



UNIVERSITY OF
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BODØ GRADUATE SCHOOL OF BUSINESS

MASTER THESIS

Management control in fast growing entrepreneurial firms

Case study of four small and medium sized gazelles in Nordland county

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BE304E

Management Control



Preface

We would like to thank people who were involved in this project directly and indirectly, whose participation made a great contribution to our thesis.

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Sammendrag

Denne masteroppgaven har til hensikt å utforske temaet «Økonomistyrings mekanismer» i raskt voksende, små og mellomstore gaseller. Oppgaven er relevant for forskere og interesserte innenfor fagfeltene økonomistyring, ledelse og entreprenørskap. Også offentlig sektor, med interesse for fremvekst av nye firma, vil ha interesse av denne masteroppgaven. Inspirasjon for å skrive om dette fagfeltet kommer fra forskning på entreprenørskap og økonomistyring utført av blant andre Antonio Davila og George Foster. I Norsk sammenheng har forskning presentert i Magma (Nr 6, 2013) av Daniel Johanson og Dag Øivind Madsen og deres artikkel «Økonomistyring i Norge» vært til inspirasjon og utgangspunkt for vår interesse i fagfeltet. Forskningen Davila/Foster og Johanson/Madsen har i hovedsak relatert seg til firma med mer enn 100 ansatte. I denne masteroppgaven har vi sett på gaseller med under 50 ansatte, altså de aller minste, målt i antall ansatte.

I denne masteroppgaven presenterer vi en utforskende case studie av fire gasellebedrifter (2015), lokalisert i Nordland fylke. Gasellene kommer fra ulike industrier, og varierer fra 2-30 ansatte. Problemstilling og forskningsspørsmål er knyttet til hvordan gründerne i bedriftene styrer og håndterer rask vekst. Først presenterer vi økonomistyrings mekanismer brukt av gründeren gjennom en kartlegging av mekanismer via rammeverket utarbeidet av Malmi/Brown (2008). Gjennom analyse av styringsmekanismene og øvrig innsamlet data, presenterer vi flere interessante funn, relatert til gründerens bruk av styringssystemer og mekanismer. I oppgaven tar vi for oss hvordan gründer bruker formelle og uformelle mekanismer i kombinasjon for å balansere mellom fleksibilitet og stabilitet/kontroll. Vi presenterer også funn relatert til gründerens «kognitive styringsmodell i bedriften. Deriblant gründernes bruk av «tommelfingerregler» for effektive beslutningsprosesser og hvordan dette påvirker den overordnede styringen i bedriften. Vi finner også at gründerne i gasellene er lite interesserte i vekst som sådan, og at de har et sterkt HR perspektiv på sin rolle som leder/eier. Avslutningsvis sammenfatter vi våre resultater fra Malmi/Brown (2008) rammeverket og øvrige funn i en kognitiv modell, som gir et utfyllende bilde på hvordan gründer styrer bedriften i rask vekst. Ved å inkludere kognitive modeller i vår oppgave, fant vi flere elementer knyttet til økonomistyring som ikke ble plukket opp gjennom Malmi/Brown rammeverket og gav oss verdifull innsikt.

Nøkkelord: Økonomistyring, Gaseller, SMB, Entreprenørskap, Kognitive modeller

Abstract

This purpose of this master thesis is to contribute to the field of management control and entrepreneurship, through the examination of small and medium sized gazelles. This paper is relevant for those interested in the fields of management control, management and entrepreneurship. It may also be of interest to public sector bodies working with supporting growth of new firms and industries. Inspiration for this thesis came initially through research in management controls and entrepreneurship by Antonio Davila and George Foster. From a Norwegian context, the research presented by Daniel Johanson and Dag Øyvind Madsen in their article “Økonomistrying I Norge” (Magma Nr.6, 2013) was the spire for our initial interest in this research. In this thesis however, we look at the smaller gazelles with less than 50 employees.

In this thesis we present an explorative case study of four gazelle firms (2015) located in Norland county, Norway. The gazelles in our cases come from different industries, and vary from 2-30 employees. Problem statement and research questions relate to how the founder in these gazelles manage and control during fast growth. First we present control mechanisms used by founders, presented through the Malmi/Brown (2008) framework. Through analysis of the mechanisms and gathered data, we present several interesting findings. We look at how founder use a mix of formal and informal controls to achieve a balance between flexibility and stability/control. We proceed to present findings related to founders “cognitive control model” of the firm. Findings include how founder use “rules of thumb” for efficient decision-making and how this affects the overall controls in the firm. We find that founders care little for growth as such, and view it as an “external force” they have to manage. Founders are found to have a strong HR-focus in their role as manager/owner. Finally, we combine our findings from Malmi/Brown framework (2008) and findings from analysis in a “cognitive control model” that provides an overall view of control mechanisms in the firm. Through incorporation of the “cognitive control model” we gained significant insights that was not discovered through Malmi/Brown (2008) framework.

Keywords: Management control, mental models, small fast growing entrepreneurial firms, gazelles

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List of Acronyms

BPM – Business Process Model
BSC – Balanced Scorecard
CEO – Chief Executive Officer
CRM – Customer Relations Management
DB- Dahl Bygg AS
DN – Dagens Næringsliv
DS- Daesign AS
EVA – Economic Value Added
GEM – Global Entrepreneurship Monitor
HMS – Helse Miljø og Sikkerhet
HR – Human Resources
HS-Heimsjyen AS
ISO – International Organization for Standardization
IT – Information Technology
MAS – Management Accounting System
MC – Management Control
MCS – Management Control System
MVA – Merverdi Avgift
NAV – Norwegian Labour and Welfare Administration
QS – Quality assurance system
RM- Rana Mek AS
ROA – Return On Assets
ROE – Return On Equity
SMB – Small and Medium sized Business
SSB – Statistisk Sentralbyrå
TEA – Total Entrepreneurial Activity
TMC – Smartphone App used for registering workhours
VC – Venture Capitalist

1 Introduction

1.1 Background

Companies in the 21st Century, face accelerating rate of change in the dynamics of markets, strong forces of globalization and convergence, and with a rapid technological development having significant impacts on dynamics. From the leader in the Economist October 24th, we can read about the impact of innovations such as AirBnB / Uber / Cloud-computing that changed industries, and to some level what it means to be a company, "over-night". The new firms and business models labelled "disruptors" due to the heavy impact on business.

Particular for an Oil-dependent Norwegian economy, the current crisis in oil price has made the question of what comes "after Oil" in the future Norwegian economy highly relevant. This leads us to entrepreneurship and "the ability to see opportunities, and create the organizations to pursue it", as defined by D.Bygrave and Zacharakis (Bygrave and Zacharakis 2009). In a dynamic, rapidly changing market, the entrepreneurial aspect of business is increasingly important. Those who refuse to adapt to these changes (like Kodak) will face major challenges, and those that excel at the entrepreneurial aspect of business will reap the rewards (Apple).

Entrepreneurship has been a point in political debates in Norway the last election period, and the government changed auditing regulations on small entrepreneurial firms to ease the administrative burden, as one of several steps taken to improve the conditions for entrepreneurial firms. With that, they hope to improve the supportive frameworks of emerging firms, and thus bring new economic gain to the economy.

After many years of relatively high and stable early-stage-entrepreneurial activity (TEA - Total Entrepreneurial Activity rate) in Norway, we are now experiencing a drop, despite high levels of identified opportunities for entrepreneurs, and reduced reporting needs. According to news articles (Dagens Næringsliv 9.12.2015) Norway is falling behind its Scandinavian neighbours on statistics for entrepreneurial activities. DNB director K. Høklingen states that although 45% of founders claim access to capital as major barrier, the issues of culture and competence are of vital importance to succeed. This is supported by GEM information, (Global Entrepreneurship Monitor, 2013) many Norwegians describe themselves as lacking the skills and competences relevant for starting a business. The fear of failure is also very high (GEM 2013), and as we see from SSB statistics, the rate of survival of new firms is poor.

After the first year, close to 50% are no longer operational, and after 5 years only 29,8% are still operational (SSB – table 1 appendix). Many fast growing entrepreneurial firms end up in default.

Even fast growing “Gazelles” struggle with survival, and several end with default, as we can read from recent news articles (Dagens Næringsliv 21/10 2015). For the Norwegian entrepreneurs, GEM data analysis back in 2004, also stated that the availability of financing was the most important obstacle to entrepreneurship in Norway (“GEM 2004 “Kolvereid et.al 2004). Looking at the GEM-Report form 2013, the availability of investors has decreased from 2004-2015, from 4.3 to 3.3 in 2015. It suggests that access to capital remains a major obstacle. With this in mind, we argue that this makes the survival of those with access to financial backing, all the more important. It highlights the importance of spending the money “right”, and increase efficiency of capital. One way to accomplish this is through the right controls and measures. In such uncertain times, and with the added uncertainty of rapid change, (change being the only constant) the issues of control becomes critical. Davila / Foster made an example in the 2010 article, where the relevance of management controls to entrepreneurial growth is described splendidly. In the same article, they provide evidence that supports the claim of relevance.

“... Formula 1 teams have highly complex and extensive systems infrastructure both on and off the track. The same logic applies to start-up’s, the faster they need to go, the more MC infrastructure they need”

- (Davila, Foster et al. 2010)

Tight and extensive controls have been presumed to constrain creativity, and thus have a negative impact on entrepreneurship according to the traditional view of management controls (Davila, Foster et al. 2009, Chenhall 2003). Looking at the growth aspect and management controls, Moores and Yuen (2001) point to the need of balancing complexity and dynamics of controls to support growth. Entrepreneurs have to balance the need for formal controls, with the flexibility of informal controls to stay “innovative” and maintain the “entrepreneurial spirit” of the firm. So how does fast growing entrepreneurial firms solve this?

From our literature review, we see that there is a fair amount of knowledge of the links between larger companies and applied controls, but a general lacking of SMB context research (Chenhall 2003). SMB context is in general relevant for Norwegian market, as only approx. 1.5% of Norwegian companies have 50+ employees (SSB). For most Norwegian firms, it would be uncertain whether international research material on MC are applicable. In later years, Davila/Foster et.al has published articles on the connections of MC’s and

entrepreneurship (2005-2014) but firm sample sizes are all above 100+ employees. It appears there is not much knowledge of MC's in smaller firms, entrepreneurial or not. Davila/Foster (2010) suggests that the need for MC's is significantly connected to number of employees, and that controls become formalized somewhere between 50-100 employees.

The entrepreneurial aspect, to our understanding, should be of key importance in surviving the rapid changes, for not only established mature companies with need for change, but it should be interesting for public sector and governance to facilitate entrepreneurial success with newly founded companies, rising with the emerging opportunities.

In this paper, we take a closer look at the up and coming entrepreneur with ambitions to grow, in the arguably most vulnerable phase of a firm's lifecycle. We apply a holistic framework by Malmi/Brown to facilitate analysis of applied formal controls, and seek to discover the entrepreneur's informal controls for fast growing firms. We do not examine linkages between formal controls ("MC as a package"), but rather seek to identify and "map out" what controls are in place, and focus on the interaction between formal controls and the cognitive mental model of the entrepreneur. Our proposition is that the interaction and use of cognitive models, help manage the balancing between needs for complexity and dynamics in control systems. We also try to discover some of the reasoning behind the choice of controls. Our contribution will be adding to understanding of management controls in a context with little existing research. From an entrepreneurial perspective, we hope to provide insights that might help the entrepreneurs "make the leap" and grow to maturity.

1.2 Problem statement

"How do founders of gazelles apply control mechanisms to facilitate, manage and control exceptional growth?"

The question then becomes how to research this problem statement and answer the research questions posted below.

Research questions:

1. What specific formal control mechanisms are applied in the firms and why?
2. What specific informal control mechanisms are applied in the firms and why?

3. Excluding legal requirements, what similarities can be found in use/application of management control among gazelles?

The first question will provide with a situational description or picture, on what formal controls currently applied in the firm. It will allow for mapping controls within the Malmi/Brown framework. This has been one of the major motivations of Malmi/Brown, and as pointed out by Chenhall (2003), the myriad of definitions and frameworks applied to MC research, make comparison of studies and results difficult. This will serve as a basis for both examining the reasoning behind them and to compare cases/firms with each other.

The second question will provide insights relevant for the informal controls, and help shed light on cognitive model applied by the entrepreneur. By answering this question, we will be able to “paint a picture” of the mental model of the entrepreneur, that in combination with established formal controls, will give a more or less complete overview of the controls applied.

With the final question, by searching for similarities instead of differences between gazelles, we seek to discover those traits that are common across industries, size and organizational variances. In this we hope to find similarities that can provide clues related to managing fast growth.

The combination of the questions above, will be the basis for discussion and comparison on how the informal and formal aspect of controls interact, combined with cognitive model of founder, to balance/solve the previously discussed paradox (introduction) of need for balance between complexity and dynamics in controls for both fast growth and entrepreneurship/innovation.

1.3 Purpose of Thesis

As discussed in introduction, the purpose of this thesis is to get insights in how MC are used by entrepreneurs in fast growing, small or medium sized firms. There is seemingly little research done on this, and the topic is timely and relevant (as previously discussed).

By completing this thesis, we hope to provide insights that can be used as a basis for a discussion of the relevance and usefulness of applied controls. When little is known about the use of controls in this context, it is difficult to have a discussion of the appropriateness and effectiveness of controls in this context.

1.4 Structure of Thesis

This master thesis is structured in six Chapters. Firstly, in Chapter 1 we familiarize our readers with the background and situational description that started us on this direction of research, and discuss some of the challenges facing fast growing firms, presenting our problem statement and research questions. In chapter two, we take a close look at the existing theories, identifying gaps in existing research and further placing and defining our thesis in relation to existing theories. The third chapter consists of the questions common for all research, the philosophical concepts and foundation of our research, data collection, and the reasoning behind our choices regarding methodology. In the fourth chapter we disclose our empirical findings. Analysis and discussion regarding empirical data is conducted in chapter five, while our final conclusions, suggestions for further research and summary of our thesis is presented in chapter six.

2 Theoretical frame of reference

In this section, we will present theories relevant for our research. We will start with some comments on literature review, and then examine more closely the possible frameworks for analysis of controls. We start with some theories on the contexts of entrepreneurship and fast growing gazelles, before we examine MC theories. When it comes to our choice of definition and scope of “Management Controls”, we have to follow with the later choice of framework to apply, and therefore we will not go too deeply into the various definitions and specifications of the term “management controls”. Suffice it to say at this point, that there exists nuances and definitions enough to suit all the major contributors to this field of research, and there seems to be difficulties converging on a fixed term (Chenhall 2003).

2.1 Literature review – General findings

As previously stated, little research was found that specifically deal with the context of SMB entrepreneurial firms and controls. A lot of MC research over the years have been in companies with 100 or more employees, both investigating effects and use of MC, and there seems to be emerging some clear ideas about the subject within this context. Malmi / Brown (2008), Otley (2009) and others, have contributed with frameworks that describe the different

controls and to some extent how they affect and relate with each other as a package. Chenhall (2003) made a call for more research in the SMB context, and a few researchers (Davila / Foster et.al) has picked this up. When it comes to SMB companies, we have not found much research that investigates the use and usefulness of MC's. Narrowing down our search further, looking at fast growing entrepreneurial firms and MC, reveals even less academic writing about the links between entrepreneurship, management controls and start-ups, which fit within our context of research.

Our challenge was that after reviewing articles about "small firms" or "entrepreneurial start-ups", we discovered when checking the samples of firms in the research, they tended to also be of 100+ employees. Some research designs were retrospective, meaning that the firms included in research was asked about previous events in the history of the firm, often two or three years back. This does not make the results less valid, but for generalization of results to other contexts, it would be preferable to have research based on current situations to improve the quality of subject's recollection of events, and thus the quality of research itself.

We have found little or no research on the subject of management controls in small entrepreneurial firms (less than 50 employees). Other existing research suggests there is some un-formalized HR "mechanisms" or controls that may affect early business performance (Isaksen 2006). Odd-Birger Hansen, point to cognitive business models as a possible competitive advantage for emerging entrepreneurs, but does not pursue the matter further in his research (Hansen 2005).

Concerning a holistic MC framework to support and structure the research, we found two that were interesting. Malmi / Brown (2008) framework, and the "performance management framework" (Ferreira and Otley 2009). Otley's framework represents control system pointing mainly on overall perspective and using inductive approach to define important issues in organizational control systems that is common for many organizations.

Otley / Ferreira argues that in order to develop a framework for managing performance of organization one should address five question about key objectives, strategies and plans, rewards, how these elements will influence performance measurement of the organisation, and what information sources organisation uses for learning purposes. The study argues that these questions embrace all issues of management accounting. Since the strategy and environment around organisation can change over years, the questions supposed to remain constant. Therefore, organization should continuously search and develop new answers. The purpose of the framework was not to find the best control system but rather to use it in order to assess and describe the effectiveness of control techniques used by managers of

organizations. The framework proposed by Otley has a strong focus on alignment of strategy and applied controls. However, in this thesis we have chosen to use Malmi / Brown (2008) framework, which will be described in chapter 2.3.

Davila/Foster's research in relations to "The Sema Project" appears to be most relevant for our research. They have asked established firms about the adaption (formalization) of controls, and checked for patterns/sequence of adoption of different controls. However, if we examine the sample of companies used, and the variable "number of employees", it has a mean of 118, and median of 113. The mean of company age is 5, 47 years, and are valued (peaked) at a mean of 168,6Million USD. In a Norwegian context, that would not qualify for a "small business". However, from our literature review, it is the best match for our context of research, and should provide a decent starting point for our thesis, in addition with others.

2.1.2 Summary

In this section we have discussed the overall findings from our literature search. We found little existing research regarding management controls and entrepreneurship, and when adding our requirement for SMB context, we found little or no existing research, revealing a gap in published articles/research. Regarding MC framework for analysis and scope of MC, we considered two frameworks and choose the Malmi / Brown (2008) framework for our further analysis. Regarding the entrepreneurial aspect of MC research, we found Davila and Foster's research from 2005-2010 to be the closest match for the entrepreneurial aspect of MC theory. In the following section we will look closer into definitions and scope for "entrepreneurial aspect" of our thesis.

2.2 Entrepreneurial Context

The word "entrepreneurship" was originally used to describe those that "take on the risk" between buyers and sellers, or who "undertake" an assignment like starting a new business. There are many different interpretations and definitions of entrepreneurship, such as corporate entrepreneurship (Guth and Ginsberg 1990, Stopford and Baden-Fuller 1994), business venturing (Eckhardt and Shane 2003), manopreneurship (Hjort 2003), strategic entrepreneurship (Ireland, Hitt et al. 2003) and others. Each view on entrepreneurship has its

own definition and variations of it between different researchers. Bruce Barringer and R.Duane Ireland define entrepreneurship as “the process by which individuals pursue opportunities without regard to resources they currently control” (Barringer 2012). In the book, they also make some distinctions of the different challenges firms meet as they seek to grow. Edit Penrose (1959 “The theory of the growth of the firm”) highlights two kinds of services that are important for the growing firm. “Entrepreneurial services” would be penetrating new markets, generating new products and service ideas. “Managerial services”, is as the name implies, related to the day-to-day operations of the firm and facilitating the execution of new opportunities (Penrose 1959).

As we seek to investigate very small firms, most likely with little or no formalized structure, our focus will not be on the strategic or corporate aspects of entrepreneurship. Our focus is on the individual founder / manager of the firm and how they utilize management control. In addition, we find the distinction made by Penrose (1959) useful for further placing our research within the entrepreneurial context, as our main concern is the “Managerial services”, and the management and more specifically, the control of operations in a fast growing entrepreneurial context.

In our paper we define entrepreneurship as “all the functions, activities and actions associated with perceiving opportunities and creating the organizations to pursue them” (Bygrave and Zacharakis 2009). This is very similar to the definitions used by Davila / Foster (2009), but different from the entrepreneurial context O.B Hansen did his work in (Corporate Entrepreneurship).

Looking at the entrepreneurial process, we have placed our research in the very beginning of the growth phase, after the firm is founded, the entrepreneur is committed to growth, and has the first employee to manage. Research has shown that growth intentions and motivation among entrepreneurs can predict actual growth (Kolvereid and Bullvag 1996, Delmar and Wiklund 2008). It’s noteworthy that Delmar/Wiklund found a stronger connection for the impact on employee growth than on sales growth. One arguably major challenge for many entrepreneurs is “making the leap” from being a successful one-man firm, or a person with a good idea and intentions of realizing it, to making a commitment to growth and managing the firm through the growth phases. There will be a trade-off between dividends/profits for owners/founders and retained profits during growth, as entrepreneurs have to re-invest capital to grow (Penrose 1959, Moreno and Casillas 2007) often with additions from equity investors or loans from banks. Due to the decrease in profitability and increase in costs, the risk is

naturally higher for the entrepreneur and potential investors. Our argument is that exactly this period is the company at its most vulnerable. Once the firm reach a certain size, they start to attract interest of venture capitalists who can bring significant knowledge and “know-how” to the firm (Davila/Foster 2010), or they are able to stand well on their own, thereby reducing the risk for both founder of the firm, but also other stakeholders.

From the point of 50+ employees, it seems that the academic environment has provided some significant insights, and that active venture capitalists start to take an interest in the firm (Davila/Foster 2010 et.al). However, in order to reach that point, the firm with a founder committed to growth, must through the “forging fire”. In this period, there is need for controls, as the margins get tighter and the risk increases. With limited founding from interested investors (“GEM 2004 Report” Kolvereid et.al 2004, GEM 2013), the way founds are used and people managed is of critical importance. If a larger firm makes a mistake they usually have the means to pay for them in some way, but for firms in this stage, the result can often be default and shutdown, often with significant consequences for the founder personally.

2.2.2 Summary

In this section we have discussed the general definitions of “entrepreneurship” and defined it as “all the functions, activities and actions associated with perceiving opportunities and creating the organizations to pursue them” (Bygrave and Zacharakis 2009). We have further placed our thesis within the “managerial services” as defined by Edit Penrose, (1959), in order to gain a stronger focus and direction. In the next section we will take a closer look at growth as concept, measure, and how it relates to MC and SMB context.

2.3 High Growth firms – “Gazelles”

According to Gibb and Davids (1990) there is no single theory can explain small business growth, and that it is little chance of such a theory being developed in the future (Gibb and Davies 1990). Many researchers in entrepreneurship and other fields use their own definition of fast growth and characteristics of high growth firms. Delmar et.al (2003) argued that no single growth measure could be used, as “high growth” is multidimensional in nature (Delmar, Davidsson et al. 2003). He argues that “high-growth” firms exhibit different growth

patterns, and that the seven identified patterns systematically relate to demographic affiliations. Storey (1994) found three main components that was important for small firm growth, namely the characteristics of the entrepreneur, the characteristics of the organization, and the types of strategy associated with growth (Storey 1994). In his research of small and medium enterprises, Smallbone (1995) defined high growth firms based on three criteria such as firms that doubled sales turnover in 11 years period, achieved sales turnover on the level of 0,5 million pounds by certain year and showed financial stability in terms of profitability by certain year (Smallbone, Leig et al. 1995). Recent demographic statistics (Eurostat 2008) stated that high growth firms could be identified both based on turnover and based on number of employees. Moreno and Casillas (2007) used sales growth as an indicator for determining fast growing firms. Delmar et al. (2003) focused mostly on criteria of sales and employment in the study of high growth firms.

Moore and Yuen (2001) were studying development of MAS (“Management Accounting Systems”) during different life-cycles of firm’s existence. One of objectives of the paper was an attempt to identify if MAS differs from stage to stage of development of firm. The outcome of the study showed that MAS specifics differ across stages and particularly growth stage was the most demanding for formal design of MAS. Study also found that from birth stage to growth stage MAS formalization was increasing. According to results of study during the growth stage the level of administrative tasks was a lot more demanding to MAS in terms of formality therefore management of firms were required to formalize their MAS to required level in order to handle complex activities of firms (Moore and Yuen 2001).

Davila T. (2005) found in his study that growing firms are experiencing challenges during transition from informal controls to developed MCS. He concluded that as firm grows and starts formalizing management processes informal activities are becoming costlier and harder to conduct because informal controls require personal involvement of managers in daily activities and close interactions with each employee (Davila 2005).

Davila and Foster (2007) provided evidence of contemporaneous correlation between evolution of MCS with the size of the firm, measured by the number of employees. The study summarized that MCS has to provide control tools and mechanisms that will help to facilitate growth beyond informal stage. It was argued that informal management controls and activities are becoming harder once the firm’s size will increase beyond certain level. As the results of

study show the adoption of MCSs is more becoming more intensive when the firm start to grow. Based on the study growing firms usually adopt financial planning systems such as operating budgets, cash flow projection and sales projection in the beginning of transition to growth stage.

Thus we may conclude that newly started growing firms distinct from newly started non-growing firms by the level of complexity and formality of control tools and mechanisms. If the firm has entered the growth stage, management of the firm will be required to adopt and develop more formal and complex MCSs because it will be too hard and costly to operate during growth stage relying only on informal management infrastructure that requires constant personal interactions.

Some researchers (Chenhall and Morris 1995) argue that it is appropriate for conservative strategies to apply tight control, but entrepreneurial firms also apply tight control tools in combination with organic decision styles and communications. According to Simons (1987), firms adopt tight control mechanisms in order to help learning in ambiguous situations and environment and prevent the excess of innovation (Simons 1987). So as Chenhall (2003) concluded we may state that the paradox is entrepreneurial firms with organic management require innovative approach for business processes in combination with tight control mechanisms in order to restrain excessive innovation. Founders must balance the need for formalized controls, with the flexibility of informal controls. This relates both to the “agility” of the growing firm, when it comes to acting on opportunities, and the cost of changing advanced formal systems.

It seems that there is no single method or any “one-way” of measuring high growth, or a singular definition of gazelles. The term “gazelle” is applied to the “elite” category of fast growing firms, and many researchers apply it to their own definitions of “high-growth” or “fast growth”(Farinas and Moreno 2000 (Birch, Haggerty et al. 1994). From the myriad of uses, we find in existing literature it seems the term “Gazelle” has become diluted / obscured, as it has been connected to different measures and criteria. For our purposes, it is important to use a definition that is commonly recognized (if possible), and suitable for the environment the research is being conducted in. To present research of “Gazelles” that contradict the consensus of what the term implies would be futile.

One of the most popular list of Gazelles in Norway, is the one made by the economic newspaper “Dagens Næringsliv”, and we will use it as a starting point for our sample of firms. They keep the list current, and provide news stories following up on the gazelles, and most other popular news channels refer to reports or articles in this paper when reporting on “Gazelles”. To qualify as a gazelle they have several key criteria. Firms must have approved accounts prepared, doubled revenues over the past 4 years, revenues of more than 1 million first year, positive profits, never had negative growth, and be registered as a stock company. These criteria would also be the qualifications we apply for our thesis, in addition to others that will be discussed later in Chapter 3.

2.3.1 Summary

In this section we have discussed the myriad of different measures and definitions of “high growth”, and found research suggesting that “high growth” has significant impact on MC. Mostly for convenience and match with our outline for research, we have chosen to adopt the definitions applied by business newspaper “Dagens Næringsliv” for “high growth”. For firms with these traits we also adopted the definition of “Gazelle” and when this is referred to, it will be as defined by this business newspaper. Furthermore, we examined how “high growth” affect MC. Formalizations of controls are found to be incremental as the firm grows, and formal design was shown to be under heavy strain during growth phase of a firm. This correlation was found to be strongest when related to growth in number of employees. Simons (1987) found that firms adopt “tight control mechanisms” to help learning and in ambiguous situations (dynamics) prevent the excess of innovation. Chenhall (2003) point to this paradox that entrepreneurial firms need to balance “innovative approaches” with tight controls, that founders must balance the need for tight formal controls, with the flexibility of informal control mechanisms. In the following section we will take a closer look at MC literature and some of the classic theories.

2.4 Management Controls

In this section, we will examine the management control aspects relevant for our thesis and research.

2.4.1 Contingency Theory

Contingency theory is suggesting that there is no universal approach for all organisations in terms of applying accounting system as a control (Otley 1980). The design of accounting system depends on certain factors and circumstances that influence organisation and contingency theory have to match particular features of the system with mentioned factors and circumstances presented as contingent variables.

The study states that the most popular contingent variables that researchers employ are structure of organisation, production technology and environment. These variables influence designing and usage of budgetary information and other management control tools. Otley also presented simplified versions of the minimum necessary contingency framework that includes accounting information system, management information system and other management control tools that users have to consider as an organisational control package and evaluate only as a whole.

The relevance of the contingency theory for management control is extremely important in terms of designing management control packages for particular organisations considering different contingent variables

The relevance for our research lies in the recognition of external factors having an effect on what types of controls found within a firm. It implies that context is significant to the investigation of management controls. This indicates that there might be different controls applied for new firms in emerging markets, then for new firms facing fierce competition from established firms and so on.

2.4.2 Presuppositions Related To Contingency Theory – what can be expected?

In his article “A literature review” (Chenhall 2003), Chenhall seeks to provide a review of contingency-based studies over the past 20 years, a critical evaluation of that work, and provide theoretical foundations that could assist in developing future research with a focus on developing a contingency-based framework for the design of MCS. It is worth mentioning that most of the research Chenhall based his review on, was for larger mature firms, and that he makes a call for more MC research in SMB context in his article. He argues that one of

many challenges with MC research is how to define it, and the myriad of definitions makes it difficult to compare and generalize from research results. Chenhall discuss contingency MC research in seven categories, and provides propositions or standpoints in relation to each category, with a critical evaluation. The relevance for our paper lies in the propositions suggested by Chenhall, and we will examine some of them more in detail (Table 3 – appendix).

In addition to the summarized “presuppositions” Chenhall sorts through the myriad of articles and research done on single or very narrow aspects of MCS, and organize them in two groups of controls, Mechanistic and Organic controls. The idea behind this way of structuring it, relates to organizational research and a desire to keep it relevant and related to organizational theories. Chenhall states that contingency theory within MC can be traced back to the original structural contingency frameworks developed within organizational theory (Burns and Stalker 1961, Perrow and Perrow 1970).

The listed propositions are highly significant to our research (see table 3 in Appendix). For the “Contextual /Environmental” category, Chenhall suggests that we find a difference between stable firms in a mature and somewhat predictable market and new emerging (vulnerable) firms, where we should find more open and externally focused controls and measurements. According to sub-categories “b” and “c” we should find a heavy reliance on formal controls and budgets, but with flexible interpersonal relations.

Regarding Size of the firm, it is noteworthy that all propositions are concerned with large firms. Is it fair to assume that if the propositions hold true for large firms, is the opposite true for small firms? Furthermore, regarding an Entrepreneurial context, Chenhall propose that entrepreneurial strategies (not clearly specified definition of “entrepreneurship”, discussed as strategy) are associated with both formal controls and organic decision-making communications. Again, as these propositions are based on 100+ size firms, does it hold for the small entrepreneurial firm, with little or no formalized strategy and control?

2.4.2.1 Summary

In this section we have examined what contingent factors may have influence on a firms MC system, and that a call for SMB context research was made by Chenhall (2003): According to

Chenhall (2003) we should find differences in MC between stable mature firms and new emerging firms. He further suggests that controls for new emerging firms should be more “open and externally focused”, with heavy reliance on formal controls and budgets, but with flexible interpersonal relations. Size of firm is also found to be a significant contingent variable, lending strength to the proposition that we find differences in SMB context. However, all presuppositions in this article was based on research from “large firms”. Regarding entrepreneurial context, Chenhall (2003) proposes a mix of formal controls and organic decision-making. In the following section we will examine MC as package, and take a closer look at Malmi/Brown framework.

2.4.3 Management Control as package / system (holistic view)

In the later years, building in previous research, scholars have developed several frameworks for analysing controls in different contexts. Each framework has its unique aspects, and some have obvious specified applications. Having examined two different frameworks, one by Ferreira/Otley (2009), and one by Malmi/Brown (2008). We have found the Malmi/Brown framework to be the best fit for our research purposes. To some extent, the purpose of both frameworks is to enable researchers to examine the “links” between controls, how they interact and possibly synergize / interfere with another. It is a basic assumption for both frameworks, that management control systems do not operate completely independent of other controls, and that what systems are applied also depend on external contingencies (in accord with Otley 1980). In the following section we will take a closer look at Malmi/Brown framework and its relevance to our research.

2.4.3.1 Management Control as a package of systems (main framework)

In the article by Malmi/Brown (2008), they discuss the idea of MC “as a package of systems” and provide a new typology for structuring MC’s. They structure it around five groups; planning, cybernetic, reward and compensation, administrative and cultural controls. Although the idea of MC as a package or system is old (Otley 1980), and others has made calls to study the phenomena (Dent 1990, Fisher 1998, Chenhall 2003), there has not been much previous theoretical research with such a broad scope of MC’s and how different controls relate in a package. By providing a useful typology, they hope to make it easier for

future research to develop better theory of the real impact of innovations, as MC's are assumed to affect other controls within a system or package. In the article, they also point out another challenge of doing MC research, namely how to define MC. There exists an abundance of definitions (Ouchi 1979, Otley and Berry 1980, Simon 1995, Fisher 1998) ranging from the very broad to a more narrow approach (Merchant and Van der Stede 2007). Malmi/Brown apply a definition, also advocated by Zimmerman (Zimmerman and Yahya-Zadeh 2011) that views MC's as:

"..All the devices and systems managers use to ensure that the behaviours and decisions of their employees are consistent with the organizations objectives and strategies, but exclude pure decision-support systems" - (Malmi and Brown 2008)

The framework distinguishes between five major categories with 12 sub categories and aims to include most relevant types and configurations of MC's (Table 2 -Appendix). Although the idea is to provide a holistic view of MCS to further study them as a package, it also provides a useful way to organize the different singular controls within categories. Most controls from Chenhall's list of mechanistic and organic controls fit nicely into this framework.

T. Malmi, D.A. Brown / Management Accounting Research 19 (2008) 287–300

Cultural Controls						
Clans		Values			Symbols	
Planning		Cybernetic Controls				Reward and Compensation
Long range planning	Action planning	Budgets	Financial Measurement Systems	Non Financial Measurement Systems	Hybrid Measurement Systems	
Administrative Controls						
Governance Structure		Organisation Structure			Policies and Procedures	

Fig. 1. Management control systems package.

The relevance for our research lies in the framework itself. By using it to map out established controls in the firms we encounter, it will make comparison with other research results

possible. It also provide useful limitations on the scope of research and provide acknowledged definitions of tools and mechanisms of control.

2.4.3.2 Summary

We have examined the Malmi/Brown framework and found it useful as a way to further define and specify our thesis. There exists an abundance of definitions and nuances regarding the definition of MC and by using such a framework we gain some useful structure and boundaries in our thesis and research. Another aspect, is that by following an established framework, comparison between cases and projects is made easier. In the next section we will take a closer look at the research and articles by Davila/Foster, to further examine the findings connecting MC and entrepreneurial fast growth.

2.4.4 Management Controls and Entrepreneurship / Growth

During our literature research we have not found many articles regarding the combination of management control issues and entrepreneurship. However, a series of articles written by Davila and Foster in the years from 2005-2010, related to what they call “the Sema Project” we found to be very interesting. The firms in the sample are all from the US, Silicone Valley, indicating a strong connection to IT industry. Another significant difference is the definition of “SMB”, where Davila/Foster’s samples are all above 100 employees, with valuations above 100 million USD. In a Norwegian context, that would hardly be considered a small firm. Also, the research is retrospective, and mostly focus on formal controls. However, it’s the closest match found to our thesis, and in the following section we will examine some of the major findings in this string of research.

2.4.4.1 Management control in entrepreneurial setting

In this article, they discuss the relevance of accounting and control in relations with innovation and entrepreneurship, as new concepts and empirical evidence has challenged the traditional paradigm. Davila/Foster also seek to provide a future framework for the study of management controls in innovative / entrepreneurial settings. The definition of MC’s according to Davila/Foster is ‘formal, information-based routines and procedures managers

use to maintain or alter patterns in organizational activities' (Simons, 1995, p. 5), in accord with the concept of diagnostic systems.

In a collection of papers (Davila and Foster, 2005, 2007, 2008) Davila and Foster finds that earlier adoption of control systems is associated with the number of employees, age of firm, replacement of founder as head of company ("making the transition"), and last but not least that high growth (number of employees) is associated with higher numbers of applied controls. They also document a simultaneous relationship between control intensity and size suggesting an endogenous relationship among these variables.

The article also discusses the question of why controls are established. Davila/Foster gives six reasons for adaption of control systems in start-up's, reaction to a crisis, "import in" concept, codify learning, managers perceived need, contract with external parties, legitimizing the company externally.

The broad conclusions that emerge from these early studies are consistent with the new control paradigm:

- (1) Management control systems are a vital part of start-up growth;
- (2) the roles that these systems play are different from those described in the traditional literature; in start-up companies, control systems help provide sense making and a stable frame of reference to navigate through rapidly changing environments, capturing the learning that accrues over time through adaptive routines, coordinating when informal systems break down and legitimizing the company
- (3) These early studies have just outlined some of the challenges in understanding control in this type of company and there is a significant need for research to advance our knowledge of this important phenomenon.

2.4.4.2 Management systems as an accelerator

This paper examines management systems and their development in high-growth startup companies. As the company grow from small venture with several employees to bigger company with 50 – 80 employees it may experience entrepreneurial crisis if entrepreneur who is still occupying position of CEO did not perform a transition into becoming a manager or did not find appropriate person to replace himself or herself as CEO (entrepreneurial crisis).

Researchers found out that managing firm without any professional management systems is possible when the company has not more than 50 – 80 employees depending on complexity of the business. The companies with higher headcount can be managed more efficiently using professional management tools and systems that help managers to save time and receive accurate information regarding business activities. Those entrepreneurs that did not resolve entrepreneurial crisis successfully will either force the company to suffer from management chaos or will cap the company at the size appropriate for personal management style.

Authors stated that similar to Formula 1 racing teams that have developed complex systems to control the car on high speed startup companies also need to have advanced control systems in order to control business activities of the company and the faster the company wants to grow the more complex control systems need to be established. The paper associate the presence of venture capitalists with rapid and earlier implementation of professional management systems. The success of firms with venture capital backing in terms of growth is significantly higher than those without. This can be due to several reasons. Venture capitalists are good at recognizing opportunities (choosing the right firms), they have significant knowledge of business development to add, the adoption of MC's is faster with VC backed companies, and they help force the firm through the entrepreneurial crisis, and finally such investors may be better suited to achieve synergies with existing assets in portfolio. It is likely a combination of the above, but it none the less proves the importance of venture capital to growing entrepreneurial firms. Davila/Foster implies that this "break-point" of establishment of formal MC's, and where "the entrepreneurial crisis" occurs, is somewhere between 50-80 employees.

It was suggested that entrepreneurs who established management systems stimulating company to grow have better chances to stay at the leadership position. After examining the speed of adoption of management systems authors found that once managers will realize that they need to adopt advanced management systems they do it earlier. There are six reasons of adoption of management systems. First reason is background of the managers. Managers adopt management systems because they used to work with them in the past. Second reason of adoption is need to focus. Managers who feel that their style of management and experience is no longer enough to enhance performance adopt management systems. Negative events and unexpected problems are the third reason of adoption of management tools. Based on working experience and established processes companies decide to formalize the knowledge through adoption of management systems. The company may adopt management

systems if managers need to inform clients or other parties that the company is well managed. The last reason is when company have to adopt certain management systems because of the partners, government regulations or clients.

The paper illustrates certain roles of adopted management systems. The system in uncertain environment such as high-growth makes goals clear and stable so that all employees could be at the same page. Small companies may communicate through direct interaction. However, when company is growing the planning and communicating process becomes less efficient. Thus, management system will help managers with communication and planning. During growth of the company, managers need to receive relevant information on time for efficient and effective decision-making. Management systems are designed to help them to sort and structure information and increase its quality. The other role of management system is formalizing routines that helps managers to focus on things that are more important during uncertain situations like high growth.

2.4.4.3 Management control systems in start-up companies

In the 2015 article, the focus remains on start-up's and mainly formal management controls. They discuss whether adaption of controls have an impact on company value, from an investor's perspective. As a part of this they touch on some findings that are relevant for our discussion, and can provide some clues as to how MC's work within start-up's. They identify three contextual (contingent?) variables where investors recognize value of MC's, and see where this applies for start-up's. The findings indicate that MCS adoption has a greater impact on valuation of start-up companies in highly competitive environments and with higher levels of growth. This suggests that investors perceive added value of formal MC's in fast growing companies, compared to value of MCS in stable growth firms.

2.4.5 Summary

In this section we have examined the findings by Davila/Foster regarding MC and fast growing entrepreneurial firms. Findings supports Chenhall (2003) regarding Size of the firm impacting MC, more specifically the number of employees and age of the firm. Furthermore, "high growth" is found to be associated with a higher number of applied controls. MC is found to support a "stable foundation" in start-ups, capturing learning, and providing support

when informal systems break down. The role of MC was also found to be aiding planning and communications during growth, as well as providing timely, quality feedback for decision-making. Regarding reasoning behind adoption of controls, Davila / Foster found six common reasons. Reaction to crisis, “import-in” concept, codifying learning, perceived need of managers, contact with external parties, external legitimization. The formalization of controls was found to concentrate at the growth stage around 50 employees, about the same stage as the “entrepreneurial crisis” occurs. Also, findings indicated that the “intensity” of controls added value to the firms from an investors perspective. High “control intensity” seemed to give higher valuations of the firms by potential investors.

Through this string of research, we found additional pointers as to what results we might find in our thesis. However, one issue remains. Research in this context have not accounted in a satisfactory way, for the informal aspect of controls. There seems to exist a, perhaps, sub-conscious notion that if controls are not documented in a system, it does not exist as anything else than “interactions”, or at best defined as “social controls”. Even Davila/Foster having the focus on fast growing SMB firms, mainly focus on formalized controls (after 50+ employees), avoiding the notion that informal interactions may constitute applied controls. We understand the difficulty of conducting research on what is not “evidently there”, but still feel this to be of vital importance for doing research within a Norwegian SMB context. There seems to be something missing, otherwise no firms would grow to maturity having “no control” until the point of 50 employees. How to uncover the informal aspect of controls, and the “full picture” of how founders control and manage in a fast growing gazelle?

In the following section we examine closer the ideas behind “cognitive models” and business research, looking for clues that might complete the picture.

2.5 Cognitive Models

As previously stated in the introduction. In order to do that, we need some knowledge of the theories and concepts behind these models. Our reasoning for including the concept of cognitive models is that from our studies and literature review, we have come to believe that these models exists, whether you recognize them as such or not. We firmly believe that entrepreneurs have a mental image of the firm, where controls are included to check if processes and progress are running according to founders intentions or targets, be they formalized or not. The ideas and research by E.J Isaksen (2006) on the HR aspect of early

business performance, suggests there is some kind of “mechanism” or combination of HR-attributes that allows some founders to outperform others. Putting theoretical technicalities aside, he gets support from O.B Hansen (2005) who uses the term “cognitive models” for the HR aspect of founder success, and pose the question of whether these models, or mental images of the business environment as a machine or process, provide a competitive advantage. Other entrepreneurial literature often discuss the entrepreneur as a “type”, with certain characteristics that is more or less evident in the majority of entrepreneurs. In the following section we will further examine the concept of cognitive models.

2.5.1 A Generic Cognitive Business Model

Organisations are used to employ common or traditional approach for managing stable business activities because of its simplicity and detailed step-by-step instructions. Whereas dynamic and complex business activities require implication of easy adaptable approach. Cognitive approach may help managers in this situation since it includes real-time and situational decision-making. The core difference between traditional and cognitive approaches is that common approach tends to concentrate on following instructions and orders whereas the latter tries to develop general rules and understanding of the ways of managing business processes according to present situation. According to the article (Wang and Wang 2006), cognitive approach successfully manages business activities using developed logic and taking into consideration the current state of environment. It helps to take timely decisions at fast changing situations and tries to predict upcoming consequences of taken decisions.

Authors presented a cognitive mechanism that manages business activities according to requirement of the environment. Based on this mechanism they designed a framework that include main elements such as agent, environment state and business logic.

Environment state is an element that contain information regarding present status of business environment. It helps to track events, current tasks and available resources. This information comes from different internal and external sources.

Business logic is another important building block that comprise of formal and informal business rules and procedures about the way of doing business. Business logic may be presented as business rules regarding reducing of business risk, efficient usage of resources, business strategy, etc.

Last important part of framework is agent, which is viewed as a stakeholder that plays a specific role: vendor, customer, affiliated unit, internal department, etc. Each agent has its own environment, resources, procedures and business logic.

The framework is not ideal and has one particular limitation regarding business logic. Authors state that business logic although is very complex in terms of consideration of business rules was assumed to be fully and accurately presented and defined.

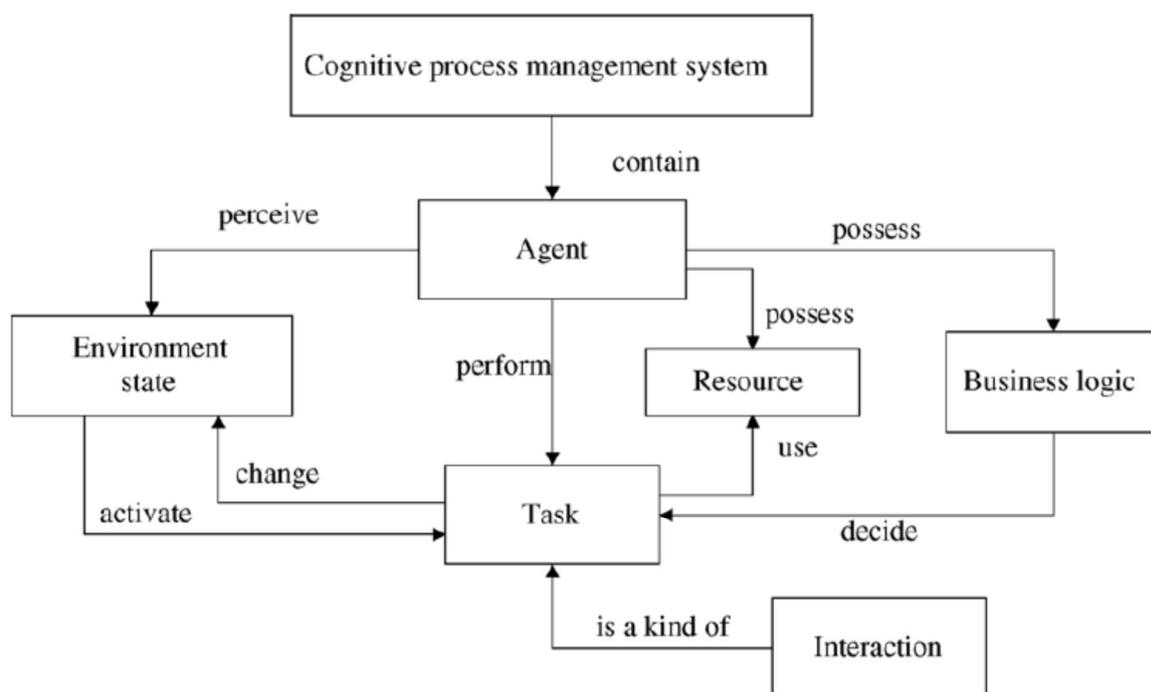


Fig. 3. The cognitive process management framework.

2.5.2 Methods for comparing mental models of dynamic systems

This model will be helpful for our research because it gives some pointers as to how and what we should enquire about in our interviews and study of these models. The model give a basic outline for a generic cognitive model, and will be useful in building our understanding of the specific model of founders in the following research.

The paper is giving description of different methods created by other authors (Schaffernicht and Groesser 2011) and suggesting its own means for comparing mental models of dynamic systems. Based on Forester (1961, 1992) mental model is a representation of situation by the individual in his/her mind. Authors argued that by considering delays in feedback loops, polarities of feedback loops, and causal links their method is able to detect differences

between models on three levels: elements, individual feedback loop and complete model. Although this method is interesting for studying mental models it is designed mostly for quantitative research and computer modelling researches.

The relevance for our research idea lies in the final image of the model, and in the contents found to be relevant for all models. It will serve as a starting point for our interpretation of founders cognitive model.

2.5.3 Cognitive Model as Competitive Advantage and Facilitator of Growth

O.B Hansen (2005) finds that there exists a cognitive accounting model of the business in the mind of the entrepreneur. This model consists of the variables and measures that is perceived as important and controllable. This model can be understood as a reservoir of accumulated knowledge (Latour 1987), and is developed over time and changes as new experience is gained by the entrepreneur. The model is used both to identify new possibilities and the governance of current issues. Without this type of model, control would be difficult if not impossible (Cooper 1992). These models are made valid through daily interactions (Boland and Schultze 1996), and contributes to the establishment of boundaries and to concentrate efforts on important variables (Gavetti and Levinthal 2000). O.B Hansen goes as far as to pose the question of whether these “cognitive models” since they are unique to each entrepreneur, difficult to copy, and obviously a large part of the success factor of the entrepreneurs, poses a competitive advantage? Or rather, in a rapidly changing environment, the ability to use and adapt such models in combination with other business critical information. If these “models” are critical, they will have to be “translated” and communicated to others as the business grows.

In the following section we will further examine the use of models to solve problems or “crisis” to support problem solving.

2.5.4 Using cognitive models to represent problems

Jonassen (2003) discuss learner problems that structured properly and in a predictive way include all elements and usually require standard solution according to well-structured rules

and instructions. While ill-structured problems with uncertain solution require from the learner application of those cognitive skills that help to consider different rules, knowledge and simulate different situations, including missing variables to the whole picture in order to come up to proper solution.

While dealing with non-standard problems and situations one should be able to simulate or build “mental model” in his/her mind in order to find solution to the problem. These non-standard problems would relate to unique business opportunities, first-time occurrences of problems, for which there is no “standardized answer”.

The article points to the use and adaption of cognitive models in a learning situation, and thus the adapting and “editing” of these models to include new knowledge or experience. This relates to the comments by O-B.Hansen (2005), about whether the ability to adapt these models would pose a competitive edge / advantage for the entrepreneurs. The article provides insights to this “learning-process” and provides further guidance for how entrepreneurs may adapt and adjust their mental models as they gain experience and knowledge.

2.5.5 Summary

Relating this to our research idea gives us some interesting suggestions. If these models are made valid through daily interactions, that would suggest a strong link to informal management controls. And if it is true that without such a cognitive model, control would be impossible, it suggests that this “cognitive mental model” is the origin of management controls? The process that Hansen (2005) describes as “translation and communication” sounds vaguely similar to the process described by Davila/Foster regarding formalization of controls. We see that these models are useful in learning situations with non-standard problem solving, which should help when dealing with rapid growth or dynamic environments.

2.6 The Basics of Control – Clarifications and assumptions

So what does really constitute “a control”? What is the bare minimum requirement of “a control”? The very basic interpretation or definition of “control” requires the existence of three basic elements, a standard, scale or expectation, an “observation” or piece of information, and a “comparison” between them. Often this “comparison” is almost instant and

innate on a personal level. Whatever piece of information the human brain gets access to, is in some way or another measured, weighed, compared and put in context with relevant information. So, an effective way of searching for controls may not be to look for when or how this “comparison” takes place, but rather what information or observations are sought by founders/managers. Examining formal controls, in most cases we expect to find documentation of all three elements, easily accessible. However, considering informal controls, finding either could pose a challenge. The way we seek to solve this, is by focusing on what observations or information the founders seek through interactions in the day-to-day management of the firm, then examine the reasoning behind it to reveal possible actions this “control” might yield. In other words, we assume that the act of “comparison” is innate. For us, that leaves the question of where are the lines between “formal” and “informal” controls?

To be able to clearly distinguish between formal and informal control we want to further clarify these constructs, as the borders between them are not clear cut. Many researchers have adopted or adapted Ouchi (1979) and the way he separated controls. Ouchi categorize formal controls as all output and behaviour controls, while informal controls would be all forms of social, clan and culture controls. This typology has later been refined by Merchant (1985, 1998), and structured as “personnel controls” (aligning personal objectives with organizational), “action control” (prescribing actions that actors should take), and “results control” which measures results of actions. Davila/Foster (T. Davila / *Accounting, Organizations and Society* 30 (2005) 223–248) states that part of the “control problem” for growing firms is that as the size increases, the efficiency gain of informal management decrease. To regain this, coordination and control mechanisms are formalized with the purpose of coding and documenting organizational learning, and reducing demand on management. Throughout the article they discuss formal and informal in a manner that is similar to “written / unwritten”. The process of “formalization” of controls consists according to Davila/Foster of the documentability of the control, structuring it, and making it “permanent” (after a period of testing). The process is similar to enactment, selection, and retention processes (Weick, 1979), where organizations experiment with different alternatives, and develop mechanisms to retain the alternative chosen.

The way we have come to understand this distinction between formal and informal, is based on the following. A control is considered formal if you could without any further explanation, document its existence and or use to a third party. If the control is of such a nature that it only

can be “proved” through interactions over time within the firm or department, it is considered informal. This seems reasonable for our purposes, as most researchers (third parties) doing MC research, Davila / Foster included, focus on formal controls, and only briefly comment on informal controls. This would relate to that most of MC research being conducted on larger firms with well-established systems. Ouchi’s framework and separation of formal and informal, would be more sensible in such an environment, as the link between social / clan controls and informal is clearer.

2.7 Chapter Summary

In this chapter we have identified gaps in existing research, regarding both informal controls, and the overall topic of management controls related to entrepreneurial fast growing firms and the SMB context (relevant for Norwegian business environment). However, we have from existing theories found some propositions regarding what we could expect to find within this context of firms, that will prove guidance and foundation for our research. We have placed our research within the existing literature, both related to MC and Entrepreneurship. Furthermore, we have discussed and chosen a framework by Malmi/Brown (2008) to give scope and definition to our research in the MC context. In addition, we have shortly discussed the basic assumptions of the terms “control”, “informal”, and “formal”, to clarify our understanding and use of the terms in this thesis. We have also discussed and chosen criteria stipulating “fast growth” and defined “gazelle” according to definition applied by DN newspaper. In the following chapter we will clarify the philosophical foundation of our research, outline research design, and the tools used for analysing and presenting our research.

3 Methodology

We want to understand how entrepreneurs manage in terms of management controls, in the growth period from 2-50 employees. Existing literature points to the lack of formalized systems as a challenge when investigating this issue (Chenhall 2003). As discussed in chapter 2.5, we want to include the concept of cognitive models in our research, as we have come to believe that they are part of, and linked with, the management controls found in the firms. This adds complexity for our research, as data should enable us to both map controls, and enable us to find some elements of cognitive model. In combinations with mapping the

controls within the Malmi/Brown framework, this should provide significant insight to the “whole-picture” of applied controls in fast growing entrepreneurial firms.

As a part of dealing with this challenge, we have tried to the best of our ability to clarify and define concepts of both control as a concept and distinction between formal /informal, in addition to the application of a structured framework like Malmi/Brown. In the following chapter we will discuss what research methodology and design that will allow us to successfully deal with the duality of data requirements for our problem statement.

Problem statement:

"How do founders of gazelles apply control mechanisms to facilitate, manage and control exceptional growth?"

Research questions:

1. What specific formal control mechanisms are applied in the firms and why?
2. What specific in-formal control mechanisms are applied in the firms and why?
3. Excluding legal requirements, what similarities can be found in use/application of MC among gazelles?

3.1 Methodology - Philosophical assumptions and concepts

The manner in which researchers view the concepts of research and the problem at hand, has impacts on how you should conduct inquires (Easterby-Smith, 2012). What philosophical standpoint you have, will have effects on how you view and describe the phenomena of interest. In this section, we will discuss our views on the philosophical aspect of research, related to terms and definitions outlined by Easterby-Smith, 2012.

When it comes to ontology, we find ourselves somewhere between Internal realism and Relativism. Internal Realism, simply stated, recognize that a "truth exists", but that it is obscured, and cannot be accessed directly. Prime example being the measurement of electrons, that change velocity the moment you try to measure it. We propose that controls do exist in these firms, although they are not formalized and thus cannot be directly described or examined. The nature of the cognitive models and the effects are not absolute truths like

scientific laws. There may be subjective interference in how you classify and understand the concepts. This makes the realist viewpoint invalid with our perception of the phenomena at hand.

The Relative viewpoint would be that there exists many truths, and they hold equal validity, as facts are recognized from the viewpoint of the observer. The "truth" as to what controls are applied may in some cases be factual, and easy to prove, where in others, they may not be formalized or directly measurable. This is very much the case for our thesis. The controls will have to be "viewed" through the interactions of the entrepreneur, in order to enable us to learn something about the applied controls. In addition, the explanations and perceived effects of adapting various controls we expect to vary across cases. One set of reasoning will not invalidate another in this regard, in line with the relativist viewpoint.

How the controls compare to either theory or another population of firms, is more in line with the Internal Realism standpoint. In order to say something about unique or more common traits among SMB Gazelles, we need to have something to compare with. The "truth" of whether or not Gazelles have some specific set of controls related to them, can only be discovered in light of a point of reference. Exactly what "facts" will be learned here, will depend on what you choose to compare with, and thus the truth be obscured.

When making comparison, it would, in theory be preferable to have a control group to compare with, in order to discern anything about "unique" traits among SMB gazelles. In our case, as available time and scope is limited, we will not establish such a control group, but rather make comparison within the chosen cases. It would also be difficult to create such a control group for this research, as contingency theory states that each context is unique and has different effects upon adoption of MC (Otley 1980). Secondly, our specific context is threefold (Entrepreneurial, SMB and "fast growing") and knowing what contexts brings certain traits of MC, compared to a control group, would be impossible as neither context are well described in existing literature (Olson et.al 2004). Therefore, finding a "normal" control group would be difficult, if not impossible.

Another aspect is the generalizability. It is not the main concern for this research to generalize results, but to gain a deeper understanding of MC in a specific context. If we expected controls to be formalized it would perhaps be more appropriate to apply a positivist research design.

3.2 Research design

Based on examination of the research questions, and the previous philosophical discussion, we believe qualitative studies best serves our needs. We find that social constructionism fits the ideas of social sciences, with the assumptions that reality is not objective, but socially constructed by the people who give it meaning (Easterby-Smith, Thorpe et al. 2012). One issue arises however, namely that one of the requirements of pure social constructionist research, is that the researcher takes part in what is being researched. As we are restricted on time (and maybe access), it would be fair to say that our research is placed between positivist and constructionist positions.

We are facing some potential difficulties with our research, specifically the assumedly “unformalised” nature of controls we are investigating, and we expect to meet entrepreneurs with very different backgrounds. This could make it challenging to communicate well, know exactly how and what questions to ask. How can we best explain and seek the answers we need in order to map out the applied controls? The type of insight / knowledge we seek is best solved by conducting explorative case studies (Yin, 2012). To solve some of the challenges outlined above, we suggest splitting up the research in different phases as outlined below.

Phase 1 – “How to gather data”: Conducting explorative informal interviews with a test subject (manager/founder) to better understand how they think about MC’s and the effects from other contingent variables (industry, business relationships etc.). This will be used to improve/finalize interview guide to ensure we ask better and relevant questions. This has special importance on the parts of interview concerning informal controls and cognitive model of founder.

Phase 2 “Data gathering”: Select cases, gather preliminary data, and conduct semi-structured interviews. In this part, we will be asking questions related to control activities of the entrepreneur in his firm, based on experience and learning from first round of interviews. We will “map out” the applied controls within the Malmi / Brown framework. For this part we expect that “Laddering” will be an important tool to get sufficient details.

Phase 3 “Analysis”: In the analysis part, we will match data from transcripts with definitions and MC descriptions outlined through the Malmi/Brown framework. Data will be structured and presented in the form of the original table, using colour codes to indicate type of control. Regarding growth of firm and related control challenges, we will use tables structured by topic, data reduction, and discussion among us as researchers to find key elements and common traits. For analysing the cognitive control model of founder, we will use Wang/Wang generic model as a starting point, then adapt to our setting and context. Basic idea is to build one model for each case, then combine them to seek out similarities, thereby answering research question 3 (similarities).

Phase 1 interview does not have to be with the same individuals or firms as phase 2, although it would be beneficial. The first phase will mainly be a learning process for us as researchers, and to possibly gain understanding of certain contingent variables within specific industries. Phase 2 interviews will be the main part of data gathering, and interviews will be transcribed and analysed. In the final phase we need to accumulate our findings and structure the formalized controls found, within the Malmi/Brown framework. When it comes to the cognitive model and informal controls, we have identified two possibilities for analysis and presentation. One would be to build a basic “business process model” of the firm, and add informal controls to this model as a way of both communicating with the entrepreneurs, but also a way to present results. This approach would allow us firstly to get a clear view on how the founder sees his firm “as a machine”, and what he considers to be key elements in his business. Secondly, it would give excellent grounds for discussing and placing controls within this machine, and also add to overall communications in this research project. Such a method is however, very time consuming, and requires much of both researchers and company cases. We therefore chose to discard it, given the relative short timeframe, and the risk of refusal from possible participants in our study. The second and our selected approach was to do careful questioning about interactions related to different control categories outlined in Malmi/Brown. This would allow for connecting data, both to informal controls, but also connect it to the final cognitive control model, as many of those aspects overlap. Starting our questions with a broad take on the topic at hand, then relying on laddering techniques for interesting topics, will serve both the need for combining informal and cognitive aspect of research, and keep questions open enough to allow for unique or unpredicted aspects to arise.

With this combination we feel that we would cover a reasonable data collection, and also thorough phase 3, be in position to observe both unique occurrences, and also check for consistency with previously collected data.

3.2.1 Unit of Analysis

In this master thesis the unit of analysis is the founder, acting as majority shareholder and manager in a gazelle firm. The main interest for us, is how this founder, through control systems and other mechanisms, manage his firm in a dynamic environment.

3.2.2 Selection of cases

In order to fit our requirements, the chosen case firms and founders will have to fill the following requirements.

Category / Context of Firm	Requirements
<i>Entrepreneurial</i>	Less than 10 years old, founder has control of firm (majority of shares) and working in the firm fulltime as manager.
SMB	Between 2-50 employees
Fast Growing "Gazelle" (requirements from DN list of Gazelles)	Approved accounts prepared, doubled revenues over the past 4 years, revenues of more than 1 million first year, positive profits, never had negative growth, and be registered as a stock company.

To find these firms we use a list of Gazelles provided by the economic newspaper "Dagens Næringsliv" as a starting point, as this category is the most extensive. These firms have fulfilled the requirements for gazelle category and are updated at least once a year. By browsing, the list of gazelles in Norway we found about 80 firms listed in Norland County (close proximity). By crosschecking with public records, we were able to sort out firms on the other variables such as number of employees and founder / owner status. From this crosscheck we ended up with a list of approximately 20 firms that could be good candidates.

We wanted different cases on two aspects, industry and number of employees (2-50). From the list we chose four firms from different industries, with employee numbers spreading from 2-30. This is a point for us, as our theoretical frame of reference (Davila/Foster) stems from Silicone Valley firms that all operate in a single industry or in close proximity of IT-sector. Our approach should provide firms from more diverse industries, and it could provide additional insights.

However, the quality and possible insights gained from this research, depends greatly on the access we are able to get to the founder. If necessary, the required access would take precedence over industry diversification, if we are forced to choose between them. As researchers, it is in part up to us to get the entrepreneurs sufficiently interested to be willing to lend us of their time. How we present our ideas and conduct ourselves in general, will naturally have influence on this, and must be given due consideration.

As for the interviews, it is by far preferable with face-to-face interviews, but should difficulties arise, it would be possible to over video calls, or phone interview.

3.2.3 Reliability and Validity

A case study like ours is not intended to find statistical correlations, its main purpose is to explore a set of cases and seek out possible new insights. Given the time-frame of our thesis, and the challenges for data gathering process and analysis as previously described, we feel that the variation and number of cases along the primary factors of industries and number of employees, is as good as can be expected. By having this broad take on the phenomena at hand we believe we have allowed for the special and unique to be uncovered, while strengthening the findings regarding similarities across cases. According to Yin (2012) the quality of empirical social research can be established through four elements, construct validity, internal validity, external validity and reliability. However, internal validity is not criteria for explorative or descriptive studies (Yin, 2012), and has mostly been related to experimental or quasi-experimental research. In the following section we will discuss those three criteria relevant for our case design, and how we have sought to fulfil them in this thesis.

Regarding construct validity as defined by Yin (2012), we have to the best of our ability emphasised the clarification of concepts and terms applied in this thesis. We have also argued for our view, through the examination of existing literature, on what operational measures that would link with the concepts we study.

Reliability in our research comes through a meticulous and honest description of how data was gathered and analysed (Yin, 2012). To strengthen the reliability of our data, transcripts have been sent back to participants for verification.

Considering external validity, the main purpose of our thesis has not been to generalize outside of the scope of the cases, but rather to seek in-depth knowledge about the cases and their particular situations. However, by seeking out the similarities between our variety of cases, we would get some “pointers” as to what elements might be important in similar or related cases, outside the scope of our thesis. Having chosen cases that has such variety relating both to industry and size, and considering the focus on the individual founder, any similarities found would allow for stronger analytical generalization than if cases had less variety. But again, the main purpose is to seek understanding about the cases at hand, and we will leave it to others, with a different research design, to seek out traits for generalization beyond our specific cases.

3.3 Expected findings, challenges of research approach

We expect to find little or no formalized controls in our sample of firms. According to literature, it would mostly be cultural controls and some financial planning controls (Davila/Foster 2010). We expect most firms to have outsourced accounting functions, and rely on fixed reporting intervals, but to some extent use consulting services (seek advice with accountants/auditors). We expect to find a variety of uses for these reports and the way founders make sense of the numbers and apply the information to day-to-day operations (relevance to controls). Some of these controls may be influenced by industry specifics, and some may be influenced by founders “cognitive model”. Finding good cases, and to get access to these entrepreneurs may prove difficult, as they often are very pressed for time, and may not see any immediate benefits of sharing this information with us and spending time on interviews. Challenge of research approach besides from access, lies in the nature of interpretation. Both our own interpretation of data and “translation”, but also the

understanding of our subjects. They may not be aware of this concept of “cognitive models”, and claim that they do not use any types of control, although this may not be the case. We need to be careful with the way we pose our questions so that we get clear answers.

In addition, there are some inherent weaknesses with interviews as there is room for unintended manipulation. Subjects also have a tendency to tell you what they think you want to hear, and one must be aware that everyone wants to project a good image of themselves (may decorate “truth” here and there).

3.4 Data Gathering process

After developing a preliminary interview guide, we contacted a local entrepreneur and founder, to conduct a test interview. The founder and firm was chosen based on same criteria as the overall cases, but due to the close connection to one of the researchers partaking in this project, this firm was removed from the pool of possible candidates in this study.

The test interview revealed that we clearly could not ask directly about specific controls and the use and reasoning behind their application. The founder had little or no understanding of the academic interpretations and understanding of management controls, let alone the nuances separating specific controls according to our applied framework. The communication was in general poor, and required extensive explaining and guiding by researchers. Close to 40% of the allocated time on interview was used to explain the questions and specifications of what we were asking about. Based on the experience from the test interview, we restructured and changed the interview guide.

In order to better communications and understanding, while still serving the need for decent data, we emphasised practicalities and concrete examples in our questioning. We translated each MC category in Malmi / Brown framework to practical application, asking directly about certain actions or patterns, bypassing the terminology of the framework.

The challenge with this approach we found to be related to our problem statement. When seeking to discover whether the founder applied controls related to planning or strategy, we asked the following question. “How do you plan for the future, short term and long term?”

This would allow us to separate between strategic long term planning, and short term operational planning, while still leaving it open enough so that important aspects could arise during the conversation. The challenge here lies in that founders may state that they do not have a plan, but may have a yearly budget including revenues and estimated profits. Yearly

budget would clearly qualify as a yearly financial plan, and qualify as a control if performance is measured against it during the year. In order to answer our problem statement, we needed multiple practical examples of applied controls related to each category. This would allow better coverage of the topic, and providing some guidance to the interview respondent to provide answers or examples that could be related to our questioning. In addition, such questioning would lend strength to negative results (control does not exist), especially on the informal aspect of controls (see previous discussion). By this “translation” to practical application, the data analysis will be more demanding as the interview data does not directly show what controls are applied. It will require pattern analysis, having established clear boundaries for what constitutes “control” and also the separation between formal and informal controls (see previous discussion)

3.4.1 Semi-Structured, In-Depth Interviews

Only after we had made the preliminary test interview did we seek to contact possible participants and finalize the selection of cases for our thesis. Having created the list (chapter 3.2.2 - Selection of cases) of possible participants fulfilling our criteria, we chose to contact four founders. From all four founders we got positive answers, and sufficient access to allow for a decent data gathering. Whether it was by sheer stroke of luck, or overall interest in our topic, we will not say anything about. Interviews was with one exception, all carried out in the main offices of the firms, with founder alone, using tape recorder and the interview guide as basis for conversations. The exception was founder of Daesign AS, whom we met at a local restaurant for convenience of the founder. Interviews was all conducted in Norwegian language to sidestep any language barriers that might interfere with data collection. Interviews was then transcribed and translated to English, and then sent back to founders for verification.

3.4.2 Secondary data gathering

The purpose of using secondary data was to supplement our interview data, and in part also to help prepare interview guide. The chosen cases had all websites with company presentation as a minimum, which helped us learn about industry and give some clues as to how the firms view themselves. Information from websites and public accounting information was all

gathered to allow for better understanding of the firms and the challenges they face. Some of the firms had Facebook pages that provided some additional information about events, etc.

3.5 Analysis and presentation of results

For our analysis, we will rely upon content analysis as described by Easterby-Smith, 2012. We found the template analysis (King, 1998) to be the most useful, and also a good fit for explorative case studies. We had many of the constructs, and overall “themes” outlined from frame of reference, but some minor adaptations were made during analysis process. Also the ability to manually manage data through this method made it attractive, as access to computer aided analysis is restricted.

After interviews, data was transcribed and sent to founders for verification. Meanwhile, we constructed several templates based on three main topics. We named the templates “Applied management controls”, “Growth/Control challenges” and “Founder background/history”. For each template we linked topic/theme with questions from interview that would provide insight into the topic in question. For the template “applied management controls” we used control categories and definitions from Malmi/Brown (2008) framework, paired with the interview questions regarding those specific controls. Data for each case was then plotted into the template, with a column for case summary. To reduce and manage the amount of data, we then used the same template, but instead of interview data from cases, used the specific “case summaries” to do analysis across cases and look for overall similarities relating to each theme/topic. For the other templates, themes/topics were created based on overall understanding of frame of reference and the key elements needed for answering research questions.

Regarding presentation of results, we will rely upon textual descriptions of our findings. However, as the material in some areas is complex, and considering the amount of data, we found the use of visual presentation both a necessity during analysis, and appealing for communication of results. We have chosen to use the original Malmi/Brown (2008) table as a “picture” and tool, for structuring presentation of applied management controls in each case. Regarding the final “cognitive control model” we have had several rounds and discussions as to how it should be presented. How do you show the founders “mental picture of the firm as a machine” (O-B. Hansen, 2005)? Suggestions have varied between using cognitive maps as applied by researchers, business process models, drawn metaphors and so forth. In the end,

we felt it was a choice of the “lesser evil”, and decided to create our own model, using the Wang/Wang generic model as a starting point, adapting as needed. However, the end result as presented in chapter 5, when all aspects were included, do not contain any of the elements from Wang/Wang. For us it became a useful starting point, that we quickly left behind.

3.6 Summary

In this chapter we have discussed our views on the philosophical aspects of research, and discussed what research methodology would be better suited for answering our research questions. We have outlined criteria for case selection that fulfil the contextual requirements for this thesis. Furthermore, we have discussed potential challenges, and how these may be solved to provide decent data gathering and analysis. We have discussed reliability and validity concerns regarding our research, and described the data gathering process.

We have chosen to do exploratory case studies, using semi-structured in-depth interviews as main data source, with founder as unit of analysis. Template analysis is chosen as main method for empirical analysis (King, 1998). In addition to textual presentation, we have chosen some visual tools to better communications and provide a sensible way to display and organize our findings. In the following chapter we will present our readers with our empirical findings.

4 Empirical findings – The cases

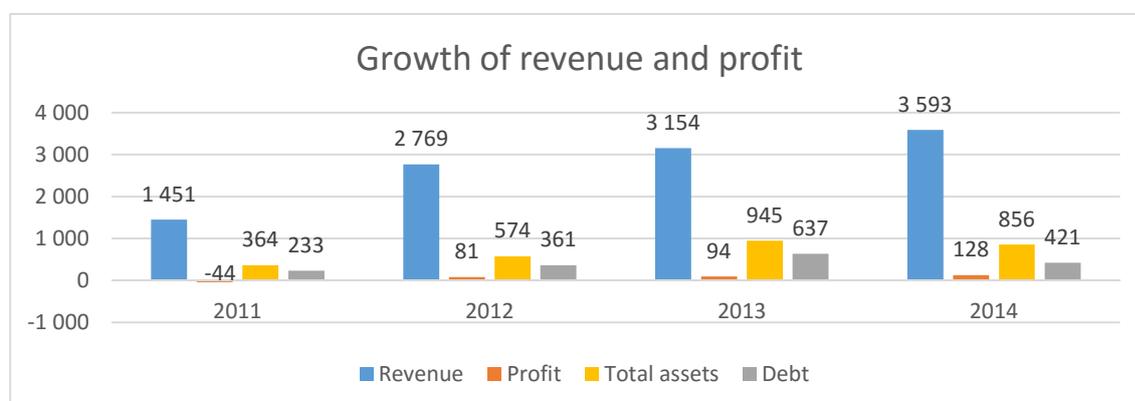
In this chapter we will present our empirical findings. We will examine them case by case, firstly giving an introduction and providing some background information for each case. Then we will present findings related to Malmi/Brown (2008) framework, structured by the 13 specific control mechanisms outlined in the framework. We then proceed to findings regarding specific challenges, separated in two sections. In “Challenges for growth” section, we present overall challenges for founder related to growth, what they feel has been challenging. In the following section, “challenges for control”, we present findings regarding specific *control-challenges* communicated by founder.

4.1 Case 1 – Heimsjyen AS

“Heimsjyen AS” is a mix of restaurant and hotel, located in beautiful surroundings in Inndyr, Nordland county. The company is 5 years old, has four employees and is a first time gazelle as of 2015. The restaurant and hotel is located centrally, in close connection to the local harbour. The building has previously been occupied by a pizzeria that was forced to close down. “Heimsjyen” offer daily serving in the restaurant/coffee shop, supplied by catering for events, hosting conferences and meetings, and the occasional pub-night both for locals and tourists. They also rent out recently refurbished rooms, and have come to rely on the income from the hotel as a major contributor to profits. Seasonal changes affect the firm related to tourism, and summer half of the year is considered high-season. On the customer side we find locals and weekend visitors with cabins in the area, they make up the major proportion of the revenues in the restaurant. Business travellers also supply a healthy income on the restaurant side, but they make up the major proportion of hotel sleepovers and of course conferences and meetings. The restaurant can conveniently be sectioned off to offer smaller meeting rooms for local businesses, thus allowing smaller and shorter meetings between local business to be held there. They do little marketing, except for an advertisement in the regional tourist pamphlet, a small informational website, and a Facebook page where they post special events and happenings.

Founder and owner started the business originally with another participant, but this individual left before the restaurant and firm was established. The founder had no previous experience with starting firms, or experience related to the restaurant or hotel industry. According to founder, major challenges with the start-up have mainly been related to staffing and finding the right people. From interview we learned that the start-up was helped financially by a shared interest with the owner of the building having a need to rent out the location. The owner supplied some of the inventory and equipment needed to house the restaurant, in addition to giving a good deal on the rent to get activity in the building after a year without. Husband of founder is co-owner in the building that houses the firm, and is also accountant for Heimsjyen AS. The accounting firm is housed in the basement of the same building providing a convenient connection and accessibility for advice and counselling. Through these relations the founder had valuable support and help during the start-up process. Even so, according to founder, it has required a tremendous amount of work and personal sacrifices to establish the firm, working long hours and being constantly available should situations arise.

4.1.1 General accounting information



(Data gathered from public accounting information)

From the diagram we see that the firm has had extensive growth (91%) from 2011 to 2012, and after that yearly growth has been stable around 15%. Firm has had the associated low profits, with increase in total assets suggesting reinvestment in firm for growth. Debt also has increased during this growth, adding increased risk, although the relative debt of the firm is 50% of accounting value of total assets. Founder has normal wage for profession, and have payed zero dividends since start-up of firm.

4.1.2 Management controls - Malmi / Brown Framework

Through our interview we have examined the presence and application of controls in Heimsjyen AS. In this section we present empirical findings structured by Malmi/Brown categories.

4.1.2.1 Clan controls

In Heimsjyen AS we found no indications of clan controls. There is no direct involvement of family in the firm as such, although husband is acting as external accountant. Related to board of directors and shareholders, founder is alone, and there are no other actors on those arenas. The small size of the firm makes it reasonable that there is not room for many sub-groups within the firm.

“No, we are not enough people for any subcultures to exist.”

4.1.2.2 Values

We found no formalized or documented control related to values. Even so, when asked about values in the firm, and how they come to light in the daily operations of the firm, the founder states that there is a strong emphasis on flexibility, and that it has to go both ways. This is discussed in relations to workhours and schedules for events and such. Employees are encouraged to be flexible with when and how they work, in order to serve changing customer needs and the irregularity (dynamic) of customers. Founder states that for this to be acceptable, she in turn has to be flexible to give time off, and to allow smaller personal tasks to take place within or between scheduled work. Employees can also ask for time off with relative short notice if personal situations arise.

“I have high flexibility when it comes to my employees and workhours, so by knowing that we can use this flexibility we are always able to adjust our costs according to the amount of business we are getting”

Founder have a conscious use of this value, and relates it to specific business logic. For her, client needs are paramount, and to be able to serve those needs, you have to do so where and when clients desire. One of her key tools to achieving this is by emphasising values of flexibility, and use it to adjust production to shifting customer needs. This allows both reduction of costs in periods of low revenues, and it also extends the “maximum” levels the firm can achieve during seasonal tops, with everyone making an extra effort.

Other values mentioned by founder was openness and contributing to a relaxed atmosphere with room for jokes and fun.

4.1.2.3 Symbols

Regarding symbols, we found no controls related to this category. During interview we asked about use of symbolism in general, uniforms and such. Founder had no awareness of symbolism and business operations, and there was not any singular uniform or use of logos, etc. to be found in the firm. Kitchen staff had “chef-clothes” suited for kitchen work, but that was it.

4.1.2.4 Long Range planning

From our questioning no structured planning takes place within the firm or in governance of the firm. The founder expresses ideas and wishes for the future, but has not staked out a clear course or set of goals for the firm as such. We found no indications of a future plan, neither formal or informal.

“No, I got no fixed plan on paper, or some clear cut vision of how to develop this in the years to come. Time will tell”

However, the founder made some indications to focus on further development of the hotel section of the firm, and also pointed out access to qualified workers as a limitation for future plans.

“Looking forward, the hotel part of the business would be the first to strengthen.”

” There is no way I can expand with the current level of staffing”

Our understanding of the absence of long range planning controls, relate to the relative simplicity of the industry, combined with founder being unable to properly distinguish between perceived possibilities and customer needs. Being as tightly connected to a local community, with a limited population within reasonable distance, makes the further development of the firm dependant on the tourism in the region. We believe that the founder feels that these things are out of her control, and therefore making fixed plans has reduced utility. Instead she focuses on being flexible and reactive, having some ideas about opportunities she can be able to act upon is sufficient (arranging hiking trips, guided tours, renting out bikes and so forth). Also, being alone in board and sole owner of the firm, the need to communicate and discuss the future is reduced, and also increase the flexibility and reaction time of the firm if opportunities arise.

4.1.2.5 Action planning

We found action planning and related controls both formalized and informal. The weekly schedule is formalized where planned events and activities for the specific week is listed. Workhour schedule is also formalized but adapted to each week, depending on staffing need for the particular week and related events and booking. Founder takes each employees desire to work into account, and plans staffing accordingly. They also make a fresh routine list of what needs to be done for every week, on a more specific level. However, when It comes to allocation of tasks, “who does what and when” this process is informal, and largely dependent on the individual employees what preferences they have.

This is demanding as it takes some time to manage, but allows for costs to be adjusted according to revenues on a weekly level.

4.1.2.6 Budgets

Formal classical budget was made during start-up of the firm, but no new budget has been made or formalized in the firm. Founder does not perceive a need for doing budgets, and relies heavily on husband (accountant) to let her know of any concerns should be raised. In her daily management and operations of the firm, she does not feel the need for a budget to operate or manage.

“I have been very relaxed with this, since my husband has a good overview of the economics and accounts of the firm, and has provided me help and guidance”

4.1.2.7 Financial Measurement systems

There is no financial measurements as EVA, ROE/ROA used in the operations of the firm. However, founder does use accounting information and does get reports on fixed intervals. In addition, the cash register generates preliminary reports of sales and estimated profits on daily, weekly, and monthly basis. The reports get filed and sent to accounting. Founder does not utilize these reports in any specified manner, but they contribute to the overall control of how the firm is doing.

“There is some systems for daily, monthly, and yearly reports from the register that is compared and related to accounting system. I print those out and put them in a folder, and send it to the accountant”

Regarding use of accounting information, accountant comments on report on what he feels is essential. During our interactions with founder, we find that financial numbers and measures in general to be of little interest to her. The accountant largely sets the agenda for what needs to be discussed at meetings or in the reports.

“When I get the accounting report, the accountant explains the numbers to me, what has gone up and what has gone down.”

4.1.2.8 Non-Financial Measurement systems

Found both formal and informal controls related to non-financial measurements. Formalized quality assurance (required by law) and registration of work hours, but informal control for client and employee feedback. Other controls in this category was not found.

“With the close interactions with both employees and customers I feel I got a good overview and control on this part”

In daily operations of firm, founder mostly relies on non-financial controls. “Work hours” is seen as important indicator of overall cost and activity level. Founder also tracks number of sleepovers in the hotel, and through experience and intimate understanding of the firm, knows that with 40 sleepovers a month she breaks even for the firm in total.

“When it is so small, it is very easy to keep track of whether customers are happy or not. With the close interactions with both employees and customers, I feel I got a good overview and control on this part “

4.1.2.9 Hybrid Measurement systems

We found no hybrid controls applied in the firm. Mainly the use of any financial or monetary measure comes through accounting report, and is not “assembled” with non-financial

information in any system or for any purpose by founder. The control activities are mainly separate, and where we do see some linkages between financial numbers and non-financial measures, like customer satisfaction and revenues, those are not systematized and used by the founder.

4.1.2.10 Reward and compensation

When asked about rewards and compensations for employees, we got instant replies regarding flexible workhours (some may see it as beneficial, others not) and general help and support for employees, who were almost seen as friends to the founder. Due to the absence of any long term planning and fixed goals in the firm, there was naturally no linkages between rewards and goals found. What was interesting was that even with the clear statements from founder about the importance of values, attitude, and the people in the firm, there were no rewards for the employees. They worked by fixed salary (hourly basis) and had no additional incentives, except for increased satisfaction with the founder.

“No, we do not have any formalized systems for this. I have started with a low fixed salary, and then increased it as I thought it deserving, and that employees was able to master their jobs”

Founder also expressed what we perceive to be a fear of losing the flexibility and goodwill of the employees, who basically have no idea how much or when they are going to work a week or two ahead.

“I think it would come back on me as a manager. If they had sick kids, they would be more often away from work, less flexible with their work hours and so on. This is important for me. “

4.1.2.11 Governance structure

Founder is alone in board and as shareholder in the firm, and thus has absolute control. The formal mechanisms and structure normally associated with the functions of board of directors and general assembly does is not valid for this firm. The formal functions of governance is used (or needed) by founder when acting in role as manager. For some business transactions

external parties may ask for resolutions from board of directors or similar, but we found no evidence of that in Heimsjyen AS.

“The board works just as a formality and has no practical influence on the firm. In relations to owners, that just me, so I guess there is not much interesting there”

4.1.2.12 Organizational structure

We found no formal or informal structure in the firm. No organizational chart exists, and there are no fixed responsibilities or authorities given, neither formally or informally.

“Some have preferences as to what tasks they want to perform, and usually I pick up and do whatever is left”

In a way, no structure or “flat structure” if you will, can be considered a structural trait as well, but in this regard relating to controls there is no conscious use of “no structure”. However, it does emphasise some values and team orientation, and may serve to strengthen flexibility, which was very important to founder. That everyone chips in all around the firm, gaining broader knowledge and experience allows for more flexibility with staffing related issues, as opposed to working with fixed tasks, which tends to give “experts”.

4.1.2.13 Policies and Procedures

Formal policies and procedural descriptions do exist in the firm. These are related to how tasks should be performed. Founder has through experience with trial and error found “best practise” and formalized routines accordingly. This is similar with the retention process described by Weick (1979).

“Based on this experience I have written down and structured the routines”

As control it is mainly used for training purposes, but also serve as a standard to which actions can be compared. There exists a perception of the “right way” of doing things, to which actions are compared.

“We also have some routines in writing, on a regular schedule for every Monday, Tuesday etc. But I do not think anyone is there looking at it now, it has been rehearsed so there is no need to check it”

Having experienced workers who know the routines are beneficial as it may reduce the need for continuous extensive control, and we see that after “initiation period” there seems to be stronger assumption that procedures are followed, and reduced control by founder.

4.1.2.14 Malmi/Brown table – Visual summary of MC found in “Heimsjyen AS”

Here we present a visual display of our MC findings as discussed in the previous sections. Color red indicates “no control”, Yellow “informal control”, green “formal controls.

Table 1: Malmi/Brown table – Visual summary of MC “Heimsjyen AS”

Cultural Controls						
Clans		Values			Symbols	
No clans		INFORMAL -Flexibility; -Everything for customer; -Open atmosphere			No symbols	
Planning		Cybernetic controls				Reward and Compensation
Long range planning	Action planning	Budgets	Financial Measurement Systems	Non-Financial Measurement Systems	Hybrid Measurement Systems	
No long range planning	FORMAL -Planning of events and weekly routines adjusted to bookings.	No budget	FORMAL -Profit, sales, costs; -Accounting reports every second month; -Sales numbers from cash register	FORMAL -Number of sleepovers; -Workhours	No hybrid systems	No control
	INFORMAL -Allocation of tasks			INFORMAL -Feedback of clients		
Administrative Controls						
Governance Structure		Organization Structure			Policies and Procedures	
No control		No structure			FORMAL -Routines based on experience	

Table 1: Color red indicates “no control”, Yellow “informal control”, green “formal controls”.

4.1.3 Challenges for Growth

According to founder she had intentions of growing, but main focus was to create a stable workplace for herself. After opening and getting a feel of the market she realized that she needed help to run the restaurant properly.

“I am worried that we do not have enough people to handle the business well, and ensure that people leave with a smile.”

In addition to getting the accounting information every two months, founder tracks sales numbers and numbers of sleepovers in hotel as indicators of growth. When discussing challenges for growth in general terms, founder is very clear that getting people with the right mind set and skills to fit the business in a small local community have been a major challenge. Whenever we discussed challenges to growth, founder related it to staffing and managing the employees. When asked directly about challenges with growth and financial or economic considerations, founder replied:

“It has been more than enough to learn all the other aspects of running this firm. There has been only one month the first year, where I only took half my salary, but besides from that I have always gathered a full wage.”

When questioned further about economical aspect of growth, re-investment needs, reduced profits and so forth, founder stated:

“I have been very relaxed with this, since my husband has a good overview of the economics and accounts of the firm, and has provided me help and guidance”

As it is, the restaurant operates without professional chef in the kitchen. Although clients seem happy with the meals served (continued growth), the founder express a desire for an educated chef.

“This may be the major drawback with our location in this small community, that access to staff is a challenge”

The way founder has managed this is through managing capabilities and increasing effectiveness of the people she currently employs. By having been more or less constantly present at the restaurant, she has through interactions been able to train and transfer her experience to the relative newly employed staff members. Also, by formalizing some routines she has been able to free more time for herself to other managerial tasks.

“I mean, at the beginning I was involved in everything, I had to be a part of every small task or event and chore. At the beginning we needed more people to do the same jobs, now we can do it with less”

When asked further about challenges of a growing staff and how it had affected her own work situation, founder expressed a relief of having more people to depend on.

“Got to keep track of workhours, overtime and salaries, but in general I feel that the further we got in terms of number of employees, things got easier for me”

We also wanted to know about what founder felt was the major contributing factor behind the growth she had the past years. She credits that to a clear need in the local community for a meeting place. From our conversations with founder, and visit to the local community, we found no immediate competitors in the community.

“The reason is that people are pleased to have a meeting place here, where they do not have to clean the house and make all the arrangements to meet friends and family.”

4.1.4 Challenges for control

“I wanted to grow the firm. But not too much! I do not want to have a huge firm, and have so many employees that I cannot manage to talk to all of them. I like that contact, and do not want it too big. But at the same time I want growth, profits, and a good economy.”

When discussing specific control and management challenges related to high growth founder mostly reasons in terms of staffing and managing that staff. As previously discussed, founder has very high trust and dependence on accountant for economic and financial control of the

firm. However, founder has some concerns about the speed of growth as we see from the quote, and does not want to grow too fast. She understands it as a need to manage the complexity of growth, without losing control of both employees and economic aspects of the firm. When we asked specifically about what controls she used to manage economics and growth, what parameters she used to know whether she was doing okay or not, founder stated that:

“... so by knowing that we can use this flexibility we are always able to adjust our costs according to the amount of business we are getting. This also makes us able to adjust production, and reduce waste by operating with minimum production, and then rather produce more if people shows up”

“Flexibility” here, relates to the flexibility of staff and workhours/schedules. Founder have established some “minimum level” of production, keeping resources in backup, or chipping in herself should there be need for further staffing and production. It works as a mechanism to handle dynamic environment with changing demand, with minimum waste of resources.

Even if founder seemed to distance herself somewhat from economic measures, it became clear that she had developed some “rule of thumbs” to evaluate the state of the firm in terms of economics and state of business in general. This rule was used as standard or goal to which results were compared (non-financial measures), and founder could evaluate progress against between accounting report intervals.

“Regarding the hotel section, if I get 40 sleepovers we have covered the rent for the building for a month, and all the other revenues are on the "plus-side”

When asking about future adoption of systems and controls, and the future development of the firm as such, founder states that:

“I want a person to handle the systems and economic functions of the firm.”

It was unclear if this related to hiring a in-house accountant or related to structuring formal cybernetic controls in general.

“No, but seriously I might consider a booking system, many suggest it. But then you have challenges with online booking might crash with "arriving guests" etc.”

Booking is currently done by mail or phone, and registered with pen and paper in a book.

“Registering workhours for employees, and a system for that would also be a good candidate for a system.”

Current system is pen and paper, where employee workhours are sent to accountant for salary payments.

4.1.5 Summary of the case

Founder of the firm applies limited set of control mechanisms. With respect to firm’s culture leader does not have clan controls and control of symbols. Values such as flexibility and strong customer orientation are controlled only informally by personal interactions with employees. Founder is trying to establish a culture that promotes teamwork, satisfaction of employees and flexibility of staff in terms of work hours and functions that employees are performing.

While both formal and informal controls of short range planning are in place long range planning is not applied at all. Action planning is controlled by formal weekly event planning which is and informal allocation of tasks. Allocation of tasks can be changed or modified at any time since it is done informally.

Founder does not think that there is a need for budget or hybrid measurement systems, however founder is compensating the absence of budget with formalized financial measurement systems and formal and informal non-financial measurement systems. Manager uses accounting reports as soon as they are ready and controls information issued by cash register on a daily basis to keep track of finances of the firm. Founder also pays attention to number of room bookings, work hours of employees, collects feedbacks from clients and employees and conducts quality assurance. Number of room bookings is an important measure for founder since it shows her monthly approximate profitability of the business. We also have found that the trust between founder and accountant is very high.

It was surprising that although founder has mentioned several times the importance of personnel and how significant it is to have employees ready to work extra hours we did not find any particular formal or informal rewards and compensations that could be used to motivate employees for certain desired behavior.

Administrative controls were limited by applying only formal policies and procedures. Formal routines exist in written form since they were created as set of rules or procedures both for training purposes and for effective performance of tasks.

Founder did not have fast growth as the main point in a strategy of the firm. Increased workload drove founder to hire more people as she was worried that there are not enough people to handle the business well. Founder does not want to grow firm to size where it will not be possible to maintain management functions by personal interactions. Throughout the time firm has gained experience to adjust various costs in order to increase efficiency and production with minimum waste. As the firm grew in number of employees founder was able to develop formal procedures for different purposes and train employees to perform these procedures to facilitate control functions and decrease total workload of founder.

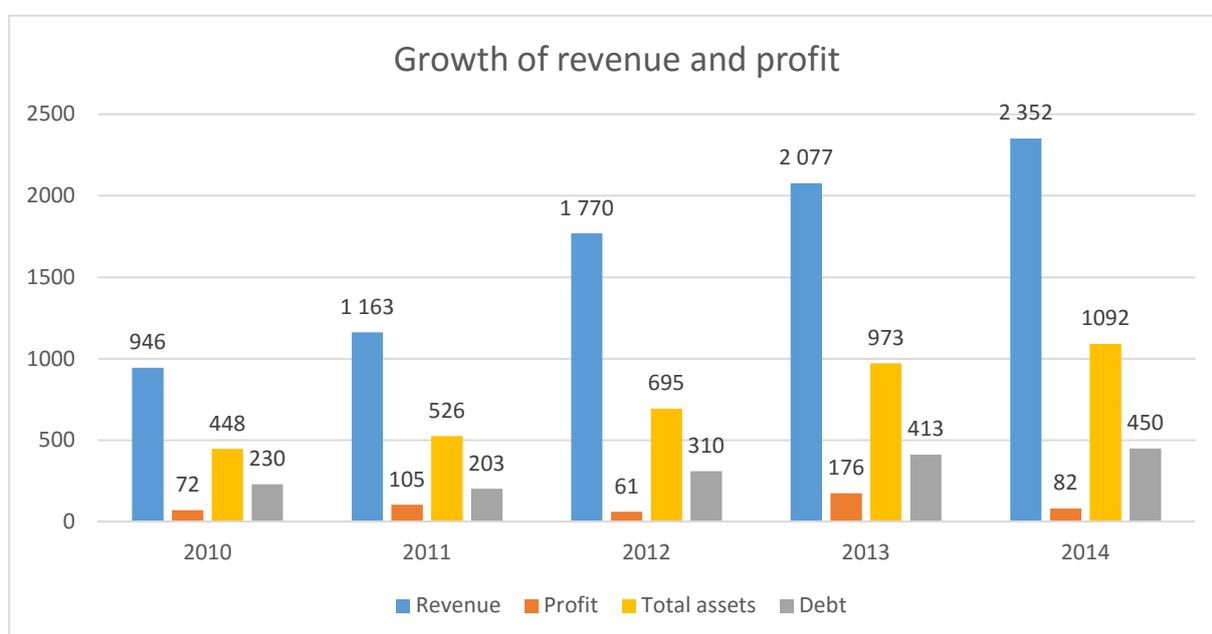
4.2 Case 2 – Daesign AS

Daesign AS is a small, agile but diverse design firm located in Mo I Rana, Nordland County. The firm produce graphical designs of logos, pamphlets, magazine advertisement, product branding and so forth. Clients are magazines, newspapers, and firms in need of branding. The firm is the smallest in our sample, with just 2,5 full positions, including the founder. There are two additional employees that is employed by the firm, but those are outsourced to another start-up where the founder is involved, working fulltime on that project. Daesign is located in a private apartment functioning as both living space and office. The firm has a webpage with short presentation and contact information, but does not market in other channels.

Founder has a broad and long experience with design and production, having worked both within graphical design, printing, and as part of a newspaper. According to founder this have definitely provided some benefits when it comes to general “know-how”, both related to design but also general understanding of both production, printing and the business in general. In the start-up of the firm, founder included two associates from his existing network on the owner side, and they also hold positions in the board of directors. Main motivation for this was not as financial investment, but to legitimise asking for advice and council as founder felt

he would rely on the two other board members in any case. Of those two, one is educated economist and handle a major portion of the accounting in the firm. In order to get start-up capital to invest in the firm, founder sold his home and invested in Daesign. Due to professional restrictions, it was not possible for Daesign to start with any form of client base, as it is not allowed for graphical designers hired in newspapers or such, to take smaller jobs on the side. This made the start-up risky, but due to connections within the industry, Daesign landed a major client (Theatre) early, which has helped the firm through the first years, providing stable work.

4.2.1 General accounting information



(based on public accounting information)

From the graph's we see the increase in revenues, and the steady build-up of assets and debt in the firm associated with growth. When considering profits, it is important to remember that these numbers come after founder have claimed his salaries as manager, and that this salary may change depending on how the year progress. According to accounting information, founder has claimed normal wages for his position the last two years, and the firm has paid zero dividends since start-up.

4.2.2 Management Controls – Malmi / Brown framework

In this chapter we report on the findings related to MC framework by Malmi / Brown.

4.2.2.1 Clan controls

As it was mentioned previously the firm has only two and half full-time working employees including founder. Amongst shareholders, founder and his wife have 65% of total control of the firm. In addition, entrepreneur has commented during interview that his friends are involved in the firm as co-owners:

“For the start-up I got two friends with me who wanted to help. ... Having those two in the firm on the owner side, also made me feel better when asking them for help, because I probably would ask their advice and council as friends anyway.”

This gives us enough evidence to think that clan control mechanisms exist in the firm however only informally since founder has confirmed that there are no groups of people operating in the firm that could be identified as clans due to the firm’s small size. We consider founder, his wife and friends as a clan, which operates within the firm for the benefit of clan members. Entrepreneur being a leader of the clan is controlling the board thus he is controlling all decisions that board may issue. Since founder confirmed that there are no documents or formalities that may be considered as formal clan control mechanisms we may conclude that clan control mechanisms exist only informally.

4.2.2.2 Values

Firm values seem to be very important for entrepreneur. During our interview he mentions several of them such as high level of trust and openness, delivering product in high level of quality, employee satisfaction:

“We have a very relaxed informal atmosphere, and we just interact as normal colleagues, but with a high level of trust and openness.”

“I always want to create high level of quality and subjective good design. I feel that the work we do is the best, and a required way to manage and show the identity of the firm.”

“I want my colleague to enjoy his work place, even though there is a significant age difference.”

We understand that by emphasizing these values founder tries to support his business strategy to achieve desired results. However, these values were not reflected in any document, policy or memo, as founder says:

“We do not have any “core values” as such, it is not all that relevant when we are so small.”

We may see that the firm does not have specified values in form of document or other official proof, but the founder still highly emphasizes trust and openness, quality of product and satisfaction of employees as things that are very important for achieving firm’s objectives. Therefore, we can say that value-based control mechanisms are found in the firm however in informal way.

4.2.2.3 Symbols

Interview with the founder has showed us that the firm does not have any recognisable symbols such as dress code, identity or image of the firm, location or interior of office, etc. On the question regarding dress code, he replies:

“No, it is not all that often we directly interact with clients so need for uniforms or such in our firm.”

During the conversation about symbols the founder has provided an understanding that he does not pay special attention to symbols of the firm. Thus we may assume that the firm has no control mechanisms in this regard.

4.2.2.4 Long Range planning

The firm does not strongly focus on long range planning anymore because it stabilized its operations. Founder is involved in “Fram” project, which helps the firm with strategy and innovation but this process is not formalized.

“In the beginning of the firm we had meetings of the board of directors where we planned what to do, but as things got going and stabilized this has not been the major part of our work.”

The reason to apply long range planning was to discuss with other owners further steps and strategy of the firm. We understand that it was important due to uncertainty in the beginning of firm establishment as it usually happens with any start-ups. Getting to the point when business operations, routines and procedures was fully established the founder does not see the reason to pay special attention to long range planning and strategy. During the interview on the question if the firm has plan for next five years founder answers:

“No, but it is developing through this “Fram” project.”

Therefore, we may say that yet there are no control mechanisms of long range planning formalized or not formalized.

4.2.2.5 Action planning

Main process of the firm is project work by its nature. When the firm receives an order from any client employees of the firm are treating each order as separate project with its own lifecycle, timeline and progress. On a daily basis founder uses special project management tool that helps him to keep track of the progress, milestones and status of each project:

“However, I do have this project management tool, helps with GANTT schemes and such. It is for my own sake, to be able to plan better.”

As entrepreneur says, this project management tool helps him to plan his daily activities to be in control of projects. The founder has informed us that this tool is presented as part of IT system that is why we may say that this project management tool can be considered as formal control mechanism.

4.2.2.6 Budgets

Throughout the interview entrepreneur has informed us several times that he has designed an excel file/table which includes as he claims important information about company's condition. He mentions that this excel file performs as a tool for keeping track of significant numbers:

"I have created my own excel file that helps me keep track of both my work, billable hours, and connects it to the correct projects."

During the interview, on the question about the need for budget, he answers:

"No, I have not felt the need for that so far. At this point I feel I have sufficient control with the simple excel file."

Although the excel file maybe a useful tool but it still can not substitute budget as some important functions of budget such as forecasting and planning, measuring performance, coordination of resources, etc. are not provided by this excel file.

Considering the above we can not say that the firm has budget and thus applicable control mechanisms.

4.2.2.7 Financial Measurement systems

Accounting report that founder receives every two months is one of the sources to check financial condition of the firm. In accounting reports revenues, costs and profits are checked firstly. In addition, one of the owners with accounting background is performing some of the accounting routines and then sends results to external accounting.

"One of the owners does our accounting, as employee, and then sends it to auditing which of course is external."

"I check revenues with my own notes and invoices. Then I check a little bit of costs, but through my excel file I have pretty good control."

As it was mentioned in previous section the founder has created an excel file that contains accounting information. This is another source of information and a tool, which helps him to control financial situation in the firm.

“At this point I feel I have sufficient control with the simple excel file.”

“I have made this in such a way that for every workhour I log in the file, it updates the totals for the “year” and in this way gives me an indicator of how we are doing.”

Accounting reports and excel file with financial measures in them are serving the role of control mechanisms over financial condition of the firm. The conclusion could be that the firm has financial measurement systems in form of accounting reports and excel file that work as formal control mechanisms.

4.2.2.8 Non-Financial Measurement systems

There are several non financial measures that founder keep track of: billable hours, clients’ feedbacks and progress of work of employee.

Billable hours are included in excel file that was mentioned before. The founder finds it very important to know how much the firm can charge to client for the work done. This information helps him to control the work on each project and understand whether the project is profitable or not.

“I just keep track of what I can bill out, all the “leftovers” I do not register, although it might be smart to get a better overview of how I spend my time. But as it is, I only register and track stuff that I can directly bill clients for. And most of this I get from my premade excel file.”

Feedbacks left by clients provides founder with information regarding satisfaction of clients and the quality of services and products created.

“I am not actively asking clients in any way to get feedback, but they will let you know if they are dissatisfied. I do not have any fixed measuring on this, I depend on a good gut feeling of how the relation is to each client. “

Tracking progress of employee's work helps founder to check timeline and the quality of projects that were assigned to employee.

"I track progress [of employee's work] from time to time."

"He [employee] works fixed hours, and he is as stable as can be, never worry about him not showing up."

Based on the above we may find that founder has formalized those control mechanisms that keep track of the most important non financial measures in the firm. Billable hours throughout interview were mentioned several times as significant measure that helps founder to know the value of each project and its profitability and billable hours were included in excel file which carries out control functions. Meanwhile, feedbacks from clients and tracking progress of work of employee is although important for the founder however control mechanisms over these non financial measures are not formalized yet.

4.2.2.9 Hybrid Measurement systems

The role of hybrid measurement system plays excel file designed specifically for control purposes and includes both financial and non financial measures such as costs, revenues, profits, work and billable hours for each project.

"I have created my own excel file that helps me keep track of both my work, billable hours, and connects it to the correct projects. I have made this in such a way that for every workhour I log in the file, it updates the totals for the "year" and in this way gives me an indicator of how we are doing."

"The excel file handles much of those problems you usually want a system to handle, like keeping track of hours and costs for different projects."

The importance of the excel file as control mechanism was discussed in previous section. The finding here could be that hybrid measurement system exists in form of excel file and it is being used as formal control mechanism.

4.2.2.10 Reward and compensation

Interview provided us with an understanding that the founder does not communicate motivation of employees that could be stimulated by rewards and compensation with desired goals and strategy of the firm. On the question if the firm has any rewards or bonuses, he replies:

“I buy Christmas gifts, and we have a gathering around Christmas where both Avis Hemnes and Daesign participate. I have also helped employees with some pension related issues, by being flexible I was able to help save him some cash. It cost me a fair amount but it was all right.”

From this quote we may conclude that rewards and compensations or control mechanisms related to them are not established in the firm yet.

4.2.2.11 Governance structure

The board of the firm consists of several shareholders. Two of them are the founder and his wife together holding 65% of total shares. His friends who also helped the founder with startup process, technicalities and fulfilling legal requirements for running business own the rest part of the shares.

“As I said, one is an accountant (sivil økonomi) and in the beginning both him and other owner were a bit more involved in the business than now. It was pretty close and often communications for the initial startup period. But today, it is usually with major decisions that we gather and discuss as a board.”

The board was created to meet all legal requirement for publicly owned firm. Besides its main functions board is also used to discuss business environment, clients, current and future state of the firm.

“We use accounting reports, and discuss a bit around “business environment” and the big lines so to say. Could be whether or not to expand, what customers to prioritize, where possibilities may be untapped and such.”

“As I said, we go through accounting reports on the meetings, and supplemented by my knowledge of the day-to-day operations and history of the firm, they have a pretty good picture of what is going on.”

Meetings of the board except the situation when law requires it are not formalized as there is no agenda, no report or document resulting these meetings.

“There is no fixed agenda so to say, we discuss current situation and if there are any changes since last time.”

“There is no additional need for me to report or document anything besides this, they do not ask for weekly reports or things like that.”

Therefore we can say that although governance structure exists and helps to control law requirement however it is not formalized.

4.2.2.12 Organizational structure

The firm employs two people except founder: one is working with founder in the same office and does the same job as founder does; another is working for company that produces newspaper but has employment contract with founder’s firm.

Employee that works for the company producing newspaper has a contract where his responsibilities are specified while contract of employee that works with founder does not specify his responsibilities. On the question if employees have specified responsibilities in their contracts founder says:

“No, it is not specified. But for one of my employees, it is in the contract that he is supposed to work with the “Avisa Hemnes” project.”

It will be fair to assume that the reason of formalizing relationship with employee that works distantly and outsourced to another company was to reduce uncertainty and increase predictability of his behavior. It was important to formally specify employee’s responsibilities

since it is difficult for founder to maintain personal interaction with employee in order to control his behavior and outcome of his work.

The reason for not specifying responsibilities of employee who is working beside the founder in the same office was the ability to interact with him personally due to close distance, employee's professional background and personal relationship with founder.

"... I took in one more employee, who I knew from Rana Blad. He also had sales experience combined with a graphical background. He helped with some sales activities etc."

By working with employee in the same office founder is able to observe and control behavior of the employee. Also, similar professional background and previous experience of working and interacting with the person assured founder that there is no need for formal control. Considering the above we think that control mechanisms associated with organizational design and structure are in place however are not fully formalized.

4.2.2.13 Policies and Procedures

Regarding existence of policies and procedures the founder answers:

"No, we have not established any procedures or polices as such."

However previously founder informed us that each project has its own stages and procedures that designer has to conduct during each stage.

"First you have what I call a "brief" where you question the client to get a clear picture of what it is you are going to help them with.

"I need something to work with, that is anchored in their firm and identity. Then I can reason the choices I make with the arguments and answers I got from them."

"Then I use the text as a basis for choosing symbols, colour schemes etc., I need to search it for inspiration and connections."

This procedures were developed by the founder based on his previous experience. The reason of establishing and implementing these procedures is achieving one firm's goals which is

satisfaction of clients. Founder is able to control the outcome and quality of his products and services by applying these procedures.

“When I do it like this, it is rarely I get clients that are dissatisfied with the results, and we are able to communicate well even across professions.”

Based on above we can state that certain procedures are established in the firm but not formalized.

4.2.2.14 Malmi/Brown table – Visual summary of MC found in “Daesign AS”

Here we present a visual display of our MC findings as discussed in the previous sections. Color red indicates “no control”, Yellow “informal control”, green “formal controls.

Table 2: Visual summary of MC found in “Daesign AS”

Cultural Controls						
Clans		Values			Symbols	
INFORMAL -Family member is in a board		INFORMAL -Quality of product is highly emphasized; -High level of trust; -Openness; -Employees satisfaction			No symbols	
Planning		Cybernetic controls				
Long range planning	Action planning	Budgets	Financial Measurement Systems	Non-Financial Measurement Systems	Hybrid Measurement Systems	Reward and Compensation
Plan is created but not used	FORMAL -GANTT scheme project management tool	No budget	FORMAL -Costs, income, profit numbers; -Accounting reports every two months	FORMAL -Billable hours INFORMAL -Clients' feedback; -Track progress of employees	FORMAL -Billable hours, costs, profit, income	No rewards
Administrative Controls						
Governance Structure		Organization Structure			Policies and Procedures	
INFORMAL -Board has only counselling function; -Legal formalities are met		INFORMAL -Assigned accountabilities			INFORMAL -Procedures to conduct projects	

4.2.3 Challenges for Growth

When the founder was starting the business, his main intention was to create stable job for himself. Founder did not have any clients at the beginning since he had a professional agreement with former employer that he will not “steal” any clients from the company. As time went by entrepreneur gained significant client base and won big projects so he used this opportunities to grow his firm bigger and hire employees.

Founder informed us that major contribution to growth of the firm was finding and working with theater which is the biggest client that the firm had and still has.

“First of all, I wanted to create a stable work for myself. Eventually I saw that it was a lot to do, and I took in one more employee, who I knew from Rana Blad.”

“But mainly I can say that the theatre is the main reason I have such a good start, they have shows running all the time and gives me great creative work on a somewhat regular basis.”

Founder measures growth of the firm by looking at the revenues and profits. Amount of billable hours assigned to project is one of the indicators that helps founder to understand the profitability of the project. Some of the services such as designing of logos have fixed price. Setting fixed price for particular services without losing profit was possible when founder was able to decrease resource consumption for some processes by automatization of operations and programming of scripts. This also gave him a possibility to become more effective in solving tasks.

“Revenues and profits of course. I do not want to have loads of revenues with no results, that is not smart.”

“I would say that I work smarter as time goes by. I have been able to automate some processes through programming of scripts that I previously spent a lot of time on.”

Founder mentioned several challenges for growth that his firm is experiencing. Organising work and capabilities, using skills of employees in the right way was the challenges that firm has to overcome during fast growth. We can say that challenges which founder has mentioned are equally important during non-growth stages of the firm but when things are changing rapidly and future of the firm is highly uncertain organising work, utilizing skills and

capabilities is highly significant for survival of the firm. Poor organisation of work, wrong usage of skills and capabilities often lead to organisational dysfunction and even bankruptcy. Also finding competent employees was pointed as a challenge for growth. Similar competence of employees is decreasing or eliminating time for training and learning. Using time effectively is very important during growth stage since losing time means longer execution of client orders and losing opportunities to get more customers.

“The challenge lies in organizing work and capabilities, and utilizing skills of employees in a good way. As it is now most of the creative things in the firm I handle myself, and I see that I may have to hire someone that is capable to help me with this process.”

“I feel that the biggest challenge is finding another with similar competence, that can work independently without needing to much training or supervision.”

“Another challenge is that I may have to upgrade the location or move all together to have room for more people and equipment. It will be a transition.”

As it was previously mentioned time is of high value for the firm during growth stage therefore using time effectively is becoming a challenge for the firm. Automating processes has helped the founder to overcome this challenge to some degree.

“I would say that I work smarter as time goes by. I have been able to automate some processes through programming of scripts that I previously spent a lot of time on.”

4.2.4 Challenge for control

During rapid growth it is difficult to keep track of all important things in the firm. Financial condition and main operations of the firm are the first priority of the founder. In order to facilitate control functions and make them more effective founder has developed an excel file/spreadsheet that helps him to keep track of important performance indicators such as billable and work hours, accounting numbers, work progress, etc. Founder is able to gather and process accounting and operations related information and compares it with actual results reflected in accounting reports.

“I have external accountant who manages the reports for me. However, I have created my own excel file that helps me keep track of both my work, billable hours, and connects it to the correct projects.”

Another challenge for control is being able to manage customer relationships. Founder is already aware of this need and the only impediment is additional costs and choice of proper system that will properly satisfy firm’s needs.

“I already see the need for a proper CRM system, but for now I have not spent money on this. The question is if you want to buy one that is a standardized system, or go for something that is more tailored for our specific needs.”

4.2.5 Summary of the case

Cultural controls consist of informal control of clans and values like strong emphasis on product quality, high level of trust and employee satisfaction.

Firm has special project management tool that helps to conduct action planning effectively and with minimum errors. Long range planning is not considered as important aspect to focus on.

Cybernetic controls of the firm do not include budget since manager finds other controls enough to cover all needs. Financial and non financial measurement systems are registration of billable hours, collecting of feedbacks from clients, tracking progress of employee’s work and accounting reports where costs, income and profits are being checked. We noted high level of trust from founder towards accountant. Non financial measurement systems also include informal control of clients' feedbacks and tracking progress of employees. Client feedbacks are gathered and processed informally because the way of providing them are always different. Tracking progress of employees can be done by manager informally due to effectiveness of personal interactions. Additional hybrid mechanism that helps founder to control the firm is own created excel file/spreadsheet which is utilized to collect and process both financial and non financial data.

There are no formal or informal rewards established in the firm by founder.

Administrative controls are informal because founder does not see special importance in such controls and he is able to regulate administrative issues by personal interactions.

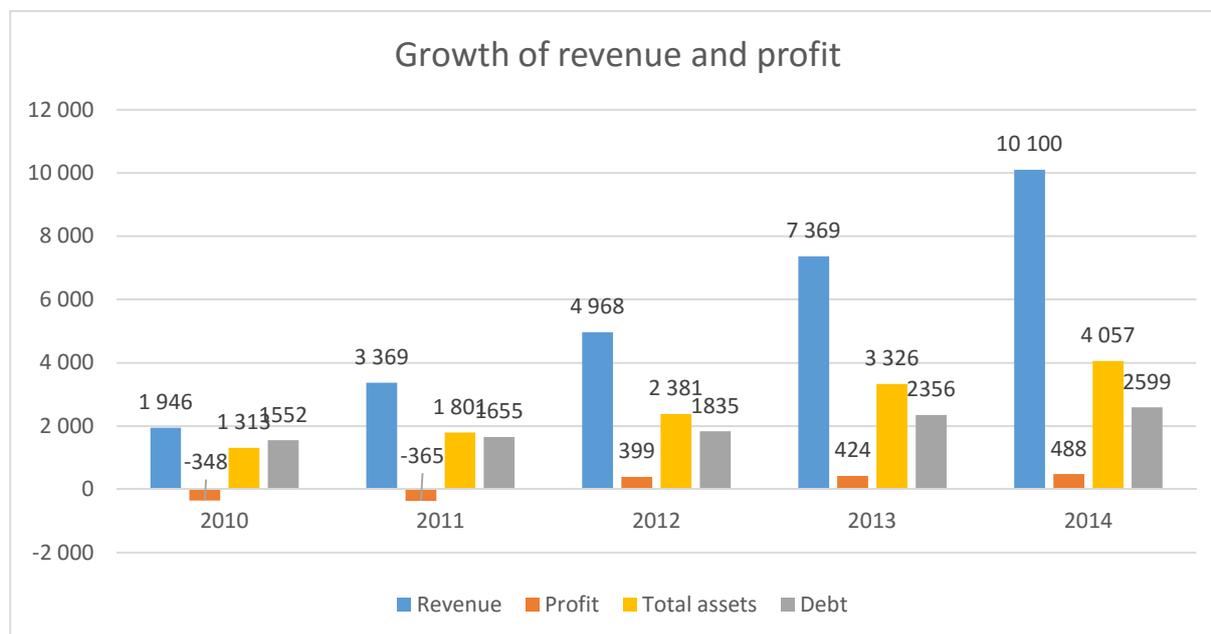
Growth was not the first priority in firm's strategy. Founder was concerned more about creating stable job for himself but as the amount of work and project increased, he has decided to hire employees. The challenge for the founder was productive usage of employees' skills and organizing of capabilities and work of the firm. We were informed by founder that formalization of financial controls helped him to work more efficiently than before formalization. Founder also claims that main contribution for rapid growth of the firm was relationship with theater that became the biggest client of the firm. He sees the quality of product and services as marketing tool that promotes the firm towards potential clients.

4.3 Case 3 – Rana Mek AS

Rana Mek AS is mainly a machining firm, located outside the industrial area in Mo I Rana, Nordland County. They create steel parts in all shapes and sizes, mainly for the local industry, but also for private actors. In addition to making parts by order, they can help design and develop parts according to requirements. In addition to this, Rana Mek have incorporated a welding firm and do some mechanical work on semi-trucks and trailers. They do little or no marketing, and does not have any webpages or Facebook pages to advertise or inform about the activities of the firm.

Founder has previous experience both from the industry, the profession, and also with start-ups. He was part of the team that started up "Momek AS" within the industrial park, both as owner and part of the management. After a couple of years he sold out of "Momek AS", and used the free capital from that sale to buy machines and start up "Rana Mek AS". Today the two firms are not connected, although "Rana Mek AS" operate in same building as "Momek AS" previously occupied. In this building was also the welding firm, that now is acquired by "Rana Mek AS". Founder is 100% owner, and acts alone in the board of directors. However, family members are involved in the firm, one as accountant and the son of founder works in the welding section, gaining experience and training for future responsibilities.

4.3.1 General accounting information



(gathered from public accounting information)

From these numbers we see that Rana Mek ran with a loss the first two years, until gaining momentum and revenues enough to support the investments needed for machinery. We see a steady rise of revenues and build-up of assets, indicating reinvestment for growth.

Founder has claimed somewhat higher wages following the increase in revenues, than what would be normal in employment situation for his profession. Firm has paid zero dividends since start up.

4.3.2 Management Controls – Malmi / Brown framework

In this chapter we report on the findings related to MC framework by Malmi / Brown.

4.3.2.1 Clan controls

Although a founder claims that there are no individual groups, micro-cultures or clans in the firm according to interview we have found that there is one individual group in the firm.

Founder, his mother who works as an accountant, founder's two sons performing main

operations of the firm and founder's wife in the board of directors can be considered as one clan.

"I got two of my sons here, so naturally they gather a lot. But we are so small that we all mix pretty good together. There is no clear-cut clans or clicks here. No separation between educational backgrounds either."

"Employed here. It is my mother actually, she has 20-25% position here and is an educated accountant."

"Well... it is me and the wife, and I do not think she have had the time to show up on those meetings yet. So I guess you can say that the influence of the board of directors is pretty much the same as my own influence in the firm."

This information shows that the founder has extensive control of almost all areas within his firm: accounting, operations, board. Since clan members share similar values and beliefs founder being a leader of the clan can influence members of the clan in order to maintain overview those operations and functions that require his control.

Thus we may say that clan controls exist in the firm but not documented and formalised.

4.3.2.2 Values

There is a number of values found in the firm such as hard work, doing things right from the first time, trust and openness, teamwork, etc. Some of them were established from the beginning and some of them were acquired throughout the history of the firm and based on experience of founder.

"Work hard. Hard work, that is probably the most accurate description. That and openness, teamwork."

"I have this thought from the start, nobody is to be "punished" for mistakes, errors or problems, it is much better that we are open and are able to discuss them."

"If you do a good job, at reasonable cost, clients are happy."

"I make a living by doing things right, preferably the first time."

“You are dependent on the people since you are small. So the importance of having the right people around you, is paramount. People need to be present and do decent work, and contribute in good way both professionally and socially.”

"Let's say now, this one guy asked for a day off here now, and if I had refused him I think I would have had trouble getting him to help with some additional extra hours or something. The flexibility is important that it goes both ways. Especially when our service level sometimes require that we work after hours from time to time. This flexibility is absolutely essential."

Entrepreneur believes that having these values will lead to certain desired behaviour and creating mindset that helps to achieve goals and be in line with the strategy of the firm.

“... If you produce with a high error rate, you lose your profits.”

“If you mistake in welding, machining, cutting or shaping, you lose the value of the materials, the time spent on the job and so on. These are all costs I cannot charge my clients. That is why you need good people who know their work, and is concerned with doing things right, preferably the first time around.”

“Instead of spending all time figuring things out yourself, they usually ask and we solve it together. Also in terms of errors, it helps reduce them when it is easy and acceptable to ask for help or guidance. We all have different areas of expertise and interest.”

"The flexibility is important that it goes both ways. Especially when our service level sometimes require that we work after hours from time to time. This flexibility is absolutely essential."

Although it seems that these values are very important for the founder, however he did not formalize them anyhow thus no formal control mechanisms are applied in this regards.

4.3.2.3 Symbols

On the questions if the firm has dress code, slogans, managed identity, etc. or not entrepreneur answered that there are no such things.

“I do not do much marketing like we discussed, we are not even available on the internet. Our work speaks for itself.”

Founder does not think that symbols are important are that requires his overview and control.

4.3.2.4 Long Range planning

Strategic plan that founder developed 5 years ago presents long range planning of the firm. Founder use this strategy an objective for the firm thus he is able to control the direction of firm’s development in order to reach the goal set in the strategy.

“... 4-5 years ago I spent time developing a strategic plan, through the board of directors, where we planned for slight growth in the years to come.”

“Well, I think it is important to have something to stretch for. It was more like an overall goal, and statement, than a list of concrete ideas and actions to enable growth.”

Formalized strategy indicates the existence of formal control mechanism of long range planning.

4.3.2.5 Action planning

Regarding action (short range) planning founder provided the following information:

“No. But I have tried to be more structured, but that works only until the first phone call, then it is a lost project again. Every week and day is different.”

“I plan maintenance on the machines, but that is dependent on number. Hours the machines have run. But I have to juggle this a bit as well, to be flexible. “

“We do plan, but they usually have to be changed when we get some emergency jobs, so it is more like a juggling game than one of planning

From the interview we understand that the firm works with client orders/projects that require machine and man hours to employ. However there are also emergency calls from clients that require quick solution of the problem for additional fee. Therefore manager have to re-arrange

schedules and re-allocate resources from one order to another when it is required to satisfy clients' needs. It is very difficult to work according to weekly and even daily plan when the firm encounters such uncertainty.

"[about weekly plans]... that works only until the first phone call, then it is a lost project again. Every week and day is different."

Founder tries to plan however plans are being changed very frequently thus we may conclude that action planning is applied in a firm in form of planning machine hours but control mechanism is not formal.

4.3.2.6 Budgets

Every third month at meeting sessions of the board of directors founder is using budget as a measurement tool to compare planned goals with actual results that accounting reports show. Founder is checking important things such as costs, revenues and profits.

"Yes. Every third month we compare to budgets, usually in relations with meeting for the board of directors. ... The fixed costs are very easy to keep track of, and on material costs and profits is no problem either, as I have a fixed mark-up on those."

The process of checking numbers in the budget with actual results indicates that the manager is utilizing budget as formal control mechanism for the purpose of keeping track of condition of the firm and taking actions if necessary.

4.3.2.7 Financial Measurement systems

As it was said before founder uses accounting reports in order to control profits and different kinds of costs.

"We keep track on profits on materials and such, and that we are able to get all costs covered."

"We also check and discuss costs for additional tools and such."

“... Mostly costs and the “operational aspect” of the firm, and profits.”

“I usually just check the major numbers [in accounting reports]”

“... The fixed costs are very easy to keep track of, and on material costs and profits is no problem either, as I have a fixed mark-up on those.”

In addition to accounting reports founder has special IT system that registers financial information such as costs, prices, etc. regarding every order in order keep track of profitability of each project.

“It creates the basis for invoices, both with fixed prices and other. ... It also displays and separates between internal costs, price for customer, and the profits I make on each job. ... And it helps explain additional costs, or lost profits.”

This system serves the firm as reliable formal financial measurement system and founder is applying control mechanisms accordingly.

4.3.2.8 Non-Financial Measurement systems

Another use of IT system is to control non financial aspects of firm processes. Founder mentioned several times that machine hours is one the most significant performance indicators. This system allows gathering and processing information regarding machine and billable hours spent on each project so it is used as the basis for issuing invoices to clients and by tracking machine hours founder is aware of profitability of every project. In addition, the system registers work hours of employees so that it functions as a basis for salary calculation. Another important function of this system is registering problems and errors. Since one the values is high quality of products and services we can see that the founder is trying to control it by utilizing features of formal IT system.

“I keep track of machine hours, and such.”

“... how many hours is registered on each job and such.”

“Also my employees register both internal work and billable hours on this order system.”

“It also allows tracking progress on work.”

“Can register transport, and it allows us to register errors/problems with a job.”

“My employees register both internal work and billable hours on this order system, so that way it works as a salary system. It is the basis of the payment they get each month.”

The reason of having system with many different performance indicators is to facilitate control and make it more efficient and effective. With this system founder is able to overview different pointers, indicators, coefficients within one system: controlling machine hours shows profitability, controlling work hours gives a basis for salary calculation, registering errors allows learning, etc.

“If machines or welders are working 24/7, we are effective and generating profits.”
“We keep track of hours, and then they can get a day off or something when needed.”
“Also if clients call AFTER delivery, we can go back and find the machining job we did, and add the report from clients about problems and such. Allows us to learn better. Good system, many possibilities, and it is just restricted by what you bother to put IN the system, it decides what you also can get OUT of it. You can also get out all types of lists and the accounting part of reports from the system I use all the time.”

The system can be considered as a formal control mechanism that helps to keep track of non-financial areas of activities of the firm.

4.3.2.9 Hybrid Measurement systems

The IT system mentioned previously contains both financial measures such as costs and profits, etc. and non financial indicators such as billable hours, work progress, etc. Embracing both financial and non financial areas of the firm the system provides comprehensive view of firm's operations, an ability for better control and decision making. The IT system is considered as formal control mechanism of the manager.

4.3.2.10 Reward and compensation

As rewards and compensation for employees firm has free access to equipment of the firm.

“No, but they have free access to use the workshop after hours. And we bought a special lift to help hoist cars up so they can use, and use their own equipment.”

This benefit is available to all employees and does not reward or motivate any particular behaviour. Thus we may say that control mechanisms in this regards are not established.

4.3.2.11 Governance structure

The board of directors consists of the founder of the firm and his wife. The board was created to meet all legal requirement for publicly owned firm.

“Well... it is me and the wife, and I do not think she have had the time to show up on those meetings yet. So I guess you can say that the influence of the board of directors is pretty much the same as my own influence in the firm.”

From the interview we know that the board is fully controlled by the founder therefore there is no need to establish any control mechanisms related to this issue.

4.3.2.12 Organizational structure

There is no formal organisational structure in the firm. The firm has two different departments but employees are not separated in teams or groups with leaders and heads. The company is divided in two departments only for accounting purposes.

“Well, okay, I guess you can say that we are two departments, but socially it does not feel like that. And we all may have to chip in at the welding section and so forth. Main reason for separating accounts, is that there is much easier to get waste on the steel for welding than for us.”

Founder’s son is getting prepared to take over some of managerial responsibilities but the process is not finished and formalised yet.

In conclusion we may say that the firm has two different departments and internal accountant however this structure does not work as control mechanism.

4.3.2.13 Policies and Procedures

Working with machines and heavy materials requires strict rules and procedures that secure safety for employees and high quality of products and services. The firm has these rules and procedures in place but giving the fact that the founder always hires professionals who know how to operate with equipment and materials used in the firm there is no need to formalize them.

“No nothing in writing. Except for that I have included in their employment contracts that they have responsibility to keep the machines they work with in good condition and clean them.”

“No, when having the people I have things have worked out pretty smooth naturally. There has not been any need to establish extensive rules, procedures, or guidelines. There are of course some small things, but nothing worthy of creating guidelines or such.”

“No, most of things related to production basically just flows well, no need for fixed rules etc.”

Based on this information we can say that procedure and policies are established in the firm however since all employees are qualified professionals the founder does not see the need to formalize these procedures.

4.3.2.14 Malmi/Brown table – Visual summary of MC found “Rana Mek AS”

Here we present a visual display of our MC findings as discussed in the previous sections. Color red indicates “no control”, Yellow “informal control”, green “formal controls.

Table 3: Visual summary of MC found in “Rana Mek AS”

Cultural Controls						
Clans		Values			Symbols	
INFORMAL -Family members are holding key positions in the firm		INFORMAL “Zero mistake mentality”; “Work hard”; ”Openness”; ”Teamwork”; ”Flexibility”			No symbols	
Planning		Cybernetic controls				Reward and Compensation
Long range planning	Action planning	Budgets	Financial Measurement Systems	Non-Financial Measurement Systems	Hybrid Measurement Systems	
FORMAL -5-year strategy plan	INFORMAL -Planning machine maintenance	FORMAL -Budget created and used	FORMAL -Costs, profits; -Check major numbers in accounting report; -IT system	FORMAL -Machine hours, Work hours, Materials, Progress on work, Customer base and orders, Billable hours, Errors INFORMAL -Clients’ feedbacks	FORMAL -Accounting and CRM, i.e. IT system	No control
Administrative Controls						
Governance Structure		Organization Structure			Policies and Procedures	
No control		No control			INFORMAL -Procedures to work with machines and materials	

4.3.3 Challenges for Growth

In the beginning founder had plan to hire two or three employees to decrease his workload and afford himself a vacation. As an opportunity to acquire welding shop arose, he used it in order to widen the range of firm's services. Consequently entrepreneur hired more employees to fill up open positions in welding department.

“Sure, I had an intention to grow to at least two or three [people], that would enable me to have a reasonable vacation at least. That was the plan. If it were not for the acquisition of the welding shop, I do not think we would have been more people here than that here.”

As founder stated during the interview the reason for growth was high quality of services at a reasonable price.

“Because we have satisfied clients, and that they get services at a reasonable price. That in combination with the service level.”

Founder measures growth in number of employees working in the firm.

“I really do not think about it a lot. But speaking about growth I think mostly about more employees, then profits and maybe revenues.”

We understand that having “right” people as employees is very important goal for the founder when the firm grows rapidly. This is certainly related to skills and professionalism of employees as well as their values. Founder points out that people should “contribute in good way” meaning that the attitude of employees and their dedication to work professionally and maintain good social relationships with colleagues is significant contribution. Having professionals on board is also saving time that firm may spend for training of employees and their learning.

“You are dependent on the people since you are small. So the importance of having the right people around you, is paramount. People need to be present and do decent work, and contribute in good way both professionally and socially.”

One issue that holds entrepreneur from hiring more employees and grow is his workload. He is fully occupied with main operations of the firm during the day and responsibilities of manager are coming on top of that increasing his workload.

“I work almost 100% out in the shop in production, and then the “managerial” side comes on top. If I get more employees that aspect will increase and grow, and I feel I am getting close to have to set aside half my days for managerial issues in the office.”

Another challenge for growing as founder states was financing the project. Considering the fact that the industry where the firm operates requires using heavy machines and equipment capital investments are very high during start-up period. The burden in form of costs can hold the firm from growing for several years.

“Well, nothing special except that first auction where I bought the machines with the capital I got from the Momek exit. Getting the right people have been the major challenge.”

“[How did you finance that?] I used my holding firm that owns the machines, and rent them out to Rana Mek. If not for that, it would not be possible to raise capital and start-up.”

“[about profit] The first two years we did not make any money, with the cost of rents and all, no way one man was able to work enough to cover that. We bought four or five machines at once, so there was a couple of millions in costs. I had plenty of work, it was not that, but the costs where so much higher than what you were able to work in yourself.”

4.3.4 Challenges for control

Growth is one of the challenges for control according to founder. He informed us that growing in number of employees is adding significant burden on control functions. Need for personal interactions and personal control of all areas of the firm makes control costly for manager. Founder spends great deal of a time for getting back on track if he has suddenly lost control on short period due to vacation, for example.

“I feel a strong need to have control of things, that is part of the reason for not wanting to grow bigger. Say now after my vacation, I had to spend a hard week to get back on track again. Even with my good people, there were some things that was not up to speed.”

“I do both [managerial and production] quite well, but... I do not want to let anyone else handle the managerial stuff, then I would lose control. But I do have some help from accountant, who handles a lot of my invoices. It helps quite a bit.”

On the question about what functions require his personal involvement every time, he answers:

“Tenders for sure. But that is also due to my experience there. But I am currently working with the manger on the welding department (my son) to include him also in this process, so that he can copy this, knowing that it works.”

Tenders were mentioned during the interview many times as one the most important processes that requires his sole involvement and control. He noted that nobody in the firm has required experience in working with tenders and he needs to have total control over that part. Having professional employees is an important requirement for reducing control, as founder says:

“when having the people I have things have worked out pretty smooth naturally. There has not been any need to establish extensive rules, procedures, or guidelines. There are of course some small things, but nothing worthy of creating guidelines or such.”

4.3.5 Summary of the case

Cultural controls consist of informal clan controls and control of values of the firm. Clan in the firm exists in form of family members of founders. They occupy head positions in different areas of business so founder has control over these areas. The firm has several values such as zero mistake mentality, openness, flexibility, work hard and teamwork. Founder is emphasizing that these values are part of firm's culture and should be adopted by all employees to provide stable and friendly work environment in the firm.

Long range planning is presented as formal strategy plan that is used more as goal setting than concrete plan of actions. As founder says due to constantly changing workload it is very difficult to create a solid schedule without changing it afterwards when the firm receives

additional orders that require immediate actions and re-direction of resources. Because of this reason founder did not formalize short range planning.

We have found that cybernetic controls are formalized in the firm. Accounting reports are compared to budgets on a regular basis to find differences between planning and results of the firm. Financial measures like costs, profits and other major numbers in accounting reports are in focus of the founder. Since mother of founder is performing as an accountant we understand that there is high level of trust between accountant and founder.

Tailored CRM system serves as a tool for controlling both financial and non financial measures. It shows detailed tracking of costs, profit measures per order, tracking of errors, registers work hours and many other things. Formalization of non financial information such as tracking errors helps personnel to learn on mistakes and improve efficiency. Only gathering and registration of feedbacks from clients is not formalized. Founder stressed that clients provide their feedbacks always in different ways, therefore firm will not be able to adapt every time if founder will formalize this procedure.

Founder did not set any rewards and compensations systems that stimulate definite behavior for achieving goals.

From administrative controls we have found only informal procedures to work with machines and materials as well as project work. These procedures are not formalized because the firm constantly experience changes in work order, workflow and workload and changing formalized procedures and rules will require more time than doing it informally.

Growth was not a primary goal for founder. Increase of number of employees is seen by founder as an indicator of growth. Founder informed us that amongst reasons for high growth he may find good service level, satisfied clients and acquisition of welding shop. Main challenge for founder during fast growth is having competent people with common values in a team. However even with good team founder still feels the need to control things personally. This factor does not provide motivation for founder to continue growing his firm.

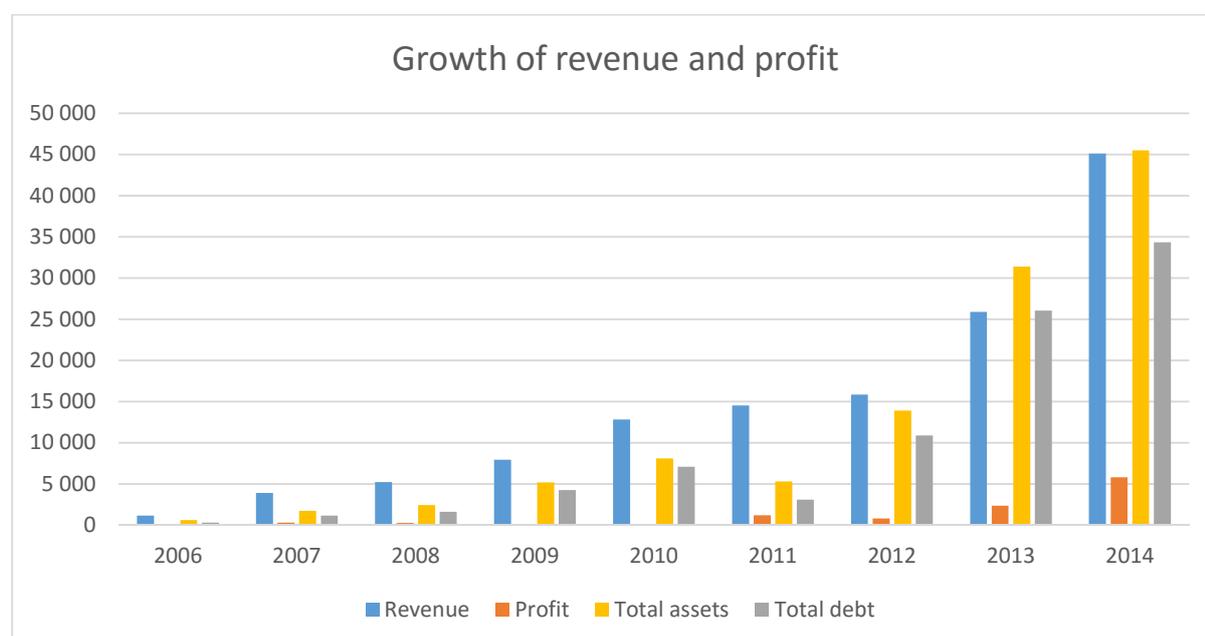
4.4 Case 4 – Dahl Bygg AS

“Dahl Bygg AS” is a 5 times gazelle-awarded construction firm and entrepreneur located near the goods terminal in Fauske, Nordland County. The firm is 10 years old, have 28 employees and is mainly building private homes on order, but also have a significant portion of own projects and development projects. Firm started as independent contractor, but joined in 2007

the “Systemhus Alliance”. According to founder this was based on a realization that you needed system support and backup to succeed. The firm today is formally split in three sections, the machines for ground work organized in “Dahl Maskiner AS”, the projects for own account is handled in “Dahl Prosjekt AS”, while the main construction firm and centre of the organization is “Dahl Bygg AS”. Firm is split up like this to better manage capacity and prioritize jobs, and allowing excess capacity to be sold in periods of lower demand. The firm is focused on building private homes, including on contracts from other firms developing homes for cooperatives.

Founder has a strong entrepreneurial background, having grown up within a family with strong entrepreneurial traits, and a “do-it-yourself” attitude. He has long experience within the industry, having had multiple jobs within different aspects of construction work. Educated as mechanical engineer, and additional courses related to construction work and carpentering over the years. Prior to founding “Dahl Bygg AS”, he was working as independent contractor within private homes segment. Besides the “Dahl Bygg AS” organization he founded and own “Salten Eiendomsutvikling AS”, a real estate firm buying and renting out real estates and buildings. Wife and Son of founder is also involved in the firm. The founder’s wife works as in-house economist and administrator (also holds shares and positions in board of directors), while Son is managing the day-to-day operations of the machine firm.

4.4.1 General accounting information



From the graph where we combined public accounting information we get a picture of how the firm has developed since the start-up. Increasing revenues with the following build-up of assets and debt, with a relative low profit suggesting reinvestments for growth. Although the firm has not operated with losses, profits have not been significant until 3 years ago, suggesting high investment needs to be profitable in industry. Founder have claimed very modest salaries the first 5 years, and a normal salary for manager of such a firm in the following years. Firm has not payed out any dividends since start up.

Dahl Bygg AS is by far the oldest and most complex firm in our sample. As such we expected to find the most extensive controls and mechanisms in place. According to Davila / Foster (2010) having the highest number of employees in the sample, suggest that the formalization of controls should be stronger than for firms with less employees. Operating within construction industry, where legal requirements are high, also suggest that we should find more formalized controls.

4.4.2 Management Controls – Malmi / Brown framework

In this chapter we examine the presence, use and application of management controls in accordance to the Malmi / Brown framework.

4.4.2.1 Clan controls

As stated in introduction, family members are heavily involved in the firm, both in day-to-day operations, but also in the governance of the firm. The presence of such “clan mechanisms” and family members in central positions help reduce control need, as they are assumed to have a high level of trust from the founder. Also, by gathering outside of work allows for tighter communications and interactions, which may both increase trust and give a “tighter” control as interactions are assumed to be more frequent compared to a clan-structure of buddies from the golf club or similar arenas.

“I bring my wife, who also works as the in-house economist and accountant. She handles the salaries and such on a day-to-day basis”

4.4.2.2 Values

Dahl Bygg AS is the only firm in our sample with formalized value controls. Some formulations of firm values is within the digital version of “company handbook”, and it also specifies a shared responsibility for creating a good working social environment. When questioned further about values, the founder communicates a strong emphasis on values and relates it both to social working environment, but also somewhat related to marketing and how customers perceive the firm.

“We want to be seen as a group of well-behaved decent people. That would include respect for customers, colleagues, and their values.”

Having some knowledge of the cultural background of the local area and the culture among craftsmen, we see a traditional orientation of values, strongly linked to “traditional craftsmen”. The cliché so to say, is of this strong silent worker, modest in his manners but strong in abilities and sense of fairness and what proper behaviour is. You should not brag about achievements and become too self-important, but let your actions speak for you. Founder clearly stated that the firm went to great lengths to avoid hiring “world champions” who is quick to showcase their achievements.

“What gets my blood pumping, what I really do not want to see in my firm, is where people are too good at emphasizing how brilliant they are, and wants to show off and put themselves above others..”

This behavior is also associated with higher “individualism” and seen as a problem for teamwork, which clearly is important for the firm.

“Nobody builds a house alone, and you are always dependent on others. Many tasks can only be solved in groups”

Founder developed special question techniques during interviews for filtering out such personalities, and when hiring for administrative positions used coaching firm to assist with hiring process, specifically to help align company values and that of the applicants.

“There are some people who work hard who never try to claim credit and put themselves forward like that, that needs to be brought forward instead.”

4.4.2.3 Symbols

We found no use of symbols as described by Malmi/Brown related to control mechanisms. When questioned further about possible brand loyalties, symbolic “rituals” or actions to emphasise some desired outputs, we found no indications that such controls were used in Dahl Bygg.

Examples of questions asked related to use of specific tool brand with desired branding matching firms identity, social rituals or symbolism to increase awareness of topic or situation, like blessing a worksite before construction (symbolic act increasing awareness of safety).

4.4.2.4 Long Range planning

Dahl Bygg AS has a documented and implemented strategy plan through the formal channels of board of directors. Even though only founder and wife are present in the board, they use the formal lines of authority and have made formal resolutions and commitment to this strategy plan.

“You need to let some so-called “opportunities” to sail past, you cannot do them all. We are now going to stabilize growth, number of employees, and reduce the order reserve, to strengthen liquidity and capital reserve, to regain some flexibility. Now is time for work, may be boring, but it is the way it has to be”

Founder has clear plans for how to tackle the future, based on assessments of the current market conditions and opportunities. They also consider and define the range of possibilities

or opportunities, based on the present competition and how competitors are assumed to act in the years to come.

When asked about the reasoning behind spending time on formalized strategy planning founder stated that:

“I want it because I need to know what to focus on the next years.”

Whether or not there was external pressure from banks or cooperative partners to have formalized this control is unclear. However, the founder was very clear on the usefulness and purpose of strategic planning, and we feel confident that founder would have utilized this control in any event.

4.4.2.5 Action planning

Working with construction projects, where all projects are more or less unique, and may have different time frames, there is no yearly plans as such. The calendar year means little to Dahl Bygg in terms of organization and planning, as projects mark the start and end of jobs. They do have plans for the whole year, but they are not sectioned off in terms of yearly business cycles. Plans run related to each separate project, like normal project management. Being in construction there is limits for as to how short you can possibly make plans, as projects tend to last at least 3 months, and may last over a year.

“We do not have a yearly plan, but we have plans that stretch for a longer time horizon. So we have plans for the year, but not separated as such”

Founder puts a lot of effort and emphasis on these project plans. In the making he seeks a strong connection and correlation to budgets economic measures for the project. As the projects progress, the founder mainly measure and evaluate progress according to plans, and relies less on financial or economic measures in this phase, knowing that if they are on schedule, the projected financial and economic measures are “as estimated”. When asked about what constitutes the difference between a good week or a bad week in the firm, the answer we got was whether or not they were behind schedules or not.

“But if the goals we set down in the plans are achieved, since the plans are made according to calculations ensuring profits, we have a good week and are working effectively.”

Depending on the project at hand, there are cases where Systemhus and other suppliers gives more detailed instructions that follow the products they deliver (modular sections, etc.). This may include how to assemble, required staffing, approximations of time consumption, competence needed, and so forth. However, there are usually some changes to be made, often based on client specific needs and so forth. These types of allocations and plans are usually handled by assigned project managers, in cooperation with founder.

“Say here in the administration we have meetings at 10 every Thursday, where site managers, engineers and project managers meet and go through cases. We assign some tasks and keep each other updated. This works as a basis for our progress plans and edits to those”

4.4.2.6 Budgets

Dahl Bygg AS use classical formalized budgets. As we come to understand the process, budgets are made for each project and its duration. The yearly budget then becomes a combination of the active projects during the calendar year, including fixed costs and administration. According to founder the yearly budget is not a major concern, they spend more time and effort on the budgets for each separate project.

4.4.2.7 Financial Measurement systems

We found the founder to be concerned mostly about accounting information , but with some additional financial measures having key-importance. Liquidity and solvency was a concern founder had to manage with special care. Regarding accounting reports, founder of Dahl Bygg AS is by far the one from our sample with the strongest focus on accounting numbers and their usefulness.

“Large part of the accounting information is useful, and I feel I have control of it. All numbers are key-numbers, and no number is “un-important”.

They hold regular meetings with accountant, where in-house economist also attends. On the meetings they go over numbers project by project, and not month by month as such. He put special emphasis on estimates for “work in progress” (value added to projects) and MVA accounting.

“This “work in progress” number gets especially important when you close the books on one year and start a new.”

Also, during our inquiry about financial numbers, we discovered the founder to have a general “rule of thumb” on which he evaluates new possible projects, and to some extent current projects.

“So for a project with 20% margin, I know we have 10% left when it is all over and done.”

4.4.2.8 Non-Financial Measurement systems

When discussing non-financial measures it quickly become clear that this is the major portion of controls utilized by founder in the day-to-day operations of the firm. In part, it is due to the construction industry and regulations they are required to follow, both from government policies and industry standards, but also when dealing with other actors and suppliers they meet demands of quality assurance systems, documentation of worker qualifications, quality assurance systems and so forth.

“These external entrepreneurs require complete Quality Assurance systems, Organizational charts, Health and Safety systems and documentation, and so forth, so we have had those for quite some time”

The project plans also re-appeared in this topic, serving as a standard to which progress is compared. When we questioned further about measures of effectivity, founder again referred to the project plans.

“I track milestones and progress in the project management plans. And if we achieve the plans we are meeting the expected profits and progress.”

In addition, a smartphone app for the workers allowed several interesting controls to take place. Registration of work hours, assigned to both specific projects, with workers registering additional information to serve as basis for invoices. Due to the complexity of the work, with many different actors on a single worksite, there is a set of rules regulating delays and who gets billed for waiting time. By the smartphone app, workers have a range of different rates and can instantly allow managers to know that they are in fact waiting, and whom they are waiting for. The system is complete with rates for driving time and so forth.

Another aspect of the same system is that it allows registration of deviances to health and safety codes or rules and regulations to be documented with pictures and descriptions. This information will instantly appear on the screen of either project manager or founder, and they can take action accordingly. The company handbook is also available on the system.

On work sites there are legal requirements for having a record of who is present at each site at any given moment. Dahl Bygg AS use employee ID card that they swipe to log in and out of work sites. This effectively means that founder has a clear picture of who of his employees is where at what times, even though they work on remote sites.

4.4.2.9 Hybrid Measurement systems

We found no systems mimicking balanced scorecard features in Dahl Bygg. However, from Systemhus alliance and the systems supplied, founder mentioned a system called Cerum. This appears to be similar to an extensive CRM system that combines financial and non-financial measures. It tracks orders and customer relationships, and also provide economic calculations and estimated profit and cost numbers.

“Also supplied by Systemhus, in a big system called Cerum. We register new clients and order according to project requirements. We register even “rehabilitation” jobs in the same system, as a single project. so all the work we do goes through that.”

4.4.2.10 Reward and compensation

There is no formalized rewards and compensation controls in Dahl Bygg AS. Founder has clear and specific thoughts about avoiding this type of controls in his firm, as he feels it

would contribute to a culture and mentality he does not want in his firm. However, he does reward employees when he feels it is fitting, but such rewards are more or less random and unpredictable, and not structured or systematized in any form.

“I reward on two factors, attitude and social factors, and or total yearly production (workload handled). The reward can either be a lump sum, a gift or something.”

The rewards vary, but seem to mostly be given to groups or teams that have made what founder feels to be extraordinary effort or contributed to the common good of the firm in some other way. As we talked about the subject, founder also stated that he felt that the effect of rewards would be diminished if it was “earned” in similar ways as salary, and that he did not feel the same joy when rewarding if it was expected.

“So I have been careful making some fixed systems for rewards... I do not want to have this “Demand, expectation mentality” behind it.”

4.4.2.11 Governance structure

In the board there is only founder and his wife, and similarly on the owner side. However, perhaps influenced by industry, the founder utilizes the formal authorities of the board to empower his role as daily manager of the firm. Meetings are held, resolutions are made, protocols are created and so forth.

“In the board there is just me and the wife, but we do make resolutions and such, so that we keep the formalities in order, and do hold meetings.”

It was also mentioned that when dealing with certain external partners or suppliers, they required a resolution of the board of directors to negotiate business deals. When asked about other stakeholders in the firm, and also about the roles of other advisors that might influence governance, founder replied that he had some close advisors but they held no positions or stakes in the firm as such.

4.4.2.12 Organizational structure

Due to industry and legal requirements, and also influenced by demands from partners and suppliers, Dahl Bygg has from the very beginning had formalized organizational map. As the firm evolved, the founder has used this to further structure and plan the development of the firm to better utilize capacities.

“We do have an organizational map, where we have a board of directors, then me, and then the in-house economist, the project managers and below that the line of the craftsmen. It is very simple, nothing tricky.”

4.4.2.13 Policies and Procedures

We found that there were not many aspects of the firm that were free of some documented and formalized procedural description. This seems mostly related to industrial regulations from government bodies, and organizations within the industry working with health and safety issues.

“Like now, I had to send my guys on a course not only in how to build scaffolds but also how to walk in them... ... So not only does there exist a procedure of how to walk in a scaffold, but that you have training in it also needs to be documented.”

Systemhus provides blueprints and how-to instructions for all their pre-designed homes and building types. Systemhus also require that suppliers building from their designs do client meetings and quality assurance checks a year after the build is finished.

“It is a great way to get feedback and also to ensure that we do quality work. Clients appreciate this as well.”

The firm handbook that employees have on the smartphones, contains procedural descriptions and technical specifications. As described by founder, they need to have procedural descriptions of handling “any eventualities” on worksites. If accidents happen, and regulators of the industry find that there was no procedural description in place, the firm will be fined

quite severely. This was said to be more or less independently of the consequences of the incident (example used was fuel spill from machines). As a consequence of this legislation the firm has an emergency container with all possible equipment for dealing with incidents, and the container is also equipped with the procedures and policies for “any eventualities”.

Also, the smartphone app workers use was again mentioned. Deviances from procedures or policies was documented and sent directly to founders display in his office, allowing immediate action to be taken.

“This allows me to instantly correct and react to such issues, and close the case when it is done.”

4.4.2.14 Malmi/Brown table – Visual summary of MC found in “Dahl Bygg AS”

Here we present a visual display of our MC findings as discussed in the previous sections. Color red indicates “no control”, Yellow “informal control”, green “formal controls.

Table 4: Visual summary of MC found in “Dahl Bygg AS”

Cultural Controls						
Clans		Values			Symbols	
INFORMAL -Family members are holding key positions in the firm		FORMAL -Contribute to good social environment at work			No symbols	
		INFORMAL -Teamwork; -Respect of customers and colleagues; -Work hard; -Honesty				
Planning		Cybernetic controls				Reward and Compensation
Long range planning	Action planning	Budgets	Financial Measurement Systems	Non-Financial Measurement Systems	Hybrid Measurement Systems	
FORMAL -Strategy for 5 years	FORMAL -Detailed plans for every project	FORMAL -Created and used	FORMAL -Almost all accounting numbers for reports; -Focus on MVA accounting	FORMAL -Project progress; -Quality assurance systems; -Health and safety; -Control of worktime	FORMAL -Accounting and CRM	INFORMAL -Attitude and social factors; -Workload handled
			INFORMAL -KPIs for margin			
Administrative Controls						
Governance Structure		Organization Structure			Policies and Procedures	
FORMAL -Fully in compliance with laws and regulations; Resolutions for manager's authority		FORMAL -Organizational chart; Subsidiary structure; Required by law and used			FORMAL -Check all buildings after finish; Procedures required by law	

4.5.2 Challenges for Growth

“The need to expand came because I saw the risk of being all alone. Risk of sickness, risk for not completing projects and in general vulnerability. So that is why I decided to grow.”

In 2007, the firm had 2-3 employees and joined the Systemhus Alliance. This allowed for further growth and also gave the founder access to important control functions easing the administrative burden. In the following years the firm steadily expanded with more workers, until reaching today's level of 28 employees.

When asked about the major contributing reason for the growth the firm has experienced founder referred both to market conditions and support systems, but allocated most of credit to the support of having joined an alliance like Systemhus.

“There is no doubt in my mind that the choice to enter this cooperation with Systemhus is a major contributing factor to our growth and success”

“Mainly that the market has been there to allow it. The growth is a result of being able to seize the opportunities when they arise.”

When asked about the future of Dahl Bygg AS, and what comes next, founder stated that:

“We will focus on developing the land and projects we got, and accept less new projects. The reserve on orders is getting pretty long, and we feel this horizon is too long, and requires a lot of bound capital. We want to use the next years to catch up on this, to get more flexible again. We have made a plan now how to make this happen. By this we expect to build up free capital, and strengthen liquidity.”

Founder also added that he wanted to regain the “flexibility” of the firm, to again be in position to seize new opportunities and regain some of what he named the “playfulness in the firm”.

“And I mean growth in itself has no value unless you are able to get a profit out of it.”

Founder of Dahl Bygg AS had very clear ideas about growth in general, and the possible pitfalls you had to avoid. He was also very clear that growth without conscious thought or purpose was to be avoided. When asked about challenges for managing a growing firm, founder immediately related it to staffing and managing competences and capabilities of the staff in a proper manner.

“You meet challenges whenever you deal with people, and you got to deal with that”
“Of course, people have to contribute to the common good of the firm, but you cannot demand the same level of involvement from them as you have yourself. This is a challenge to remember, I think I have been successful here”

Major challenge for founder and managing staffing was two-fold. One aspect as previously discussed in control section, was the hiring process, of hiring individuals with values that aligned well with the firm. The other aspect was to be able to keep the staff he had hired, trained and all in all was very pleased with, in a cyclical industry.

“This business is very cyclical, and almost impossible to predict. What we see, is that those that have to let works go, or put them on forced leave and such, always loose the best people first. At the end you dilute the staff, so eventually you are stuck with the people who are unable to get other work. I have seen these mechanisms over and over again, and feel it is very important to take care of the people and the investments you have made in them.”

The founders solution to this is to have wholly owned projects where staff is put to work in times of low demand, thus allowing them stable work and working conditions. Founder is then able to retain experienced workers where others may let them go.

“Our firm and workflow so to say, is basically split in two major processes. We have some projects “egen regi” (own initiative) and others where external parties come to us and want us do to work for them “ekstern regi” (External Initiative).”

“We have overall had a high utilization of capacity, both in terms of capital, labour and available time. We have continuously re-invested capital and invested in this growth. “

About market and growth challenges founder stated that due to transport costs and moving heavy machinery, paying staff for driving time and so forth, construction industry was somewhat geographically restricted, but this challenge is also opportunity for him.

“And thus, we focus on this local sphere, where you drive up to 20 minutes maximum each way. And this challenge is equal to all, and it tells me that the same restrictions apply to those external firms as well”

Also when considering and managing growth, founder takes competition into consideration as a factor he have to adjust to. He does not perceive growth opportunities as endless, but as a limited opportunity with boundaries.

“This results in the fact that if the total local market is x millions, you cannot have ambitions to exceed that. And now I see the signs that we are getting close to this “roof in the market”, and reduce growth. We have one competitor here, and there is no point in trying to ruin the whole market.”

When asked about specific financial and economic challenges founder made it clear that it was a balancing act with several actors. According to founder, growth requires both a willingness to take risks, but also caution and restraint, mixed with a willingness to sacrifice.

“You could say in a matter of speaking, that we have been constantly broke for the past 10 years. It is just the way it is. People need to learn this, you cannot both expand and claim high dividends, unless you are in some extremely special situation, with crazy margins.”

For bigger construction projects Dahl Bygg AS needed to put forward financial guarantees to be allowed to commit to contracts. Again, being part of the Systemhus Alliance have been a great help to founder overcoming this obstacle. The firm have also had a stable and good relationship with the bank connection (DNB), and having integrity and trust of your partners was points the founder stressed as having major impact on the ability to seize opportunities.

“We have to face guarantees when we deliver a group of houses. Guarantee has to be in place for 5 years. DNB (bank) helps us solve this, and in addition Systemhus has a dealership guarantee they offer.”

“DNB has followed us the whole way. They have been a very good bank connection, but of course, they have not said yes to everything we have asked of them, but in retrospect that was just as good”

4.5.3 Challenges for Control

As previously discussed, the construction industry faces significant legal barriers in terms of control functions. Founder was very clear on the support systems (required by law) that Systemhus Alliance provides it's members, are invaluable when discussing growth opportunities. Due to the heavy restrictions and demands for documentation, founder states that it would be close to impossible to be a totally independent contractor in the long run. At this point during interview, founder again brings the conversation to the challenges related to staffing and managing the capacities of the firm, now in terms of controls and mechanisms.

“The way we do it, since we cannot control the external need, is that we have a base of projects and work within “Egen regi”, without end dates. This way, when we get external work, which usually got a fixed end date, we can move resources from our own project into the external ones to finish them on time.”

“This way, we are working at full capacity at all times. This is beneficial both for the firm and for the employees, it gives them added security and a stable working environment.”

When we inquired about specific control challenges during growth founder stated that:

“Taking part in Systemhus gave us a tremendous lift, by giving us access to HMS, QS, Designs, Databases for construction reports, and many great tools”

It seems that through the alliance, Dahl Bygg AS have been provided significant formalized control systems, and in fact that is the major intention and contribution from the alliance. We asked founder about these control systems was the major reason for joining alliance, upon which he replied:

“Yes, to have some support and backup. Someone to deliver the technical documentation that is required by law. We know how to build houses, but not the documentation. It is about energy accounting, and such stuff, which Systemhus now handles for us”

The Management control package supplied by Systemhus seemed to be quite extensive, as we also have seen during the discussion of specific controls. We proceeded to ask about what types of controls or systems founder needed outside of the Systemhus package.

“I have not felt a need for many extra systems and designs. It is basically just accounting and auditing that is not part of the package. But it is coming.”

“However, what we are working on now, outside of that package, is the two-month accounting stuff. We want to have better measures “as-we-go” and make some better budgets on that part. Both with liquidity and accounting in general.”

It seems that the extensive packaged from Systemhus have effectively covered most of the control challenges, and given the founder excellent tools to manage his firm. This we came to understand was a contributing factor to the founder’s emphasis of managing people, competences and utilizing capacity. Having such well-established controls allowed founder to focus on what he perceived to be important for the development and well-being of his firm.

4.5.4 Summary of the case

Founder has clear thoughts of avoiding formation of clans, subcultures or subgroups however his family members are involved in leading positions of different departments of the firm and it shows an existence of clan. By interacting with family members closely he has full control of their positions and the firm. Some values such as contributing to society are included in formal electronic system that is available to all employees of the firm, other values like teamwork, honesty, etc. are emphasized informally.

Both long range and action planning are formalized and used frequently for every project and other activities of the firm. Cybernetic controls are entirely formalized. Founder pays close attention to all accounting numbers, have special focus on MVA accounting. There is high professional trust between founder and his wife who is performing as CFO of the firm to keep control on economy of the firm. Also founder has an informal “rule of thumb” in form of

simple equation which allows him to take rapid decisions regarding new projects. This rule is quite flexible since he can easily apply it to any potential project. It includes different variables that founder take into consideration. Systemhus provided the firm with different kinds of systems that help to manage the firm and its resources effectively. Systems include project planning, CRM, worktime control, registration of milestones, health and security, etc. There is no formal bonus system, founder rewards employees for outstanding behavior, however he does not want rewards to be predictable. Since rewards are controlled informally founder can quickly decide whom to reward and how.

Administrative controls such as governance and organization structure are formalized in order to fulfill legal requirements, for dealing with external parties and for better capacity and resources utilization. Procedures and policies are used for control of main activities of the firm. Formalized systems in this case is crucial component for efficient control.

The workflow of the business is divided on two parts: client projects and own projects. This split was made in order to smooth season workload fluctuations and keep personnel of the firm busy throughout the year. Working this way is one of the challenges for the firm since founder has to be aware of re-directing resources from own to client projects. Need to grow came to founder because of the risk of not fulfilling needs of clients and not completing projects on time. Having staff to perform main operations the firm was able to process larger amount of orders which consequently led to the need to hire more employees. However the founder understands that the size of local market is not unlimited and there is a threshold for firms growth. Taking care of employees and investments in them is seen by founder as a challenge for the firm during rapid growth. Being able to utilize capacity effectively the firm was re-investing capital to growth. Systems for control and other purposes provided by “Systemhus” gave a possibility to grow faster and bigger.

4.5 Summary for empirical data

By interviewing founders from our sample we have found many interesting points and moments that we would like to highlight in our summary.

Cultural controls are informal or not applied at all by the firms. We can say that founders of three firms from our sample have invited their friends and family members to hold key positions of their firms. This can be explained by a need to reduce formal control via employing trustworthy people as head members of their firms. Thus we may consider family

members and friends of founder as a unite clan with founder as a leader of the clan. Also all founders were trying to create friendly atmosphere at job place, promoting team work and values that support business strategy of the firm such as flexibility, honesty, etc.

Action planning is mostly formal while long range planning is used by only two firms from our sample. The use of action planning is different depending on the nature of the business. We found that firms with project type of work use formalized action plans, because founders find it is easy to track progress and stage of each project by using formalized action plans as control mechanisms. Firms that experience unpredictable behavior and demands from clients tend to use more informal action planning because it is easier for managers to change and correct informal plans rather than formalized plan or schedule. Also informal planning is used more actively when manager employs professionals with particular set of skills. It was confirmed by founders that informal planning and other informal controls are helping the firm to quickly adapt to changing environment.

Firms with more complex cost structure and diverse operations use formalized budgets and financial measurement systems more extensively. Founders use formalized non-financial measurement systems and controls to keep track of key business processes. Trust between founder and accountant was common factor for all firms.

It was interesting to find out that even though all founders mentioned that personnel is one of the most important aspects of their firms neither of them tried to formalize control of rewards and compensations in order to motivate and promote desired behavior. Below we will list other similarities and differences amongst firms in our sample:

- All founders act as entrepreneurs, i.e. used all opportunities that they had in order to achieve their goals;
- None of the founders had external financing such as capital from investors, bank loans, etc. to start their business;
- Founders has specific knowledge about their firms that help them to estimate quickly the situation and react properly upon it;
- None of the founders put growth as a first priority or first thing to think about in their agendas, and reasons for growth according to founders are very different.

Based on our findings we think that formalization of controls is crucial factor that allows firm to learn. Also, as firms grew bigger founders were able to formalize some controls that atomized many operations and brought efficiency to work process. The reason to start

business for all founders was to provide themselves stable job and income. Founders relied more on personal relationships with clients than on traditional advertising and marketing. In further analysis we would like to focus on discussion about how founders try to manage their firms in unstable environment inside and outside their firms caused by rapid growth.

5 Analysis of findings

In our thesis we have been searching for how the founders in gazelles utilize management control mechanisms to handle the dynamics of rapid growth, and how founders think about control/management in their firm. For this thesis we have used the Malmi/Brown (2008) framework, to have some fixed definitions and scope for the control aspect of the research. For further focus and differentiation, we have separated control mechanisms in two major categories, formal and informal control, as discussed in chapter 2.6. By including cognitive model aspect and seeking out “behavioural patterns” constituting informal controls, we will get a more complete picture of control mechanisms than by only examining formal controls, as have been the most common approach in previous research.

Through research questions one and two, “*what specific formal/informal control mechanisms are applied in the firm and why*”, we have been able to map out controls within the Malmi/Brown (2008) framework. This serves as basis, combined with founder’s interview data regarding growth related issues, for analysis of the third research question. In this section we will present our findings regarding that last research question, namely “*Excluding legal requirements, what similarities can be found in use/application of MC among gazelles?*”

As managers and owners, we found our sample of founders to have a very strong focus on the HR aspect of their firms. During interview process most of our questions were instinctively answered in terms of managing people and capabilities. They were clear on the dependence and importance of the employees, and when discussing any type of challenge for the firms, founders all related it to HR aspect. Dahl Bygg AS however, may be said to have a stronger external orientation, mentioning “local market roof” as future challenge for the firm. In the other cases, challenges for the firms was either related to recruitment or utilization of HR resources to achieve some goal for the firm.

Existing theory have posed questions to whether the controls support or constrain growth (Davila/Foster, 2010), or if there are other mechanisms that impact growth (O.B Hansen,

(2005), E.J Isaksen (2010)). In the final section, we will present a cognitive control model, incorporating our findings and similarities between cases into one model. This will give us the final “picture” of how founders in our cases, utilize controls in fast growing firms

5.1 Management control and growth – Similarities

Based on data found through research questions one and two, we have found seven key similarities across our cases. In this section we will examine four points, that are linked to growth and control mechanisms.

5.1.1 Rules of thumb – proven “shortcuts”

To our slight surprise, founders was not very concerned about financial aspects, or economic measures of firm in the day-to-day operations of the firm. Instead, they seemed to periodically estimate performance in economic measures, then monitor non-financial controls as performance indicators. Due to having intimate knowledge of the firm the founders have learned about other non-monetary/non-financial aspects of the firm that works as key indicators, even producers, of financial outputs. This would be intimate knowledge about where and how the firm -actually- makes profit, and retains its earnings from. It is the very “core” of the business, the processes that are vital for performance of the firm. The founders have some “rules of thumb” concerning this “core”, that allows them to quickly estimate gains, or decision making points. This relates to O.B Hansen (2005), and his findings that hint at the founder’s reliance upon “shortcuts” that is tested and proved to work. Instead of having to do extensive estimations, preparations and considerations of accounting / financial data, the founders rely upon intimate knowledge of the firm and processes. In some way, they have simplified the whole firm down to some “metaphor” or “shortcut”. Founder of Dahl Bygg had his 20/10 rule for quickly assessing projects and make fast decisions. If the estimates were around 20 % profits on projects, he would end up with 10% when it was all over and done with. Founder of Heimsjyen AS had a rule related to monitoring profits during a month, saying that 40 sleepovers a month covered all expenses for her firm. So, subsequently she tracked the number of sleepovers, knowing it was the major contributor to profits, in order to track how she was doing the current month. No other estimate gave her better prediction of financial numbers during the course of a month, as it also influenced sales in restaurant.

Founder of Rana Mek AS has intimate knowledge of both the profession and the industry. He tracks errors in production, and has an overall culture and mentality in his firm to prevent errors, document and learn from the ones you make. This reminded us strongly about firms such as Toyota and the ideas behind total quality assurance. The CRM system allows for profit estimates on orders, and by tracking errors and minimizing them he has more or less accurate measures for running profits the current month.

5.1.2 Founder's "jump the breaks" on growth

Based on our empirical findings, it seems that founders care little about growth as such. There was not, as we anticipated, a strong focus on growth numbers or extensive marketing or lobbying to attract new customers. The founders did little to no marketing, fearing the effects of increased demand. Even so, the firms obviously have had no problem attracting clients to boost their growth numbers into the elite group of young Norwegian firms. One of our founders simply claimed that "work just comes in the door". Thinking he was just boasting and making jokes, we smiled and refrained from commenting further. During the next 30 minutes however, clients did indeed humbly present themselves in a steady stream asking if he may be so kind to help them out with a job, if he had time and at his own leisure of course. Needless to say we were somewhat surprised by this, and it definitely got our attention. As the interview process went on, we discovered that founders saw the external demand on their firm as a force that had to be controlled. The overall impression was that the founders somewhat feared the demand would be too great for them, and that the problem was that they already had too much to do. They also expressed worries about the strain on employees and the organization as a whole if the workload increased further.

Examining our findings, we have realized that the founders have done an excellent job with identifying a need in the market, and aligning and adapting the firm to serve the clients need to such a degree that they need not rely on marketing to attract customers and grow. The firms seem to have some inherent "attraction" to customers, beyond slogans, logos and marketing campaigns. However, the local competitive environment also has effect on this, but it does not remove the fact that a need in the market have been identified and pursued by the founders. After some careful thought and discussion about this, we came to the realization that founders were in many ways trying to "jump the breaks" on company growth, trying to reduce and manage it. It struck us as a major paradox, that the fastest growing firms are trying to slow

growth in this regard, and left us with several questions. Is this rapid growth somehow forced on them? How is it that when you have in theory 100% control of your firm, you end up feeling you are dragged or pushed into fast growth? Could it be as simple as an inability to say “no” when clients came running through the door? What mechanisms, besides all but dropping marketing, do founders make use of to handle the strain of fast growth?

5.1.3 High trust in accountant - Strong voice of advisor and mitigation of risk.

We found Founders to have a strong dependence on accountants as advisors and councillors for doing financial and economic evaluations and decisions regarding the firm. To us, this strong relationship seemed risky, as external accountants have no stake in the firm, and usually has multiple firms as clients. Economic considerations should to our mind be at the forefront of founders thinking in dynamic situation as high growth. However, after some thought and discussion regarding this topic we came to some suggestions to explain this. One of the major strong points in our sample of founders is that they either have unique position in local community to provide the services they do (Heimsjyen), or they are strong professionals with intimate knowledge of industry. They are not educated managers, accountants, professors, or financial advisors. So instead of trying to do it all themselves, they have acquired help in one way or another, to handle the points where their knowledge/skill is weak. By “outsourcing” the accounting function leaving the day to day economic considerations to others, the founders can increase focus on their strongpoints and utilize the full capacity of their own skill and knowledge. However, that leaves the issue of trust. To mitigate the risk in this “gap of knowledge”, all founders have utilized clan controls and the involvement of family or trusted friends for economic advice. Founder of Heimsjyen had husband as accountant, Daesign had involved friends in board and let them manage accounting. In Rana Mek, accounting was handled by founder's mother. In Dahl Bygg AS that had external accountant unrelated to firm, founder had hired his wife as CFO to strengthen this gap in formal education. By such clan mechanisms the founders are able to both gain stronger focus on their own strengths, and import vital knowledge and skill to key positions in their firms.

5.1.4 Rewards Through Culture – not culture of rewards

Another paradox in our sample is that even though all founders strongly emphasise the importance of HR, having employees with the right mind-set and cultural values, none of our founders use compensations or rewards for employees. Sure there is the traditional Christmas party, and some access to the firm's facilities, and the occasional group trip for the firm as a whole. But there are no bonuses, either for groups or individuals, connected to achievement of firm goals or employee behaviour. And yet, founders were overall very pleased with their staff, and in many ways felt gratitude for extraordinary effort, and regarded them in some ways as close kin. The responsibility of the well-being of employees was evident in all founders, and they seemed to have an overall strong connection to the staff members. Having discussed around this, the strong focus of aligning values and mind set of staff, we have come to believe that the match of culture and staff acts as both support for performance and overall well-being of staff, and acts as a reward. The relative small size of the firms also adds to this effect, that people feel stronger ties to each other after spending time in smaller groups than in larger gatherings. In other words, there exists a working environment that when matching values of employees, feels rewarding to be part of, and contribute in.

Also, we found no evidence of symbols being used in the sample of firms. During questioning, founders seemed little interested in the topic overall, and did not see any potential use for it.

5.2 Formal controls – Organizational Learning and Legal Requirements

In this section we have looked at the “why” part of research question one and two. We have sought out the reasoning or purpose of applied control mechanisms. Through combining results from each category in Malmi/Brown (2009) framework, we have checked for similarities in purpose/reasoning for application of *informal* and *formal* control mechanisms separately. In this section we will present our findings regarding formalization of controls.

When examining what controls founders had formalized in their firms, we made two interesting findings. First, that many of the formalized controls found were due to legal requirements from government, or external demands from banks / suppliers / partners. For the purpose of our thesis, those controls held little interest for us initially. Legally required controls must be formalized so that they can be reviewed by a third party. These controls are common for all actors in an industry, and should not contribute to any differences in growth

between firms. Founders have no option to choose whether to apply the controls or not. They are a pre-requisite for doing business. However, in industries such as construction, that face extensive legal requirements, access to “control packages” that fulfil these legal requirements would be a major contributor to growth for a starting firm. Founder of Dahl Bygg AS, clearly stated that participation in the Systemhus alliance, and access to their control systems, was the major contributor to the rapid growth of his firm. Should the full costs of development of these control functions and systems be carried by each single actor, the resources available for growth would be significantly reduced. Also the entrepreneurial opportunities of the firm would be reduced, as they would be restricted by lack of controls for certain jobs or partnerships. The Systemhus alliance is built upon this mechanism, offering access to control systems for the purchasing loyalty of the individual local firms.

Secondly, excluding formalized controls due to legal requirements, the founders had chosen to formalize controls for purposes related to the retention of knowledge or training of staff. In Heimsjyen, production routines were formalized based on founder’s experience, to train staffing in “best practise”. Daesign used project management tools both for tracking progress and planning the specific projects, but it also allows to create a record of experiences/history of the firm. Rana Mek had not formalized procedures or routines, but relied heavily upon recruiting people with the right mindset and experience from his previous firm, thereby circumventing the need for it. However, Rana Mek had formalized routines for tedious production logging and tracking of errors. Each part produced was documented with both error log, and economic results. Having the “zero mistake” mentality, this both supports business strategy and allows the firm to correct mistakes in the future and systematically improve their work. Dahl Bygg AS facing the extensive legal requirements had no option to choose formalization or not, and all controls are formalized, with the exception of rewards and symbols.

It appears founders have actively used formalization of controls to be able to retain knowledge within the firm, maybe in an effort to reduce dependence on the individual employee. Another aspect is that the faster you are able to train your employees, the faster you get increased efficiency and are able to handle increased growth. So it appears that indirectly, formalization of controls are supporting growth when used for retention of knowledge and training of staff. The added internal bureaucracy seems worth it to the founders.

5.3 Informal controls – Foundation of strategy and Dynamic responsiveness

During our interviews it quickly became apparent that the areas that was of the most concern to founders where areas governed by informal controls. Most their emphasis, effort, and to some degree interest, was related to these areas. It may not be that strange considering that all informal controls are controls specifically applied by founder's choice. So why, what reasoning/purpose was behind the founders use of informal control mechanisms? We found it to be related to two major aspects, namely culture and flexibility.

5.3.1 Culture – “Like soil for sapling of strategy”

The cultural values emphasised by founder in their firms we found to be matched with the apparent “strategy” of the firm. The founders emphasise cultural traits that would support or create employees in position to fulfil some strategic properties desired by the firm. Heimsjyen with the strong client focus and high fluctuations in demand, emphasised flexibility as part of the firm culture. Employees was allowed to take time off with short notice, and choose what work to do, but was also expected to work overtime, contribute on all stations if needed and be flexible with work schedules in turn. We found similar situation in Rana Mek, who also provide emergency production, putting his whole firm to work if the clients need it. In addition, the founder of Rana Mek having the “zero mistake” mentality, emphasised openness and teamwork as cultural values in his firm. This helped ensure that you could discuss problems openly, learn from each other to prevent unnecessary mistakes in production. When asked about values in Daesign, founder quickly made it clear that quality of product was highly emphasised, you should do proper work, however small the job or client. In Daesign we also found a strong client focus. Being the smallest firm in our sample with just 2,5 full positions, we found no further information related to culture in firm. In Dahl Bygg, cultural values included “teamwork”, “respect of customers and colleagues”, “honesty” and “hard work”. For a firm facing continuous deadlines, and is mostly involved in project work, those cultural traits would support the firm performance in such an environment. This successful linking of cultural values and “strategic properties” presumably provides synergies that affect the performance of the firm in a positive manner.

5.3.2 Flexibility and “Dynamic Responsiveness”

By “dynamic responsiveness”, we think of the ability to respond to dynamics in a timely manner. We define this as aspects of the firm that is either an enabler of growth to the specific firm, or a pre-requisite. Using “Heimsjyen AS” as example of such “responsiveness”, would be the high flexibility in staffing and schedules, being a pre requisite for taking orders on short notice, and meeting changing client needs, or providing services to multiple markets simultaneously (sleepovers, business meetings, guided tours). Without flexibility as value in staffing, and informal organization of the firm, this would not be possible, and Heimsjyen would have to start declining certain requests and opportunities, and thus reducing growth. Where the informal cultural controls, by themselves, were used mainly to emphasise values among employees, this other purpose of informal controls was to support this “dynamic responsiveness” that the firm relied upon for growth. In “Heimsjyen AS” there was no fixed positions (chef/maid/waiter), and no formal or informal structure was found. Everybody in the firm had to be able to perform all tasks, and the allocation of tasks was informal and “on-the-go”. When asked about why there was no formalization of roles or responsibilities (assumed to be more efficient) founder stated that it would then require more people to solve the same tasks, and she would face problems when planning staffing. So in order to be able to respond to the dynamics of shifting client needs, it was beneficial to use informal task allocation. It is the specific use of informal control in this exact area, for this specific firm, that combined creates what we named “dynamic responsiveness”. The ability to respond to dynamics, in a timely manner. If Heimsjyen only had flexibility as cultural value, but chosen to formalize organizational structures, it would hinder “dynamic responsiveness” as it would be much more demanding to manage, and require more resources from the firm.

For Rana Mek, who also depended on delivering high level of service to clients, action planning was all informal, in addition to client feedback. The situation for Rana Mek is somewhat similar, they are flexible with meeting client’s needs, and are willing to work extra hours to meet short deadlines and handle emergency jobs. This makes both the planning of machine hours and maintenance very demanding. Founder stated that he had tried to make weekly and even daily plans/schedules, but they never lasted more than 15 minutes before

changes had to be made. So to deal with that, he dropped the action plans and schedules, and instead strengthened the “dynamic responsiveness” and flexibility of these areas by informal controls. Without this ability for “dynamic responsiveness”, the firm would probably not have the good position it does today with its clients.

Looking at Dahl Bygg AS, were the only informal control we found was cultural values, we also found links regarding informal controls and “dynamic responsiveness”. When questioned about the future and strategic planning in his firm, founder had clear ideas about having to reduce growth and shorten the order reserve. This was due to a desire to “regain the playfulness of the firm”. He wanted to free more resources in order to regain the “dynamic responsiveness” of the firm. What we found interesting was that the only informal control we discovered besides cultural controls, was the founders “rule of thumb” for evaluating projects and the overall input/output ratio of his firm. It worked as an informal “KPI standard” to which projects were both evaluated before acceptance, and as progress measure. Looking at the firm structure, with 2 daughter companies, a machine firm, a real estate firm and the main construction firm, we see that the “dynamic responsiveness” of Dahl Bygg, lies in the possibility of switching between own projects and orders for clients. Through the flexibility of capacity allocated to own projects (no deadlines), combined with the informal rule of thumb to evaluate projects, Dahl Bygg has the ability to respond to dynamics in a timely manner. So, through this informal KPI standard, the “rule of thumb”, and the flexibility of capacity, the founder is able to quickly assess and seize new opportunities as they come. Although on a different scale and organizational level, we found the basics to be the same as for the other firms.

For Daesign AS, this connection was not that clear. The firm is the smallest in our sample, and with one employee working at another location, it is the firm with the least amount of interactions between founder and staff. Informal controls (besides cultural) were related to client feedback, tracking employee progress on projects, governance structure, and policy and procedures for design projects. It took us a couple readings of transcript until we understood what was going on. The founder of Daesign has a very strong “professional orientation” which means that he will not do what he perceives to be “bad design work” even if that is what clients ask for. If that is the case, he rather seeks to work with the client finding a better design match for them, than producing what the client initially asked for. Creating “high quality design” is a core value for the founder, and he perceives it to be a vital reason for his success and growth. To understand the final point we need to take a closer look at his production. How does he go about achieving such a subjective goal?

Using what he calls a “brief” where he identifies key indicators of the “identity” of the client, he use that as basis for his designs. What he discusses with clients are not the design layouts itself, but the premises for the making. He then proceeds when presenting the results to clients, with a detailed description linking the brief-document signed by clients, to the design presented to them, highlighting the connections.

For outsiders like us as researchers, the process seemed pretty straight forward. Gather job description from client, draw the design desired, send to client for feedback, adjust and then deliver final product. But according to founder of Daesign, this is what usually ends up with some half decent “thrown together” designs, and is the very thing he seeks to avoid. So the production process and result is seen by him as unique for each project. He continuously seeks new expressions for different “identity indicators” and may examine surroundings and history of his clients for inspiration when making designs. He use informal controls in the form of some guiding principles that he considers during each project, but has not structured it further, allowing for a unique production process each time. So by having a flexible production, using informal controls, founder is able to serve shifting client needs and create unique products. In this manner founder emphasise and support business strategy of “high quality designs” that he considers a major contributor to his success.

5.3.3 Summary

In this chapter we have examined our findings and answered our research questions. We have presented seven key points of similarities across our cases. The seven points include:

- Founders use “rules of thumb” for quick and accurate evaluation, allows for fast decision-making
- Founders “jump the breaks” on growth, trying to reduce impact on firm, and control it.
- Founders have high trust in accountants / advisors for economic advice.
Advisors/accountants have strong connection/relationship with founders.
- Founders reward through culture – no culture of rewards.
- Formal controls are used for fulfilment of legal requirements, and for retention of knowledge in the firms.
- Informal controls: Culture as “soil for the sapling of strategy”, values emphasise and support “strategic properties” of firms

- Flexibility as value and informal controls are combined to achieve “dynamic responsiveness”

In the following section we will finalize our analysis by combining our findings in a mental control model. This will allow us to get a visual “picture” of how founders think about control in the firms facing rapid growth, and also enable us to better understand the complexity of the control mechanisms applied by founders.

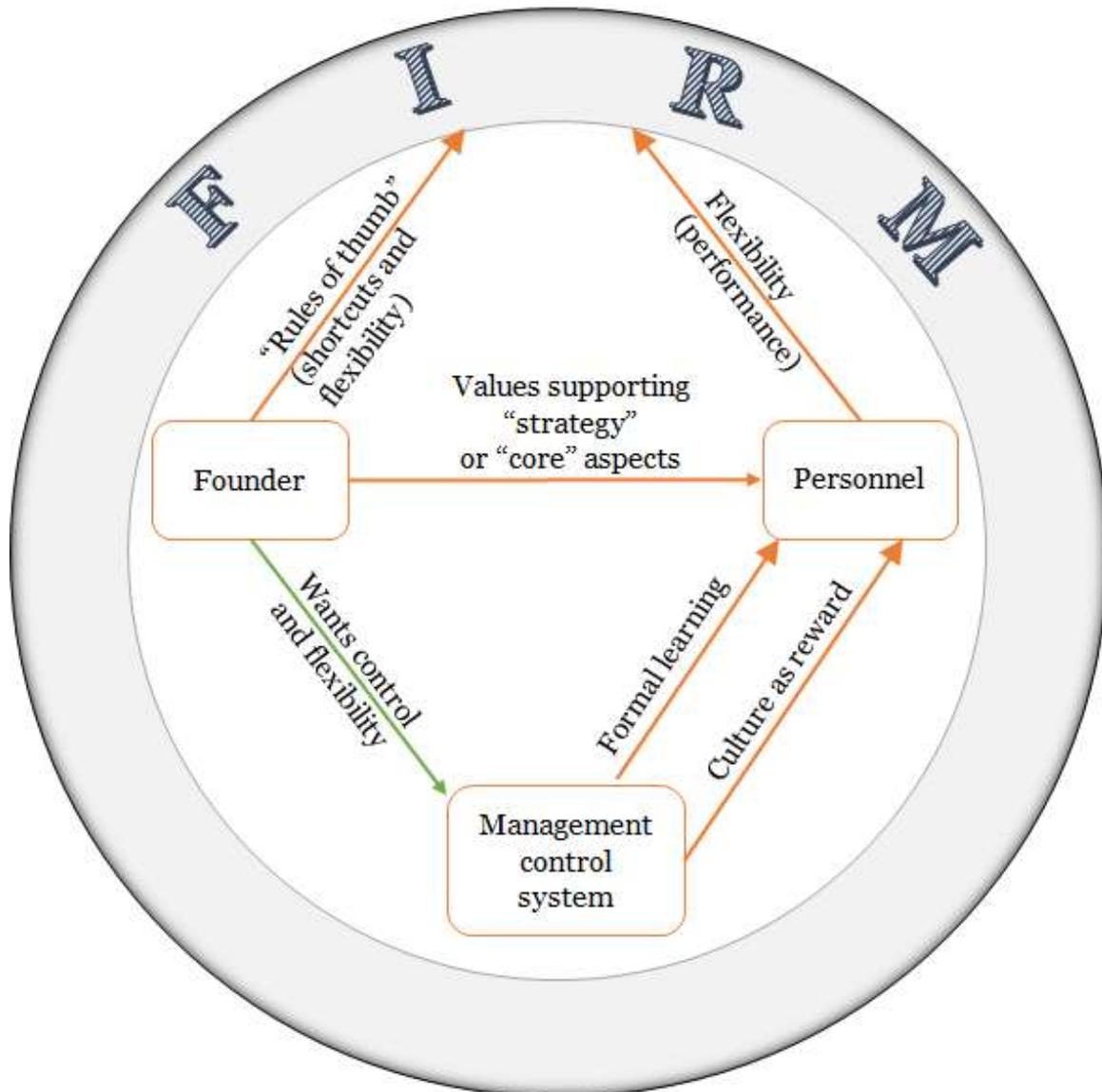
5.4 Elements of Key Importance - Cognitive Model

According to our findings, internal elements of mental model besides founder him/herself are *Personnel* and *Management control system*. We think that these elements are the most important parts of the firm that interact with each other and significantly affect the firm from within. Founders of all firms are establishing values that support business strategy and “core” aspects, acting like “soil” for growing “strategic properties”. These values supposed to be adopted by staff and followed during workday. Management control system helps founder to control his/her firm since founders’ requirements for MCS are ability to control and flexibility. As it was already discussed previously one of the reasons for formalization of controls is organisational learning so we can say that MCS is helping personnel to learn. Another interesting connection between MCS and staff is rewards. We are not talking about rewards in traditional way, as bonuses or monetary compensation for applied efforts and delivered results. Here we talk about being part of team where people have similar values, beliefs, mind-set, and goals as person do which is itself a reward for a person.

From our findings we know that founders pay extra attention to personnel and think that staff is very important for the firm. Employees possess skills and abilities that impact the firm, one of the most valuable is flexibility. In Heimsjyen employees are flexible in performing their functions, they can easily switch from one operation to another, waiters can help with cooking and cooks can help waiters if needed. Manager can do cleaning and laundry without difficulties. Similar situation we can observe in other firms of our sample.

Founders have their own way to timely respond on uncertainties and opportunities that firm faces during its lifetime. “Rules of thumb” is an instrument that helps managers to quickly analyse and seize opportunity when it is needed. Rule of thumb is so strong instrument that founder can change firm’s operations, focus and strategic objectives overnight.

Speaking about uncertainties and opportunities let us move on to external elements of mental model.



5.5 Cognitive model of founders

Uncertainties and opportunities are usually caused by external dynamic environment or as we call it in our model *Dynamics*. Founder from his side is monitoring *dynamics* and trying to reduce its impact on the firm by foreseeing changes and preparing firm for them. Same reaction from founder is observed towards *Client demand* element which basically represents demands from clients who expect, strain and push the firm to satisfy their needs. These two elements are the strongest “wheel-pushers of the firm”, if founder finds effective and efficient ways to successfully satisfy requirements from both elements the firm will have better chances to survive and grow.

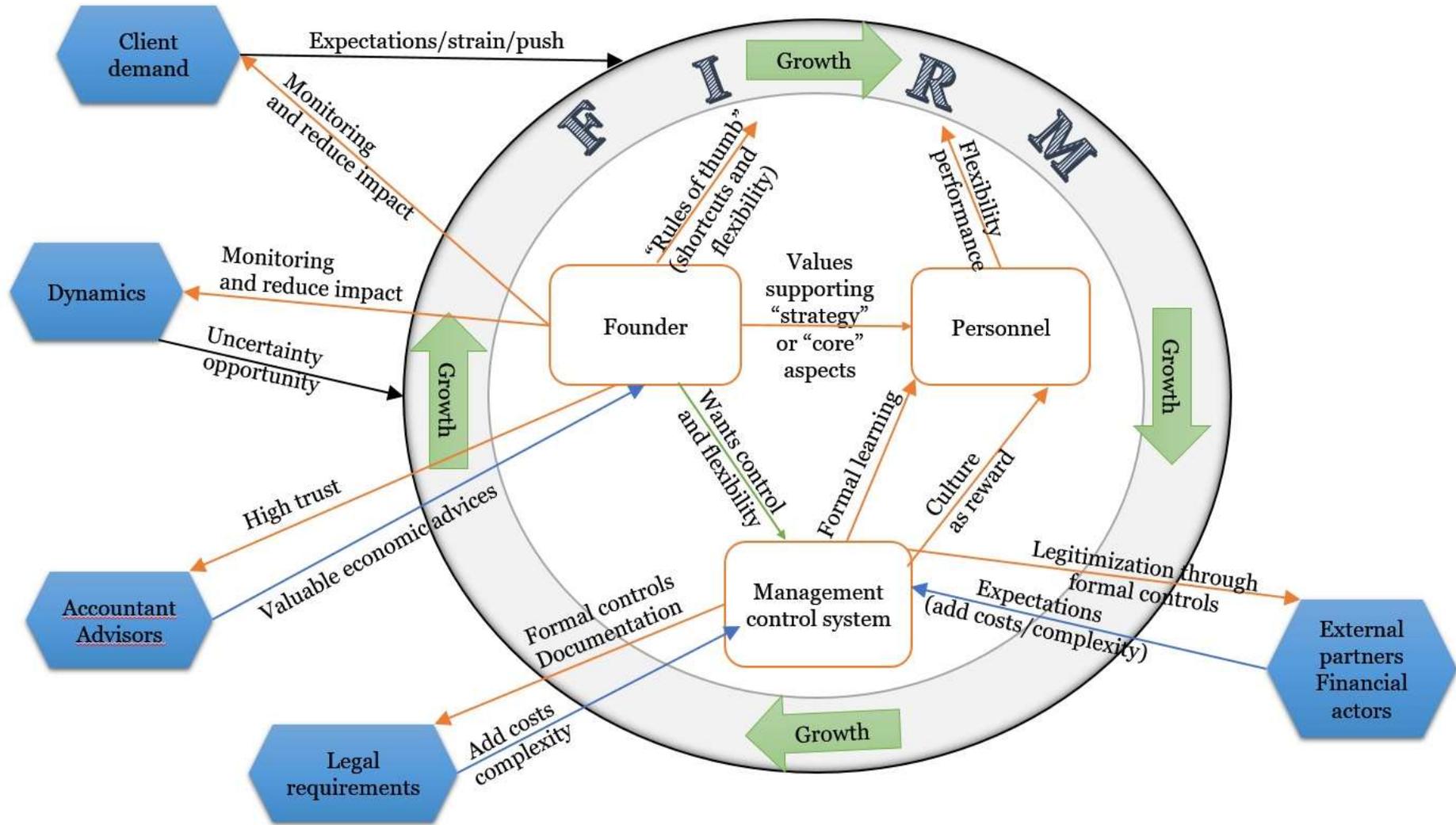
However, it is obvious that responding successfully only on demands from clients and dynamics is not enough for successful long-term existence of business since there are several more elements that contact and pose effects on the firm. We named those element *Accountant/Advisors*, *Legal requirements* and *External partners/Financial actors*. *Accountant/Advisors* element represents outsourced accountants or any advisors that help founder to control financial condition of the firm. These actors provide founder with valuable economic advices and founder can repay them with his/her trust. The more valuable advices are coming from *Accountant/Advisors* the more they trusted by founder. Trust can also be achieved if *Accountant/Advisors* have personal relationship with founder as family membership or friendship.

The only way to satisfy *Legal requirements* imposed by government is to formalize and document certain controls of MCS. Usually small businesses do not have too much of a burden in form of legal requirements, however when firm is growing government poses tougher legal requirements upon the firm in order to regulate its activities which adds costs and complexity for running business. In case of Dahn-Bygg this pressure is one of the impediments of growth since in order to grow at a certain size government rules require from the firm to submit some additional reports and formalise particular controls. *External partners/Financial actors* influence MCS in the same manner as *Legal requirements*, founder will have to formalize certain controls in order to comply with loan agreements or other financial relationships with financial actors and business partners.

Connecting all elements and put them together in one model we will get mental model of founders which shows how they think and what things are of high priority for them.

We named this model “the wheel of compelled growth” for several reasons. One of the reasons is that we see the firm as wheel which is rolling throughout the time at different speeds and it can be of different sizes with elements inside and outside that either help the wheel to roll faster or slowing it down. Growth is compelled because founders do not focus on growth, do not emphasize it, growth is coming organically and unintentional. Founders see it as an “external force” they have to deal with, rather than blessing from the sky for their efforts and dedication.

This model shows how founders think about their firm through management control perspective. Elements inside the wheel represent a core of the model, things that allow to turn the wheel so to say, where management control system is the main lubricant. We can replace MCS element in the model with tables *Visual summary of MC* designed earlier in empirical chapter for each firm and model will represent same idea. As we already mentioned *Client demand* and *Dynamics* are pushing the wheel, *Accountant/Advisors* and *External partners/Financial actors* support the wheel while *Legal requirements* form a slope for the wheel. When the firm grows bigger, the wheel is going to enlarge and the slope or the burden of *Legal requirements* will become steeper making it harder to keep going at the same speed.



"The Wheel of Compelled Growth"

5.6 Re-visiting problem statement

The purpose of this thesis was to explore the SMB context of management controls, with particular attention to gazelles. We wanted to know how founders in the smallest firms deal with control issues and fast growth. Our problem statement was as follows:

“How do founders of gazelles apply control mechanisms to facilitate, manage and control exceptional growth?”

As we have seen from our empirical findings and analysis, by allowing for careful examination of informal controls, and incorporating cognitive control model of founders, the emerging “control picture” is quite complex. We have found interesting and important control mechanisms in each of the three “dimensions”, formalized management controls, interactions constituting informal controls, and the mental control model of founders. We have found there to be significant "cognitive elements", that exists beyond the sphere of pure "management controls", that plays a major part in how founders manage and control the firms.

Examining the first part of our problem statement, how founders apply management controls to facilitate growth, we learned that they simply do not. Our findings indicate that founders do not strive for growth, they do little or no marketing, and view growth as “external force” they have to manage and control. They realize that some growth is good and healthy for the firm, but it is the speed or amount of growth that concerns them. In hindsight, a better and more correct phrasing according to our findings would be that “founders apply control mechanisms to *allow* for growth” without it disrupting the organization. How founders manage and control exceptional growth, we have answered through the combined results presented within Malmi/Brown (2008) framework, and the eight points presented in analysis section. The cognitive model shows how the founder thinks in terms of control and managing the firm, and allows for a more or less complete "picture" of the control mechanisms impacting the firms.

6 Conclusions and future research

As discussed in introduction, the purpose of this thesis is to get insights in how MC are used by entrepreneurs in fast growing, small or medium sized firms. By examining how founders

of gazelles manage and control, we have gained some significant insights as to how they manage fast growth. Looking back at where we started with our literature research, we can safely say that this has been a tremendously rewarding learning process for us as researchers. We have had to challenge our understanding of controls, the concept of mental models, and the situation of the founders at every turn. Looking back at our expected findings and research challenges, we can truly say that we got a few surprises. The amount of formalized controls was much higher than what we expected to find, and the control systems more sophisticated than what we expected, considering the number of employees in our firms. Also, to some extent, the sophistication of the IT-systems founders used especially in Rana Mek AS, and Dahl Bygg AS truly surprised us. In addition, we had some presuppositions about our founder's interest in economic performance measures, that was promptly put to shame. Their daily focus is not economic measures, but as we have discussed through this whole thesis, lies almost exclusively on the human resource aspect of management. The founder's express strong ties to the people working for them, and to us at least, communicated great concern for the well-being of the employees.

Based on our empirical findings and analysis we can conclude with the following points.

1. Fast growth of gazelles is not intentional, but organic and perceived as a compelling external force that founders tries to manage.
2. Founders applies "rules of thumb", as proven short-cuts, to enable fast decision making.
3. Flexibility as value in personnel and informal control mechanisms are combined to achieve "dynamic responsiveness".
4. Founders rely on informal controls for flexibility and formal controls for retention of knowledge and fulfilment of legal requirements.
5. Founders have strong HR focus, and views personnel as most important aspect of firm.
6. Culture and values is strongly linked with "strategic properties" desired by the firm, and acts as "soil" for strategic development and alignment.
7. Founders have all exceptional connection to advisors / accountants that has experience or competences that the founders are lacking.

6.1 Contributions

By completion of this thesis we believe we have made an overall contribution to the existing research connected to the areas both of entrepreneurship and also to the field of management controls. Our findings should be of interest to entrepreneurial researchers, and those interested in management controls. Also, it should hold some interest to the public sector with interests in boosting and facilitating growth for new firms, or bringing SMB firms to “maturity”.

Firstly, there exists in general little research of management controls in SMB context, and even less in a Norwegian SMB context. By completion of this thesis, we believe we have made a valued contribution, and a good supplement to Norwegian SMB context of research. Specifically, by mapping applied controls of SMB gazelles within the Malmi/Brown (2008) framework, we have provided some insight as to what controls are used in this context that might be interesting for further research.

Secondly, not much research is done connecting management control and entrepreneurship in SMB context. By completion of this thesis, we hope to have shown that research in entrepreneurship and management control could benefit greatly by combining forces, and could give potential new insights for both fields of research. From our own findings, we have highlighted the importance of control for entrepreneurial firms, and also shown that the entrepreneurial context provides specific control challenges. Specifically, we have added knowledge of how entrepreneurs have to balance the need for formal controls, with the flexibility of informal controls to stay “innovative” and maintain the “entrepreneurial spirit” of the firm.

Thirdly, by incorporation of the “cognitive mental model” of founders, we hope to have caught the interest by both entrepreneurial and management control researchers. By including this aspect in our thesis, we gained valuable insights related to controls and the overall way of running a successful entrepreneurial firm.

6.2 Limitations

Our paper is an explorative study designed to research the ways of application of management control mechanisms by founders during fast growth. Our focus and viewpoints, have been mainly through the eyes of management control, and through the framework of Malmi/Brown (2008). Therefore, there may be aspects that were not covered or not thoroughly analysed.

Time boundaries and financial obstacles set significant limits for gathering appropriate data and level of “diving” deep into research problem. That is why our study is limited with only four cases, and we have only covered “similarities” as opposed to including “differences” in our analysis of empirics.

Also since the paper include only qualitative research methods we focus only on our cases and we are not able to generalize our findings, beyond the cases we have researched.

6.3 Suggestions for future research

Since our study was conducted on only four cases we would advise to perform in future either wide scale research including big sample or narrow the sample to one case study with deep analysis.

Quantitative research embracing a large sample of firms will give a chance to test our ideas on big amount of firms and see how and to what extent our ideas can be generalised. Another suggestion for future studies may be to conduct a research based on case observation where researcher can follow only one founder but for longer period of time in order to observe how his/her mental model and understanding of MCS would change and evolve throughout the years.

One of aspects that we did not have a chance to research deeply is strategy of firms. Since strategy is an important part of MCS and firm's long-term functioning we would suggest during observation research to focus on strategy and study it thoroughly.

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<http://www.gemconsortium.org/> - Global Entrepreneurship Monitor (Reports for Norway 2004-2013)

<http://www.dn.no/Gasellene/> - Dagens Næringsliv – Newspaper articles about gazelles, Oktober 2015.

<http://www.dn.no/gasellene/2015/12/09/1822/Grndervirksomhet/disse-tre-tingene-m-norge-bli-bedre-p-hvis-vi-skal-sl-sverige> - Dagens Næringsliv - DNB Director discuss areas needed to improve entrepreneurial situation in Norway.

<http://www.economist.com/news/leaders/21676767-entrepreneurs-are-redesigning-basic-building-block-capitalism-reinventing-company> - The Economist - Leader October 24th.

Conferences

20/10 2015 «Gasellekonferansen» – Scandic hotell, Bodø.

- Conference held by the newspaper DN, about the conditions and development of gazelles. Focus on regional (county) firm's and general development and economic outlook relevant for gazelles. Award for "gazelle of the year" handed out.

Appendix

1. Figures and Tables

Table 1 – Survival rate of established firms in Norway, www.ssb.no

Survival Rate of Established firms Norway					
	Percent of firms that survive				
	1 år	2 år	3 år	4 år	5 år
Established year					
2007	54,5	47	39,4	34	29,8
2008	50,3	44,7	37,6	32,9	
2009	48,4	44,1	37,2		
2010	48,6	44			

Table 2 – Description of control categories Malmi / Brown 2008 framework.

The five main controls is described in the table below, with references to the contributors for each category.

Elements	Description	Components
Planning	Ex-Ante form of control (Flamholtz et.al 1985) Goals. Standards to be achieved in relations to goals. Enables congruence across functional areas of the organization.	Action planning, short-term goals (12 months) has tactical focus. Long-range planning has a strategic focus.
Cybernetic	Five characteristics (Green and Welch,1988). Measuring (quantifiable). Standards of performance (targets). Feedback (enable comparison with standard). Variance analysis of feedback.	Budgets, Financial measures, Non-Financial measures, Hybrids (BSC)

	Ability to modify/adjust system	
Reward / Compensation	Motivating and increasing performance of individuals and groups by attaching rewards to control effort direction, effort duration and effort intensity.	Attaching rewards to achievement of goals (Flamholtz et.al 1985)
Administrative	Direct organisation design and structure. Monitoring behaviour, making individuals accountable for behaviour (governance). Specifying tasks or behaviours (policies and procedures)	Organizational design and structure (Otley and Berry,1980,) Governance (Abernathy and Chua 1996), Procedures and policies (Macintosh and Daft, 1987; Simons, 1987)
Culture	Values, Beliefs and social norms that are established influence employee behaviour.	Value-based controls (Simons,1995), Clan controls (Ouchi, 1979), Symbols (Schein, 1997)

(Description of control characteristics of Malmi/Brown Framework, "Management control systems as a package - Opportunities, challenges and research directions" Teemu Malmi, David A Brown, Management accounting research 19, 2008.

Table 3

Category	Propositions
1.Contextual/Environmental	<p>a) <i>The more uncertain the external environment the more open and externally focused the MCS</i></p> <p>b) <i>The more hostile and turbulent the external environment the greater the reliance on formal controls and emphasis on traditional budgets</i></p> <p>c) <i>Where mc's focused on tight financial controls are used in uncertain external environments they will</i></p>

	<i>be used with an emphasis on flexible interpersonal interactions..</i>
2.Size (nr.employees)	<i>a) Large organizations are associated with more diversified operations, formalization of procedures and specialization of functions</i> <i>b) Large organizations are associated with more divisionalized organizational structures</i> <i>c) Large size is associated with an emphasis on and participation in budgets and sophisticated controls</i>
3.Strategy	<i>a) Entrepreneurial strategies are associated with both formal, traditional MCS and organic decision-making and communications</i>

Based on Chenhall 2003 “A literature review”.

2. Guide for semi-structured interviews

Main topics to cover:

Firm specifics, founder background, Formal controls, informal controls (social managerial interactions?).

A) Founder background: *(Age, education/ profession, other “investments” startups, time in industry / similar business.)*

1. Can you tell us a little bit about yourself and your background?

Areas to cover:

- Main reason for starting firm
- education background
- professional background
- previous entrepreneurial experience
- previous industry experience

B) Firm specifics: *(Background/history, founders understanding of his business (process/value chain), introduce generic business model and discuss around it.)*

1. **Tell us shortly about history of your firm.**
2. **Tell us shortly how you see your business working.**
3. **What are main and most important processes?**

C) GROWTH

As we know you have achieved tremendous results and now you are in the list of the most successful firms in Nordland county. We would like to know a little bit about growth of your firm.

1. **Did you initially plan to grow?** *(Did you one day say to yourself that you are going to grow? Or maybe you declared in your plan/strategy/documents that during some certain period of time you will grow to particular size?)*

If Yes:

- When did you make this decision?
- Why did you want to grow?

2. Do you and your firm face any particular challenges related to the rapid growth?

3. How do you measure growth? *(Number of employees, income, profit, number of clients)*

4. How do you handle/respond to growth in terms of control functions? *(Liquidity, people, locations, etc. Hire professional managers, hire more people in general, establish more controls/checks/rules/routines/official policies.)*

5. Has your work changed, do you work in a different way now, then before this growth?

(For example, in the beginning you were spending more time on interaction with your employees, did not have too much of paperwork and now, maybe, you have to process more internal reports from employees, manage more routines, procedures?)

6. Do you have more internal rules now than in the beginning?

7. Why do you think it happened?

8. If you look ahead a year or two, what controls or systems, would you like to have to help you manage the firm?

Formal controls/Informal controls: What routines, formalized control functions are applied in the firm now? Informal controls: Values, culture, beliefs, social norms, and team based learning?

D) Planning

1. How do you plan for the future, short term and long term?

Areas to cover (long term)

- Strategy / plan for next 5-10 years
- Why you need to plan
- How is it presented? (*Document, sealed, signed. Everybody can take it, read it, and discuss it?*)

Short term:

- Yearly plan?
- How do you use it?
- How is it presented? (*Document, sealed, signed. Everybody can take it, read it, and discuss it?*)

Action planning:

- Daily plans
- Weekly routines
- Presentation / documentation

E) Cybernetic

1. What kind of IT support systems do you have? (*CRM, inventory systems, registering work hours, salary support, accounting systems*)

Areas to cover:

- How do you use them?
- Who uses the information
- How these systems help you? (*specific numbers, calculations you do to keep track of certain elements*)
- To what do you compare these numbers? How do you know if “x” is good or bad ?

Budgets

2. Do you have a budget in form of document?

Areas to cover:

- the most important parts of budget
- When / how often is it used
- Reasons for using budget.

Financial measures

3. How do you use accounting numbers?

Areas to cover:

- Most important accounting numbers
 - Why these specific numbers?
 - Targets, are they in plan/strategy/documented?
- How is accounting numbers helpful in controlling the firm ?

Non financial measures:

4. What kind of non-monetary information is important for you? (*How/what do you keep track of? For example, Time spent on some activities (phone calls, meetings, processing information), customer satisfaction, feedbacks, level of quality measures, learning/training, productivity measures?*)

5. Is it registered in system or do you keep track on paper reports with signatures?

- Why do you need it?
 - How does it help you?

Hybrid systems:

6. Do you have a system where you can collect and check financial and non-financial measures/targets/costs/feedbacks that we discussed before? (*Not necessarily IT system but maybe in form of catalog/archive with paper reports?*)

- Why?
- How does it help you?

f) Rewards

1. Do you have any reward, bonus, benefits, or compensations for employee performance?

If yes:

- 1. How do you reward your employees?**
- 2. Do you have written rules/policies/agreements where the process and conditions of reward is clearly stated?**

3. Is it important to reward employees? why?

4. How does it change performance of employees or firm?

g) Administrative controls

Structure

1. How do you organize daily work in your firm, who does what?

Areas to cover:

- Is it clearly outlined in firm's policy/documents?
- Do you have an organizational chart?

Governance

2. Do you have officially documented department heads, leaders, board and commissions?

If Yes:

- How do they help to control your firm?
- How does the board of directors keep track of your firm? (*What information, what reports do they require or discuss on meetings? Policies and Porcedures?*)

Policies and procedures

3. Does your firm have policies, procedures/rules that are required by banks, government, clients, or providers? (*Banks may ask accoutnig reports, budgets. Government may require certificates, check from sanitation, fire fighters, tax office. Client and providers may ask ISO certificates.*)

H) Culture (*Values like team work, leadership in your industry, excellence, always do what you promised, constant learning, share, collaborate, put yourself in clients shoes*)

1. What cultural values do you embrace in your firm?

- Why?
- How do these values/beliefs appear on the workplace?
- How does it help you in your daily work?
- Is it presented in form of document/code of conduct?
 - Do you or anybody else in firm use it?
 - How and Why?

Symbols

2. Do you have dress code in your firm?

- Why?
- Is it stated in the policy of firm?

3. Do you, and if so, how do you manage the image/identity of the firm? (*Location of office, outside and inside interior, type of cars (electro, luxury), specific actions in customer relations etc*)

- How does it help you in your work?

Clan**14. Do you have groups of salesmen, maids, workers, top managers, janitors, receptionists, kitchen workers who create subcultures in your firm?** (*They usually hang out together, they have their own unofficial rules of how to do things, they learn from each other, and newcomers should be in good relations with the group that s/he belongs to.*)**If yes:**

- How do you manage these groups with their own traditions, rituals?