obtain status from birth, age, gender or wealth. Here status is not based on personal achievement but it is accorded on the basis of the person's being.

Last but not least the seventh cultural dimension of Trompenaars and Hampden-Turner "sequential vs. synchronic time" deals with the time orientation of people; the relative importance cultures assign to past, present and future, and their approach to structuring time. According to the authors, cultures developed their own response to time. In a sequential culture, people structure time sequentially and do things one at a time. In a synchronic time culture, people do several things at once, believing time is flexible and intangible.

2.2.3.6 House et. al. (2004 – GLOBE):

GLOBE, which stands for 'Global Leadership and Organizational Behavior Effectiveness' is a project conceived by Robert J. House in 1991 and the findings are published in a book in 2004 (House et. al.). This comprehensive study directly involved 170 country co-investigators based in 62 cultures as well as a 14-member group of coordinators and research associates. Data from 17,300 middle managers in 951 organizations were collected. The original aim was to focus primarily on leadership; however the collected data was also used to analyze national culture and organizational culture. This research is considered to be the most extensive and ambitious attempt to gather and analyze information relevant to the study of the cross-cultural aspects of leadership (Gutterman, 2010). The researchers grouped 62 societal cultures into 10 clusters (i.e. Anglo (7), Nordic Europe (3), Eastern Europe (8), Sub-Saharan (5), Southern Asia (6), Latin Europe (6), Germanic Europe (5), Latin America (10), Middle East (5) and Confucian Asia (7)) (Chhokar et. al. 2008). As a result of this broad study, the authors identified 9 cultural dimensions. It is important to note here that the dimensions are measured in two aspects; in the form of social practices (as is) and in the form of social values (as should be).

The first dimension "Performance Orientation'' deals with the degree to which a collective encourages and rewards group members for performance improvement and excellence. In countries that have the highest scores (i.e. Singapore, Hong Kong, U.S.) training and development is highly valued. People have a "can-do" attitude and believe in taking initiative. They prefer a direct and explicit style of communication and tend to have a sense of urgency. In contrast, countries (i.e. Russia, Italy, Argentina) that have the lowest reported scores on this dimension, tend to emphasize loyalty and belonging, view feedback as discomforting, emphasize tradition, and pay attention to one's family and background rather than performance. They associate competition with defeat and value sympathy.

The second dimension ''Uncertainty Avoidance'' is defined as the extent to which members of an organization or society strive to avoid uncertainty by reliance on social norms, rituals, and bureaucratic practices to alleviate the unpredictability of future events. This dimension simply refers the extent to which individuals in a country seek orderliness, consistency, structured lifestyles, clear specification of social expectations, and rules and laws to cover unpredictable situations. Societies that are high on uncertainty avoidance (i.e. Switzerland, Sweden, Germany) have a stronger tendency toward orderliness and consistency, structured lifestyles, clear specification of social expectations, and rules and laws to cover situations. In contrast, in countries (i.e. Russia, Greece, Venezuela) there is strong tolerance of ambiguity and uncertainty. People are used to less structure in their lives and are not as concerned about following rules and procedures.

The third dimension ''Future Orientation'' is the degree to which individuals in organizations or societies engage in future-oriented behaviors such as planning, investing in the future, and delaying gratification. Countries with a strong future orientation (i.e. Singapore, Switzerland, Netherland), are associated with a higher propensity to save for the future and longer thinking and decision-making time frames. Countries with weak future orientation scores (i.e. Russia, Argentina, Italy) are associated with shorter thinking and planning horizons and greater emphasis on instant gratification.

The fourth dimension ''Power Distance'' is defined as the degree to which members of a society expect power to be unequally shared. It represents the extent to which a community maintains inequality among its members by stratification of individuals and groups with respect to power, authority, prestige, status, wealth, and material possessions. It also reflects the establishment and maintenance of dominance and control of the less powerful by the more powerful. Societies that are high on power distance (i.e. Russia, Thailand, Spain) tend to expect obedience towards superiors and clearly distinguish between those with status and power and those without it. In contrast, countries that practice low power distance (i.e. Denmark, Netherlands) expect less differentiation between those with power and those without it. They tend to be more egalitarian and favor stronger participation in decision-making.

The fifth dimension ''Assertiveness'' is the extent to which a society encourages people to be tough, confrontational, assertive and competitive versus modest and tender. Highly assertive societies (i.e. U.S. and Austria) tend to have a "can-do" attitude and tend to value competition. They have sympathy for the strong and the winner. The less assertive societies (i.e. Sweden, New Zealand) tend to prefer warm and cooperative relations and harmony. They have sympathy for the weak and emphasize loyalty and solidarity.

The sixth dimension ''Humane Orientation'' is defined as the degree to which a society encourages and rewards individuals for being fair, altruistic, generous, caring, and kind to others. In countries with high scores on this dimension (i.e. Malaysia, Ireland, Philippines) human relations, belongingness sympathy, and support for others, especially the weak and the vulnerable, are highly valued. Paternalistic and patronage relationships are important. People are usually friendly, sensitive and tolerant, and value harmony. Parents are expected to closely monitor their children, and children are expected to be obedient. In societies with low scores (i.e. Germany, France, Singapore) power and material possessions motivate people. Self-enhancement is a predominant value. Assertive styles of conflict resolution are preferred. People are expected to solve their own problems, and children are expected to be independent.

The seventh dimension ''Institutional Collectivism'' reflects the degree to which individuals are encouraged by societal institutions to be integrated into groups within organizations and the society. Institutional emphasis on collectivism consists of allocating resources and making opportunities available for members of the society to participate in societal legislative, economic, social, and political processes. Societies that strongly value individualism (i.e. Greece, Italy, Argentina) tend to value autonomy and individual freedom. Rewards are based on individual performance because self-interest is more strongly valued than the collective good. In contrast, in collectivist countries (i.e. Sweden, South Korea, Japan) group harmony and cooperation is paramount. Rewards are designed to recognize the group and not the individual. People in these societies tend to prefer similarity to others rather than distinctiveness. They are motivated by other members' satisfaction and cooperation rather than individual autonomy and achievement.

The eight dimension ''In-group Collectivism'' is different from the above-mentioned dimension. It refers to the extent to which members of a society take pride in membership in small groups such as their family and circle of close friends or colleagues. In countries like Iran, India, and China, being a member of a family and of a close group of friends, an in-group, is very important to people. Family members and close friends tend to have strong expectations from each other. Taking care of their needs and satisfying their expectations is critical to each individual. In contrast, in countries like Denmark, Sweden, and New Zealand, the cultural practices are quite different. Family members and close friends do not expect any form of special treatment, and people do not feel an obligation to ignore rules or procedures to take care of close friends.

The last dimension ''Gender Differentiation'' is the extent to which a society maximizes gender role differences. Countries with least gender-differentiated practices (i.e. Hungary, Poland, and Denmark) tend to accord women a higher status and a stronger role in decision-making. They have a higher percentage of women participating in the labor force and more women in positions of authority. Men and women in these cultures tend to have similar levels of education. In contrast, countries with high degrees of gender differentiation (i.e. South Korea, Egypt, China) tend to accord men higher social status and have relatively few women in positions of authority.

After having thoroughly gone over the theories and dimensions of 'the cultural guru's', in the following section the pro's and con's of each are debated. As each of these models have their advantages as well as their disadvantages, it is important to scale them against each other and determine which model is the most appropriate to employ for this present thesis.

2.2.4 Which Cultural Dimensions to use?

Kluckhohn and Strodtbeck's (1961) Value Orientation Theory is one of the master pieces that laid the basis for most of the further research. Yet, their study itself was only limited to a quite small sample size in a certain area of the United States of America. It also yielded very limited practical value for empirical researchers especially on the quantitative side.

The work of Hall and Hall (1990) is also highly cited and used in other research studies. Also, these four concepts are very useful to operationalize as cultural dimensions. However, their research is again restricted to three nations and lacks sufficient empirical data to be generalized. They provide also limited statistical and a relatively smaller sample size (Dahl, 2004).

Schwartz's (1992) manages to separate his model into an individual-level analysis and a culture-level analysis, a major difference compared to the works of Hofstede and Trompenaars and Hampden-Turner who sometimes fail to clearly distinguish between the two levels, although generally claim to work at the culture-level. In other words, his measure instrument is different when compared to the other two scholars (Dahl, 2004). According to Dahl, this has two consequences: First, it potentially eliminates the possibility of situational variables having a strong impact on respondents. Secondly, it opens the argument that when asked about values (rather than specific outcomes) respondents may be inclined to choose a more utopian answer, which in turn may not be reflected in their actual behavior. Furthermore, although comprehensiveness of this work makes it very suitable for empirical research, its wide scope makes it difficult to be properly reproduced and incorporated in a research design (Yeganeh et al, 2009).

Trompenaars and Hampden-Turner's (1997) extensive research yielded comprehensive results in terms of these dimensions explained above. Yet, it has been widely argued that these cultural dimensions show to a large extent similarities to some earlier research conducted by for instance Kluckhohn and Strodtbeck's (1961) human-time, human-nature and relational orientations., Hofstede's (1980) collectivism/individualism, power distance, uncertainty avoidance, time orientation and Hall and Hall's (1990) polychronic and monochronic time perceptions (Dahl, 2004). The model can be used to understand the people from different cultural backgrounds; nevertheless it too does not provide a concrete numerical schema as a reference point to enable researchers test cultures empirically and compare-contrast different cultures.

Hofstede's research (1980) has been a milestone in the field of cross-cultural studies and his model of cultural dimensions has been broadly used in academic as well as practical areas. Such a popular, widely reviewed and cited work has received throughout the years its share of not only positive but also negative critique. Far more scholars belong on the pro-Hofstede team than don't, most quote Hofstede's work with unabashed confidence, many including his findings as absolute assumptions; however it has also been dogged by academics discrediting his work partially or wholly (Jones, 2007). Main negative criticism gathers around the notion that his conceptualization of culture is not static and as essential as he mentions. The most cited criticism of his work is by McSweeney (2000, 2002a, 2000b). First of all, he argues that Hofstede's methodology is fundamentally flawed. According to him the sampling was sparse and unevenly distributed (McSweeney 2000). Secondly, he claims that nations are not the proper units of analysis as cultures are not necessarily bounded by borders (McSweeney, 2000). Moreover, he argues that there are no valid reasons for assuming that only analyzing one company (IBM) in each country shows the national average (McSweeney, 2002a). This argument is supported by many other scholars such as Graves (1986), Olie (1995) and Søndergaard (1994) that one company cannot fully represent a national culture.

In addition to McSweeney, Alion (2008) finds several inconsistencies at the level of both theory and methodology. He argued that a survey is not an appropriate instrument for accurately determining and measuring cultural disparity. Swartz (1999) added to this by saying that such a method is not suitable especially when the variable being measured is a value which is culturally sensitive and subjective (Schwartz 1999). Another key critique which largely focuses on level of analysis is by Gerhart and Fang (2005) who point out that amongst other problems with Hofstede's research; his results actually only show that around 2 to 4 percent of variance in individual values is explained by national differences – in other words 96 percent, and perhaps more, is not explained. Yet, according to Hofstede, those original four dimensions explain 49 percent of a variance across countries (Hofstede 2001). They also asserted that there is nothing in Hofstede's research that pertains to individual-level behaviors or actions (Gerhart & Fang, 2005). It is important to note here that Hofstede's five dimensions are intended to describe tendencies of individuals and not precise characteristics (Hofstede, 2001). Last but not least, Hofstede's work has been criticized by some authors of being too old and out-dated, especially in today's rapidly changing global environments, internationalization and convergence (Jones, 2007).

On the other hand, as mentioned before, Hofstede's work has also received tremendous positive critique and support from the scholars; worldwide applied, replicated and cited, and is still accepted as a groundbreaking research in its field (Furrer 2000, Ross 1999, Søndergaard 1994). Such important studies later conducted by Trompenaars & Hampden-Turner (1997) and House et. al. (2004) that are based on or extend Hofstede's research confirm how essential it has been and still is. Including Hofstede himself, numerous academics have backed up his research and responded to negative critiques addressed by others. Firstly, as a reply to the methodological criticism, Søndergaard

(1994) discussed that the research framework used was based on rigorous design with systematic data collection and coherent theory. Furthermore, Hofstede (2002) answered to the inappropriateness of surveys by claiming that it was not the only method used in his research. Secondly, he justifies the use of national culture as a unit of analysis by saying that they may not be the best way of studying cultures but are probably the only means available of identifying and measuring as well as comparing cultural differences (Hofstede, 2002). Thirdly, he also rationalizes the use of IBM data and argues that any set of functionally equivalent samples from national populations could provide information about differences between cultures, since this was the main purpose of the research and not specific characteristics of every individual culture.

Moreover, Hofstede counters the critique on the data being old and out-dated. He states that the dimensions found are assumed to have centuries-old roots; only data which remained stable across two subsequent surveys were maintained; and they have since been validated against all kinds of external measurements; recent replications show no loss of validity (Hofstede 1998). This was also supported by Søndergaard (1994) as he analyzed 61 replications originated from or similar to Hofstede's research and found that the majority confirmed the validation. Hofstede concluded that although cultures may shift over time, they will not change overnight.

The last study that is analyzed above is the GLOBE research of House et al (2004) which has also gained significant attention from its field in the last decade. Naturally, this study is appreciated, highly cited and valued as well as criticized but not as much as, for instance, Hofstede since it's a relatively recent study. Many of the GLOBE culture dimensions that the researchers measured are direct descendants of the prior cross-culture research and, for these; labels were already available (Hofstede, 1980, 2001; Triandis, 1995). Several of the GLOBE authors also compare their findings with two major studies, namely; Inglehart et al. 's (1998, 2004) World Values Survey and Swartz's (1994) Value Survey (Hofstede, 2006). Hofstede himself provides a critical review which, amongst other issues, argues that the GLOBE study is US centric, that it fails to capture what is intended through the questionnaire and that the study's total of 18 dimensions are unnecessary and lack parsimony (Brewer & Venaik, 2008).

In their analysis of GLOBE study, Maseland and van Hoorn (2009) as well as Brewer and Venaik (2010) found surprisingly that in seven of the nine dimensions, there is a negative correlation between social practices (as is) and social values (as should be). This would mean that people's values contradict their practices. Hofstede (2010) also emphasized on this point stating that such comparison leads to confusion and obscurity. He also argues that adding the term 'organizational culture' creates fuzziness rather than depth to this study.

Aside of the negative criticism, GLOBE study has its positive sides as well. A particular strength of the GLOBE research design is the combination of quantitative and qualitative data. Elimination of common method and common source variance is also the strength of the design strategy (House et. al 2004). Brewer & Venaik (2010) stated that the GLOBE study provides cultural scholars with an important set of measures, which should support a wealth of future culture research. The significance of this study comes from its great network of researchers, namely 170 researchers from different cultural backgrounds worked together on construct definition, construct conceptualization and on the measurement of the constructs. In most countries and cultures analyzed in GLOBE project, data collection was carried out by natives of the country or by researchers with extensive experience in those markets (Terlutter et. al., 2006). In the end, it can be stated that GLOBE study has extended the previous studies and offered an alternative perspective to the existing frameworks on cultural dimensions. However, despite the wide range of cultures, a major limitation of the GLOBE study is its relatively small sample, with an average of only about 250 subjects per culture (Terlutter et. al., 2006). The previously discussed frameworks, especially that of Hofstede are all based on significantly larger samples.

Having reviewed and evaluated all these research and studies on cultural dimensions, considering the advantages and drawbacks of each, it's decided that Hofstede's cultural dimensions will be employed in this paper when constructing the hypotheses and his scoring schema will provide a point of reference to scrutinize the culture of two focus countries, Turkey and the UK in the following section.

Taras et. al. (2012):

For this specific thesis, instead of Hofstede's original scores from 1980 which can be argued to have been pretty much outdated being 40-year old, the meta-analysis of those scores based on a considerably newer, larger and more representative sample by Taras et. al (2012) is used. Their study offers an updated set of national cultural scores along the dimensions of Hofstede's cultural framework (Taras et. al. 2012). Besides bigger dataset, another advantage of this study is that the cultural change is addressed by offering separate sets of indices for different decades. This would be helpful in longitudinal studies of the interplay between culture and other phenomena. The meta-analytic indices are validated against a set of external criteria (Taras et. al. 2012). Considering these advantages, it's decided that the scores of the two focus cultures on Hofstede's cultural dimensions are to be obtained from the study of Taras et al (2012).

To provide a foundation for the analysis, the authors converted all culture data into a common metric (Taras et al, 2012). First, the differences in the scale ranges (e.g., 1–5, 1–7) were resolved by transforming raw scores to the 0–1 range. Then, the differences in item functioning and scoring schemes of different instruments were addressed by standardizing the scores (mean = 0, SD = 1) within data subsets corresponding to each instrument type in the pool. Consequently, the new scores usually do not exceed -2 and +2 on the extremes with zero indicating a neutral position along a cultural dimension (corresponds to roughly 50 on Hofstede's original scale).

In the following section, based on the updated scores of Taras et al (2012), the cultural dimensions of Turkey and the UK are introduced and discussed. In addition to presenting a general picture of these cultures with respect to these dimensions, an overall atmosphere of the business culture and the current state of entrepreneurship in these countries is captured.

2.2.5 The National Culture of Turkey

The culture of Turkey is truly a great mix of the cultures of early civilizations and empires that took place in the region called Anatolia. Straddling the continents of Europe and Asia, this geographically and strategically important area has been home for diverse folks and their colorful cultures. Today, Anatolia hosts the Republic of Turkey with the Turkish nation composed of various ethnic and cultural backgrounds. It is absolutely a melting-pot of heterogeneous set of elements that have been derived from European, Middle Eastern and Central Asian traditions. Because of the different historical factors defining the Turkish identity, the culture of Turkey combines clear efforts to be modern and Western, with a desire to maintain traditional, religious and historical values.

2.2.5.1. Updated scores of Turkey on Hofstede's dimensions

The adjusted scores of Turkey on Hofstede's four main cultural dimensions are as demonstrated in the graph below:

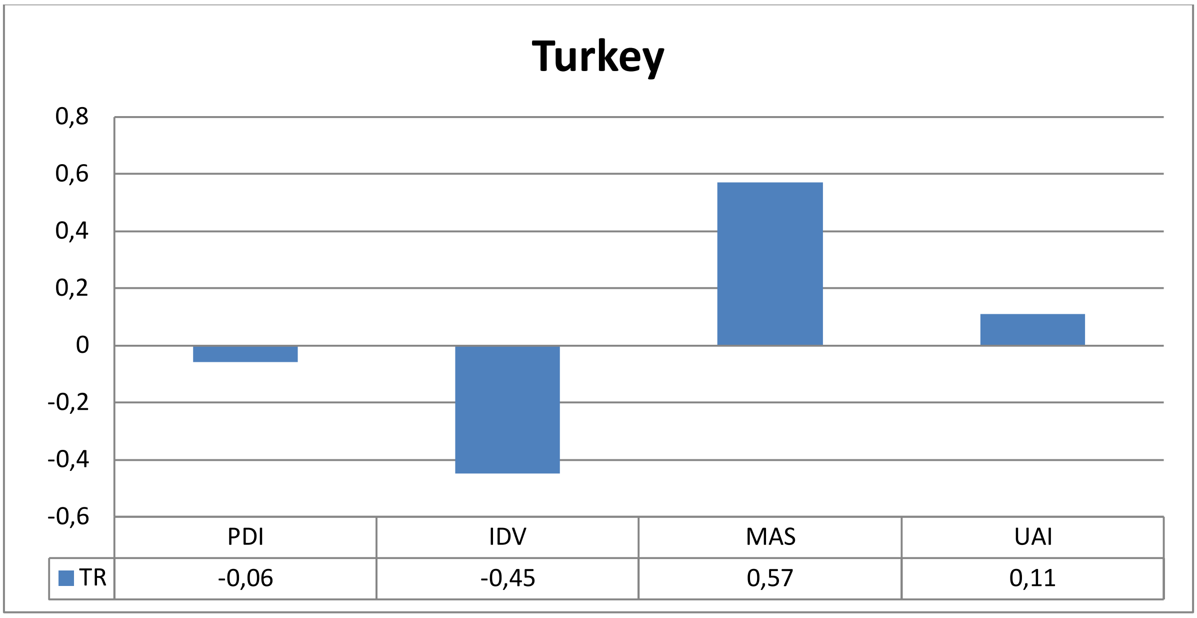


Table 3. Scores of Turkey based on Taras et al (2012)

First of all, with regard to the Power Distance Index, Turkey scores just below the average on this dimension with an adjusted score of -0,06. This suggests that the power distance in Turkish society has been balanced over the years. Earlier, the characteristics of the Turkish style were dependent, hierarchical, superiors often inaccessible and the ideal boss is a father figure. Power used to be centralized and managers rely on their bosses and on rules. Employees were expected to be told what to do and the attitude towards managers was highly formal. Communication was indirect and the information flow was selective. The same structure could be observed in the family unit, where the father is a kind of patriarch to whom others submit. However, the recent studies including that of Taras et al indicate that this situation has slowly evolved throughout the years even though some of the core characteristics still remain in the culture.

Secondly, on the dimension of Individualism, with a score of -0.45, Turkey is clearly a collectivistic society. This means that the "We" is important, people belong to in-groups (families, clans or organizations) who look after each other in exchange for loyalty. Communication is indirect and the harmony of the group has to be maintained, open conflicts are avoided. The relationship has a moral base and this has priority over task fulfillment. Time must be invested initially to establish a relationship of trust. Nepotism may be found more often. Feedback is indirect, also in the business environment.

On the third dimension, Masculinity, Turkey scores 0.57 and is quite high at the scale, evidently on the masculine side. In terms of visual display of success and power, Turkey is a very masculine society, The designer brand label, the flash and bling that goes with advertising one's success, is widely practiced. In corporate Turkey, which is further explained below, it is not rare that employees are most motivated when they are fighting in a winning team against their competitors. In masculine countries such as Turkey the focus is on success and achievements, validated by material gains. Work is the center of one's life and visible symbols of success in the work place are very important. It is still hard for women to climb up the corporate ladders in Turkey with their masculine norm of hard and long working hours.

Lastly, with regard to Uncertainty Avoidance Index, Turkey scores 0.11 on this dimension and is ranked just above the average. Thus, it can be stated that Turkey has a fairly pragmatic culture in terms of dealing with uncertainty avoidance. This means that both generalists and experts are needed. There is focus on planning, and they can be altered at short notice and improvisations made. Yet, Turkish people are still not completely comfortable in ambiguous situations and try to avoid uncertainty at often times.

2.2.5.2. The Business Culture and Entrepreneurship in Turkey

Turkish culture has undergone profound changes over the last century. To this day, Turkey may be the only country that blends extremes of Eastern and Western culture along with many compromises and fusions between the two. From a political point of view, while the negotiations to join the EU are ongoing; Turkey preserves its mild-Islamic position in the region. From an economical point of view, Turkey is one of the fastest growing economies in the world and by far the fastest growing in Europe with an average annual real GDP growth of 5.2% between 2002 and 2011. More importantly, in spite of the crisis in 2011, Turkey has become the fastest growing economy among the OECD countries and World's second fastest growing economy behind China with 8.5% annual growth (source: OECD Economic Outlook No: 86). It is at the moment the 17th largest economy in the world and 7th in Europe (source: IMF 2010). Moreover, Turkey's economical interaction with the foreign countries has been significantly increased, especially with Europe. In fact, more than 50% of the country's export is received by the member countries of the European Union. Between 2002 and 2011 Turkey's foreign trade has increased by 312% while its exports have reached 135 billion US dollars. Such huge advancements have brought along a tremendous interest from abroad and foreign investment in the country has topped over the last decade. Turkey has been selected the 13th most attractive FDI destination in 2012. Between 2003 and 2011, the country attracted over 110 billion US dollars worth of FDI. There are 25,490 foreign firms operating in Turkey by 2011.

In the last decade as a result of such a big economic growth and doing business with the rest of the world, it is safe to say that the Turkish business and entrepreneurial culture has also been evolving throughout the time. Business life in Turkey is used to be dominated by private holding companies and state economic enterprises. Paternalistic cultural values appear to be dominant among Turkish managers (Aycan et al., 2001; Pasa et al., 2001). For Turkish managers, it is important that subordinates are loyal and comply with their directions (Sargut, 2001). Recently, professionalism and rationalism tend to arise as other cultural tendencies among Turkish people in the business world. Professionalism and rationalism orientations together with a cultural emphasis on power, hierarchy, and relationships, for instance, can be seen in most Turkish firms (Danışman & Özgen, 2008).

The state has been an important institution in shaping the business structure (Kabasakal & Bodur, 1998). Turkish private companies remained highly dependent on the state for financial incentives and the state often intervenes by frequent and unpredictable policy changes, which introduce uncertainties in business life (Bugra, 1990). Yet, in the last decade, Turkey has widely reformed its institutions. This effort led to a strong, fast-improving entrepreneurial environment. In July 2011, based on 1,001 interviews of G20 entrepreneurs, Turkish respondents described their country as the most business friendly of the G20 (G20 Entrepreneurship Barometer, 2011).

This favorable entrepreneurship climate, new business density — a measure of new businesses registered per 1,000 people aged 15–64 — is lower than the average for the rapid-growth markets in the G20; this could be a result of traditional conglomerates, rather than small enterprises, having driven much of the growth in economic activity in Turkey (G20 Entrepreneurship Barometer, 2011). Entrepreneurs do still find it difficult to access funding in Turkey, yet this has improved markedly in recent years. The regulatory and taxation environment has also become more favorable, and the support provided to entrepreneurs is on a trajectory that shows improvement. The entrepreneurial culture in Turkey has significantly improved, and the country reportedly has many more opportunities for education and training in entrepreneurship than it did five years ago. In the end, 80% of the entrepreneurs interviewed indicated that Turkish culture encourages business and 90% are convinced that job creation by entrepreneurs greatly enhances the culture (G20 Entrepreneurship Barometer, 2011).

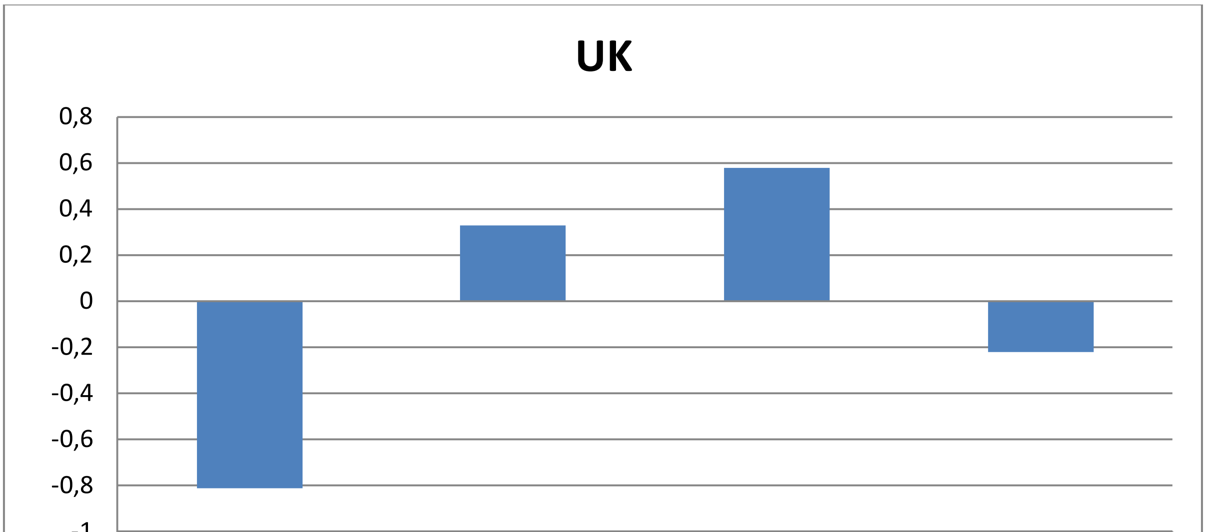
As a conclusion, it can be stated that Turkish culture, although not quite complete yet, has taken big footsteps to become more and more entrepreneurial.

2.2.6 The National Culture of the United Kingdom

Just like the Turkish culture, the culture of the United Kingdom can also be described as an evolving blend of people from many ethnic communities, background and religions. This large diversity is mainly a result of the British Empire that once spanned a fourth of the world's land and governed nearly a fourth of its people. Professor John McKenzie (2008) mentioned that the experience of military, political and economic power from the rise of the British Empire led to a very specific drive in artistic technique, taste and sensibility in the United Kingdom. Great Britain has been throughout the centuries a home to outstanding art in forms of music, literature, cinema, theatre and also a great producer of science and technology. All these aspects together, the United Kingdom has been described as a 'cultural superpower' and London has been described by many as the world's cultural capital in 21th century. The UK has now become a far more multicultural society than it has ever been before and this has played a fundamental role in balancing traditionalism and modernism as well as reshaping the mentality and the culture in the United Kingdom.

2.2.5.1. Updated scores of the United Kingdom on Hofstede's dimensions

According to the analysis of Taras etal (2012), the United Kingdom scores are as follows:



	PDI	IDV	MAS	UAI
UK	-0,81	0,33	0,58	-0,22

Table 4. Scores of the UK based on Taras et al (2012)

Firstly, at -0.81 Britain sits in the lower rankings of PDI – i.e. a society that believes that inequalities amongst people should be minimized. Interestingly is that research shows PD index lower amongst the higher class in Britain than amongst the working classes. The PDI score at first seems incongruent with the well established and historical British class system and its exposes one of the inherent tensions in the British culture –

between the importance of birth rank on the one hand and a deep seated belief that where you are born should not limit how far you can travel in life. A sense of fair play drives a belief that people should be treated in some way as equals.

Second of all, with a score of 0.33 the UK is amongst the highest of the individualistic scores, beaten only by some of the commonwealth countries it spawned i.e. Australia and the USA. The British are a highly individualistic and private people. Children are taught from an early age to think for themselves and to find out what their unique purpose in life is and how they uniquely can contribute to society. The route to happiness is through personal fulfillment. As the affluence of Britain has increased throughout the last decade, with wealth also 'spreading North', a much discussed phenomenon is the rise of what has been seen as rampant consumerism and a strengthening of the "Me" culture.

Thirdly, with a score of 0.58 Britain is a masculine society – highly success oriented and driven. A key point of confusion for the foreigner lies in the apparent contradiction between the British culture of modesty and understatement which is at odds with the underlying success driven value system in the culture. Critical to understanding the British is being able to 'read between the lines'. What is said is not always what is meant. In comparison to feminine cultures such as the Scandinavian countries, people in the UK live in order to work and have a clear performance ambition.

Lastly, at -0.22 the UK has a low score on uncertainty avoidance which means that as a nation they are quite happy to wake up not knowing what the day brings and they are happy to 'make it up as they go along' changing plans as new information comes to light. As a low UAI country, the British are comfortable in ambiguous situations - the term 'muddling through' is a very British way of expressing this. There are generally not too many rules in British society, but those that are there are adhered to (the most famous of which of course the British love of queuing which has also to do with the values of fair play). In work terms this results in planning that is not detail oriented – the end goal will be clear (due to high MAS) but the detail of how we get there will be light and the actual process fluid and flexible to emerging and changing environment. Planning horizons will also be shorter. Most importantly the combination of a highly individualistic and curious nation is a high level of creativity and strong need for innovation. What is different is attractive! This emerges throughout the society in both its humor, heavy consumerism for new and innovative products and the fast highly creative industries it thrives in – advertising, marketing, financial engineering.

2.2.5.2. The Business Culture and Entrepreneurship in the United Kingdom

Long time ago C.P. Snow (1963) suggested that two mutually exclusive cultures were developing in the United Kingdom; one made up of a scientific elite and the other based on the traditional intellectual elite. Scholars such as Mant (1977) confirmed this and claimed that a similar division was to be found in business culture, as well.

The industrial revolution had begun in Britain and therefore the United Kingdom was the world's first industrialized country. Its economy remains one of the largest, but for many years it has been based on service industries rather than on manufacturing. The UK has a long history as a major economical and political player in international affairs and fulfils an important role in the EU, UN and NATO. The period from 1979 to 1997 was characterized by the privatization of state enterprise, the development of an 'enterprise culture', deregulation, tax reduction, the abolition of foreign exchange controls, and a cutback on the welfare state. The aim was to change the business culture from dependency to individual freedom, enterprise and responsibility (Randlesome, 1995).

As a part of GLOBE study, managers from the United Kingdom were researched and it yielded significant results showing that a major transformation is taking place in the business culture of the UK. There appears to be a definite movement from once dominant traditionalist sub-culture to the liberal sub-culture. This transformation has brought along different perspectives and expectations of future managers and leaders of companies. Nowadays, autocratic, status conscious and bureaucratic managers are not favored anymore. Instead, the attributes most expected in outstanding leaders are the ability to provide inspiration and vision linked to a performance orientation and team integration. Personal integrity, decisiveness, diplomacy and administrative competency are also highly valued. Managers can no longer rely solely on loyalty; instead they have to earn it. It is clear that managers of the future need a rather different set of attributes compared to those emphasized by leaders in the 1945 to 1990 period (Booth, 2002).

These developments in the business culture as well as the government regulations have created a favorable environment for entrepreneurship in the United Kingdom. Although the number of new businesses registered annually has declined since 2007, it has remained consistently and significantly higher than the averages for G20 and mature market countries (G20 Entrepreneurship Barometer, 2011). Furthermore, new business density — a measure of new registrations per 1,000 people aged 15–64 — is the highest out of any G20 country. When asked, with 76% the vast majority of UK entrepreneurs agreed that the culture of the UK encourages entrepreneurship (G20 Entrepreneurship Barometer, 2011). 72% of the respondents are convinced that promoting the role of entrepreneurs in creating new jobs has a high impact on entrepreneurship culture. It is also mentioned that just like Turkey, the biggest challenge for the young entrepreneurs in the UK is access to funding, in fact, 72% of the respondents reported this as a large obstacle to starting-up their own venture (G20 Entrepreneurship Barometer, 2011). Differing from Turkey, a further factor positively contributed to this favorable entrepreneurial culture in the UK has been the rising popularity of TV shows like The Apprentice and Dragon's Den. In brief, it can be stated that the entrepreneurial culture in the United Kingdom has come a long way; it has produced worldwide-known successful figures such as Richard Branson and Alan Sugar and as a result of governmental regulations as well as creating public-awareness, a fascination in the UK towards entrepreneurship has been fostered.

2.3 The Link between Culture and Entrepreneurship

Despite the considerable progress many countries have achieved in developing their economies, entrepreneurial activity remains relatively limited in many of these nations (Berger, 1991). In Berger's words, "It is culture that serves as the conductor, and the entrepreneur as the catalyst (to entrepreneurship)" (Berger, 1991). As such, despite the presence of a favorable environment, individuals who are motivated by factors such as financial rewards, achievement, social, career, and individual fulfillment, for these conditions or motives to cultivate into entrepreneurship, a national culture that supports and encourages entrepreneurial activity is needed (Lee and Peterson, 2000).

As pointed out several times earlier in this paper, the aim of this research is to fill up the research gap that exists between entrepreneurship and culture, specifically speaking the influence of culture on entrepreneurial processes. So far, there has been limited work done in particular to finding out how national culture can influence entrepreneurial behavior. Extensive research conducted at the individual level shows that there is a link between individual values and beliefs, on the one hand, and individual behavior on the other. Hence, it is plausible that cultural differences between countries or regions have a determining effect and influences a variety of individual behaviors, including the decision to become self-employed rather than an employee (Thomas & Mueller, 2000). Furthermore, it can be most likely expected that entrepreneurs reflect the dominant values of their national culture and national culture has definite effect on entrepreneurship (Thomas & Mueller, 2000). Hayton et. al. (2002) stressed the importance of such an effect that culture may have on entrepreneurship and claimed that this would have substantial value not only theoretically but also in practice.

2.3.1 Three Theories on 'Culture and Entrepreneurship'

In their broad research of the literature covering the relationship between culture and entrepreneurship, Thurik and Dejardin (2011) acknowledged three theories that provide an analytical framework that has been used to investigate this relationship: (1) the aggregate psychological traits approach, (2) the social legitimation or moral approval approach and (3) the dissatisfaction approach. Firstly, an aggregative logic emerges from aggregate psychological traits approach. According to this approach, for a given country, the more individuals with entrepreneurial values there are in a society, the more individuals will display entrepreneurial behavior (Davidsson, 1995; Shane, 1993).

Secondly, for the social legitimation approach, the focus is on the impact of social norms and institutions on the conduct of society at large. According to this view, in societies where the entrepreneurship is considered to represent a higher social status, entrepreneurial activity is observed to be significantly high. Furthermore, in these societies, the education system recognizes and supports entrepreneurship, and tax incentives encourage business start-ups. Thus, for the social legitimation or moral approval approach, higher entrepreneurial activity within some countries can be explained by the general incidence of culture and institutions favorable to entrepreneurship; while for the aggregate psychological traits approach, higher entrepreneurial activity is explained by aggregate effects of individual characteristics.

Both the aggregate psychological traits and social legitimation (or moral approval) approaches contribute to a 'pull' explanation of entrepreneurial behaviors. Pull factors account for the entrepreneurial choice of individuals as the result of their expectation of being better off as an entrepreneur, whatever the material and/or nonmaterial benefits. 'Pull' factors are distinguished from 'push' factors (Stanworth and Curran, 1973). The latter take into account the conflict between the individual current and desired state. They are often associated with some level of dissatisfaction.

Third theory, the dissatisfaction approach is fundamentally different when compared to the first two approaches. Here, different entrepreneurial activity across nations and regions is explained with the link to differences in values and beliefs between potential entrepreneurs and populations as a whole. It proposes that in a predominantly non-entrepreneurial culture, a clash of values between groups may drive potential self-employed into actual self-employment (Baum et al., 1993). The expected relationship between cultural indicators and entrepreneurship described in the dissatisfaction approach may be opposite to the expected relationship referred to in the social legitimation or moral approval approach (Noorderhaven et al., 2004).

2.3.2 Cultural Dimensions and Entrepreneurship

These three theories presented above provide an analytical framework for the explanation of differences in entrepreneurship across countries and regions. In such an analytical framework explanatory factors may be identified and articulated (Thurik & Dejardin, 2011). Among potential explanatory factors, Hofstede's dimensions of national culture have been prominently tested by earlier research in order to investigate the influence of each individual dimension on several economical aspects related to entrepreneurship (i.e. Morris, Avila, & Allen, 1993; Davidsson, 1995; Shane, 1995). For instance, Acs, Audretsch and Evans (1994) and Hofstede et. al. (2004) empirically examined the relationship between culture and self-employment using Hofstede's indices. Both research delivered results supporting that UAI positively and IDV negatively are related to higher self-employment (Brown & Ulijn, 2004). On the other hand, Gudergan and Soo (2001) found a positive relationship of power distance with innovation, which later leads to higher entrepreneurial intentions.

Uncertainty Avoidance is the most sought-after dimension when it comes to explaining the influence of culture on entrepreneurship. Uncertainty avoidance is a cultural trait closely linked to attitudes of risk and uncertainty and, consequently, largely associated with the entrepreneurial propensity within a country (Thurik & Dejardin, 2011). Uncertainty avoidance can be interpreted in relation to the extent which societies tolerate ambiguity and the following statement can be inferred: ''the higher uncertainty avoidance is, the less society is inclined to be entrepreneurial." Wennekers et al. (2007) have tested this statement by examining direct and indirect effects of uncertainty avoidance on a panel dataset (1976-2004) for 21 OECD countries. In the group of high-uncertainty avoidance countries a strongly negative relationship between GDP per capita and the level of business ownership is found, suggesting that rising opportunity costs of entrepreneurship are the dominant perception in this cultural environment. In a group of low-uncertainty avoidance countries no such influence of per capita income is found, but the profits associated with being self-employed are positively associated with business ownership (Wennekers et. al. 2007).

Well-known entrepreneurship scholar Scott A. Shane (1992; 1993) has conducted several studies examining the effects of cultural dimensions on innovation and entrepreneurship levels of nations. For example, Shane (1992) investigates the relationship between culture and inventions, and finds that countries with small power distance (PDI –) and high individualism (IND +) are more inventive than others. This can also be witnessed that countries having lower power distance (PDI –) score higher on innovation index and are having higher entrepreneurial intentions (Shane, 1993). Shane (1993) has also acknowledged the relationship of innovation and entrepreneurship with uncertainty avoidance and found out that low uncertainty (UAI –) may result in high rates of innovation and entrepreneurship. Last, Shane (1992; 1993) also detects that high masculinity (MAS +) also positively relates to entrepreneurship. In sum, one might surmise based on Shane's findings that PDI–, UAI–, MAS+ and IDV+ stimulate entrepreneurship. These findings are also supported by Baum et. al. (1993); the authors studied the entrepreneurship in countries in a reverse manner and found that cultures with PDI+, UAI+, MAS – and IND – cause serious difficulties to those individuals with entrepreneurial mindset to do things their own way within their organizations. Therefore such difficulties may trigger those individuals to choose self-employment. Finally, Hayton et. al. summarizes: In general, researchers have proposed that entrepreneurial behavior is facilitated by cultures that are high in individualism, low in uncertainty avoidance, low in power distance and high in masculinity (Hayton, George and Zahra, 2002).

In another research, Kate Brown (2003) of University Otago has explored the entrepreneurial behavior in New Zealand again based on Hofstede's cultural dimensions. The results suggest that entrepreneurs can be distinguished from non-entrepreneurs on the basis of attitudes reflecting individualism and power distance. However no conclusions could be drawn about entrepreneurs and their behavior with respect to masculinity and uncertainty avoidance dimensions. In a similar study investigating the effects of national culture on entrepreneurial intentions, Ali et. al (2010) collected data from 500 employees from various organizations in Pakistan and tested the results in the light of 5 cultural dimensions of Hofstede. The results showed that higher power distance in Pakistan has significant effects on the entrepreneurial intentions of the people. Also, uncertainty avoidance is found to have significant effect on entrepreneurial intentions but negatively. Moreover, the hypotheses regarding the masculinity, individualism and short-term orientation were rejected since the authors found insignificant influence of these dimensions on entrepreneurial intentions.

In spite of several scholarly contributions, research on the relations between culture and entrepreneurship is relatively new (Thurik & Dejardin, 2011). The studies mentioned above mainly aimed to find out traces of cultural influences on entrepreneurs, their intentions and orientation. Although some of the findings from different academics contradict each other, there is usually some evidence of a significant relationship between culture and entrepreneurship. As stressed, further research is necessary to provide a broader data and test this relationship.

In the present study, the focus is also explicitly on Hofstede's dimensions of national culture in order to comprehend the effects of national culture in a measurable way. Yet, a slightly different approach is followed. What distinguishes this research from the examples given above is that this research does not take entrepreneurship as a broad concept and try to detect the effects of culture on entrepreneurship as a whole, which is what most scholars have attempted to do so far. Unlike those prior research, the results are not expected to yield statements such as, for instance, MAS has positive correlation with entrepreneurship as a whole. Instead, this research intends to deepen the concept and specifies it to entrepreneurial processes, in particular to Saras Sarasvathy's theory of effectuation and causation. Results may provide support for whether a certain cultural dimension has a significant influence on the entrepreneur following effectual or causal reasoning. Therefore, Hofstede's cultural dimensions are used to examine the possible influence of culture on entrepreneurial processes, principally with respect to the entrepreneurial decision making styles, effectuation and causation.

3. Hypotheses:

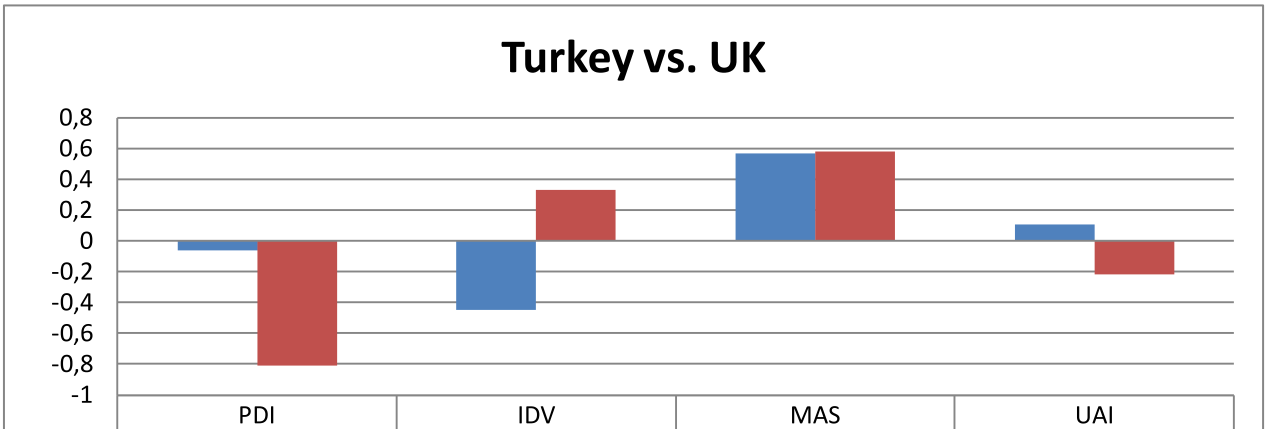
In the third chapter, the hypotheses are constructed in order to tackle the research question investigating the influence of national culture on the entrepreneurial processes. Looking back at the research question:

''To what extent does the <u>national culture</u> of Turkey influence the <u>entrepreneurial processes</u> – specifically whether or not to employ effectuation logic of thinking – in comparison with the <u>national culture</u> of United Kingdom?''

When constructing the hypotheses, it is crucial to identify the dependent variable and the independent variable that compose the research question. Here, since it is intended to find out the influence of the national culture on the entrepreneurial processes, the independent variable is the national culture and the dependent variable is the entrepreneurial processes. Now, there is a need to break down both variables into measurable components so that these can statistically be tested in order to find out whether there is any significant correlation.

After a profound literature review on these two main components of the research question, it has been decided that the hypotheses will be founded in a way that Hofstede's national culture dimensions will be used to match the elements of Sarasvathy's effectuation theory that explains the entrepreneurial processes. These hypotheses will later be empirically tested to find out evidence about the correlation and explain to what extent the national culture affects the entrepreneurial processes.

At this point, it is important to note that the hypotheses are constructed in the light of three of the four dimensions. This is mainly because on the dimensions PDI, IDV and UAI these two cultures visibly differ from each other whereas on the dimension of MAS, they score almost exactly the same. In other words, the difference based on these scores seems to be too small in order to build a hypothesis upon and test it. A comparison between Turkey and the UK on the cultural dimensions look like the following graph:



	PDI	IDV	MAS	UAI
TR	-0,06	-0,45	0,57	0,11
UK	-0,81	0,33	0,58	-0,22

Table 5. Scores of Turkey and the UK compared based on Taras et al (2012)

The link between these cultural dimensions and entrepreneurial processes as described by the effectuation theory of Sarasvathy is sought after. As used in the coding schema, the principles of Sarasvathy's (2001) effectuation theory in opposition to causation are:

Causal	Effectual
Goal Driven	Means Based
Expected Returns	Affordable Loss
Competitive Analysis	Use of Alliances or Partnership
Existing market knowledge	Exploration of Contingency
Predictions of the future	Non-predictive control
Emphasis of Analysis of Data	Distrusting or Opposing Market Research
Causal (no subcategory given)	Effectual (no subcategory given)

Table 6. Principles of Sarasvathy's causation vs. effectuation (2001)

3.1 PDI and Entrepreneurial Processes

Hofstede's first cultural dimension Power Distance (PDI) can be linked to one of the main principles of Sarasvathy's effectuation theory, that is, whether entrepreneurs focus on competitive analysis (causation) or alliances and partnerships (effectuation).

Saras Sarasvathy (2008) discusses that entrepreneurs differ in their perspective on competition and collaboration, based on their reasoning mechanisms. According to her, those entrepreneurs that follow a causal reasoning are more focused on competitive analysis. Their view on new markets is principally concentrated on rigorousness of competition, barriers to entry and analysis of these factors before starting up a venture to enter an industry. On the other hand, entrepreneurs who think and act in an effectual way put the stress upon the value of cooperation and collaboration with other parties. They focus rather on how they can co-create new markets with other participants instead of viewing them as rivalries and potential threats (Dew et. al., 2009).

Entrepreneurs' tendency to be on the competition side or cooperation side can be explained by the influence of their culture's nature of power distance. Hofstede (1980) defines this dimension as the degree of equality or inequality in distributed power within a society. Inequality can be manifest in wealth, power, education, and basic physical and mental individual characteristics. High power distance implies that there is a remarkable inequality between the members of the society, also particularly in business situations. This can apply to the hierarchical system within organizations as well as unequal distribution of power in a market place or an industry. In such a society, it can be naturally expected that competition amongst the participants is quite fierce and firms are motivated to maximize their market share by eliminating opponents. As a consequence of this, entrepreneurs see the other parties much less as potential partners in high power distance cultures. In contrast, since the power is more equally distributed and the standards are rather equalized in low power distance societies, it can be assumed that competition is less fatal and collaboration amongst the participants of the same industry is highly valued and believed to create win-win situations.

Based on these inferences, it can be asserted that in cultures that rank high on power distance index, competition is robust and therefore entrepreneurs are more focused on competitive analysis (causal) whereas in cultures that rank low on power distance index, entrepreneurs are driven with collaboration and partnerships (effectual). Thus, the first hypothesis posits a positive correlation between power distance index and the focus on competitive analysis.

H1: The higher a culture scores on power distance index, the more likely that the entrepreneurs are focused on competitive analysis, thus follow a causal reasoning.

Of the two focus countries, Turkey scores higher on PDI with -0.06 while the UK has a considerable low score of -0.81. Hence, results are expected to reveal that Turkish entrepreneurs are more focused on competitive analysis than alliances and partnership.

3.2 IDV and Entrepreneurial Processes

The second cultural dimension of Hofstede, namely the Individualism can be associated with one of the main principles of Sarasvathy's effectuation theory, that is, the focus on competitive analysis or alliances and partnerships.

In his analysis, Hofstede (1980) compares individualist and collectivist cultures to find out how strongly people are integrated into groups. In individualistic cultures, personal interests, ambitions and desires are primary and being a part of a unit, team or a group is of less importance. People are taught to work independently, stand alone and 'mind your own business'. This fundamental philosophy can be recognized in the business context, too; entrepreneurs and their ventures ought to stand on their own feet and not be dependent on anybody or anything else. It can be therefore presumed that collaborating with one another is not encouraged by the society because one must take care of business on his or her own first. Conversely, in collectivist cultures many aspects of life are shared among the members of a group or a society and there is a bigger emphasis on helping one another. People adjust themselves according to the norms of a community and welfare of a large population comes prior to the interests of individuals. This leads to higher levels of collaboration and cooperation among the people. As Hofstede quotes: ''in collectivist cultures, time must be invested initially to establish a relationship of trust''.

In the context of entrepreneurship, Sarasvathy's effectuation theory (2008) made a distinction between causal and effectual entrepreneurs based on their view of competition and collaboration. She clearly stated that causal entrepreneurs pay more importance to competitive analysis whereas effectual entrepreneurs depend more likely on their networks, partnership and alliances. This difference could be influenced by their cultures being individualist or collectivist. As mentioned above, highly individualist cultures tend to build looser relationships and value personal performances and achievements much more.

Consequently, a positive correlation between individualism and competitive mentality is traceable. Cultures that score high on individualism are expected to have entrepreneurs who focus more on competition and competitive analysis (causal) whereas cultures that score low on individualism are expected to have entrepreneurs who put emphasis on collaboration and partnership (effectual). This statement is hypothesized as follows:

H2: The higher a culture scores on individualism, the more likely that the entrepreneurs are focused on competitive analysis, thus follow a causal reasoning.

In this dimension, Turkey's score is -0.45, which is fairly on the collectivist side. The counterparty, the UK with a score of 0.33 is the third highest scoring country, hence is amongst the most individualistic cultures. Given this drastic difference, the results may deliver significant support to this hypothesis, that is, entrepreneurs from the UK are largely focused on competitive analysis.

3.3 UAI and Entrepreneurial Processes

Hofstede's fourth dimension, Uncertainty Avoidance Index (UAI), is possibly the most influential cultural dimension on the entrepreneurial processes. In other words, several aspects of entrepreneurs' decision making mechanisms can be explained by this cultural dimension. At this point it is important to remember, as earlier emphasized in this paper, that Sarasvathy's effectuation theory that explains the entrepreneurs' decision-making process has been largely inspired by the theories of Knightian uncertainty and Marchian goal ambiguity. Thus, it can clearly be suspected that there might be a significant interaction between a culture's position on uncertainty avoidance and its entrepreneurs' way of decision making. Specifically, four main principles of Sarasvathy's effectuation theory are assumed to be influenced by cultures' uncertainty avoidance traits.

Uncertainty avoidance is meant to explain how nations stand towards the future. That is, how cultures deal with predictability, uncertainty and ambiguity. Hofstede (1980) suggested that this dimension has mainly to do with people's risk aversion, planning, collective rules and norms, and even innovativeness. In countries with high level of uncertainty avoidance, high risk aversion results in the need of explicit scheduling, plans and predictions. These cultures enjoy much less taking risk and actions of which the consequences are unknown. People base their actions and decisions therefore rather on the knowledge or information they trust in. These characteristics of a country have presumably substantial impacts on entrepreneurs' mentality and actions.

Firstly, a significant influence of a culture's stance on uncertainty avoidance may influence in whether entrepreneurs set off by expected returns or affordable loss. This principle according to Sarasvathy (2008) is another significant point where causal and effectual entrepreneurs differ from each other. Sarasvathy argues that entrepreneurs that follow an effectual logic are motivated not by pre-determined returns on their investment but they rather consider the amount of financial and other resources that are available to them, which they can risk to lose in the process of starting up a venture. This principle is somewhat parallel to the first principle, that is entrepreneurs being whether goal-driven or mean-driven. Causal entrepreneurs who are apparently driven by pre-defined goals are also expected to care more for the returns which are strongly linked to those goals. They prefer to have a certain target which they must achieve in the end. On the other hand, effectual entrepreneurs are driven by the means available to them, such as financial resources, physical resources and their networks. In this way, they do not focus on strict goals but set off by knowing what they have and to what extent they may risk it. In fact, by understanding what they can afford to lose, effectual entrepreneurs limit their risk instead of constantly investing in order to achieve the desired returns (Dew et. al. 2009).

From this perspective, there can be detected a correlation between uncertainty avoidance characteristic of a culture and entrepreneurs' focus on expected returns of affordable loss. It can be asserted that entrepreneurs from cultures with high uncertainty avoidance focus on what they can afford to lose instead of unclear amount of investment it may take to reach pre-defined targets. In other words, it can be expected that highly risk-avert entrepreneurs employ more possible an effectual reasoning. In contrast, it can be said that entrepreneurs from culture with low uncertainty avoidance who are high risk-takers probably stick to their targets and more eager to achieve the returns of their investments under all conditions. In support of this, Brown (2003) underlined that uncertainty avoidance is negatively correlated to the need for achievement. Therefore the following hypothesis can be sketched:

H3a: The higher a country scores on uncertainty avoidance, the more likely that the entrepreneurs are focused on affordable loss, thus follow an effectual reasoning.

Second principle of Sarasvathy that can be related to uncertainty avoidance is the tendency of entrepreneurs to base their decisions on existing market knowledge or on exploration of contingencies. Sarasvathy (2008) distinguished the decision-making mechanisms of effectual and causal entrepreneurs. She highlighted that causal entrepreneurs choose to enter markets that are familiar to them; whether they worked in those sectors before as an employee or have access to information and knowledge about them. Moreover, they take further decisions and actions based on their knowledge about the past developments and trends in these markets. Conversely, effectual entrepreneurs appear to care much less about these issues when deciding to enter a market. As Sarasvathy explains, effectual entrepreneurs invite 'the surprise factor'. What rather matters to them is how they can benefit from unexpected happenings which are usually considered as threats by other participants. Here, they tend to differentiate themselves from their competition by not avoiding challenges that are unknown to them but instead trying to convert what is seen by others as 'bad news' into potential to create new premises and opportunities.

Therefore, it can be propounded that effectual entrepreneurs do not try explicitly avoid uncertainties but seek ways to leverage the contingencies. They also do not necessarily pick those markets that are known to them but rather go for tackling the challenges of somewhat virgin territories. Here a clear link is tracked between entrepreneurs' decision making system and uncertainty avoidance. It can hence be hypothesized that there is a positive correlation between a culture being high uncertainty avoidant and its entrepreneurs depending on existing market knowledge.

H3b: The higher a country scores on uncertainty avoidance, the more likely that the entrepreneurs depend on existing market knowledge, thus follow a causal reasoning.

Thirdly, the cultural dimension uncertainty avoidance can be associated to entrepreneurs' approach in prediction or non-predictive control. Sarasvathy (2008) put forward that entrepreneurs differ in their manner to approach future situation that are uncertain at present stages. She claimed that causal entrepreneurs are heavily dependent on predictions, in the form of estimations and forecasting whereas effectual entrepreneurs focus on the activities that they can control in the future. This principle of Sarasvathy's theory has roots in the two main schools of thought as explained in this paper previously; namely the planning school and emerging (transformative) school. In short, predictive strategies are ways to manipulate current realities to reach pre-selected while transformative strategies generate new goals and new environments from current realities (Wiltbank et. al., 2006). As clearly seen, just like goal-driven approach, predictive is a consequence of this planning strategy which complies with the causal reasoning. On the contrary, effectual entrepreneurs view the future as a set of uncertain events in a rapidly changing environment (i.e. market place) and therefore hard or impossible to predict. Whereas causal entrepreneurs try to compensate the uncertainty with planning, their effectual counterparts rather concentrate themselves on the actions within their control, which they believe will result in desired outcomes. In their standpoint, future is not to be predicted but can be co-created by their own actions and decisions (Dew et. al., 2009).

Accordingly, it can be interpreted that entrepreneurs from cultures that are prone to avoid uncertainties are expected to follow predictive strategies in order to cope with the uncertain situations. Prediction enables them to feel more secure with the uncertainties that the future may bring. Therefore it is hypothesized as:

H3c: The higher a country scores on uncertainty avoidance, the more likely that the entrepreneurs adopt predictive strategies, thus follow a causal reasoning.

The fourth and the last influence of culture's uncertainty avoidant nature can be spotted on its entrepreneurs' perception on data and research. In this principle of her theory, Sarasvathy explains the difference between causal and effectual entrepreneurs such that causal entrepreneur find it crucial to have the correct data and information concerning their function areas whereas effectual entrepreneurs have a disposition to critically judge and even distrust a given data or information. Sarasvathy (2008) noted that the subjects in her research overtly refused the efficacy of formal market research that is based on surveys, focus groups and other systematic efforts to determine, for instance, the potential demand. Those entrepreneurs even revealed in their decision-making a profound distrust of attempts to predict the future. This notion clearly is compatible with the previous discussion that effectual entrepreneurs avoid predicting the future. Effectual entrepreneurs do not appreciate to be dependent on or limited by these data but they rather choose to concentrate on what they have to offer and believe the demand will emerge. In a contrary manner, causal entrepreneurs do want to have a certain market with a secure demand so that they can set goals and reach their targets. That's why for causal entrepreneurs sufficient market research and accurate analysis of the data are indispensible.

Hofstede (1980) pointed out that people from low uncertainty avoidance cultures tend to distrust too many rules and regulations while people from high uncertainty avoidance countries such rules are essential. As this plainly suggests, entrepreneurs high uncertainty avoidance countries are expected to depend on the data obtained from market research whereas entrepreneurs from low uncertainty cultures distrust it. Hence the hypothesis can be derived as such:

H3d: The higher a country scores on uncertainty avoidance, the more likely that the entrepreneurs put emphasize on analysis of data, thus follow a causal reasoning.

In this cultural dimension, scores of the two focus countries deviate from each other to a large scale. Turkey, with a score of 0.11, is a relatively uncertainty avoidant countries. People use many strategies to overcome uncertainty and be able to have a concrete picture of the future. The UK on the other hand, scores a very low -0.22 and it means that people do not mind waking up not knowing what the day brings. They even enjoy contingencies and changing plans as new information comes to light. Referring to the hypotheses, it can be expected that Turkish entrepreneurs focus more on affordable loss, depend rather on existing market knowledge, adopt more often predictive strategies, and strongly emphasize on analysis of data, as discussed above.

4. Methodology:

In the fourth chapter, the empirical construct of this master thesis is presented. The empirical research is conducted in order to test the hypothesis formulated above and to convey results that shed a light to the original research question. The empirical construct of this study has several elements. The first section is dedicated to the data collection. First of all, the sample of the research is introduced; the subjects who participated in this study. Secondly, the setting in which the research took place is described. In the second section, the Operationalization, firstly the think aloud method is further elaborated which is of great importance for this research. Moreover, the main materials are explained, namely the case, the questionnaires and the VSM survey. In the third and the last section, the method of analysis is outlined. The methods of statistical analysis are given that help make sense of the data obtained from the coding.

4.1 Data Collection

The data gathering process for this study consists of several steps. First the focus group of subjects for this project is identified and contacted. The objective is to obtain data from minimum 20 participants. This data is composed of think-aloud verbal protocols as an outcome of interviewing the participants going through a case-study prepared specifically for this project. This interview where participants feel absolutely free expressing their opinions about the given matters in the case is planned to take a maximum of 2 hours. Afterwards these protocols are comprehensively analyzed based on a unique coding scheme. In the following sections, all the details of this procedure are exhibited.

4.1.1 The Sample

The target sample of this research is novice entrepreneurs who are either in the last phase of their studies (i.e. Bsc., Msc. or Phd.) at a university or recent graduates with limited work experience. Since the main focus countries are Turkey and the United Kingdom, the data from novice entrepreneurs in these countries is collected. The standard size of the sample is set by EPICC project as 20 novice entrepreneurs, yet for this particular thesis the data for 22 novice entrepreneurs are obtained and analyzed. For the United Kingdom, the data is derived from the research of a fellow participant of EPICC project, R. A. Mones (2012). For Turkey, I collected the data myself by interviewing the Turkish novice entrepreneurs.

Two groups of people were contacted to participate in the case study. Mainly, personal contacts were used for the sampling. Primary and secondary friends or old classmates who I knew started their own businesses were contacted. Furthermore, additional contacts were obtained from an association for young entrepreneurs who attended a state-organized idea contest (Teknogirişim). I was familiar with this contest and the association since I personally participated to it prior to my master studies. This entrepreneurship contest is organized in Turkey each year since 2009 by the Ministry of

Industry and Trade and approximately 100 young entrepreneurs who are in the last year of their study or recently graduated from various universities all over the country rewarded with government funds to start-up their own venture within the first 2 years. The winners are united under the roof of an association (Teknogirişim Derneği) in order to create a huge network and support one another. This is obviously the perfect match for the target sample of this research.

In the first instance, I identified 58 people from these two sources who matched the target group and approached them via email and social media. 15 people didn't respond to my request, at all. From 43 people who responded and agreed to participate in my study, I could get an eventual appointment with 26 of them. After 4 of these appointments failed to take place, I finally interviewed 22 people which is a convenient number given the required sampling (min. 20 subjects) to maintain reliability of this project. This also yields an approximately 40% overall response rate which is quite reasonable in social and behavioral sciences.

12 of the respondents are from personal contacts and 10 of the respondents are from the entrepreneurship association mentioned above. Regarding the demographics of the respondents, a homogenous picture appears with respect to age, marital status and religion. The age of the respondents have a quite narrow range from 25 to 30 with an average of 27,4. Expect the two, all the respondents are males. And again, expect the two who didn't give a specification, all the respondents are Muslim. Two third of the respondents are singles at the moment of research. Yet, in terms of education, the respondents differ from each other widely. Approximately 30% of the participants hold a Bachelor degree, %40 Master of Science, 20% MBA and 10% PhD. The disciplines vary from biomechanics to ship engineering, from international relations to electronics and from computer engineering to marketing. Furthermore, the family backgrounds of the respondents diverge, too. Half of the respondents come from families that work as a public servant, 25% work in the private sector while 25% are entrepreneurs or have family businesses. However only 20% of the respondents declared that their parents have upper-class incomes, the rest has families from the middle class. Finally, the respondents have had in average three and a half years work experience during their studies or following their graduation. A detailed overview of the demographics of the participants can be found in Appendix B.

4.1.2 The Setting

The environment where the research takes place is of utmost importance. Especially for the think-aloud method, which will be explained in details later, it is essential that the participants feel themselves at ease, they must be comfortable conducting the interview in order to obtain optimal output. They may not be disturbed or interrupted by any events or people in their environment so that they can be fully focused on the study.

In particular for this research, the interviews were conducted on teleconference via Skype. Nonetheless, I made sure to make appointments with my participants that fit them the best, in their free times when they could be relaxed and focus on the interview. Furthermore, it was ensured that all the participants were at the desired environment as described above. Each time, I insistently told them to be at a comfortable area, usually at home or in their rooms, as if we were chatting with each other, having their tea and cookies while completely relaxing as they went through the questions of the case-study. The comfort of taking breaks was also provided at any time they needed. This was all to create a comfortable environment for my participants even though the interviews are done via Skype. With the help of a software program that records the calls on Skype, the interviews were digitally recorded in order to be transcribed later on.

As many of the participants were curious and asked about the privacy and use of the data as well as the purpose of the research, the details of my master thesis and this project were clearly communicated to them. They were convinced after providing them with a representation of the project and were interested in being a part of it as they also wished to contribute to my master thesis. Most of them also asked me to present them the final outcome of my thesis and were also interested in the results of these experiments. The participants found the topics this project covers very interesting and wanted to know more about subjects such as cultural dimensions, the analysis of Turkish culture and effectuation theory of entrepreneurial processes. Through all this interaction with my participants, I made sure that there is a trust environment where participants are not only comfortable expressing their ideas fully and openly but they are also interested in the topics and felt considerably attached to the study so that they did their best to elaborate on their answers and contribute optimally to the research.

The language of the study is obviously English. Hence, the case was also prepared originally in English. While conducting a research in a language foreign to the participants, there may be some limitations. Before starting the experiments, I considered translating the case into Turkish in order to guarantee that the participants find it all clear and could work on it without missing any details or making mistakes. However, I decided that translating the case from its original language into Turkish might also have some drawbacks, such as missing out some important points, creating confusion and imprecision. On the other hand, a vast majority of the participants are graduated from English-taught universities and they have had some international experience so they are highly proficient in English language. At the beginning of each interview, the participants were asked whether they feel comfortable with doing this study in English and each participant was OK with it. Even though the participants had no problem reading the case and answering the questions, it was repeatedly reminded to them to take their time, read and speak slowly and clearly, pose questions about the language when necessary in order to minimize any restriction of using a foreign language. From time to time, the participants were asked to elaborate on their ideas, rephrase their answers by avoiding complicated expressions and it was checked for clear understanding. In the end, all 22 interviews were completed without any problems that might have arisen related to language.

4.2 Operationalization

4.2.1 Think-Aloud Protocols

The think-aloud method is the specific technique used in the interview phase of this research. The think-aloud protocol, abbreviated as TAP from now on, is a method used to gather data in usability testing in product design and development, in psychology and a range of social sciences (e.g., reading, writing, translation research, decision making, and process tracing) (Ericsson & Simon, 1981). Researchers studying cognitive phenomena frequently use the think-aloud method, called 'verbal protocol analysis', and researchers in management-related disciplines have also employed it (Isenberg, 1986). In general, TAPs involve participants thinking aloud as they are performing a set of specified tasks. Users are asked to say whatever they are looking at, thinking, doing, and feeling as they go about their task. This enables observers to see first-hand the process of task completion rather than only its final product. Observers at such a test are asked to objectively take notes of everything that user's say, without attempting to interpret their actions and words. Test sessions are often audio- and video-recorded so that developers can go back and refer to what participants did and how they reacted. The purpose of this method is to make explicit what is implicitly present in subjects who are able to perform a specific task (Ericsson & Simon, 1981).

Specifically in this research, as the focus is on investigating the cognitive decision making processes of entrepreneurs in problem solving, TAP is the ideal strategy that enables the researchers to maximize the output obtained from the subjects (van Someren et. al 1994). Protocols are collected by instructing people to solve one or more problems while saying 'what goes through their head', stating directly what they think. In studies on cognition, verbal protocols are used as raw data about cognitive processes. Such protocols require substantial interpretation and analysis to see their implications for process theories of problem-solving (van Someren et. al 1994). In her research on expert entrepreneurs, Sarasvathy (2008) also employed the TAP strategy as she proposed that these verbal protocols are a fruitful method for studying the decision-making processes of entrepreneurs. She justified her reason for using TAPs as saying that while retrospective recall allows subjects to make up good stories about how they believe they solve problems, and stimulus-response methods force researchers to deduce the subjects decision making processes after the fact, concurrent verbalization allows the researcher to look directly inside the black box of cognitive processing, because of the structure of the brain's short term memory system (Sarasvathy, 2008). It has been consequently decided that TAPs are also the method for conducting the interviews for EPICC project and thus for this study.

Before going into the real experiment and interviews with Turkish novice entrepreneurs, a pilot think-aloud session was held under the supervision of Dr. R. Harms, one of the EPICC project leaders. The aim of this was to get acquainted with the case and the think-aloud style of interviewing. This study was done with a Dutch novice entrepreneur whom I personally knew from my studies at the University of Twente. The process was properly led and observed by the supervisor. The interview was later also analyzed and coded according to the coding schema. After successfully executing this process reviewed by the supervisor and receiving feedback, I was competent and ready to conduct the original interviews for my study.

In this experiment, my role as the interviewer is noticeably restricted in the process of interviewing the participants. The interviewer welcomes the interviewee to the session, makes sure that he or she is comfortable with the surrounding and asks whether the interviewee has any questions before going on to the case and starts the recording. Before starting to read the questions, the interviewee also receives a document covering the instructions for student entrepreneurs which clearly states what is expected from the interviewee and the purpose of the assignment. After reading the short introduction of the case-study, the interviewer yields the stage completely to the interviewee. The interviewee reads the problems, speaks aloud while thinking about his/her answers and expresses everything that comes up to his/her mind. The interviewee may talk about anything that's related to the topic, speak up about own experiences, knowledge and opinions. When there is a lack of information or explanation, the interviewee is asked to use his/her own imagination and predictions. The interviewer is there only to moderate the session and make sure that the interviewee stays on the right course referring to the problems. When the interviewee has some difficulty with the language or understanding the content, questions may arise and be answered for clarification, however no direction, additional information or help may be given to the interviewee. The aim is to maximize the output that the interviewee can give to the case-study and this is sustained by asking him to elaborate on his answers, speak aloud and share everything that comes to his mind when talking about a specific subject. When the end is reached, the interviewee is thanked, asked whether there are any further comments or contributions to this experiment from his side and wished luck for the rest of his/her entrepreneurial activities.

4.2.2 The Case

The case used in this research is adapted from Sarasvathy's original work (2001; 2008) (founded in book: Effectuation: Elements of Entrepreneurial Expertise) on expert entrepreneurs regarding entrepreneurial processes. Her research was designed solely to investigate expert entrepreneurs in the United States of America. Specifically for the EPICC project, the project leaders Dr. R. Harms and M. Stienstra adjusted and simplified the case to some extent in order to make it useable and applicable to an international environment to entrepreneurs from any country and culture. Furthermore Sarasvathy's original case-study was too much focused on technology and to prevent this and have a broader sample of participants, the case has been altered.

The case-study used in EPICC project is named as 'Coffee Inc.''. The case consists of ten decision-making problems with regard to the entrepreneurial activities while starting up a coffee corner at a local university. The novice entrepreneurs that join this study, regardless of their actual background or business they run, imagine themselves in a situation, as the introduction of the case explains; where they have 5 years of experience working at a coffee shop as a student job, and decide to enter this market on their own with limited financial sources. The case basically covers the major phases and milestone decisions that a company goes through from day one: starting-up to the very end. In the light of the information given, the participant goes through each question that concerns a particular decision regarding market research, financing, branding, leadership, product re-development, growing the business, goodwill, exit strategies and so forth. As explained before, participants had maximum 2 hours for this experiment; usually they took a time approximately 1.5 hours. Participants reported that they found the case both interesting and challenging, and they enjoyed joining this study while brainstorming about issues that are related to the day-to-day operations of their own actual ventures despite in other contexts. They often mentioned similarities between the problems given in the case and the decisions they have had to make concerning their own companies. Hence, most participants provided meaningful insights and input to the study based on their own experiences, thoughts, knowledge and predictions which is exactly what the purpose of this case-study was. The full case can be found in Appendix C.

4.2.3 The Questionnaires

As an addition to the case, the participants are asked to fill out a questionnaire about their companies. This questionnaire is adapted from the work of Chandler et al (2011) and utilized in order to strengthen the validation of the case results. The questionnaires consist of 17 statements based on 5-point Likert scale where participants are to indicate whether they absolutely don't agree (1) or fully agree (5) with the statements that aim to investigate the entrepreneurs' strategies with regards to starting up their businesses. From the 17 statements, the first nine (from 1th to 9th) are intended towards causal entrepreneurial strategies and the last eight (from 10th to 17th) are towards effectual entrepreneurial strategies. The rate of participation was 100%.

In the light of this design of the questionnaires, the dimensionality of the two constructs, causation and effectuation as well as their distinctiveness can be measured (Chandler et. al., 2011). For this research, the results of the questionnaires are statistically tested with factor analysis and presented in the results section in order to make a comparison with the outcomes of the case study. The questionnaires can be found in Appendix D.

4.2.4 The VSM Survey

In the frame of this research, as thoroughly explained earlier, the reference point for the independent variable (i.e. national culture) is the comprehensive study results of Hofstede's work on culture and its dimensions. The scores of Turkey and the UK on cultural dimensions of Hofstede are relied upon when comparing two countries' national cultures. In order not to solely count on Hofstede's results, the Value Survey Model (VSM) model is used to test whether the results of the target group of this study match with Hofstede's generic scores. In other words, the VSM survey is employed for this research as secondary data that allow the researcher to detect the validity of the

Hofstede scores used as primary data when dealt with this specific sample group of entrepreneurs.

The VSM survey is developed originally in 1982 by Geert Hofstede, Gert Jan Hofstede, Michael Minkov and Henk Vinken. The purpose of VSM survey is to compare culturally influenced values and sentiments of similar respondents from two or more countries, or sometimes regions within countries. It allows scores to be computed on seven dimensions of national culture, on the basis of four questions per dimension: thus it counts 7 x 4 = 28 content questions. These 28 content questions deal with a range of issues regarding respondents' job, private life, personality, habits, religion, health, past experiences and so forth. The other six questions ask for demographic information: the respondent's gender, age, education level, kind of job, present nationality, and nationality at birth (Hofstede et. al., 2008).

The version that is adopted for this research is the one of 2008. For the VSM survey, it's indicated that minimum of 20 participants is required. For this study, 22 Turkish entrepreneurs are interviewed, thus the target group complies with this requirement. The twenty-eight content questions allow index scores to be calculated on seven dimensions of national value systems as components of national cultures: Power Distance (large vs. small), Individualism vs. Collectivism, Masculinity vs. Femininity, Uncertainty Avoidance (strong vs. weak), Long- vs. Short-Term Orientation, Indulgence vs. Restraint, and Monumentalism vs. Self-Effacement (Hofstede et. al. 2008). All content questions are scored on five-point scales. Index scores are derived from the mean scores on the questions for national samples of respondents. Specifically for this research as mentioned above, 4 of these national dimensions are used since the data for Turkey on the rest of the dimensions are not available.

The formula for calculating the scores of each participant is exhibited in Appendix E. The results are given in the respective section and further discussed in the light of Hofstede's original scores of two target countries.

4.3 Method of Analysis

In order to make sense of the data that have been collected and coded for this thesis, the outputs are to be statistically tested. As elucidated before, the main construct of the data collection is the think-aloud sessions conducted with respondents going through a case study. The outputs are subsequently coded based on the coding schema of Sarasvathy's effectuation and causation theory. The coding has therefore yielded a bulk of data that is ready to be analyzed.

The first step is to find out whether the data that's dealt with is normally-distributed. Normality tests are used to determine whether a dataset is well-modeled by a normal distribution or not, or to compute how likely an underlying random variable is to be normally distributed. There are numerous tests and methods to measure univariate normality including D'Agostino's K-squared test, the Jarque–Bera test, the Anderson–Darling test, the Cramér–von Mises criterion, the Lilliefors test , the Kolmogorov–Smirnov test), the Shapiro–Wilk test, the Pearson's chi-squared test, and the Shapiro–Francia test. A 2011 paper from *The Journal of Statistical Modeling and Analytics* (Razali & Wah, 2001) concludes that when these major normality tests are compared, Shapiro-Wilk has the best power for a given significance.

Therefore, executed in order to test the normality of each component set in the data collected for this research, the Shapiro-Wilk test is. The Shapiro-Wilk tests the null hypothesis that a sample came from a normally distributed population (Shapiro & Wilk, 1965). Recalling that the null hypothesis is that the population is normally distributed, if the p-value is less than the chosen alpha level, then the null hypothesis is rejected (i.e. one concludes the data are not from a normally distributed population). If the p-value is greater than the chosen alpha level, then one does not reject the null hypothesis that the data came from a normally distributed population (Shapiro & Wilk, 1965).

Next to the Shapiro-Wilk tests, graphical method is used to confirm the results of normality. A Q-Q plot of the sample is looked into to compare to a normal probability curve. The empirical distribution of the data (i.e. the histogram) should be 'bell-shaped' and resemble the normal distribution. This curve is described in terms of the point at which its height is maximum (i.e. 'mean') and how wide it is (i.e. 'standard deviation'). The most important things to look at are the symmetry and peakiness of the curve.

The second step is by looking at the outcomes of the Shapiro-Wilk normality tests and graphical method of normality. This is of significance because depending on the results it is determined whether the data may thereafter be analyzed by parametric or non-parametric statistics. If the data is proven to be normally distributed, it is generally most applicable to continuous data and is therefore intrinsically associated with parametric statistics. If otherwise, nonparametric statistical tests need to be employed. The main difference is that with the normality of the data being the most important assumption, parametric methods depend on more assumptions than nonparametric methods.

When normally distributed, the data can be analyzed by parametric statistical methods. In the case of this study however, there are limited number of methods that are suitable for the data being relatively small. Furthermore, each hypothesis deals with only one dependent variable, therefore such multi-variance tests as MANOVA cannot be utilized for this research. With only one dependent variable and an independent variable, a bivariate statistical analysis is needed. The most commonly used tests of bivariate statistical analysis are t-test and ANOVA. T-test is only applicable when there are just two samples, while ANOVA can be used for two or more sample groups. Although either could be used for this research, the preferred method is ANOVA due to a pair of reasons. First of all, the t-test is used to determine if two sets of data are significantly different from each other by looking at their means. ANOVA on the other hand is used to analyze the differences between group means and their associated procedures such as variation among and between groups. Secondly, ANOVA provides a statistical test of whether or not the means of several groups are all equal, and therefore is able to generalize *t*-test to more than two groups. The most important reason why ANOVA is more robust than t-test in most case is that by using ANOVA, the chance of the type I error is decreased compared to t-test (Gelman, 2005, p.2). A type I error, also known as an error of the first kind, occurs when the null hypothesis (H_0) is true, but is falsely rejected. The more hypothesis tests you use the more you risk making a type I error and the less power a test has (Howell, 2002, p.320). For these reasons, ANOVA is most used and also most useful technique in the field of statistical inference (Montgomery, 2001, p63). As a result, ANOVA method is to be employed for the present thesis in case of normal distribution.

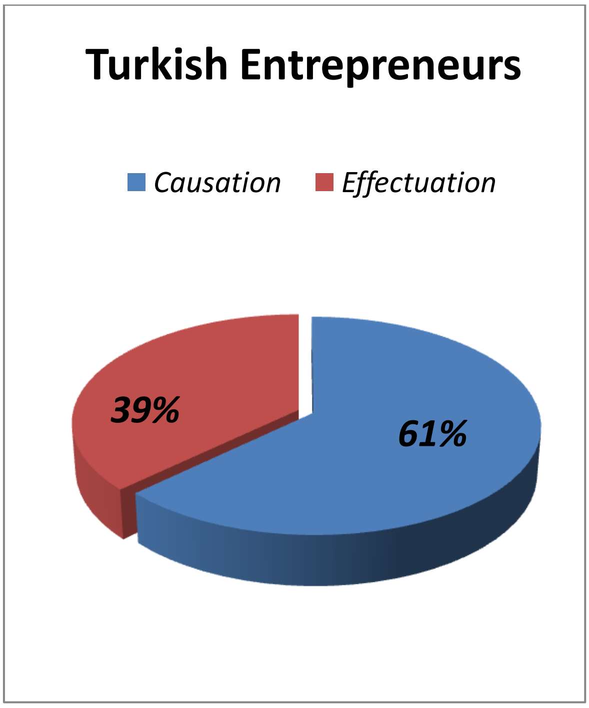
In case the data is not normally distributed, it is necessary to use nonparametric methods. Unlike parametric statistics, nonparametric statistics make no assumptions about the probability distributions of the variables being assessed. There are also a numerous methods for nonparametric statistics however since the samples used for this study are independent, the best technique seems to be the Mann-Whitney U test (also known as Wilcoxon rank sum test). Mann-Whitney U test is appropriate for comparing differences between two independent groups when the dependent variable is either ordinal or interval/ratio, but not normally distributed (Mann & Whitney, 1947). It is used to test the null hypothesis that two populations have identical distribution functions against the alternative hypothesis that the two distribution functions differ only with respect to location (median), if at all. It has a greater efficiency and robustness compared to t-tests on non-normal distributions. Therefore, the Wilcoxon Mann-Whitney Test is one of the most powerful of the nonparametric tests for comparing two unpaired populations. It is used to test the null hypothesis that two populations have identical distribution functions against the alternative hypothesis that the two distribution functions differ only with respect to location (median), if at all. This test can also be applied when the observations in a sample of data are ranks, that is, ordinal data rather than direct measurements. For these reasons, it's been decided that when the data appears to be not normally distributed, Mann-Whitney U nonparametric test is applied.

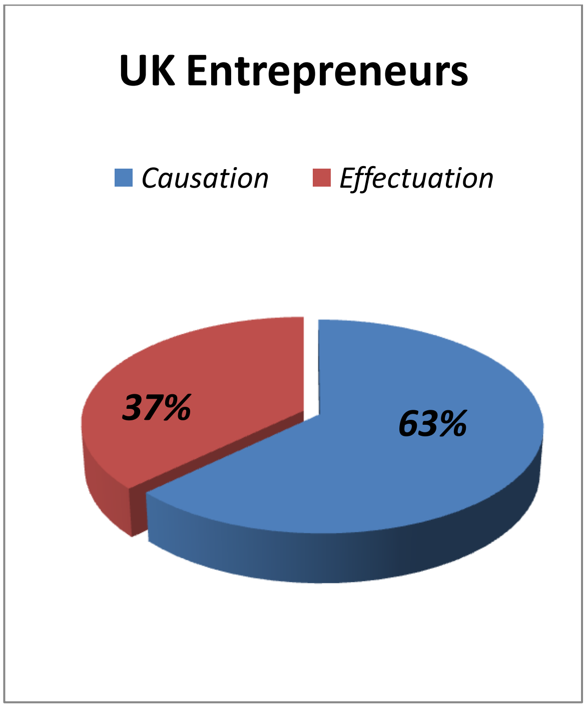
5. Results:

In this chapter, the outcomes of the methodological component of the research as describe in the previous chapter are exhibited and elaborated. Firstly, a general picture on the analysis of the think-aloud protocols (TAP) and the results of the coding of two sample groups are presented and interpreted. Secondly, the results of the statistical analysis of the data in the light of the hypotheses are given and thoroughly discussed. Subsequently, the analysis on the questionnaires is put forward. Last but not least, the outputs of the VSM survey are detailed.

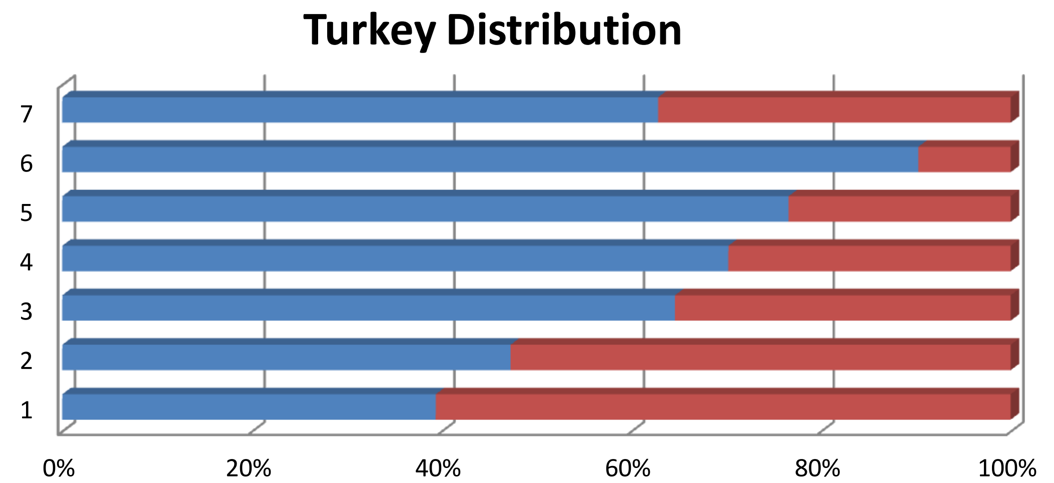
5.1 Overview of TAP findings

Before getting to the analysis of the hypothesis, an outlook to the findings of think-aloud protocols is necessary to get a general understanding of the results. Underneath are the visualizations of these findings:



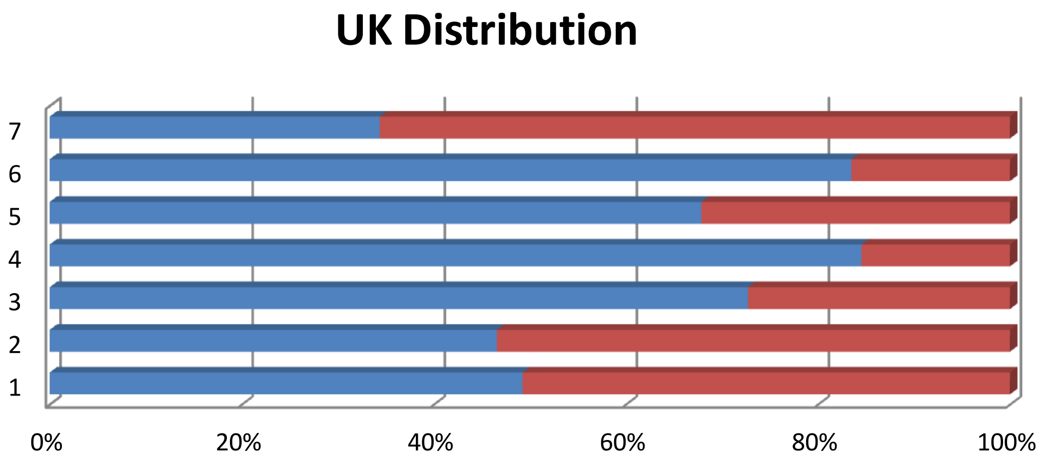


In the pie charts above overall scores of entrepreneurs from Turkey and the UK are presented with regard to causation and effectuation proportions of each, based on the case study. As it can be derived from the graphs, there exists a slight difference between two groups although the scores similarly point out a clear dominance of causal decision-making style for both parties in comparison to effectual decision-making style. Entrepreneurs from the UK have only a 2% more tendency towards causation, as it appears from the findings. However, in order to understand whether this difference statistically significant or not, the statistical test results need to be analyzed. In the following graphs, a detailed glance at the each component of the coding scheme (i.e. principles of Causation and Effectuation by Sarasvathy, 2008) is taken, in order to break down the general picture on causation and effectuation to their seven principles.



	1	2	3	4	5	6	7
Causation	0,39	0,47	0,65	0,70	0,77	0,90	0,63
Effectuation	0,61	0,53	0,35	0,30	0,23	0,10	0,37

In the above-presented graph, the results of entrepreneurs from Turkey are given based on the principles of Sarasvathy's Effectuation theory (2008). From this graph it can be clearly seen that except of the first two principles Turkish entrepreneurs follow a predominant causal decision-making style. Findings indicate an obvious difference with regard to the rest of the principles in favor of a causal reasoning.



	1	2	3	4	5	6	7
Causation	0,49	0,47	0,73	0,85	0,68	0,83	0,34
Effectuation	0,51	0,53	0,27	0,15	0,32	0,17	0,66

The results exhibited in the graph above show that just like their Turkish counterparts, the entrepreneurs from the UK predominantly follow a causal reasoning on the basis of five of seven main principles. Regarding both first and second principles, the results differ slightly towards an effectual logic, nevertheless regarding the rest, there is a noticeable difference between two decision making styles.

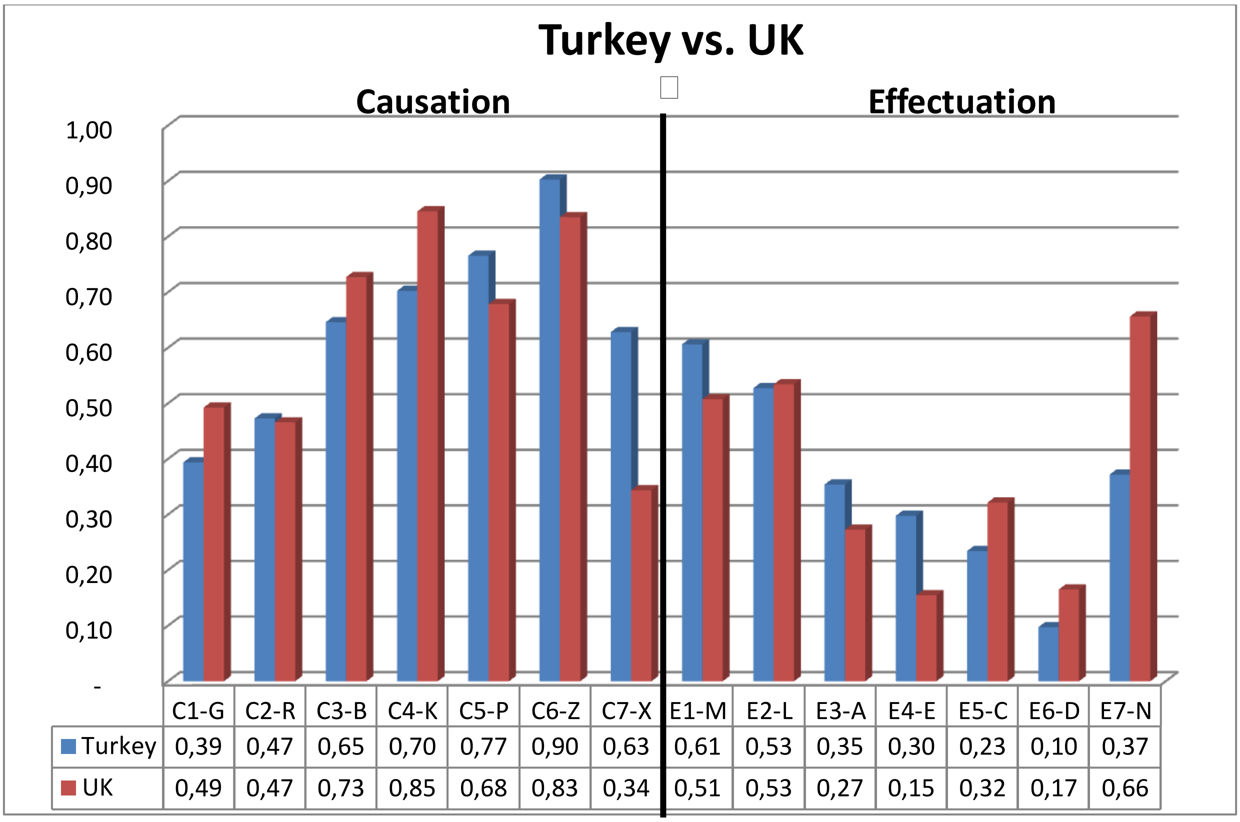


Table 7. Causation and Effectuation scores of Turkey and the UK compared

The graph shown above collects the main findings of the case study and the subsequent coding. It exhibits the scores of two focus countries, namely Turkey and the UK, in a comparable manner based on the seven principles of causation and effectuation theories. As demonstrated before, entrepreneurs from both Turkey and the UK prove a strong dominance of causation against effectuation. This result can also be evidently seen in this chart since the weight of five of the seven principles (C3 to C7) lay upon the causation side. This graph also gives the possibility to compare the two countries in respect to these individual principles.

When compared, Turkish entrepreneurs marginally outweigh their counterparts on the use of causal reasoning based upon predicting the future and emphasizing the analysis of the data. On the other side, the entrepreneurs from the UK score slightly higher than their Turkish colleagues when it comes to use of competitive analysis and existing market knowledge. A noticeable difference occurs on the scores of C7 and E7 which concerns causation and effectuation beyond the six main principles (when coding, the input that do not fall into any of the other six categories but still signifies the appearance of either causation or effectuation is labeled as C7-X or E7-N).

Such differences between two countries are observable while looking merely at the means of the obtained dataset for each group. Nevertheless, to better understand and conclude whether these differences are statistically speaking significant or not, the necessary tests are conducted in the light of the hypotheses and presented in the respective sections below.

5.2 Analysis: Statistical Testing of Hypotheses

In the previous section, a general overview is demonstrated in the form of charts and graphs, and the scores are evaluated with the comparison of causal and effectual logics for entrepreneurs from Turkey and the UK. As it can be recalled, a number of hypotheses are constructed upon the potential impact of national culture on entrepreneurial processes and are formulated in order to tackle the research question. The aim of the hypotheses is to test whether two countries significantly differ from each other and to conclude if such a difference in entrepreneurship style can be explained by the differences in national culture. Therefore, in this section, the hypotheses are statistically tested to come to a formal conclusion about these differences between two countries.

5.2.1 Normality Tests

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
C1_G_Goal_Driven	.101	44	.200*	.988	44	.913
C2_R_Expected_Return	.153	44	.012	.891	44	.001
C3_B_Competitive_Analysis	.149	44	.016	.921	44	.005
C4_K_Existing_Market_Knowledge	.149	44	.016	.934	44	.015
C5_P_Predictions_of_the_Future	.186	44	.001	.878	44	.000
C6_Z_Emphasis_of_the_analysis_of_Data	.355	44	.000	.645	44	.000
C7_X_Causal_no_subjectory	.175	44	.002	.863	44	.000
E1_M_Means_Based	.102	44	.200*	.987	44	.909
E2_L_Affordable_Loss	.146	44	.019	.894	44	.001
E3_A_Alliances_or_Partnership	.149	44	.016	.921	44	.005
E4_E_Exploration_of_Contingency	.149	44	.016	.934	44	.015
E5_C_Non_Predictive_Control	.186	44	.001	.878	44	.000
E6_D_Distrusting_Market_Research	.355	44	.000	.645	44	.000
E7_N_Effectuation_No_Subjectory	.226	44	.000	.854	44	.000

Table 8. Test of Normality

As explained under the methodology chapter, the first step that determines which tests (i.e. parametric or nonparametric) need to be employed is examining whether the data is normally distributed. Each independent variable is tested for both samples together, as illustrated above.

It is argued in the methodology chapter that the adequate technique that needs to be taken into consideration is the Shapiro-Wilk normality test. The test is designed for relatively small populations (n<50) (Shapiro & Wilk, 1965), therefore it fits very well the sample of the present study (n=44). The null-hypothesis for this test is that the sample comes from a normally distributed population. The null-hypothesis is rejected when the p-value is smaller than the alpha-value (the significance level); that is α=0.05 (Fisher, 1925). In the case of normality tests, this basically means any dataset with a p-value greater than 0.05 is normally distributed. In addition to the Shapiro-Wilk normality test, the Q-Q plots and histograms of given data are also checked in order to visually confirm the test results.

When looked at the present data, it can be observed from normality table and the Q-Q graphs that only two variables, namely 'C1-Goal Driven' and 'M1-Means Based' turn out to be normally distributed. The 12 other variables all significantly belong to non-normal distributions. The consequence of this is that only these two variables named above are to be exposed to parametric statistical tests and the rest has to do with nonparametric statistical tests. As earlier discussed, in this thesis for parametric statistics ANOVA test is adopted and for nonparametric statistics Mann-Whitney U test is employed. The execution and results of these tests on given data connected to the hypotheses are put forward in the section below.

5.2.2 Hypotheses Analysis:

In this section, the hypotheses are statistically tested and the results are presented. For each hypothesis, based on the normality test, the relevant dependent variable is tested with either ANOVA or Mann-Whitney U tests. Further interpretations on the results take place under the discussion chapter.

Hypothesis 1: PDI and Entrepreneurial Processes

H1: The higher a culture scores on power distance index, the more likely that the entrepreneurs are focused on competitive analysis, thus follow a causal reasoning.

As seen, the first hypothesis tackles the potential link between the power distance index and the focus on competitive analysis during the entrepreneurial processes. Turkey scores much higher on PDI (-0.06) than the UK (-0.81), therefore it is expected that Turkish entrepreneurs make more use of competitive analysis than their counterparts from the UK. When comparing the two samples based on competitive analysis (C3-B), the results show an opposite direction since it turns out that the entrepreneurs from the

United Kingdom on average are more focused on competitive analysis (73%) than the entrepreneurs from Turkey (65%). Therefore the findings do not support the first hypothesis. Looking at the statistical analysis, the data on competitive analysis shows a non-normal distribution and hence is tested by nonparametric Mann-Whitney U test. As it can be seen in Appendix F, the statistical test result delivers a p-value 0.103 which is greater than the alpha-value ($\alpha=0.05$). It can be therefore concluded that there is no significant difference between two samples.

Hypothesis 2: IDV and Entrepreneurial Processes

H2: The higher a culture scores on individualism, the more likely that the entrepreneurs are focused on competitive analysis, thus follow a causal reasoning.

Similar to the first hypothesis, the cultural dimension of individualism is coupled to the competitive analysis. It can be anticipated from the hypothesis that entrepreneurs from the UK, scoring much higher than Turkey on IDV (0.33 vs. -0.45 respectively), give more attention to competitive analysis. The results of the case study are in accordance with the hypothesis since the proportion of competitive analysis (C3-B) for the UK is 73% and for Turkey 65%. However, as discussed in the first hypothesis, the statistical tests yielded a non-significant difference between two groups on competitive analysis.

Hypothesis 3a: UAI and Entrepreneurial Processes

H3a: The higher a country scores on uncertainty avoidance, the more likely that the entrepreneurs are focused on affordable loss, thus follow an effectual reasoning.

This hypothesis deals with the possible impact of UAI on the use of affordable loss throughout the entrepreneurial processes. According to the scores of Turkey and the UK on UAI, respectively 0.11 and -0.22, it can be derived from this hypothesis that Turkish entrepreneurs concentrate on affordable loss (E2-L). The proportion of affordable loss for the entrepreneurs from the UK and from Turkey is exactly the same: 53%. Thus a difference from the mean of the two data cannot be seen. Looking at the statistical analysis, the data on affordable loss is not normally distributed and therefore is tested by nonparametric means. Displayed in Appendix F, the Mann-Whitney U test gives a p-value of 0,766 which is way above the significance level alpha ($\alpha=0.05$) and hence the statistical tests also proves that there is no significant difference between two samples on this variable.

Hypothesis 3b: UAI and Entrepreneurial Processes

H3b: The higher a country scores on uncertainty avoidance, the more likely that the entrepreneurs depend on existing market knowledge, thus follow a causal reasoning.

The hypothesis above investigates the influence of UAI on the dependency of entrepreneurs on existing market knowledge. As mentioned, Turkey scores much higher than the UK on UAI, therefore it is expected that Turkish entrepreneurs depend more on their existing market knowledge (C4-K) than their counterparts from the UK. When the case-study results are observed, the proportion of existing market knowledge for the UK is with 85% higher than Turkey with 70%. Such findings contradict the concerning hypothesis. When looked at the statistical analysis, the distribution of the data on existing market knowledge is not normal; therefore the Mann-Whitney U test is employed. The p-value derived from the test given in Appendix F is 0.004 and therewith smaller than the alpha-value (α=0.05). Thus, the difference between two groups is statistically significant.

Hypothesis 3c: UAI and Entrepreneurial Processes

H3c: The higher a country scores on uncertainty avoidance, the more likely that the entrepreneurs adopt predictive strategies, thus follow a causal reasoning.

This hypothesis looks into a possible relationship between UAI and predictive strategies in the entrepreneurial processes. As Turkey scores much higher than the UK on UAI, it can be stated that Turkish entrepreneurs focus more on predictive strategies than the entrepreneurs from the UK. The case study results are in line with this hypothesis since the proportion of predictive strategies (C5-P) for Turkey is 77% and for the UK 65%. When statistically tested, the data on predictive strategies is not normally distributed; hence the nonparametric Mann-Whitney U test needs to be executed. The test delivers a p-value of 0.640, that is way above the significance level alpha (α=0.05). Therefore the difference between two groups is statistically insignificant.

Hypothesis 3d: UAI and Entrepreneurial Processes

H3d: The higher a country scores on uncertainty avoidance, the more likely that the entrepreneurs put emphasis on analysis of data, thus follow a causal reasoning.

The last hypothesis explores the link between UAI and the emphasis on analysis of the data during the entrepreneurial processes. Turkey scores much higher on UAI than the UK, thus it can be expected that Turkish entrepreneurs put more emphasis on analysis of the data (C6-Z) than their colleagues from the UK. Both Turkey and the UK have a very high proportion on this variable while Turkish entrepreneurs slightly outweigh the entrepreneurs from the UK with 90% to 83% respectively. These findings show accordance to this hypothesis. Considering the statistical analysis, the data on this variable is also not normally distributed and the nonparametric Mann-Whitney U test is utilized. The p-value is 0,230 which is higher than the alpha level (α=0.05), therefore there is no significant difference between two samples.

5.3 Analysis: Questionnaire vs. Case Study

As explained in the methodology section, an additional questionnaire based on the study of Chandler et al (2011) is used in order to compare the results with the findings of the think-aloud case study and thus to reinforce the reliability of the case study. There are 17 questions in the questionnaire and the first 9 are associated with causal reasoning while the remaining 8 questions are linked to effectual logic. The questionnaire uses a 5-point scale however for the sake of simplified calculations of causation and effectuation scores the following method is used:

	Do not agree	Agree little	Agree somewhat	Mostly agree	Fully agree
Q's 1 to 9 (causation)	-2	-1	0	1	2
Q's 10 to 17 (effectuation)	2	1	0	-1	-2

When the results are explored, it is important to note that when the total is positive, it means that the participant uses more of a causal logic and when the total is negative, more of a effectual logic. This is illustrated on table 9:

Causal	TR1	TR2	TR3	TR4	TR5	TR6	TR7	TR8	TR9	TR10	TR11	TR12	TR13	TR14	TR15	TR16	TR17	TR18	TR19	TR20	TR21	TR22
Q1	0	2	1	2	-1	1	2	1	0	1	1	2	-1	0	0	2	0	1	2	1	1	1
Q2	0	2	2	2	2	2	0	2	2	0	2	2	2	0	1	2	1	2	1	0	1	1
Q3	1	0	1	2	0	1	1	1	0	-1	-1	-1	-2	-1	1	2	0	0	1	1	0	0
Q4	1	0	1	1	0	1	1	1	0	2	0	-1	-1	-2	1	2	0	0	1	0	-1	0
Q5	-2	-1	-2	-1	0	2	-1	-1	1	2	1	0	2	-2	1	1	2	-1	1	0	-1	-1
Q6	-1	2	2	2	0	1	2	1	2	1	1	2	1	0	2	2	2	0	0	2	0	1
Q7	-2	0	1	2	0	1	0	2	-1	0	-1	-2	-1	-2	0	2	0	-1	2	1	-2	-1
Q8	0	1	0	1	0	0	1	0	1	-1	1	0	0	0	0	0	0	-1	1	2	-1	1
Q9	-1	0	2	2	0	1	0	1	1	2	2	1	0	0	1	1	1	1	-1	0	1	1
Mean	-0,44	0,67	0,89	1,44	0,11	1,11	0,67	0,89	0,67	0,67	0,67	0,33	0,00	-0,78	0,78	1,56	0,67	0,11	0,89	0,78	-0,22	0,33

Effectual	TR1	TR2	TR3	TR4	TR5	TR6	TR7	TR8	TR9	TR10	TR11	TR12	TR13	TR14	TR15	TR16	TR17	TR18	TR19	TR20	TR21	TR22
Q1	1	1	0	1	0	1	1	2	0	-1	0	0	1	0	-2	1	1	-1	2	1	-1	0
Q2	-2	-1	0	1	-1	0	2	-1	-1	0	1	-1	0	2	1	1	0	0	2	1	1	2
Q3	-1	-1	-2	-2	-1	0	-2	-2	-1	-1	0	-2	0	-1	1	-1	-1	-1	0	-1	-2	-1
Q4	-1	-2	-1	0	0	-1	1	-1	-2	0	-2	-2	-2	-1	0	-1	-2	-1	0	-1	-1	-1
Q5	0	-1	1	-1	-1	-1	-1	0	-2	-2	0	-1	0	-2	-1	-2	-1	-1	-1	-1	-1	-1
Q6	1	1	-2	-2	-1	-1	-2	-1	-1	-2	-2	-2	-1	-2	0	0	-2	-1	0	-1	-2	-2
Q7	2	0	-1	-2	0	-1	-1	1	1	0	-1	1	1	0	-1	1	0	1	1	0	1	0
Q8	2	1	-2	0	-1	1	1	0	0	0	-2	-1	0	-1	-2	-1	-1	1	1	1	-2	-1
Mean	0,25	-0,25	-0,88	-0,63	-0,63	-0,25	-0,13	-0,25	-0,75	-0,75	-0,75	-1,00	-0,13	-0,63	-0,50	-0,25	-0,75	-0,38	0,63	-0,13	-0,88	-0,50
TOTAL	**-0,19**	**0,42**	**0,01**	**0,82**	**-0,51**	**0,86**	**0,54**	**0,64**	**-0,08**	**-0,08**	**-0,08**	**-0,67**	**-0,13**	**-1,40**	**0,28**	**1,31**	**-0,08**	**-0,26**	**1,51**	**0,65**	**-1,10**	**-0,17**

Table 9. The Questionnaire Results

As it can be observed from the table, exactly the half of the respondents (11) has a positive total end-value and therefore uses more of a causal reasoning whereas the other half has a negative total end-value and therefore uses more of a causal reasoning.

On the other hand, the results of the case study per respondent are given in this table 10:

	TR1	TR2	TR3	TR4	TR5	TR6	TR7	TR8	TR9	TR10	TR11	TR12	TR13	TR14	TR15	TR16	TR17	TR18	TR19	TR20	TR21	TR22
Causal	62%	68%	54%	65%	72%	60%	66%	59%	58%	60%	59%	52%	61%	53%	59%	60%	58%	63%	63%	68%	64%	50%
Effectual	38%	32%	46%	35%	28%	40%	34%	41%	42%	40%	41%	48%	39%	47%	41%	40%	42%	37%	37%	32%	36%	50%

Table 10. The Case-study Results per respondent

Further interpretations about the comparison of these results are given in the conclusion and discussion chapters.

5.4 Analysis: VSM08 Survey vs. Hofstede scores

In the methodology chapter, it is introduced that a VSM survey is conducted to compare the results of this specific set of participants against the Hofstede scores on national culture dimensions. The formula's for calculating VSM08 is exhibited in Appendix E. It is indicated that the results may vary from values between 0 and 100. For this reason, a constant value is used to adjust the negative scores. It is important to use the same constant value for the same dimension to overcome confusions. The results are:

Turkey	Score	Constant	End Score	Hofstede (1980)	Taras (2012)
PDI	-14	33	19	66	-0,06
IDV	-21	25	4	37	-0,45
MAS	-3	60	57	45	0,57
UAI	-46	98	52	85	0,11
UK	Score	Constant	End Score	Hofstede (1980)	Taras (2012)
PDI	2	33	35	35	-0,81
IDV	64	25	89	89	0,33
MAS	6	60	66	66	0,58
UAI	-63	98	35	35	-0,22

Table 11. The VSM08 Results

The constants are determined by equalizing the UK scores to the Hofstede scores. By doing this, the VSM08 scores of two countries can be more visibly contrasted to their Hofstede scores. As discussed earlier, Hofstede (1980) and Taras (2012) scores do not match only on MAS dimension. When looking at the VSM08 end scores, it can be observed that except for the dimension PDI, the scores comply with both Hofstede' and Taras' scores for both countries. In other words, it can be concluded that the VSM08 scores of this particular set of participants are in line with Hofstede scores as well as with Taras' scores only with the exception of PDI dimension. This could be a point of discussion; however the hypothesis on PDI is not supported, so there is no consequence of it upon the conclusions.

6. Conclusion, Discussion and Limitations, and Recommendations:

In the last chapter of the present thesis paper, several sections are introduced. First of all, a comprehensive conclusion section covers the results of the findings of this research and presents the conclusions drawn in order to come to an answer to the start point, namely the research question. In the second section, a broad discussion is given to put forward the argumentations as to why certain decisions and steps are taken throughout the process of this research. Moreover, the methods used and limitations of these methods are discussed. Last but not least, in the third chapter some recommendations towards a relevant future research are given to point out where the improvements could be made.

6.1 Conclusion

There are a number of conclusions that can be derived in the light of the hypotheses' analysis. The findings are used to tackle the research question and draw the conclusions upon it. To remember the original research question:

''To what extent does the <u>national culture</u> of Turkey influence the <u>entrepreneurial processes</u> – specifically whether or not to employ effectuation logic of thinking – in comparison with the <u>national culture</u> of United Kingdom?''

The hypotheses are constructed in order to make a link between national culture and causation and effectuation as a part of entrepreneurial processes. For the national culture construct, Hofstede's cultural dimensions are used and for the entrepreneurial process construct the principles of Sarasvathy's effectuation and causation theory are considered. In other words, a possible impact of national culture on the entrepreneurs' choice of effectual or causal reasoning is examined on the basis of relating cultural dimensions to principles of Sarasvathy. Three national culture dimensions for target countries; Turkey and the UK are coupled to the principles of causation and effectuation in order to understand whether the differences (if any) between the entrepreneurial processes in these two countries can be explained by national culture.

The hypothesis 1 suggests that the cultural dimension ''Power Distance'' (PDI) can be the underlying reason of a difference in entrepreneur's use of competitive analysis in the entrepreneurial processes. It is further argued that in the cultures with higher power distance, the entrepreneurs are more likely to emphasize competitive analysis and thus follow a causal reasoning. Since Turkey scores higher on PDI in comparison to the UK, it is expected that Turkish entrepreneurs focus more on competitive analysis. When looked at the case-study results, it turns out that entrepreneurs from the UK make more use of competitive analysis than their Turkish counterparts. Therefore, the results contradict the first hypothesis. When the samples are statistically analyzed, the output shows that there is no significant difference between two groups. As a conclusion, the first hypothesis fails to be accepted, in other words, the cultural dimension of power distance does not seem to have a significant influence on entrepreneurs' use of competitive analysis.

The hypothesis 2 links the cultural dimension ''Individualism'' (IDV) to competitive analysis and suggested that entrepreneurs from individualistic cultures are more strongly driven with competitive analysis as a part of causal logic when compared to collectivistic cultures. As clearly seen from the scores, Turkey is a fairly collectivist country whereas the UK has one of the most individualistic cultures in the world. Such a dramatic difference between two countries may suggest a visible difference in the focus on competitive analysis for entrepreneurs. Based on the case-study findings, the hypothesis seem to be legitimate since entrepreneurs from the UK outscore their Turkish colleagues in this principle of Sarasvathy's theory, the competitive analysis. Statistically speaking however, there appears to be no significant difference between the two groups, thus this hypothesis also cannot be accepted.

The hypothesis 3a examines whether the cultural dimension ''Uncertainty Avoidance'' (UAI) can be used to explain the difference between entrepreneurs following the logic of affordable loss. It is suggested that in cultures with higher uncertainty avoidance, entrepreneurs focus more on affordable loss when involving in entrepreneurial processes. Turkey scores much higher on this cultural dimension than the UK, hence it can be anticipated that Turkish entrepreneurs rely on the logic of affordable loss as a part of effectual thinking more than the entrepreneurs from the UK. The findings of the case-study deliver an exact same outcome for both groups and statistical analysis confirm that there is no significant difference between the two samples when it comes to affordable loss. Consequently, this hypothesis is also not supported with this data.

The hypothesis 3b investigates a possible impact of the cultural dimension ''Uncertainty Avoidance'' (UAI) on entrepreneurs' dependence on existing market knowledge during the entrepreneurial processes. It is hypothesized that in culture that score high on this cultural dimension, entrepreneurs are more likely to engage themselves in entrepreneurial based on their existing knowledge of the market and thus adopt a causal reasoning. Accordingly, Turkey with a higher score on UAI than the UK, is expected to have entrepreneurs who depend more on existing market knowledge. Nevertheless, the findings of the case-study disprove this statement as the entrepreneurs from the UK considerably outweigh their Turkish counterparts on the use of existing market knowledge. When statistically tested, this difference is approved to be significant. Yet, this hypothesis also has to be rejected.

The hypothesis 3c connects the cultural dimension ''Uncertainty Avoidance'' (UAI) to predictive strategies towards the future. It is stated that entrepreneur's focus on predicting the future can be a result of their culture's strong nature of avoiding uncertainty. In other words, entrepreneurs from cultures that tend to avoid uncertainty to a great extent give importance to predictions, hence follow rather a causal thinking. As Turkey has a more uncertainty avoidant nature than the UK, it is expected that the entrepreneurs from Turkey employ predictive strategies more often than those from the UK. The case-study verifies that Turkish entrepreneurs indeed make more use of predictive strategies. Statistical analysis also confirms that this difference is significant and therefore the hypothesis 3c can be supported.

Last but not least, the hypothesis 3d explores a link between ''Uncertainty Avoidance'' (UAI) and the emphasis on analysis of data. It is argued that the countries that score high on this cultural dimension have entrepreneurs who strongly emphasize the analysis of data. Therefore, Turkish entrepreneurs are expected to put more emphasis on the analysis of the data than their counterparties from the UK. The case-study findings are in accordance to this hypothesis since Turkish entrepreneurs emphasized analysis of the data more often, nevertheless when statistically analyzed, the difference is insignificant. Consequently, the last hypothesis finds also no support.

To wrap up all the hypotheses' analysis, only one (3c) of the six hypotheses finds significant support from the data that is researched. It is interesting to note that next to the hypothesis 3c, the two sample groups also show statistically significant difference only for the variable of the hypothesis 3b. However, this difference occur in the opposite direction of what the hypothesis 3b proposes, therefore it is rejected. The remaining independent variables of causation and effectuation show no significant difference when statistically tested, thus these hypotheses fail to be confirmed since the two groups do not differ from each other based on the case-study. As a result, the research question that is broken down to six hypotheses, only finds one single time an evidence to support that a difference between entrepreneurial processes can be explained by the national culture. It is therefore difficult to conclude that the research question could be confirmed with the given data and results of the analysis.

When considering the second analysis, namely the comparison between the case results and the results of the questionnaire of Chandler et al (2011) applied to each participant with a 100% rate of response, there seems to be a great deal of contradiction. The analysis of the questionnaires yields a result that distributes causation and effectuation equally among Turkish entrepreneurs. In other words, 11 of the Turkish entrepreneurs, based on their responses to the questionnaire turn out to be on the causal side and the other 11 on the effectual side. Such a result is quite surprising because the analysis of the case study result in a full dominance of causation on all Turkish entrepreneurs except of the very last participant whose score is precisely balanced. It may therefore be concluded that the case-study results are absolutely not in-line with the questionnaire results. The interpretations of these findings are discussed in the discussion chapter.

6.2 Discussion and Limitations

In this section, the most noteworthy points of discussion on this research as well as certain limitations that it accommodates are elaborated. The argumentations on why certain decisions are taken and directions are chosen when conducting this research study are comprehended. Furthermore, as all studies, there are a number of limitations of this thesis and these are also mentioned in this section.

6.1.1 The Sample

To begin with, one of the first decisions that lead the main core of this research is given when choosing to research student entrepreneurs instead of expert entrepreneurs. As pointed out several times from the beginning, the focus of this study is on student entrepreneurs who are recently graduated or about to be graduated and who within a few years of time have started their own business. This has clearly consequences when researching entrepreneurship and entrepreneurial processes. Since their experience and perspective are supposedly less broad than those of expert entrepreneurs, one can argue that the input that is derived from interviewing student entrepreneurs could as well be limited. In contrast to this project, Sarasvathy's original study (2001) on effectuation, that is the reference point of this present thesis, is based on expert entrepreneurs. In fact, Sarasvathy (2001, 2008) indicates that her start point is when she observed expert entrepreneurs actually differ in their entrepreneurial processes than the others, which has eventually lead her to develop the effectuation theory. Since in this research, components from a similar method to that of Sarasvathy including the case-study, think-aloud protocols and the coding schema are employed, one can discuss that this research is also appropriate for expert entrepreneurs and the results might diverge when applied to student entrepreneurs.

To move on from this point, some other critical discussions regarding the set of (Turkish) participants can be made. Another one of them concerns the background of the sample. As explicitly mentioned, the sample consists of the primary and secondary contacts of the researcher. This means, participants most probably come from a similar span of environments, backgrounds (i.e. family, education, wealth, religion, culture etc.) and mindset and perspectives. Referring back to the demographics table in Appendix B, it is evident that such an assumption is valid. For instance, it can be argued that people with a beta-study background (ex. Engineering) may deliver considerably different results than people with social sciences background (ex. Business Administration). Majority of this sample consists of participants from various engineering degrees, which may accordingly lead to particularly similar results given that the mentality of these people might be predominantly similar. Likewise, as comprehensively explained in the section 'the sample', there are many other similarities within the group of Turkish entrepreneurs, including age, level of education, family background, religion and so forth. Consequently, it can be rightly discussed that from such a 'close-knit' sample set, quite homogeneous findings are expected to reveal and with a much more diversified dataset, the findings of this research might as well be significantly different.

In addition to the background of the sample, the fact that student entrepreneurs are researched may have had a significant impact on the results. In her original study, Sarasvathy (2001b) concludes that 78% of the MBA students did not use effectuation at all whereas 63% of the expert entrepreneurs used effectuation more than 75% of the time. Based on these findings, Sarasvathy asserts that effectuation is a style of entrepreneurship which expert entrepreneurs are more aware of and put into reality; directly quoted: 'effectuation as entrepreneurial expertise' (2003). Therefore, as the focus of this research is student entrepreneurs, one may claim that if the research was done with expert entrepreneurs, the findings might have been different that what they are now.

Another big concern is certainly the size of the sample. This study constitutes a relatively small sample, that is, 22 participants from each group (Turkey and the UK) to be compared with each other. It can be argued whether such a sample size could be a proper representative of a country or its culture and whether it is sufficient to lead to generalization of the conclusions. It is however claimed that by means of think-aloud technique, even a small number of subjects can provide rich and extensive data for analysis (Nielsen, 1994). Although for all methods of analysis (case-study, questionnaire, VSM08 survey etc.) the rate of response is retained at 100%, with such a sample size, the number of statistical techniques is quite restricted. On the other hand, the number of dependent variables is 14 (7 for causation and 7 for effectuation) in case of which the sample is considered too small to conduct, for instance, a regression analysis. A further discussion on sample size and its consequences on statistical testing follow below.

6.1.2 Think-Aloud method

Speaking of think-aloud technique, there are naturally pro's and con's that can be discussed. At first, the purpose of this method is to maximize the input extracted from the participant by allowing him to say instantly just about anything that comes to his/her mind while focusing on a particular issue or problem. It has been claimed that this method enables the interviewee with minimum disturbance in the thought process as he can make up his own mind and formulate opinions in his own manner mostly derived from the short-term memory. Collecting data from the short-term memory is preferable because thoughts generated from the long-term memory of subjects are often tainted by perception. Ericsson and Simon (1993) stated that once information enters the long-term memory, subjects may incorrectly describe the processes they actually used. Verbalizations that take place concurrently with cognitive processes are largely independent of interpretation on the part of the subject (Van Someren, Barnard, & Sandberg, 1994). Thinking aloud may also help some participants focus and concentrate by falling into a rhythm of working and talking throughout the evaluation. The think-aloud technique captures preference and performance data simultaneously rather than having to ask preference questions later. It gives a better understanding of the user's mental model because you are continually getting clues about misconceptions and confusion before they manifest as incorrect behaviors.

On the contrary, this technique has also its disadvantages. Firstly, it is argued that the think-aloud method slows the thought process by increasing mindfulness, which might prevent errors that might have normally occurred in the actual work setting (Ericsson & Simon, 1993). Thinking aloud may seem unnatural and distracting to some participants since it may be very different from their learning style. It may be exhausting to verbalize a thought process for two to three hours while performing a maintenance procedure, which is exactly the case in this study that has duration of 2 hours expectedly. Gathering data in real-time can be problematic because think aloud utterances are often incoherent (Ericsson & Simon, 1993). Branch (2000) identified disadvantages of the think aloud method. She found that the cognitive load of problem solving and speaking may be too difficult for some subjects.

6.1.3 Statistical Testing

As discussed above, the sample size has consequences for statistical testing and therefore direct impact on results. First and most important of all, small sample size has implications on normality tests. Normality tests are used to determine whether a parametric or nonparametric method needs to be employed and therefore are very crucial in statistical analysis. Normality can be problematic when the sample size is small ($n<50$) and may result in misleading findings. Subsequently, a decision on parametric or nonparametric statistics may be wrong and consequently the results deviate. Specifically for this research, it turns out that only two of 14 independent variables are normally distributed with the given sample size. Moreover all the independent variables used for hypotheses seem to be not normally distributed, as a result of which a nonparametric method, Mann-Whitney U test are employed. In case of a larger sample, the results of normality tests could be different and perhaps parametric methods could be used to statistically test the hypotheses, which could probably yield different conclusions.

6.1.4 Exploratory Factor Analysis

In the section 5.3, a comparison is made between the TAP results and the questionnaire adopted by the work of Chandler et al (2011). The questionnaire is to give an indication of how frequently Turkish student entrepreneurs may have made use of causal and/or effectual reasoning when setting up their actual, real-life ventures. The results of each participant are exhibited in Table 9 and compared to the results of the case-study in Table 10. It is hence expected to see similarities between these results in order to strengthen the findings of this research. However, the questionnaire results do not quite support the TAP results since exactly half of the participants appear to have used causation when starting-up their businesses, whereas according to the case-study all of them use a predominant causation decision-making style. This analysis is made in the light of a simple averaging and summing because the sample size is too small to do a exploratory factor analysis while one can discuss that exploratory factor analysis might yield different results. Hereunder, a discussion is given on what exploratory factor analysis is and about a possible added-value of an exploratory factor analysis to this research with regard to this questionnaire, similar to the work of Chandler et al (2011) done with a much broader sample.

Factor analysis is a statistical method used to describe variability among observed, correlated variables in terms of a potentially lower number of unobserved variables called factors. In other words, it is a technique for investigating whether variations in multiple observed variables of interest mainly reflect or linearly related to the variations in fewer unobserved variables (Rummel, 1970). There are two main techniques within factor analysis, namely the exploratory factor analysis (EFA) and the principal component analysis (PCA). In EFA, the researcher makes the assumption that an underlying causal model exists, whereas PCA is simply a variable reduction technique. Researchers have argued that the distinctions between the two techniques may mean that there are objective benefits for preferring one over the other based on the analytic goal. Regarding the purpose of this research, an EFA method is preferable since its overarching goal is to identify the underlying relationships between measured variables. The EFA statistical method could be used to uncover the underlying structure of a relatively large set of variables.

While constructing her original theory of effectuation as opposed to causation, Sarasvathy (2001a) claims that causation and effectuation are two different approaches to venture creation. Therefore, it is suggested that there is a two-factor solution. This means that causation and effectuation as separate items must lean on one factor each. On the other hand, Chandler et al (2011) conduct an exploratory factor analysis in order to find out the multidimensionality of these two items. They develop and validate measures of causation and effectuation approaches to new venture creation and test the measures with two samples of entrepreneurs in young firms. Chandler et al (2011) find that the measure of causation is a well-defined and coherent uni-dimensional construct. They also propose that effectuation is a formative, multidimensional construct with three associated sub-dimensions and one dimension shared with the causation construct.

Two fellow students of the EPICC project, namely Krijgsman (2012) and van der Linde (2012) also apply the EFA technique on their data. Krijgsman (2012) finds out that causation items tend to load together as well as effectuation items tend to load together. In addition, causation tends to load on two factors (1 and 3) whereas effectuation loads on all three factors but has a greater tendency to load together on factor two. She concludes that both constructs can be described as multidimensional. Supporting her colleague, van der Linde (2012) also finds that both effectuation and causation load on three different factors and therefore concludes that they are both multidimensional constructs.

A possible added-value of an EFA method to this research would be additional explanatory consequences to the findings. If in the research it was also found that based on the questionnaire results, causation and effectuation happen to be multidimensional constructs; it could be the explanation of why the entrepreneurs use both effectual and causal type of entrepreneurial processes. If the causation elements loaded on one factor and the effectuation elements on another, it could be concluded that both elements are two different constructs, like Sarasvathy suggests. All the items that load on one factor, they could be computed together. If the items did not load on one factor, in this case the items could not be computed together. The final step would be to figure out whether there is a correlation between the two methods. When causation and effectuation are computed together, it is not possible to see which items measure which entrepreneurship style. As a consequence, no correlation could be analyzed between the two. Therefore, if the results of factor analysis showed, similar to the findings of Chandler et al (2011), van der Linde (2012) and Krijgsman (2012), that causation and effectuation were multidimensional and loaded together on different factors, only those items that measure causation and effectuation separately would need to be taken into consideration. Only after determining which items should be retained for the analysis, a correlation matrix could be conducted for the questionnaire and TAP results.

6.1.5 Language

Before going into the discussion on the content of the thesis, there is one more methodology-related point to be made. As told earlier, the language of this study is fully English. This includes the execution of the think-aloud protocols. It can be discussed that Turkish entrepreneurs, for whom English is a second language, might have difficulties going through the case-study, especially considering that think-aloud technique requires lots of verbalizing of instantaneous thoughts on the spot. After careful consideration, I, the researcher, dismissed the idea of translating the case into Turkish because the case then might have lost its power, originality and entirety. It could have some drawbacks such as risk of missing out some crucial information, creating confusion and imprecision. The fact that a vast majority of the participants are graduates of English-taught universities, hence highly proficient and comfortable in English, has been advantageous in order to eliminate such a language limitation. In the beginning of each session, participants were asked whether they are OK with it, and all 22 interviews were completed without any problems. To sustain the comfort with using a foreign language during the interview, participants were reminded to take their time, read and speak slowly and clearly without minding the small mistakes and feel free to ask questions when needed. In the end, strangely enough, Turkish entrepreneurs appear to have given surprisingly more input and insights for the case when compared to their counterparties from the UK. Looking at the number of pages, paragraphs and analysis of the coding, it can be clearly asserted that the participation of the Turkish entrepreneurs were limited by the language, instead it was greater than that of the entrepreneurs from the UK.

6.1.6 Culture

Regarding the cultural component of this research, a comprehensive argumentation is given in the literature review chapter as to why the national culture's dimensions of Hofstede are aimed for this thesis. However, using just one parameter to measure culture may not be sufficient. There are also a lot of generalizations involved in such measurements, whether or not such generalizations comply with the particular sample is questionable. Furthermore, the hypotheses are constructed to connect the specific dimensions to principles of Sarasvathy's effectuation and causation theory in order to understand a possible impact of culture on entrepreneurial processes. It is nevertheless debatable whether these dimensions serve a valid basis for such a relationship, by themselves alone.

There are only three dimensions used to build the hypotheses upon, since on the dimension ''MAS'', the two cultures (Turkey and the UK) have almost exactly the same scores according to the study of Taras (2012) although they vary significantly from each other according to Hofstede's original study (1980). As talked about earlier, instead of Hofstede's original scores which are collected from a limited source (i.e. IBM employees) and are quite outdated (i.e. 30 years ago), the meta-analysis of Taras (2012) is used which is much more updated and based on a broader dataset. Nonetheless, there could be some additional hypotheses to be formulated if MAS was also considered, since masculinity of a culture conceivably has a big impact on some of Sarasvathy's dimensions, such as being goal-driven and focusing on competitive analysis. The link between masculinity and entrepreneurial processes could not be built and tested particularly for this thesis.

6.1.7 Entrepreneurial Processes (the Case & the Coding)

Regarding the other main construct of the research, namely the entrepreneurial processes and the theory of Sarasvathy, there can be a couple of points made. I personally believe that the case itself and the coding have particular limitations with regard to the entrepreneurial component. To begin with, in my view, the case has a certain nature of guiding the participants towards specific directions throughout the study, which in fact contradicts the very purpose of the research that is to test effectuation and causation. To give an example, the case starts off already with the theme that respondents are 'told' to imagine they start up a coffee shop, in the campus of their university. In further phases of the case, they are also 'told' that they have limited financial resources. Now, in the effectuation theory, Sarasvathy claims that effectual entrepreneurs choose their own direction of starting a business based on, inter alia, their own specific personal interests, financial situation, past experiences and network (i.e. who I am, what I know and whom I know). When steering the entrepreneurs into a certain business idea from the beginning and in a given location, which may be new, unknown or unclear to them – although it is stated that they imaginarily have 5 years of past experience and personal interest in coffee business), the case is already partly departed from effectual reasoning, in my opinion. Similarly, in the flow of the case certain tasks are given to the entrepreneur to undergo, such as product redevelopment, growing the company, hiring professional management so on and so forth. On the one hand, as the aim of the case is to witness entrepreneurs' decision making reasoning throughout the entrepreneurial processes (i.e. the case). On the other hand, guiding entrepreneurs into certain tasks might jeopardize the reliability of testing especially their effectual logic.

Furthermore about the case, I have a feeling that some of the questions in particular reserve a certain direction in them. First problem asks the interviewee to identify potential customers, competitors; to conduct a market research and growth possibilities. Thereby, the entrepreneur automatically concentrates on market such causal elements as market knowledge, competitive analysis, goal-driven (growth) and future predictions, which result in a frequent coding of these elements. In effectuation theory also seen in the coding schema, it is put forth that effectual entrepreneurs do not focus on costumers, competition and market research. Such a problem hence directs the entrepreneur into the direction of causation. As a result, it must be no coincidence that for instance competitive analysis (C3-B) is mentioned by entrepreneurs from both Turkey and the UK, only in the first question, 50% (39/73 and 28/56 respectively) of the entire case study. Similarly, existing market knowledge (C4-K) occurs by chance again for both parties 28% of the time (60/210 and 49/175 respectively).

Therewithal, the second problem gives results of an already-conducted market research as well as information about competitors, the entrepreneur is asked to determine a market segment to sell to, a selling price and selling strategy. These questions again lead mainly to causal answers and argumentations, which results in 80% causation proportion for Turkish and 90% for the UK entrepreneurs. Problem four explicitly asks about potential alliances and partnership, thus it is no surprise that E3-A element of the coding schema in fact occurs most frequently on this question. 60% (24/40) of the overall E3-A coding happens only in the fourth problem for Turkish entrepreneurs and 70% (15/21) for the UK entrepreneurs. To move on, once more, the problem seven is all about growing the company and possible strategies on this. It is inevitable that the respondents talk continuously about growth (goal driven) and the future (predictions). In the table below, a certain pattern in each question, similar for both Turkish and the UK entrepreneurs can be observed:

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10
Turkey	82%	80%	19%	46%	88%	70%	59%	30%	51%	66%
UK	90%	90%	37%	41%	64%	59%	58%	23%	68%	69%

Table 12. Causation Scores for each problem

From the table 12, a pattern can be deduced that is almost equally evident for both sample groups. To be more precise, the distribution of effectuation and causation shows a similar form; only in P3, P4 and P8 data from both groups resulted in effectuation. In the remaining 7 problems, causation has an evenly strong dominance for both parties, except for the P5 and P9 where the scores differ approximately 15% from each other, but both on the same side of the equation. From these findings and the argumentations presented above, it can be inferred that the case-study has a certain guiding nature of its own, which may be considered as a serious limitation to be dealt with. I have further doubts about whether or not this case-study precisely measures the genuine mentality, decision making style and entrepreneurial logic of the participants who find themselves in a virtually shaped business environment where they are asked to go through a fixed set of questions.

One last remark goes to the coding of the think-aloud protocols based on the case-study. Constructed upon Sarasvathy's main principles of effectuation and causation, a coding schema is prepared for this project (presented in chapter 4). For both constructs, there are six chief elements plus one element when there is no trace of any of the other six. This coding schema supposedly covers effectuation and causation wholly, when the interviewee vocalizes his or her thought process, the task of the researcher is to categorize it within the coding schema. Two possible constraints are to be spoken of. First, one can argue that this schema may not be sufficient to cover everything that a respondent mentions about and to specify it under one of this limited number of categories. Although there is a rather generic, nonspecific option (C7-X causation with no subcategory and E7-N effectuation with no subcategory), I as the researcher, felt sort of constrained with the coding schema and had difficulty at times while interpreting what the interviewee talked about. Secondly, the coding component of the research is the most subjective element in this study as it depends merely on the understanding, interpretation and elucidation of the researcher. Although this is quite normal as this thesis exactly is a very subjective academic work of the researcher; the fact that the core of study is very much open to subjective interpretation and directly influences the results is to be approached cautiously.

6.1.8 Hypotheses comparison

Last but not least, a short discussion is given on hypotheses results from the present paper with respect to the results of comparable hypotheses developed and tested by fellow EPICC students.

In her research on Mexican and Dutch student entrepreneurs, Judith Krijgsman (2012) tests amongst others a relationship between masculinity and causation, collectivism and effectuation and uncertainty avoidance and causation. She hypothesized that the more masculine a culture is, the less corporation the entrepreneurs will use (Krijgsman, 2012 p27), the more collectivistic a culture is, the more partnership the entrepreneurs will use (p28) and the more uncertainty avoidant a culture is, the less non-predictive control the entrepreneurs will use (p30). She finds support for masculinity, a contradictory result for collectivism, and also significant evidence for uncertainty avoidance. I also intended to test masculinity with competitive analysis but the data I acquired did not allow me to do so, I could have also found perhaps an evidence for a relationship between masculinity and competitive analysis. I test individualism as a positive impact on competitive analysis, yet can't retrieve any significant evidence, Krijgsman (2012) tests it oppositely and finds a negative result, thus in a way it is parallel to my hypothesis. Lastly, both hypotheses on uncertainty avoidance are linked to predictive strategies, whereas I find no evidence, Krijgsman (2012) finds significant evidence for this relationship, which again may be a result of the dataset.

In her comparison between Canadian and Malaysian student entrepreneurs, M. C. Drent (2012) tests amongst others the positive impact of individualism on competitive analysis that is similar to my hypothesis. As for my analysis, there is no significant evidence for this hypothesis, while Drent (2012) finds significance yet in the other direction of the hypothesis (p76).

In another research from a fellow EPICC student, Ronald van den Ham (2012) studies Dutch and Vietnamese student entrepreneurs and investigates the influence of individualism on each principle of Sarasvathy's theory. Among these, he also tests the relationship between individualism and competitive analysis (p65) and finds a significant difference between two samples as opposed to the results of my research. On the other hand, similar to my findings, when comparing Dutch and Polish student entrepreneurs, Robin Steentjes (2012) rejects the hypothesis connecting individualism and competitive analysis (p56). Finally, Nicole van der Linde (2012) conversely tests these phenomena, investigates the impact of collectivism on partnership, and finds support for her hypothesis.

In short, most EPICC students attempt to test a potential relationship between individualism and competitive analysis. Some including me find no significant evidence for this relationship whereas the majority does really find support for it. These results are closely related to the set of data being used and tested for each research as well as the sample countries having similar or different cultural characteristics.

6.3 Recommendations for Further Research

After having comprehensively talked about the most important discussion points of this thesis, the very last section is dedicated to some recommendations and improvements for further research in the light of those discussion points.

This research has narrowed down its focus onto the impact of culture on entrepreneurial processes. These key elements, culture and entrepreneurial processes are two very broad concepts and in particular for this study they are broken down by narrower measurements. Culture is measured by the dimensions of Hofstede and entrepreneurial processes by the effectuation and causation theory of Sarasvathy, the link between the two is aimed at. However, the question remains whether entrepreneurship and entrepreneurial processes can fully be measured only by four (in this case three) cultural dimensions (UAI, IDV, MAS & PDI). These dimensions give a well-drawn general picture of a culture; however they are not sufficient to completely explain culture as a whole. Moreover, from personal perspectives, there are some critical values within a culture that affects entrepreneurship which cannot be categorized within these dimensions. For further research, culture can be tackled from many other aspects, a combination of theories and measures from various cultural studies could be used and the most relevant characteristics of a culture that has to do with entrepreneurship can be undertaken in order to create a more abundant and profound link between culture and entrepreneurship.

In my point of view, experience and observation; there are many other factors that can explain the entrepreneurial mindset and the stance of entrepreneurship in a country. Among many others, economy is plays a very decisive role in people developing entrepreneurial mentality and activity. Within countries with higher life-standards and better economical conditions, people more easily intend to express their entrepreneurial mindset and have a bigger room and flexibility to put these into life. In short, I believe on the one hand that culture plays a significant role in creating people with more and more entrepreneurial mindset, on the other hand social, economical, legal, and infrastructural dynamics of a country serve as unignorable factors that have a great impact not only on entrepreneurial mindset of a folk but also the realization of such mindset into actual entrepreneurial processes. Therefore such factors could be taken into consideration for further research next to culture.

To tackle entrepreneurial processes, in specifics of causation and effectuation, the coding schema can be extended to cover more elements within a given input. Extending the coding schema will probably make the researcher's life also easier and give a bigger room for concise interpretations. Saras Sarasvathy, the prime mover of effectuation theory, stresses the possibility of extending the principles and the cycle of effectuation, as quoted from a speech of her: ''The six principles of Effectuation will probably be expanded as teaching and researching continue''. Furthermore about the coding, in order to strengthen the reliability and objectivity of the findings, in the further research, the coding and its results could be multiple times checked and backed up by a number of other researchers. This way, the subjectivity of one single researcher can be tested and the results could therefore yield more reliable and objective findings.

The last recommendation is about the sample size and type (i.e. background). As discussed in the previous section, the sample size is a fundamental issue for this research. It has major impact on statistical analysis; when the sample size is small, the results look very different from the way they look if the sample size is large. For further research, a bigger sample can be used to compare the results. Besides the size, a different type of the sample can be an option; for example a more variety in the background of the participants can be sought after, or instead of student entrepreneurs, expert entrepreneurs can be researched to compare the findings.

I would like to finalize my thesis by quoting from a highly recognized entrepreneurship scholar, Arnold Cooper's depiction:

"Entrepreneurship is as old as human history. Some of the cuneiform tablets in Babylon record commercial transactions involving entrepreneurs. Queen Isabella functioned as a venture capitalist when Columbus sought capital to support his entrepreneurial vision. However, as a field of academic study, entrepreneurship is very young. Some compare it with older fields, which represent the fruits of decades of scholarship. I would suggest that comparing the older fields with entrepreneurship is somewhat like comparing a train station with an airport. The train station was built long ago. The schedules are well-established; things are clear-cut and not very confusing. However, there may be some dust here and there. The airport, by contrast, is under continuous reconstruction, with temporary signs, and changes from week to week. There is confusion and there may seem to be a lack of clear organization. But, there is also energy and dynamism and change. I would suggest that entrepreneurship is like that airport. It is still under construction and 'the best is yet to come' " (Cooper, 2003).

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APPENDICES

APPENDIX A

Evaluation of Models

	Emergence (Gartner, 1985)	New value creation (Bruyat and Julien, 2000)	Effectuation (Sarasvathy, 2006)	Opportunity driven new means-ends frameworks (Shane, 2003)
New venture created	Yes	Unspecified	Yes	No
Profit oriented	Yes	Market based	Performance	Yes
Individual	Yes	Yes	Yes	Yes
Temporality	No	Yes	Yes	Yes
Opportunity	Yes	Yes	Constructing	Yes
Innovation	No	Partially	Creativity (inferred)	Yes
Risk/uncertainty	Yes	Yes	Yes	Yes
Epistemological approach	Interpretive/Phenomenological	Social Constructionist	Pragmatist	Teleological
Implications for theory	Retrospective framework for generalizing theory	Extant focus on issues important to theory development	Challenges economic theory (endogeneity)	Basis for unifying theory
Implications for practice	Indirect	Indirect	Direct	Indirect
Generic and distinct?	No: Innovation/falsifiable	No: Innovation and function unclear	No: Contradictory, over complex	No: Whole but not parts/falsifiable

Evaluation of 4 Entrepreneurial Process Models (Moroz & Hindle, 2011)

APPENDIX B

	age	sex	study	religion	marital	work exp.	int. exp.	fam. Back.	fam. incm.
TR1	27	m	Msc. Informatica	-	single	2	5	public	middle
TR2	30	m	PhD. Biomech	islam	single	1	5	public	middle
TR3	28	m	Bsc. IR	islam	married	1	0	public	middle
TR4	26	m	Msc. Marketing	islam	engaged	2	0	public	middle
TR5	27	f	Msc. Hydrobio	islam	single	3	0	public	middle
TR6	25	m	Msc. EE	islam	single	2	2	private	middle
TR7	27	m	MBA	islam	single	3	3	private	middle
TR8	30	f	Msc. Econ.	-	married	7	0	e'preneur	middle
TR9	26	m	MSc. EE - Comp	islam	single	2	2	private	middle
TR10	27	m	Msc. Ship design	islam	single	5	2	private	middle
TR11	25	m	Bsc. Mol. Bio.	islam	single	2,5	0	public	middle
TR12	30	m	Bsc. EE	islam	single	7	0	public	middle
TR13	28	m	Msc. Bio Gen	islam	married	6	0	public	middle
TR14	25	m	Msc. Comp	islam	engaged	2	0	private	upper
TR15	25	m	Bsc. Comp	islam	engaged	3	0	e'preneur	upper
TR16	30	m	MBA	islam	married	7	2	e'preneur	middle
TR17	28	m	Bsc. EE	islam	single	1	3	public	middle
TR18	30	m	PhD. EE	islam	single	6	0	e'preneur	upper
TR19	27	m	Bsc. BA	islam	married	2	0	e'preneur	upper
TR20	28	m	MBA	islam	single	5	1	private	upper
TR21	26	m	MBA	islam	single	1,5	0	e'preneur	middle
TR22	28	m	Bsc. Mech	islam	single	7	0	public	middle

APPENDIX C

THE CASE

Introduction

In the following experiment, you will solve ten decision problems. These problems arise in the context of building a new company for an imaginary product. A detailed description of the product follows this introduction.

Before you start on the product description and the problems, I do need one act of creative imagination on your part. I request you to put yourself in the role of the lead entrepreneur in building this company -- i.e., you have very little money of your own to start this company , but you have about five years relevant working experience in the area.

Description

Since some time, you have been thinking of starting a coffee-corner at your university. Your inspiration for this came from the fact that when you, as a student, want to get a fresh cup of coffee, there was no possibility. You did not like the coffee from the machines which are available in the university buildings. Next to that, you had to pay an amount of money, which was in no relation to the quality of the coffee. You have been working in a coffee corner in your hometown for 5 years so you know what goes around

You saw the success of other coffee corners, but since these were from expensive franchisers, you thought that it should be possible to still start your own. In several reports in newspapers and magazines you read that there is an increasing demand for drinking coffee in your home country.

You have taken all possible precautions regarding intellectual property. The name of your company is C*offee, Inc.*

Problem 1: Identifying the market

Before we look at some market research data, please answer the following questions -- one at a time:

1. Who could be your potential customers for your coffee corner?

2. Who could be your potential competitors?

3. What information would you seek about potential customers and competitors -- list questions you would want answered.

4. How will you find out this information -- what kind of market research would you do?

5. What do you think are the growth possibilities for this company?

Problem 2: Defining the market

In this problem you have to make some marketing decisions.

Based on secondary market research (published sources, etc.), you estimate that there are three major segments who are interested in drinking coffee at your coffee corner:

Segment	Estimated total size
Students	40.000
Staff members	20.000
Visitors (annually)	10.000

- The estimated value of regular coffee sales in your home country is €448 Million
- The estimated value of specialized coffee sales €100 Million.

Both are expected to grow at a minimum rate of 5% p.a. for the next 5 years.

The following are the results of the primary (direct) market research that you have completed.

Survey #1 – Students, staff members and visitors were asked via questionnaires to express their interest in a coffee corner. Also, they were asked to indicate what they were willing to spend on coffee.

In total, 1000 people were asked and 500 filled out the questionnaire.

Willing to pay (€)	Students (%)	Staff members (%)	visitors (%)
0,50 – 0,75	52	26	45
0,75 – 1,00	30	38	32
1,00 – 1,25	16	22	15
1.25 – 1,75	2	9	8
1,75 – 2,50	0	5	0
Total	100	100	100

Survey #2 -- The prices of coffee, offered during lunch breaks in between lectures

Willing to pay (€)	Students (%)	Staff members (%)	visitors (%)
0,50 – 0,75	65	21	51
0,75 – 1,00	25	49	42
1,00 – 1,25	10	19	7
1.25 – 1,75	0	8	0
1,75 – 2,50	0	3	0
Total	100	100	100

Survey #3 -- Focus Group of educators (high school and community college teachers and administrators)

Staff members of the university who participated in the focus group found the plan of the coffee corner very interesting – but indicated that the range of coffee could potentially be expended before they would be willing to spend €1,50 or more. With the current offer, they would be willing to pay €1,00 - € 1,25 and would demand a bonus system in which they could save up for discounts after a certain amount of coffee drunk.

Both at the lunch and the focus group, participants are very positive and enthusiastic about the coffee corner. They provide you with good feedback on specific features and also extend suggestions for improvement. But the staff members are particularly keen on going beyond the regular coffee aspect; they make it clear that much more diversity would be required in trying to market the product to them. They e.g. indicate that there are companies which might be capable of printing advertisement on cups for discounts on the coffee.

Based on all your market research, you arrive at the following **cost estimates for marketing** your product.

Internet	€200 upfront + €50 per month thereafter
Newspapers	Relatively cheap -- but ads could cost €500 upfront
Cinema	€2000 to 4000 per month, with €1000 upfront
Commercials on Local TV	€5000 to 10.000 upfront

Direct advertisement elsewhere (think of sport-canteens, handing out lighters with

advertisement, etc) Involves recruiting and training ‘sales representatives’

Competition

None of the following four possible competitors sell cheap quality cups of coffee in the center of your hometown - you are unique in this respect.

Company	General price level per cup of coffee	Revenue	Where to be found
Starbucks	€ 5,00	€6.5 billion	Large cities / global
Peet's	€ 4,00	€225 million	Large cities / mostly USA
Coffee Bean	€ 4,50	€130 million	Large cities / global
Douwe Egberts store	€ 2,50	€25 million	Large cities/ Netherlands

The coffee corner companies are making a **net return of 25% on sales.**

At this point, please take your time and make the following decisions: (Please continue thinking aloud as you arrive at your decisions)

Which market segment/segments will you sell your product to?

How will you price your product?

How will you sell to your selected market segment/segments?

Problem 3: Meeting Payroll

You have started the company on a shoestring, using face to face promotion as your primary source of marketing. You are six months into marketing your product. You have priced the products at the low end of the surveys at 0.50 – 0.75 euro. You have about 3000 customers per month. Based on numerous suggestions provided by your customers, you believe you can start selling special coffees in the range of 1.25 – 1.50 euro. This would especially be the case when you would redesign the interior of the coffee corner to make it into a more upscale coffee corner.

You have invested the last of your savings and maxed out your credit cards in order to make sure you have the coffee asked for in stock-- You need this to participate in a competition on where 'Architecture meets Catering', where you will get a lot of exposure.

You have four employees -- and you are out of cash to meet the next payroll. You estimate you need 30,000 euro to survive the next three months and to come up with a supercool store design to be able to participate in the competition. You have the following four options:

1. Borrow from your girlfriend's parents -- they are not overly wealthy, but could probably get their hands on 30,000 euro if they needed to.
2. Borrow from some old friends from the university and your old student job.
3. Convince your parents to take out a mortgage on their house.
4. Convince your employees to wait out the period.

Which of these options would you choose? Why?

Problem 4: Financing

Your store design has won the first prize in the New talent category at the 'Architecture meets Catering' competition. This in turn has led to inquiries from large coffee suppliers such as Nestlé Netherlands B.V. to market the concept (with full multi-media exposure) nationally. You estimate that it will take you six months to develop the concept in more detail and about three months after that to actually roll it out on three main channels -- Web, national newspapers and national TV. The coffee will be priced at 4.00 euro per unit. You estimate that you will need 150.000 euro till break even (by the third quarter of the second year) -- this includes enhancing the concept, putting in place excellent (support) staff, full-blown advertising and web links, and the development of a small direct sales staff for selling on site.

You estimate the following sales projections for the first five years (You are at the beginning of Year 1 now):

	Year 1	Year 2	Year 3	Year 4	Year 5
Sales	€ 100,000	€ 150,000	€ 300.000	€500.000	€1 M
Profits	€ < 0	€ 20.000	€40.000	€200.000	€300.000

You have three financing options:

Option 1

A venture capitalist who specializes in startup companies in catering and adjacent areas, is willing to finance you € 150.000 for 48% of your company.

Option 2

A friend of the family who has extensive experience in catering is eager to go into partnership with you -- for 33% of the company. He is able to invest €150.000 but wants to work for the company at a base salary of €40,000 per year. He agrees to accept a minimum level of €30,000 for the first two years to keep his family going and defer the rest to when the company starts making money. You like and respect this man and have no personal feelings against him.

Option 3

You can continue the company with internal cash flow -- grow at a much slower pace.

Which option would you choose? Why?

If the venture capitalist is also willing to take only 33% of the company, which option would you choose?

Problem 5: Leadership/Vision

You have found the financing and have signed a contract with two major coffee suppliers to market your product. You have hired new staff and moved into new premises. A national newspaper is doing a series of stories on local entrepreneurs and wants to do a story on you -- you know that this interview would be a defining moment in the development of your company and you see this as an opportunity to convey to the world (and to your new employees) your vision for your company's future. This newspaper article series has been very successful; it routinely gets picked up by other national papers and TV networks. One of the reasons for its success is its headline which consists of a one-line quote that captures the entrepreneur's vision for the company -- to be achieved by the year 2012.

You have come up with several possibilities for the one-liner:

1. Starbucks is the past -- *Coffee inc* is the future.
2. We aim to have at least a thousand employees by the year 2014.
3. The fastest growing coffee caterer.
4. Invest in *coffee inc*—Enjoy the Dutch tradition.

Which one of the above do you choose? Why? If you do not choose any of them and want to come up with ideas for an alternative, please do so.

Problem 6: Product Re-development, Part One

You are almost at the end of your fifth year in operation -- you have just managed to break even (later than you projected). You have opened the doors to all three segments (students, staff, visitors). Sales, while they are steady and continuous, are rather 'colourless' and you start doubting whether you will ever reach your growth targets. You decide to conduct a serious market research initiative in order to find out how to grow your sales. You organize focus groups with both existing customers and potential new customers. The main problem seems to be the "great divide" between the regular coffee and the specialized products. Over 90% of the participants in your focus groups find the regular products very interesting. But when it comes to the specialised coffees, there is a clear division of opinion. The participants who primarily enjoy the regular coffees almost *never* bother to go and buy more expensive coffees and wonder why all that 'e*lite stuff'* is there; and those who are primarily interested in the specialised coffees think that the regular products downgrade the atmosphere.

How do you respond to this feedback?

Problem 6: Product Re-development, Part Two

You go back to the origins and think of a concept which could provide solutions to both parties. You come up with a solution in which you have 1 existing shop and 1 new shop. Shop number 1 (the existing shop) is for more regular coffees, the new shop is for exclusive coffees and teas. With the exclusive shop one should think of specialized Asian, South American and African coffee specialties, which would result in a total amount of 30 different types of coffee. Teas will come in a variety of 20 types. Also, exclusive cakes and pastries are sold. Next to this, customers can also borrow books, read newspapers and have access to free wireless internet. In the regular coffee booth, you plan to sell 8 different regular coffees, like plain cappuccino, espresso, etc, and add 5 regular teas (e.g. China Blossem and Rooibos) and limited variety of donuts and muffins.

You first start to promote the idea with the exclusive shop with a variety of 15 different coffees and 15 different teas, and also a smaller variety of cakes and pastries than you eventually will include. This together with free newspapers and free wireless internet is what you show to the focus group. It turns out that especially the exclusive shop is received very enthusiastically and customers are willing to pay 2 to 2,5 times as much as asked previously.

One of the requirements is however that you have to extend to what you had in mind (the 20 teas, 30 coffees, the books, newspapers and free wireless internet). You have to decide whether to undertake this massive concept change or to focus completely on one of the two concepts. If you want to extend it will cost you as much as 200.000 euro and a separate marketing effort.

Year	1	2	3	4	5	6	7	8
Estimated Sales (€M)	0.10	0.50	1	6	12	18	24	30
Actual Sales (€M)	0.14	0.48	0.84	2.8	4.2			

Which of the two options do you choose? Why?

Assuming you have decided to go in for the extension, you have to choose one of the following three options:

1. Undertake the redesign effort in-house -- Estimated Cost: €250.000 .

2. Out-source the redesign to the new company within your home-country-- Estimated Cost: € 200.000

3. Out-source the redesign to the new company outside your home-country-- Estimated Cost: € 100.000

Which option do you choose? Why?

Problem 7: Growing the Company, Part One

You are almost at the end of the sixth year of business. You are now running two types of shops—under the umbrella of Coffee inc.

- Plain Coffee (sales between 1.00 – 5.00 euro) where you sell a limited amount of regular coffees and teas and a basic amount of donuts, muffins and chocolates
- Exquise (sales between 5.00 – 15.00 euro) where you offer the 'complete picture'

Your number of outlets and therewith the new coffee shop managers has swelled to twenty from the original three and you are continuing to expand your sales force and develop an even better concept of Exquise for more upscale areas in town. Greg Thomas, who is an excellent salesman (dealing with the regular coffees previously) and has headed the sales team since Day One, has clearly not kept up with the issues of growing the company -- he is definitely not the person to lead the new Exquise. How will you deal with this situation?

Year	1	2	3	4	5	6	7	8
						Revised		
Estimated Sales (€M)	0.10	0.50	1	6	12	6	12	20
Actual Sales (€M)	0.14	0.48	0.84	2.8	4.2	8.6		

Would you:

1. Fire him?

2. Hire a new sales manager to head the sales team? If so, would you consult with Greg before doing so? How would you break the news to him?

Please feel free to elaborate on any other way of dealing with the situation.

Problem 7: Growing the Company, Part Two

Although the company has been growing for a while now, you are trying to keep the entrepreneurial culture of the company alive. But you begin to notice that your partner is fostering a more "corporate ambiance" -- long and unnecessary meetings, complicated organization charts, colorful expense accounts, "consultants" to "optimize market potential", and so on. When you try to talk with him about it, he argues that it is time for the company to go "corporate" -- that such a "professional" image would actually be good for the bottom line.

Year	1	2	3	4	5	6	7	8
						Revised		
Estimated Sales (€M)	0.10	0.50	1	6	12	6	12	20
Actual Sales (€M)	0.14	0.48	0.84	2.8	4.2	8.6	20	27.5

How will you deal with this situation? Do you think it is time for *Coffee Inc.* to go "corporate"?

Problem 8: Hiring Professional Management

You are now in the eighth year of your company. You are doing very well -- surpassing growth targets and building reliable market share. Your sales are €27,5 Million and you project a growth rate of at least 25% per year for the next three years.

Year	1	2	3	4	5	6	7	8
						Revised		
Estimated Sales ($M)	0.10	0.50	1	6	12	6	12	20
Actual Sales ($M)	0.14	0.48	0.84	2.8	4.2	8.6	20	27.5

Your Board's advice is to hire professional management to run the company so you can focus on issues of new growth and new strategic initiatives. Assuming you have already developed a short list of three high-potential candidates to interview for the position of **Chief Operating Officer** (COO), how would you prepare for the interview?

List questions you would ask, techniques you would use, and critical issues you would take into account in hiring this person.

Problem 9: Goodwill

At this point, you are approached by the principal of an inner city school in your area, who also works with 10 other schools such as hers -- she believes that Exquise could be a perfect learning environment for her students in her Catering study program.

She requests you to work with a couple of really enthusiastic teachers to develop some elementary learning materials for the students to work on in the Exquise shops. The project would mean not only an investment of €100.000 (approx.) for modifications, but also a substantial chunk of your time for about six months during development and then about 10 sessions of classroom participation per year for a couple of years at least.

Note: Your sales are €27,5 Million and you project a growth rate of at least 25% per year for the next three years.

Will you take the initiative for this project?

If not, why not?

If yes, would you:

a) Donate the product?
b) Sell it at cost?
c) Sell it at your regular profit margin?

Why?

Problem 10: Exit

You are now in the tenth year of your company -- *Exquise* is a great success and thanks to your new targeted strategies, even *Plain Coffee* is growing satisfactorily. You have acquired three other profitable catering concepts. You are doing €45 Million in sales and project that you will reach €70 Million within a year. At this time you face two possible directions for your company.

Direction 1

Your accountants and bankers think that this is a good time for you to take the company public. The Initial Public Offering (IPO; new stocks) market is booming and catering is in a solid upward trend. They estimate you should make an initial public offering of 2 million shares at €30 per share. The company has a total of 12 million shares outstanding.

Direction 2

At this point in time, Starbucks approaches you and makes an offer for your company -- it seems they have decided to get in on the more exclusive segment and have decided to enter the arena through acquisitions -- they see you as a perfect fit for their strategy and offer you €300 Million.

Year	1	2	3	4	5	6	7	8	9	10
					Revised					
Estimated Sales (€M)	0.10	0.50	1	6	12	6	12	20	30	45
Actual Sales (€M)	0.14	0.48	0.84	2.8	4.2	8.6	20	27.5	38	70

Which of the above two directions do you choose? Why?

End

APPENDIX D

Interviewer Name: ________________________

Interviewee Name: ________________________

Code number interview: ____________________ (same as for the biographical info)

Email interviewee: ________________________

Name / website of student company;:. _________________________-

Short description of student company (what business are you in):

____
____
____
____
____

Founding date: __________________

Founding place: __________________

Number of founders (including entrepreneur): _______________________

Current number of employees (including all founders, in full time equivalents): _______________

Annual turnover in country currency: _________________ (amount) ______________ currency

To what degree did you start your enterprise because you had no other option for work?

Not at all	A little	Somewhat	To a large extent	absolutely

To what degree did you start your enterprise because you wanted to become independent or increase your income

Not at all	A little	Somewhat	To a large extent	absolutely

(Measures for necessity vs. opportunity taken from GEM)

Please answer this questionnaire on the basis of reflecting on your own company.

Please have a look at the following statements. Now, indicate to what extend you agree or not agree to the statement.

	Do not agree	Agree little	Agree somewhat	Mostly agree	Fully agree
We analyzed long run opportunities and selected what we thought would provide the best returns					
We developed a strategy to best take advantage of resources and capabilities					
We researched and selected target markets and did meaningful competitive analysis					

	Do not agree	Agree little	Agree somewhat	Mostly agree	Fully agree
We designed and planned business strategies					
We organized and implemented control processes to make sure we met objectives					
We had a clear and consistent vision for what we wanted to do					
We designed and planned production and marketing efforts					
The ultimate product/service that I used to launch this business was quite similar to my original conception					
Our decision making has been largely driven by expected returns					
The ultimate product/service that I used to launch this business was quite different from my original conception					
It was impossible to see from the beginning where we wanted to end					
We have allowed the business to evolve as opportunities have emerged					
We evaluated the set of resources and means we had at our disposal and thought about different options					
We experimented with different products and/or business models					
We started out very flexibly and tried to take advantage of unexpected opportunities as they arose					

	Do not agree	Agree little	Agree somewhat	Mostly agree	Fully agree
We used a substantial number of agreements with customers, suppliers and other organizations and people to reduce the amount of uncertainty					
Our decision making has been largely driven by how much we could afford to lose					

Note 1: Scales from Chandler et al. (2011): Causation and effectuation processes: a validation study. JBV, 26(3), 375-390

Note 2: When you have used the previous questionnaire, you need to recode (make sure the items show in the right direction), and go back to the entrepreneur to ask the missing questions.

APPENDIX E

V S M 08

VALUES SURVEY MODULE 2008
QUESTIONNAIRE
English language version

MAY BE FREELY USED FOR RESEARCH PURPOSES

FOR REPRODUCTION IN COMMERCIAL PUBLICATIONS,

PERMISSION IS NEEDED

Release 08-01, January 2008

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INTERNATIONAL QUESTIONNAIRE (VSM 08)- page 1

Please think of an ideal job, disregarding your present job, if you have one. In choosing an ideal job, how important would it be to you to ... (please circle one answer in each line across):

1 = of utmost importance

2 = very important

3 = of moderate importance

4 = of little importance

5 = of very little or no importance

01. have sufficient time for your personal or home life	1	2	3	4	5
02. have a boss (direct superior) you can respect	1	2	3	4	5
03. get recognition for good performance	1	2	3	4	5
04. have security of employment	1	2	3	4	5
05. have pleasant people to work with	1	2	3	4	5
06. do work that is interesting	1	2	3	4	5
07. be consulted by your boss in decisions involving your work	1	2	3	4	5

08. live in a desirable area	1	2	3	4	5
09. have a job respected by your family and friends	1	2	3	4	5
10. have chances for promotion	1	2	3	4	5

In your private life, how important is each of the following to you: (please circle one answer in each line across):

11. keeping time free for fun	1	2	3	4	5
12. moderation: having few desires	1	2	3	4	5
13. being generous to other people	1	2	3	4	5
14. modesty: looking small, not big	1	2	3	4	5

INTERNATIONAL QUESTIONNAIRE (VSM 08) – page 2

15. If there is something expensive you really want to buy but you do not have enough money, what do you do?
    1. always save before buying
    2. usually save first
    3. sometimes save, sometimes borrow to buy
    4. usually borrow and pay off later
    5. always buy now, pay off later

16. How often do you feel nervous or tense?
    1. always
    2. usually
    3. sometimes
    4. seldom
    5. never

17. Are you a happy person ?
    1. always
    2. usually
    3. sometimes
    4. seldom
    5. never

18. Are you the same person at work (or at school if you're a student) and at home?
    1. quite the same
    2. mostly the same
    3. don't know
    4. mostly different
    5. quite different

19. Do other people or circumstances ever prevent you from doing what you really want to?

1. yes, always
2. yes, usually
3. sometimes
4. no, seldom
5. no, never

20 . All in all, how would you describe your state of health these days?

1. very good
2. good
3. fair
4. poor
5. very poor

21. How important is religion in your life ?

1. of utmost importance
2. very important
3. of moderate importance
4. of little importance
5. of no importance

22. How proud are you to be a citizen of your country?

1. not proud at all
2. not very proud
3. somewhat proud
4. fairly proud
5. very proud

INTERNATIONAL QUESTIONNAIRE (VSM 08) – page 3

23. How often, in your experience, are subordinates afraid to contradict their boss (or students their teacher?)

1. never
2. seldom
3. sometimes
4. usually
5. always

To what extent do you agree or disagree with each of the following statements? (please circle one answer in each line across):

1 = strongly agree

2 = agree

3 = undecided

4 = disagree

5 = strongly disagree

24. One can be a good manager without having a precise answer to every question that a subordinate may raise about his or her work	1	2	3	4	5
25. Persistent efforts are the surest way to results	1	2	3	4	5
26. An organization structure in which certain subordinates have two bosses should be avoided at all cost	1	2	3	4	5
27. A company's or organization's rules should not be broken - not even when the employee thinks breaking the rule would be in the organization's best interest	1	2	3	4	5
28. We should honour our heroes from the past	1	2	3	4	5

INTERNATIONAL QUESTIONNAIRE (VSM 08)- page 4

Some information about yourself (for statistical purposes):

29. Are you:

    1. male
    2. female

30. How old are you?

    1. Under 20
    2. 20-24
    3. 25-29
    4. 30-34
    5. 35-39
    6. 40-49
    7. 50-59
    8. 60 or over

31. How many years of formal school education (or their equivalent) did you complete (starting with primary school)?

    1. 10 years or less
    2. 11 years
    3. 12 years
    4. 13 years
    5. 14 years
    6. 15 years
    7. 16 years
    8. 17 years

9. 18 years or over

32. If you have or have had a paid job, what kind of job is it / was it?

1. No paid job (includes full-time students)
2. Unskilled or semi-skilled manual worker
3. Generally trained office worker or secretary
4. Vocationally trained craftsperson, technician, IT-specialist, nurse, artist or equivalent
5. Academically trained professional or equivalent (but not a manager of people)
6. Manager of one or more subordinates (non-managers)
7. Manager of one or more managers

33. What is your nationality?

____

34. What was your nationality at birth (if different)?

____

Thank you very much for your cooperation!

VSM08 CALCULATIONS

All content questions are scored on five-point scales (1-2-3-4-5). Index scores are derived from the mean scores on the questions for national samples of respondents. In the following formulas **mXX** is the mean of the question used in this formula. **C(xx)** in the formulas stand for a constant that can be added, when the constant added is the same for both countries it does not affect the comparison between countries. It can be used to shift the scores between 0 and 100.

<u>Power Distance Index (PDI)</u>
Power Distance is defined as the extent to which the less powerful members of institutions and organizations within a society expect and accept that power is distributed unequally. The index formula is

PDI = 35(m07 – m02) + 25(m23 – m26) + C(pd)

<u>Individualism Index (IDV)</u>
Individualism is the opposite of Collectivism. Individualism stands for a society in which the ties between individuals are loose: a person is expected to look after himself or herself and his or her immediate family only. Collectivism stands for a society in which people from birth onwards are integrated into strong, cohesive in-groups, which continue to protect them throughout their lifetime in exchange for unquestioning loyalty. The index formula is

IDV = 35(m04 – m01) + 35(m09 – m06) + C(ic)

<u>Masculinity Index (MAS)</u>
Masculinity is the opposite of Femininity. Masculinity stands for a society in which social gender roles are clearly distinct: men are supposed to be assertive, tough, and focused on material success; women are supposed to be more modest, tender, and concerned with the quality of life. Femininity stands for a society in which social gender roles overlap: both men and women are supposed to be modest, tender, and concerned with the quality of life. The index formula is

MAS = 35(m05 – m03) + 35(m08 – m10) + C(mf)

<u>Uncertainty Avoidance Index (UAI)</u>
Uncertainty Avoidance is defined as the extent to which the members of institutions and organizations within a society feel threatened by uncertain, unknown, ambiguous, or unstructured situations. The index formula is

UAI = 40(m20 - m16) + 25(m24 – m27) + C(ua)

APPENDIX F

Test Statistics[a]

	Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)
C2_R_Expected_Return	231,500	484,500	-0,250	0,802
C3_B_Competitive_Analysis	173,500	426,500	-1,629	0,103
C4_K_Existing_Market_Knowledge	121,500	374,500	-2,844	0,004
C5_P_Predictions_of_the_Future	222,500	475,500	-0,468	0,640
C6_Z_Emphasis_on_analysis_of_Data	198,000	451,000	-1,200	0,230
C7_X_Causal_no_subcategory	105,500	358,500	-3,274	0,001
E2_L_Affordable_Loss	229,500	482,500	-,297	0,766
E3_A_Alliances_or_Partnership	173,500	426,500	-1,629	0,103
E4_E_Exploration_of_Contingency	121,500	374,500	-2,844	0,004
E5_C_Non_Predictive_Control	222,500	475,500	-0,468	0,640
E6_D_Distrusting_Market_Research	198,000	451,000	-1,200	0,230
E7_N_Effectuation_no_subcategory	141,000	394,000	-2,443	0,015

a. Grouping Variable: Nationality