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Bachelor Thesis

**THE IMPACT OF CULTURAL VALUES AND
DISSATISFACTION ON NEW VENTURE CREATION**

A Comparison of Brazil and the Netherlands

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PREFACE

The thesis at hand comprises the report of an exploratory study on the relationship between entrepreneurship and national culture, as a conclusion of the Bachelor in Business Administration at the faculty of Management and Governance at the University of Twente.

Having spent four months in Ghana doing research on microfinance for the minor of Sustainable Development, I got a taste of travel and getting to know different cultures. Hence, I decided to enjoy the freedom of being a student while I still could, and started looking for an opportunity to do another research abroad. This opportunity presented itself in the form of a Bachelor thesis for the EPICC project of NIKOS. With the project combining my interests in international business and entrepreneurship, I was easily enthused. Having already found an AIESEC internship in Brazil, the next country on my bucket list, preparations went full speed ahead. It did not take long for the first hurdle to appear; taking into account the low degree of English proficiency of the average Brazilian, to ensure internal validity the case studies had to be done in Portuguese. Not the kind of person to say no to a challenge, I readily accepted. Learning a new language, why not? Well, what a journey that has been!

My thanks goes out to my first supervisor, Mr. Stienstra, for his advice and guidance, and his endless patience while I was struggling to get a grasp of the language or venting my frustrations. Thanks also to my second supervisor, dr. Rainer Harms.

Special thanks and appreciation goes out also to the Brazilian entrepreneurs that I had the pleasure of doing the case studies with. It was very inspiring to meet so many young and ambitious Brazilians, many of whom I am sure one day I will meet again. Furthermore, many thanks to one very special Brazilian friend, who helped me with translating the case study to Portuguese and finding respondents, and who spared me a lot of agonizing hours in Brazilian public transport by driving me around the huge city of Goiânia to my respondents, in the motion jumping in as a translator when my Portuguese happened to stagnate while briefing the respondents for the first few case studies. Thank you, Eduardo Lira. In addition, my thanks goes out to my Brazilian host family, who welcomed me into their home for five months and made me feel like I have a second family in Brazil, and all the amazing AIESEC-ers I met who made sure that I did not have to feel alone in Brazil for a single second.

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Anne van den Bos,
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ABSTRACT

Entrepreneurship, being recognized for its contributions to technological innovation, job creation, and economic growth, constitutes one of the most extensively researched topics in business literature. Knowledge about entrepreneurship is interesting for scholars and policymakers alike, allowing for a more fine-grained understanding of how new venture creation efforts can be supported. Culture is one of the constructs thought to explain differences in national levels of entrepreneurship. One of the elements of entrepreneurship on which culture is thought to have an influence is the cognitive process used by entrepreneurs in operating their business venture. Sarasvathy (2001a) provides a theoretic perspective on cognitive framing processes, arguing that entrepreneurial decision making can be categorized into two distinct models of entrepreneurial cognition: *causation* and *effectuation*. Whereas causation is based on the logic of prediction, effectuation is based on the logic of control.

In an attempt to facilitate the transition of the current, intermediate state of research into causation and effectuation to the next stage, the research at hand sets out to analyze whether there is an empirical relationship between causation and effectuation and culture by comparing the mean tendencies of Brazilian and Dutch student-entrepreneurs to use elements of causal and effectual cognitive framing processes. Expectations of the direct and indirect influence of culture are derived from the literature and form the basis for four hypotheses which are subsequently tested. Results indicate that there may not be a straightforward, linear relationship between Hofstede's (2001) cultural dimensions and modes of cognitive framing. Instead, the thesis at hand argues that a more nuanced perspective might be appropriate, taking into account Hofstede et al.'s (2004) Dissatisfaction theory and collecting more qualitative data on the perceptions of entrepreneurs to facilitate a more inclusive picture of why entrepreneurs employ certain cognitive processes. Furthermore, the research provides useful directions for future research on the relationship between culture and effectuation.

Keywords: Effectuation; Entrepreneurial Decision-making; Cultural dimensions; Dissatisfaction theory

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LIST OF ABBREVIATIONS

A	Use of alliances or partnerships
ANOVA	Analysis of variance
B	Focus on competition
C	Non-predictive control of the future
EPICC	Entrepreneurial Processes in a Cultural Context
G	Focus on goals
GLOBE	Global Leadership and Organizational Behavior Effectiveness Project
IBM	International Business Machines
IDV	Individualism
K	Avoidance of contingencies
MAS	Masculinity
PDI	Power Distance Index
UAI	Uncertainty Avoidance
VSM	Values Survey Module

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1. INTRODUCTION

It has long been acknowledged that entrepreneurship is important to national economies as it is an important source of technological innovation, job creation and economic growth (e.g. Schumpeter, 1934; Birley, 1987; Parker, 2009). This spurred a stream of research with diverse theoretical lenses on entrepreneurship and its relationship to diverse constructs (e.g. Choi, 1993; Hopp & Ute, 2012). Several scholars have attempted to explain why countries differ in levels of entrepreneurial activity.

Culture is found to influence the motives, values, and beliefs of individuals (e.g. Hofstede, 1980; House et al., 2004), and individuals' personalities and behaviors, firms, and a countries' institutional conditions are said to be intertwined with the national culture from which they originate (Berger, 1991). Cultural backgrounds may thus be the main factor unifying groups of entrepreneurs with the same nationality. In trying to explain differences in levels of entrepreneurial activity between countries, some scholars have therefore focused on the influence of culture on entrepreneurship (e.g. Davidsson, 1995; Wennekers et al., 2001; Hayton et al., 2002). Although limited, evidence has been found that cultural backgrounds of entrepreneurs may indeed influence levels of entrepreneurial activity (Hayton et al., 2002, Hopp & Ute, 2012).

Another stream of research in the field of entrepreneurship focuses on how entrepreneurs come to their decisions in their business venturing (e.g. Choi, 1993; Lyon et al., 2000). All new firms and entrepreneurs, irrespective of which industry or environment they are in, make decisions. A very interesting perspective on this decision-making process is Sarasvathy's (2001a; 2001b; 2008) theory about causal versus effectual reasoning. Based on this theory, entrepreneurial decision making can be categorized into two distinct entrepreneurial processes: *causation* and *effectuation*. The predominant goal-driven, deliberate model of entrepreneurial decision making as taught in most business schools is referred to by Sarasvathy (2001a) as the causation model. Next to this causation model, Sarasvathy argues that individuals also employ effectuation processes in their entrepreneurial activities.

Entrepreneurs using effectuation processes start with a generalized aspiration and without a clear overall objective and then look at the resources at their immediate disposal (i.e. who they are, what they know, and who they know) and how they can put those resources to use to satisfy that aspiration. During the process, these entrepreneurs remain flexible, take advantage of contingencies as they arise, and learn as they go (Perry et al., 2011). Existing research on effectual and causal processes is classified by Perry et al. (2011) as nascent or intermediate, meaning that inquiries regarding effectuation as a phenomenon of interest have been predominantly open-ended. The next suggested state of research should, according to the authors, focus on proposed relationships between new and established constructs to analyze whether effec-

tuation might be conceptually and empirically related to other theories or constructs (Perry et al., 2011).

Culture is one of these established constructs (e.g. Triandis, 1972; Hofstede, 1980, Trompenaars, 1992; Schwartz, 1994; House et al., 2004) that might be related to Sarasvathy's effectuation theory. Combining the constructs of culture and effectuation versus causation leads to an interesting new perspective on how culture might influence entrepreneurial decision making in creating a new venture. NIKOS, the University of Twente's expert center for Innovative Entrepreneurship, Marketing, Strategic Management and International Entrepreneurship & Management initiated a research project, *Entrepreneurial Processes in a Cultural Context* (EPICC), to gain insight into the relationship between culture and Sarasvathy's (2001a) theory of effectuation. As part of this research project, comparisons of the tendency of novice entrepreneurs with diverse cultural backgrounds to focus on either causal or effectual reasoning have been made.

De Wit (2013) for example, compared the average tendency of Belgian and Malaysian novice entrepreneurs to focus on effectuation processes and tried to relate these differences to Hofstede's (2001) Uncertainty Avoidance dimension. In a comparable research, but using more Hofstede (2001) dimensions, Van den Ham (2012) compared Dutch and Vietnamese novice entrepreneurs. Taken together however, the results found in prior research carried out for the EPICC project can be said to be arbitrary at best. Motivated by these arbitrary and sometimes conflicting conclusions, the research for the paper at hand takes a more nuanced view on the influence of culture on effectual and causal framing of decisions (Sarasvathy, 2001a).

More specifically, it takes into account Hofstede et al.'s (2004) dissatisfaction theory, which states that dissatisfaction is a main determinant of the level of entrepreneurship, as a possible contextual factor influencing effectual framing processes, with Hofstede's (2001) cultural value dimensions acting as moderators rather than as direct causal agents. In doing so, the research at hand addresses the following central research question:

How are the processes of causal and effectual framing of decisions employed by entrepreneurs in starting a new venture influenced by their country of origin?

In aiming to answer this central research question, in the research at hand I set out to investigate differences in framing of decisions between a group of Brazilian student-entrepreneurs and a comparison group of Dutch student-entrepreneurs. The remainder of this report will first provide a more thorough description of the constructs of culture, Sarasvathy's (2001a) theory of effectuation, and Hofstede et al.'s (2004) Dissatisfaction theory. Expected differences are then drawn from both theorizing in entrepreneurship research and empirical findings in the broader literature on cultural

dimensions, on the basis of which specific hypotheses are formulated. Next, these hypotheses are empirically tested using the data collected by applying the methodology as described in section 4 of this report. The report concludes with implications for theory and practice and suggestions for further research.

2. THEORETICAL FRAMEWORK

2.1 FRAMING OF DECISION MAKING

Originating from entrepreneurship theory, Sarasvathy (2001b) developed a “general theory of decision making in uncertain situations” (Sarasvathy, 2008, p. 227) consisting of two different ways to frame decisions she terms *causation* and *effectuation*. She uses the act of cooking a meal as an analogy to clarify the difference between the modes. Using a causation process, one would decide on the recipe, make a list with ingredients, shop for the ingredients, follow the recipe while cooking and eventually serve the meal. Using an effectuation process, in contrast, one would use the ingredients present in the kitchen cabinets and combine those to prepare a meal (Sarasvathy, 2001a). In other words, “causation processes take a particular effect as given and focus on selecting between means to create that effect. Effectuation processes take a set of means as given and focus on selecting between possible effects that can be created with that set of means” (Sarasvathy, 2001a, p. 245).

Translating this analogy to the field of entrepreneurship, entrepreneurs using causal logic would see the future as a continuation of the past and thus implicitly or explicitly assume that future events can be accurately predicted by looking at the past. They would predetermine goals for their business venture and direct their efforts towards achieving those goals. Moreover, they will pursue activities if they believe these activities to be the most profitable option; hence they aim to maximize their expected returns. Causal entrepreneurs take a competitive attitude toward outsiders and focus their efforts on analyzing their competitors’ moves and staying ahead of them. Finally, they would stress extensive analyses of different options to avoid contingencies wherever possible.

In contrast, entrepreneurs using effectual logic to arrive at their decisions do not rely on predictions of the future based on past events, but instead tend to believe that they can create their own future. They take into consideration who they know, what they know, and who they are and imagine possible courses of action based on these means at their disposal. In pursuing new opportunities, they focus on what they can afford to lose and tend to choose the option with the lowest downside potential, instead of the option with the highest expected returns. To expand the means at their disposal, they attempt to involve outsiders in their business ventures to create a network of self-selected stakeholders with which they create new markets. If unexpected contingencies arise, they see these as opportunities and leverage them as such (Sarasvathy, 2001a; Sarasvathy & Dew, 2005; Dew et al., 2009; Read et al., 2009). The theory was empirically validated by Dew et al. (2009) in their research on effectuation versus causation comparing logical framing processes of expert entrepreneurs and MBA students.

To further clarify the differences between the two modes to frame decision making, causation and effectuation logic are contrasted in table 1 below.

Issue	Causal frame	Effectual frame
View of the future	Predictive. Causal logic frames the future as a continuation of the past. Hence accurate prediction is both necessary and useful.	Creative. Effectual logic frames the future as shaped (at least partially) by willful agents. Prediction is therefore neither easy nor useful.
Basis for taking action	Goal-oriented. In the causal frame, goals, even when constrained by limited means, determine sub-goals. Goals determine actions, including which individuals to bring on board.	Means-oriented. In the effectual frame, goals emerge by imagining courses of action based on given means. Similarly, who comes on board determines what can be and needs to be done. And not vice versa.
Predisposition toward risk and resources	Expected return. Causal logic frames the new venture creation problem as one of pursuing the (risk-adjusted) maximum opportunity and raising required resources to do so. The focus here is on the upside potential.	Affordable loss. Effectual logic frames the problem as one of pursuing adequately satisfactory opportunities without investing more resources than stakeholders can afford to lose. The focus here is on limiting downside potential.
Attitude toward outsiders	Competitive analysis. Causal frames promulgate a competitive attitude toward outsiders. Relationships are driven by competitive analyses and the desire to limit dilution of ownership as far as possible.	Partnerships. Effectual frames advocate stitching together partnerships to create new markets. Relationships, particularly equity partnerships drive the shape and trajectory of the new venture.
Attitudes toward unexpected contingencies	Avoiding. Accurate predictions, careful planning and unwavering focus on targets form hallmarks of causal frames. Contingencies, therefore, are seen as obstacles to be avoided.	Leveraging. Eschewing predictions, imaginative rethinking of possibilities and continual transformations of targets characterize effectual frames. Contingencies, therefore, are seen as opportunities for novelty creation - and hence to be leveraged.

Table 1: Differences between effectual and causal logics (Dew et al., 2009, p. 290)

Whereas the rational, deliberate causal process of entrepreneurial decision making (Perry et al., 2011) is taught in many business schools as the appropriate way to initiate and operate a business venture, Sarasvathy (2001a) argues that effectuation processes, with their ambiguous goals (Sarasvathy, 2008), may in some cases more accurately explain the actual thoughts and behaviors that some entrepreneurs may display when starting a venture (Perry et al., 2011). Below, the different aspects which together comprise Sarasvathy's (2001) effectuation theory are explained separately.

2.1.1 VIEW OF THE FUTURE

Sarasvathy (2001a) explains that causal entrepreneurs assume that there is a relationship between past and future, on the basis of which they can acceptably try to predict an uncertain future in an attempt to control it. Effectual entrepreneurs, in contrast, tend to believe that to the extent the future can be controlled, there is no need to predict it (Sarasvathy, 2001a; Dew et al., 2009). Focusing on non-predictive control,

they attempt to (co)create the future (Read et al., 2009) by undertaking activities that lie within their control, which may lead to new outcomes not previously envisaged (Sarasvathy, 2001a).

2.1.2 BASIS FOR TAKING ACTION

Causal thinkers let their actions be determined by their goals (Sarasvathy & Dew, 2005; Dew et al., 2009; Read et al., 2009), with a focus on maximization (Sarasvathy & Dew, 2005). Effectual thinkers rather attempt to create something new with existing means (e.g. who I know, what I know, and who I am), imagining possibilities originating from those means (Sarasvathy, 2001; Sarasvathy & Dew, 2005; Wiltbank et al., 2006).

2.1.3 VIEW OF RISK AND RESOURCES

Whereas entrepreneurs focusing on expected returns intend to reduce risk (in financial decisions) by pursuing opportunities with the maximum opportunity (Sarasvathy & Dew, 2005) based on their assessment of the expected value (Read et al., 2009), a focus on affordable loss indicates an acceptance and challenge of a predetermined risk in a non-predictive manner (Sarasvathy, 2001a), thereby only investing what one is willing to, and can, lose (Sarasvathy, 2001a; Read et al., 2009).

2.1.4 ATTITUDE TOWARD OUTSIDERS

Using competitive analysis or focusing on forming partnerships is a consequence of an attitude towards others (Sarasvathy, 2008). Whereas causal entrepreneurs have a competitive attitude towards outsiders (Read et al., 2009) and hence emphasize extensive analysis of their competitors (Sarasvathy, 2001a), effectual entrepreneurs attempt to decrease or rule out uncertainties by making use of partnerships and stakeholder commitments in dynamic networks (Sarasvathy, 2001a; Read et al., 2009). Having the right partners can constitute a huge advantage for entrepreneurs; it allows them to share knowledge, experience, risks and rewards and allows them to leverage their joint strengths to create new markets (Read, Song & Smit, 2009; Read et al., 2009).

2.1.5 ATTITUDE TOWARD UNEXPECTED EVENTS

Sarasvathy (2001a) explains that entrepreneurs that embrace contingencies leverage surprises and new situations to create opportunities and formulate new targets. Causal entrepreneurs, in contrast, focus on prediction and careful planning and see contingencies as obstacles to be avoided in the accomplishment of predefined goals (Sarasvathy & Dew, 2005; Dew et al., 2009).

Although causal and effectual processes of decision making are contrasted in table 1 and the different aspects together comprise Sarasvathy's (2001) effectuation theory as explained above, Sarasvathy (2001a; 2001b) stresses that the one does not preclude the other. The same person might use both causal and effectual reasoning at different times. What is more, depending on the circumstances these two processes may even be used simultaneously. In fact, according to Sarasvathy (2001b), the best

entrepreneurs are capable of both and do use both modes well. Sarasvathy's (2001) effectuation theory furthermore explicitly disconnects the success of the individual entrepreneur from the success of the firm he or she creates. For this reason the research at hand does not distinguish between successful and unsuccessful business ventures.

2.2 THE CULTURE PARADIGM

2.2.1 CULTURE

As explained before, the EPICC project set out to investigate the influence of culture on the tendency of entrepreneurs to employ effectuation and/or causation in the framing of decision problems in starting a new venture. An extensive body of literature on culture (e.g. Kroeber & Kluckhohn, 1952, cited by Adler, 1997; Hofstede, 1980) provides several definitions of the concept of culture, some comparable and/ or complimenting each other, others diverging. As to now, there has not been agreement among scholars about a universal, comprehensive definition of culture. In an attempt to provide more clarity on the concept, Dahl (2004) analyzed notions about culture from the most prominent and most cited scholars in research about culture including amongst others Triandis (1972), Hofstede (1991; 1994), Spencer-Oatey (2000) and Trompenaars and Hampden-Turner (1997). In conclusion, he describes culture as

“a shared set of basic assumptions and values, with resultant behavioral norms, attitudes and beliefs which manifest themselves in systems and institutions as well as behavioral patterns and non-behavioral items” (Dahl, 2004, p. 6).

These basic assumptions and values comprise the ‘inner layers’ of culture and fulfill an interpretative function. Although culture is shared among members from one group or society, individuals’ personalities modify the observable ‘outer layers’ of culture, and hence the expressions of eventual behavior resulting from culture. Instead of being inherited or genetically determined, individuals ‘learn’ culture from the societies in which they live (Dahl, 2004).

This explanation of culture has strong connotations with the way culture is seen by Hofstede (1980; 2001), who proposes a cultural system of four layers. The outer, visible layers are rituals, heroes, and symbols, which he subsumes under the term practices. When comparing this cultural system to an onion, one can imagine peeling away these layers to reveal the previously invisible core. In the core of this onion the cultural values can be found. Hofstede (2001) defines culture as follows:

Culture is “the collective programming of the mind that distinguishes the members of one group or category of people from another” (Hofstede, 2001, p.9).

In the research at hand, Hofstede's (2001) Cultural Dimensions, which will be further explained below, will be used as a construct for culture in the research at hand. In the

paper at hand, culture will thus be understood by Hofstede's (2001) definition of culture above.

2.2.2 MEASURING CULTURE

Several scholars have attempted to measure (national) culture in some form (e.g. Hall, 1959; Hofstede, 1980; Hall & Hall; 1990; Schwartz, 1992; Trompenaars, 1993; House et al., 2002). Of this extensive body of literature on the measurement of culture, Hofstede's (1980) framework for structuring and investigating cultures of nations remains the most widely used national cultural framework in psychology, sociology, marketing, and management studies (Sondergaard, 1994; Steenkamp, 2001), with his value dimensions most frequently used as a paradigm for describing country differences (Søndergaard, 1994; Steenkamp, 2001). Hofstede (1980; 2001) linked his dimensions with demographic, geographic, economic, and political aspects of societies, which to date is unmatched by other frameworks (Soares et al., 2007).

Hofstede's (2001) framework is considered to be a simple, practical, and useful shortcut to the integration of culture into research (Soares et al., 2007) and all his dimensions are empirically verifiable and validated by data from different sources (Hofstede, 2001). Using Hofstede's (2001) dimensions of culture furthermore contributes to ease of comparison to empirical results of other research on the subject. Despite criticisms of his work, there is wide support in the literature for the use of his conceptualization and operationalization of culture (e.g. Lynn & Gelb, 1996; Soares et al., 2007). Moreover, Hofstede et al.'s (2004) Dissatisfaction theory, as explained below, encompasses a relationship to some of Hofstede's cultural values. For these reasons, and because Hofstede's (1980; 2001) framework is most frequently used in research for the EPICC project, these dimensions will be used to operationalize culture in the research at hand.

Hofstede (2001) provides scores for most countries on six (originally four (Hofstede, 1980)) value dimensions, measured through a survey administered in 1968 and 1972 among IBM employees from 50 different countries and in three global regions (several countries grouped together) to obtain average values for a particular group of people, and hence a measure of their cultural attributes (Venaik & Brewer, 2010). These cultural values provide a general guidance to the behavior at the society level. Hofstede's (1980; 2001) dimensions quantitatively measure cultural values and in a very general way describe the cultures to which individuals belong (Fink et al., 2006). In other words, the Hofstede (2001) dimensions are used to categorize and rationalize the influence of culture on the dependent variable of interest to the researchers (House et al., 2004), in research for the EPICC project causal and effectual reasoning (Sarasvathy, 2001a).

Hofstede (1980) claims that his dimensions measure cultural values, that is, "a conception, distinctive of an individual.. of the desirable which influences the selection from

available modes, means and ends of action” (Kluckhohn, 1951, p. 395). It has been debated whether values or practices are more appropriate to investigate the influence of culture on entrepreneurship (Hopp & Ute, 2012). Past research has been dominated by the cultural values perspective (Stephan & Uhlaner, 2010; Thornton et al., 2001) but yielded inconsistent results (Stephan & Uhlaner, 2010). Some argue that cultural practices might be more directly linked to actual entrepreneurial behavior (e.g. Cialdini, 2005). However, whereas research in social psychology showed that individuals are likely to display behavior in accordance with social norms prevalent in their environment (Cialdini, 2005), values are argued to be stronger predictions of decisions and choices that individuals make (Gorgievsky et al., 2011). Since research for the EPICC project explores the influence of culture on entrepreneurial decision making it is appropriate to focus on values over cultural norms.

In his research, Hofstede (1980; 2001) attempted to measure these cultural values by developing four cultural dimensions, which were extended to five and eventually six based on later findings (Hofstede, 2001). For the research at hand, four of these dimensions, those that are thought to be the most relevant in investigating culture’s influence on Sarasvathy’s (2001a) effectuation theory, are explained in the section below.

2.2.2 HOFSTEDÉ’S DIMENSIONS OF CULTURE

On face value, not all Hofstede’s (2001) dimensions to measure culture are equally relevant in attempting to explain the decision making processes employed by entrepreneurs. The dimensions generally integrated into hypotheses for the research for the EPICC project are Power Distance (PDI), Individualism versus Collectivism (IDV), Masculinity versus Femininity (MAS), and Uncertainty Avoidance (UAI), the meaning of which will be explained below.

- *Power Distance (PDI)*: Power Distance is defined by Hofstede (2001) as “the extent to which the less powerful members of a society accept and expect that power is distributed unequally” (p. 98). A high score on the Power Distance Index thus signifies an acceptance of people in those societies of a “hierarchical order in which everybody has a place and which needs no further justification” (Hofstede et al., 2001).
- *Individualism versus Collectivism (IDV)*: Members of societies that score high on Individualism display a preference for a loosely-knit social framework in which individuals are expected to take care of themselves and their immediate families only. Members from collectivist societies are from birth onwards integrated into strong, cohesive groups which continue protecting its members in exchange for loyalty (Hofstede, 2001).

- *Masculinity versus Femininity (MAS)*: A high score on this dimension signifies a society driven by competition, achievement and material reward for success, with success being defined by the winner/ best in field. A masculine society at large is more competitive. A feminine society, in contrast, will show a preference for cooperation, modesty, caring for others, inclusiveness, and quality of life. A feminine society at large will be more consensus-oriented (Hofstede, 2001; Hayton et al., 2002).
- *Uncertainty Avoidance (UAI)*: Hofstede (2001) defines his Uncertainty Avoidance Index (UAI) as expressing the degree to which members of a society feel uncomfortable with uncertainty and ambiguity.

2.3 DISSATISFACTION THEORY

In seeking to answer why some countries have more entrepreneurs than others, Hofstede et al. (2004) investigated the role of cultural traits based on Hofstede's (1980; 2001) cultural values as explained above on peoples motives for becoming an entrepreneur. Inspired by Sapero and Sokol (1982), who argued that "the state of being out of place or between things" [...] often precedes the formation of a company" (p. 81), they specifically investigated the influence of dissatisfaction within nations on the number of entrepreneurs present within those nations. Their results yielded empirical support that, across nations, dissatisfaction with life in general is a main determinant of the level of entrepreneurship. They moreover found similar results for satisfaction with democracy and societal satisfaction.

These results led the authors to set forth their theory of dissatisfaction, which argues that would-be entrepreneurs experience more difficulties with 'doing things their way' and hence are 'pushed' towards self-employment (Hofstede et al., 2004, pp. 175-175). The authors furthermore found empirical support that this is especially the case for countries with larger Power Distance, stronger Uncertainty Avoidance, more bureaucracy, more corruption, and which are relatively poor (Hofstede et al., 2004). In hindsight, empirical results from other studies with respect to job mobility and business start-ups at the micro level confirmed the influence of dissatisfaction as a motive at the micro level (Wennekers et al., 2002).

One of the countries to which Hofstede et al.'s (2004) Dissatisfaction theory appears to be applicable is Brazil. Whether Brazil is relatively poor remains debatable depending on how poverty is defined, the other indicators are fairly descriptive of Brazil (Wuerzius, 2013; Transparency International, 2012; Hofstede, 2001).

Although the OECD Better Life Index (OECD, 2013) classifies Brazilians as in general being a little more satisfied than the OECD average, Brazil's recent mass protests in June and July 2013 suggest otherwise. These protests, starting with students and left-

wing activists and later including hundreds of thousands of mainly middle-class protesters, expressed deep and contradictory frustrations and a wide range of demands, including concerns over public services and broader issues of governance, especially corruption. Although this exorbitant number of protestors was influenced by mass media coverage, these protests were spurred by dormant societal dissatisfaction of Brazil's middle class (Saad-Filho, 2013).

To investigate the influence of Hofstede et al.'s (2004) Dissatisfaction theory and the moderating effect of culture on causal and effectual decision making (Sarasvathy, 2001a), Brazil thus provides a good case study. As can be seen in table 2 below, Brazil differs notably from the Netherlands on the relevant Hofstede (2001) value dimensions as explained above. Average tendencies of Brazilian novice entrepreneurs to focus on aspects of either effectual or causal cognitive framing will therefore be compared to those average tendencies of Dutch novice entrepreneurs, as hypothesized in chapter 3 below.

	Brazil	the Netherlands
PDI	69	38
IDV	38	80
MAS	49	14
UAI	76	53

Table 2: Brazilian and Dutch scores on Hofstede's (2001) Value Dimensions

3. HYPOTHESES

Out of the different aspects together comprising Sarasvathy's (2001a) effectuation theory as explained in section 2.1 differences in behavior between effectual and causal thinkers can be derived which, amongst others, form the basis for the hypotheses formulated in this section.

As mentioned before, not all Hofstede's (2001) dimensions of culture seem equally relevant for attempting to explain the logical framing processes employed by entrepreneurs. The focus of the vertical protocol analysis of the case studies by means of the coding scheme as explained in the methodology section below is on identifying and categorizing causal and effectual clues. Taking into account characteristics and previous findings of Hofstede's cultural dimensions of Power Distance (PDI), Individualism versus Collectivism (IDV), Masculinity versus Femininity (MAS), and Uncertainty Avoidance (UAI), expectations are formulated in the hypotheses below.

3.1 DISSATISFACTION AND NON-PREDICTIVE CONTROL

As mentioned before in section 2.1 of the Theoretical Framework, causal entrepreneurs assume that they can acceptably try to predict an uncertain future based on past events. Effectual entrepreneurs, in contrast, tend to believe that to the extent the future can be controlled, or (co)created, there is no need to predict it (Sarasvathy, 2001a; Dew et al., 2009).

As explained in section 2.3, Hofstede et al. (2004)'s Dissatisfaction theory might be very applicable to Brazil. Thus, in investigating the influence of Hofstede's (2001) Cultural Value Dimensions on Sarasvathy's (2001a) modes of logical framing, it is very interesting to take into account the close fit of Brazil (scoring markedly higher than the Netherlands on both PDI with a score of 69 as compared to 38, and a score on UAI of 76 as compared to 53) to the characteristics found by Hofstede et al. (2004) to be specifically relevant to their Dissatisfaction theory.

Hofstede et al.'s (2004) Dissatisfaction Theory explains that dissatisfied would-be entrepreneurs are 'pushed' into self-employment. Psychology tells us about motivation that dissatisfaction especially activates individuals with a high sense of self-efficacy (Noorderhaven et al., 2004). These individuals thus believe that instead of settling for a future determined by their past and current context which is their life and the way democracy works, they should rather take matters into their own hand. Instead of avoiding an uncertain future by remaining in the status quo, that is, staying employed or continuing their search for employment, they believe that they can break loose from the chains of their surroundings about which they are dissatisfied, and create their own future by becoming self-employed.

Dissatisfaction Theory thus leads to the expectation that Brazilian entrepreneurs are 'pushed' into self-employment, wanting to take matters into their own hands, 'do things their way', hence, create the future.

Hypothesis 1

Brazilian student-entrepreneurs will show a higher tendency to focus on non-predictive control than Dutch student-entrepreneurs

While Hypothesis 1 is based on the indirect influence of culture on Sarasvathy's (2001a) modes of cognitive framing, it is still interesting to investigate whether culture also exerts direct influence. Hence, the remainder of the hypotheses below are formulated based on prior literature leading to expectations of direct influence of Hofstede's (2001) Value Dimensions on Sarasvathy's (2001a) modes of cognitive framing.

3.3 AVOIDANCE OF CONTINGENCIES

Whereas causal entrepreneurs see contingencies as obstacles to be avoided, effectual entrepreneurs embrace contingencies and leverage them to create new opportunities (Sarasvathy & Dew, 2005; Dew et al., 2009).

A society with a hierarchical order in which everybody has a place which needs no further justification (Hofstede, 2001) can be said to provide clarity to its members as there is no dispute about one's position. When there is clarity about one's role based on one's position in society, contingencies relating to interaction with others are to some extent avoided. Indeed, according to Cotta (1976, p. 176) "inequality of power in organizations is essential for temporarily overcoming the Law of Entropy, which states that disorder will increase". On the psychological level, the need for power is matched by a need for security (McGregor, 1960). Hence, societies scoring higher on Power Distance (Hofstede, 2001), as is Brazil (with a score of 69) as compared to the Netherlands (scoring 38), may have a motive to prefer to avoid contingencies.

Furthermore, Hofstede (2001) claims that countries scoring high on UAI, as is Brazil, show a strong need for rules and elaborate legal systems to structure life, their organizations, institutions and relationships, which make events clearly interpretable and predictable and hence prevent unexpected contingencies from arising. For people that are familiar with the actual functioning of Brazil, this may seem counterintuitive. A cultural need for rules and elaborate legal systems does however not necessarily mean that these are actually there in the country. It may very well be that such rules and elaboration in the legal system leads to a large, inefficient bureaucracy. Moreover, corruption leads to inefficiency in ensuring that such rules are actually enforced. Since for the research at hand Hofstede's (2001) value dimensions and accompanying explanation are used as a basis for the hypotheses, it is assumed that Hofstede's claim that strong UAI leads to a strong *need* for rules and elaborate legal systems is correct.

Whether there actually *are* such rules or legal systems present and whether these are effective is outside the scope of the research at hand.

Uncertainty then, is said to be a pivotal catalyst in feedback seeking behavior (Ashford & Cummings, 1983); if individuals experience uncertainty, they will be motivated to enact an information search (Ashford, 1986; Morisson, 2002). Literature on small firms assumes that the primary issue in internal planning is the management of uncertainty (Lyle et al., 1995; Ryans, 1997). Indeed, Read et al. (2009) state that “prediction, careful planning and focus enable the firm to minimize the impact of unexpected events”.

In short, Hofstede’s (2001) definition of uncertainty avoidance is practically similar to what has been described by amongst others Sarasvathy (2001) as the avoidance of contingencies. In a related research of the EPICC project, comparing cognitive processes of Macedonian entrepreneurs to those of Dutch entrepreneurs, Nieuwenhuis (2012) found that there is a possible relationship between a high score on Hofstede’s (2001) Uncertainty Avoidance and the avoidance of contingencies, whereas van der Linde (2012) found support for a possible relationship between countries with low Uncertainty Avoidance and the leveraging of contingencies in comparing scores of Malaysian and Dutch entrepreneurs.

Hofstede (2001, p. 152) found a strong positive correlation between his dimensions of UAI and PDI. The practical consequence of this correlation is that, at least in studies limited to Western countries (that is, excluding Asian and African countries, for which a comparable, but less strong correlation between the dimensions was found), the effects of PDI and UAI are difficult to separate.

Taking the above into account, it is expected that Brazilian respondents, who score higher on both Hofstede’s (2001) Power Distance index and Hofstede’s (2001) Uncertainty Avoidance Index (76 as compared to 53) than their Dutch counterparts (69 as compared to 38) , will have a higher tendency to avoid contingencies.

Hypothesis 2

Brazilian student-entrepreneurs will show a higher tendency to avoid contingencies than Dutch student-entrepreneurs

3.3 USE OF ALLIANCES OR PARTNERSHIPS

Causal entrepreneurs have a competitive attitude towards outsiders, whereas effectual entrepreneurs leverage partnerships and stakeholder commitments in dynamic networks to create new markets (Read, Song & Smit, 2009; Read et al., 2009).

In collectivist societies people are integrated into strong, cohesive in-groups from birth onwards, which benefits the members of the group (Hofstede, 2001). Chen et al. (1998) found proof that collective societies prefer to cooperate, to work in groups, to

share time and effort, and to build long-term relationships. Furthermore, Ardila et al. (2012) argue that individuals from collectivistic societies aim to be part of a group and promote alliances and relationships. This leads to the expectation that Brazilians, who score lower on Hofstede's (2001) Individualism dimension than the Netherlands (38 as compared to a Dutch score of 80), and are therefore significantly more collectivistic than the Dutch, will put a larger focus on the formation of alliances. Strengthening this expectation are the findings of van der Linde (2012) for a related research for the EPICC project, who found that Malaysian entrepreneurs, being members of a more collectivistic society, display a higher tendency to focus on the formation of alliances as compared to Dutch entrepreneurs.

The established rules in societies with high Uncertainty Avoidance (Hofstede, 2001) lead to more predictable behavior (Kale & McIntyre, 1991; Singh, 1990). When behavior of others is more predictable, it is easier to trust others. Based on this, Doney et al. (1998) posited that members from societies scoring low on Uncertainty Avoidance may be less willing to trust others than those from high Uncertainty Avoidance cultures. According to Hofstede (2001), uncertainty in the environment is confronted by organizations through the behavior of employees, stakeholders and external agencies with which the organization interacts. Pre-commitments from stakeholders help shape a desired future (Sarasvathy, 2003), making uncertainty irrelevant.

House et al. (2004) argue that to avoid having to predict future events, and hence to reduce uncertainty, firms undertake a strategy of negotiated environments, i.e. forming alliances and partnerships or establishing customary practices in an industry to control on competitive behavior. Whereas in oligopolies firms make predictions about their environment, such as their competition, consumer behavior, and supplier dynamics, firms negotiating their environment take a more proactive way of dealing with uncertainty (House et al., 2004). Furthermore, financial means contributed by strategic partners limit investments and thus risk of the entrepreneur, whereas the knowledge and experience of these partners allow for more control over the future (Sarasvathy, 2003). Brazil's higher score on Hofstede's (2001) dimension of Uncertainty Avoidance (76 as compared to a Dutch score of 53) thus strengthens the expectation that, to decrease or rule out uncertainties (Sarasvathy, 2008), Brazilians focus more on forming alliances.

Hypothesis 3

Brazilian student-entrepreneurs will show a higher tendency to focus on the use of alliances or partnerships than Dutch student-entrepreneurs

3.4 FOCUS ON GOALS

While causal thinkers let their actions be determined by preset goals, effectual thinkers rather imagine possibilities originating from the means (i.e. who I know, what I know, and who I am) at their disposal (Sarasvathy, 2001; Sarasvathy & Dew, 2005; Wiltbank et al., 2006).

With higher scores on masculinity indicating a stronger achievement motivation and a higher importance of performance and growth (Hofstede, 2001), members of such societies can naturally be expected to put a larger focus on reaching a desired goal. The coding scheme implied indications of respondents of being growth-oriented to be coded as goal-oriented behavior. Brazil actually scores in the middle on Hofstede's Masculinity index (with a score of 49), but is much more masculine than the Netherlands (scoring 14), which can be described as a very feminine society. Because of Brazil's higher score on Hofstede's (2001) Masculinity index it can be expected that Brazilian respondents will display more goal-oriented behavior.

According to Locke & Latham (1990), people who accept a hierarchical order as given need structure and regulation. Based on this, Van der Linde (2012) suspected a relationship between a high score on Hofstede's (2001) Power Distance index and a high tendency to be goal-driven. She argues that since entrepreneurs do not have a boss to provide them with this structure, the setting of goals may provide them with the necessary guidance. She found support for her hypothesis in that she found that Malaysian entrepreneurs, who score higher on Hofstede's (2001) PDI than the comparison group of Dutch entrepreneurs, displayed more goal-oriented behavior in their think-aloud protocols. If this indeed is caused by the higher degree of Power Distance in Malaysia, it can be expected that this relationship holds for Brazil, with a higher PDI score as the Netherlands.

It follows that Brazilians, scoring higher on Hofstede's (2001) Masculinity index (49 as compared to 14) and on his Power Distance index (69 as compared to 38), will have a higher tendency to display logical, goal oriented behavior.

Hypothesis 4

Brazilian student-entrepreneurs will show a higher tendency to focus on goals than Dutch student-entrepreneurs

4. RESEARCH METHODOLOGY

To answer the central research question above, as stated before the research at hand set out to investigate the differences in the framing of decision problems between 20 Brazilian (specifically: the Brazilian region of Goiás) and 44 Dutch student-entrepreneurs in order to indicate whether there are significant differences in their tendency to employ either effectual or causational logic that might be related to their diverging cultural backgrounds. In doing so, the research takes an exploratory stance, attempting to answer the question of “why” something occurs (Babbie & Earl, 2007).

4.1 THE SAMPLE

Specifically, the sample consisted of 44 Dutch student-entrepreneurs, from whom data was collected by various researchers in prior stages of the EPICC project. Taking into account the time-consuming nature of data collection, transcription of the protocols, and coding using the think aloud protocol method, this data was compared to data from 20 Brazilian student-entrepreneurs collected by the author of the research at hand. Specifically, these respondents were all from Goiânia, in the district of Goiás. One of the Brazilian protocols could only be used for analyses of the first 5 problems because due to other obligations of the respondent the interview had to be terminated after problem 5. For the remaining 5 problems, this protocol was left out of the analysis and the data from the 44 Dutch respondents was compared to the remaining 19 Brazilian respondents. Since Dew et al. (2009) found evidence of differences in the degree of effectual versus causal thinking among expert and novice entrepreneurs, a selection criterion for both the Dutch and the Brazilian respondents is that they have to be novice entrepreneurs; specifically, only the founders of firms no older than five years are selected to participate in the research to prevent the results being biased because of entrepreneurial expertise. This selection criterion furthermore made the two groups of subjects more comparable, with little variation on age and, especially important in the case of Brazil, social class.

First respondents were found by building up a local network of students in Goiânia. After that, a snowballing process took place, asking prior respondents to refer to other student entrepreneurs in their networks. Moreover, a supportive organization for young entrepreneurs (many of them students) was approached and found prepared to provide further contacts and office space for conducting the interviews without disturbances.

4.2 THE DEPENDENT VARIABLE: EFFECTUAL AND CAUSATIONAL DECISION-MAKING PROCESSES

How an individual perceives a problem depends on his or her frame of reference (Dew et al., 2009). Starting a new venture can be considered as a problem, i.e. how to design and operate a new business (Dunegan, 1993), which leads to the expectation that indi-

viduals with different frames of reference will perceive and solve this problem in different ways. When culture serves as a frame of reference for an entrepreneur, entrepreneurs with different cultural backgrounds may undertake different lines of reasoning to solve the problem of starting a new venture.

4.2.1 THINK-ALoud PROTOCOLS

To record the lines of reasoning and thus the cognitive processes used by respondents, the think-aloud method was used. This method consists of asking people to think aloud while they solve a problem, in this case a case study consisting of ten decision problems in building an imaginary new venture called *Coffee, Inc.*, putting them in the role of the lead entrepreneur.

While verbal protocols have been used as early as 1912 by Titchener, Ericsson and Simon (1980) are generally regarded as the founders of verbal protocol analysis. Van Someren et al. (1994) then provide a very useful guidebook on how to apply this protocol analysis in practice. The method has applications in psychological and educational research and in many cases provides a unique source of information on cognitive processes (van Someren et al., 1994).

The advantage of using think-aloud protocols over other methods is that they call for current verbalization – i.e. subjects are required to think aloud continuously as they solve problems and the transcriptions of their recorded verbalization form the basic data to be analyzed. In this way the validity of the generated data is ensured because it concerns the *exact* thought process of the respondent, instead of a possibly primed retrospective recall of a decision process generated by using interviews, possibly leading to hindsight bias, or the researcher having to deduce a subjects' decision process after the fact (Ericsson & Simon, 1980). The think-aloud methodology has also been used by Dew et al. (2009) and Sarasvathy (2008) in their empirical research on effectuation.

The case study to which through which the verbal protocols were generated is based on the case study applied by Sarasvathy (2008) to investigate elements of entrepreneurial expertise. To ensure the respondents thinking aloud, they were asked to read the entire case aloud. Interference of the interrogator was kept to a minimum by only reminding the respondent to think aloud when necessary. After an explanation of the problems, respondents were guided by basic questions. When issues of doubt arose, the respondents were instructed to make assumptions. To ensure internal validity both groups of respondents were presented with, and asked to solve, the case study in their native language, with the translation of the Brazilian case being checked and double checked by native Brazilian Portuguese speakers to ensure consistency between the two cases. The Dutch and Brazilian Portuguese cases can be found in annex 1 and annex 2, respectively. Each interview was arranged face to face in the house or office of

the respondent and lasted between one and two hours. Before and after the case study the respondent received a short briefing, which can be found in annex 3.

Because the case study concerns the set-up of an imaginary business venture, generated data concerns the lines of reasoning of the individual student-entrepreneurs and not the performance of their firms. All respondents received the same information, worked on exactly the same problems and were asked to think aloud continuously as they solved these problems and came to their decisions. Their think-aloud protocols were recorded and transcribed and were subsequently compared using country of origin as the independent variable, in an attempt to isolate specific heuristics that differentiate the logical frames used by the two groups of respondents.

4.2.2 THE CODING SCHEME

As derived from the explanation and operationalization of the concepts of causation and effectuation, the coding scheme aiming to identify these modes of logical framing focuses on the identification and coding of the types of heuristics and logical approaches used by respondents in their verbal protocols and categorizing them as either causal or effectual logical framing processes. Specifically, clues about goal-driven reasoning employed by the respondents, a focus on expected returns, a focus on the analysis of competition, the use of existing market knowledge, attempts to predict the future, and other causal key words not falling under the above mentioned clues are categorized as being indicative of a causal logical framing process. On the other hand, clues about means-based reasoning employed by the respondents, a focus on avoidable loss, a focus on the use of alliances and/ or partnerships, the exploration of contingencies, a focus on non-predictive control, and other effectual key words not falling under the above mentioned clues are categorized as being indicative of an effectual logical framing process.

The operationalization of the coding scheme and its clarification can be found in annex 4. A shortened overview of the coding scheme can be found in table 3 below.

Causal	Effectual
P-Prediction of the future	C-Creation of the future
G-Goal-driven	M-Means-based
R-Expected returns	L-Affordable loss
B-Competitive analysis	A-Use of alliances or partnerships
K-Avoid contingencies	E-Embrace contingencies
X-Causal (no subcategory given)	N-Effectual (no subcategory given)

Table 3: Effectual and causal codes, based on Sarasvathy (2008, p.55)

Frequency counts are used for each code to compare the total tendency of each group of respondents towards that type of causal or effectual heuristic, and the total tendency of each group of respondents to reason causally or effectually.

Because entrepreneurs were empirically found to use both effectual and causal approaches in a variety of combinations (Dew et al., 2009), and according to Sarasvathy (2001a), successful entrepreneurs can, and do, use both modes well, in the research at hand the two constructs are viewed as orthogonal, i.e. the one does not exclude the other.

In first collecting data in the form of think-aloud protocols and later coding this data and performing frequency counts, the research at hand combines qualitative and quantitative methodologies. Whereas qualitative data allows for a broader overview of the social reality and more space for interpretation and flexibility, qualitative data is more focused on a narrowed down topic and hence avoids errors (Neumann, 2007), and the quantified data is better testable and more replicable (Babbie & Earl, 2007).

The protocols are all in Brazilian Portuguese, and because there were no recoders available that are proficient in that language, unfortunately not all protocols could be recoded. Instead, one of the protocols was translated to English and recoded by the first supervisor. Comparison of the codes led to the agreement that with a correspondence of about 90%, coding procedures were sufficiently similar.

4.3 THE INDEPENDENT VARIABLE: NATIONAL CULTURE

Cross-cultural research may use several levels of analysis of culture. Culture can be measured at both a national level of analysis and an organizational or even an individual level of analysis. According to Smith & Schwartz (1997), the appropriate level of analysis depends on the type of research question asked. A research question concerning variations in culture at the level of an individual, i.e. a relationship between individual differences in value dimensions and other individual attributes, warrants an individual level of analysis of culture. However, if the research question addresses the relationship between cultural differences and variation across cultures on other variables, culture-level dimensions should be used (Smith & Schwartz, 1997). Furthermore, in describing the Values Survey Module (VSM), his instrument to measure scores on his cultural dimensions, Hofstede (2001) explicitly states that this questionnaire has been developed to compare culturally influenced values of similar respondents from two or more countries, and is not suitable to compare scores of individuals. Since in the research at hand the research question relates to variations across cultures to the variable of the mode of logical framing, the use of culture-level dimensions is warranted.

Hence, in the research at hand country of origin, i.e. Brazil and the Netherlands, is used as a proxy for national culture, as is common in business applications (Soares et al., 2007). Members of a nation tend to share a similar language, history, religion, under-

standing of institutional systems, and sense of identity (Hofstede, 1980), making nation or country of origin a suitable proxy for culture. In fact, country, nation, culture, and society are often used interchangeably (Sekaran, 1983; Nasif et al., 1991). Although caution is recommended using this approach, there is empirical support for between-country differences (e.g. Hofstede, 1980; Steenkamp, 2001).

5. RESULTS

5.1 CONTROL OF THE FUTURE (C)

H1: Brazilian student-entrepreneurs will show a higher tendency to focus on non-predictive control than Dutch student-entrepreneurs

As explained before, Hofstede et al. (2004) found their theory of dissatisfaction to specifically apply to countries with large Power Distance, stronger Uncertainty Avoidance, more bureaucracy, and more corruption. With a score of 69 on Hofstede's Power Distance Index and a score of 76 on Hofstede's Uncertainty Avoidance Index, Brazil fulfills the first two criteria. Moreover, several sources confirm that bureaucracy in Brazil is stifling (e.g., World Bank, 2014; Wuerzius, 2013). Finally, with a score of 42 on Transparency International's (2013) corruption index, Brazil is characterized as a very corrupt country.

That individuals in Brazil are dissatisfied with democracy is further confirmed by the mass protests taking place in the summer of 2013, which is also explained above. However, since Brazilian protests were spurred mainly by Brazilians belonging to the middle class, to investigate whether the respondents from the sample may have belonged to these 'dissatisfied individuals', first a closer look must be taken to the social class these respondents belong. The respondents all indicated their parents to earn in the middle half or upper quartile of average Brazilian income. Hence, these respondents can be said to belong to Brazil's middle class.

First, the respective countries were labeled; 1 for the Netherlands, 2 for Brazil. Next, the total amount of text blocks coded as C was divided by the total amount of causal and effectual text blocks coded to arrive at the propensity of respondents to focus on non-predictive control. The tables below and in the annex refer to this variable simply as 'Non-predictive control'.

Because a normal distribution is an underlying assumption in parametric testing (Laerd Statistics, 2013), the normality of the sample was first tested using a Shapiro-Wilk Test of Normality. As can be seen in table 4 below, the propensity to focus on non-predictive control for both Brazilian and Dutch respondents deviates significantly from a normal distribution, with significance values of 0.037 and 0.000 respectively.

	Country Code	Shapiro-Wilk		
		Statistic	df	Sig.
Non-predictive control	Netherlands	0,799	44	0
	Brazil	8,893	19	0,037

Table 4: Results of the Shapiro-Wilk Test of Normality for the tendency of respondents to focus on Non-predictive control

For comparing differences between two independent groups of which the dependent variable is not normally distributed, usually an Independent Samples Mann-Whitney U Test is recommended because it ranks the data it analyzes. However, since in the research at hand the means of unequal sample sizes are compared, unequal variances (heteroscedasticity) lead to an inflation of the type 1 error rates (Kasuya, 2001) and an unequal variances t-test is preferred (Ruxton, 2006). To overcome the non-normality of the data, first a variable was created in which the propensity of respondents to focus on non-predictive control was ranked.

As can be seen in table 5 below, the two-tailed significance rate of the independent samples T-test of 0.012 shows that there is a significant difference between the average tendency of Brazilian and Dutch respondents to focus on non-predictive control. More specifically, with a mean of approximately 40.61 (table 6 below) Brazilians respondents focused significantly more on non-predictive control than their Dutch counterparts with a mean of approximately 28.28. Hypothesis 1 is thus accepted.

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Non-predictive control - Ranked	Equal variances not assumed	0,432	0,514	-2,634	36,459	0,012	-12,3212	4,677927	-21,804305	2,83804

Table 5: Results of the Unequal Variances Independent Samples T-Test for the ranked tendency of respondents to focus on non-predictive control

	Country Code	N	Mean	St. Deviation	Std. Error Mean
Non-predictive control - Ranked	Netherlands	44	28,28409	17,84507	2,690245
	Brazil	19	40,60526	16,68131	3,826955

Table 6: Ranks of the Independent Samples T-Test on focus on non-predictive control for Brazil and the Netherlands

5.2 AVOIDANCE OF CONTINGENCIES (K)

H2: Brazilian student-entrepreneurs will show a higher tendency to avoid contingencies than Dutch student-entrepreneurs

This hypothesis was tested by comparing the average tendencies of Dutch and Brazilian respondents to focus on avoiding contingencies. The variable capturing the respondents' tendency to focus on avoiding contingencies was arrived at by dividing the total amount of text blocks coded as K – Avoid Contingencies by the sum of all causal and effectual text blocks coded.

In table 7 below can be seen that the significance value of the Netherlands, with a value of 0.033 scoring below the cut-off point of 0.05 on the Shapiro-Wilk Test of Normality, indicates that the data significantly deviates from a normal distribution. Therefore to compare the means of the two countries on the tendency of respondents to avoid contingencies again the application of an Unequal variances Independent Samples T-Test on the ranked data was warranted to analyze their means. The results of this test can be seen in table 8 below.

	Country Code	Shapiro-Wilk		
		Statistic	df	Sig.
Avoidance of contingencies	NL	0,944	44	0,033
	Brazil	0,958	19	0,526

Table 7: Results of the Shapiro-Wilk Test of Normality for the tendency of respondents to avoid contingencies

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Avoidance of contingencies - Ranked	Equal variances not assumed	3,395	0,07	-1,457	42,9	0,152	-6,631579	4,551171	15,8105	2,547353

Table 8: Results of the Unequal Variances Independent Samples T-Test for the ranked tendency of respondents to avoid contingencies

With a 2-tailed significance value of 0.152, scoring well above the significance level of 0.05 or 2-tailed significance level of 0.10, the distribution of the respondents' tendency to avoid contingencies can be said to not vary significantly between the respective countries of Brazil and the Netherlands. Hypothesis 2 is rejected.

5.3 USE OF ALLIANCES OR PARTNERSHIPS (A)

H3: Brazilian student-entrepreneurs will show a higher tendency to focus on the use of alliances or partnerships than Dutch student-entrepreneurs

This hypothesis will be tested by comparing the average tendency of Dutch and Brazilian respondents to focus on the use of alliances or partnerships. To arrive at the variable capturing the the tendency of respondents to focus on the formation and/or use of alliances, the total amount of text blocks coded as use of alliances was divided by the total amount of causal and effectual text blocks coded.

The Shapiro-Wilk Test of Normality indicated that with a significance value of 0.001 the data of the Netherlands deviates significantly from a normal distribution, see table 9

below. Therefore again an Unequal variances Independent Samples T-Test on the ranked data was used to compare the means of the two countries. The results of the test can be found in table 10 below.

	Country Code	Shapiro-Wilk		
		Statistic	df	Sig.
Use of alliances	NL	0,904	44	0,001
	Brazil	0,955	19	0,473

Table 9: Results of the Shapiro-Wilk Test of Normality for the tendency of respondents to focus on the use of alliances

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Use of alliances - Ranked	Equal variances not assumed	0,117	0,734	-0,826	35,352	0,415	-4,107057	4,974479	14,2022	5,988082

Table 10: Results of the Unequal Variances Independent Samples T-Test for the ranked tendency of respondents to use alliances

From this test it became clear that the distributions of the tendency of Brazilian and Dutch respondents to focus on A did not differ significantly, with a 2-tailed significance value of 0.415. Hypothesis 3 is rejected.

5.4 FOCUS ON GOALS (G)

H4: Brazilian student-entrepreneurs will show a higher tendency to focus on goals than Dutch student-entrepreneurs

This hypothesis will be tested by comparing the average tendency of Dutch and Brazilian respondents to focus on goals. The variable expressing the tendency of respondents to be goal driven (G) is arrived at by dividing respondents' total text blocks coded as goal-driven the total amount of causal and effectual text blocks coded. With significance rates of 0.080 and 0.290 respectively on the Shapiro-Wilk Test of Normality as can be seen in table 11 below, the data for both the Netherlands and Brazil is normally distributed.

	Country Code	Shapiro-Wilk		
		Statistic	df	Sig.
Focus on goals	NL	0,954	44	0,08
	Brazil	0,942	19	0,29

Table 11: Results of the Shapiro-Wilk Test of Normality for the tendency of respondents to focus on goals

To compare the means of the two countries' respondents, an Independent Samples T-test of the ranked data was therefore applicable. The two-tailed significance rates as stated in table 12 below indicate that there is no significant variance between the mean tendency of Brazilian and Dutch respondents to display goal-oriented behavior. Hypothesis 4 is rejected.

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Focus on goals - Ranked	Equal variances not assumed	0,795	0,376	0,352	39,352	0,726	0,0047	0,01335	0,02229	0,0317

Table 12: Results of the Unequal Variances Independent Samples T-Test for the ranked tendency of respondents to focus on goals

5.6 CAUSAL VS. EFFECTUAL REASONING - THE GENERAL RELATIONSHIP

To test the general relationship between the country of origin and the tendency of the respondents to either reason causally or effectually, the overall tendency of respondents to reason causally was computed by dividing all the text blocks coded as causal by the sum of all causal and effectual text blocks coded. With significance rates for both Brazil and the Netherlands above the value of 0.05 on the Shapiro-Wilk Test of Normality as can be seen in table 13 below, indicating a normal distribution of the data, the use of an Independent Samples T-test to analyze the means of Brazil and the Netherlands was warranted.

	Country Code	Shapiro-Wilk		
		Statistic	df	Sig.
Causal thinking % of total problems	NL	,985	44	,829
	Brazil	,945	19	,330
Effectual thinking % of total problems	NL	,985	44	,829
	Brazil	,945	19	,330

Table 13: Result of the Shapiro-Wilk Tests of Normality for distribution of total causal and effectual thinking

The two-tailed significance rates as stated in table 14 below show that there is no significant variance between the tendency of Brazilian and Dutch respondents to reason causally, thereby also implying that there is no significant variance between Brazilian and Dutch respondents to reason effectually.

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Causal thinking % of total problems	Equal variances not assumed	0,001	0,977	-	35,264	0,223	-0,02935	0,02364	-0,07732	0,01862

Table 14: Results of the Independent Samples T-Test on country of origin and overall tendency to causal reasoning

5.7 CAUSAL REASONING PER PROBLEM AREA

The tendency of respondents towards causal reasoning during each problem was computed by dividing the sum of causal reasoning for each problem by the total of causal and effectual text blocks coded for each problem. Next, Brazilian and Dutch student-entrepreneurs were compared using the tendency of respondents towards causal reasoning during each problem as the dependent variables. As can be seen in table 19 in annex 5, only in Problem 6 both the data for Brazil and the Netherlands is distributed normally. Therefore to analyze the means of the tendency to causal reasoning (and thereby implicitly the tendency to effectual reasoning) only for problem 6 an Independent Samples T-test was used, whereas the usage of an Independent Samples Mann-Whitney U Test was warranted to analyze the data from problem 1 to 5 and 7 to 10.

As can be seen in table 21 in annex 5 all 2-tailed asymptotic significance scores score well above the significance level of 0.05, indicating that Brazilian and Dutch respondents have no significant different tendency to either more causal or effectual reasoning in problems 1 to 5 and 7 to 10. Furthermore, the two-tailed significance rates as stated in table 24 in annex 5 indicate that there is no significant variance between the tendency of Brazilian and Dutch respondents in problem 6 to employ causal (and implicitly, effectual) reasoning. In conclusion, the observation that Dutch and Brazilian student-entrepreneurs do not differ significantly in their tendency to employ causal and effectual reasoning holds for each problem separately as it does for the complete case studies.

5.8 CONTROL VARIABLES

The results as stated above were tested for the control variable study background of the respondent, for which respondents indicated whether they study business, social sciences, IT engineering, engineering but non-IT, natural sciences, or whether their study falls into another, undefined, category, to see whether the tendency to either causal or effectual reasoning varies with the study background of the respondent. The results of the Shapiro-Wilk Tests for Normality in table 24 in annex 5 indicate that the data is distributed normally and variances can be tested using a One-way ANOVA test. The results in table 26 in Annex 5 show that there is no statistically significant relationship between the group means, indicating that the relationship between the cultural background of the respondents and their overall tendency to causal reasoning is not influenced by the study background of the respondent.

Furthermore, the results above were tested for the influence of having an entrepreneurial family history on the tendency to causal reasoning. The influence of having an entrepreneurial family is captured in a control variable for which respondents indicated whether the main provider of their family is an entrepreneur/ self-employed, works for a private company, is a public servant, or falls into another, undefined, category. The Shapiro-Wilk Test for Normality (see table 27 in annex 5) shows that, like the respondents' study background, the data of the respondents' family background has a normal distribution. Again, variances were tested by a One-way ANOVA test. The results in table 29 in annex 5 show that there is no statistically significant relationship between the group means, indicating that the relationship between the cultural background of the respondents and their overall tendency to causal reasoning is not influenced by the family background of the respondent.

6. DISCUSSION OF RESULTS

The confirmation of Hypothesis 1 strengthens the expectation that dissatisfied individuals will be more inclined to take matters in their own hand, that is, create their own future, or in other words, focus on non-predictive control. However, although a significant difference between Dutch and Brazilian respondents' focus on non-predictive control has been shown in the analysis, these results do not necessarily imply a direct causal relationship between dissatisfaction and a focus on non-predictive control. This connection should be explored in more detail and should be verified empirically before any definitive conclusions can be drawn.

In a related research for the EPICC project, van den Ham (2012) found contradicting results. Based on Thomas & Mueller (2000), who claim that collectivism is related to a yearning for security, van den Ham formulated the expectation that collectivistic societies will display a greater need to predict the future. By comparing the tendency of Dutch and Vietnamese respondents to focus on non-predictive control, he then managed to find support for the hypothesized relationship between a high degree of Individualism in a culture and the members of that culture being inclined to focus on attempts to create the future (Van den Ham, 2012). Based on the notable difference of Brazil and the Netherlands on Hofstede's (2001) IDV index (38 as opposed to 80), one would then expect to find the same relationship for Brazilian and Dutch respondents, with the Dutch, coming from the more individualistic society, focusing more on non-predictive control instead of the Brazilians, as was found here.

These contradicting results and the rejection of Hypotheses 2-4 indicate that the relationship between Hofstede's (2001) Value Dimensions and causation and effectuation (Sarasvathy, 2001a) might not be as straightforward as assumed in a lot of prior research done for the EPICC project. Thus, there might be external factors at play and the influence of culture may be indirect and exerted through other processes rather than direct. Indeed, culture, in various forms, is often depicted as a moderator between contextual factors and entrepreneurial outcomes, i.e. culture may act as a catalyst rather than a causal agent (Hayton et al., 2002).

When taking a closer look at possible explanations for the rejection of hypotheses 2-4 this is further underlined. First off, Hypothesis 2 was based on the expectation of a relationship between Hofstede's (2001) PDI and UAI index and the tendency to avoid contingencies. Whereas there is a large theoretical justification for the expectation that cultures with high Uncertainty Avoidance values will display a larger tendency to avoid contingencies, and the possibility of this relationship existing has been furthermore confirmed by Nieuwenhuis (2012) and van der Linde (2012) in related research for the EPICC project, no significant difference between the means of Brazilian and Dutch student-entrepreneurs could be found. Moreover, in comparing the means of Colombian and Dutch student entrepreneurs for embracing contingencies, the oppo-

site of avoiding them, Hampp (2013) also did not manage to find a significant difference. This may indicate that there have been different factors at play in the research of Nieuwenhuis (2012) and van der Linde (2012).

Hypothesis 3 was based on the expected influence of Hofstede's (2001) IDV and UAI dimension on the tendency to form alliances. However, taking several theories and perspectives into account, the influence of Uncertainty Avoidance on the tendency to form alliances and partnerships is ambiguous. Among the characteristics of uncertainty avoiding societies in Hofstede's (1980) analysis are lower tolerance for ambiguity in perceiving others, and lower readiness to compromise (Hofstede, 1980, pp. 132-133). Thus, one might actually expect the Dutch, scoring lower on UAI than the Brazilians (53 as compared to a Brazilian score 76), to focus more on the formation of alliances.

The fact that no significant differences in the means of Dutch and Brazilian respondents could be found, indicates that the effect may be offset by scores on other cultural dimensions. Indeed, in a related research for the EPICC project, Jacobs (2013) compared a cluster of Canadian and Dutch respondents to a cluster of Vietnamese and Chinese respondents and found support for a possible relationship between a higher degree of Uncertainty Avoidance and a larger focus on the use of alliances. However, this relationship may also be related to the higher degree of collectivism in Vietnam and China which, unfortunately, is not taken into account by the author. Van der Linde (2012) did find a significant difference in the average tendency of Malaysians, like Brazil a collectivistic society, and the Dutch to form alliances.

Another cultural dimension that may potentially influence a respondent's tendency to either form alliances or display competitive behavior is Hofstede's (2001) Masculinity dimension. Managers in Masculine societies are expected to be, amongst others, assertive, aggressive, and competitive (Hofstede, 2008). Competition separates the winners from the losers. With a focus on achievement in terms of ego boosting, wealth, and recognition (Hofstede, 2008), in Masculine societies there are pressures for its members to display their superiority. Members of Masculine societies were found to show competitive behavior both in business and in daily life (Wieland & Sarin, 2012).

Indeed, Van Hal (2012) found support for a possible relationship between a high score on Masculinity and a tendency to focus on competitive analysis (B), the opposite of focusing on alliances, by comparing the scores on B of Australian and Dutch firms. Thus, the possible tendency of Brazilians to put a larger focus on the formation of alliances because of their higher degree of collectivism may be offset by their higher score on Masculinity (49 as compared to the Dutch score of 14) (Hofstede, 2001). In the same vein, Hofstede's (2001) Individualism might offset Brazilians' tendency to display goal-oriented behaviour, as predicted in Hypothesis 4.

Indeed, although Hofstede's (2001) dimensions indicate the intensity of cultural values, they cannot be used to determine the relative importance of each dimension (Yenageh et al., 2009). Hofstede's (1980) Cultural Values Theory thus provides no indications as to which dimensions are central to the reliance of respondents on elements of causation and effectuation. While the research at hand attempted to explore the influence of multiple Hofstede (2001) indices on Sarasvathy's (2001a) and Dew et al.'s (2009) categories of cognitive processes, it might be interesting to isolate the effects of the individual indices by exploring differences in average tendencies between respondents from countries that lie around extremes of these indices. However, care must be taken in ensuring that these countries differ significantly on a single one of these indices and are comparable on others to ensure that results are not still influenced by scores on other dimensions, or a large quantity of countries must be systematically compared to facilitate accurate interpretation of observed differences.

7. CONCLUSION

Several scholars have attempted to measure (national) culture in some form (e.g. Hofstede, 1980; Hall & Hall; 1990; Schwartz, 1992; Trompenaars, 1993; House et al., 2002) and subsequently every single one of them has been subject to severe criticism. Culture, constituting the broadest influence on many dimensions of human behavior, remains an elusive concept. This poses considerable difficulties for cross-cultural research (Soares et al., 2007). It has even been posited that the concept of culture is too global to be meaningful as an explanatory variable and might only be useful if its components are unpacked (e.g. Leung, 1989; van de Vijver & Leung, 1997; Schwartz; 1994).

The research at hand attempted to do exactly this by exploring the relationship between four of Hofstede's (2001) cultural dimensions and the tendency of entrepreneurs to focus on several of Dew et al.'s (2009) categories that together make up Sarasvathy's (2001a) processes of logical framing. Specifically, based on scores of Brazil and the Netherlands on Hofstede's (2001) cultural dimensions of Uncertainty Avoidance, Masculinity, Individualism versus Collectivism and Power Distance, the average tendency of Brazilian and Dutch student-entrepreneurs to focus on avoiding contingencies, alliances and partnerships, setting of goals, and non-predictive control on the future were compared. For the research at hand, prior reports on the EPICC project were moreover extensively analyzed to highlight contradicting results and friction in theoretical argumentation. Although the expectations of the hypotheses postulated in the research at hand were grounded in theory and previous empirical findings, statistical analysis of the means of Brazilian and Dutch student-entrepreneurs did not lead to acceptance of hypotheses 2-4.

The confirmation of Hypothesis 1 and the rejection of Hypotheses 2-4 indicate that the relationship between Hofstede's (2001) Value Dimensions and causation and effectuation (Sarasvathy, 2001a) might not be as straightforward as assumed in a lot of prior research done for the EPICC project. It is very plausible that there are external factors at play and the influence of culture is indirect and exerted through other processes, such as dissatisfaction (Hofstede et al., 2004), rather than direct. Indeed, culture, in various forms, is often depicted as a moderator between contextual factors and entrepreneurial outcomes, i.e. culture may act as a catalyst rather than a causal agent (Hayton et al., 2002). The actual influence of Hofstede et al.'s (2004) Dissatisfaction theory however remains to be further empirically investigated.

In prior, comparable research for the EPICC project some hypotheses were confirmed, although taken together the results can be said to be arbitrary at best. Based on a thorough review of both existing theory and prior reasoning of researchers working on the EPICC project, the paper at hand argued that the effects of one value dimension (Hofstede, 2001) may be offset by the effects of other dimensions. For example, as explained before in section 6 discussing the results of the analysis, the high score of

Brazil on Hofstede's (2001) Masculinity index, being a lot higher than the score of the Netherlands, may have offset the influence of collectivism and uncertainty avoidance on forming alliances.

Indeed, although Hofstede's (2001) dimensions indicate the intensity of cultural values, they cannot be used to determine the relative importance of each dimension (Yenageh et al., 2009). Hofstede's (1980) Cultural Values Theory provides no indications as to which dimensions are central to the reliance of respondents on elements of causation and effectuation. While the research at hand attempted to explore the influence of multiple Hofstede (2001) indices on Sarasvathy's (2001a) and Dew et al.'s (2009) categories of cognitive processes, it may be interesting to isolate the effects of the individual indices by exploring differences in average tendencies between respondents from countries that lie around extremes of these indices. However, care must be taken in ensuring that these countries differ significantly on a single one of these indices and are comparable on others to ensure that results are not still influenced by scores on other dimensions. Another interesting possibility would be to systematically compare a large quantity of countries to facilitate accurate interpretation of observed differences.

8. LIMITATIONS

8.1 THE RESEARCH INSTRUMENT

As stated before, to ensure internal validity both groups of respondents were presented with, and asked to solve, the case study in their native language, with the translation of the Brazilian case being checked and double checked by native Brazilian Portuguese speakers to ensure consistency between the two cases. Amounts were stated in local currency and prices were compared to local price levels to ensure that these did not differ greatly from conventional prices, which could have led to different interpretations. However, the possibility of differences between the two cases due to translation or conversion must be taken into account when interpreting the results. Furthermore, with the interrogator and first coder being a recent Portuguese speaker, learning Portuguese while conducting the research and refining the language proficiency while transcribing the interviews, interpretation issues cannot be completely ruled out. While always attempting to transcribe the recordings of the verbal protocols as accurately as possible, occasionally some lines had to be left out due to incomprehensibility.

Respondents were asked to provide their contact details to keep the option of further contact with the respondents open. However, because confidentiality was explicitly ensured to the respondents, a bias of giving politically correct answers because of this fact is assumed to be negligible. Furthermore, the interrogator was acquainted with four out of the twenty respondents prior to the case study. However, familiarity was limited to a maximum of three months and prior contact was superficial. Nonetheless, possible bias occurring because of these respondents giving politically correct answers has to be taken into account.

8.2 REPRESENTATIVENESS OF THE SAMPLE

In the research at hand, the coded data resulting from 19 think-aloud protocols of Brazilian student-entrepreneurs was compared to that of 44 Dutch student-entrepreneurs, together comprising a limited group of respondents. However, applying the think-aloud method in gathering the data is said to provide the remedy to limited external validity due to a small sample of respondents since the unit of analysis is the semantic chunk and not the subject (Dew et al., 2009).

Furthermore, it is reasonable to expect that countries can be segregated into culturally homogeneous regions (Hayton et al., 2002). Still, all Brazilian respondents were from Goiânia, Brazil, and taking the vast size of the country into account, one should be cautious when attempting to generalize the results to include all of Brazil.

8.3 OPERATIONALIZATION OF CULTURE

Although Hofstede's (1980) work has been praised by many scholars, it has also received considerable criticism, with the criticism of McSweeney (2002a; 2002b) being the most cited. These criticisms include his findings not being generalizable beyond IBM (Soares et al., 2007), and the process of identification of dimensions not being theoretically derived (Albers-Miller & Gelb, 1996) and capitalizing on chance (Erez & Early, 1993). Furthermore, his findings are said to be a subjective and arbitrary aggregation of items (Dorfman & Howell, 1988; Fernandez et al., 1997). Finally, critics argue that his dimensions are non-exhaustive (Erez & Earley, 1993; Schwartz, 1994; Lenartowicz & Roth, 2001) and that applicability of his dimensions to all countries is questionable (Soares et al., 2007).

Another oft-cited criticism pertains to the possibility of Hofstede's findings being outdated (e.g. Soares et al., 2007) since the first empirical work, which uncovered the first four dimensions, took place in 1967-76. However, change of cultures is believed to be very slow (Sivakumar & Nakata, 2001) and changes in cultures big enough to invalidate the index scores should not be recognizable for a long period to come (Hofstede, 2001), although Taras et al. (2012) recently found that cultural change may be occurring faster than expected.

Taras et al. (2012) responded to several of these criticisms by providing an updated set of national culture scores on Hofstede's (2001) dimensions for separate decades, based on a meta-analysis of 451 studies that used models and research designs comparable to that used by Hofstede. The authors claim their scores to be more accurate because they are based on more recent data, and more generalizable because they relate to a broader range of respondents than merely IBM employees. This has led to some EPICC researchers to use Taras et al's (2012) scores instead of Hofstede's (2001) scores (e.g., Bode, 2013).

However, Taras et al. (2012) do not provide separate scores for Brazil but instead only provide a lump score for South America. As can be seen in Table 30 in the annex, comparing Hofstede's (2001) original scores for South-American countries for which they are available, there is quite some variability among country scores on the dimensions used, rendering the scores less suitable to represent Brazilian culture. It should moreover be noted that in their attempt to replicate Hofstede's original approach as closely as possible, Taras et al.'s (2012) scores share many of the limitations of Hofstede's original work.

The GLOBE study (House et al., 2004), a recent extension of the Hofstede (1980; 2001) study which tries to overcome most of these limitations, might be more applicable to future research since it is less criticized. This may be because there are fewer controversial issues but it is more probable that this is due to the GLOBE dimensions being

more recent, and therefore not yet fully analyzed by scholars. All in all, both Hofstede and GLOBE are highly valuable studies on cross-cultural management, supported by powerful arguments as to their validity, and there is no general consensus in the research community on which model should be preferred (Venaik & Brewer, 2010). One should however keep the limitations of Hofstede's (2001) cultural dimensions into account when interpreting the results of the research at hand.

The scores used for this study are based on direct values inference (IVI), meaning that the expected relationships in research at hand are based on secondary data without directly measuring members of the group (Soares et al., 2007). What is more, although culture is most commonly conceptualized at the national level (Stephan & Uhlaner, 2010), several scholars argue that community-level culture might be more proximal to entrepreneurs' actions and decisions (e.g. Davidsson, 1995; Tung, 2008; García-Cabrera & Garcia-Soto, 2009). Hofstede's (2001) value scores might therefore be diverging from the actual cultural values of the respondents. Although data on these actual cultural values of respondents was collected by means of Hofstede's VSM survey (Hofstede, 2001), analysis of this variance is outside the scope of this research. Possible differences on cultural values must however be taken into account when interpreting the results.

Also, instead of using the actual scores of Brazil and the Netherlands on Hofstede's (2001) value indices, because of the exploratory nature of the research the country was used as a proxy. Because members of a nation tend to share a similar language, history, religion, understanding of institutional systems, and sense of identity (Hofstede, 1980), using country as a proxy for culture is common in business applications. It may however very well be that countries differ on other factors beyond culture, such as on institutional aspects, and these differences may then actually cause the observed variance. The thesis at hand attempted to take these institutional and contextual differences beyond culture into account to some extent by incorporating Hofstede et al.'s (2004) dissatisfaction hypothesis. Care must however still be taken when interpreting the results.

Finally, entrepreneurs are said to be typically a minority within their own culture (Soares et al., 2007), which was first coined by Etzioni (1987) as social legitimation and has connotations of Hofstede et al.'s (2004) dissatisfaction hypothesis. It may thus be that Hofstede's (2001) indices, being broadly defined measures of general culture instead of directly addressing aspects of culture that are most significant to entrepreneurship, do not capture those aspects of culture particularly relevant to the student-entrepreneurs researched (Busenitz et al., 2000). However, since no significant differences in the means of Brazilian and Dutch student entrepreneurs were found on the selected categories of Sarasvathy's (2001a) modes of logical framing (except for the focus on non-predictive control, for which Hofstede's dissatisfaction hypothesis has

been taken into account), this is merely to be taken into account when weighing the explanations of why the hypotheses were rejected.

8.4 THE CONTROL VARIABLES

The One-Way ANOVA test of the control variables indicated that the respondents' tendency to focus on either effectual or causal reasoning was not significantly influenced by their study background or family background. A bivariate test of these variables such as the One-Way ANOVA however, is less reliable than a multiple regression analysis of the separate variables. Such an extensive multiple regression analysis is however outside the scope of this research and the One-Way ANOVA was therefore used as a workaround. Because of the very low significance rates provided by the One-Way ANOVA it is not expected that multiple regression analysis will yield different results, but care must nonetheless be taken when interpreting the results.

9. IMPLICATIONS FOR RESEARCH AND PRACTICE

Whereas both culture (e.g. Triandis, 1972; Hofstede, 1980, Trompenaars, 1992; Schwartz, 1994; House et al., 2004) and entrepreneurship (e.g. Birley, 1987; Bird, 1989; Etzioni, 1987; Acs et al., 2008) have been extensively researched, research on the influence of culture on entrepreneurship has unfortunately not led to a lot of consensus to date (Soares et al., 2007). Insight into the relationship between culture and entrepreneurship contributes to a more fine-grained understanding of how new venture creation efforts can be supported. Furthermore, more insight helps to address contingencies and enables scholars and policy makers alike to derive recommendations and for more strategic management by entrepreneurs. Relating entrepreneurial characteristics with entrepreneurs' environments can furthermore help create a more dynamic view of entrepreneurship in general.

In particular, Sarasvathy's (2001a) theory of effectuation questions the universal applicability of the causation-based model of entrepreneurship which is predominant in business schools. Effectuation may moreover in some cases more accurately explain the actual thoughts and behaviors of entrepreneurs (Perry et al., 2011). In an attempt to take the current state of research into causation and effectuation (Sarasvathy, 2001a) to the next stage, the research at hand set out to analyze whether there is an empirical relationship between causation and effectuation and culture (Sarasvathy, 2001a). In doing so, a case is made for incorporating Hofstede et al.'s (2004) dissatisfaction theory and other possible contextual factors into the equation in future research.

Although no significant results were found beyond hypothesis 1, the research at hand provides potentially fruitful avenues for future research on the subject. Specifically, since culture is a multi-dimensional construct, meaning that several cultural factors are at play in each country that is taken into the analysis, one should attempt to isolate the influence of these separate factors in attempting to determine how effectuation processes are influenced by culture.

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11. ANNEXES

ANNEX 1 - DE CASE

Introductie

In dit experiment gaat u tien beslissingsproblemen oplossen. Deze problemen komen voort uit de context van het opzetten van een nieuw bedrijf met een denkbeeldig product. Een meer gedetailleerde beschrijving van dit product volgt na deze introductie.

Voordat u zich in de productbeschrijving en de problemen gaat verdiepen vraag ik u om enige mate van creativiteit. Zie uzelf in de rol van de hoofdondernemer die het bedrijf opzet. U heeft erg weinig geld om het eigen bedrijf te starten, maar u heeft 5 jaar ervaring op het gebied van koffie verkoop.

Beschrijving

Sinds enige tijd heeft u lopen denken aan het starten van een eigen koffiecorner op uw universiteit. Uw inspiratie kwam voort uit het feit dat wanneer u als student een verse kop koffie wilde hebben, dit niet mogelijk was. U hield niet van de automatenkoffie die aanwezig was in de gebouwen van de universiteit. U moest voor deze kwalitatief mindere koffie een bedrag betalen wat niet in relatie stond met wat u voor dat geld mocht verwachten. U weet wat er wel mogelijk zou kunnen zijn omdat u al 5 jaar ervaring heeft in het werken in een koffiecorner in het dorp waar u oorspronkelijk vandaan komt.

U zag dat er andere koffiecorners bestonden die erg succesvol waren, maar die waren vaak gerelateerd aan erg dure franchiseconcepten. Daarom heeft u bedacht dat het mogelijk moet zijn om een eigen koffiecorner te beginnen. U heeft in diverse media gezien dat er een groeiende vraag is naar koffie in uw thuisland.

U hebt alle mogelijke voorzorgsmaatregelen op het gebied van intellectueel eigendom geregeld. De naam van uw koffiecorner is Koffie B.V.

Probleem 1: Marktidentificatie

Voordat we gaan kijken naar gegevens over de markt wil ik u vragen de volgende vragen 1 voor 1 te beantwoorden:

- 1. Wie zouden potentiële klanten kunnen zijn voor uw koffiecorner?**
- 2. Wie zouden uw potentiële concurrenten kunnen zijn?**
- 3. Welke informatie zou u uit willen zoeken over uw klanten en concurrenten? Maak een lijstje van vragen die u in dit kader zou willen stellen.**
- 4. Hoe zou u deze vragen beantwoord willen zien? Wat voor soort marktonderzoek zou u willen uitvoeren?**
- 5. Wat denkt u dat de groeimogelijkheden zijn voor dit bedrijf?**

Probleem 2: Het beschrijven van de markt

Bij dit probleem wordt u gevraagd een paar beslissingen te maken ten aanzien van de marketing.

Op basis van secundaire informatiebronnen (publiek toegankelijke marktrapporten, etc.) schat u dat er 3 segmenten zijn die geïnteresseerd zouden kunnen zijn in uw koffiecorner;

<u>Segment</u> <u>omvang</u>	<u>Geschatte</u> <u>totale</u>
Studenten	40.000
Medewerkers universiteit	20.000
Bezoekers (op jaarbasis)	10.000

- Een schatting van koffie-verkoop op jaarbasis in uw thuisland komt uit op €448 miljoen.
- Een schatting van speciale koffie verkoop op jaarbasis is €100 miljoen.

In beide gevallen is er een verwachte groei van minimaal 5% per jaar voor de aankomende 5 jaar.

De volgende resultaten volgen uit eerstehands (direct) marktonderzoek door uzelf.

Vragenlijst 1 – Een online vragenlijst, verstuurd per e-mail aan studenten, medewerkers en bezoekers (met toestemming) bevatte vragen gericht op het achterhalen van de mate van interesse voor de koffiecorner. Tevens werd gevraagd, op het moment dat aangegeven werd dat er interesse voor was, welke prijzen men bereid was te betalen voor een kop koffie.

In totaal vulden 500 van de 1000 mensen die gevraagd waren de enquête in.

Resultaten

<u>Bereid te betalen(€)</u>	<u>Studenten (%)</u>	<u>Medewerkers (%)</u>	<u>Bezoekers (%)</u>
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
<hr/>			
Totaal	100	100	100

Vragenlijst 2 – Papieren vragenlijsten, uitgedeeld tijdens lunchpauzes.

Resultaten

<u>Bereid te betalen(€)</u>	<u>Studenten (%)</u>	<u>Medewerkers (%)</u>	<u>Bezoekers (%)</u>
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
<hr/>			
Totaal	100	100	100

Vragenlijst 3 – Een focusgroep van medewerkers, anders dan diegenen die meededen aan de online en papieren vragenlijst werd gevraagd mee te doen met het onderzoek.

De medewerkers van de universiteit die mee hebben gedaan met het focusgroep-onderzoek vonden het plan van de koffiecorner erg interessant. Zij gaven echter aan dat het scala aan koffies wellicht moest worden uitgebreid en dat ze in dat geval bereid waren €1,50 of meer te betalen. Met het huidige aanbod zouden ze €1,00 - €1,25 uit willen geven, maar dan werd er wel verwacht dat er een bonussysteem ingevoerd zou worden waarbij consumenten konden sparen voor kortingen na een x-aantal koppen koffie te hebben gekocht.

Zowel bij het onderzoek tijdens de lunch als bij de focusgroep waren de reacties ten aanzien van de koffiecorner erg positief en enthousiast. Beide partijen gaven goede feedback op specifieke componenten om tot verbeteringen te komen. De medewerkers zijn in het bijzonder geïnteresseerd in het uitbreiden van het aanbod bovenop de reguliere koffies. Ze geven aan dat er meer diversiteit nodig was als men het product bij hen aan de man wilde brengen. Ze gaven daarnaast ook aan dat er bedrijven waren die wellicht reclame op mokken konden plaatsen waarvoor dan korting kon worden bedongen.

Marketing

Op basis van alle marktonderzoek dat u uitgevoerd heeft komt u tot de volgende kosten om uw product verder in de markt te zetten en naamsbekendheid te geven;

Internet	€200 meteen te voldoen + €25 per maand daarna
Kranten	Relatief goedkoop – maar kosten voor deze reclames kunnen oplopen tot €500 per stuk
Bioscoop	€2000 tot 4000 per maand, en €1000 voorafgaand te betalen
Reclame op de lokale TV	€5000 tot 10.000 voorafgaand te betalen

Directe reclame elders (denk aan kantines, het uitdelen van aanstekers met de naam van de koffie corner, etc.) betekent dat u verkopers moet trainen.

Concurrenten

Geen van de vier onderstaande potentiële concurrenten verkoopt goedkope kwaliteitskoffie op uw universiteit dan wel in het centrum van de stad. U bent uniek ten aanzien van dat concept.

Bedrijf	Algemeen prijsniveau per kop koffie	Omzet	Waar?
Starbucks	€ 3,00	€6.5 miljard	Grote steden / wereldwijd
Kaldi	€ 2,00	€225 miljoen	Grote steden / Europa
Simon Levelt	€ 2,50	€130 miljoen	Grote steden / Europa
Douwe Egberts winkel	€ 2,00	€25 miljoen	Grote steden/ Nederland

Deze bedrijven hebben een netto opbrengst van 25% op hun verkopen.

In dit stadium wordt u gevraagd om de volgende beslissingen te maken (denk er daarbij aan om hardop te blijven praten);

1. Aan welk marktsegment / segmenten wilt u uw product gaan verkopen?
2. Welke prijs wilt u op het product plakken?
3. Hoe wilt u aan het door uw gekozen segment / segmenten gaan verkopen?

Probleem 3: Salaris

U bent het bedrijf begonnen met erg weinig geld. De voornaamste manier van adverteren is 'face-to-face' promotie. U bent zes maanden bezig met marketing-activiteiten om uw product in de markt te zetten. U heeft de prijzen van uw product gezet op het laagste segment (zoals aangegeven in de vragenlijst); 0.50 – 0.75 euro. U heeft gemiddeld 3000 klanten per maand. Op basis van diverse suggesties die u van klanten heeft gekregen denkt u dat u ook speciale koffies zou kunnen gaan verkopen in het prijssegment 1.25 – 1.50 euro. Dit zou voornamelijk kunnen als u het interieur van de koffiecorner zou herontwerpen waarbij u het meer 'cachet' zou kunnen geven.

U heeft uw laatste spaargeld ingezet en uw limiet van uw creditcards gebruikt om er voor te zorgen dat u voldoende koffies op voorraad heeft. U heeft dat ook nodig om mee te doen aan een wedstrijd waarvan 'architectuur ontmoet catering' het thema is. Deze wedstrijd zal zorgen voor veel publiciteit.

U heeft vier medewerkers – en u heeft geen geld meer om de komende salarisuitbetaling voor elkaar te krijgen. U schat in dat u 30,000 euro nodig heeft om de eerstkomende drie maanden te overleven en om een super cool concept voor een nieuwe koffiecorner te bedenken op basis waarvan u mee kan doen met de wedstrijd. U heeft vier opties;

1. Lenen van de ouders van uw vriend(in) – zij zijn niet erg rijk, maar kunnen waarschijnlijk wel 30,000 euro regelen als het nodig zou moeten zijn.
2. Lenen van oude vrienden die u kent van de universiteit en van uw oude baan.
3. Uw ouders overtuigen van het feit dat ze een extra hypotheek op hun woning nemen.
4. Uw medewerkers overtuigen dat ze over 3 maanden uitbetaald zullen worden.

Welke van deze opties kiest u? Waarom?

Probleem 4: Financiering

Uw nieuwe concept van de koffiecorner heeft de eerste prijs gewonnen bij de wedstrijd 'architectuur ontmoet catering' in de categorie 'beste nieuwkomer'. Dit heeft er toe geleid dat grote koffie-leveranciers zoals Nestlé Netherlands B.V. gevraagd hebben naar mogelijkheden om het concept verder op de markt te zetten. Dit zou veel media aandacht krijgen. U schat in dat het verder ontwikkelen van dit concept zo'n zes maanden zou moeten gaan duren en vervolgens drie maanden om het via drie grote kanalen bekendheid te geven – Internet, landelijke kranten en landelijke tv. De koffie zal worden geprijsd op €1,90 per kop. Dit is de prijs in de nieuwe koffiecorner. U schat dat u €150.000 nodig heeft om quitte te draaien (ten tijde van het derde kwartaal van het tweede jaar). Hierbij zitten de kosten inbegrepen voor verbetering van het nieuwe concept, het aanstellen van excellente (ondersteunende) medewerkers, het trainen van de verkopers en een enorm grote advertentie campagne via internet, kranten en tv.

U schat in dat de verkoopcijfers voor de aankomende vijf jaar als volgt zullen zijn (u bent aan het begin van het eerste jaar);

	Jaar 1	Jaar 2	Jaar 3	Jaar 4	Jaar 5
Verkopen	€ 100.000	€ 150.000	€ 300.000	€500.000	€1 M
Winst	€ < 0	€ 20.000	€40.000	€200.000	€300.000

U heeft drie financieringsopties;

Optie 1; een durf-investeerder met een focus op startende ondernemingen in de catering en aanpalende terreinen is bereid de €150.000 te financieren voor een belang van 48% van de aandelen.

Optie 2; een vriend van de familie die veel ervaring heeft in de catering industrie is erg gretig om een vennootschap aan te gaan met u – voor een belang van 33% in het bedrijf. Hij heeft €150.000 beschikbaar maar wil wel een basis salaris van €40.000 per jaar. Hij gaat akkoord met een basissalaris van €30.000 euro per jaar voor de eerste twee jaar. U kunt goed overweg met deze man, u respecteert hem en u heeft geen negatieve gevoelens jegens hem.

Optie 3; u kunt doorgaan met het bedrijf op basis van de huidige financiering – resulterend in een significant langzamere groei.

Welke optie kiest u? En waarom?

Als de durf-investeerder ook akkoord gaat met een aandeel van 33%, welke optie zou u dan kiezen?

Probleem 5: Leiderschap en visie

U heeft de financiering gevonden en u heeft een contract getekend met twee grote koffieleveranciers om uw koffiecorner te promoten. U heeft nieuw personeel aange-trokken en bent in een nieuw bedrijfspand gaan zitten. Een lokale krant is bezig met een serie over lokale ondernemers en wil een artikel over u schrijven. U beseft zich dat dit artikel een cruciaal moment zou kunnen zijn in de ontwikkeling van uw bedrijf en u ziet dit als een mogelijkheid om de wereld (en uw nieuwe personeel) te laten zien wat uw toekomstige ideeën zijn.

De serie artikelen is erg succesvol en wordt routinematig opgepikt door landelijke kranten. Een van de succesfactoren is de krantenkop, bestaande uit een slogan waarin de visie van de ondernemer ten aanzien van waar het bedrijf in 2013 zou moeten staan, tot uiting komt. Er zijn een aantal mogelijkheden voor deze slogan;

1. Starbucks is het verleden – Koffie B.V. is de toekomst.
2. We azen erop minstens duizend medewerkers te hebben in 2015.
3. De snelst groeiende koffie cateraar.
4. Investeer in Koffie B.V. – geniet van Nederlandse traditie.

Welk van bovenstaande slogans kiest u? Waarom? Als u niet kan kiezen uit bovenstaande slogans en u heeft uw eigen ideeën voor een alternatief, wees vrij om dat te doen.

Probleem 6: Herontwerpen, deel 1

U bent bijna aan het eind van uw vijfde jaar en u bent er maar net in geslaagd om quitte te draaien (veel later dan verwacht). U heeft uw deuren geopend naar alle drie de klant segmenten (studenten, medewerkers en bezoekers). Verkopen, alhoewel stabiel en continu, zijn behoorlijk vlak. U begint te twijfelen hoe u uw doelen om te groeien kunt behalen. U besluit een serieus marktonderzoek uit te voeren om uit te vinden hoe u de verkoop omhoog zou kunnen brengen. U organiseert een bijeenkomst met een focusgroep waarbij potentiële en bestaande klanten zijn opgenomen. Het grote probleem blijkt de grote 'split' te zijn tussen reguliere koffie en meer gespecialiseerde producten.

Meer dan 90% van de deelnemers in de focusgroep vinden het reguliere product interessant. Maar als speciale koffies worden bekeken blijkt er een groot verschil in opinie te zijn. De deelnemers die in eerste instantie meer gebruik maken van reguliere koffie blijken bijna nooit gespecialiseerde koffies te kopen en vragen zich openlijk af waarom dat 'elite spul' er überhaupt is. Diegenen die meer geïnteresseerd zijn in de speciale koffies richten zich eigenlijk helemaal niet op reguliere koffies en vinden dat deze reguliere koffies de sfeer naar beneden haalt.

Hoe reageert u op deze feedback?

Probleem 6: Herontwerpen, deel 2

U gaat terug naar het begin en denkt na over een concept waarbij u voor beide partijen een oplossing zou kunnen vinden. U vindt deze in een concept met de huidige reguliere koffiecorner samen met een nieuwe winkel. Het huidige concept zal meer gericht zijn op de meer reguliere koffies. De nieuwe winkel zal gericht zijn op meer exclusieve koffies en thee. Bij de meer exclusieve koffie kunt u denken aan Aziatische, Latijns-Amerikaanse en Afrikaanse koffiesoorten. In totaal zouden dat 20 verschillende soorten zijn. De thee is verkrijgbaar in 15 verschillende soorten.

Daarnaast zijn in de nieuwe winkel een breed scala aan gebakjes en exclusieve cupcakes verkrijgbaar. Vervolgens zijn er ook mogelijkheden boeken te lenen en kranten te lezen, en hebben klanten toegang tot gratis draadloos internet.

U bent van plan om in de reguliere koffiecorner 5 types reguliere koffie te verkopen. Te denken valt aan cappuccino, espresso, etc., en daarnaast 5 reguliere theesoorten, zoals China Blossom en Rooibos. Verder een beperkt aanbod aan donuts en muffins.

U start met het uitwerken van het idee van de meer exclusieve winkel door 15 verschillende koffies en 10 theesoorten aan te bieden, met een iets beperkter aanbod in de gebakjes & cupcakes dan uiteindelijk de bedoeling is. Samen met gratis kranten en gratis draadloos internet is dat wat u aan de focusgroep laat zien. Het blijkt dat de exclusieve winkel met veel enthousiasme wordt ontvangen en mensen zijn bereid 2 tot 2,5 keer zoveel te betalen als wat eerder werd gevraagd.

Een van de vereisten echter is dat u de uitbreiding moet maken die u in gedachten had (15 soorten thee, 20 soorten koffie, de boeken, de kranten en gratis draadloos internet). U moet besluiten of u deze grote verandering in het concept daadwerkelijk wilt doorvoeren of dat u zich gaat richten op 1 van de 2 concepten. Als u wilt uitbreiden dan zijn de kosten minimaal €200.000 met daarnaast nog een aparte marketing-campagne.

Jaar	1	2	3	4	5	6	7	8
Verwachte verkoop (€M)	0.10	0.50	1	6	12	18	24	30
Daadwerkelijke verkoop (€M)		0.14	0.48	0.84	2.8	4.2		

Welke van de 2 alternatieven (focus op 1 van de 2 doelgroepen, danwel beide doelgroepen bedienen) kiest u? En waarom?

Als we aannemen dat u gekozen heeft voor het concept van de uitbreiding (beide doelgroepen bedienen), dan dient u nu uit de volgende 3 opties te kiezen;

1. U laat het herontwerp binnen het eigen bedrijf uitvoeren; verwachte kosten; €250.000
2. U laat het ontwerp over aan een ander bedrijf in uw thuisland; verwachte kosten €200.000
3. U laat het ontwerp over aan een ander bedrijf in het buitenland; verwachte kosten €100.000

Welke optie kiest u? En waarom?

Probleem 7: Groei van het bedrijf, deel 1

U bent bijna aan het eind van het zesde jaar. U heeft nu 2 typen bedrijven ondergebracht onder Koffie B.V.

1. Gewoon Koffie (verkoop tussen de €1,00 en €5,00 pp) waar u een beperkt aantal 'standaard' soorten koffie en thee verkoopt met daarbij een beperkt aantal donuts, cupcakes en chocolade.
2. Exquise (verkoop tussen de €5,00 en 10,00 pp) waar u het 'complete scala' aanbiedt.

Het aantal verkooppunten en daarmee het aantal nieuwe managers is op 20 uitgekomen, daar waar het er oorspronkelijk 3 waren. U bent nog steeds bezig om het aantal verkopers uit te breiden en daarnaast ontwikkelt u een nog betere versie van Exquise om de rijkere buurten in uw stad te kunnen bedienen. Jan van Zomeren, een prima verkoper (voorheen actief in de verkoop van de reguliere koffie) die het verkoopteam vanaf de eerste dag geleid heeft, is niet in staat gebleken zich aan te passen aan de nieuwe ontwikkelingen. Hij is duidelijk niet de persoon om de nieuwe Exquise winkels te leiden. Hoe gaat u om met deze situatie?

Jaar	1	2	3	4	5	6	7	8	
						Herziene			
versie									
Verwachte verkopen (€M)	0.10	0.50	1	6	12		6	12	20
Daadwerkelijke verkoop (€M)		0.14	0.48	0.84	2.8	4.2		8.6	

Zou u hem;

1. **Ontslaan?**
2. **Een nieuwe manager boven hem aanstellen om het verkoopteam te leiden? Zo ja, zou u voordat u dat doet met Jan overleggen? Hoe zou u dit nieuws aan hem brengen?**

Voel u vrij om uit te weiden over hoe u met deze situatie om zou gaan.

Probleem 7: groei van het bedrijf, deel 2

Alhoewel uw bedrijf al enige tijd aan het groeien is, probeert u toch de ‘ondernemerschapscultuur’ binnen het bedrijf levend te houden. U begint echter te merken dat uw partner meer en meer het idee uitbeeldt van een meer “zakelijke ambiance” – lange vergaderingen, ingewikkelde organisatietabellen, dure accountants, consultants om “het marktpotentieel te optimaliseren”, enzovoort. Als u daarover met hem in gesprek raakt dan merkt u dat hij denkt dat de tijd aangebroken is voor een meer zakelijke aanpak. Deze meer professionele aanpak zou volgens hem zelfs goed zijn voor het bedrijf an sich;

Jaar	1	2	3	4	5	6	7	8	
						Herziene versie			
Verwachte verkoop (€M)	0.10	0.50	1	6	12	6	12	20	
Daadwerkelijke verkoop (€M)	0.14	0.48	0.84	2.8	4.2		8.6	20	27.5

Hoe zou u met deze situatie omgaan? Denkt u dat het tijd wordt voor Koffie b.v. om meer ‘zakelijk’ te gaan?

Probleem 8: Aanstellen professioneel management

U bent aangeland in het 8e jaar. Het gaat uitstekend. De groeicijfers zijn beter dan de oorspronkelijke doelen en het marktaandeel wordt groter. Uw verkopen zijn €27,5 miljoen en u voorziet een groei van 25% per jaar voor de aankomende 3 jaar.

Jaar	1	2	3	4	5	6	7	8	
						Herziene versie			
Verwachte verkoop (€M)	0.10	0.50	1	6	12	6	12	20	
Daadwerkelijke verkoop (€M)	0.14	0.48	0.84	2.8	4.2		8.6	20	27.5

Het advies van de Raad van Bestuur van Koffie B.V. is om professioneel management aan te stellen om het bedrijf te runnen opdat u zich kunt richten op de groei en het bedenken van nieuwe strategische initiatieven. Gesteld dat u al een drietal 'high potentials' voor ogen heeft uit te nodigen voor een interview voor de positie van 'Chief Operating Officer' (COO), hoe zou u dit interview voorbereiden?

Geef u aub de type vragen die u zou stellen, de interviewtechnieken die u zou gebruiken en kritische onderwerpen die u aan de orde zou stellen tijdens het interview.

Probleem 9: Goodwill

U wordt gecontacteerd door het hoofd van een school in de binnenstad die samenwerkt met 10 andere scholen zoals de hare. Zij geeft aan dat zij denkt dat Exquise een perfecte leeromgeving zou kunnen zijn voor haar studenten binnen de opleiding 'Catering'.

Zij vraagt of u samen met een aantal zeer enthousiaste onderwijzers een basis lespakket zou willen ontwikkelen voor de studenten zodat ze in Exquise zouden kunnen werken. Dit project betekent niet alleen een investering van €100.000 voor aanpassingen binnen uw bedrijf, maar ook een redelijke portie van uw tijd gedurende een periode van 6 maanden en daarnaast wordt uw aanwezigheid gevraagd bij minstens 10 colleges per jaar voor minimaal enkele jaren.

N.B.; uw verkopen zijn op een niveau van 27,5 miljoen euro per jaar en u voorziet een groeipercentage van 25% voor de aankomende 3 jaar.

Neemt u het initiatief voor dit project?

Zo niet, waarom niet?

Indien 'ja', zou u dan:

- 1. Het project doneren?**
- 2. Het voor de kostprijs verkopen? (€100.000)**
- 3. Het voor een gangbare marktwaarde verkopen?**

Waarom?

Probleem 10: Exit

U bent nu in het 10e jaar aangeland. Exquise is een groot succes en mede dank zij uw nieuwe doelgroepen strategie groeit Gewoon koffie ook naar behoren. U heeft 3 andere catering concepten opgekocht en u maakt een omzet van €38 miljoen. U schat in dat u binnen 1 jaar €70 miljoen omzet zal maken.

Op dit moment zijn er 2 mogelijke richtingen;

Richting 1

Uw accountants en andere financiële experts denken dat het een goed moment is om het bedrijf naar de beurs te leiden. De IPO aandelenmarkt (nieuwe aandelen) is in opkomst en catering past daar prima binnen. Zij schatten dat de eerste prijszetting van 2 miljoen aandelen op €30 per aandeel zal worden gezet. In totaal heeft het bedrijf 12 miljoen aandelen.

Richting 2

Starbucks komt naar uw kantoor en doet een bod op uw bedrijf. Het blijkt dat ze besloten hebben om zich meer in het luxere segment te gaan begeven en ze hebben besloten dit te doen door het opkopen van andere bedrijven. Ze zien uw bedrijf als een prima optie voor deze strategie en ze bieden u €300 miljoen.

Jaar	1	2	3	4	5	6	7	8	9	10
						Herzien concept				
Verwachte verkoop (€M)	0.10	0.50	1	6	12	6	12	20	30	45
Daadwerkelijke verkoop (€M)	0.14	0.48	0.84	2.8	4.2		8.6	20	27.5	38

Welke van bovenstaande 2 richtingen kiest u? En waarom?

Dank u voor uw medewerking. U krijgt nu nog een beperkt aantal vragen n.a.v. deze case.

ANNEX 2 - O CASO

Introdução

No seguinte experimento, você vai resolver dez problemas de decisão. Estes problemas surgem no contexto da construção de uma nova empresa para um produto imaginário. Uma descrição detalhada do produto segue esta introdução.

Antes de iniciar a descrição do produto e os problemas, eu preciso de um ato de imaginação criativa de sua parte. Eu peço que você se coloque no papel do empresário líder na construção desta empresa - ou seja, você tem muito pouco dinheiro para iniciar esta empresa, mas você tem cerca de cinco anos de experiência relevante de trabalho na área.

Descrição

Desde algum tempo, você esteve pensando em abrir uma pequena cafeteria na sua universidade. Sua inspiração para isto veio do fato de que quando você, como estudante, queria uma xícara de café fresco, não havia a possibilidade. Você não gosta do café das máquinas que estão disponíveis nos prédios da universidade. Junto a isso, você teve que pagar uma quantia de dinheiro, que não compensava em relação à qualidade do café. Você tem trabalhado em uma pequena cafeteria em sua cidade natal há 5 anos para que você saiba como esse negócio deve ser.

Você viu o sucesso de outras cafeterias, mas estas eram franquias caras, você pensou que deveria ser possível começar a sua própria. Em vários relatos em jornais e revistas que você leu que há uma demanda crescente para beber café em seu país.

Você tem tomado todas as precauções possíveis em matéria de propriedade intelectual. O nome da sua empresa é *Café, Inc.*

Problema 1: Identificar o mercado

Antes de olharmos para alguns dados de pesquisas de mercado, por favor, responda às seguintes questões - uma de cada vez:

- 1. Quem poderiam ser seus clientes potenciais para a cafeteria?**
- 2. Quem poderiam ser seus potenciais concorrentes?**
- 3. Que informações você procura sobre clientes potenciais e concorrentes – lista das questões que você gostaria que fossem respondidas.**
- 4. Como você vai descobrir esta informação - que tipo de pesquisa de mercado que você faria?**
- 5. Quais você acha que são as possibilidades de crescimento para esta empresa?**

Problema 2: Definição do mercado

Neste problema, você tem que tomar algumas decisões de marketing.

Baseado em pesquisa de mercado secundário (fontes publicadas, etc), você estima que existem três principais segmentos que estão interessados em beber café em sua cafeteria:

<u>Segmento</u>	<u>Tamanho total estimado</u>
Estudantes	40.000
Funcionários	20.000
Visitantes (anualmente)	10.000

- O valor estimado das vendas de café regularmente no Brasil é R\$ 1122 milhões
- O valor estimado das vendas de cafés especializados é R\$ 250 milhões

Ambos devem crescer a uma taxa mínima de 5% ao ano para os próximos 5 anos.

A seguir estão os resultados da pesquisa de mercado primário (direto) que você concluiu.

Avaliação # 1 - Os estudantes, funcionários e visitantes foram convidados através de questionários para manifestar o seu interesse em uma cafeteria. Além disso, eles foram solicitados a indicar o quanto eles estavam dispostos a gastar em café.

No total, 1000 pessoas foram convidadas e 500 responderam ao questionário.

<u>Dispostos a pagar (R\$)</u>	<u>Estudantes (%)</u>	<u>Funcionários (%)</u>	<u>Visitantes (%)</u>
1,25 – 1,85	52	26	45
1,85 – 2,50	30	38	32
2,50 – 3,10	16	22	15
3,10 – 4,35	2	9	8
4,35 – 6,25	0	5	0
<hr/>			
Total	100	100	100

Avaliação #2 - Questionários em papel, entregue durante a pausa para almoço entre aulas

<u>Dispostos a pagar (R\$)</u>	<u>Estudantes (%)</u>	<u>Funcionários (%)</u>	<u>Visi- tantes (%)</u>
1,25 – 1,85	65	21	51
1,85 – 2,50	25	49	42
2,50 – 3,10	10	19	7
3,10 – 4,35	0	8	0
4,35 – 6,25	0	3	0
<hr/>			
Total	100	100	100

Avaliação #3 – Grupo alvo de educadores (professores do ensino médio e escolas técnicas, e administradores)

Os funcionários da universidade que participaram do grupo alvo acharam o plano da cafeteria muito interessante - mas indicaram que deveria haver mais variedades de café para que eles estivessem dispostos a gastar R\$3,57 ou mais. Com a oferta atual, eles estariam dispostos a pagar de R\$2,50 - R\$3,10 e exigiria um sistema de bônus no qual eles poderiam ganhar descontos depois de uma certa quantidade de café bebido.

Tanto no almoço quanto no grupo alvo, os participantes são muito positivos e entusiasmados com a cafeteria. Eles oferecem-lhe um bom feedback sobre as características específicas e também estenderam sugestões de melhoria. Mas os funcionários são particularmente interessados em ir além do aspecto regular de café, eles deixam claro que muito mais diversidade seria necessária na tentativa de comercializar o produto para eles. Eles por exemplo indicam que existem empresas que podem ser capazes de imprimir propaganda em copos para descontos sobre o café.

Com base em toda sua pesquisa de mercado, chega-se as estimativas de custo a seguir para comercialização de seu produto.

Internet R\$500,- antecipadamente + R\$125,- por mês depois

Jornal R\$1250,- Relativamente barato - mas anúncios podem custar antecipadamente

Cinema R\$5000,- até R\$10.000,- por mês, com R\$2500,- antecipadamente

Anúncios na TV local R\$ 12,500 até R\$25.000 antecipadamente

Publicidade direta em outro lugar (como em garrafinhas de água, isqueiros com propaganda, etc) envolve recrutamento e formação de “representantes de vendas”.

Competição

Nenhum dos seguintes quatro concorrentes possíveis vende café de qualidade, a um preço justo, no centro de sua cidade - você é único a este respeito.

Companhia	Nível geral de preços por xícara de café	Receita	Onde é encontrado
<i>Starbucks</i>	R\$12,50	R\$16 bilhão	Grandes cidades / global
<i>Peet's</i>	R\$10,-	R\$560 milhão	Grandes cidades / na maior parte dos EUA
<i>Coffee Bean</i>	R\$11,25	R\$325 milhão	Grandes cidades / global
<i>Douwe Egberts store</i>	R\$6,25	R\$62,5 milhão	Grandes cidades/ Holanda

As empresas de cafeteria estão fazendo um retorno líquido de 25% sobre as vendas.

Neste momento, por favor, tome o seu tempo e fazer as seguintes decisões (por favor, continue pensando em voz alta conforme você chega em suas decisões):

Qual segmento/ segmentos de mercado você vai vender o seu produto?

Como você vai precificar o seu produto?

Como você vai vender por o seu segmento/ segmentos de mercado selecionado?

Problema 3: Conhecendo a Folha de Pagamento

Você iniciou a empresa com pouco dinheiro, usando promoções boca a boca como sua principal fonte de marketing. Você está comercializando seu produto há 6 meses. Você deu preços aos produtos baseado no limite inferior das pesquisas, em R\$1,25 – R\$1,85. Você tem cerca de 3000 clientes por mês. Baseado em inúmeras sugestões fornecidas pelos seus clientes, você acredita que pode começar a vender cafés especiais na faixa de R\$3,10 – R\$3,75. Isso seria especialmente o caso quando você redesenharia o interior da cafeteria para fazê-la ficar mais requintada.

Você tem investido suas últimas economias e aumentado o limite dos seus cartões de crédito, a fim de ter certeza de que o café que você pediu está em estoque - Você precisa disto para participar de uma competição chamada “Arquitetura no Setor Alimentício”, onde você vai ter muita exposição.

Você tem quatro funcionários - e você está sem dinheiro para quitar a próxima folha de pagamento. Você estima que precisa de R\$75.000, para sobreviver nos próximos três meses e chegar a um projeto superlegal da loja para poder participar na competição. Você tem as seguintes quatro opções:

1. Pedir emprestado para os pais da sua namorada(o) - que não são muito ricos, mas provavelmente poderiam colocar as mãos em R\$75.000 , se eles precisassem.
2. Pedir emprestado a alguns velhos amigos da universidade e seu trabalho antigo de quando era estudante.
3. Convencer os seus pais a hipotecar sua casa.
4. Convencer seus funcionários a esperar o período.

Qual dessas opções você escolheria? Por que?

Problema 4: Financiamento

O design da loja ganhou o primeiro prêmio na categoria novos talentos na competição 'Arquitetura no Setor Alimentício'. Isto, por sua vez, levou ao questionamento de grandes fornecedores de café como Nestlé Holanda BV para vender o conceito (com exposição multimídia completo) nacionalmente. Você estima que irá demorar seis meses para desenvolver o conceito em mais detalhe e cerca de três meses depois para começar a rodá-lo em três canais principais: Web, jornais nacionais e televisão nacional. O café terá preço de R\$7,00 por unidade. Você estima que vai precisar de R\$370.000, até o ponto de equilíbrio (no terceiro trimestre do segundo ano) - isso inclui melhorar o conceito, contratar funcionários excelentes, publicidade madura e completa e links na web, bem como o desenvolvimento de uma pequena equipe de vendas direta para as vendas no local.

Você estima as seguintes projeções de vendas para os primeiros cinco anos (você está no início do ano 1 agora):

	Ano 1	Ano 2	Ano 3	Ano 4	Ano 5
Vendas	R\$250.000,-	R\$370.000,-	R\$750.000,-	R\$1.250.000,-	R\$2.500.000,-
Ganhos	R\$ < 0	R\$50.000,-	R\$100.000,-	R\$500.000,-	R\$750.000,-

Você tem três opções de financiamento:

Opção 1

Um investidor de risco que se especializou em empresas do setor alimentício iniciantes e áreas adjacentes, esta disposto a financiá-lo com R\$370.000, por 48% da sua empresa.

Opção 2

Um amigo da família que tem uma vasta experiência no setor alimentício esta ansioso para entrar em parceria com você - por 33% da empresa. Ele é capaz de investir R\$370.000, mas quer trabalhar para a empresa com um salário base de R\$100.000, por ano. Ele concorda em aceitar um nível mínimo de R\$75.000, para os primeiros dois anos para manter a sua família, e adiar o resto para quando a empresa começa a fazer dinheiro. Você gosta e respeita este homem e não tem sentimentos pessoais contra ele.

Opção 3

Você pode continuar a empresa com fluxo de caixa interno - crescer em um ritmo muito mais lento.

Qual opção você escolheria? Por que?

Se o capitalista de risco também estivesse disposto a levar apenas 33% da empresa, qual opção você escolheria?

Problema 5: Liderança / Visão

Você encontrou o financiamento e assinou um contrato com dois grandes fornecedores de café para comercializar o seu produto. Você contratou novos funcionários e mudou-se para novas instalações. Um jornal nacional está fazendo uma série de reportagens sobre os empresários locais e quer fazer uma história sobre você - você sabe que esta entrevista seria um momento decisivo no desenvolvimento da sua empresa e você vê isso como uma oportunidade para transmitir ao mundo (e aos seus novos empregados) sua visão para o futuro da sua empresa. Esta série de artigos de jornal tem sido muito bem sucedida, tanto que rotineiramente é usada por outros jornais nacionais e redes de TV. Uma das razões para seu sucesso é a sua manchete, que consiste de uma citação de uma linha que capta a visão do empreendedor para a empresa - a atingir até o ano de 2012.

Você veio com várias possibilidades para a linha:

1. Starbucks é o passado - Café Inc. é o futuro.
2. Nosso objetivo é ter pelo menos mil funcionários até o ano de 2014.
3. O bufê de café de mais rápido crescimento.
4. Invista no Café Inc. - Desfrute da tradição Brasileira.

Qual dos acima você escolhe? Por que? Se você não escolhe qualquer um desses e quer sugerir novas idéias para uma alternativa, faça isso.

Problema 6: Re-desenvolvimento de Produto, Parte Um

Está quase no final do seu quinto ano de operação - que você só conseguiu empatar (mais tarde do que previsto). Você abriu as portas para todos os três segmentos (alunos, funcionários, visitantes). Vendas, enquanto eles estão firmes e contínuos, são bastante "sem graça" e você começa a duvidar se você nunca vai alcançar suas metas de crescimento. Você decide realizar uma iniciativa de pesquisa séria de mercado, a fim de descobrir como fazer crescer as suas vendas. Você organiza grupos focais com os clientes existentes e potenciais novos clientes. O principal problema parece ser a "grande divisão" entre o café regular e os produtos especializados. Mais de 90% dos participantes em seus grupos de foco encontraram os seus produtos regulares muito interessantes. Mas quando se trata de os cafés especializados, há uma clara divisão de opiniões. Os participantes que gostam principalmente dos cafés normais, quase nunca se preocuparam em ir e comprar cafés mais caros e se perguntam por que todas as "coisas de elite" estão lá, e aqueles que estão interessados sobretudo nos cafés especializados pensam que os produtos regulares rebaixam a atmosfera.

Como você responde a esse feedback?

Problema 6: Re-desenvolvimento de Produto, Parte Dois

Você vai voltar às origens e pensar em um conceito que poderia fornecer soluções para ambas as partes. Você aparece com uma solução em que você tem uma loja existente e uma nova loja. Loja de número 1 (a loja existente) é para cafés mais regulares, a nova loja é de cafés e chás exclusivos. Com a loja exclusiva deve-se pensar em cafés especializados da Ásia, América do Sul e especialidades de cafés africanos, o que resultaria em um montante total de 30 diferentes tipos de café. Chás viriam a uma variedade de 20 tipos. Além disso, bolos exclusivos e produtos de pastelaria são vendidos. Junto a isto, os clientes também podem emprestar livros, ler jornais e ter acesso à WIFI gratuita. Na loja de café regular, você pretende vender 8 diferentes cafés regulares, como cappuccino simples, espresso, etc, e adicionar 5 chás regulares (por exemplo, China Blossom e Rooibos) e uma variedade limitada de donuts e muffins.

Você começa a promover a ideia da loja exclusiva com uma variedade de 15 diferentes cafés e 15 chás diferentes, e também uma menor variedade de bolos e doces do que você eventualmente irá incluir. Isto, juntamente com jornais gratuitos e internet sem fio gratuita é o que você mostra para o grupo de foco. Acontece que especialmente a loja exclusiva é recebida com muito entusiasmo e os clientes estão dispostos a pagar de 2 a 2,5 vezes mais do que anteriormente.

Um dos requisitos é, porém, que você tem que estender-se ao que você tinha em mente (os 20 chás, 30 cafés, os livros, jornais e WIFI gratuita). Você tem que decidir se quer empreender esta mudança de conceito maciça ou se concentrar completamente em um dos dois conceitos. Se você deseja estender vai custar-lhe por volta de R\$500.000, e um esforço de marketing separado.

Ano	1	2	3	4	5	6	7	8
Vendas estimadas (R\$M)	0.25	1.25	2.5	15	30	45	60	75
Vendas reais (R\$M)	0.35	1.20	2.1	7	10.4			

Qual das duas opções você escolhe? Por que?

Supondo que você tenha decidido ir para a extensão, você tem que escolher uma das três opções seguintes:

1. Realizar o esforço de redesenho em casa - Custo estimado: R\$620.000,
2. Out-source o redesign para a nova empresa dentro do seu país - Custo estimado: R\$500.000,-
3. Out-source o redesign para a nova empresa fora do seu país de origem - Custo estimado: R\$250.000,-

Qual opção você escolhe? Por que?

Problema 7: Crescimento da empresa, Parte Um

Esta quase no final do sexto ano do negócio. Você está agora executando dois tipos de lojas, sobre o respaldo do Café, Inc.

- Café Simples (vendas entre R\$2,50 – R\$12,50), onde você vende uma quantidade limitada de cafés e chás regulares e uma quantidade básica de donuts, muffins e chocolates
- Requitado (vendas R\$12,50 – R\$35,-), onde você tem a oferecer o "quadro completo"

O número de estabelecimentos, e com isso os novos gerentes das lojas de café, aumentou para 20, a partir de três originais, e você continua a expandir sua força de vendas e desenvolver um conceito melhor de requinte para as áreas mais luxuosas da cidade. Greg Thomas, que é um excelente vendedor (lidando com os cafés regulares anteriormente) e liderou a equipe de vendas desde o primeiro dia, não foi claramente mantido com as questões do crescimento da empresa - ele definitivamente não é a pessoa para liderar o novo requinte. Como você vai lidar com essa situação?

Ano	1	2	3	4	5	6	7	8
						Revisado		
Vendas estimadas (R\$M)	0.25	1.25	2.5	15	30	15	30	50
Vendas reais (R\$M)	0.35	1.2	2.10	7	10.4	21.3		

Será que você:

- 1. Demiti-lo?**
- 2. Contratar um novo gerente de vendas para chefiar a equipe de vendas? Se for assim for, iria você consultar Greg antes de fazer isso? Como você contaria a notícia a ele?**

Por favor, fique à vontade para elaborar qualquer outra forma de lidar com a situação.

Problema 7: Crescimento da Empresa, Parte Dois

Embora a empresa esteja crescendo por um tempo agora, você está tentando manter a cultura empreendedora da empresa viva. Mas você começa a perceber que seu parceiro está promovendo um "ambiente mais corporativo" - reuniões longas e desnecessárias, organogramas complicados, contas coloridas de despesa, "consultores" para "otimizar o potencial de mercado", e assim por diante. Quando você tenta conversar com ele sobre isso, ele argumenta que é hora de a empresa ficar "corporativa" - que uma imagem de "profissional" seria realmente bom para a linha de fundo.

Ano	1	2	3	4	5	6	7	8
						Revisado		
Vendas estimadas (R\$M)	0.25	1.25	2.5	15	30	15	30	50
Vendas reais (R\$M)	0.35	1.20	2.10	7	10.4	21.3	50	68.1

Como você vai lidar com essa situação? Você acha que é hora para o *Café, Inc.* se tornar "corporativa"?

Problema 8: Contratação de Gerência Profissional

Você agora está no oitavo ano de sua empresa. Você está indo muito bem - superando metas de crescimento e construção de quota de mercado confiável. Suas vendas são de R\$68.1 milhões e você projeta uma taxa de crescimento de pelo menos 25% ao ano durante os próximos três anos.

Ano	1	2	3	4	5	6	7	8
						Revisado		
Vendas estimadas (R\$M)	0.25	1.25	2.5	15	30	15	30	50
Vendas reais (R\$M)	0.35	1.20	2.10	7	10.4	21.3	50	68.1

O conselho do seu Conselho de Administração é contratar uma gestão profissional para administrar a empresa para que você possa se concentrar em questões de crescimento e novas iniciativas estratégicas. Supondo que você já desenvolveu uma pequena lista de três candidatos de alto potencial para a entrevista para o cargo de Chief Operating Officer (COO), como se preparar para a entrevista?

Lista perguntas que você faria, técnicas que usaria e os problemas críticos que levaria em conta na contratação desta pessoa.

Problema 9: Boa Vontade

Neste ponto, você é abordado pela diretora de uma escola urbana em sua área, que também trabalha com 10 escolas, tais como a dela - ela acredita que Requite poderia ser um ambiente de aprendizagem ideal para seus alunos em seu programa de estudo do setor alimentício.

Ela pede que você trabalhe com um casal de professores realmente entusiasmados para desenvolver alguns materiais elementares de aprendizagem para os alunos para trabalhar nas lojas requintadas. O projeto significaria não só um investimento de R\$250.000,- (aprox.) para modificações, mas também uma parte substancial do seu tempo por cerca de seis meses, durante o desenvolvimento e, em seguida, cerca de 10 sessões de participação em sala de aula por ano, por uns dois anos, pelo menos.

Nota: Suas vendas são de R\$68,1 milhões e você projeta uma taxa de crescimento de pelo menos 25% por ano durante os próximos três anos.

Você vai tomar a iniciativa para esse projeto?

Se não, por que não?

Se sim, você faria:

- a) Doaria o projeto?**
- b) Venderia-o a um custo?**
- c) Venderia-o em sua margem de lucro regular?**

Por que?

ANNEX 3 – BRIEFING FOR THE RESPONDENTS

Material for the student entrepreneurs

The experiment and your role in it

Introduction

The purpose of this study is to find out how people go about setting up a new company. This applies in particular to determine what processes they go through while starting their own business.

An example in the personal sphere: it is your turn to cook. There are people who first recipe from the internet, then write a note on the ingredients, and then going to the supermarket to buy products. When they get back, exactly as recipe ingredients at the right time (the recipe) to scramble and come with such a delicious meal. There are also those first go and see what they have in the fridge already. Then treat them with resources to work. On intuitive they throw some ingredients together that is not entirely clear whether it will be at the right moments. The result: a delicious meal. This is also how entrepreneurs differ from each other. Some do everything very structured, others do it by feel. These differences we want to measure in this study.

In this study you will be asked when making the case by speaking your mind.

Below is some information regarding the purpose of the case and how it should be executed. Furthermore, some guidance that can help you verbalizing your thoughts and the role of the experimenter are explained. Read the information carefully. Then the experimenter will ask if everything is clear. If so, you will get some short exercises to practice thinking aloud. Then the experimenter gives you the case. Think aloud as soon as you instructed.

The purpose of the assignment

The purpose of the command you will execute is: setting up a new company, a coffee corner. Information with respect to the coffee corner can be found in the case. The idea is that you verbalize what you think while going through the case.

Your contribution to this research is not only theoretically important. The results will be used in a later phase of the study to gain more insight into

the workings of more experienced entrepreneurs with large, publicly traded companies. Based on this knowledge we will get insight in the processes of entrepreneurial businesses. The fictional company is very similar to companies in the real practice which the processes must be improved. The way you execute the case also largely determines what improvement proposals can later be made to such companies.

The execution of the case

You are not bound by what you think in general or what you might think is logically correct but may find your own personal use logic. Again, these is not one proper way of how to proceed. Many ways of following the steps may be appropriate.

If you need some factual information (eg technical details of coffee machines) that you cannot be found in the background you may formulate assumptions (for example, assume that such a device should be able to produce 50,000 cups of coffee before a service is due). Do this only when absolutely necessary.

Take, if you think it makes sense, notes. It may be difficult to assign responsibility entirely from your memory to perform and the risk that during the execution of the case the order gets lost. Incidentally, you may feel free to start over completely or partially.

The task

You have two hours available for this task. Then a short interview will follow.

You can use pencil and paper and, if you want, from a calculator.

The role of the experimenter

The experimenter is only present to make sure you verbalize your thoughts and record your actions. He or she does not give you additional information. If you forget to share your thoughts by speaking, the experimenter can point this out.

Thinking aloud

Remember, during the execution of the assignment, to keep talking aloud. Speak every thought that comes to mind immediately, even if you believe it has nothing to do with the assignment or if you are not sure if the idea is correct. We will analyse how the case runs rather than looking at the "rightness" of your thoughts but especially to the completeness of its ap-

pearance.

Try not to notice explain or summarize to the experimenter. This may interfere with performance of the contract.

ANNEX 4 – THE CODING SCHEME

Coding scheme dd 2-05-2013

Causal	Effectual
P-Prediction of the future	C-Creation of the future
G-Goal-driven	M-Means-based
R-Expected returns	L-Affordable loss
B-Competitive analysis	A-Use of alliances or partnerships
K-Avoid contingencies	E-Embrace contingencies
X-Causal (no subcategory given)	N-Effectual (no subcategory given)

Table 4: Effectual and causal codes, based on Sarasvathy (2008, p.55)

The coding of transcripts should be done on the basis of the categories found in table 3. In order to understand what the codes are about, the operationalization can be found in table 4 (below).

Table 15: Operationalization codes

ISSUE	Trigger question & operationalization into Causal or Effectual indicators	
View of the future (P vs C)	(Causal) P =Prediction of the future: what is being predicted?	(Effectual) C =Creation of the future: what is being created?
	<p>The future can be acceptably predicted on the basis of past experiences (Read et al., 2009, p.3; Sarasvathy and Dew, 2005, p.390). There is a relationships between past and future (Dew et al., 2009, p.290; Sarasvathy, 2001, p.251).</p> <p>Causal logic frames the future as a continuation of the past: you can control what happens on the basis of previously obtained knowledge (Sarasvathy, 2001, p251). Hence accurate prediction is both necessary and useful to control the future (Dew et al., 2009, p.290).</p>	<p>The future can be (co)created (Read et al., 2009, p.3). The future comes from what people do (not from inevitable trends). You can create a new market. Focus on the extent to which you can control the future, then there is no need to predict the future (Dew et al., 2009, p.290; Sarasvathy, 2001, p.251).</p> <p>The future is shaped (at least partially) by wilful agents (investors, partners and customers) who “precommit” to the venture (Read et al, 2009, p.576; Sarasvathy and Dew, 2005). Prediction is neither easy nor useful (Dew et al., 2009, p.290).</p>

Basis for taking Action (G vs M)	(Causal) G = Goal-driven: what is the goal, what is the effect?	(Effectual) M = Means-based: what are the means, what are the tools?
	<p>Goal-oriented / growth intention; ends based. Vision of a desired world: goals / effect are given (Dew et al., 2009, p.293; Sarasvathy, 2001, p.251). Do what you ought to do, based on maximization (Sarasvathy and Dew, 2005, p.390).</p> <p>In the causal frame, goals, even when constrained by limited means, determine sub-goals. Goals determine actions, including which individuals to bring on board (Dew et al., 2009; p.290; Read et al., 2009, p.3; Sarasvathy and Dew, 2005, p.390).</p>	<p>Means-oriented; Start with means: who I know, what I know, who I am. Do NOT start with the goal. You do this by looking at:</p> <ul style="list-style-type: none"> - Who I know; social & professional networks, e.g. family, Business school professors - What I know; Personal experience, training, education, expertise - Who I am : traits (such as trust, risk propensity) , tastes and abilities. <p>Sarasvathy, 2001, p.250; Sarasvathy and Dew, 2005, p.390; p.250; Wiltbank et al., 2006, p.992)</p> <p>Goals emerge by imagining courses of action based on given means (Read et al., 2009, p.3). Similarly, stakeholders who come on board determine what can be and needs to be done, not vice versa. First, possible sub-goals are set; goals emerge through aggregation of sub-goals (Dew et al., 2009; p.290).</p>

View of Risk and resources (R vs L)	(Causal) R = Expected returns: how much do you need to borrow to reach a predetermined goal?	(Effectual) L= Affordable loss: how much do you and your stakeholders personally have to spend and are you maximally willing to lose?
	<p>Expected returns; pursue new opportunities based on the (risk-adjusted) expected value (Read et al., 2009, p.3). Financials (investments, loans, incubation capital) needed to reach a goal (Read et al., 2009, p.3; Sarasvathy, 2001)</p> <p>Causal logic frames the new venture creation problem as one of pursuing the (risk-adjusted) maximum opportunity and raising required resources to do so. The focus here is on the upside potential. (Sarasvathy and Dew, 2005, p.390)</p> <p>Choose multiple market segments to chase the largest expected returns (Dew et al., 2009, p.299)</p>	<p>Affordable loss; Private capital (could be 0 euro). Invest what you are willing to / can lose; small bets. (Read et al., 2009, p.3; Sarasvathy, 2001; p.246). Totally in their control (Wiltbank et al., 2006, p.993)</p> <p>Effectual logic frames the problem as one of pursuing adequately satisfactory opportunities without investing more resources than stakeholders can afford to lose. The focus here is on limiting downside potential. (Read et al., 2009, p.3; Sarasvathy and Dew, 2005, p.390)</p>

Attitude toward Outsiders (B vs A)	(Causal) B = Competitive analysis: which competitors are identified and analysed?	(Effectual) A = Use of alliances or partnerships: what sort of alliances are mentioned?
	<p>Competitors mentioned; expected competition level. (Sarasvathy, 2001; p.252)</p> <p>A competitive attitude toward outsiders. Relationships are driven by competitive analysis and the desire to limit ownership of outsiders as far as possible (Read et al., 2009, p.3; Sarasvathy, 2001; p.252).</p> <p>Recruiting sales force. (Dew et al, 2009, p.299)</p> <p>Protect what you have and maximize your share of the opportunity (Read et al., 2009, p.3)</p>	<p>Partnerships; build a network of self-selected stakeholders (Not competitive analysis). Realized partnerships and/or potential partnerships are discussed. (Sarasvathy, 2001; p.251)</p> <p>Through partnerships you are better able to create new markets. Relationships, particularly equity partnerships, drive the shape and trajectory of the new venture (Read et al., 2009, p.3; Sarasvathy, 2001; p.252).</p> <p>Personally approaching customers. (Dew et al, 2009, p.299)</p> <p>Both partners acknowledge to share risks and reward (Read, Song and Smit, 2009; p.583; Read et al., 2009, p.3)</p>

Attitude toward unexpected events	(Causal) K = Avoid contingencies: What is done to avoid contingencies / where is indicated surprises is bad?	(Effectual) E = Embrace contingencies: What is done to leverage contingencies ... where is indicated surprises are good?
(K vs E)	<p>Surprise is bad. Develop techniques to avoid or prevent from surprises (Read et al., 2009, p.3; Sarasvathy, 2001, p.251; Sarasvathy and Dew, 2005, p.390).</p> <p>Prediction, careful planning and focus enable the firm to minimize the impact of unexpected events (Read et al., 2009, p.3). Avoid obstacles. Contingencies are seen as obstacles to be avoided. (Sarasvathy and Dew, 2005, p.390; Dew et al., 2009; p.290)</p> <p>No change when confronted with new information, means or surprises. (Read, Song and Smit, 2009, p.574)</p>	<p>Surprise is good. Leveraging / embrace contingencies, rethinking possibilities, are challenges. Leverage contingencies and even failures, not avoid them (Read et al., 2009, p.3; Sarasvathy, 2001; p.251; Sarasvathy and Dew, 2005, p.390).</p> <p>Prevent from predictions, imaginative rethinking of possibilities and continual transformations of targets characterize effectual frames. Contingencies, therefore, are seen as opportunities for novelty creation— and hence to be leveraged. (Sarasvathy and Dew, 2005, p.390)</p> <p>Change when confronted with new information, means or surprises. (Read, Song and Smit, 2009, p.574)</p>
No subcategory given (X vs N)	(Causal) X =	(Effectual) N =
	No subcategory given.	No subcategory given.

Within the last category (no subcategory given), you will include components which you think are still causal or effectual but which cannot be identified as being part of either the causal categories P, G, R, B and K versus the effectual categories C, M, L, A and E.

ANNEX 5 – TABLES

	Country Code	Shapiro-Wilk		
		Statistic	df	Sig.
Focus on goals	NL	0,954	44	0,08
	Brazil	0,942	19	0,29
Avoidance of contingencies	NL	0,944	44	0,033
	Brazil	0,958	19	0,526
Use of alliances	NL	0,904	44	0,001
	Brazil	0,955	19	0,473
Non-predictive control	NL	0,799	44	0
	Brazil	0,893	19	0,037

Table 16: Results of the Shapiro-Wilk Tests of Normality

	Country Code	N	Mean	Std. Deviation	Std. Error Mean
Non-predictive control - Ranked	NL	44	28,28409	17,845069	2,690245
	Brazil	19	40,60526	16,681309	3,826955
Avoidance of contingencies - Ranked	NL	44	30,00000	19,299054	2,909442
	Brazil	19	36,63158	15,255092	3,499758
Use of alliances - Ranked	NL	44	30,76136	18,561804	2,798297
	Brazil	19	34,86842	17,927200	4,112782
Focus on goals - Ranked	NL	44	4,9318	3,34384	,50410
	Brazil	19	4,5263	2,52473	,57921

Table 17: Ranks of the Independent Samples T-Test on focus on non-predictive control, avoidance of contingencies, use of alliances and goal-orientation for Brazil and the Netherlands

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Non-predictive control - Ranked	Equal variances not assumed	0,432	0,514	-2,634	36,459	,012	12,321172	4,677927	21,804305	2,838040
Avoidance of contingencies - Ranked	Equal variances not assumed	3,395	0,07	-1,457	42,900	,152	-6,631579	4,551171	15,810511	2,547353
Use of alliances - Ranked	Equal variances not assumed	0,117	0,734	-,826	35,352	,415	-4,107057	4,974479	14,202197	5,988082
Focus on goals - Ranked	Equal variances not assumed	2,647	0,109	,528	44,829	,600	,40550	,76786	-1,14121	1,95221

Table 18: Results of the Unequal Variances Independent Samples T-Test for the ranked tendency of respondents to focus on non-predictive control, avoidance of contingencies, use of alliances and goal-orientation

	Country Code	Shapiro-Wilk		
		Statistic	df	Sig.
Share causation (%) in P1	NL	,940	41	,031
	Brazil	,927	18	,175
Share causation (%) in P2	NL	,935	41	,021
	Brazil	,934	18	,227
Share causation (%) in P3	NL	,850	41	,000
	Brazil	,862	18	,013
Share causation (%) in P4	NL	,912	41	,004
	Brazil	,919	18	,123
Share causation (%) in P5	NL	,815	41	,000
	Brazil	,813	18	,002
Share causation (%) in P6	NL	,962	41	,178
	Brazil	,942	18	,317
Share causation (%) in P7	NL	,934	41	,019
	Brazil	,889	18	,036
Share causation (%) in P8	NL	,871	41	,000
	Brazil	,911	18	,091
Share causation (%) in P9	NL	,884	41	,001
	Brazil	,886	18	,033
Share causation (%) in P10	NL	,750	41	,000
	Brazil	,852	18	,009

Table 19: Results of the Shapiro-Wilk Tests for Normality for each problem of the case

	Country Code	N	Mean Rank	Sum of Ranks
Share causation (%) in P1	NL	44	34,65	1524,50
	Brazil	20	27,78	555,50
	Total	64		
Share causation (%) in P2	NL	44	34,17	1503,50
	Brazil	20	28,83	576,50
	Total	64		
Share causation (%) in P3	NL	44	29,48	1297,00
	Brazil	20	39,15	783,00
	Total	64		
Share causation (%) in P4	NL	43	29,67	1276,00
	Brazil	20	37,00	740,00
	Total	63		
Share causation (%) in P5	NL	43	29,94	1287,50
	Brazil	19	35,03	665,50
	Total	62		
Share causation (%) in P7	NL	44	32,08	1411,50
	Brazil	19	31,82	604,50
	Total	63		
Share causation (%) in P8	NL	43	31,21	1342,00
	Brazil	19	32,16	611,00
	Total	62		
Share causation (%) in P9	NL	43	32,50	1397,50
	Brazil	19	29,24	555,50
	Total	62		
Share causation (%) in P10	NL	44	29,19	1284,50
	Brazil	19	38,50	731,50
	Total	63		

Table 20: Ranks of the Mann-Whitney U Test on the tendency towards causal reasoning for Brazil and the Netherlands for each problem

	Share causation (%) in P1	Share causation (%) in P2	Share causation (%) in P3	Share causation (%) in P4	Share causation (%) in P5	Share causation (%) in P7	Share causation (%) in P8	Share causation (%) in P9	Share causation (%) in P10
Mann-Whitney U	345,500	366,500	307,000	330,000	341,500	414,500	396,000	365,500	294,500
Wilcoxon W	555,500	576,500	1297,000	1276,000	1287,500	604,500	1342,000	555,500	1284,500
Z	-1,371	-1,069	-1,987	-1,492	-1,064	-,053	-,197	-,670	-1,930
Asymp. Sig. (2-tailed)	,170	,285	,047	,136	,287	,958	,844	,503	,054

Table 21: Results of the Mann-Whitney U Test (Legacy) on the tendency towards causal reasoning for Brazil and the Netherlands for problem 1-5 and 7-10

	Country Code	N	Mean	Std. Deviation	Std. Error Mean
Share causation (%) in P6	NL	44	,5326	,26381	,03977
	Brazil	20	,5892	,16279	,03640

Table 22: Ranks of the Independent Samples T-Test on country of origin and overall tendency to causal reasoning for problem 6

	Levene's Test for Equality of Variances	t-test for Equality of Means								
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Share causation (%) in P6	Equal variances assumed	5,084	,028	-,884	62	,380	-,05663	,06404	-,18464	,07139
	Equal variances not assumed			-1,050	56,107	,298	-,05663	,05392	-,16463	,05137

Table 23: Results of the independent samples T-test on country of origin and overall tendency to causal reasoning for problem 6

	Study Background	Shapiro-Wilk		
		Statistic	df	Sig.
Causal thinking % of total problems	Business Study	,968	25	,592
	Social Sciences	,962	9	,819
	Engineering- IT	,969	11	,880
	Engineering- non IT	,945	12	,566
	Natural Sciences	,929	3	,483
	Other	,995	3	,859

Table 24: Results of the Shapiro-Wilk Test of Normality for Study Background

Causal thinking % of total problems

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Business Study	25	,5465	,10336	,02067	,5038	,5891	,29	,77
Social Sciences	9	,5376	,08339	,02780	,4735	,6017	,42	,67
Engineering- IT	11	,5806	,07821	,02358	,5280	,6331	,42	,70
Engineering- non IT	12	,5336	,07148	,02063	,4882	,5790	,42	,65
Natural Sciences	3	,5518	,04314	,02491	,4446	,6589	,52	,60
Other	3	,4630	,05530	,03193	,3257	,6004	,41	,52
Total	63	,5450	,08758	,01103	,5229	,5670	,29	,77

Table 25: Descriptives of the One-way ANOVA for Study Background

Causal thinking % of total problems

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,036	5	,007	,943	,461
Within Groups	,439	57	,008		
Total	,476	62			

Table 26: Results of the One-way ANOVA on Study Background and overall tendency to causal reasoning

	Family Background	Shapiro-Wilk		
		Statistic	df	Sig.
Causal thinking % of total problems	Entrepreneur / self employed	,941	22	,207
	Private Company	,944	23	,216
	Public servant	,909	15	,131

Table 27: Results of the Shapiro-Wilk Test of Normality for Family Background

Causal thinking % of total problems

	N	Mean	Std. De- viation	Std. Error	95% Confidence In- terval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Entrepreneur/ self employed	22	,5241	,09188	,01959	,4834	,5649	,29	,67
Private Company	23	,5527	,07921	,01652	,5185	,5870	,42	,77
Public servant	15	,5572	,09107	,02351	,5068	,6076	,42	,69
Total	60	,5434	,08679	,01120	,5209	,5658	,29	,77

Table 28: Descriptives of the One-way ANOVA for Family Background

Causal thinking % of total problems

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,013	2	,007	,860	,428
Within Groups	,431	57	,008		
Total	,444	59			

Table 29: Results of the One-way ANOVA on Family Background and overall tendency to causal reasoning

	Brazil	Argentina	Chile	Peru	Colombia	Suriname	Venezuela	Uruguay	Ecuador
PDI	69	49	63	64	67	85	81	61	78
IDV	38	46	23	16	13	47	12	36	8
MAS	49	56	28	42	64	37	73	38	63
UAI	76	86	86	87	80	92	76	99	67

Table 30: Scores of South-American countries on Hofstede's (2001) PDI, IDV, MAS & UAI dimensions