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The Usage of, and Attitude towards, Business Planning and Business Plans: A multiple Case Study

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The usage of, and attitude towards, business planning and business plans: A multiple case study.

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This thesis has been written within the research topic of entrepreneurship, business planning, and business plans.

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ABSTRACT

Title: Questioning the importance of business planning and business plans: The perspectives of five different startups.

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Key words: Business planning, business plan, revenue forecasting, startup, entrepreneurship, effectuation.

This thesis addresses the ongoing debate about business planning and business plans in entrepreneurship literature. In universities all over the world, entrepreneurship classes teach students how to write a business plan, indicating a widespread assumption that both business planning and business plans imply venture success (Brinckmann et al, 2010). Opposing scholars, however, argue that business planning and market success are negatively correlated (Chwolka & Raith, 2012). Timmons and Spinelli (2009) argue that a business plan is obsolete the moment it emerges from the printer, due to the uncertain and dynamic environment. Additionally, contributing to the questioning of the business plan is the trivialization of revenue forecasting. As a feature of the business plan, revenue forecasting is argued to be too assumption based and thus, irrelevant (Alänge & Lundqvist, 2013; Goodwin & Wright, 2010). Instead, what should matter is the economics of the business (Timmons & Spinelli, 2009).

The aim and ambition of this thesis is to examine whether startups find business planning and business plans to be necessary activities to establish. This will be accomplished by addressing six study objects' attitude and use of business planning and business plans. It is a thesis of comparative design, where five startups and one venture capitalist constitute the empirical findings, to eventually be compared to existing literature.

Conclusively, the author found that all cases' attitudes and usage of business planning and business plans are unique. In the broader context, both the planning and non-planning schools are represented, as well as elements of effectuation and causality. It has been challenging to identify similarities in terms of attitudes and usage, which has led to a belief that what determines a company's attitude and usage towards business planning and business plan is heavily reflected in the entrepreneur's prior knowledge and experiences.

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Erik Heimer Berglund

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1. INTRODUCTION

The first chapter will begin with an introduction to this thesis. It will commence with describing and problematizing the ambiguities related to business planning and business plan. This is then followed by the aim and ambition of the thesis, and the research questions addressed.

1.1 Problem description

A frequently debated topic in recent entrepreneurship literature is the value and importance of business planning for new firms. There are many dimensions to this topic, for instance if the value of business planning depends on how volatile and uncertain the industry is, and if business planning refers to the physical business plan or the process of planning the business (Brinkmann et al, 2010; Chwolka & Raith, 2012; Gruber, 2007). The topic addresses whether entrepreneurs should formally and systematically plan the business in order to achieve venture success, or if they should storm the castle with flexibility (Brinkmann et al, 2010). Scholars advocating that business planning leads to success argue that both business plan and business planning generates similar positive performance (Brinkman et al, 2010). Furthermore, the process of business planning is to be considered crucial for firms in fuzzy and uncertain environments, such as for new firms (Gruber, 2007). Schwetje & Vaseghi (2007) argue that the business plan is the commercial document used to attract potential investors, or as Timmons and Spinelli (2009) put it, a blueprint that allows for a structured approach to articulate an idea. However, Timmons and Spinelli (2009) also argue that a business plan is obsolete the moment it emerges from the printer. This is due to the change of pace in all areas affecting a firm. Other scholars contributing to the approach of trivializing the importance of business planning include, for example, Chwolka and Raith (2012) who argue that regardless if the majority of emerging entrepreneurs plan their businesses, the majority of ex-post successful entrepreneurs do not. As a matter of fact, the two authors identified a negative correlation between business planning and market success. Business planning is also suggested to impede the adaptability of new firms entering uncertain markets (Gruber, 2007). In spite of this, universities all around the world teach the importance of preparing and writing business plan in entrepreneurship classes. Consequently, a widespread assumption is that business plan writing implies venture success (Brinkmann et al, 2010). What if this assumption is wrong? What if neither business planning nor business plans matter? As of today, the business plan includes elements that are trivialized, such as the financial estimates, i.e. profit and loss statement, which are avoided in early stages due being based on too many

assumptions (Alänge & Lundqvist, 2013). However, although the actual numbers in a business plan do not matter, the economics of the business model matter enormously (Timmons & Spinelli, 2009).

In other words, important elements of the business plan, such as revenue forecasting, are being trivialized. But why is this? Why even bother to forecast revenue as the numbers do not matter? How come estimations are inaccurate? Is it due to the uncertain and volatile environment start-ups act in? Perhaps this ambiguity prevents the worthwhile activity of planning the business (Gruber, 2007; Garvin & Levesque, 2006)? Or are existing forecasting methods not suitable for start-ups? Maybe since forecast methods contain the fundamental weakness of being too assumption-based (Goodwin & Wright, 2010)?

1.2 Research question

The aim and ambition of this thesis is to examine whether startups find business planning and business plans to be a necessary activity to establish. This will be accomplished by addressing the study objects' attitudes towards business planning and business plans, partially through the perspective of the trivialization of revenue forecasting. The following research questions will be answered:

RQ1: How do the case companies use business planning and business plans?

RQ2: What are the case companies' attitudes towards business planning and business plans?

RQ3: What factors affect the case companies' attitudes and usage of business planning and business plans?

2. METHODOLOGY

The second chapter describes and presents the methodology used in order to carry out this research. It will treat choice of method, work progress, data collection and discuss the reliability and validity.

2.1 Choice of method

The methodology chosen to carry out this research is characterized by an inductive research strategy. Although the topic of the thesis derives from existing theory about business planning, business plans and revenue forecasting, the empirical findings has intrinsically shaped the theoretical framework. An inductive approach focuses on linking data and theory together to produce generalizable findings. In this thesis, however, elements of a deductive approach are used, as the research has involved a weaving back and forth between data and theory. Such a strategy is often called iterative (Bryman & Bell, 2007). Furthermore, the research strategy is indeed qualitative, as the research emphasizes words rather than quantification and analysis of data (Bryman & Bell, 2007). Very little quantitative data has been used in this study, and when used it is for illustrative purposes. In this case, the qualitative research has not been used to produce theory; instead, theory has laid the foundation for the qualitative research.

An additional approach to categorize the choice of method is through the framework for collection and analysis of the data, i.e. the research design. This research is a multiple case study, which is considered as a comparative design. The purpose of a multiple case study is to compare and contrast the findings deriving from each of the cases. Thus, a multiple case study allows for the researcher to decide what is unique and what is common between the cases, and consequently promotes theoretical reflection on the findings. Additionally, what distinguishes a multiple case study from a cross-sectional design is that a multiple case study focuses on each case and their unique context, instead of attempting to produce general findings as in a cross-sectional design. (Bryman & Bell, 2007)

2.2 Work progress

This research builds on a problem identified during my studies. In entrepreneurship and innovation classes several assignments have circled around determining the feasibility of an idea, or its commercial potential. The end-result of this have more often than not resulted in a report similar to a business plan. Consequently an interest arose about how much business plans are actually written, and how much business planning occurs amongst startups. In

addition, business plans requires much assumptions and guesstimates. From my own experience, this is especially evident in revenue forecasts, and I have not yet found a proper methodology to conduct such a forecast. The issue of forecasting revenue for startups is naturally combined with the raised question of how crucial business plans and business planning is. In other words, how much one plan for the future is assumed to be related to the method of how a revenue forecast is carried out.

As discussed in the introduction, the subject addressed is currently extensively debated in entrepreneurship literature; is planning a worthwhile activity? A part of this debate is also whether the financial forecasts in a business plan actually matter. This thesis aims to contribute in terms of empirical findings about firms' attitude and application of business plan and business planning, and what methods and techniques startups use to forecast their revenue during the first fiscal year. As I see it, three parties can benefit and gain new insights from this research; *scholars* participating in the debate about business plans, business planning, and revenue forecasting, *venture capitalists* or *investors* that are handed business plans to evaluate a company, and *startups* searching for guidelines and information about how others have fared.

After deciding on the topic, the next step was to conduct an extensive literature review. This resulted in theories about business plans, business planning and revenue forecasting, as well as empirical findings from previous studies. Consequently, the literature review is what constitutes the theoretical framework. When the theoretical framework was set, the interview framework and search for case companies began. Here, it was decided to carry out semi-structure interviews, letting the interviewee to speak freely. When the interviews were conducted, the theoretical framework was adjusted to be more aligned with the responses; indicating an inductive approach. The process of collecting data will be further addressed in the next chapter.

The analysis of the collected data was done within the boundaries of a comparative research design. First, the empirical findings from the case studies were compared to find similarities and differences. This was followed by a comparison between the summary of the empirical findings and existing literature. More specifically, the first research question was answered through comparing how the theoretical framework empirical findings use business planning and business plans. A part of the business plan comparison is to compare how the cases use revenue forecasts, and what methods to construct them. Similar to the first research question,

the second was answered through comparing the advantages and disadvantages in literature with the case companies' attitude towards business planning and business plan, revenue forecasting included. The last research question strives to answer why the case companies think as they do about business planning and business plans. It was answered through attempting to identify similarities and differences in the companies' contextual environment that might affect their attitudes.

2.3 Data collection

2.3.1 Primary data

The primary data used in this thesis was gathered through semi-structured interviews. According to Bryman and Bell (2007), interviews are probably the most widely employed method in research to gather primary data. In qualitative research, there are two forms of interviews used; unstructured and semi-structured. Both interview types allow the interview to be very open and focusing on the interviewees' own perspectives. In a semi-structured interview, the interviewer relies on an interview guide (see Appendix A – Interview framework), although the interviewee is allowed much freedom in how to reply. In an unstructured interview, however, the interviewer merely takes the help of notes as a brief set of reminders of what topics to cover (Bryman & Bell, 2007). The motivation behind using semi-structured interviews in this thesis is that the similar sequence of events ha discussing the similar sequence of events with the different interviewees.

Scandinavian Enviro Systems (SES), Prototyp Business Design (Prototyp), and Promimic were found through Venture Cup's alumni network. There are 56 companies in the network, whereof fifteen located in Gothenburg and contactable. Of these fifteen, twelve were contacted for an interview. As participating in Venture Cup requires a business plan, the companies' forecasts were documented and thus, aligned with the initial aim of this study. Aktivators were found threw my own network, and has also participated in Venture Cup. Magenta News (Magenta), was founded by the same entrepreneur as SES, namely, Ola Ekman. When meeting with him as a representative for SES, he also told about his experience of starting Magenta, which also participated in Venture Cup. An additional interview was held with Almi Invest AB, to examine and understand an investor's take on business plans, business planning and revenue forecasting. Below follows a descriptive list of the six companies interviewed.

Prototyp. Business Design (referred to as Prototyp) is a business design consultancy, founded in 2011, that designs innovative services, processes and business models with a focus on the user, regardless if the user is an employee, a client or a fellow human being. Interviewee: David Joelsson, Co-founder.

Aktivators is a flash retail store active in the sporting industry. The business idea is to contact companies to freeze their stock surpluses of old collections for a certain period. Aktivators then initiates a campaign in its website with very beneficial prices. Once the campaign deadline has passed, a bulk order is sent to the company holding the stock surplus. Person interviewed: Victor Gerdén, Marketing and Procurement Manager.

Scandinavian Enviro Systems (referred to as SES) is a company holding a patent for the technique of recycling carbon black, oil, steel and gas from scrapped tires. SES was founded in 2001 one year after the technique was patented. Person interviewed: Ola Ekman, co-founder.

Magenta News (referred to as Magenta) is a Norwegian company today known as Meltwater, brought to Sweden by Ola Ekman in 2004. The company offers news and media coverage to other businesses. Interviewee: Ola Ekman, Founder.

Promimic is a biomaterial company, founded in 2004, that develops and markets a unique implant surface which dramatically accelerates osseointegration. The surface can be applied onto various types of substrates, including metals, ceramics and polymers. Furthermore, it can convert any implant, regardless of its dimensions and structure, to a surface that resembles natural human bone tissue. Interviewee: Ulf Brogren, CEO.

Almi Invest AB (referred to as Almi) is a public venture capitalist investing in companies with scalable business models and high growth aspirations. Today, its portfolio consists of 350 companies in many different industries in which Almi has placed SEK 750M. Interviewee: Johan Falk, Investment Manager.

2.3.2 Secondary data

All through this research, the secondary data collected is almost exclusively from written documents such as articles, books and reports (see chapter 7 'References'). When evaluating documents, two criteria to account for are authenticity and credibility. Authenticity suggests that the source of the evidence is unquestionable, and credibility refers to the document being free from error and distortion (Bryman & Bell, 2007). The secondary data used in this thesis

fulfills both of these criteria, as the documents have been reviewed carefully and no subjective data has been used. Additionally, the databases used to retrieve the secondary data are in the author's opinion credible (Gothenburg University Library and Google Scholar).

As the trivialization of business planning and business plans is a current debated topic, it was a grateful activity to collect secondary literature. Key words used included "business plan", "business planning", "business + sales + forecast", "revenue forecasting" and "revenue forecasting". The most recent articles, approximately ten years old, were prioritized in the search and gathering. Apart from documents found through the search with the key words, some articles were provided by my supervisor, some were reused from previous my previous academic studies, and many very found through citations in other documents.

2.4 Reliability and validity

Validity and reliability are two important criteria in qualitative research, by which the quality of the research is assessed. In qualitative research, the two criteria are assessed both internally and externally (Bryman & Bell, 2007). External reliability refers to the likeliness to replicate the study with similar result. This is problematic for qualitative research as it is impossible to repeat a social setting. The results in this study differ extensively to each other, and a replication of the study would probably generate an equal uniqueness among the cases studied. In other words, due to the unique context of each firm, similar widespread inequalities would be found if the study was replicated. Internal reliability refers to whether disagreements about observations within the research team have occurred. As this study was performed individually by me, it is problematic to assess. My views and perceptions would probably have been challenged by a hypothetical research partner. However, my supervisor has been involved extensively in formulating the interview framework to make it as straightforward as possible; and I have not lacked a counterpart to discuss the observations with. According to Bryman & Bell (2007), external validity refers to the generalizability of a study. Qualitative research struggles with generalizability due to case studies and small samples. Thus, this study has produced no generalizable findings, at its best some indications. With that being said, nothing else was intended. Internal validity refers to the coherency between the researcher's observations and the theoretical ideas developed. By using a research strategy that allows the researcher to go back and forth between theoretical framework and empirical findings I have been able to adjust the theories when required, and

thereby assure the internal validity. For instance, '3.3 Revenue forecasting' was immensely larger before realizing that the case companies do not use the complex quantitative models.

Further, Bryman and Bell (2007) present another method with alternative criteria to assess the quality of a research; trustworthiness and authenticity. Trustworthiness, includes both reliability and validity, and consists of four criteria; dependability which corresponds with reliability, *credibility* which corresponds with internal validity, *transferability* which corresponds with external validity, and *confirmability*. As reliability and validity already have been argued for, what remains to determine the trustworthiness is confirmability; by which they mean what degree the research suffers from personal values and interpretations. Of course, I have strived to maintain objectivity throughout the research. However, as I has been in contact with several interviewees (Ola Ekman, Victor Gerdén and David Joelsson) before, it is possible that previously experiences influenced the interview. Also, as only one interview with each interviewee occurred, the responses only reflect the interviewees' opinions at that particular time, and are certainly dependent on how I formulated the questions. Thereby I cannot reject the possibility that the interviewees would have answered differently if it was another day, another interviewer, other questions, i.e. other circumstances.

In addition to the four trustworthiness criteria, authenticity aims to assess the wider political impact of the research. Authenticity consists of five criteria; fairness, ontological authenticity, educative authenticity, catalytic authenticity and tactical authenticity. Fairness reveals whether the research fairly represent different viewpoints among members of the social setting. As all companies, Almi excluded, participated in Venture Cup it was already assured that they had once constructed a business plan. This was a necessity in order to see how the business plan was used, but this leads, however, to missing out on companies not even writing a business plan in the first place. On the other hand, the companies are very widespread in terms of industry and offers, ranging from biotech and recycling to consultancy and retail. Ontological authenticity refers to whether the researcher helps interviewees to improve their understanding of their social environment. This has been accomplished through a summarizing introduction about my thesis, the topic and what is written in literature, at all interview occasions. The educative authenticity criterion is determined by how well the researcher has mediated perspectives of others, in a learning purpose. As mentioned, the interviewee has been provided with a summary of the literature. Of course, I was not able to discuss others' perspectives at the first interview, but the following interviews I presented empirical findings relevant for the interviewee. This resulted in a more intense discussion.

Catalytic authenticity refers to whether the researcher has suggested any actions to change their circumstances. I have not suggested any changes for the interviewees. Instead I have taken a role whereas the interviewee teaches me about his or her journey. Finally, similar to catalytic authenticity, tactical authenticity refers to whether the researcher has empowered members to engage in action. This has not been done to any extent, except for perhaps presenting opposing and challenging views on business planning and business plans.

3. THEORETICAL FRAMEWORK

The third chapter will give the reader an understanding of the related theoretical topics. It starts with a presentation of the two contradictive approaches on how to account for the future; the effectual and casual logic. Following this is a presentation of literature within the field of business planning, business plans and revenue forecasting, which aims to provide an understanding of why and how the topics are trivialized.

3.1 The effectuation logic

3.1.1 Casual vs. effectuation

When starting and establishing a venture, there are at two contradictive approaches suggesting different methods to predict the future. Most textbooks and newspapers suggest a method where the entrepreneur needs to identify market segments through market research and competitive analyses. Once the market segment is identified, the entrepreneur should develop a strategy to attack the identified market segment, calculate cost and price margins and make financial estimations. Included in the textbook and newspaper approach is also to write a business plan, raise resources, hire a team and build your venture. In other words, there are many suggested steps to take, and analysis always precedes action. According to Sarasvathy (2006), this method is termed casual or predictive, because it depends on accurate predictions and clear goals. Expert entrepreneurs, on the other hand, suggest a disagreeing approach, termed effectual or nonpredictive, which instead is stakeholder dependent and means driven. The effectual logic suggests that the entrepreneur begins with identifying herself; who you are, what you know and whom you know. The entrepreneur should also begin to do what is doable with as few resources invested as possible. Further, the entrepreneur is recommended to interact with potential stakeholders and negotiate actual commitments. These commitments should then reshape the specific goals of the venture. This process is to be repeated until the chain of stakeholders and commitments converges to a viable new venture. (Sarasvathy, 2006)

Table 3.1 Casual vs. effectual logic

Casual Logic	Effectual logic
- Analysis precedes action	- Actions and interactions precede analysis and drive the process.
- Resources are invested in upfront information-gathering.	- Creativity to build the venture with virtually no resources invested.
- Accuracy of prediction and clarity of goals drive the resources allocation process.	- Unpredictability itself is a resource. Thus, nonpredictive strategies.
- Reaching the preselected targets dictates whom to bring on board.	- The people included help determine the goals and shape the venture and its market.
- Control over outcomes through being one step ahead of trends and competition.	- Control over outcomes through doing the doable and transforming realities into possibilities
- Managing risk through avoiding failure at all costs.	- Managing risk through keeping failures small and having them happen early.

Source: Sarasvathy, (2006)

3.1.2 Origins of effectuation

The effectual logic is a human problem solving developed from a cognitive based study of 27 founders of successful companies ranging in market capitalization from USD 200M to USD 6.5B. The creator of the logic, Dr. Saras Sarasvathy, did not create an entrepreneurship theory that would be compared to other theories. Instead, she documented a logic of entrepreneurial action that has methodical implications for both researchers and entrepreneurs. The research produced two major findings: (SEA, 2012)

- 1) Effectuation explains historical methods of performance, and is a method anyone can use to decrease the risk of starting a venture through providing a way to control a future that is inherently unpredictable.
- 2) Effectuation is an entrepreneurial method which can be used to create more experiments by entrepreneurs testing their theories in the real world.

3.1.3 The five principles of effectuation

As previously mentioned, most ventures are started in a space in which the future is not only unknown, but unknowable. However, entrepreneurs actually do shape this unpredictable future through using five different principles, termed; bird-in-hand, affordable loss, lemonade, patchwork quilt and pilot-in-the-plan. The principle of *bird-in-hand* refers to that entrepreneurs should start with their means instead of pre-set goals or opportunities. Through identifying who they are, what they know and whom they know, the entrepreneurs can

imagine possibilities originating from their means. *Affordable loss* recommends the entrepreneur to focus on the downside risk, as opposed to the causal logic focusing on expected return. Expert entrepreneurs limit risk by knowing what they can afford to lose. The third principle, *lemonade*, suggests that entrepreneurs accept the surprise factor and not neglect contingencies. Contingencies should be considered as potential clues and hints to create new markets. *Patchwork quilt* refers to building partnerships with self-selecting stakeholders. Through pre-commitments from these partnerships, entrepreneurs reduce uncertainty and co-create the new market with its interested participant. Finally, the *pilot-in-the-plane* principle suggests that entrepreneurs focus on controllable activities, i.e. knowing that their actions will result in the desired outcomes. According to the effectual logic, the future is neither found nor predicted, but rather created. (University of Virginia, 2011)

3.2 Business planning

3.2.1 Definition

Business planning is a systematic and prediction-oriented approach to plan the different processes in a firm with the purpose to enhance business performance (Brinckmann et al, 2010). According to Brinckmann et al (2010) the activities refers to e.g. the frequency of planning meetings and forecasting and the detail degree of market analysis. Furthermore, the authors argue that business planning is a proactive learning strategy through expanding the entrepreneur's knowledge about the intended business, and thus, eases decision-making.

3.2.2 Advantages

Gruber (2007) argues that business planning is particularly useful for complex and dynamic tasks or environments, such as for startups. This is due to that the time span between planning and feedback is much shorter for emerging firms than established, and thus, it is argued to be more effective (Shane & Delmar, 2004). The process of business planning allows entrepreneurs to manage much greater amounts of information, to set milestones toward achieving their vision, and to develop action plans to reach those milestones in a timely manner (Gruber, 2007). In their research, Brinckmann et al (2010) found that business planning increases business performance, for both new and established small firms.

3.2.3 Disadvantages

Chwolka and Raith (2012) found a negative correlation between business planning and market success in their research, which indicates that business planning is not perhaps a prerequisite for successful performance. Bidh  (2000) argues that startups facing high degrees

of uncertainty where business planning does not serve as a guide, but can actually hinder the adaptability required to survive such an environment. Instead of a planning approach, such environments should be handled with learning and strategic flexibility (Brinckmann, 2010). Sometimes, even the entrepreneur's intuition is sufficient for effectively serving a particular market (Allinsson et al, 2000).

3.3 Business plans

3.3.1 Definition

The business plan refers the physical document, i.e. the often printed product that commercializes the business (Schwetje & Vaseghi, 2007). There are many approaches on what to include in a business plan, here follows an approach dividing the business plan work into six phases, presented by Barrow et al (2012). The first phase concerns the company's history and position to date. It includes the purpose of the business, and description of the business and its service or product. Thereafter, the company should conduct a market research, which is the second phase. Included here is identifying customers, competitors and establish a market plan. In the third phase, named competitive business strategy, the company's strategy, pricing model, advertisement, and distribution channels are to be presented. The fourth phase concerns staffing and operations, in which sales plan, administrative procedures, people, legal and regulatory factors, and communication systems are presented. In the fifth phase, the entrepreneur should forecast the firm's financials, including sales forecast, break-even analysis, financing requirements and profit and loss statements. The final phase, business controls, addresses how the firm should monitor, measure and control the financials and sales. In university all around the world, students in entrepreneurship classes are taught about the necessity of business planning and what components to include. Consequently, a widespread assumption is that business plan writing implies venture success, and business plan competitions are in many countries a way to foster and cater for entrepreneurship (Brinckmann et al, 2010).

3.3.2 Advantages

In entrepreneurship literature, there are plenty of advantages related to business plans. Schwetje and Vaseghi (2007) argue that there are both internal and external benefits from a business plan. Internally, the business plan can be used as a guideline, and externally, a commercialization of the business to attract funding, form alliances and establish partnerships. Furthermore, a business plan manages risk and rewards of a business, and sets a realistic time

schedule to a venture, and essentially, has the potential to transform an idea into an opportunity and thereby determine whether to commercialize or not (Timmons & Spinelli 2009; Gruber, 2007).

3.3.3 Disadvantages

In their study from 2012, Chwolka and Raith found that the majority of ex-post successful entrepreneurs do not have a business plan, even if almost all entrepreneurs plan their business. Similar to criticism against business planning, the criticism towards business plans focus on the dynamic and uncertain nature of a startups environment, and a plan is not the course of action to cope and handle this (Brinckmann et al, 2010; Timmons & Spinelli, 2009). Given the change of pace in all areas affecting a firm, a business plan is obsolete and outdated the moment it emerges from the printer (Timmons & Spinelli, 2009).

3.4 Revenue forecasting

The ongoing debate about the importance of business plans and business planning also comprises the weight of financial forecasts in startup stages. In an early stage, factors affecting the financials of a business are unpredictable, and thus forecasts build on guestimates which invokes a false confidence (Alänge & Lundqvist, 2013). This ambiguity of revenue forecasts is perhaps what prevents it from being worthwhile activity (Garvin & Levesque, 2006). Reeves and Sivaramakrishnan (2007) argue that what matters is not when or how the forecast is conducted but rather the accuracy, as not meeting the forecast signals failure. On the contrary, Gruber (2007) suggests that entrepreneurs do not have anything to lose from inaccurate forecasts, as the risks are low due to the investments typically being small. Additionally, forecasting sales is considered to be the most important set of numbers deriving from business planning (Barrow et al, 2012). Opposing scholars, however, suggest that the actual number do not matter, but the economics of the business model matter immensely, and therefore financial forecasts are an important element of business plans and business planning (Timmons & Spinelli, 2009). Finally, Goodwin & Wright (2010) suggest that forecast methods contain the fundamental weakness of being too assumption-based, and thus are pointless.

3.4.1 Familiar revenue forecasting methods

In their article “The Evolution of Sales Forecasting Management: A 20-Year Longitudinal Study of Forecast Practices” from 2006, McCarthy, Davis, Golocic and Mentzer present several revenue forecast methods. The different methods presented are of both qualitative and

quantitative kind. Below, these techniques will be described and explained, supplemented by two other methods, ‘The L.E.K model’ (McIntyre, 2002) and ‘The Sales forecast’ (Barrow et al, 2012). In table ‘3.2 Revenue forecasting methods’ models from McCarthy et al (2006) are presented, as well as the models’ familiarity and how frequently used they are.

Table 3.2 Familiarity and usage of revenue forecasting methods

	FAMILIARITY			FREQUENCY OF USE (<i>n</i> = 86)		
	% familiar	% somewhat familiar	% not familiar	Short horizon (less than 3 months)	Mid horizon (3 months - 2 years)	Long horizon (more than 2 years)
Quantitative						
Moving average	84	16	0	6	7	na
Straight-line projection	71	20	9	6	8	6
Exponential smoothing	76	20	4	3	2	5
Regression	73	24	3	3	6	2
Trend-line	69	23	7	3	5	4
Decomposition	30	22	48	na	8	na
Box-Jenkins time series (auto regression)	38	16	46	na	11	na
Qualitative						
Jury of executive opinion	57	17	26	na	1	1
Sales force composite	66	18	17	2	3	3
Customer expectations	62	21	17	1	4	na

Source: McCarthy et al (2006)

As tabulated, the three most familiar techniques are moving average, straight-line projection and exponential smoothing. Not surprisingly, they are also in top when it comes to the frequency of use when forecasting three months ahead. When forecasting revenue in a time horizon of 3 months to 2 years, the most common three methods are auto-regression, decomposition and straight-line projections. For long horizon forecasts, straight-line projections, exponential smoothing, and trend-line are most important. All methods tabulated will be described below, separated as quantitative and qualitative.

3.4.2 Quantitative

Moving average forecast methods account for irregular fluctuations of data, and can consequently over steer the forecast. Such methods are computed by averaging data from several time periods and using the average as the forecast for the next time period. Additionally, a moving average is updated or recomputed for every new time period being considered. For instance, a four-month moving average is updated when a new month starts to only include the most recent four months. The most straightforward moving average method is the *simple moving average* method, where the forecast for time period *t* is the average of

the values for any given number of previous time periods. A common version of the moving average is to weight certain time periods as some periods might be considered more important, this is obviously named *weighted moving average*. (Cortinhas & Black, 2012)

Straigh-line projection is used to estimate evenly spaced, and regularly increasing, revenues from a project, although reality may be a little more irregular (Evans & Evans, 2007).

Exponential smoothing is a forecasting method used to weight data from previous time periods with exponentially decreasing importance in the current forecast. The value of the exponential smoothing constant, α , is determined by the forecaster. As the foundation of exponential smoothing is combining the present forecast and the present actual value; the lower α , the less weight is placed on the actual value. The simple exponential smoothing method is accomplished by multiplying the actual value for the present time period, with the exponential smoothing constant, and adding that to the product of the present time period's forecast. (Cortinhas & Black, 2012)

Figure 3.1 Simple exponential smoothing

$$F_t = \alpha(X_{t-1}) + (1 - \alpha) \times F_{t-1}$$

Source: Cortinhas & Black (2012)

When the data set includes a trend, the simple exponential smoothing method is not applicable. Instead, the double exponential smoothing method comprising a trend smoothing factor, β , should be used. This method consists of three steps: First, calculate the forecasted value, F_t , similar to the simple exponential smoothing method, however include the trend value from previous year, T_{t-1} . Second, calculate the forecasted trend, T_t , and finally add them together get the forecast including trend, FIT_t . (Middel, 2014)

Figure 3.2 Double exponential smoothing

$$F_t = \alpha(X_{t-1}) + (1 - \alpha)(F_{t-1} + T_{t-1})$$

$$T_t = \beta(F_t - F_{t-1}) + (1 - \beta)T_{t-1}$$

$$FIT_t = F_t + T_t$$

Source: Middle, (2014)

Regression analysis refers to the method of constructing a mathematical model that can be used to predict or determine one variable by another variable. The most fundamental regression model is called simple regression involving a single explanatory, or independent, variable. (Cortinhas & Black, 2012)

Figure 3.3 Simple regression model

$$\hat{y} = \beta_0 + \beta_1 x$$

Source: Cortinhas & Black (2012)

The simple regression model shown in ‘Figure 3.3’ is a deterministic model as it produces the exact output for a given input. However, it is unlikely that the values of y will equal exactly the values yielded by the equation. For instance, suppose a firm trying to predict revenue, $y_{revenue}$, by using the annual advertising expenditures, $x_{advertising}$, as the explanatory variable. Albeit revenue often is related to advertising, this regression model excludes other factors related to revenue. Thus, some error is expected. A probabilistic model comprises an error term, ϵ , which allows for the value of the dependent variable to vary for any given value of the independent variable. A *trend line* is almost identical to the probabilistic regression model as it in forecasting terms refers to a regression model. The only difference is replacing x_i with x_{ti} to constitute what time period it is. If the time periods, X , are consecutive they can be entered along with the time-series data, Y , into a regression analysis. (Cortinhas & Black, 2012)

When the error terms of a regression forecasting model are correlated autocorrelation, or serial correlation, occurs. The probability for this to occur with business data increases over time, especially with economic variables. Autocorrelation can cause problems by underestimating the variance of the error terms and the standard deviation of the estimated regression coefficient. The regression coefficient may also be useless. One way to cope with the autocorrelation problem is by auto regression. As Cortinhas and Black (2012) suggest, auto regression is a multiple regression technique in which the independent variables are time-lagged versions of the dependent variable. In other words, auto regression helps to predict the value of Y from previous time periods’ values of Y . Hence, auto regression is a way to exclude the trend from a data set. In ‘Figure 3.4’ an auto regressive model with independent variables for three time periods is presented.

Figure 3.4 Auto regressive model

$$\hat{Y} = \beta_0 + \beta_1 Y_{t-1} + \beta_2 Y_{t-2} + \beta_3 Y_{t-3}$$

Source: Cortinhas & Black (2012)

In forecasting literature a proper method including auto regression is the ARIMA model (auto regressive integrated moving average). Apart from autocorrelation, the ARIMA model copes with stationary distribution; the assumption that the variance in the independent variable is constant. Cortinhas & Black (2012)

However, while ARIMA models are popular among statisticians, forecasting practitioners often use decomposition as it is easy to understand and explain to others. Additionally, *decomposition methods* are in many cases as accurate as ARIMA models, and provide information not emphasized in ARIMA models, such as trend and cycle (NCSS, 2014). The decomposition methods offer a systematic process to isolate the effects of seasonality and vary in terms of extent, and elements included. A basic decomposition is the multiplicative model, consisting of four elements; trend (*T*), cyclicity (*C*), seasonality (*S*), and irregularity (*I*) (NCSS, 2014).

3.4.3 Qualitative

Jury of executive opinion is a qualitative way to forecast revenue, where top executives' views and opinions are combined to agree upon a forecast. Since executives typically are involved in decision making on a strategic level, jury of executive opinion is used for long-term forecasts. The method offers a cheap, easy and quick way to forecast revenue by integrating opinions from all over the firm. However, the forecast is not fact, or data, based which can implicate a high plausible error.

The sales force composite suggests that each sales manager forecast their own territory. All the forecasts are then aggregated into a company revenue forecast. This qualitative method allows the employees actually generating revenue to be the forecasters. Thus, benefitting from the sales force's knowledge due to its proximity to the market. One critical issue for this method to work is trust, meaning that the sales managers might set a low forecast to hit their quotas easy. *Customer expectation* is a revenue forecasting method using the potential customers' needs and requirements as the basis for the forecast. This is particularly used in

competitive markets as firms recognize the importance of retaining customers, and thus, strive to build relationships with the customers. (McCarthy, 2006)

The L.E.K model is a method for forecasting revenue for new products, applicable to a broad number of industries. It comprises five elements; customer base, total penetration, a product's share of penetration, price per unit and units per year. The value of the forecast is the product of these five elements. The starting point is to identify the *customer base*, the total number of potential customers. Once the customer base is identified, the total penetration can be found. Total penetration refers to the percentage of the customer base currently being served by all products similar to what the firm is about to launch. Total penetration helps to estimate the market share, or the product's share of total penetration. The L.E.K model does not include any pricing theory; instead emphasizing that the price should be determined before establishing a revenue forecast. Additionally, the L.E.K model argues that the sales volume is included in pricing theory, and also depends on the price. In brief, the L.E.K model offers a method to identify market share, which in combination with determined price per unit and estimated units per year creates a forecast. (McIntyre, 2002)

In their book "The Business Plan Workbook" Barrow et al (2012) emphasize the importance of accurate revenue forecasts in business plans. To be as accurate as possible the authors suggest eight factors to consider when forecasting, named '*The sales forecast*'. First of all, the forecast and projections need to be believable, and therefore a firm should analyze competitors' history to see how they have fared. Secondly, the firm must work out a market share, and investigate whether market is growing or contracting. A common way to forecast is by estimating the total market revenue, and arguing to capture a certain percentage of that. According to the authors, such forecasts lead to more failures than successes. The third factor addresses the customers and their preferences. Here, one should find out how many existing and potential customers the business has, and how the customers can be reached. The fourth and fifth factor concerns the timeliness, or more specifically order cycles and seasonality. Rule of thumb, the sixth factor, is to be used when possible. This factor is mainly applicable in retailing where location studies, traffic counts and population density etc. affect the revenue. A forecast should also comprehend the desired income, which is the seventh factor. Knowing how much revenue is required to break-even is crucial to any business. However, this factor also addresses the revenue necessary to enable growth. The final factor, is relating the sales forecast to activities within the firm. Forecasted revenue will convince no one if not related to a specific activity performed by the firm.

3.4.4 Forecast accuracy

In their study, Rees and Sivaramakrishnan (2007) found a significant association between returns and revenue forecast errors. Consequently, they argue that what matters for a business is not when or how a forecast is conducted, but rather how accurate the forecast is. The two authors also argue that not meeting a forecast signals failure, which corresponds with Henderson's and Marks's (2013) suggestion that an accurate revenue forecast provides a vital reference point. However, opposing scholars argue that entrepreneurs have nothing to lose from forecast inaccuracy, as the risks are low due to the investments typically are small (Gruber, 2007).

A common way to calculate forecast accuracy is Mean Absolute Deviation (MAD). The accuracy measure reveals the average deviation from the mean, in terms of absolute numbers. However, as it might be difficult to grasp the absolute deviation and relate it to the forecast, another method is Mean Absolute Percentage Error (MAPE), which instead presents the absolute average deviation from the mean in percentage. (Cortinhas & Black, 2012)

4. EMPIRICAL FINDINGS

The fourth chapter presents the empirical findings, which have been gathered through interviews with founders or employees of each company, by using the interview framework (see Appendix A – Interview framework). As business plans and business planning were proved to be very much aligned to revenue forecasting for each company, the empirical findings are presented company-wise. The empirical findings are summarized and tabulated in Table 4.1.

4.1 Prototyp Business Design

4.1.1 Company background

Prototyp Business Design (Prototyp) was founded in the autumn of 2011 by two recent graduates from School of Design and Crafts at the University of Gothenburg; David Joelsson and Sigrid Hellberg. The two founders identified a gap in the market of consultancy like projects that neither management consultancies nor design agencies catered. Prototyp's idea was to attract projects usually executed by management consultancies with design methods. Initially, no direct competitors were recognized, and the need for design methods in business development and service innovation was emerging.

4.1.2 Business plans and business planning

The business took off quickly, and Prototyp had a few case projects and workshops already during its first active month. However, even if the first customer was invoiced early it took sometime before the business was self-propelled. According to the founder interviewed, Prototyp was pretty naïve initially in its strategy to attract customers. It was believed to be an easy task, not requiring much time or resources, due to the evident gap available in the market between management consultancies and design agencies. Not only was it more difficult to acquire customers, but the customers were also from another segment than expected, namely large high-tech companies. Accordingly, it was crucial for Prototyp to be open-minded in terms of customers segment when entering the market. Particularly given the market being unexplored without any direct competitors to compare and vie with.

Perhaps the biggest and most impactful change Prototyp were required to do was when the company realized to sell competencies and consultancy hours, instead of having full responsibilities of a project and delivering an end-product, or deliverable. Prototyp found it difficult to acquire long-term projects, and the effort to participating in projects as consultants resulted in the two founders being full-time employed at various companies, and Prototyp is now on hold indefinitely.

As the founders come from the academic world, and have studied much design thinking, business planning has through the venture been in Prototyp's nature. Accordingly, Prototyp constructed a business model using the Business Model Canvas presented by Osterwalder et al (2010), and worked with a long-term vision and brand identity. Prototyp's journey has been characterized by much business planning activities, and the business has been monitored thoroughly. To achieve the forecasted revenue, it was not only broken down into daily revenue targets, but also to how many calls and meetings booked were required daily. Consequently, Prototyp could identify the cause of the forecast not being reached monthly. In other words, Prototyp recognized whether lacking sales depended on too few sales calls or too few meetings being booked. In combination with this type of monitoring the sales, Prototyp also had other goals and targets, such as when to manage its first service design project and business model project. According to the founder interviewed, these deadlines were very motivating. Additionally, Prototyp evaluated itself continuously through the use of short-term action plans. Another example of Prototyp's fundamental monitoring of the business was grading every meeting via an internal framework. Prototyp also planned long-term, even if not as explicit as the short-term planning, and had a vision to grow by competence to eventually employ 25-30 people with different competencies. To follow up with the long-term vision, meetings were held on a monthly basis. In alignment with design thinking theory, Prototyp were convinced that a trial and error approach was a prerequisite to be successful. A business model should be evaluated after each contact with customers. This iterative approach is perpetual.

Although spending a lot of time on business planning, including different targets and action plans etc., the constructed business plan was merely used for participating in Venture Cup. The founders thought that a business plan tends to stigmatize the business, and that it impedes the flexibility required in an early phase. Also, a business plan presumes a sequence of events were an idea is born, then the realization is planned and eventually the plan is carried out and everything will work. Prototyp, however, learned that once the idea is actualized, many unexpected events occurs which requires the business to adapt accordingly. Essentially, what is planned and predicted for is unlikely to happen, and the reality is too dynamic for a business plan to be a helpful guide. According to the founder interviewed, a business plan often is used to attract funding and as Prototyp was not looking for any investors, a business plan was not considered a crucial activity. Instead of using the sluggish and static business plan, Prototyp prioritized three other documents. The first being action plans for the very near

future to stay on top of the most critical activities, the second being a long-term vision to remind each other of the purpose and goal, and finally the business model to continuously remind each other what value is being delivered to the customers. These three documents should be printed and nailed to the wall in each office.

4.1.3 Revenue forecasting

Before its first fiscal year, Prototyp forecasted a turnover of SEK 610,400. The actual revenue the first fiscal year was SEK 460,000, which implies a MAD of SEK 150,400 and a MAPE of 32.7%. Prototyp's revenue forecast was indeed very speculative, and to some extent cost based. As the company was funded by the founders, a negative result was not an option. Instead, Prototyp was required to at least break even. The greatest costs during the first year were indubitably salaries for the two founders and during the first few months the founders were not paid. It took a couple of months until the founders got paid, and after that their salaries increased gradually to stop at SEK 15,000 a month. The accelerating and desired salaries laid the foundation for the forecasted revenue. Of course, the revenue forecast was slightly exaggerated in order to trig the willingness to sell.

4.2 Aktivators

4.2.1 Company background

Aktivators was founded by two friends about to accomplish a 'Swedish Classic'¹, who had troubles finding the required equipment for all elements in one place. This was in December 2012, a time when the sporting industry blossomed; many brands invested in a sporting collection and many released collections every other month. As a consequence of the fierce competition some companies had big surpluses of outdated collections. Aktivators identified this opportunity and formed a company in January 2013. The flash retail store was launched and fully operating in March 2013. The business model is simple; Aktivators contact companies to freeze stock surpluses of old collections for a certain period of time. Once the stock is frozen, a temporal campaign is started on Aktivators's website. Once the campaign deadline has passed, Aktivators sends a bulk order to the retailer.

4.2.2 Business plans and business planning

From the beginning Aktivators entered a market with no direct competition, and was, due to being cloud-based, fully operating very soon after the idea was born. Thus, Aktivators

¹ The Swedish Classic consists of four elements; cross-country skiing (Vasaloppet), bike race (Vätternrundan), swimming (Vansbrosimningen) and running (Lidingöloppet).

believed it would be easy to conquer the market and to get access to stock surpluses. However, this required much more job than first expected, especially to acquire the first partner, or retailer. Another expectation the founders had from the beginning was to focus on the affluent Norwegian market. However, as Norway is not a part of the European Union it was too complicated with taxes and customs, leading to Aktivators to relinquish the Norwegian market.

Aktivators did not spend much time on planning in the initial phase. Instead, entering the market rapidly was prioritized. The planning started after six months when the company had been up and running for a while, and business intelligence was gained. According to the interviewee, the usual process of going from planning to business, suggested by a business plan, seldom occurs. On the opposite, Aktivators were forced to the market as the website was up and running. Due to this rapid environment, Aktivators could not waste time on planning and used a trial and error approach. This is very evident as the industry was chosen before knowing what product or service to offer. Initially, being self-supportive within two years was all that was planned for. Aktivators chose this trial and error approach as all the people involved were very driven by the idea and getting to the market. Instead of wasting time on planning and plans, the founders identified an opportunity, took a risk and invested in it.

From the beginning, Aktivators saw no purpose in constructing a business plan, and would not have done one if not for participating in Venture Cup. Of course, the company recognized benefits of having a business plan such as presenting the business and documenting what kind of business you are running. But when Aktivators pitched to investors, the team and vision was prioritized, which was appreciated. The reason not putting any effort into the business plan was due to the dynamic setting, as a plan would have been changed continuously. Thus, a business plan was deemed unnecessary and wasteful.

4.2.3 Revenue forecasting

As Aktivators did not have any competitors, the company did not know much about the market from the beginning. Due to the lack of knowledge, the company did not establish any financial goals initially apart from being profitable and self-supporting within two years. This was communicated to the potential investors as well, and investments to cover fixed costs were attracted. However, an element of the business plan sent to Venture Cup had a revenue forecast based on the first few active months, and the monthly national online shopping pattern. The first forecast was for January 2014, estimating revenue of SEK 70,000 and the

actual value turned out to be SEK 63,000. This generates a MAD of SEK 7,000 and a MAPE of 11.11%.

4.3 Scandinavian Enviro System

4.3.1 Company background

Scandinavian Enviro Systems (SES) holds a patent for the method of recycling carbon black, oil, steel and gas from scrapped tires, referred to as Carbonized by Forced Convention (CFC). The method is based on pyrolysis technique and was invented in 1994 and patented in 2000, after a two year application process. Today, the CFC technique is patented in 19 countries. When founded in 2001 SES immediately began to authenticate the CFC-technique and making the process scalable. The effort to improve the technique resulted in a new patent filing in 2006, which was granted in 2009. In 2013, the first full-scale production facility was built and established. Apart from being a production facility, the purpose of it is also to demonstrate the technique and results. Now, in 2014, SES has started to market the CFC-technique globally, with the expectation of boosting the sales.

4.3.2 Business plans and business planning

According to SES's CEO, it has taken eight years to get to the market, counting from the second patent filing. During almost a decade SES has been forced to remodel its business plan continuously, especially in terms of identifying the customer and how to make money. From the beginning, SES anticipated that the customers would be big national recycling companies. However, the demand identified actually was cross-industrial, with a majority within the energy industry. Initially, the business model allowed SES to own factories around the world to meet customer demand at a regional level. The next iteration of the business model suggested that SES builds the production facility to eventually sell it to the customer. As a result of this, another iteration of the business model was to license the CFC-technology. Although remaining flexibility in how to sell its offer, the latest iteration is what SES prefer; selling the CFC-technology and the blueprints for a factory, and offer additional consultancy services to the customers. Further, SES also offers many different ways of financing the facilities, as they require heavy investments (MSEK 125). For example, SES can offer the customer an installment plan, where SES obtains a share of the revenue until the whole facility is paid off.

As SES's journey is characterized by flexibility and adaption, business planning has not been a crucial activity. Instead, what has steered SES is the long-term planning to verify and

authenticate the CFC-technique. Due to the market being unexplored SES has been required to maintain a certain level of flexibility to adjust to the customers and regulation. Thus, business planning has not been considered a worthwhile activity. The business plan, however, has been a fundamental document for research purposes. As the employees have travelled around the world to meet potential customers for since 2006, the business plan has been remodeled several times. A business plan was established even before SES entered the market in 2006, with the objective to find usage areas for the technology, as such the business plan was very investigative. Another objective of the initial business plan was to determine the feasibility of the idea, and once the idea proved to have commercial potential the business plan investigated the next steps. The outcome from all the business plans was, intrinsically, a decision to go to market. According to SES's CEO, what is supposed to be in a business plan you should already know before constructing one, however, there should always be a small part, or something, that is particularly interesting or revolutionizing.

4.3.3 Revenue forecasting

SES has identified two factors problematizing revenue forecasting. First, as SES offers installment plans where the installment pace depends on the customer's revenue from the facility; it is difficult to derive revenue to a specific time horizon. Secondly, SES's revenue is highly dependent on the market prices of carbon black, oil, steel and gas, which are considered to be volatile. These two factors hamper SES's ability to forecast its revenue reliable and accurate. The revenue forecast presented in the business plan was not used in other purposes than for Venture Cup. That forecast was based on the costs of building a facility (MSEK 125), and that customers would significantly improve their profitability and efficiency, which motivated the facility selling price of MSEK 250. However, the forecasted revenue has not yet been realized, thus no MAD or MAPE can be presented. According to SES's CEO the financial and revenue forecasts do not matter, neither internally or externally. Instead, what matters are the assumptions behind the forecasts, and the underlying strategy to accomplish the forecast.

4.4 Magenta News

4.4.1 Company background

The Norwegian company Magenta News (today a part of Meltwater) was brought to Sweden and established by serial entrepreneur Ola Ekman, in a time where media and news coverage was a growing industry. The service offered to customers was to monitor what was said and

written about relevant topics, such as the customers' brands. Ola Ekman realized that the existing competitors were very sales oriented and lacked in terms of following up with their customers. Also, the service was very complex and difficult for the customer to manage. Consequently, competitors lost many customers after their subscription of the service ended. Naturally, Ola identified that an easy-to-use service was demanded and to retain customers, much consumer interaction and follow-up was required.

4.4.2 Business plans and business planning

In order to determine the commercial potential of Magenta News, Ola Ekman collaborated with a vocational university, Chalmers University of Technology, and Gothenburg School of Business, Economics and Law, and let students from the three institutions write one business plan each. As Ola Ekman recognized that he had to establish in the market quickly, this happened quickly and a decision whether to commercialize or not had to be made within three months. The business plan was not only crucial to determine feasibility of the idea, but also to receive suggestive business models, gain market and competitors insights, and to find out where Magenta should be positioned in the market. In other words, the three business plans was used internally, in an investigative purpose to retrieve business intelligence. As the process from idea to market happened rapidly, no time could be wasted on planning. Instead, once the business plans revealed a commercial potential, Ola Ekman established an office with a few phones and started to sell. Of course, one major benefit for the quick establishment was that the service already existed and was provided by the Norwegian parent company.

4.4.3 Revenue forecasting

Before commercializing and establishing on the market, Magenta deemed revenue forecasting to be an unnecessary activity, as no external investors were sought after. It was not until six months of operational business before the revenue was forecasted. According to Ola Ekman, Magenta then had acquired enough knowledge about the market and industry to construct a reliable forecast. The forecast was based on the competitors' financials and the overall market size, but most importantly, a strategy of how to expand the existing market. Ola Ekman means that staring blindly on what market share to attain is foolish, and unrealistic. Apart from this quantitative data, the forecast was supplemented by qualitative data collected through customer interaction. Despite from good business insights, the forecasted revenue the first year was overestimated, and heavily underestimated the third year of business (without being able to provide the forecasted figures). According to Ola Ekman, this was due to the rapid growth in the evolving industry. The actual revenue the first year was around MSEK 1, and

the third year approximately MSEK 70, which indicates the rapid growth. Although forecasting its revenue inaccurately, it did not hamper the business noticeably, nor would accurate forecasts have generated a different result.

4.5 Promimic

4.5.1 Company background

Promimic is a product of research at Chalmers University of Technology, where two researchers found a method for producing the smallest component in bone mineral, hydroxyapatite nanocrystals, in its natural size and shape. Since the corporatization in 2004, Promimic holds a patent for the method until 2024 in Europe, Japan, Korea, Russia and India, and until 2028 in the U.S.

4.5.2 Business plans and business planning

When the company was founded in 2004, the method had no applications nor was it verified. Therefore, the first years were dedicated to verifying the method, and pre-clinical validation. Once biomaterial scientists at Sahlgrenska University Hospital verified the produced bone mineral, Promimic started to explore application areas. As Promimic faced difficulties in findings application areas, and as selling the bone powder with low margins for research or bone filling material was not an option, a collaboration with Chalmers Innovation was initiated. After a year or so, the collaboration resulted in a unique implant surface which dramatically accelerates osseointegration. The surface can be applied onto various types of substrates, including metals, ceramics and polymers. After the surface application was identified, Promimic signed an exclusive deal with Nobel Bio Care. However, three years after the partnership was initiated, Nobel terminated the project, and left Gothenburg. This was in 2009, a time when implant firms did not invest in any new research and development projects, but prioritized saving.

Promimic's business model is to set up its simple process at the customer's location, which gives Promimic a great time and cost advantage towards its competitors with large factories, to which implant firms sends their implants. Today, Promimic generate revenue as royalties when its customers, implant firms, sells implants. The business model has only been tested with a few customers, but shows great potential. In 2014, Promimic has a few paying customers and are in prolonged negotiations. It has taken 10 years for Promimic to be a sales and market oriented business. The lengthy process to market is mainly due to two reasons. First, the difficulties Promimic faced in finding the right area of application. In 2007,

Promimic participated for the second time in Venture Cup, this time by producing toothpaste with the bone mineral. The project was shut down, when Promimic noticed the low margins, and that only the brand owners made money. Secondly, the failed partnership with Nobel, which damaged Promimic's relationship with the other implants company in Gothenburg, Astra Tech. Before signing with Nobel, Promimic were in negotiations with Astra Tech as well. Naturally, Promimic became unpopular at Astra Tech when choosing Nobel.

Due to the lengthy process, Promimic has had several iterations of business plans. The use of business plans has been very helpful, especially in terms of keeping track of development and structuring what tasks and activities need to be prioritized. Nowadays, however, a business plan is not used internally. Since Promimic are externally financed, documentation of everything is essential to keep the investors up to date. Internally, business planning is what steers the business, and all activities in the business are planned for. Promimic plans six months ahead with GANT-schedules and an associated budgets. During 2014, Promimic aims to boost the sales, and therefore, all activities are to support and facilitate sales, such as industrialization manuals.

4.5.3 Revenue forecasting

Due to its many alterations of application areas, Promimic has forecasted its revenue and failed many times. Without being able to provide the exact figures, the CEO says that the forecast has been too positive and the actual revenue never near to the forecast; with the exception of the three year partnership with Nobel. When forecasting its revenue, Promimic primarily utilizes its customers' forecasts. As Promimic is a subcontractor of the end product and receives royalties of sold implants, the company can base its forecast on how much the implant firms are expecting to sell, and to what price. Of course, Promimic does not blindly trust its customers' forecast, and supplementary factors, such as market reports, and current deals and negotiations are considered and accounted for.

The revenue forecasts established has not been used internally, but rather an element in the business plan to provide financial insights for potential investors. The forecasted revenue has not been broken down weekly or monthly, or involved in the daily operation, especially since it can take six months to negotiate a deal. What motivates and measures the sales is instead what Promimic calls customer progress, which is certain milestones within a negotiation, e.g. when a potential customer suggests something, or when a confidentially agreement is signed.

4.6 Almi Invest AB

4.6.1 Company background

Almi Invest AB is a publically owned company venture capitalist, investing in startups with great potential growth. It consists of two different funds; the seed fund targets companies in a very early stage, and the expansion fund targets companies with an already accelerating growth. As any other venture capitalist, Almi enters companies through offering funding against co-ownership of the company. Typically, Almi invests between TSEK 300 to SEK 1,500, but has the financial power to invest up to TSEK 5,000, and remains in the companies between three and twelve years.

4.6.2 Business plans and business planning

To evaluate if companies seeking investment have any commercial potential, Almi has seven investment criteria which need to be met. First, the product or service needs to be innovation based. Almi requires some kind of elevation, preferably a patent or a business secret in order to generate and secure protection. Secondly, the people behind the idea need to be suitable for the task, and possess great leadership skills. This second criteria is almost as importance as the product or service. Thirdly, a business plan needs to be in place and intact. As Almi evaluate companies, a well written business plan can be decisive. But the business plan is not just important for Almi, it should be guidance for the company as it lets a company know when and why it deviates from what was expected. However, it is important to maintain a relaxed attitude towards it, as it is an iterative process that is updated continuously; as such the business plan is a documentation of development. The fourth investment criterion is the business model, and more specifically knowing what problem to solve, for whom and what the customer is willing to pay. If the entrepreneur knows this, and has a scalable business model, the business plan is not equally important. The fifth investment criterion is to show potential to have a turnover of TSEK 30,000 in five years, and a great growth rate. Here, the forecast is provided by the entrepreneur and then evaluated by Almi. The sixth criterion refers to the timing. No matter how good a business model, product or service is, timing is crucial and there needs to be a market opportunity in the near future. This criterion also includes a realistic time plan, as in Almi's experience everything will require more time than expected. Finally, the last criterion requires the investment to be summarily and defined.

The seven investment criteria aside, what Almi emphasizes is the importance of knowing who the customer is, and meeting the customer before seeking investment. No other feedback

offers the same value as feedback from potential customers. The investment process at Almi is an iterative and prolonged approach, where Almi meets the entrepreneurs on several occasions and allows the entrepreneurs to take baby steps. In other words, Almi advocates somewhat of a trial and error approach.

4.6.3 Revenue forecasting

The financial statements in the business plan that Almi accounts for are the cash flow statement and profit margin. The cash flow statements illustrate the companies' short-term viability and their ability to pay bills, and the profit margin gives an understanding of how much money actually can be made. In Almi's experience, a majority of companies assumes and presents a growth which follows the hockey stick theory. This is however rejected by Almi. Additionally, companies seeking investment usually attempt to value the company through different kinds of valuation models. However, as the companies assume too low cost of capital, short perspectives and overestimate their capability to sell, these valuations are also often rejected.

In general, the revenue forecasts are too optimistic, which is ironic as entrepreneurs usually tune them down before meeting a potential investor. On the other hand, if a company is too pessimistic and lack ambition an investment is not in question.

4.7 Summary

In Table 4.1 the empirical findings are summarized, categorized by company, industry, commercialization process, attitude towards business planning, attitude towards business plans, revenue forecasting method, and revenue forecasting accuracy.

Table 4.1 Summary of empirical findings

Company	Industry	Commercialization process	Attitude towards business planning	Attitude towards business plans	Revenue forecast method	Revenue forecast accuracy
Prototyp	Consulting	Two Master graduates identified the need for design methods in business development. From idea to business in less than six months. The first few projects were generated quickly, but later experienced difficulties in sales.	Very careful planning, using the Business Model Canvas. Monitoring the business using KPIs and action plans. Continuous self-evaluation to be aligned with the long-term vision.	Only used for Venture Cup. Not found necessary due to no external investors. Business plans stigmatize the business, as what is planned for seldom occurs.	Based on the founders' desired salaries, i.e. cost-based. The forecast was slightly exaggerated to boost sales.	MAD: TSEK 150 MAPE: 32.7% <i>Forecast period: First fiscal year</i>
Aktivators	Online retail	Less than six months from idea to market. The founders were driven and motivated by the idea to realize the idea. Experienced difficulties in sales and establishing partnerships with retailers	Did not 'waste' any time on planning, instead commercialization was prioritized. Used a trial and error approach instead of planning.	Only used for Venture Cup When meeting potential investors, Aktivators prioritized the team and the long-term vision. Too dynamic of a setting to construct a business plan.	The revenue forecast was only for the business plan, and thus Venture Cup. Based on the initial months, adjusted for seasonal online shopping patterns.	MAD: SEK 7,000 MAPE: 11.11% <i>Forecast period; first forecasted month.</i>
SES AB	Recycling	A prolonged process of eight years due to authenticating the technique and identifying potential customers. Many iterations of the business model, especially in terms of how to generate revenue.	Not a crucial activity as SES has been forced to remain flexibility and adapt to the market, customer needs, and regulations.	SES's business plan led to commercialization. Helpful to find application areas. A business plan contains revolutionizing data.	The revenue forecast was only for Venture Cup. Based on costs of building a factory, and customers' expected increase in profitability.	Not available.
Magenta	Media coverage	Less than six months. The founder identified an unmet need in the market, and had to establish quickly.	Not a worthwhile activity. Focused on going to market.	Very important; generated the decision to go to market.	Based on competitors' financials and customer interaction. Initiated after six months.	No figures, but very far from forecast.
Promimic	Bio tech	Approximately a ten year process, due to identifying application areas and authenticating the technique.	All activities are planned six months ahead with GANT-schedules and budgets.	Helpful; documentation of the development. Required by investors.	As subcontractors, the firm can use customers' forecasts.	No figures, but very far from forecast.
Almi Invest	Public VC	Not available.	Advocates flexibility and customer interaction instead of planning.	A guide, allowing the firm to recognize deviations from what has been planned for.	What matters is profit margin and cash flow statement.	The accuracy is irrelevant. Ambition is important.

5. ANALYSIS

In the fifth chapter, the empirical findings will be compared and analyzed alongside the theoretical framework. I will start by comparing the case companies' commercialization process to see if it has affected their attitude and usage towards business planning. This will be followed by comparing and analyzing the case companies' attitude and usage of business planning and business plans, including revenue forecasting.

5.1 Commercialization process

The length of the commercialization process, i.e. the time from idea to market, has, among the cases, been a decisive, or at least a contributing, factor in terms of the usage of and attitude towards business planning and business plans. Hence, it is important to discuss and present the cases' unique conditions and prerequisites before entering the market. Prototyp, Aktivators and Magenta went from idea to market in approximately three months, although for different reasons. When graduating from the School of Design and Crafts, the two founders of Prototyp already had a few projects in the pipeline through their thesis work and thus, it was a natural and viable decision to start a business. The two founders had identified a need for the studied design methods in business consultancy. Additionally, the two founders had not found any other interesting employment opportunities, and were intrigued by the idea of being their own boss. Due to a strong belief in the idea, the founders of Aktivators were driven by commercializing the idea as quickly as possible, and had a trial-and-error mindset. Fortunately, few errors were made and Aktivators could establish smoothly. However, Aktivators faced some issues in establishing partnerships with retailers, and eventually sales. To cope with the trailing sales, Aktivators invested in activities boosting sales, such as marketing. One factor that eased the commercialization process was the cloud based structure, as Aktivators went fully operational as soon as the online retail store was set up. The founder of Magenta, Ola Ekman, stresses that its commercialization process was very time-limited, as the market was competitive. As competitors lacked in after-sales services and retaining their customers, Ola Ekman aimed to establish a more service-oriented organization. He realized that he had to move quickly before someone else, either the existing actors or a new actor, identified the very same gap. In order to do so, Ola Ekman took help of the academic sphere and talked to people in his network to see if they were interested. Consequently, Magenta already had a few paying customers when they went operational.

Contrary to the short commercialization processes mentioned above, SES's and Promimic's time from idea to market has been lengthy processes. To demonstrate the lengthy process of SES's commercialization; the CFC-technique was invented in 1994, and filed for patent in 1998. The patent was granted in 2000, which led to a corporatization in 2001. Efforts to improve the technique led to a new patent filing in 2006, which was granted in 2009. In 2013, the first full-scale production facility is in operation. Today, twenty years after the technique was invented, SES has initiated marketing and sales activities. Along the process of authenticating the technique, SES has suffered from two major issues; difficulties in identifying the customer, and how to construct a profitable business model. In similarity to SES, it has taken several years for Promimic to become the organization it is today. Although, not due to a lengthy authenticating processes but rather due to unfortunate investments, such as the terminated exclusive deal with Nobel Bio Care, and difficulties in finding a feasible application area. It has taken ten years to for Promimic to become a market and sales oriented business. Of course, during this decade many years have been dedicated to research and develop the current application area, but not managed commercially.

Perhaps, in some sense, what actually push the speed of the commercialization process are the entrepreneurs' drivers and motivations. The founders behind Aktivators were driven by the mere idea of commercializing and running a business, while Prototyp and Magenta recognized an opportunity and realized they had to act quickly in order to establish within the window of opportunity. In addition, both Prototyp and Magenta already had commitments with customers before starting and thus, almost guaranteed business. The strategy of pre-commitments is in the effectual logic termed as the *patchwork quilt*, and is a way of reducing risk and entering a market with interested participants. Actually, there are many further elements of the effectual logic amongst the three companies with a fast commercialization process. Magenta used three different educational institutions to determine the feasibility of the idea, which has to be recognized as a creative approach to minimize investments. Effectuation is also evident in Aktivators' trial-and-error approach, in which the objective was to allow failures to happen, as long as they were small and happened early (Sarasvathy, 2006). Furthermore, in Aktivators' approach actions preceded analysis, as the founders strived to establish as quickly as possible. On the contrary, in the case of SES's and Promimic's commercialization processes, elements of the casual logic are evident. Especially as the respective companies filed patent applications and spent much time investigating the feasibility of the venture, i.e. resources were invested in up-front information-gathering. The

road to market has for the two companies been characterized by analysis preceding action, which indicates that perhaps not only do the entrepreneurs' drivers and motivation affect the speed of the commercialization process. Instead, maybe what matter the most, are the conditions and characteristics of the industry a company is established in. Both SES and Promimic started out with a technique, which was later on patented. SES invested much in authenticating the technique and proving its benefits, and Promimic went through pre-clinical validation. Also, both companies had a patented method, but no idea about how to commercialize. As mentioned, SES did not know how to make money, and Promimic was unsure about the application area. Needless to say, when comparing the biotech industry and recycling industry to consulting, online retail and media coverage, it is obvious that establishing in the former two industries is a more extensive process. Conclusively, I argue that both the entrepreneurs' drivers and motivations, and the industry characteristics have shaped the companies usage and attitude towards business planning and business plans, which I will discuss in the following sections.

5.2 Business planning

The attitude towards and usage of business planning varies vast among the studied cases. Prototyp and Promimic utilized the benefits of business planning and planned activities carefully. As a business design consultancy, Prototyp's first project was on itself as a business model was constructed using the Business Model Canvas provided by Osterwalder et al (2010). Furthermore, Prototyp monitored the business thoroughly using action plans to prioritize tasks and various KPIs to measure the performance, such as breaking down the revenue forecast to daily targets. In combination with the short-horizon micromanagement, the two founders held monthly meetings to discuss the long-term vision and make sure the business was aligned with the predetermined brand identity. Even if Promimic has carefully planned the business during its journey, the planning has not borne fruit due to the described difficulties in finding a viable application area and unfortunate externalities, such as the Nobel Bio Care partnership and the subsequent damaged relationship with the other implant actor in Gothenburg, Astra Tech. Today, however, Promimic allocates resources towards activities supporting and facilitating sales, and uses GANT-schedules with associated budgets, on a six month horizon, to plan the activities. Surprisingly, SES's attitude towards business planning differs from Promimic's. Due to an unexplored market and a new technique, SES had to remain flexible and adapt to its potential customers and regulations, which generated in many iterations of its business model. SES's approach is also reflected in venture capitalist Almi's

belief, where customer meetings and flexibility precede planning. Similar to SES, Magenta and Aktivators did not invest in business planning. Instead, Magenta and Aktivators wanted to establish quickly and thereby deemed business planning to be a wasteful activity. The founder of Magenta realized that the window of opportunity was tight, before other actors identified the very same opportunity. The founders of Aktivators were driven by realizing the idea, and business planning was not started until after six months. In other words, Aktivators identified an opportunity, took a risk and invested in it to start a business with the only vision to be self-supporting within two years, thereafter started planning; the complete opposite of the casual logic.

When comparing the cases' individual attitudes towards business planning to the literature, the two contradictive schools are represented. In entrepreneurship literature, business planning is argued to stimulate venture performance through planning and predicting processes (Brinckmann et al 2010). The process allows the entrepreneurs to manage greater amounts of information to set milestones toward achieving their vision, and to develop action plans to reach those milestones (Gruber, 2007). This is very similar to how Prototyp utilized business planning. And as recent university graduates when starting the business, maybe the Prototyp founders' approach where analysis precedes action is not, at all, unexpected. Promimic's ambition to plan its business is also supported in the literature. Business planning is particularly useful for complex and dynamic environments (Gruber, 2007), which most certainly has been the case for Promimic. Although facing difficulties in its environment, business planning may have been a guideline, or a lifeline, that has helped Promimic to its current stage. As opposed to Gruber (2007), Bidhé (2000) argues that business planning is not the option to manage and cope with an uncertain environment: Instead, entrepreneurs should focus on learning and flexibility; and business planning is an impediment to the required adaptability for new firms (Brinckmann et al, 2010). This strategy is similar to what Almi recommends, and what SES adapted by remaining humble and letting the customers, market and regulations steer the direction of the company. Corresponding literature to both Magenta's and Aktivator's initial rejection of business planning can also be found; Gruber (2007), argues that an entrepreneur's intuition is sufficient for effectively serving a particular market, and that planning is not necessary.

In the effectual logic, the attitude towards business planning primarily corresponds with Aktivators and Magenta; prioritizing action before analysis (Sarasvathy, 2006). This element of effectuation is probably most significant for Aktivators as it started planning the business

after six months, and went from business to planning, rather than from planning to business. There are also features of effectuation in Almi's and SES's relaxed attitude towards business planning. SES recognized the importance of adapting to customers, market and regulations, and thereby remained flexible and turned the unpredictability into a resource. Both Prototyp and Promimic, with a particular focus on business planning reflect the casual logic where analysis precedes action, and accurate predictions and distinctive goals determine the allocation of resources (Sarasvathy, 2006). As opposed to the effectual logic where control is established through doing the doable, the casual logic suggests that control is established through being one step ahead, which Prototyp's attitude testifies (University of Virginia, 2011).

The cases in this thesis represent both schools of thoughts when it comes to the importance and necessity of business planning, and effectuation versus causality. Remarkably enough is that similarities between the case companies with resembling attitudes and logics are lacking. The 'planners' Promimic and Prototyp are active within very different industries, had different motivations to establish and a very different commercialization processes. The 'non-planners' Magenta, Aktivators and SES show some similarities. Magenta and Aktivators, although with different motivations, strived to establish quickly, and reckoned business planning would hinder that process. The similarities between Aktivators and SES are absent, but one thing to emphasize is that SES and Magenta are both founded by Ola Ekman; pointing to that the founders' backgrounds and practices can influence a venture's usage of business planning.

5.3 Business plans

Among the companies studied, both the positive and negative attitude towards business plans was represented. For SES and Magenta, with the same founder, the business plan helped determine the feasibility of the two ventures, and was as such very investigative and a way to gain business intelligence. The main objective for the business plan constructed for SES helped finding application areas of the technique, and all the iterations of it has been a fundamental document for research purposes. Although with in a much shorter time horizon, the students' business plans for Magenta gave insights and recommendations on where to position Magenta in the market; and intrinsically, determined the commercial potential. Eventually, the two business plans eased the decision for SES and Magenta to go to market. For Promimic, a business plan has not only been a demand by investors, but also very helpful

to document the prolonged development of the business. Due to the many alterations of Promimic's journey, constructing a business plan has been an iterative process. As of today, the business plan is only used externally to present the business to potential investors or stakeholders. The public venture capitalist Almi advocates the business plan being a documentation of a company's evolution. It allows a company to recognize deviations from what originally was planned, which, in Almi's experience, stimulates the learning process for new ventures. Yet, Almi also sympathizes with the negative attitude towards business plan, and believes that its power should not be overestimated, it is just a plan. Prototyp and Aktivators only used their business plan to participate in Venture Cup. The founder of Prototyp said it was not necessary as no external investments were sought after; thereby repelling the use of a business plan as an internal document. Additionally, a business plan was believed to stigmatize the business. Aktivators, on the other hand, argued that its environment was too dynamic and unpredictable that an attempt to write a business plan would not be a worthwhile activity. That aside, Aktivators reckoned a business plan to be useful when meeting potential investors, but the founders of Aktivators focused on mediating the team's capabilities and the long-term vision instead.

In literature, the case companies' different attitudes are well represented. SES and Magenta used the business plan as a way to determine the feasibility, including how to commercialize the business, and can include an internal guideline in how to do so (Schwetje & Vaseghi, 2007; Gruber, 2007). As Timmons and Spinelli put it (2009), a business plan transforms an idea to a business. Also, the business plan is an external tool to attract funding, form alliances and establish customer relationships (Schwetje & Vaseghi, 2007). This external use is what corresponds with Promimic's and Prototyp's attitudes. Documenting the business with a business plan was a demand by Promimic's investors, albeit also helpful internally. According to one of the two founders, the reason for Prototyp not to work with a business plan was that it had no external investors, and thus, no purpose to use a business plan. Thereby, Prototyp rejects the use of a business plan as an internal guideline. As opposed to Prototyp, venture capitalist Almi suggests that a business plan is to be used just as an internal guideline, allowing the entrepreneur to identify discrepancies from the predicted. According to Timmons and Spinelli (2009), a business plan is obsolete the very moment it emerges from the printer due to the dynamic environment and nature of a firm. This supports Aktivators' attitude towards not using a business plan, as the future was unpredictable.

The text book and academic approach to write a business plan is, indeed, a casual activity. According to the causal logic, when starting and establishing a venture, the entrepreneur should, among other things, identify the market, formulate a strategy, calculate margins and make financial statements (Sarasvathy, 2006). These casual features are evident in the investigative purposes SES and Magenta have utilized a business plan, where the business plan eventually led to a decision to commercialize. It is difficult to refer Promimic's use of a business plan as a communicative tool to its investors in terms of causality and effectuation. Of course, the business plan, as such, has casual features, but losing investors due to not writing a business plan is hard to motivate and defend. Further, although not using a business plan, Prototyp reckoned it is useful when external investors are involved. Both Prototyp and Aktivators argued that a business plan would have prevented flexibility of the business, indicating an effectual logic, in which the future is unpredictable and firms must remain flexible effectuation (SEA, 2012).

In similar to the case companies' attitudes towards business planning, their attitudes towards business plans differ and correspond with different schools of thoughts in the literature. What is interesting is that SES and Magenta saw no purposes of business planning, but used the business plan as a basis for the decision to commercialize. Also Prototyp, which planned activities very carefully, saw no use of a business plan for its venture. Aktivators, however, remain consistent with its non-planning approach, while Promimic all through seems to advocate the planning approach.

5.3.1 Revenue forecasting method

When examining the case companies' method of constructing a forecast, and how the forecast has been used, the findings are very different. One thing that is different quantitative methods presented in this thesis, are not put into practice extensively. Instead, the companies have in general used easier methods, not requiring many resources, i.e. time and money. To some extent, revenue forecasting is not considered a crucial or necessary activity. Prototyp and SES used a quantitative cost-based approach, where the former based it on desired salaries, and SES on the cost of building a facility. This approach was not represented among the most commonly used methods as presented by McCarthy et al (2006). Prototyp used this forecast on a daily basis, as it was broken down to a daily basis and how many sales calls had to be made. Thereby, Prototyp could see if it was the number of calls lacking or the pitch to potential customers. When measuring the accuracy with MAD, Prototyp were SEK 150,000 off, and with MAPE 32.7% off. Contrary to Prototyp, SES only constructed a forecast for the

business plan submitted to Venture Cup, and did not use it in daily operations. This was mainly due to difficulties in how the revenue streams actually would look like, i.e. how the customers would pay and what they would pay for. Similar to SES, Aktivators did not use the revenue forecast included in the business plan submitted to Venture Cup. Aktivators's quantitative method included the seasonality of online shopping patterns in Sweden as a multiplier to the few operational months before. Aktivators's approach was to some extent represented in McCarthy's et al (2006) study, as it was based on the average of previous months as well as adjusted for a trend. Magenta and Promimic were the only firms using a qualitative method to construct their forecasts. As it took a couple of operational months before Magenta constructed a revenue forecast, the company already had a customer base, whose expectations and predictions of the future gave an indication. This was supplemented by the quantitative method to examine competitors' financial statements. Revenue forecasting is for Promimic, as a subcontractor, a very grateful task as the company extensively can use its customers accumulated forecast. This was then combined with industry reports. The method of customer expectations was presented as a familiar and frequently used method by McCarthy et al (2006).

Moreover, what is also interesting apart from the method, are the case companies' attitudes towards revenue forecasting and how that is supported in literature. Aktivators, SES and Magenta did not find revenue forecasting to be an activity delivering any value to them, and established a forecast just for the purposes of Venture Cup. The lack of trust in revenue forecast may derive from the uncertainty attached to such an activity, adducing the forecaster in a false confidence (Alänge & Lundqvist, 2013). According to Almi, which actually evaluates others' revenue forecasts, what matters in a financial statement is the profit margins and cash flow statements; meaning that Almi prioritizes the businesses' economic structure, i.e. the cost structure. This approach is, as well, supported in the literature. Timmons and Spinelli (2009) argue that the actual number of the forecast does not matter. Instead, it is the economics of the business model that is interesting in financial forecasts and therefore a crucial element of a business plan. Almi argues that the actual revenue forecast, the actual number, is not important as long as the entrepreneur demonstrates growth and ambition. Even Promimic's relaxed attitude towards revenue forecasting, and more specifically inaccurate forecasts, is represented in the literature. Bidhé (2000) suggest that there is nothing to lose from inaccurate forecasts, particularly in startups as the investments typically are small. Just the opposite of Promimic, Prototyp let the revenue forecast run the business as it was broken

down to daily targets on how many sales calls to do. Not meeting the forecast signals failure, and consequently, accuracy should be prioritized over when or how the forecast is conducted (Rees & Sivaramakrishnan, 2007).

To conclude, there are many methods on how to construct a revenue forecast, ranging from talking to your customers to complex statistical methods. The case companies in this thesis has not used any difficult or complex methods, nor have they invested much time in their forecasts. The quantitative method of customer expectation was used both by Magenta and Promimic. SES and Prototyp had a cost-based approach, and Aktivators based it on previous months and a macroeconomic trend. At the same time, venture capitalist Almi does not really care about the revenue forecast, but rather the economics of the business. Even though all companies constructed a business plan, only Prototyp used it as a target and affecting the daily operations. Promimic constructed several forecasts, but did not care about the results. The three other case companies constructed forecasted its revenue just because it was a prerequisite to participate in Venture Cup.

6. DISCUSSION

In this chapter I will systematically answer each research question, which leads up to the brief and final conclusions, and suggestion for future research.

6.1 Addressing the research questions

RQ1: How do the case companies use business planning and business plans?

Of the five startups, Almi excluded, two startups are associated to the business planning school; Prototyp and Promimic, and three are considered non-planners; Aktivators, SES and Magenta. The most dedicated planner, Prototyp, carefully planned its business through using various KPIs and action plans to prioritize among activities. Not only was the very near future planned, Prototyp also held regular meetings to assure alignment with the long-term vision. Promimic has also utilized business planning, although unsuccessfully due to the lengthy commercialization process. The main objective for Promimic was to document the development in order to provide it to investors. Non-planner Aktivators were driven by the mere entrepreneurial sensation to establish and commercialize the idea, and could not waste precious time and resources on business planning. SES entered a market and industry that was so unexplored that no comfort was found in business planning, instead interacting with various actors and remaining flexibility was prioritized. Finally, Magenta identified an opportunity, in which a quick establishment was necessary; otherwise the opportunity might have disappeared. Therefore, no time could be wasted on business planning. Both the use and non-use of business planning are supported in literature.

As all startups participated in Venture Cup, they all constructed a business plan. However, it was only Promimic, SES and Magenta that used it for other purposes. For Promimic, the many iterations of its business plan has been a way to keep track of development, and also required by investors. SES and Magenta used the business plan as an investigative research to gain business intelligence and insights, and eventually led to the decision of commercializing. Prototyp and Aktivators, however, did not use the business plan for other purposes than Venture Cup. Furthermore, as the perspective of this thesis is to address the trivialization of the business plan through revenue forecasting, the usage of revenue forecasts also needs to be discussed. Prototyp was the only case that strictly used the forecast as a target, and broke down its cost-based forecast to weekly and daily targets on how many sales calls to make. SES also used the cost-based approach but did not use the forecast in daily operations, but

only for Venture Cup. Similar to SES, neither did Aktivators include the revenue forecast in daily operations. Its forecast, based on previous months and seasonal online shopping patterns, was only used for Venture Cup participation. Magenta and Promimic stood alone in using a qualitative forecasting method, namely, customer expectations. Magenta initiated its forecast after a couple of operational months, through using the existing customer base's expectations and predictions, supplemented by reviewing competitors' financial statements. Promimic, as a subcontractor, benefited from its customers' forecasts, which was supplemented by industry reports.

RQ2: What are the case companies' attitudes towards business planning and business plans?

Undeniably, the study objects' attitude towards business planning and business plans are reflected in the first research question, however, not included. Both advantages and disadvantages with business planning, which are found in literature, are also represented among the case companies. Likewise are features of both the effectual and casual logic evident. The planners Prototyp and Promimic found great comfort in business planning to prioritize urgent tasks and to monitor the business. Although, acknowledging some benefits with business planning, such as risk avoidance, Almi advocates startups to remain flexible and interact with potential customers instead. This is the same attitude SES had when entering an uncertain market. Magenta and Aktivators did not find it to be a worthwhile activity, instead quick establishment was prioritized, albeit for different reasons.

Although not a positive attitude towards business planning, investigative business plans were intrinsically what led SES and Magenta to commercialize. And further, even if SES's and Magenta's had a positive attitude towards business plans, the two companies did not value revenue forecasting, and especially not the accuracy of a forecast. Equally surprising is that Prototyp argued that a business plan would have impeded the business, although carefully planning the business and relied heavily on its revenue forecast. Also, Prototyp did not need a business plan as it was not externally financed. In contrast, Aktivators, who is externally financed, does not see any purpose of a business plan nor revenue forecasts when meeting potential investors, as a dynamic environment cannot be frozen and put into a business plan. Promimic's attitude towards business plans is reflected in its investors' requirements; it is necessary in order to document the company's development. Additionally, Promimic did not

care for revenue forecasts, although forecasts were performed, Promimic had a very relaxed attitude towards the accuracy of them. Promimic

RQ3: What factors affect the case companies' attitudes and usage of business planning and business plans?

When trying to find similarities and differences between the case companies' attitudes and usage of business planning and business plan, it was evident that the commercialization process might have been an affecting factor. Two of the companies with a relaxed attitude to business planning, Magenta and Aktivators, were motivated by a quick establishment and had a very short process to go to market; Magenta was a franchise, and Aktivators was cloud-based. A similar attitude was found in SES, which had one thing in common with Magenta; the same founder. Otherwise, SES was very different from both Magenta and Aktivators, with a lengthy procedure of patent searching, many iterations of the business model and no known market. Just as different SES is to Magenta and Aktivators are the two planners; Prototyp and Promimic. The former is a consultancy firm with short time to market, and the latter a biotech company with years of patent filing and research to find a viable application area.

Equally confusing as searching for similarities in terms of attitude and usage towards business planning is to do the same for business plans. The companies using the business plan, SES, Magenta and Promimic do not, all three, have any commonalities. However, Magenta and SES did once again suggest a similar attitude and use, and thus, indicating that the entrepreneur's preferences is what matter. Also, SES and Promimic had similar commercialization process, characterized by years of validating and authenticating their respective techniques. Aktivators and Prototyop saw now purpose of using the business plan, and had a similar commercialization process in terms of length, but not in terms of planning. Needless to say, no generalizable factors affecting the case companies' attitudes and usage of business planning and business plans were found. However, the commercialization process, the entrepreneur's motivations to establish, industry-specific circumstances, and the entrepreneur's prior experiences have all been identified as potential factors to influence the attitude and use.

6.2 Final conclusions

To conclude this research, it is safe to say that every company's usage and attitude towards business planning is unique. In the broader context, both schools of thoughts are represented,

i.e. advantages and disadvantages of business planning and business plans, as well as effectual and casual features. In brief, advantages of business planning include monitoring business development and disadvantages include that the environment is too dynamic for planning. Business plan are by some considered to be a way to document the business and produce business intelligence, and by others argued to stigmatize the business. Furthermore, the cases seem to be inconsistent in their attitude and usage of business planning and business plans. What I mean is that proponents of business planning do not necessarily advocate business plans, and vice versa. The importance and usage of revenue forecasts has been widely spread across the cases with a slight ascendancy for the cases trivializing it. Also, the methods to forecast revenue have been very simple, although more complex methods exist and are applicable.

Although the aim of this study was not to relate attitude and usage of business planning and business plans to venture performance, I must stress that it is difficult to determine which approach produces success. Perhaps, business planning and business plans are not a decisive factor when it comes to venture performance. One thing is sure, and that is that the entrepreneur does not simply chose a path of effectuation or causality or just adopted a certain attitude; instead, it seems to be the entrepreneur's intuition.

Surprisingly enough, it has been very difficult to pinpoint and identify the underlying factors of the usage and attitude. In other words, no significant differences or similarities have been obvious and reasonable. For instance, the length of the commercialization process was believed to be very relevant. However, companies with similar commercialization process, and ultimately similar motivations to establish and industry-specific circumstances did not use business planning and business plans the same, nor was their attitudes alike. What this indicates is that what perhaps influences a company's attitude and usage of business planning and business plans derives from the entrepreneurs' prior knowledge and experiences.

6.3 Suggestion for future research

As the cases studied all were found through Venture Cup's alumni network, they all had, at least once, constructed a business plan and were familiar with the concept. And although some cases only constructing a business plan for Venture Cup, this bias has impeded the 'real' non-users of business plans to be prominent. I believe that a study involving both companies that have constructed a business plan and those who rejected it would result in an easier process to identify factors affecting the companies' attitudes and usage of business planning

and business plans. As of now, what affects a company's attitude and usage of business planning and business plans are, to me, unknown. Furthermore, I believe that following a startup's commercialization process in real-time, would give better insights to how the approach to planning changes in alignment with the dynamics of the environment. Finally, linking the usage of business planning and business plans to venture performance would be very inspiring contribution to the debate. This has already been done, and referred to in this thesis. However, as both schools of thoughts linked their approach to successful venture performance, a statistical ensured study that proves whether business planning and business plans improves venture performance is much needed.

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APPENDIX A – Interview Framework

COMPANY INFORMATION

History

- When were you founded?
- Who are the founders?

Commercialization process

- Where did the idea come from?
- How long from idea to market?
- What was the initial/anticipated offer?
- What was the realized offer?
- What was the believed/anticipated market/customer segment?
- What was the realized market/customer segment?

BUSINESS PLANNING

- Did you construct a business plan?

If yes:

- For who?
- How much time did you spend on it?
- What was the outcome of the business plan?

FINANCIAL ESTIMATES

Sales figures

- What was the forecasted revenue (volume & price) for the first fiscal year? (At the start of the business)
- What was the actual revenue (volume & price) the first fiscal year?
- How has these figures been presented and documented? (Internally, business plan, to investors etc.)

Forecast

- How was the forecast constructed?
- Did you use a qualitative or quantitative method?