Entrepreneurial Processes in a Cultural Context

Effectual Behavior as the Firm Matures

The effect of a company's stage in its life-cycle on effectual behavior

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EXECUTIVE SUMMARY

This thesis aims to explore the link between effectuation theory and firm growth theory, to improve understanding of the construct of effectuation. Sarasvathy found that successful expert entrepreneurs tend to behave in ways that deviate significantly from classical entrepreneurship theories. She found that expert entrepreneurs all share a set of common behaviors, that she named effectuation. In effectual behaviors, the focus of the entrepreneur is on exploring the effects that may be reached using a given set of means, rather than finding means to achieve a predetermined effect. In essence: effectual reasoning is primarily means-based, causal reasoning is primarily goals-based.

Sarasvathy hypothesized in her 2008 book that *"Successful firms are more likely to have begun through an effectual logic and grown through causal approaches as they expand and endure over time".* This hypothesis was developed into this thesis's central research question: How does the growth stage of a firm relate to the level of effectuation versus causation in its decisions?

To answer the central research question, a number of key firm-growth theories were studied. These studies were compared and contrasted against effectuation theory. It was found that several important firm-growth theories imply a shift from effectual towards causal behavior as the firm grows. Other firm-growth theories which were studied were ambiguous towards the development, but no firm-growth theory studied suggested a shift towards causal behavior.

To investigate the research question the following hypotheses were developed:

1. A company will develop in:
    a. An effectual direction as its resources grow
    b. A causal direction as its amount of employees grow
2. There is a higher level of causation in Greiner's second stage than in Greiner's first stage
3. There is a positive relationship between causation and firm age
4. There is a negative relationship between the level of causation in the early growth phases and entrepreneur experience

As this research was carried out in the context of the Entrepreneurship in a Cultural Context (EPICC) research, the data of that research were used. For the EPICC research over 300 student entrepreneurs in over 13 countries were interviewed. These entrepreneurs were asked to answer questions about their own companies, and also asked to make several decisions for a simulated company in a think aloud interview. Thereafter these interviews were analyzed using protocol analysis and statistical methods.

To analyze the EPICC data from a firm growth perspective, the temporal dimension of the simulated company used for the interviews was mapped out. Furthermore, applicable firm growth theories were mapped to this dimension.

The hypotheses have been tested using paired-sample t-tests, factor analysis, and regression analysis. Hypotheses 1a and 4 were both rejected, hypothesis 3 is inconclusive, and hypotheses 1b and 2 were both not falsified by the statistical methods.

To conclude, evidence was found that Sarasvathy's assumption is correct. Yet, the data is unable to provide a definitive answer to the research question, and more research is suggested to conclusively study the link between effectuation theory and firm growth theory. This result may partly be caused due to the EPICC data being recorded only at one point in time; a longitudinal study of growing companies should be able to deliver clearer results.

CONTENTS

1 INTRODUCTION

For many years research in the field of Entrepreneurship has presented variations on one single method of starting a business. The classic path of starting a business begins with doing research, writing a business plan, and seeking financing for this plan. Recently, though, researchers have started to look into a new type of startup process. (Perry, Chandler, & Markova, 2012)

In 2001, Sarasvathy presented her view on entrepreneurship. To find out what led to success in start-up companies she interviewed several very successful entrepreneurs. In these interviews she found out that a certain type of behavior was pervasive. She named this behavior *effectuation*: where instead of seeking means to reach a pre-established goal, one seeks goals which may be reached with their available means. (Sarasvathy, 2001)

One of the hypotheses Sarasvathy presents states *"Successful firms are more likely to have begun through an effectual logic and grown through causal approaches as they expand and endure over time".* (Sarasvathy, 2008, p. 133). She predicted that where entrepreneurs use effectual methods, it is known that established businesses use causal methods. Therefore there must be a point, or period, in time where the focus of a company's decision making shifts from effectual to causal. To analyze where the changeover may be found, firm growth literature could be studied. A large amount of research has been done about how firms grow, and the types of behavior firms exhibit while they go through the growth process. (Mintzberg, 1989) (Miller, 1983) (Churchill & Lewis, 1983) (Greiner, 1972)

Following on these statements it appears interesting to explore the data collected in the *Entrepreneurship in a Cultural Context* (EPICC) project to see if a trend can be found from effectual behavior towards causal behavior in the simulated 10-year lifespan of the business 'created' by the research subjects. Furthermore, it would be useful to see how the theory of effectuation fits in with other firm life-cycle models. Investigating the link could increase understanding of effectuation. This leads to the central research question of this thesis: How does the growth stage of a firm relate to the level of effectuation versus causation in its decisions?

An analysis of the temporal development of effectuation as the venture matures is relevant because it leads to an improved understanding of effectuation and its effects on the entrepreneurial process. As the nature of the firm-growth process becomes clearer, further research will be able to better focus on the stages in the growth process which are interesting from an effectuation point of view. Furthermore, entrepreneurs going through the process will have a better understanding of what to expect, and will therefore be able to better anticipate the events that result from the growth of their business, and build better businesses. Research in the field of entrepreneurship is beneficial and relevant, for example because currently entrepreneurship students are not being taught the answers to key questions pertinent to the early venture start process (Sarasvathy, 2001). The theory of effectuation is capable of fundamentally changing our understanding of how businesses come to be, thereby improving the ability to teach entrepreneurship. Therefore it is relevant to explore this construct.

2 THEORY

2.1 STRATEGY MAKING

Much research has been done to discover how firms make decisions, and especially to distinguish between decision making processes in successful companies and unsuccessful companies. As strategic decisions are among the main means through which management choice is actually effected, they strongly influence the firm's successfulness. (Papadakis, Lioukas, & Chambers, 1998)

In literature, various dimensions have been used to characterize Strategic Decision Making Processes (SMDPs): comprehensiveness/rationality, centralization, formalization/standardization, political/problem-solving dissensions dimension, among others. (Papadakis, Lioukas, & Chambers, 1998) Many authors have also attempted to find when usage of a certain SMDP is most effective: some looking at external factors (Sharfman & Dean, 1991), others at internal factors (Drago, 1998), and some looking at both external and internal factors (Elbanna & Child, 2007).

Sarasvathy (2001) set out to research decision making in startups, seeking to find the common denominator between successful entrepreneurs. She found that most successful entrepreneurs use a type of decision making she named 'effectuation', which is markedly different from rational decision making processes.

2.2 THE THEORY OF EFFECTUATION

The main body of entrepreneurship research is focused on rational decision making (Perry, Chandler, & Markova, 2012). Effectuation theory is a departure from this line of thinking. After analyzing the behavior of expert entrepreneurs Sarasvathy (2001) found that they tend to behave in a rather different manner. For example: rather than predicting the future using predictive models, they would aim to control the future using pre-commitments (see Table 2.1 for further behaviors, as adapted for the EPICC research). Sarasvathy named this new set of behaviors 'Effectuation', as opposed to the rational decision making which she named 'Causation'. "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, 2001, p. 245) Effectuation is a strategy when the entrepreneur has to imagine possible effects, but when a particular effect has been preselected by the decision maker, causation processes can be applied. (Sarasvathy, 2001, p. 249)

Causal	Effectual
Predictions of the future *Decisions based on predictions of an uncertain future*	**Non-predictive control** *Decisions based on an assumed certain future.*
Goal driven *Where entrepreneurs are driven by the desire to achieve pre-determined goals*	**Means driven** *Where entrepreneurs are driven by who they are, what they are, whom they know, or other means*
Expected returns *Decisions based primarily on the expectation of a return on investment type of reasoning*	**Affordable loss** *Investing with regard to the amount of time and/or money available rather than the expected return*
Competitive analysis *Considering competitor response to actions, or deciding on actions based on expected competitor moves.*	**Alliances** *Focusing on forming a network where everybody adds value*
Existing market knowledge *Making decisions based on what you know about the current state of the market*	**Exploration of contingency** *Explore and exploit events as they arise*
Data analysis *Using data analysis to decide on strategy*	**Distrusting research** *Questioning the usefulness or truthfulness of research data.*

TABLE 2.1: CAUSAL AND EFFECTUAL BEHAVIORS

The first behavior described by Sarasvathy as causal is 'predictions of the future'. This behavior is exhibited whenever an entrepreneur focuses on the predictable aspect of an uncertain future (Sarasvathy, 2001). An effectual entrepreneur would focus on the controllable aspects of an uncertain future. For example, a causal entrepreneur developing GPS units for cars would predict the amount of people who need one and attempt to predict the sales this could generate. An effectual entrepreneur however, would try to get a commitment from a car manufacturer to include the entrepreneurs' units in their cars and thereby largely control the amount of units they sell.

The second behavior typical for causation is goal-driven behavior. A typical causal aim would be to achieve pre-determined goals. In contrast, an effectual entrepreneur is driven by their means: who they are, what they are, whom they know, and other means. For example, a typical causal goal would be to achieve a certain percentage of market penetration. An entrepreneur who is taking the causal approach would then try to achieve this level of market penetration with any means they can find. An effectual entrepreneur, however, would focus on their means, and would try to leverage this to the best of their abilities without regard to a pre-determined goal.

The third typically causal behavior is basing decisions on expected returns: where an entrepreneur will develop a thorough cost-benefit analysis for a decision, and chooses between alternative courses of action given their respective present value of the projected earnings. The effectual behavior in this situation would be affordable loss based: rather than discussing the potential returns on an investment they will consider the worst-case scenario. If the worst case scenario would be an 'affordable loss' (i.e. constitutes an acceptable risk to the entrepreneur) the entrepreneur will go through with his decision. (Sarasvathy, 2008)

The fourth behavior that is described as causal by Sarasvathy is competitive analysis. An entrepreneur who is behaving in a causal way would see other players in their field primarily as competitors and would attempt to anticipate their competitors' moves and defeat them. An entrepreneur behaving in a primarily effectual way would focus less on the competitive aspect, yet try to form alliances to create and leverage a network which will produce value for all parties involved. Furthermore, an effectual entrepreneur would negotiate with any and all stakeholders who are willing to make actual commitments to the project, without worrying about opportunity costs, or carrying out elaborate competitive analyses. Furthermore, who comes on board determines the goals of the enterprise. Not vice versa. (Sarasvathy, 2008)

The fifth behavior is described using the lemonade principle: an effectual entrepreneur will make lemonade whenever life hands them lemons. A typical causal behavior would be to try to avoid surprises and focus on the current state of the market, whereas an effectual entrepreneur would try to leverage surprises. A good example of the lemonade principle was the founding of Staples. After the founder of Staples lost his job as a division manager for a supermarket chain, he couldn't find printer ribbon to start writing the business plan for a new venture. This realization led him to see the potential of a business which has grown into what is now the global office supplies chain Staples. (Sarasvathy, 2008)

The sixth and final behavior describes a causal entrepreneur's preference for analyzing data to make better informed decisions. An effectual entrepreneur would question the truthfulness of the data and would prefer to base their decisions on their own experimental findings. It was found that one of the most pervasive behaviors shared by expert entrepreneurs is distrust in traditional market research. (Sarasvathy, 2008)

Sarasvathy (2008) predicts a trend where entrepreneurs, who tend to prefer effectual logic, will employ a greater rate of causal logic as their company matures. This is the central premise for this thesis. Whereas a strong empirical link hasn't been established, prior research does provide incidental evidence. For example: Christensen, Craig and Hart (2001, p. 87) tell a story about the history of Sony, which Chandra & Yang (2011) put into a context of effectuation: [Emphasis placed by Chandra & Yang]

> *"Until the 1970s, Sony's product launch decisions were strongly guided by its chief executive officer, Akio Morita, who followed his intuition rather than conducting careful market research to unearth the potential new products* ***(showing evidence of effectual logic)****. But as the company became huge and successful in the 1980s, it had to hone its good management practices in market research, planning, budgeting, and resource allocation* ***(showing the evidence of using causal logic)****. These careful, rational processes, which are crucial to an established company's efficient operation, prevented one of history's successful 'serial disrupters' from succeeding at new market creation."*

In this excerpt it is clear that there are documented cases of companies going from being primarily effectual logic driven towards primarily being causally driven. Furthermore, a small scale study in Croatia found that within their sample companies tended to develop in a causal direction (Harmeling, Oberman, Venkataraman, & Stevenson, 2004); in corporate settings a similar trend was found (Harting, 2004). However, it is also argued that older companies might have a larger degree of task-specific knowledge, making effectuation more likely (Harms & Schiele, 2012). This line of reasoning is in line with the concept of companies acting out of their core competences. (Prahalad & Hamel, 1990). Also, Harms & Schiele (2012) found that firm age is ambiguous in determining whether a company would use more causal, or more effectual, logic when creating a new international venture.

Finally, the effect of entrepreneur experience has been explored by Dew et al. (2009). They had both expert entrepreneurs, and novices (MBA students) go through a simulation of the early stages of the venture start process. They concluded that expert entrepreneurs tend to use significantly more effectual logic in the venture start process than novices.

2.3 Change in Use of Effectuation as the Firm Matures

There are several reasons to expect a company to develop in an effectual direction as it matures. A typical effectual behavior is leveraging contingencies rather than avoiding them. In order for a company to be able to leverage contingencies, in many cases it will need resources. This is especially true when a quick reaction is required. More mature companies tend to have greater resources than companies in earlier growth stages. Therefore, as more mature companies have the resources, they could be able to act this way more frequently than smaller companies.

Another reason to expect a company to develop in an effectual direction is the larger amount of task-specific experience found in more mature firms. Experience by itself is one of the means described in means-based decision-making, one of the effectual behaviors (Dew, Read, Sarasvathy, & Wiltbank, 2009). Therefore, the more knowledge and experience a company has accrued over time, the more means it has. And the better equipped it is to use means-based logic.

Whereas there are several reasons to expect a company to develop in an effectual direction as it grows, there are also reasons to expect it to develop in a causal direction. As organizations grow, they tend to develop formalized strategic decision making process, and the larger the company, the more comprehensive these processes. (Frederickson & Iaquinto, 1989) Goal-based thinking is both inherent to formal strategy making processes, and one of the causal behaviors. Therefore a certain increase in the amount of causal behavior could be expected in growing businesses.

A second reason to expect growing companies to develop in the causal direction concerns the nature of some of the effectual behaviors. For example, alliance forming leads to a 'crazy quilt' of interconnected actors. In an effectual organization the direction of the organization is determined by the actors who are willing to make real commitments to the forming organization (Sarasvathy, 2008). However, over time vested interests develop for the actors who have joined, making it less likely that new actors will join and significantly change the direction of the organization. This leads to a decrease in effectual behavior.

A third reason for a maturing firm to develop in a causal may be found when a company goes public. Listed public companies have to publish results and inform shareholders. The market requires that companies work towards goals and aim to maximize their returns. Furthermore, more research has to be done in order to be able to sufficiently inform shareholders. All of these behaviors increase the level of causal behavior in the firm.

This leads to these hypotheses:

> **Hypothesis 1a** *A company's decision making will become more effectual as its resources grow.*
>
> **Hypothesis 1b** *A company's decision making will become more causal as its amount of employees grows.*

2.4 Firm Growth Theories

The main stream of firm-growth literature presents stage-based theories. In stage-based theories the development of a firm is modeled as a single path through several stages. Recent review articles recognize Greiner's (1972) model as the archetype of stage-based theories (Furlan & Grandinetti, 2011); (Levie & Lichtenstein, 2010). A prominent other type of firm growth theories, based on configurations, was popularized by Mintzberg. In these models the relative powers of different parts of the company define the various configurations a firm can be in. In these models multiple growth paths are possible through these configurations, and even backtracking is sometimes allowed.

As Greiner's model is, either explicitly or implicitly, the basis for many stage-based firm growth theories, it deserves a closer look. Greiner's model consists of 5 'evolutionary' phases, with a 'revolutionary' phase between each evolutionary phase. From an entrepreneurial point of view the first phases are most relevant: "growth through creativity" and "growth through direction". These phases are separated by the leadership crisis. In the creativity phase the focus is mostly on activities which fit the effectual pattern: opening up markets and forming alliances. This is followed by the leadership crisis, where the leaders find out the informal, hands-on, style of management common in small ventures will not scale up to the size the company has become. During this crisis the behavior of the company swings in the causal direction. In the next phase, the direction phase, the company exhibits activities which primarily fit the causal behaviors. For example: incentives, budgets, and work standards are adopted (Greiner, 1972, p. 42). When considering Greiner's entire model (see 0), the company appears to swing back and forth between primarily behaving causally and primarily behaving effectually. This should in the end lead to the company finding an equilibrium somewhere in the middle.

In this research, a case study is used where student entrepreneurs were asked to create and grow a fictional company, more details will follow in paragraph 3.2. As in this fictional company Greiner's first phase and second phase are identifiable, we can test if the researcher's prediction of causal versus effectual behavior holds. This leads us to the following hypothesis:

> **Hypothesis 2** *There is a higher level of causation in Greiner's second stage than in Greiner's first stage.*

A stage model focused on the early phases of a company was created by Churchill and Lewis (1983). In their model they present five phases: existence, survival, success, take-off, and resource maturity. Their model is especially interesting because they looked at the importance of a set of 'management factors' and their relative importance in the early phases of a firm (see Appendix C). For example, whereas in the initial 'existence' phase the owner's ability to do what the company sells is really important, it is one of the most unimportant factors when a company has reached resource maturity. Some of these factors can be indicative of a company focusing on effectual behavior: the relative importance of 'people – quality and diversity', one of the factors mentioned by Churchill and Lewis, can be seen as the relative importance of alliance making, one of the factors in effectuation theory. Other factors could indicate a focus on causal behavior, like the 'strategic

planning' and 'systems and control' factors. However, although the Churchill and Lewis clearly indicate the relative importance of these factors as the company grows, it is hard to discern a clear pattern in the ratio of causal v effectual behavior using their theory. Some factors are ambiguous as to whether they indicate a causal or effectual preference, and other factors move in a way which makes it hard to assess whether as a whole Churchill and Lewis would predict a shift towards either a causal or effectual direction.

As ambiguity towards the expected level of effectuation is found even in the single-path stage methods, like in Churchill and Lewis's model, more ambiguity may be expected in the configuration-based models. Configuration-based models describe different shapes of companies dependent on the type of company, as for example a large architecture firm would have different dynamics than a similarly large factory. However, when looking at Miller's configuration model it is not as bad as might be expected. Miller (1983) presents a three-configuration model: all firms start in the 'simple' configuration, and then evolve into either an 'organic' or a 'planning' type configuration. Whereas in the stage models all firms go through the same process, in the configuration models a company should evolve into a configuration which fits the individual company. For example, a manufacturing company would evolve into the 'planning' configuration as it is optimizing and analyzing its business. An architecture firm, however, would better fit the 'organic' type as they are built on employee expertise.

When comparing this model to the theory of effectuation, it may be predicted what level of effectuation could be expected in Miller's configurations. It may be found that the 'simple' configuration seems to indicate a high level of effectuation: these firms are centralized around the owner in a way which matches with Sarasvathy's 'pilot-in-the-plane' principle. This principle is used by Sarasvathy to illustrate typical effectual behavior in her book. (Sarasvathy, Effectuation, Elements of Entrepreneurial Expertise, 2008) The planning type obviously is more a causal-type configuration: it focuses on returns-based efficiency. Organic firms would actually primarily be effectual: they share the pilot-in-the-plane focus of the simple firms. Therefore, depending on the type of firm it could be expected, based on Miller's model, that at least in some cases the firm would develop in a causal direction.

Miller's model is based on a configuration model developed by Mintzberg. The chief difference being that Miller's model is a simplified version which has empirically been proven. Mintzberg's (1989) model is more complex, as it has a large set of potential configurations. When looking at the early phases of the company, Mintzberg sees companies starting out in a configuration he aptly named the 'entrepreneurial' configuration. Then he envisions six potential paths for this company to develop in: the machine configuration, the diversified configuration, the missionary configuration, the professional configuration, the innovative configuration, and the final option, demise. When looking at Mintzberg's configurations from an effectuation point of view, (see Appendix B) it may be observed that all these potential paths would result in at least a slight decrease in effectual behavior.

Theory presents a factor which might change a firm's direction strongly: the 'founder's disease'. Some authors put forward that a company reaches a point in its development where the founder will become a hindrance rather than a driver for growth. Therefore, these authors argue that the founder should leave the company at a certain point in the firm growth process. (Boeker & Karichalil, 2002); (Willard, Krueger, & Feeser, 1992). A reason for the incompatibility, between a founder and a company which has grown out of the initial entrepreneurial phase, may be found in that it has been established that founders and managers are different types of people. (Stewart, Watson, Carland, & Carland, 1992). Both Sarasvathy and Mintzberg have also written about founder replacement. Mintzberg has indicated that many young organizations remain in the entrepreneurial configuration as long as their founding leaders remain in office. (Mintzberg, 1989). Furthermore, some evidence for this statement can be found as the mean age of a founder-run company has

been found to be lower than the mean age of a non-founder run company (He, 2008). The departure of a founder might very well be related to the leadership crisis in Greiner's model.

After reviewing literature, a gap is found between the fields of effectuation and firm growth. No research exists that establishes a strong empirical link between effectuation theory and firm growth. This thesis aims to close this gap. The literature indicates a general expectation for causal behavior to become more prevalent as the company grows. This leads to the following hypothesis:

> **Hypothesis 3** *There is a positive relationship between causation and firm age*

For firm-growth theories other than Greiner's the phases can't be identified clearly in the case, therefore they cannot be tested using the data available for this thesis. The data used for this research is, however, capable of testing the research developed by Dew et al.: expert entrepreneurs tend to use more effectual reasoning, and novices tend to use more causal reasoning. Leading to the fourth and final hypothesis:

> **Hypothesis 4** *There is a negative relationship between the level of causation in the early growth phases and entrepreneur experience.*

3 METHOD

3.1 SAMPLE

The data used for this thesis originates from the *Entrepreneurship in a Cultural Context* (EPICC) research. The aim of the EPICC research is to analyze the usage of effectual thinking by student entrepreneurs in different cultures. Student entrepreneurs, for the purpose of the EPICC research, are defined as students or recent graduates who have started a business. For this research, protocols from interviews with 302 students from 13 countries have been used.

The EPICC research globally has used cluster sampling: researchers have been sent to individual countries to collect data. Within these countries, different researchers have used individual strategies to find subjects. For example, in Hungary snowball sampling was used, using contacts at universities and start up groups as seeds. Snowball sampling is appropriate in Hungary, as the population of student entrepreneurs in Hungary is both unknown and rare. The GUESSS research has surveyed a large sample of university students in Hungary (N=5677) of which 25% of respondents indicated they would like to start a business 5 years after graduating, yet only 130 respondents had completed a sale in the context of their own businesses.

Country	N	Average Subject Age (y)	Average Firm Age (y)	Female/Male
Australia	20	24.6	1.1	15/85
China	50	25.9	3.6	36/64
Germany	18	27.2	0.8	27/73
Hungary	19	26.3	2.1	11/89
Indonesia	19	21.4	1.6	47/53
Macedonia	20	25.9	0.8	30/70
Malaysia	22	23.9	1.9	18/82
Mexico	20	26.7	0.9	45/55
Netherlands	45	25.6	3.2	13/87
Poland	15	N/A	N/A	N/A
UK	22	25.6	0.9	45/55
USA	15	24.1	1.5	13/87
Vietnam	17	23.9	0.0	53/47
Total	**302**	**23.9**	**2.0**	**29/71**

TABLE 3.1: DESCRIPTIVE STATISTICS

3.2 THE RESEARCH INSTRUMENT

To analyze the type of thinking used by student entrepreneurs the think-aloud method, as described by van Someren, Barnard & Sandberg (1994) and (Ericsson & Simon, 1981), has been used. During think-aloud interviews, test subjects are asked to solve a task while vocalizing their thoughts. This method allows researchers to research processes as they happen, rather than retroactively. When subjects are asked to recount how they performed a certain tasks, they may have forgotten steps or give a biased view of the events.

To measure the level of causation versus effectuation, the EPICC research uses an adapted version of the research instrument used by Sarasvathy (2001), this adapted version is localized for every culture where data is collected. The localization process changes prices to local levels, and makes other similar changes to enable the entrepreneur to make better judgments based on local realities.

The research instrument (may be found in Appendix E) is a case study which consists of a set of 10 decision problems that need to be solved in the startup process of a fictional coffee-focused restaurant. The entrepreneur makes decisions about the firm's marketing, finance, and human resource.

Problem	Short Description
1	Market analysis, without data being provided
2	Market segmentation and pricing, with data provided
3	An early stage liquidity problem, emergency financing and cost cutting options are provided
4	Long term financing and equity
5	Marketing, choice of slogan
6	Product redevelopment (with additional market analysis)
7	Growth problems, employees not functioning well in the growing organization
8	Preparation for an interview to hire a COO
9	Corporate governance
10	Exit: sell to competitor, or issue shares.

TABLE 3.2: DECISION PROBLEMS IN THE CASE

3.3 OPERATIONALIZATION

The level of effectuation can be identified in two places: in the case or in the entrepreneur's real-life company. In the case the level may be found using protocol analysis: the protocols that resulted from the interviews have been coded to identify causal or effectual behavior. Whenever evidence of a certain type of behavior that indicates either causal or effectual behavior was found, this was registered using the following coding scheme:

Code	Causal	Effectual	Code
P	Predictions of the future	Non-predictive control	C
G	Goal-driven	Means-based	M
R	Expected returns	Affordable loss	L
B	Competitive analysis	Use of alliances or partnerships	A
K	Existing market knowledge	Exploration of contingency	E
Z	Emphasis on the analysis of data	Distrusting or opposing (market) research	D
X	Causal (no subcategory given)	Effectual (no subcategory given)	N

TABLE 3.3: CODES USED FOR PROTOCOL ANALYSIS

The amount of either effectuation or causation is represented by the amount of occurrence of the behaviors indicated by the codes, similarly to how Sarasvathy measured effectuation in her research. A simple ratio is then computed to indicate whether an entrepreneur is behaving in a primarily effectual or causal way.

$$Level\ of\ Causation = \frac{Number\ of\ Causal\ Codes}{Total\ Number\ of\ Codes}$$

To analyze the level of causation of an entrepreneur's real-life company, rather than the simulated company in the case, the method used by Chandler et al. (2011) is used. The interview subjects of the EPICC projects have all been asked to fill out the same questions as were used in Chandler et al. Afterwards, using factor analysis, a regression score can be calculated.

The set of behaviors that the codes represent have been statistically analyzed by Chandler et al. (2011). They confirmed that the set of causal behaviors all correlate. Their data indicates causation is a reflective construct. However, effectuation was found to be a formative construct. In other words: causation is a type of behavior which can be measured using the indicators Sarasvathy discovered, whereas effectuation is defined by the indicators. Therefore, whereas indicators could be added and/or removed while measuring causation, changing the indicators used to measure effectuation changes the definition of effectuation.

Having both the simulated data and the real-life data allows analysis of the research question from multiple angles. The simulated data describes a growing firm, whereas the real-life data contains snapshots of firms. A disadvantage of the simulated data is the fact that it is simulated, and therefore may not accurately represent several factors that occur in real-life. For example, in real life entrepreneurs gain experience as the company grows.

When analyzing the firm's position in the temporal dimension, it is required to establish in what phase a company is. The research instrument simulates the startup and initial growth of a business. The simulation is built around ten decision moments, named problem 1-10, that are set at a discrete point in the simulated time. As firm age is commonly used as an indicator for firm-growth processes, like with Greiner (1972), it makes sense to establish at what simulated time the decision problems are set. See Table 3.4 for which case problem is set in which point in case time, and what evidence may be found in the case to support this preposition.

Problem	Point in Case Elapsed Time (in years)	Evidence
1	0	Beginning of case
2	0	Pre-start marketing research
3	0.5	"You have been marketing your product for six months now."
4	1	"You are at the beginning of Year 1 now"
5	Unknown	
6	6	"You are almost at the end of your fifth year in operation"
7	7	"You are almost at the end of the sixth year of business"
8	8.5	"You are now in the eighth year of your company"
9	Unknown	
10	10.5	"You are now in the tenth year of your company"

TABLE 3.4: POINT IN CASE ELAPSED TIME OF CASE DECISION PROBLEMS

To find these times, several assumptions had to be made: it is assumed that problem 3 occurs in year zero. This assumption is made to resolve the ambiguity between 'you have been marketing your product for six months', which is followed by 'you are at the beginning of year 1 now' in the next problem. Furthermore it is assumed that when the case states 'you are now in the x-th year', rather than 'you are at the beginning of the x-th year', this means that the decision moment is halfway in that year.

With regard to the theoretical framework it makes sense to compare the research instrument's decision problems with the growth phases identified in literature. Comparing the problems in the case to Greiner's phases it may be observed that in problem 7 (the case may be found in Appendix E) leadership issues are seen: a manager who isn't performing well in his role, and another manager who isn't communicating well with the founders. In problem 8 this problem is solved by hiring a COO for day-to-day management. Therefore, it could be concluded that problem 7 constitutes the leadership crisis which is followed up by the start of the direction phase in problem 8. In problems one through six the focus of the company is on developing product and market.

It is difficult to compare the development found in the case to Mintzberg's configurations, as it would depend on the personal preferences of the subject into which configuration the entrepreneurial organization would convert. Therefore the data is less suitable to analyze Mintzberg's theory in contrast to effectuation, than Greiner's. Moreover, depending on the subject's preferences the organization could stay in the entrepreneurial phase throughout the entire case. The founder's identity might be a good predictor of the next configuration of an entrepreneurial organization. (Fauchart & Gruber, 2011)

3.4 METHOD OF ANALYSIS

To analyze the first hypothesis of this thesis, the rate of causation, and the amount of current full-time equivalent employees are required. Furthermore, the company's current revenue will be used as an indicator for its resources. The EPICC dataset contains the full-time equivalent amount of employees of the test subjects' real-life companies. The rate of causation may be calculated using Chandler et al.'s (2011) questions, which were also posed to the EPICC subjects. The revenue in the EPICC dataset is recorded in the local currencies, for this analysis they have been converted to United States Dollars using the rate of October 18th, 2012 (details on the data may be found in Appendix D).

The second hypothesis this thesis will analyze is "*There is a higher level of causation in Greiner's second stage than in Greiner's first stage"*, this hypothesis can be tested using a paired-sample T-test to compare the means of the rate of effectuation in the different Greiner stages. For this analysis the first two questions of the case will be disregarded, as these decision problems occur before the start of the simulated company and the business plan phase is not part of any firm growth process. As the data for this research consists of the amounts of codes found through protocol analysis, first the means for each entrepreneurs have to be calculated. The data was loaded in a database, where the problem numbers were converted into the Greiner stages (see 3.3). Then the average level of causation and the amount of data points (semantic chunks) used to calculate this average, grouped by test subject, were both used as a basis for a linear regression analysis (more details about data handling may be found in Appendix D)

The third hypothesis "*There is a positive relationship between causation and firm age"* will be approached from two ways. The first is to see if there is a trend in the subject's behavior within the case where, as the company grows, a change in the rate of causal/effectual behavior might be observed. A linear regression analysis will be able to detect the slope. Also for this hypothesis, the first two problems will be disregarded.

The second way of approaching the third hypothesis is to compare the age of the real-life companies of the interviewed entrepreneurs with the level of causation of these companies. A linear regression is suitable between the calculated level of effectuation, as found using Chandler et al.'s method (Chandler, DeTienne, McKelvie, & Mumford, 2011), and company age.

The fourth hypothesis analyzed by this thesis is "*There is a negative relationship between the level of causation in the early growth phases and entrepreneur experience"*. This hypothesis examines Dew et al.'s (2009) claims that novice entrepreneurs use more causal reasoning, whereas expert entrepreneurs tend to behave in a more effectual way. This hypothesis can be examined using a linear regression analysis on the rate of causal and effectual behavior in the case's first two questions compared with the age of the entrepreneur's real-life company.

4 RESULTS

The first hypothesis of this thesis aims to find a link between the level of causation found in a firm's decision making and both the firm's revenue and current amount of full-time equivalent employees. For this analysis the factor scores have been used to establish the rate of causation. For verification a Cronbach-Alpha score was computed: a satisfying score of 0.827 was found, and removal of any of the questions would lower this score.

As many similar measures are taken sometimes from real-life data and other times from the case data, whenever real-life data is used green tables and charts are used, for case data blue tables and charts are used.

Model	Unstandardized Coefficients: B	Coefficient Standard Error	t	Significance
(Constant)	-.246	.009	-2.485	.014
Current FTE	.028	.009	3.091	.002
Revenue (USD)	-1.81×10^{-7}	.000	-.079	.351

TABLE 4.1: RESULTS OF LINEAR REGRESSION ANALYSIS; R^2: .062, F: 4.778; TOTAL DF: 146; REAL-LIFE DATA

The linear regression analysis finds a significant positive link between the level of causation and the amount of current employees. However, it rejects that there is a link between revenue and the level of causation.

The second hypothesis in this thesis aims to find if the researcher's interpretation of Greiner's stages may be recognized in the EPICC simulated case. When looking at Figure 4.1 it appears that, as expected, the second stage (after year 7) is more causal than the first stage (between 6 months and the end of the 6th year). A paired-sample t-test (where only cases are considered with at least 5 codes in the first stage and at least 5 codes in the second stage) confirms that indeed there is a higher level of causation in the second Greiner stage than in the first one. In order to establish if the N>5 threshold influences the results, N>0 and N>10 were also evaluated. If cases with a less than 10 codes for each stage are excluded from analysis the difference of means becomes slightly larger. Similarly, when all cases are considered, the difference of means is also slightly larger (details in Appendix D). It is observed that, with all considered thresholds, a difference in the expected direction may be observed. An effect which may be observed in Figure 4.1 is the small dip in causal behavior during the crisis (year 7); however, effectual behavior during crises is out of scope for this thesis.

Data	Mean	N	Standard Deviation	Standard Error of the Mean
Greiner stage 1	.501	213	.152	.010
Greiner stage 2	.540	213	.177	.012

Mean of Difference	Std. Dev. Of Diff.	Std. Err. Mean Diff.	95% CI Lower	95% CI Upper	T	Df	Sig. (2-tailed)
.039	.188	.013	.013	.064	-3.023	212	.003

TABLE 4.2: PAIRED-SAMPLE T-TEST RESULTS; CASE DATA

This thesis's third hypothesis aims to link company age to the company's rate of causation v effectuation. A regression analysis was performed where the rate of causation in the case was compared with the elapsed simulated time (see Figure 4.1). A positive trend is easily seen in this graph, especially when keeping in mind that the first point (t=0) is excluded from analysis.

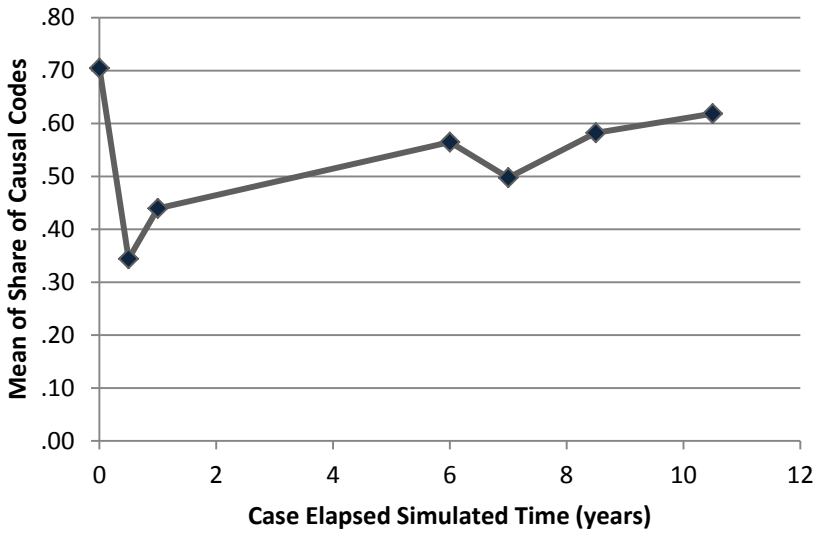


FIGURE 4.1: CAUSAL CODES VS. CASE ELAPSED TIME

When this data is analyzed using linear regression, this positive trend is confirmed. The linear regression analysis returns a .023 coefficient for case elapsed time, which is .000 significant. In other words it is strongly likely that case elapsed time is a good predictor for the level of causal behavior.

Model	Unstandardized Coefficients: B	Coefficient Standard Error	T	Significance
(Constant)	.385	.011	33.814	.000
Case Elapsed Time	.023	.002	12.737	.000

TABLE 4.3: RESULTS OF LINEAR REGRESSION ANALYSIS; R^2: .023, F: 162.241, TOTAL DF: 6962; CASE DATA

Another approach to this hypothesis is to analyze the real company's data. For this purpose the factor score is used which was also used for Hypothesis 1. When looking at the computed factor score for causation plotted against the age of the company at the date of the interview, it is unclear if there is any trend. For this analysis any data points where either firm age or interview data were undefined were left out, also data points which yielded a negative age were left out of consideration.

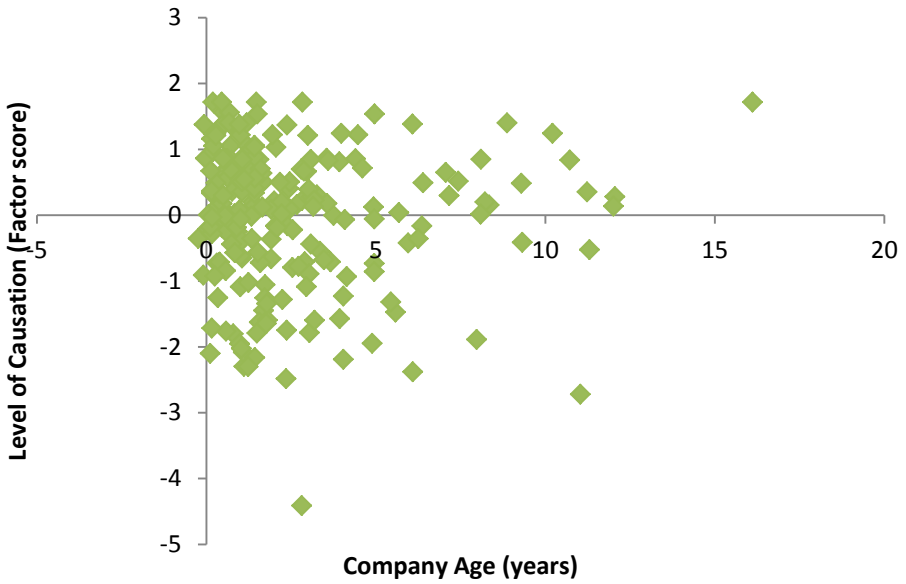


FIGURE 4.2: FACTOR ANALYSIS VS. COMPANY AGE

A linear regression analysis confirms that no trend may be found in this data. A p-value of 0.719 exceeds any reasonable alpha value.

Model	Unstandardized Coefficients: B	Coefficient Standard Error	t	Significance
(Constant)	.024	.099	.240	.811
Company Age	-.010	.026	-.361	.719

TABLE 4.4: RESULTS OF LINEAR REGRESSION ANALYSIS; R^2: .001, F: .130, TOTAL DF: 212; REAL-LIFE DATA

The fourth and final hypothesis of this thesis aims to confirm the finding of Dew et al. (2009) that expert entrepreneurs tend to behave more effectually than novices, using the EPICC data. Dew uses the age of an entrepreneur's company as an indicator for entrepreneur experience, among other qualifiers.

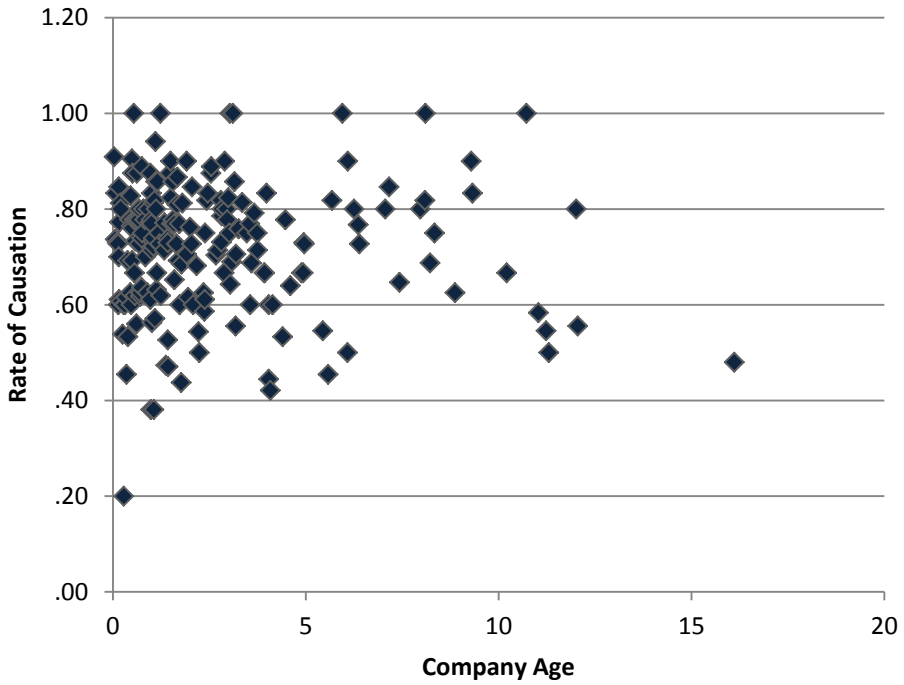


FIGURE 4.3: RATE OF CAUSATION VS. COMPANY AGE

Similar to Dew et al., only the first two decision problems of the case are taken into account here. Furthermore, whereas Dew et al. use multiple criterions for defining an expert entrepreneur, here only company age is used as an indicator. The graph appears to indicate that the EPICC data does not support this hypothesis, which is confirmed by a linear regression analysis (significance is 0.149).

Model	Unstandardized Coefficients: B	Coefficient Standard Error	T	Significance
(Constant)	.720	.011	66.443	.000
Company Age	-.004	.003	-1.444	.149

TABLE 4.5: RESULTS OF LINEAR REGRESSION ANALYSIS; R^2: .001, F: 2.084, TOTAL DF: 3239; CASE CAUSATION, REAL-LIFE AGE

After analysis it is seen that hypothesis 1a is rejected, hypothesis 1b is not rejected, and hypothesis 2 is not rejected. Hypothesis 3 is ambiguous, using simulated data it is not rejected, and yet using real-life data it is rejected. Finally, hypothesis 4 was rejected.

5 Discussion

5.1 Discussion of Results

In this thesis, we were looking for a relationship between a company's stage in the firm growth process and the level of effectuation in its decision making. The results appear to provide a picture that is not altogether clear.

Several points need to be kept in mind when interpreting the results. There are several limitations on the dataset used by the EPICC research for this project. Firstly, the EPICC dataset was designed to measure the influence of culture on effectual behavior. In this thesis the influence of culture has been disregarded, which may influence results. Another limitation of the data that needs to be kept in mind is that in each individual country (details in Table 3.1) the amount of interviews was rather small.

Another design factor which may influence the results is the case (may be found in Appendix E). Firstly, the general wording of the case will impart an effect on how the questions are answered. Furthermore, the problems are not only spaced in time, but also in subject matter, which may also influence results.

For each hypothesis additional limitations apply. For the first hypothesis Chandler et al.'s questions were used. These questions ask the entrepreneur about their company, but not specifically about the recent history of their company. Therefore these results don't just capture the company as it is now, but also the company as it was in earlier stages.

Additionally, it is relevant to consider that this data is based on a simulation; in real life these entrepreneurs would gain experience while going through the process. Most entrepreneurs in the EPICC research indicated that their own companies were in a stage similar to the stage presented in the case at problem 3.

The second hypothesis appears to confirm the researcher's interpretation of Greiner's theory, at least in the first two stages. It remains to be seen if this interpretation holds when looking at further Greiner stages. Furthermore it could be interesting to see what happens during the crises, in the EPICC data the crisis is tackled slightly more effectually than the problems right before and right after. As the case used for this research only contains one crisis, more research would be necessary to find trends in the crises.

Finally, for the fourth hypothesis, several causes could be considered. Firstly, only real-life firm age is used as an indicator of entrepreneur experience, whereas Dew et al. (2009) had more selection criteria. This might indicate that firm age may not be the most appropriate indicator for entrepreneur experience. Furthermore, Dew et al. defined novices as MBA students; it was also a selection criterion for the entrepreneurs in the EPICC research to be either a current student or a recent graduate. Academic education might cause these entrepreneurs to be inclined to apply the causal methods they have learned in class.

Another consideration which may cause the results of this thesis to differ from published materials is that most articles consider a sample which has been obtained in a single country, whereas the EPICC sample was obtained in several countries (see Table 3.1).

To conclude, the thesis's central research question is: How does the growth stage of a firm relate to the level of effectuation versus causation in its decisions? Some evidence has been found that suggests a trend towards causation as the firm growth, yet other evidence doesn't support these findings. Therefore more research would be necessary to find a conclusive answer to this question.

5.2 Suggestions for Further Research

As the data does point towards confirming the literature's predictions, some further research should be able to conclusively confirm or deny them. This research would help towards additional understanding of the

theory of effectuation. For example, a longitudinal research where entrepreneurs are interviewed at regular intervals would be an effective way to poll the level of effectuation throughout a business's growth. Furthermore, as the state of the subject's business is assessed at every interval, a direct comparison could be made between the entrepreneur's level of causation and the theoretical growth stages of the various authors. The state of the business could be assessed using the configurations and growth stages put forward by the authors, but also using data (as proposed by Churchill & Lewis) like profit, number of employees, market share etc.

Another area which warrants further research is the link between entrepreneur behavior (and business growth) compared to Bass's model of innovation dispersion. (Bass, 1969) Bass's study is a continuation of Rogers' (1962) study about the adoption of innovations. When a new technology is introduced first innovators and early adopters embrace it, before the majority and laggards adopt the technology. Cumulatively this forms an S-curve (see Figure 5.1) indicating a growing market for this technology: and it would follow that the market dynamics are different in the different phases of this S-curve. In the early adoption phase there are few competitors and large market growth, yet in the late phase there are many competitors and very small market growth. These situations require an entirely different type of approach from a company. (Lawrence & Lorsch, 1967)

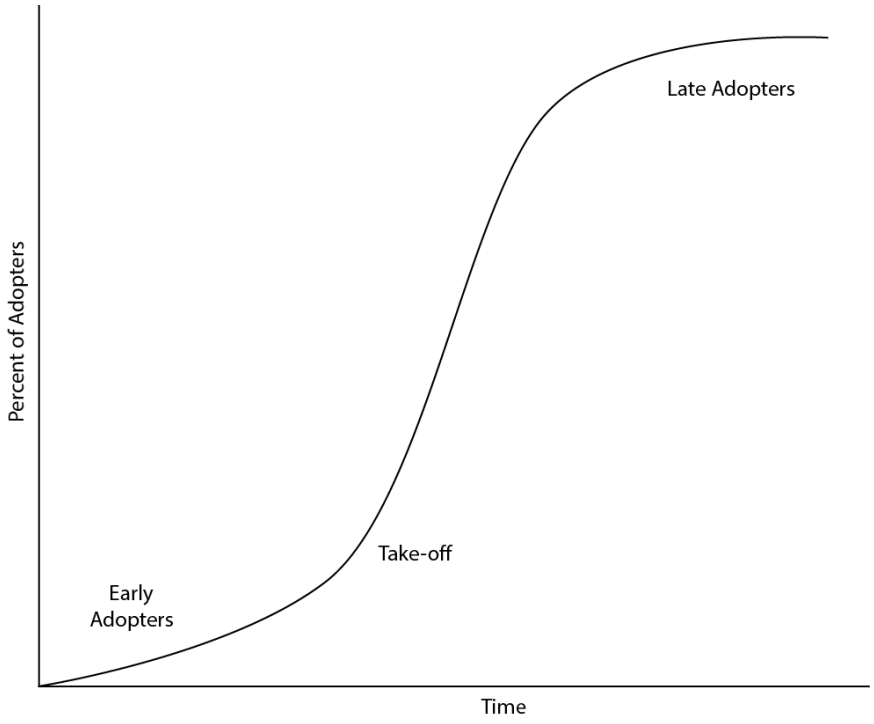


FIGURE 5.1: DIFFUSION OF INNOVATIONS CURVE

Since Effectuation is especially prevalent in businesses creating their own markets, it would be expected that a link may be found between effectuation and the S-curve presented by Rogers and Bass. In a new market, there is a lot of uncertainty, where an effectual approach would seem fitting. When a new innovation becomes main stream the market's growth pace reduces, with the S-curve's decreasing slope, and it therefore stabilizes and becomes more predictable. Common contingency theory argues that in a more predictable market, organizations should become more mechanistic rather than organic, suggesting a higher rate of causal thinking. (Morgan, 1986)

6 BIBLIOGRAPHY

Armstrong, S., & Hird, A. (2009). Cognitive Style and Entrepreneurial Drive of New and Mature Business Owner-Managers. *Journal of Business and Psychology*, 419-430.

Bass, F. M. (1969). A New Product Growth for Model Consumer Durables. *Management Science*, 215-227.

Belbin, M. (1993). *Team Roles at Work.* Oxford, UK: Routledge.

Blanchflower, D. (1998). What makes an entrepreneur? *Journal of Labor Economics*, 26-60.

Boeker, W., & Karichalil, R. (2002). Entrepreneurial Transitions: Factors Influencing Founder Departure. *The Academy of Management Journal*, 818-826.

Chandler, G., DeTienne, D., McKelvie, A., & Mumford, T. (2011). Causation and Effectuation Processes: a validation study. *Journal of Business Venturing*, 375-390.

Chandra, Y., & Yang, S. (2011). Managing disruptive innovation: Entrepreneurial strategies and tournaments for corporate longevity. *Journal of General Management*, 23-50.

Christensen, C., Craig, T., & Hart, S. (2001). The Great Disruption. *Foreign Affairs*, 80-95.

Churchill, N., & Lewis, V. (1983). The Five Stages of Small Business Growth. *Harvard Business Review* , 1-11.

Dew, N., Read, S., Sarasvathy, S., & Wiltbank, R. (2009). Effectual versus predictive logics in entrepreneurial decision-making: Differences between experts and novices. *Journal of Business Venturing*, 287-309.

Drago, W. A. (1998). Structure as a Predictor of Strategic Planning Use. *Journal of Applied Business Research*, 125-136.

Elbanna, S., & Child, J. (2007). The Influence of Decision, Environmental and Firm Characteristics on the Rationality of Strategic Decision-Making. *Journal of Management Studies*, 561-591.

Ericsson, K. A., & Simon, H. A. (1981). Protocol Analysis.

Fauchart, E., & Gruber, M. (2011). Darwinians, Communitarians, and Missionaries: The Role of Founder Identity in Entrepreneurship. *Academy of Management Journal, 54*(5), 935-957.

Frederickson, J. W., & Iaquinto, A. L. (1989). Inertia and Creeping Rationality in Strategic Decision Processes. *Academy of Management Journal*, 516-542.

Fuchs-Schündeln, N. (2008). On Preferences for Being Self-Employed.

Furlan, A., & Grandinetti, R. (2011). Size, Relationships and Capabilities: A New Approach to the Growth of the Firm. *Human Systems Management*, 195-213.

Greiner, L. E. (1972). Evolution and Revolution as Organizations Grow. *Harvard Business Review*, 37-46.

Harmeling, S., Oberman, S., Venkataraman, D., & Stevenson, H. (2004). That My Neighbor's Cow Might Live: Effectuation, Entrepreneurship Education, and Economic Development in Croatia. *Frontiers of Entrepreneurship Research.* Babson Park, MA: Babson College.

Harms, R., & Schiele, H. (2012). Antecedents and Consequences of Effectuation and Causation in the International New Venture Creation Process. *Journal of International Entrepreneurship*, 95-116.

Harting, T. (2004). Entrepreneurial Effectuation in a Corporate Setting: The Case of Circuit City's Carmax Unit. *Frontiers of Entrepreneurship Research.* Babson Park, MA: Babson College.

Haslam, S. (2001). *Psychology in Organizations.* Thousand Oaks, CA: Sage Publications.

He, L. (2008). Do founder matter? A study of executive compensation, governance structure and firm performance. *Journal of Business Venturing*, 257-279.

Lawrence, P., & Lorsch, J. (1967). Differentiation and Integration in Complex Organizations. *Administrative Science Quarterly*, 1-30.

Levie, J., & Lichtenstein, B. (2010). A terminal assessment of stages theory : introducing a dynamic states approach to entrepreneurship. *Entrepreneurship: Theory and Practice*, 317-350.

Miller, D. (1983). The Correlates of Entrepreneurship in Three Types of Firms. *Management Science, 29*(7), 770-791.

Mintzberg, H. (1989). *Mintzberg on Organizations.* New York, NY: The Free Press.

Mintzberg, H., & James, B. (1991). *The Strategy Process, Concepts, Contexts, Cases.* Englewood Cliffs, NJ: Prentice Hall.

Morgan, G. (1986). *Images of Organization.* Newbury Park, CA: Sage Publications.

OECD. (2011). *PPPs and Exchange Rates.* Retrieved October 20, 2012, from OECD.StatExtracts: http://stats.oecd.org/Index.aspx?DatasetCode=SNA_TABLE4

Papadakis, V. M., Lioukas, S., & Chambers, D. (1998). Strategic Decision-Making Processes: The Role of Management and Context. *Strategic Management Journal*, 115-147.

Parker, S. C. (2006). Learning about the unknown: How fast do entrepreneurs adjust their beliefs? *Journal of Business Venturing*, 1-26.

Perry, J., Chandler, G., & Markova, G. (2012). Entrepreneurial Effectuation: A Review and Suggestions for Future Research. *Entrepreneurship: Theory and Practice*, 837-861.

Prahalad, C., & Hamel, G. (1990). The Core Competence of the Corporation. *Harvard Business Review*.

Rogers, E. (1962). *Diffusion of Innovations.* New York, NY: Free Press.

Sarasvathy, S. D. (2001). Causation and Effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency. *Academy of Management Review*, 243-288.

Sarasvathy, S. D. (2008). *Effectuation, Elements of Entrepreneurial Expertise.* Cheltenham, UK: Edward Elgar Publishing Ltd.

Sharfman, M. P., & Dean, J. W. (1991). Conceptualizing and Measuring the Organizational Environment: a Multidimensional Approach. *Journal of Management*, 681-700.

Stewart, W. H., Watson, W. E., Carland, J. C., & Carland, J. W. (1992). A Proclivity for Entrepreneurship: A comparison of entrepreneurs, small business owners, and corporate managers. *Journal of Business Venturing*, 189-214.

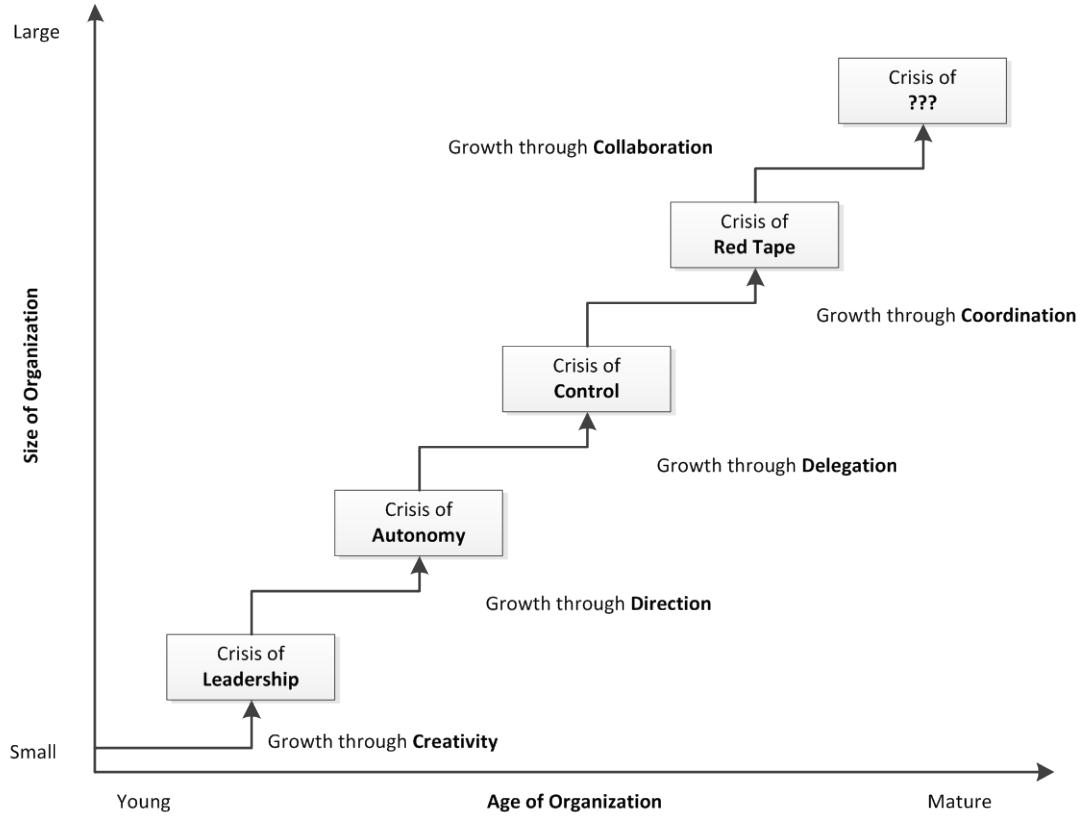
The Gallup Organization Hungary. (2009). *Entrepreneurship in the EU and beyond.* Budapest, HU.

van Someren, M., Barnard, Y., & Sandberg, J. (1994). *The Think Aloud Method.* London, UK: Acadamic Press.

Willard, G., Krueger, D., & Feeser, H. (1992). In Order to Grow, Must the Founder Go. *Journal of Business Venturing*, 181-194.

Appendix A GREINER'S MODEL AND EFFECTUATION

In this appendix Greiner's stage-based firm growth model is analyzed from an effectuation point of view.



Phase 1: Creativity

The first phase in Greiner's model is strongly effectual: *"Long hours of work are rewarded by modest salaries and the promise of ownership benefits"* (Greiner, 1972, p. 42) is an indication of affordable loss based thinking. Moreover *"Control of activities comes from immediate marketplace feedback; the management acts as the customers react"* indicates exploration of contingency.

& THE LEADERSHIP CRISIS

When the company grows, the individual style management that is prevalent in a phase 1 company will start to limit the company's performance. The required changes in behavior to overcome this crisis significantly reduce the level of effectuation: *larger production runs require knowledge about the efficiencies of manufacturing.* Increasing efficiency is an obvious sign of return-based thinking.

Phase 2: Direction

The trend that emerged from the revolutionary leadership crisis continues in the evolutionary direction phase, as is expected. *"Incentives, budgets and work standards are adopted"* (Greiner, 1972, p. 42): this statement clearly indicates the return-based and future-prediction based thinking that is prevalent in this phase.

& THE AUTONOMY CRISIS

Greiner's theory is based on crises which attempt to (violently) correct the preceding phase, which is exactly what is seen here. The lower-level employees become frustrated with the management and seek more independence. As "without dedicated followers there is no prospect of successful leadership" (Haslam, 2001, p. 63), during this revolution more power is relegated to these lower-level employees, which is in accordance with the pilot-in-the-plane principle of effectuation.

Phase 3: Delegation

As expected, effectuation continues it trend upwards: "Much greater responsibility is given to managers of plants and market territories" signifies Pilot-in-the-plane thinking. "Profit centers and bonuses are used to stimulate motivation" could be seen as affordable loss based thinking. Moreover "Management often concentrates on making new acquisitions which can be lined up beside other decentralized units" (Greiner, 1972, p. 43) indicates that alliances are being made, another typical trait of effectual behavior.

& THE CONTROL CRISIS

As the pattern emerges, the situation goes into a crisis and swings back towards the control direction. After a period of phase 3, top management sense that they are losing control and attempt to regain it.

Phase 4: Coordination

In phase 4 the company moves back into causal territory: "Each product group is treated as an investment center where return on invested capital is an important criterion used in allocating funds", it needs no additional explanation to see how return-based thinking is present in this phase. Furthermore "Formal planning procedures are established and intensively reviewed" (Greiner, 1972, p. 43) is a clear indication of prediction of the future and data analysis behavior.

& THE RED-TAPE CRISIS

In these organizations eventually the cure is worse than the disease and the organization gets bogged down in bureaucracy. Line managers will become weary of the many rules staff forces them to adhere to, and in turn staff managers will complain about uncooperative and uninformed line managers. This battle between staff and line-managers sparks a revolutionary phase leading to the next phase.

Phase 5: Collaboration

In the fifth phase the emphasis of the organization is on strong interpersonal relationships. For example: team performance, rather than individual performance, is rewarded. A mixture of causal and effectual behavior can be seen here: *"Real-time information systems are integrated into daily decision making"* indicates data driven behavior, yet *"experiments in new practices are encouraged throughout the organization"* seems to foster exploitation of contingencies.

& THE ? CRISIS

Greiner indicates that this fifth stage is not final, and other crises and phases may follow the collaboration phase.

Greiner's Phases and Effectuation

A firm growing through Greiner's phases would see an ebb-and-flow of causation and effectuation as it goes through the revolutionary phases and would eventually end up in the middle ground (see Figure 6.1). This waveform is the result of the company reversing a trend during revolutionary phase and then overshooting the

goal in an evolutionary phase. As the company finds a balance, in the end the company would be less effectual than in the beginning.

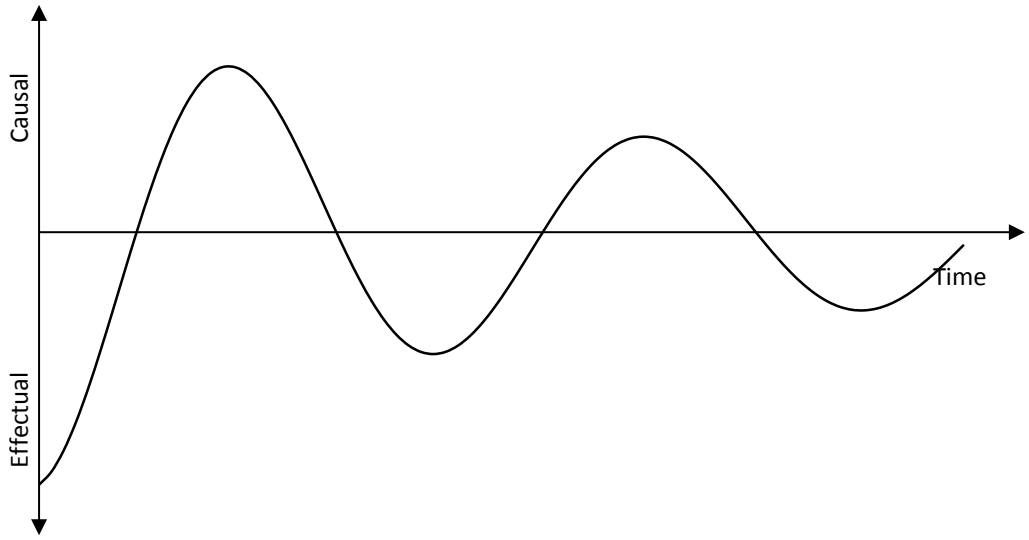
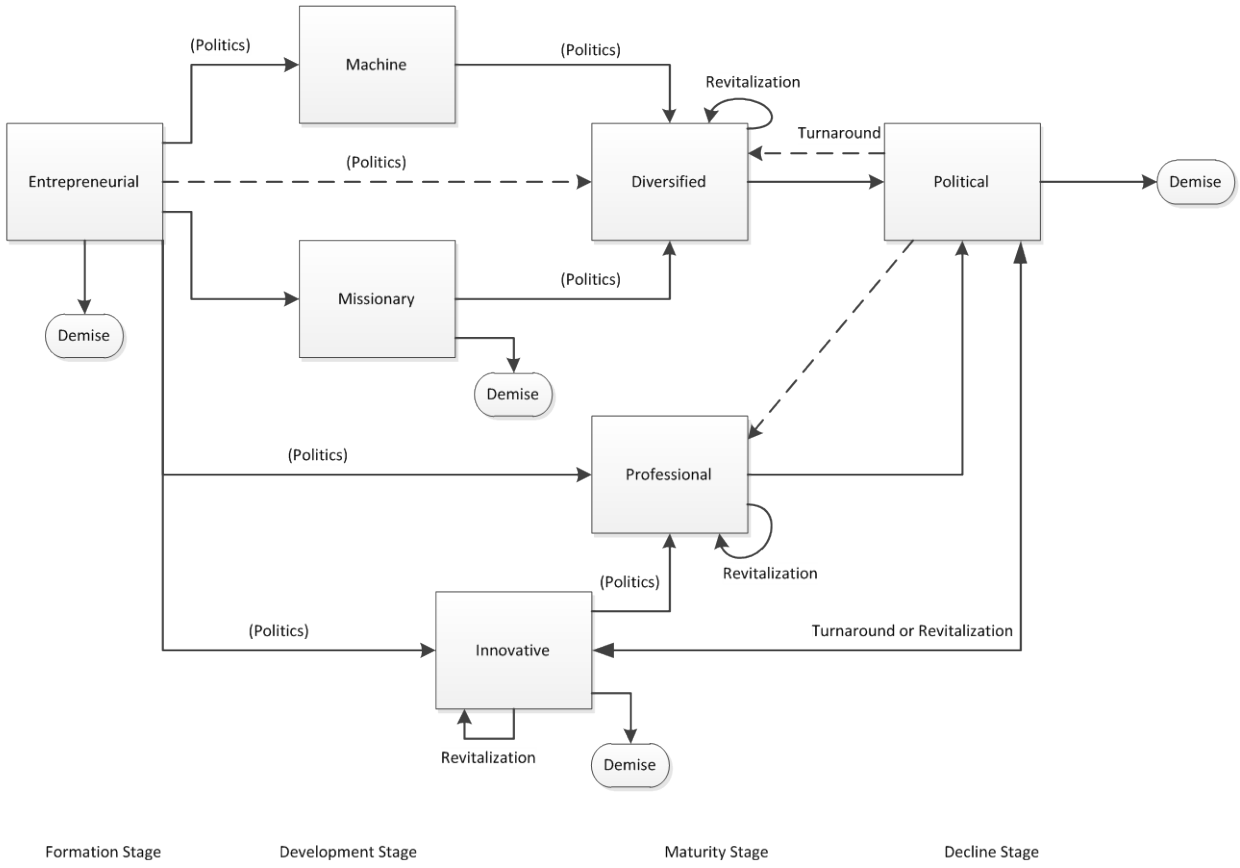


FIGURE 6.1: EBB AND FLOW OF EFFECTUAL BEHAVIOR

Appendix B MINTZBERG'S MODEL AND EFFECTUATION

In this appendix Mintzberg's configuration-based model is analyzed from an effectuation point of view.



In Mintzberg's model (Mintzberg & James, 1991), all organizations start in the **entrepreneurial configuration**. The entrepreneurial configuration is, as expected, quite effectual. It is dominated by the pull to lead of its top management, which matches the pilot in the plane principle (Sarasvathy, 2008). Other characteristics Mintzberg mentions are its organic structure (crazy quilt principle), and its flexibility because it operates in a dynamic environment (the lemonade principle).

One of the configurations an entrepreneurial organization could potentially evolve into is the **Machine Organization**. This configuration is much more causal than the entrepreneurial organization: it prides itself on standardization. It has a large technostructure (analysts outside the hierarchy of line authority) to design this standardization. This data analysis is causal behavior. Furthermore its goals are strictly defined, which is another hallmark of causal behavior.

The **professional organization**, however, focuses less on standardization of processes and more of standardization of skills. Examples of this type of organization are hospitals and universities, where highly specialized professionals have considerable control over their own work. This type of organization embodies the pilot in the plane principle; as these organizations, by definition, rely on human agency.

The **diversified organization** is an interesting configuration from the effectuation point of view, as it can be argued both ways. On the one hand:

"An organization divisionalizes for one reason above all, because its product lines are diversified. And that tends to happen most often in the largest and most mature organizations, the ones that have run out of opportunities –or have become bored-in their traditional markets" (Mintzberg & James, 1991, p. 346)

This, to the researcher, indicates means-based thinking. However, its primary means of control are performance control systems, or in other words: the standardization of outputs. This could be construed as goal-based thinking.

The **innovative organization** has similarities to the professional organization, as they are both primarily driven by human agency. The innovative organization demonstrates even stronger effectual behavior as it is based on an 'adhocracy' where experts in different fields dynamically form creative teams, similar to the crazy-quilt principle.

A **missionary organization** is defined by the domination of its ideology. The organization functions because its norms, values, and beliefs are standardized throughout the organization. As the firm will work towards its ideology, this is a clear example of goal-based thinking. Furthermore, Mintzberg states that these organizations will reject external professional training, because it would force the organization to surrender some control to external agencies. This violates the crazy quilt principle. Overall this type of organization seems to most likely be controlled by causal logic.

Mintzberg's last configuration is the **political organization**. This configuration is described as mostly dysfunctional; therefore it is irrelevant to this thesis to classify it as primarily effectual or causal.

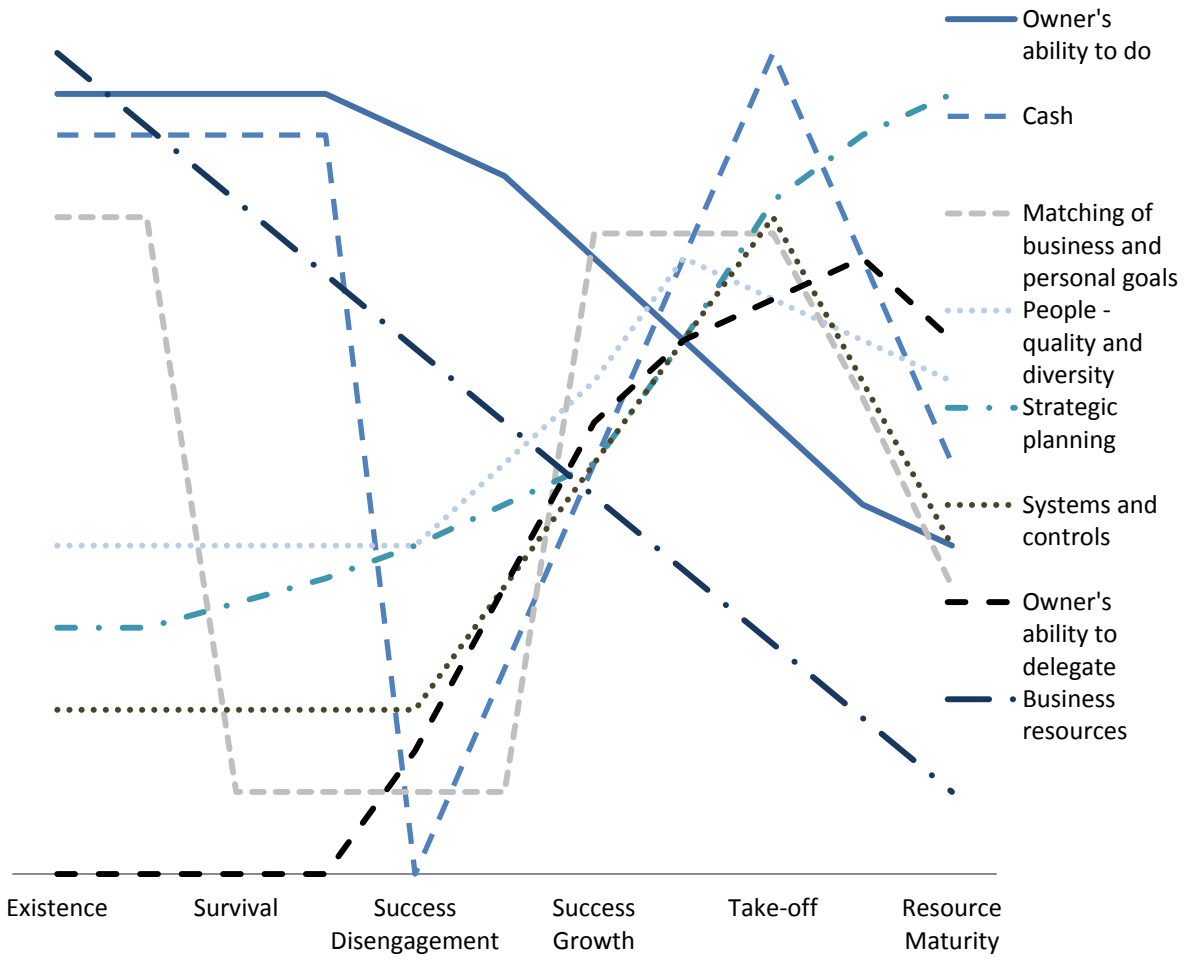
When analyzing **Mintzberg's Configurations** in contrast to **Effectuation**, the estimated level of effectuation for each configuration is compared and contrasted. Mintzberg sees six potential paths from the entrepreneurial organization: demise or any configuration except political.

Configuration	Causal or Effectual Logic Dominant
Entrepreneurial	Strongly effectual
Machine	Mostly causal
Diversified	Slightly effectual
Missionary	Causal
Professional	Effectual
Innovative	Effectual

TABLE 6.1: MINTZBERG CONFIGURATIONS AND EFFECTUATION

As the entrepreneurial configuration seems strongly effectual, and three out of five of the potential new configurations are less than 'effectual', it follows that an increase in causation would be likely.

Appendix C CHURCHILL AND LEWIS'S MANAGEMENT FACTORS



MANAGEMENT FACTORS AND THE STAGES. ADAPTED FROM "THE FIVE STAGES OF SMALL BUSINESS GROWTH" BY N.C. CHURCHILL & V.L. LEWIS, 1983, HARVARD BUSINESS REVIEW, P. 7; Y-AXIS INDICATES RELATIVE IMPORTANCE.

Appendix D DATA TRANSFORMATION AND ANALYSIS

For data entry and analysis, several data formats have been used, and several tools have been built and deployed to convert between these formats.

During protocol analysis the data (for Hungary) has been coded in the following format (dubbed EZcode):

Line number	Code	Sequence number	Rationale	HUN001 *[subject code]*
			1 *[indicating problem 1]*	
2-4	E	1	"I will exploit contingencies"	

A custom built tool (code available upon request) transforms this format to and from the 'Master code' format, which is used to contain all data in the project:

Subject Code	P1_E	P1_X	P1_G	P1_Z	Etc..
HUN001	1	0	0	0	0

In this format the columns represent the total amount of codes found of a certain type within a certain problem. P1_E designates all "exploitation of contingency"-type codes found in Problem 1.

For analysis of the protocols EZcode-conversions have been used. The 08-08 RH version of the master file has been used for this thesis.

HYPOTHESIS 1 – LINK BETWEEN REVENUE, NUMBER OF EMPLOYEES, AND CAUSATION

For this analysis, an EZcode version of all data was imported into Microsoft SQL server.

SubjectCode	QuestionNumber	Lines	Code	SequenceNumber	Causation
AUS001	1	Unknown	B	0	1
AUS001	1	Unknown	B	1	1
AUS001	1	Unknown	K	2	1
AUS001	1	Unknown	K	3	1

Lines are unknown whenever the Master code is converted into EZcode. The following SQL query was executed:

```
select Subject_ID, Causation, Company_current_FTE, Company_annual_turnover,
(Company_annual_turnover * Forex.ConversionToUSD) as Revenue_USD  from Data
      inner join Forex on Data.CountryCode=Forex.CountryCode
      where Company_current_FTE > 0 and Company_annual_turnover > 0
```

Forex rates were obtained from Google and XE, market rates of October 18th, 2012 were used. Values were not adjusted for purchasing power parity or similar measures. When values are adjusted for purchasing power parity, using the OECD (2011) data, the regression with revenue does not become more significant.

HYPOTHESIS 2 – GREINER STAGES

The following queries were executed. The table dbo.converted$ represents the imported EZcode.

```
update [dbo].[converted$] set
      [GreinerPhase] =
```

```
            CASE
                  WHEN [QuestionNumber] > 2 AND [QuestionNumber] < 7
                        THEN 1
                  WHEN [QuestionNumber] > 7
                        THEN 2
            END;
GO

SELECT [SubjectCode], [GreinerPhase]
      ,AVG([Causation]) 'Mean'
      ,COUNT([SubjectCode]) 'N'
  INTO [EPICC].[dbo].[GreinerData]
  FROM [EPICC].[dbo].[converted$]
  WHERE GreinerPhase >= 1
  GROUP BY [SubjectCode], [GreinerPhase];
GO

select
      [SubjectCode] as 'Subject',
      (select        [Mean]        from        [GreinerData]        where
[SubjectCode]=[g1].[SubjectCode] and [GreinerPhase]=1) as 'Mean1',
      (select        [Mean]        from        [GreinerData]        where
[SubjectCode]=[g1].[SubjectCode] and [GreinerPhase]=2) as 'Mean2',
      (select [N] from [GreinerData] where [SubjectCode]=[g1].[SubjectCode]
and [GreinerPhase]=1) as 'N1',
      (select [N] from [GreinerData] where [SubjectCode]=[g1].[SubjectCode]
and [GreinerPhase]=2) as 'N2'
into [EPICC].[dbo].[GreinerFormatted]
from [EPICC].[dbo].[GreinerData] g1
group by [SubjectCode];
```

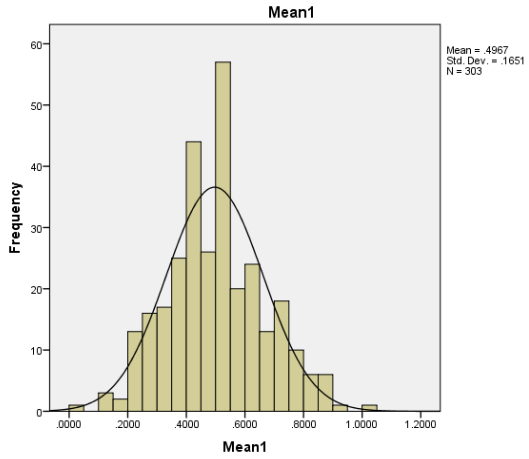
This code results in the following table (first three rows shown)

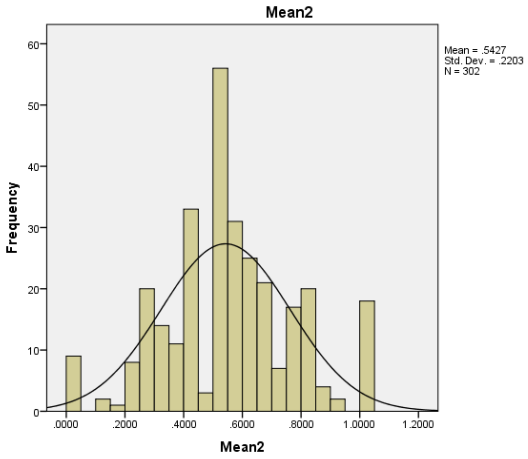
Subject	Mean1	Mean2	N1	N2
AUS001	0.722222	0.846154	18	13
AUS002	0.695652	0.454545	23	11
AUS003	0.375	0.5	24	8

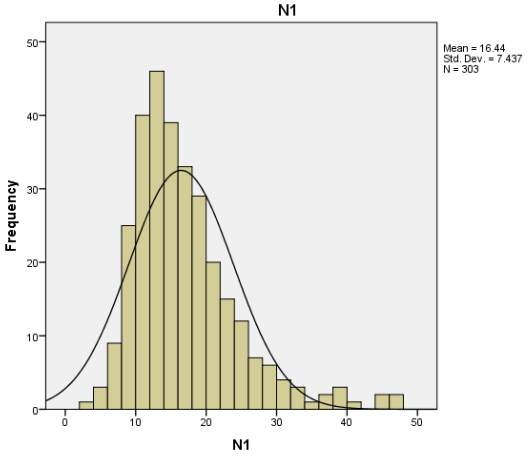
Descriptive Statistics for Hypothesis 2

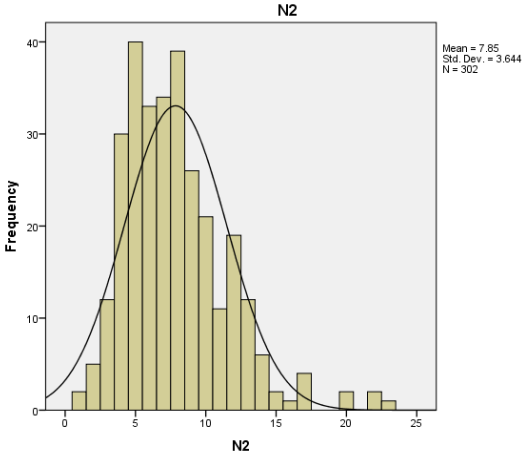
Statistics

		Mean1	Mean2	N1	N2
N	Valid	303	302	303	302
	Missing	0	1	0	1
Percentiles	25	.388889	.400000	11.00	5.00
	50	.500000	.538462	15.00	7.00
	75	.600000	.666667	20.00	10.00


Mean1
Mean = .4967
Std. Dev. = .1651
N = 303
Frequency
Mean1


Mean2
Mean = .5427
Std. Dev. = .2203
N = 302
Frequency
Mean2


N1
Mean = 16.44
Std. Dev. = 7.437
N = 303
Frequency
N1


N2
Mean = 7.85
Std. Dev. = 3.644
N = 302
Frequency
N2

A consideration to keep in mind with these numbers is that when low N cases are excluded from analysis, cases from some cultures will get less emphasis than others.

Country	Avg Codes
MEX	55
NLD	52
AUS	52
IND	50
MKD	45
CHN	43
GBR	43
MYS	42
VNM	41
GER	37
USA	36
HUN	34
POL	30

Value	Mean	N	Std. Dev.	Std. Err. Of Mean
Stage 1 (N>10)	.510	60	.161	.021
Stage 2 (N>10)	.567	60	.152	.020
Stage 1 (All)	.497	302	.165	.009
Stage 2 (All)	.543	302	.220	.013

Paired-samples t-tests: (mean1 – mean2)

Comparison	Mean	Std. Dev.	t	df	p
N > 10	-.057	.178	-2.493	59	.015
N > 5	-.039	.188	-3.023	212	.003
All N	-.045	.242	-3.262	301	.001

Appendix E RESEARCH INSTRUMENT

LOCALIZED FOR HUNGARY

THE CASE

Introduction

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

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

Description

For some time, you have been thinking of starting a coffee-corner at your university. Your inspiration for this came from the fact that when you, as a student, want to get a fresh cup of coffee, that is impossible. You do not like the coffee from the machines which are available in the university buildings. Also, the price of this machine coffee is in no relation to the quality of the coffee. You have been working in a coffee corner in your hometown for 5 years so you know what goes around

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

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

Problem 1: Identifying the market

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

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

2. Who could be your potential competitors?

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

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

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

Problem 2: Defining the market

In this problem you have to make some marketing decisions.

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

Segment	Estimated total size
Students	40,000
Staff members	20,000
Visitors (annually)	10,000

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

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

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

You have done two surveys and organized a focus group. For your first survey you had potential customers fill out an online questionnaire, for your second survey you handed out paper surveys during the lunch breaks.

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

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

Willing to pay (HUF)	Students (%)	Staff members (%)	Visitors (%)
200-250	52	26	45
250-300	30	38	32
300-350	16	22	15
350-400	2	9	8
400-450	0	5	0
Total	**100**	**100**	**100**

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

Willing to pay (HUF)	Students (%)	Staff members (%)	Visitors (%)
200-250	65	21	51
250-300	25	49	42
300-350	10	19	7
350-400	0	8	0
400-450	0	3	0
Total	**100**	**100**	**100**

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

Staff members of the university who participated in the focus group found the plan of the coffee corner very interesting – but indicated that the range of coffee could potentially be expanded before they would be willing to spend HUF 450 or more. With the current offer, they would be willing to pay HUF 300-350 and would demand a bonus system in which they could save up for discounts after a certain amount of coffee drunk.

Both during the lunch and in the focus group meeting, participants are very positive and enthusiastic about the coffee corner. They provide you with good feedback on specific features and also extend suggestions for improvement. The staff members are particularly keen on going beyond the regular coffee aspect; they make it clear that a much wider product range would be required to market the product to them. Also, they indicate that there might be companies which could advertise on cups.

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

Internet	€200 upfront + €50 per month thereafter
Newspapers	Relatively cheap -- ads cost around 10,000 HUF upfront
Cinema	130,000 HUF per month, with 60,000 HUF upfront
Commercials on Local TV	1,500,000 HUF a month
Direct advertisement elsewhere (think of sport-canteens, handing out branded lighters , etc.)	Involves recruiting and training 'sales representatives'

Competition

None of the following four possible competitors sell decent cups of coffee at a good price in the center of your hometown - you are unique in this respect.

Company	Price for a Medium Latte	Revenue	Where to be found
Starbucks	750 HUF	€6.5 billion	Large cities / global
Coffeeshop Company	690 HUF	€225 million	Large cities / Europe
CoffeeHeaven	700 HUF	€130 million	Large cities / Eastern Europe
McCafe	480 HUF	Unknown	Global

These companies are making an average **net return of 25% on sales.**

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

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

How will you price your product?

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

Problem 3: Meeting Payroll

You have started your company on a shoestring, using face to face promotion as your primary method of marketing. You have been marketing your product for six months now. You have priced the products at the low end of the price range (as found by the surveys) at 200-250 HUF. You have about 3000 customers per month. Based on numerous suggestions provided by your customers, you believe you can start selling special coffees in the range of 300-350 HUF. This would especially be the case when you would redesign the interior of the coffee corner to make it into a more upscale coffee corner.

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

You have four employees -- and you are out of cash and unable to pay them at the end of the month. You estimate you need 5,000,000 HUF to survive the next three months and to come up with a super cool store design to be able to participate in the competition. You have the following four options:

1. Borrow from your girlfriend's parents -- they are not overly wealthy, but could probably get their hands on 5,000,000 HUF if they needed to.
2. Borrow from some old friends from the university and your old student job.
3. Convince your parents to take out a mortgage on their house.
4. Convince your employees to wait out the period.

Which of these options would you choose? Why?

Problem 4: Financing

Your store design has won the first prize in the 'New talent' category at the 'Architecture meets Catering' competition. This in turn has led to inquiries from large coffee suppliers such as Lavazza Hungary Kft. to market the concept (with full multi-media exposure) nationally. You estimate that it will take you six months to develop the concept in more detail and about three months after that to actually roll it out on three main channels -- Web, national newspapers and national TV. The coffee will be priced at 600 HUF per unit. You estimate that you will need 25,000,000 HUF till break even (by the third quarter of the second year) -- this includes enhancing the concept, putting in place excellent (support) staff, full-blown advertising and web links, and the development of a small direct sales staff for selling on site.

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

	Year 1	Year 2	Year 3	Year 4	Year 5
Sales	15M HUF	25M HUF	50M HUF	75M HUF	100M HUF
Profits	< 0	3.5M HUF	7.5M HUF	22M HUF	30M HUF

You have three financing options:

Option 1

A venture capitalist who specializes in startup companies in catering and adjacent areas, is willing to finance you 25,000,000 HUF for 48% of your company.

Option 2

A friend of the family who has extensive experience in catering is eager to go into partnership with you -- for 33% of the company. He is able to invest 25,000,000 HUF but wants to work for the company at a base salary of 300,000 Ft per month. He agrees to accept a minimum level of 200,000 Ft for the first two years to keep his family going and defer the rest to when the company starts making money. You like and respect this man and have no personal feelings against him.

Option 3

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

Which option would you choose? Why?

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

Problem 5: Leadership/Vision

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

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

1. Starbucks is the Past -- *Coffee Inc.* is the Future.
2. We Aim to Have at Least a Thousand Employees by the Year 2014.
3. The Fastest Growing Coffee Caterer.
4. Invest in *Coffee Inc.*—Enjoy the Hungarian Tradition.

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

Problem 6: Product Re-development, Part One

You are almost at the end of your fifth year in operation -- you have just managed to break even (later than you projected). You have opened your doors to all three segments (students, staff, and visitors). Sales, while they are steady and continuous, are rather 'colorless' and you start doubting whether you will ever reach your growth targets. You decide to conduct a serious market research initiative in order to find out how to grow your sales. You organize focus groups with both existing customers and potential new customers.

The main problem seems to be the "great divide" between the regular coffee and the specialized products. Over 90% of the participants in your focus groups find the regular products very interesting. But when it comes to the specialized coffees, there is a clear division of opinion. The participants who primarily enjoy the regular coffees almost *never* bother to go and buy more expensive coffees and wonder why all that 'e*lite stuff*' is there. Those who are primarily interested in the specialized coffees think that the regular products downgrade the atmosphere.

How do you respond to this feedback?

Problem 6: Product Re-development, Part Two

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

You first start to promote the idea with the exclusive shop with a variety of 15 different coffees and 15 different teas, and also a smaller variety of cakes and pastries than you eventually will offer. This together with free newspapers and free wireless internet is what you show to the focus group. It turns out that especially the exclusive shop is received very enthusiastically and customers are willing to pay 2 to 2.5 times as much as asked previously.

One of the requirements, however, is that you have to start with the full product range (the 20 teas, 30 coffees, the books, newspapers, and free wireless internet). You have to decide whether to undertake this massive concept change or to focus completely on one of the two concepts. If you would like to start the second store it will cost you as much as 40,000,000 Ft and a separate marketing effort.

Year	1	2	3	4	5	6	7	8
Estimated Sales (M HUF[1])	10	65	150	600	1000	1800	2400	3000
Actual Sales (M HUF)	16	61	132	283	386			

Which of the two options do you choose? Why?

[1] Millions of Forints

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

1. Undertake the redesign effort in-house

   Estimated Cost: 50,000,000 HUF

2. Outsource the redesign to the new company within your home-country

   Estimated Cost: 40,000,000 HUF

3. Outsource the redesign to the new company outside your home-country

   Estimated Cost: 20,000,000 HUF

Which option do you choose? Why?

Problem 7: Growing the Company, Part One

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

- Plain Coffee (sales around 300 – 1000 HUF per customer) where you sell a limited amount of regular coffees and teas and a basic amount of donuts, muffins and chocolates
- Exquise (sales around 1000 – 4500 HUF per customer) where you offer the 'complete picture'

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

Year	1	2	3	4	5	6	7	8
						Revised		
Estimated Sales (M HUF)	10	65	150	600	1000	600	1200	2000
Actual Sales (M HUF)	16	61	132	283	386	860		

Would you:

1. Fire him?

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

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

Problem 7: Growing the Company, Part Two

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

Year	1	2	3	4	5	6	7	8
						Revised		
Estimated Sales (M HUF)	10	65	150	600	1000	600	1200	2000
Actual Sales (M HUF)	16	61	132	283	386	860	2000	2750

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

Problem 8: Hiring Professional Management

You are now in the eighth year of your company. You are doing very well -- surpassing growth targets and building reliable market share. Your sales are 2750 Million HUF and you project a growth rate of at least 25% per year for the next three years.

Year	1	2	3	4	5	6	7	8
						Revised		
Estimated Sales (M HUF)	10	65	150	600	1000	600	1200	2000
Actual Sales (M HUF)	16	61	132	283	386	860	2000	2750

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

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

Problem 9: Goodwill

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

She requests you to work with a couple of really enthusiastic teachers to develop some elementary learning materials for the students to work on in the Exquise shops. The project would mean not only an investment of 20,000,000 HUF (approx.) for modifications, but also a substantial chunk of your time for about six months during development and then about 10 sessions of classroom participation per year for a couple of years at least.

Note: Your sales are 2750 Million HUF and you project a growth rate of at least 25% per year for the next three years.

Will you take the initiative for this project?

If not, why not?

If yes, would you:

a) Donate the educational product?

b) Sell it at cost?

c) Sell it at your regular profit margin?

Why?

Problem 10: Exit

You are now in the tenth year of your company -- *Exquise* is a great success and thanks to your new targeted strategies, even *Plain Coffee* is growing satisfactorily. You have acquired three other profitable catering concepts. Your sales are around 4500 million and you project that you will reach 7000 million within a year. At this time you face two possible directions for your company.

Direction 1

Your accountants and bankers think that this is a good time for you to take the company public. The Initial Public Offering (IPO; new stocks) market is booming and catering is in a solid upward trend. They estimate you should make an initial public offering of 2 million shares at 3000 HUF per share. The company has a total of 12 million shares outstanding.

Direction 2

At this point in time, Starbucks approaches you and makes an offer for your company -- it seems they have decided to get in on the more exclusive segment and have decided to enter the arena through acquisitions -- they see you as a perfect fit for their strategy and offer you 30 Billion HUF.

Year	1	2	3	4	5	6	7	8	9	10
Est Sales (M HUF)	10	65	150	600	1000	600	1200	2000	3000	4500
Actual Sales (M HUF)	16	61	132	283	386	860	2000	2750	3800	7000

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

-End-