INTERPLAY OF CONTROL IN A CONTEMPORARY ORGANIZATION

Laskentatoimi
Maisterin tutkinnon tutkielma
Tuomas Koskiniemi
2009

Laskentatoimen ja rahoituksen laitos
HELSINGIN KAUPPAKORKEAKOULU
HELSINKI SCHOOL OF ECONOMICS

HELSINKI SCHOOL OF ECONOMICS (HSE)
Department of Accounting and Finance

INTERPLAY OF CONTROL IN A CONTEMPORARY ORGANIZATION

Accounting
Master´s thesis
Tuomas Koskiniemi
Spring 2009

Approved by the Council of the Department ____ / ____ 20____ and awarded the grade____

____

Helsinki School of Economics Abstract

Master's Thesis in Accounting 20-04-2009
Tuomas Koskiniemi

INTERPLAY OF CONTROL IN A CONTEMPORARY ORGANIZATION

Objectives

Purpose of research is to identify interplaying control in contemporary organization and provide new understanding in management control and their applications in organizations. This research is conducted in R&D organization and provides a description of formal and informal control mechanisms that are interfacing. This study concentrates particularly on the interplay of budgetary control and organizational culture.

References

This research refers to management control literature supported with academics related financial planning, organizational science and sociology. Theory is supported with evidence from case organization. Empirical evidence is gathered from R&D organization.

Methodology

This research has contingency-based approach to management control research. The research design is based on Alvesson & Kärreman (2007) framework of research work on mystery creation and solving. The empirical evidence is gathered with semi-structured theme interviews. Empirical evidence is employed though the theoretical model presented in literature review.

Results

This research presents a case study on interplaying controls. Results indicate how different ways of control can be interfacing and illustrate how formal control can be embedded to informal control. This study describes how financial planning can be part of organizational culture and presents the mechanisms how this is employed in practice. This study also contributes on discussion related to controllership in professional organizations.

Key words

Management control, professional organization, financial planning, organizational culture

HELSINGIN KAUPPAKORKEAKOULU TIIVISTELMÄ

Laskentatoimen tutkielma 20.4.2009
Tuomas Koskiniemi

OHJAUSMENETELMIEN VUOROVAIKUTUS MODERNISSA ORGANISAATIOSSA

Tutkimuksen tavoitteet

Tutkimuksen tarkoituksena on tunnistaa johdon ohjausmenetelmien keskinäistä vuorovaikutusta nykyaikaisessa asiantuntijaorganisaatiossa ja antaa uutta ymmärrystä johdon ohjauksesta ja sen menetelmistä käytännössä. Tämä tutkimus on suoritettu tuotekehitysorganisaatiossa, ja antaa kuvauksen formaalien ja epäformaalien kontrollimekanismien keskinäisestä vuorovaikutuksesta. Tutkimus keskittyy eritoten budjettikontrollin ja organisaatiokulttuurin väliseen suhteeseen.

Lähdeaineisto

Tämä tutkimus perustuu johdon ohjausta käsittelevään kirjallisuuteen. Teoria tukeutuu myös tieteelliseen tutkimukseen liittyen taloudelliseen suunnitteluun, organisaatioihin ja sosiologiaan. Empiirinen materiaali on kerätty haastatteluin tuotekehitysorganisaatiosta.

Aineiston käsittely

Tutkimuksessa käytetään kontingenssiteorian mukaista lähestymistapaa case-organisaatioon. Tutkimusmalli perustuu Alvessonin & Kärremanin (2007) esittelemään viitekehykseen mysteerin luomisesta ja sen ratkaisusta. Empiria on kerätty semi-strukturoitujen haastattelujen avulla. Tutkimuksessa empiirisiä havaintoja tarkastellaan teorian pohjalta luotua viitekehystä vasten.

Tulokset

Tutkimus esittää case-organisaation jota ohjataan vuorovaikutteisilla ohjausmenetelmillä. Tutkimustulokset osoittaa kuinka eri ohjausmenetelmät ovat keskinäisessä suhteessa ja miten formaalit kontrollit voivat olla sisäänrakennettu informaaliin kontrolliin. Kyseisessä case-organisaatiossa taloudellinen suunnittelu on muodostunut osaksi organisaatiokulttuuria. Tutkimus esittelee eri mekanismeja kuinka tämä on toteutunut käytännössä. Tutkimus osallistuu myös tieteelliseen keskusteluun asiantuntijaorganisaation kontrolloinnista.

Avainsanat

Johdon ohjaus, asiantuntijaorganisaatio, taloudellinen suunnittelu, organisaatiokulttuuri

Table of Contents

1. INTRODUCTION

Control is critical for organizations to function according to its purpose and objectives. Organization science, economics and sociology has investigated this theorem of management over two centuries. Widely recognized such as Adam Smith, Karl Marx, Frederick Taylor and Max Weber have contributed to this work with their widely referred theories. Adam Smith in the 18th century introduced the concept division of labour in his classic work; Karl Marx argued the necessity of management control in his theory of capital in order to ensure the profitability in business and its fundamentality to capitalist economy. Frederick Taylor introduced concept of rationalization into management and found the basis of scientific management. This thought of rationalization was employed by Max Weber in his theory of bureaucracy, which he credited being unbiased and rational. Weber argued that an organization needs written rules, standardized processes and formal authority to function, thus the bureaucracy as vehicle of control is necessary in effective organizations. (Hatch, 1997) These theories have been noticeable while creating modern day academics in organisation science, sociology and economics.

The world has changed since those days, the economic and social development, technological change and globalization have altered the society and its structures. Since Weber's golden age, the strong believe in bureaucracies have been torn down. Burns & Stalker (1961) suggested that bureaucracies have limited effectiveness in modern day post-industrial flexible and fast-pace businesses. This transition in organizational structures has also definite affect on management and the exercised management control.

In the question of modern capitalism and control lie a paradigm between basic concepts of control and how it enables the firm drive success in future. It is critical to understand how we drive for the value and performance of company. It means that there is a need to recognise the controls for business. Identifying the value drivers behind the figures and managing them is critical for this organisational performance. These issues combined with aspects of professional organisation where the most important assets are the professionals who are creating the value to the company, creates a complex set of variables which need management control. Therefore understanding of how the professional organization is controlled is crucial necessity for profitable firm.

1.1 Motivation of the Study

The control has been under broad scientific research and review both in management accounting and organizational science (Chenhall, 2007, 2003; Tuomela 2005; Das & Teng, 2001, 1998; Langfield-Smith, 1997; Abernethy & Chua, 1996; Otley, 1994; Simons 1995, 1994, 1991, 1990; Hopwood, 1987; Merchant 1985, Flamholz, 1985; 1983; Otley & Berry, 1980; Ouchi, 1980, 1979, 1977). Ouchi (1977) conceptualizes control as an evaluation process which is based on the monitoring and evaluation of behaviour or outputs. Particularly in the cases of modern contemporary non-bureaucratic organization and organizational changes, the need for systems that enables control and give ability to steer the change is essential for success. The management will and should not be able to participate in every action, so different methods for controlling the activities to ensure that the right things must be utilized. Basically, the choice is between the trust and control. Finding the right ratio between these two variables is a difficult task and usually is depended on contingent factors.

Conventionally management control systems have been understood as passive tools to support management decision making. The view of the concept of control package was limited to the accounting and measurement systems. The public image of accounting has been that it is a package of "neutral set of techniques which objectively record and represent the results of organizational activity" (Roberts, 1991). The accounting information can be described as intact organizational truth which helps to express and enforce expectations, and as a resource of power. (Roberts, 1991) This view became obsolete in the 70's and 80's, when the researchers started to suggest that control consists also other elements, such as rules and culture. (Flamholz, 1983)

Management have a vast choice of control systems, they can be categorized into the formal and informal controls (Anthony & Govindarajan, 1998). These systems can be divided into two categories: formal ways and informal ways of control. Formal ways of control are performance measurements, audits, standards, procedures, rules and policies and other formal mechanistic controls. Informal ways of control are the social and behavioural controls such as organizational culture, norms, values, self-regulation and routines.

These formal and informal control mechanisms are the means and hence the design of procedures and instruments by which the organization utilizes control. According to Das & Teng (1998) the profound aim of control mechanisms are to support in achieving an adequate level of control. Adequate level of control can be seen as profound device for gaining maximum performance.

Management control systems are implemented and employed in order to secure the alignment of the actions and behaviour of the individuals in the organization (Chenhall, 2003; Flamholtz et al, 1985). The old-fashioned conception's of management control systems were simplistic feed-forward and feedback processes that merely allowed the planning and prediction of behaviour (Otley & Berry, 1994). Abernethy & Chua (1996) emphasize the importance of exploring how accounting and non-accounting controls can act as complements or substitutes for each other. If the control package is not adequately balanced and linked between a budgeting or an accounting measurement system and the other essential components of a control system, then the system may not fulfil its intended functions. Abernethy & Chua (1996) and Chenhall (2003) argued that the major part of the literature has seen the management control systems as isolated and technical system which is separated from social and cultural aspects of control.

According to Tuomela (2005) the informal and formal control systems are interfacing. Either can be dominating, they can be contradicting, they can be interacting or they can be combined in a customized form. Alvesson & Kärreman (2004) states that the literature mostly suggests that the socio-ideological controls (here informal) and technocratic controls (here formal) are separate and exclusive in systems because the "complexity and uncertainty make rules prescribing behaviour and the precise measurement of results impossible". According to Roberts (1991) the accountability in hierarchical organization produces the sense of our role and its relationship to others. Roberts argue that the formal and informal ways of control are separate and the social forms of accountability can be affected by the informal control mechanisms. Every organization adopts a mix of formal and informal controls that are highly interdepended. Formal and informal systems both control the behaviour of people within organizations. The research has been debating over this issue for longer period. The earlier study indicated that the formal and informal control systems are separate and they function in different context. The focus has also been highly concentrated on formal controls. The recent studies have indicated contrary, this paper will in following text present two case studies on the combination of formal and informal control systems.

Both Alvesson & Kärreman (2004) and Frow et al. (2005) are able to present findings that suggest that both controls can be in a relationship in the whole management control system. Alvesson & Kärreman (2004) argues that "technocratic control systems can be identified as non-obvious sources of socio-ideological control". In their case study in a multinational knowledge intensive company presents evidence of interplay formal and informal controls. It illustrates an example on how performance measurement and target setting can be combined with organizational culture. In the Frow et al. (2005) research the case company involved in global technology consultancy business utilized a formal performance measurement tool which embedded informal controls and encouraged the management to control informally. These findings are contrary to the previous literature (Frow et al, 2005) which widely suggests that formal and informal controls act separately. Frow et al. (2005) pointed out that despite the importance of balanced utilization management control system, the knowledge is weak about the organizational provision of formal processes managers are expected to exercise and how the managers are actually able to use them when they are faced with problems in organizational and management accounting changes. The previous literature is strongly concentrated on the formal control -oriented literature and the social or political -oriented research of management control system has received less attention than its importance. The organizations in these case studies implemented informal control mechanisms in formal controls, which indicates that these controls can be used both in formal and informal ways. The researches also presents how can be formed a shared responsibilities and accountabilities with a formal management control system. Compared to previous literature these findings are significant and represents a basis for future study.

1.2 Research Question and Object

Thus, for this research it is interesting to find out that how does the Alvesson & Kärreman (2004) model of technocratic and socio-ideological controls apply in a professional organization. This study concentrates particularly on the interplay of budgeting and organizational culture.

Professional organization in this context is a research & development (R&D) organization in a global technology company. The purpose of this case study will provide new understanding on management control and their applications in organizations. This study tries to recognize and describe the interplay between formal and informal controls. R&D work is drastically stated commonly understood and described as engineers' ballpark where business orientation kills innovation and de-motivates people of performing with their best capabilities.

This thesis studies management control in its organizational context. The research adopts contingency-based management accounting theory, which is found on the assumption that there is no universally applicable management control system, but the choice of the appropriate system is contingent to the organizational environment. (Chenhall, 2003) The contingency-based literature emphasizes the importance of the contextual factors in the management control systems research (Chenhall, 2007, 2003). R&D organizations represent a clear gap in the previous research and therefore set an interesting context for this research.

The researcher has working experience from this organization. He has been participating financial planning process and during this he has been experienced wide discussion on financial planning and its interplay with organization culture.

Thus, the preliminary research question will be:

- *How financial planning and organizational culture as management controls interplay in the contemporary organization?*

Secondary research question is derived from this:

- *How R&D work is controlled in case organization?*
- *Are R&D professionals motivated for business performance?*
- *Does interplaying management control have a strategic importance for organization?*

1.3 Research Design and Structure

This design of this research is based on Alvesson & Kärreman (2007) framework of research work. Their philosophy of conducting a research work is two-fold: mystery discovery/creation and subsequent mystery solving. They see empiria as a source for develop theoretical ideas "through active mobilization and problematization of existing frameworks". The idea is to use the empirical material to "facilitate and encourage critical reflection", as an input for building theories. The empiria is used to challenge, revise and clarify theories.

This study has a managerial approach; literature review contains mainly management accounting literature, which is supported by some literature from organizational and sociological studies. The empiria is gathered from information technology firm's R&D organization. Upper middle level management and financial controllers assisting them are interviewed concerning controlling mechanisms in their organizational context. The purpose is to enlighten the theory with empiria. This research will be interpreted by the research framework which bases on Alvesson & Kärreman research.

This descriptive case study will be conducted with semi-structured theme interviews. The research can have explanatory and illustrative implications. The material received from interviews will be interpreted on the base of management control framework.

The actual research work is done in iterative process. The theory of management control is detailed first stage. Second step is participation to the organizational reality and developing the actual research problem according to this. Third part was to introduce the researcher to planning and culture literature and create the actual themes for empiria gathering. After going through the empiria, the theory is finalized.

In the second chapter existing management control literature will be illustrated. The distinction to formal and informal controls is made and these concepts are introduced to the reader. It also covers introduction to planning and organizational culture. As conclusion of literature review second chapter is ended with presentation of framework for this research. The third f chapter presents the methodology carried out in this case study. Fourth chapter introduces results of the case study and discussion. Fifth chapter concludes this research paper with summary of findings and suggestions of future research.

1.4 Scope and Limitations

This research concentrates on management control and its utilization in case company. Sociological and organizational theories are not specifically employed in this research. The approach for this study is managerial accounting. Organizational control is excluded in this study and no literature on this is introduced. Specific strategy literature is also excluded as well as deep-down analysis organization culture literature. This research is not discussing on professionalism and motivation theory. This means that the research mostly contributes to management science academics.

This research is a case study which is conducted amongst upper-middle level. Empirical evidence on organization culture in R&D organization might be left scarce. However, on the other hand interviewees are responsible for managing and controlling the organization and therefore they should have excellent viewpoints and insight on the case organization.

Research is also excluding organizational change literature. The case organization experiences sort of constant reorganization due to external and internal factors. These factors are not analysed in this research.

As stated this research is discussing on management control and its setting in this specific case company. This study is aiming describe the existing controls in case organisation. This study is not examining how these are build despite the fact that this study has explanatory aspect. This study is not also aiming to illustrate new design, but describe commentary raised in empirical data gathering. These aspects fits into the nature of this research as relying on Alvesson & Kärreman (2007) design introduced in previous section.

2. CONTROL IN LITERATURE

This chapter discusses on the management control in academics. This chapter also covers short introductions on planning as control and description organisational culture and professional organisation. Management control discussion is divided into following sections: management control, management control systems, management control in contingency-based literature, management control and its linkage to strategy, formal and informal control and interfaces of management controls. First four sections on this discussion handle the topic in the more general and abstract level, and two following sections introduces formal and informal control more profoundly.

2.1 Management Control

Control is a process that ensures desired objectives will be achieved and all the activities are planned to conform according to this. Control can not be carried out without objectives and plans, since "these predetermine and specify the desirable behaviour and set out the procedures that should be followed by members of the organization to ensure that a firm is operated in a desired manner. (Drury, 2000)

Mintzberg (1983) discussed vastly on control in organizations. He stated that standardization and design are key elements while building control. Standardization is carried out through formalization of work processes, skills, behaviour, process outputs, and other organizational factors. Design aspects of control are employed with job specification, formalization of the behaviour and job training and indoctrination.

Anthony (1965) separated control into three hierarchical levels:

1. strategic planning
2. management control
3. operational control

Strategic planning takes place at a global level, deciding on the objectives of the organization and the resources needed to achieve those objectives. Management control is used to ensure that resources are used efficiently and effectively in order to achieve organization's objectives. Operational control ensures that specific tasks are carried out according to their plan.

However, this research on control is not exhaustive and can not by itself describe and explain the controls and their employment in organizations. Particularly the management discipline tries to understand the concept of control in managerial approach.

Anthony & Govindarajan (1998) conceptualizes management control *as a process by which managers influence other members of the organization to implement the organization's strategies.* Thus, the management control has essential role while executing the organization's strategy.
Simons (1990, 1991, 1994) has investigated thoroughly this field of management control and were able to present a framework (1995) which combined management control system to strategy.

Merchant & van der Stede (2003) argues control can be viewed as having two basic dimensions: strategic control and management control. Strategic control has an external interest; it questions the validation of the current strategy. On the contrary the management control has an internal interest, it main concern is that all the individuals act appropriately and expected way to achieve the organization's strategy. Anthony & Govindarajan (1998) distinguishes three types of control and planning activities in the organization: management control, strategy formulation and task control. They suggest that management control fits between the other aspects.

Ouchi (1979) suggests two strategies to control: performance evaluation and minimizing individuals' divergence of preferences. The performance evaluation refers to the cybernetic process of monitoring and rewarding. Control is emphasized on the information. Minimizing divergence relies on individuals will to achieve the organizational goals. This strategy is employed through HRM policies and socialization.

Otley (1990) argues that management control combines a view of management as being concerned with acting for the benefit of the organization, control as involving both ends and means and an overall systemic view of the organization and its interaction with the environment.

According to Anthony & Govindarajan (1998) the management control involves six different activities:

1. activity planning

2. coordination of activities
3. communicating information
4. evaluation of information
5. decision whether to action
6. influencing on behaviour

This six step process conceptualizes management control as cybernetic feed-back and feed-forward process. However, this study will adopt more contemporary and ambiguous view that control is not only a formalized tool, but it is an interfacing system of formal and informal controls. Thus, next will be introduced three different views of dimensions of control: Ouchi's, Merchant's and Alvesson & Kärreman's frameworks.

Ouchi (1979) classifies three fundamental categories of control:

- markets
- bureaucracies
- clans

The markets and bureaucracies controls can be distincted as formal controls. The markets control measures and reward individuals on the basis of their contributions. Bureaucracies rely on a mixture of close evaluation with a socialized acceptance of common objectives. Clan control derives from the shared values and norms of the organization. The controls have two prerequisites: informational and social requirements. The market controls is the lightest form of control in this sense, clan controls need the most circumstantial factors to work.

Merchant (1985) distinguishes three categories of control:

- action controls
- personnel and cultural controls
- result controls

Action controls, personnel and cultural controls define to individuals and groups what is desirable and undesirable action for the organization. *Result controls* are based on monitoring the action taken. Merchant suggest that action and result controls are the formal and personnel and cultural controls are the informal controls. Merchant & van der Stede (1998) stated that informal controls can be labelled as social controls.

Alvesson & Kärreman (2004) divided the control mechanisms into two categories:

- socio-ideological controls
- technocratic controls.

They describe socio-ideological control as management control practices that intend to affect on behaviour indirectly. Technocratic controls were described as the objective and affecting directly behavioural aspects of control.

There are multiple classifications on the dimension in the management control literature. Though, the literature Ouchi's and Merchants classifications are widely adopted in the management control literature. Alvesson & Kärreman classification is contemporary concept and it is adopted from the organizational science. This thesis adopts this classification of controls while reporting findings in the chapter 5.

2.2 Management Control Systems

Next will be introduced the concept of management control systems. Management control can be understood the complete package which steer the organization to its objectives. Management control system can be described as a device which is employed to achieve the control.

The terms management accounting (MA), management accounting systems (MAS), management Control systems (MCS), and organizational controls (OC) are sometimes used interchangeably.
MA refers to a collection of practices such as budgeting or product costing which are used in the organization, while MAS refers to the systematic use of MA tools and methods to achieve some goal. MCS is a broader term that encompasses MAS and also includes other controls such as personal or clan controls. OC is sometimes used to refer to controls built into activities and processes. (Chenhall 2003) MCS is understood in this case study according to Chenhall's understanding.

Simons defines that *"management control systems are the formal, information-based routines and* *procedures managers use to maintain or alter patterns in organizational activities."* (Simons, 1995). This definition is rather based on formal control mechanisms. These mechanisms include formal tools such as performance measures, budgets, routines and procedures, and concentrates on information.

According to Drury (2000, pp. 605) MCS have two core elements: formal planning processes and responsibility accounting. The first includes tools such as budgeting and long-term planning, the latter separates the responsibilities of these actions carried out i.e. enables accountability on the performance measurement.

According to Anthony & Govindarajan (1998) the control systems have at least four elements:

1. Detector
2. Assessor
3. Effector
4. Communications network

Detector measures and identifies the actual issue in the controlled process. *Assessor* determines the significance of the issue. This is usually done by comparing the actual information to some preset standard or expectation. *Effector* is a device that alters the behaviour based on assessors' indication. *Communications network* is the process that transmits the information though the three previous elements.

Merchant (1985) defines control system in an operational sense. It offers a vehicle for managers to ensure that organizational strategies are implemented. Management control systems are therefore concerned with planning activities, the actions taken to implement plans, the monitoring of both these actions and the plans and any necessary modification to the plans. Management control systems are used by managers to assist them in performing all of the control functions of planning, decision-making, motivating, coordinating, communicating objectives, providing feedback and integrating activities within complex organizations.

The need for MCS can be categorized into three classes (Merchant & van der Stede, 2003):

1. lack of direction
2. motivational problems

3. personal limitations

Lack of direction might lead to situation where the individuals do not know the expectations how to perform. Motivational problems are caused by the division of individuals' and organization's interest. Personal limitations Personal limitations prevent individuals to perform as well as expected due to some characteristics e.g. intelligence, training, experience etc.

For implementing functioning MCS it is necessary to be aware of what is desired from the MCS and what is likely to happen while utilizing the MCS. The desired action can be derived from the organizational strategy and objectives. To understand the controlled issues it is necessary to identify the *key actions.* These actions must be performed in order to achieve the desired objectives. The focus of the MCS must be concentrated on the areas where it is likely that control problems might to occur. When the focus is decided two fundamental decisions must be made: the choice of utilized controls and the choice of control tightness. (Merchant & van der Stede, 2003)

2.3 Contingency Approach to Management Control Systems

Contingency theory tries to explain the relationship between different control mechanisms, their effectiveness and type of business.

Otley (1980) and Goold & Quinn (1990) discussed contingencies and management accounting. The contingency approach to management accounting bases on the premise that there is no generic and universal management accounting system, which is applicable to all possible circumstances and organizations

Chenhall (2003) indicated that contingency-based research is widely adopted and has long tradition in management control systems research. The adopted control systems do not exist in a vacuum; rather the environment has unavoidable affect on the systems. The contextual factors are necessary to take in consideration while conducting a management accounting research.

The contemporary view suggests that MCS is much broader concept which includes information from the macro-environment, non-financial measures and particularly informal personal and social control mechanisms. The contingency-based research follows the conventional view, where particularly financial planning, measures and analysis have played important role. (Chenhall, 2003)

Chenhall (2003) reviewed vastly findings from contingency-based studies over the last 20 years. The paper criticized and derived a series of propositions relating MCS to organizational context. According to Chenhall the scholars need to focus particularly on:

1. contemporary dimensions of MCS
2. the context of MCS
3. organizational and social outcomes

Chenhall (2003) emphasized that understanding the role of MCS in the strategic change process is important. In future relevance will be gained by reflecting on the studies in the field of original organizational theorists and working in areas such as strategy, organizational and cultural change, manufacturing, information technology and human resource management. Chenhall & Langfield-Smith (2003) suggested that sociological orientation might yield more contemporary knowledge on MCS.

Abernethy & Chua (1996) discussed the concept of control package. They emphasized the not only importance the importance of interfacing control package, but also the understanding its institutional context.

The ranges of context factors in organizations are nearly unlimited, in many cases multiple relevant situational factors can exist. According to Merchant and van der Stede (2003) the situational context of an MCS is complex because many of the factors are related and they are interacting with each other. The factors such as industry/market structure, stability, size, growth, competition, regulation, technological change, ownership and strategy affect on the form of MCS (Merchant and van der Stede, 2003, 587-590). Merchant & van der Stede (2003) suggested that some indication between the form of MCS and contextual factors can be estimated. Particularly better known MCS-related effects in the situational factors are:

1. environmental uncertainty
2. organizational strategy
3. multi-nationality

Environmental uncertainty is formed by broad set of activities, which individually or collectively affect on organization's actions and difficulties the estimation of the predicted behaviour (Merchant

& van der Stede, 2003). Chenhall & Langfield-Smith (2003) proposed that the uncertain environment leads to less-tight and externally focused MCS and turbulent environment leads to high reliance to formal controls.

Chenhall (2003) distinguished that conservative, defend and cost-oriented strategies are employed with formal MCS, which focuses on cost controls, specific operating goals and budgets. The more entrepreneurial and differentiation strategies are operated through less-formal controls. For example hierarchical organizations cost-leadership organizations are usually linked with the formal ways of control. Langfield-Smith & Auzair (2005) indicated that more mature, mass service and cost-oriented firms employ and emphasize bureaucratic forms of MCS, compared to professional services, growth and differentiation-oriented firms. They also suggest that business strategies and organizational structures have a significant effect on the design of firm's MCS.

In the multi-national context the cultural differences have strong affect on organizations and its controls. According to Chenhall (2003) the research of this context is rather explanatory and lacks of consensus on findings. Therefore only generic propositions can be presented national culture's affect on MCS. Simons (1990) emphasizes that while the controls might appear to be similar in different organizations, they might be utilized differently. This makes the task of finding the optimal system for each organization more difficult. Under contingency theory in management accounting, we can only assume what is right way to control in the occurring situation in each organization. However some suggestions under academic literature and evidence from field have been gathered.

2.4 Management Control Systems and Strategy

In order to understand the purpose and objectives of management control in this section management control system and strategy literature will be introduced. Organizational change and strategic change are widely discussed in the literature. The literature suggests that management control systems can affect on this change and vice versa. According to Hopwood (1987) he organizational development can be shaped with accounting system through time. The information which is gathered through accounting system on the interactions within the organization and with its environment can help the organization to facilitate strategic change in proactively. Kloot (1997) argued that management control systems "may help or hinder organizational change". This is evidence for the necessity of the control mechanisms in the formation of strategic and pursue of comparative advantage.

Langfield-Smith (2007) reviewed large scale of quantitative case studies conducted in MCS and strategy. The contingency approach to strategy studies were widely adopted in the 90's. The researcher concluded that the knowledge on MCS and strategy are still limited.

Traditionally the view has been that the organizational strategy shapes the MCS. However, the more contemporary views suggest that the combination of strategy and MCS is in an interrelationship and an iterative process. (Kober et al 2007) Simons' work (1990, 1991, 1994) presented a theory for the management to utilize the control mechanisms to implement and renew the strategy. Simons defines strategy from four different angles. Simons sees strategy as a *perspective.* This means that the starting point of any strategy emerges from the mission and values of the organization. He sees strategy also as a *position,* communicating to the individuals of an organization how to compete. Third angle is *plan*, which means that the strategy can be implemented through setting goals and targets. Fourth, strategy can be also seen as *patterns of action*, which can be understood as adjusting the strategy continuously through learning and feedback. (Simons, 2000)

Simons suggests that top management may seek to influence and support managers' strategic activities through the use of beliefs systems and interactive control systems. Simons presented how formal control systems, if used in an interactively, could overcome organizational inertia and ambiguity, and manage emergent strategies. The formal way of control helped to communicate the strategy and direct attention to the uncertainties that arise as a consequence of pursuing a new strategy. The control system also helped organize implementation timetables and targets, while performance measurement assured the continued attention of senior management to particular areas. Tuomela (2005) suggests that interactive use of performance measures is apt to improve the quality of strategic management and to increase commitment to strategic targets.

According to Frow et al. (2005) many organizations are struggling with a challenge of how achieve the desired goals and at the same time pursuit the renewal of the strategy. Their study suggests that traditional MCS such as budgeting part of the wider control framework influences top managements influence and support both in the formation and implementation of the strategy. The current state of continues arrangements in organizations and management practices problematize the traditional approaches such as cybernetics, individual-level controllability and management-by-exception in the whole management control concept. (Frow et al. 2005) Simons (1995) framework of levers of control emphasized the role of MCS in organizational change. The Simons' framework enables the management to balance the tensions between the need for predictable goal achievement and strategic adaptation and renewal. Frow et al. (2005) research emphasizes the role of the wider framework in management control i.e. the social ways of control and the balance in the utilization of MCS to achieve the desired state of organization strategy.

Roberts (1991) stated that the current forms of accountability in contemporary organizations a between individual and social environment are separate, and affects on individuals experiences of themselves as a part of organization and the organizations capability to achieve its strategic objectives. Roberts urged for mechanisms that "generate more full hearted commitment". (Roberts, 1991)

Simons attempted to connect the different controls to structured formal system which is controlling the organization towards its strategic targets. This framework is called as Simons' *levers of control.* Simons' framework *levers of control* (1995) are based on four control systems:

1. beliefs systems
2. boundary systems
3. diagnostic control systems
4. interactive control systems

These four control levers are nested as they are working simultaneously even though for different purposes. A core idea in this strategic control framework is that it balances needs for innovation and constraints. Each of these key elements is controlled by particular systems, which Simons calls as a lever of control. While beliefs systems and interactive control systems are used to encourage innovative behaviour, boundary systems and diagnostic control systems are used to ascertain that people behave according to pre-established rules and plans (Simons, 2000).

Beliefs systems are used to enhance core values related to business strategy and to inspire search for new opportunities in line with these values. These systems are the set of the organizational definitions and they function through commitment to the purpose of the organization, values and strategic objectives. (Simons, 2000)

Boundary systems reduce risks by setting limits to strategically undesirable behaviours. Also these systems are able to steer the course of action while strategic change and uncertainties exist. These systems function through communication of the business conduct and strategic boundaries. They indicate to the individuals on what a) is desired and b) is undesired course of action. These systems set the limits for the action conducted and are particularly effective in organic organizations where individuals have freedom to work independently and innovatively (Simons, 2000)

Through *diagnostic control systems* critical success factors are communicated and monitored. Diagnostic control mechanisms were defined by Simons (2000) as "formal feedback used to monitor organizational outcomes". Thus, these systems are formal systems and preserves high attention from the managers. They monitor the actual performance and compare these results to the preset standards. The action is conducted if it is found necessary. This process is called *management-by-exception.* (Simons, 2000)

Simons (2000) argues that any system can be exercised diagnostically if it is possible to set targets in advance, measure outputs and performance variables, use information as feedback and design a rewarding system for achievement of the desired performance. Tuomela (2005) indicated that a Balanced Scorecard system can have implications of a belief and boundary system, and they can be used both diagnostically and interactively.

Finally, *interactive control systems* can be defined as formal systems that can be employed in signalling to all organizational levels on action to be monitored and where new ideas should be proposed and tested. These systems are used to discuss strategic uncertainties and to learn novel strategic responses to a changing environment. Interactive systems are important not only in strategy implementation, but also in the strategy formation. (Simons, 2000)

For a MCS mechanism to be interactive, Simons (1995) specified that it must exhibit
four characteristics:

1. information is an important and recurring agenda
2. information demand frequent and regular attention from managers across all levels of the organization
3. information are interpreted and discussed in face-to-face meetings
4. information are used to continually challenge and debate the underlying information, assumptions, and action plans.

Simons (1995) suggested that formalized control systems, if used in an interactive manner, could help to overcome organizational inertia and manage "emergent strategies". The system helps to communicate the strategic agenda and direct attention to the uncertainties that arise as a consequence of pursuing a new strategy. The control system also helped organize implementation timetables and targets.

2.5 Formal and Informal Controls

2.5.1 Formal Controls

Formal control can be derived from the agent theory; Jensen & Meckling (1976) stated that formal control systems are, totally or partially, designed to monitor the agency relationships within business organizations. The agency relationship involves a contract under which one or more persons (the principal) engage another person (the agent) to perform some service on their behalf. Assumption is that if both parties of this relationship are utility maximizers, it is probable that the agent will not always act in the best interests of the principal. Therefore formal control is needed to direct agents' behaviour to act according to principals objectives.

Eisenhardt (1985) categorizes formal control into three control groups:

1. behaviour control
2. input control
3. output control

Behaviour control, also known as structural or bureaucratic control, is usually based on the use of rules and procedures to monitor employee behaviour. Input control refers to the manipulation of resources intended to influence organizational performance. Output control describes the regulation of results of activities in an attempt to achieve desired goals (Eisenhardt, 1985).

Dekker (2004) suggests that formal control includes contractual obligations and formal organizational mechanisms for cooperation and can be subdivided into outcome and behavioural control mechanisms. Fryxell et al. (2002) stated that formal control mechanisms are structural arrangements deployed to determine and influence on organizational members action.

Simons (1995) includes into formal controls formalized procedures for planning, budgeting, environmental scanning, market analysis, performance reporting and evaluation, resource allocation, rewarding etc. Characteristics for these controls are that they are formalized processes what contain a great number of data.

Alvesson & Kärreman (2004) identified technocratic controls as formal ways to control. Technocratic controls are the objective and behavioural aspects of control. Technocratic controls work through plans, arrangements and systems that focus on behaviour and/or measurable outputs. The five modes of technocratic controls are: simple, technical, bureaucratic, occupational control and worker self-control modes of control. Simple control is a supervising power of the manager over the worker. Technical controls are embedded in the technology of work. Bureaucratic controls are carried out through rules, policies, formal incentives and other personal devices. Occupational control the individual's profession defines desired or undesired action. Self-control is exercised when individual's themselves produce discretion. (Alvesson & Kärreman, 2004)

Merchant (1998) stated that action and result controls are seen as formal ways of controlling. Action controls are applied to activities. Action controls direct the individuals' behaviour the most visible way. These mechanisms can be categorized to behavioural constraints, preaction reviews, action accountability and redundancy. According to Merchant & van der Stede (2003, pp. 220-221) action controls are direct and they lead to accumulation and documentation of knowledge such as policies and procedures. This knowledge can be seen as organizational memory and ease organizational coordination. These controls are employed particularly in bureaucratic organization. They suggest that these controls are passivating, cause negative attitudes and difficulty to perform while organizational change.

The result controls drive performance through rewarding or punishment. They involve performance measurement and communication of these results. These control mechanisms includes both financial and non-financial measures. Result controls involve four stages (Merchant, 1998):

1. establishing performance measures that minimize the action is undesirable
2. establishing performance targets
3. measuring performance
4. rewarding or punishment

Result controls are feasible to adopt there where they do not exist. Results controls due to its performance oriented nature are able to provide autonomy to individuals, which can be considered as positive while controlling. The downsize of these controls are that they might indicate less of the nature of action taken. Also there controls might shift of risk from owners to workers and cause measurement noise. These control mechanisms might also put challenge in motivation and coordination of work. Merchant & van der Stede (2003, pp. 221-222)

Ouchi (1977) argues that formal control systems are effective when the environment is stable, behaviour is standardized into routines, processes are monitored and the individuals' performance is measured. Falkenberg & Herramans (1995) suggest that effective formal systems reduce uncertainty, because these systems set a basis on which to individuals' behaviour can be directed.

2.5.2 Informal Controls

Formal control included rules, standard operating procedures and budgeting systems. Characteristics for these mechanisms are that they are build through conscious process. On the contrary, informal controls are not consciously or in fact can not be explicitly designed; these controls emerge from the organization. According to Langfield-Smith (1997) Informal controls include the everyday policies of the organization and are tied to organizational culture. As stated, these controls cannot be designed explicitly; they are shaped and influenced by activities such as frequent interactions, meeting, negotiation of disputes, codes of conduct, senior management attitudes and style, rituals and other organizational influences. Therefore these controls are ordinarily difficult to acknowledge. Formal controls are therefore more visible and objective components of the control system than informal controls.

The distinctions and definitions of informal controls are manifold, and literally there can be distinguished as many definitions as there are scholars in this field. For example Anthony & Govindarajan (1998) separated informal controls into external and internal view. External controls included work ethics and internal control processes. Internal controls mechanisms were in this model culture and management style. Marschan (1996) divided the informal control mechanisms into two groups: personal relationships and corporate culture. Common for all the definitions is that they see informal controls functioning in the social relationships in the organizational context and therefore many researchers define informal controls as social control which can be understood as shared norms, values and beliefs. However, Langfield-Smith (1997) suggests the understanding of informal controls have been ambiguous and occasionally misunderstood and this prestated definition is misleading.

Alvesson & Kärreman (2004) suggested that informal controls i.e. socio-ideological controls are *efforts to persuade people to adapt to certain values, norms and ideas about what is good, important, praiseworthy etc. in terms of work and organizational life. Ideologies justify certain principles, actions and feelings and discourage others.* They describe socio-ideological control as management control practices that intend to affect on behaviour indirectly. Most of the literature argues that the socio-ideological controls are exercised non-bureaucratic and non-output measurement ways. These practices target minds through norms, emotions, beliefs and values. The key characteristics to function are social relations, identity formation and ideology. (Alvesson & Kärreman, 2005)

As stated in chapter 2.X. Merchant & Van der Stede (2003) divided controls into three groups. The personnel and cultural controls were seen as informal ways to control. Personnel controls are build on individuals' natural tendencies to control themselves. These control mechanisms communicate and verifies organization's expectations on the individual, they provide abilities to perform the way expected and will assist individuals for self-monitoring. Personnel controls can be carried out by selection, placement and training of the personnel, and by job design and provision of the necessary resources. Cultural controls are designed to encourage individuals for group monitoring, to conduct according to the group norms and values. Cultural controls represent the organizations shared values, social norms and beliefs which influence their actions. These mechanisms can be utilized by code of conduct, group based incentives and strengthening the organizational structures by interorganizational transfers. Merchant & van der Stede suggest that personnel and cultural controls should be as initial consideration while controlling. They argue that these controls have relatively negative side effects and have relatively low direct costs. Depending on the organizational type, these controls might be sufficient. (Merchant & van der Stede, 2003, pp. 67-77, 215-218).

Merchant & Van der Stede (2003) suggest that social controls serve three different purposes:

1. clarification of expectations
2. ensure capabilities to perform
3. self-monitoring

Ouchi (1979) relates informal controls to informal cultures and systems which influences organization's members and it is based on self-regulation. These mechanisms base on the belief that solidarity and commitment towards the organization's objectives can affect on individuals behaviour to overcome their own interests. Ouchi (1979) suggested that the clan can serve as an organizational control form in which the level of uncertainty is too great for the other control mechanisms to function. The clan is embedded on a social agreement on a broad range of values and beliefs and .relies for its control upon a deep level of common agreement between members on what constitutes proper behaviour, and it requires a high level of commitment on the part of each individual to those socially prescribed behaviours.

Clan controls provide due its characteristics can be more directive than the official formal controls. The social requirements can lead to high level of discipline and goal-orientation. Ouchi (1980) identifies three categories of social requirements which as a set of arrangements between people are necessary to control: a norm reciprocity, legitimated authority and broad range of social agreement of values and beliefs. The clan controls are constituted on a profound level of common and highly committed agreement between the individuals. This agreement defines the desired behaviour, and therefore exceeds the power of formal controls.

For the outsider, it is challenging to enter the organization and learn to behave like the others. The values and beliefs which are embedded in the organizational culture and adopted by the clan in the forms of rituals, stories, ceremonies etc. can be only learned through social interaction with others. For functioning perfectly in the organization and learn the clan code i.e. tradition, the individual might have to spend years in the socialization process. The traditions are implicit rules that control clans' behaviour. The traditions are difficult to access because they are difficult to specify. (Ouchi, 1980)

The socialization process is powerful control mechanism. For example the Japanese organizations rely highly on social controlling by selecting and hiring inexperienced, green workers and educate them to pursue precisely organization's mission and goals. These clan controls lead to high work ethics which Japanese firms are famous for. (Ouchi, 1980) Informal controls are most efficient when the individuals are ambitious to perform (Ouchi, 1980). This also occurred in the case of Alvesson & Kärreman (2004). Interesting for this study is that according to Ouchi (1979) the clan controls fit best such organizations as in the public sector, in service industries and fast-growing technologies.

2.6 The Interplay Between Formal and Informal Controls

As stated in introduction chapter, the literature suggests widely that the formal and informal controls are separated. This section presents few studies which suggests on the contrary. For example, Falkenberg & Herremans (1995) suggest that "The most effective control of behaviour occurs when the formal and informal systems are congruent." They implement the concept of ethical culture into MCS context. Ethical cultures result when formal policies and procedures involving ethical criteria are supported by ethical values and norms within the informal system. They state that congruent MCS does not necessary produce an ethical culture which can encourage suboptimal behaviour. Formal controls can focus solely on the economic interest in short term. For example, when organizational objectives only involve profit short term needs, the organizational objects might be undermined and purpose of actions conducted be forgotten.

Incongruence between the formal and informal controls is most likely to develop when the senior managers of an organization fail to recognize the role of the informal system or subtly encourage behaviours that conflict with the formal control mechanisms. The norms contrary to ethical culture emerge from the organizational culture i.e. "counter norms". The counter norms create situations of ambiguous priorities, where individuals must discern whether the priorities in the formal or informal system are relevant for decision making. (Falkenberg & Herremans, 1995)

Falkenberg & Herremans (1995) indicated that even when formal controls are in place, the informal controls have the dominant influence on behaviour. However, the results indicated that the formal controls gave guidance to behaviour. The dominance of the informal system was related to two different conditions within the organization: a) formal controls are usually developed within higher levels in organizations and fail to descend to the lower hierarchical levels b) when the policies do descend to the lower levels they must be interpreted and implemented by the individual or department in relation to a given situation. Here the informal controls such as values and expectations emerging from the organizational culture are used to interpret and implement formal policies.

Alvesson et al. (2002) discussed on return of bureaucracies. They were able to identify hierarchical structures in knowledge intensive firms. They suggest that the formal control structures are formed in the cultural and societal context. The formal controls were employed in order to keep the business on track. Similarly, Alvesson & Kärreman (2004) are able to identify socio-ideological controls (informal) in a relationship with technocratic (formal) controls. In their case study social control mechanisms are embedded into bureaucracy and output controls i.e. the informal controls are utilized in formal control mechanisms. The informal systems emerged from the formal systems which emphasized performance, professional identity and certain Human resource management (HRM) policies. The technocratic control systems communicated the perceived values of the company and steered the socio-ideological controls. The organization itself was performance-oriented; the budget constraints, evaluations, schedules and selling were seen as the key indicators of organizational success. In this case the socio-ideological controls were group imperatives, ambition, loyalty and obedience. The individuals valued status, success and professional elitism. The work presents them self-esteem and a position in their social context. The social control mechanisms were particularly mobilized through fear of been seen as a failure in the eyes of the upper hierarchical level. The individuals wanted to give "favourable impressions" to their supervisors. Negative impressions will affect on individuals wage, professional status and career development. Particularly in this case study, the role of social controls in HRM policies emphasizes. The social controlling can explain the high degree of work ethics, which Ouchi (1980) distinguished in his study in Japanese firms.

In Frow et al. (2005) study an organization sought to develop a broad framework of management control, particularly concentrated on the social mechanisms, to overcome the unjustified demands placed on managers by the traditional MCS in the pursue of strategic initiative. The study examined how the managers used the official procedures of social interaction in both informal and formal ways and how the individuals engage in establish shared responsibilities and boundary-spanning i.e. interorganizational activities and team-working in order to succeed their accountabilities. The lack of willingness discharging the individual accountabilities and extent of exercised procedures indicates that the control mechanisms are not able to support to achieve solutions.

Kunda (1992) investigated controls in the professional organization, which he describes as engineering culture. He describes organizational ideology as"explicit, articulated and logically coherent system of ideas that make the sense of the social reality faced by the collective". The ideology is a subculture, but it is self-consciously and authoratively articulated opposite to other aspects of culture which are implicit, less-systematic and taken for granted (Kunda, 1992). Weiss & Miller (1987) defined ideology in the organizational context *as sets of ideas originating in social structurally-based interests and conflicts*. The ideology is mobilizing the organizational values, attitudes and beliefs, thus the ideology steer the individual action in the organizational context. To understand the ideology, it must be analyzed by focusing on organizational norms and beliefs.

As suggested the organizational culture affects on controls. According to Falkenberg & Herremans (1995) informal control includes common values, beliefs and traditions, which group adopts from the organizational environment. Fryxell et al (2002) defined informal controls as social controls, which involve values and norms through personal interaction and training. However these mechanisms are probably idiosyncratic to each organization, therefore it is more essential to concentrate on mechanisms which facilitate social control rather than on the social control itself.

Das & Teng (1998, 2001) suggest that social control is formed by organizational culture. Social control performs the function of structural constraints that foster employee socialization into a specific organizational culture, which consists of a system of values and norms intended to reinforce and reward certain behaviours. As a result of such socialization, employees internalize organizational goals and use them as their guiding principles. Consequently, social control influences employees' behaviour indirectly by ensuring that their preferences coincide with those of management (Das and Teng 2001).

While formal control may undermine trust (because rules reduce employee autonomy to make decisions), social control, which is achieved through socialization into organizational culture, may encourage the development of trustworthy relationships. Therefore, trust and control are alternative routes to risk reduction which “can and should be combined in specific ways for best risk management results" the differences between informal control and trust can be seen as ambiguous. (Das and Teng 2001) According to Ouchi (1980), behaviour within the company is guided by the corporate philosophy communicated through organizational culture. Similarity of goals within an organization promotes the development of trust and therefore replaces explicit rules and regulations.

Abernethy & Stoelwinder (1995) examined management controls in organizations performing complex production tasks and argued that formal controls are not able to direct actions of these professionals. They emphasized the importance of self-control and social control mechanisms. They suggest that social control is strongly linked to adhocracy. Critical for success in these complex work professional organizations were control which emerged from organizational culture. If the controls were embedded on culture, the formal controls might have been unnecessary.

Anthony & Govindarahan (1998) suggested that organizational culture is the most important internal control mechanism. Kunda (1992) suggested that strong culture replace the formal control, because the individual sees the firm in more aspects than only an “economic transaction”. Alvesson

(1989) has also studied organizational culture as control. He found that culture controls efficiency in operations depends on understanding the whole concept. Alvesson stated that organization culture is

1. Culture is building block in an organizational design
2. Culture means symbolic management
3. Culture is a diagnostic instrument
4. Culture is a paradigmatic concept

Alvesson refers that culture is one designed organizational element in the sense of management control and therefore it can be regulated in terms of cultural elements. Symbolism is formed through culture and utilized as a mean of achieving the organizational targets. Diagnostic instrument indicates that organizational ideologies are embedded to its context in partly conscious manner and thus can be only partly affected by the organizational controllers. Paradigmatic concept views organizational culture as a theoretical approach offering profound understanding about organizations. Kärreman et al (2006) stated culture might be only control in professional organizations where are difficult to develop any effective performance measures.

Falkenberg & Herreman (1995) found that control of behaviour in the situations where individual feels uncertain and are unexpected, the informal controls became dominant. Implicitly the informal systems can be seen as more powerful than formal systems. Alvesson & Kärreman (2004) indicated that informal systems can be embedded into formal systems and are able to boost the formal systems. The informal systems can offer an aiding force to combine the formal systems. The informal systems include the expected organizational goals and therefore they guide the behaviour in occurring situations, thus the informal systems complete the whole control system. (Ouchi, 1980) These findings stress the importance of the informal control mechanisms and indicate that particularly organizational culture is important factor in the organization's control package. As stated previously the balanced control package is essential, although the literature has been concentrated on formal mechanisms.

These researches point the importance of the socio-ideological controls. The evidence suggests that these controls are able to complete and balance the control systems and therefore be strategically important tools for the organization. These studies also underline the importance of MCS in the organizational change. Frow et al (2005), Alvesson & Kärreman (2004) indicated in their case studies that how informal control mechanisms are able to solve these issues of strategy renewal and organizational change. In their case companies, in a large multinational technology firm and in a consultant firm, the informal controls balanced the whole control package and were able to guarantee that the actions conducted by the individuals supported the organization's strategy.

2.7 Short Description on Financial Planning as Control Mechanism

Planning processes are standard procedures and control mechanisms for organization. As Anthony (1965) stated in section 2.1, organization has three hierarchical levels of control: strategic planning, management control and operational control. In this division, budgeting as part of the management control is complementary control process distincted strategic planning and operational control. According to Hansen et al. (2003) budgeting produced an accounting-based approach to controllership due to the fact that these accounting processes were universal routines and easily founded standards for performance. Later the academics elaborated the planning processes and found integration of budgeting and strategic planning.

Drury (2000) defines two different budgeting processes: strategic and short term planning. Strategic planning is more about controlling and directing the future operations towards corporate objectives. Short-term planning is concentrated on this moment resources and optimizing the use of these.
Drury separates seven stages for planning process:

1. Objective setting
2. Identifying possible strategies
3. Evaluate alternative strategies
4. Selection of strategy
5. Implementation of strategy in form of short term plan
6. Monitoring the actual results
7. Actions to manage the divergences

Four first is concentrated on long term strategic scope and three last for short term financial management.

Simons (2000) states the purpose of the budget is to link it with strategy and presented following classification on objectives of budgeting:

- Translate the business strategy into a detailed plan of action
- Evaluate the available resources to execute planned strategy
- Create an institution to align financial targets with strategy measures

Budgeting can be seen part of many accounting processes such as cost accounting, responsibility accounting, performance measurement and compensation. Covalevski et al. (2003) sees budgeting many purposes: planning and coordination of activities, resource allocation, motivation and expression conformity. Simons (2000) suggests following roles for budgeting:

- Decision-making
- Controlling
- Signaling
- Education and learning
- External communication

A research done by Hansen & Van der Stede (2004) indicates similar in practice. Researchers interviewed budgeting practitioners and found that budgeting is used for short- and long-term planning, target communication and performance evaluation. Researchers also found that different planning processes are over-lapping and there is not universal way to utilize the budgeting processes. Ekholm & Wallin (2000) found that three types of planning and measurement systems are in place: traditional budget system; a hybrid system including budgets, forecasts and other instruments such as balanced scorecard and forecasts with or without other instruments.

Hansen & Van der Stede (2004) also found that rolling-budgeting is used if short-term planning is used for operational planning. Rolling budgeting gives improves the planning accuracy. Same result is concluded in Ekholm & Wallin study (2000), which indicated that organizations are using rolling planning instead of traditional budgeting when they aim to improve operational planning process and increase performance evaluation such as budget accuracy measures.

Hansen et al. (2003) noted that still practice and theory are separated in budgeting. Their study suggest that budget assumptions are commonly outdated and thus reducing the value of estimation, budgets are concentrated on cost-cutting and not value-adding, budgets create centralized and inflexible organization distancing the employees and mechanizes the strategic planning. Hansen et al (2003) and Ekholm & Wallin (2000) studied that planning process development is constantly ongoing and discussion to drop down financial budgeting is existing.

Hansen et al (2003) conclude that budgeting controls are driving organization to sub-optimized use of resources. Their research is indicating that budgets are creating budgeting games. Hansen et al. states that traditional top-down processes are the back-ground for these games. They suggest that solution for this either improvement of the process or abandoning traditional budgets. On the other hand Chencall (2003) concludes that according to many research successful organizations are using formal budgets.

Hansen & Van der Stede (2004) also noted that number of iterations during financial planning is diminishing the value of the budgets to be used for operational planning and performance evaluation. Continues iteration can mean arbitrary financial targets given from top management, on the other hand it can provide validation process when financial figures are reviewed in top and bottom –levels. They conclude that multiple iterations can be phenomenon of vast organizational uncertainty or a lack of agreement on organization’s objectives. They also conclude that due to this uncertainty or lacks of agreement organizations are not willing to use planned financials for performance evaluation when the committed figures are created through multiple iterations.

Iterations are creating organizational inertia by creating budgeting games (Otley, 1990). The research presented a process where managers were expected to change their planned figures. This lead to continues loop-process where financial plans where reviewed and resulting an arbitrary cost plan.

Covalevski et al. (2003) see budgeting in three different theoretical perspectives: economic, psychology and sociology. They see that if budgeting is understood in all of three perspectives, more profound view is created on budgeting concept. Economic view is concentrated on organization, psychological perspective on individuals and sociological aspect on organizational groups. Economic perspective is explaining the economic benefit of budgeting process for the employees and owners. Economic view is concentrated on agency in term of employer or employee. Psychological perspective explains the effects of budgeting to individual mental state, behaviour and performance. This aspect focuses on individual. Sociological view is investigating the budgeting process in light of organizational interests in decision-making and resource allocation and concentrates on organizational units. Economic view is traditional aspect in management accounting science and researches suggest that more value is gained to discipline when these other two aspects are taken into consideration. According to Covalevski et al (2003) combining psychological aspect in form investigation of budget affect on individuals or introducing sociological understanding of the budget processes in organizational context could emerge new information for budgeting as management control mechanism. This way management control academics could improve their knowledge on budgeting games, organizational ineffiencies and other factors weakening control.

2.8 Culture and Professional Organization

2.8.1 Organizational Culture

In order to understand the power of organizational culture to informal controls, this topic will introduce and discuss shortly on culture and its implications in organizational context. Sociological approach on society's affect on the individual state is that the social environment defines who we are (Giddens, 2006). The others affects on how we see ourselves as an individual and how behave amongst other people. This is a process which sociologists call *socialization. Socialization* begins when we are children. When we grow up, we will start to be aware of ourselves, and perpetuate the values, norms and social practices of the surrounding society. (Giddens, 2006, p. 163) Schein (1985) argues that a large part of the individual's values, beliefs and assumptions develop in childhood and are not easily altered after they are implied. As similar to child, individual while entering organization is having perceptions and adopting the organization's culture from their social environment. They begin to behave like the others in the organization.

Defining organizational culture is a difficult task; it is a vast and ambiguous concept. The both concepts themselves have many definitions, so the concept of organizational culture is certain to have "conceptual and semantic confusion". Culture generally refers to patterns of human activity and the symbolic structures that give such activity significant importance. Different definitions of "culture" reflect different theoretical bases for understanding, or criteria for evaluating, human activity. (Schein, 1985)

Organizational culture can be studied in a numerous different perspectives e.g. institutional, managerial, ethnographical and sociological perspectives. A central problem in most organizational culture research is the multiplicity and confusion of concepts (Martinsuo, 1999). For example Ouchi (1979) refers culture in the organizational context as the broader values and normative patterns which guide worker behaviour, practices and policies. It has been under discipline since the 70's, the managerial approach was widely introduced not until the 1980's. This study introduces Schein's framework (1985), which was represented in the 80's. Schein's conceptual framework analyzes and intervenes the culture in the organizational context.

Schein (1985) defines organizational culture as “pattern of shared basic assumptions that a given group has invented, discovered or developed in learning to cope with its problems of external adaptation and internal integration, and that have worked well enough to be considered valid, and therefore, to be taught to new members as the correct way to perceive, think and feel in relation of those problems.” Byles and Keating (1989) defined organizational culture following manner: Organizational culture is basic and enduring values and beliefs which are widely held throughout the organization. These values and beliefs comprise the content of an organization's culture and are common understandings which are frequently taken for granted and which are reinforced by stories, symbols, rituals, and language systems. Intangible and unseen but known, these values and beliefs are distinguished from the concrete or visible manifestations of culture.

Schein (1985, pp. 13-22) categorizes organizational culture into three simultaneous levels:

1. Artifacts
2. Values
3. Assumptions

Assumptions are individuals’ perceived basic beliefs about reality and human nature. It consists *relationship to environment; nature of reality, time and space; nature of human nature; nature of human activity and nature of human relationships.*

Values are the social principles, philosophies, goals and standards that are considered to have inartistic value. Values are testable in the *physical environment* and by the *social consensus.* Schein uses values in the context of cultural learning and as a means for testing the existing basic assumptions. When a newly developed group faces a problem, the solution can only express some set of values which are based on some person's (often the founder's or manager's, or shared) basic assumptions about reality, environment, human beings etc. If the found solution is appropriate, functions and provides the group with a sense of success, the values can be processed through a cognitive transformation process and become basic assumptions.

Artefacts are the tangible, audible and visual signs what emerge from assumptions and values. It is the most visible level of culture. Artefacts are constructed in the physical and social environment. Artefacts' characteristics are visible and they are auditable for external observer. The signs are the rites, rituals, organizational stories, physical objects etc. Schein suggest that the assumptions are the essential factor to understand the culture.

Kunda (1992) viewed organizational culture as shared rules governing cognitive and affective aspects of membership in an organization. Organizational culture can be explained with metaphors such as Ouchi's clan. Schein (1984) suggests that culture is a template of basic assumptions that a particular group has invented, discovered, or devised in learning to scope with its challenges to meet of external adaptation and internal integration. This template has worked well enough to be considered valid, therefore it is taught to new individuals in the organization as the correct way to think, feel and perceive in accordance with other problems.

According to Schein (1985), social entities of any size have a culture if they have had the opportunity to learn and establish their assumptions about themselves and the environment. Organizational culture can be referred is a *social unit.* A single social unit can be consisting several cultures such as managerial culture, occasionally based cultures, geographically based cultures, hierarchically based culture etc. (Schein, 1985, pp 1-9). In this paper, we shall refer to organization culture as the set of values, beliefs and social norms which tend to be shared by its members and, in turn, tend to influence their thoughts and actions.

Schein (1985) suggests that leadership research has underemphasized the importance of culture. He states that *the only thing of real importance that leaders do is to create and manage culture and that the unique talent of leaders is their ability to work with culture.* Schein (1985) suggest that leadership is typically emphasized in a relationship to cultural or ideological control. This is an interesting particularly for management control implications which have traditionally emphasized importance of formal controls. The more contemporary literature as stated previously has taken informal controls to closer review. According to Martinsuo (1999) management studies identify three mean of formal managing tools: mission statements, value statements and management philosophies. A mission statement responds to the question why the organization exists, a value statement is slightly more concrete and focuses on the question of what and how individuals should act. Value statement is more abstract than management philosophies that in turn focus on detailed guidelines of behaviour and decision-making. Values can be use not only in the organizational management, but the values can be viewed as explicit statements and a tool for management-by-exception. Values can be particularly employed to increase organizational performance and point organizational culture towards a desired direction. Martinsuo (1999)

2.8.2 Professional Organizations

According to Schein (1985) organization is concept where people have joined to together to conquer something that they could not achieve by themselves. Organization has common purpose which its participants are achieving with join efforts. Organization diminishes randomness in operations. Organization is in practice division of work and power between different hierarchical level and departments. Being member of the organization people are able to satisfy their own needs in addition to organizational needs.

Organization and culture are deeply interlinked. According to Schein (1999) culture is affecting on organizations mission, strategy, purpose, measurement and context. It is critical for organizational understanding for its powerful, latent and unconscious power that control the individual and groups. The controlling is working with different ways of perception, frameworks and values.

Alvesson (1995) defines professional work with following characteristics:

- Work is not standardized and organization produces new information and solutions
- Work is creative, analyzing, ambiguous problem solving and planning
- Production is depended on individuals, not physical assets. Individuals' education and knowledge level is high and replacement is hard.

Typical professional organizations are educational institutions, research and development organizations, consultation firms, hospitals, theatres and cultural institutions, architecture and engineering offices, information technology firms etc.

Mintzberg defines five organizational structures: simple, machine bureaucracy, professional bureaucracy, division organization and adhocracy. According to Alvesson (1995, 91-93) professional organizations can be most clearly defined as both professional bureaucracies and ad hoc –cratia.

In professional bureaucracy division of labor is based on standardized skills. Work is specialized and specialists are having significant control on their own work. Work is complicated and it can not be fully designed, planned and controlled. Professional bureaucracy underlines the power of professionalism. Operations are managed by professionals. Leadership concentrates on strategic work, stakeholders and organizational disruptions.

Adhocracy is based on complicated innovations and developed solutions which are created by formed teams of professionals. Work is based on integrated coordination. The organizational structure is adjusted to be reforming and organic. It can not be planned, but it is formed through interaction. Specialization is based on education, but skills are not particularly standardized. Professionals have the power, but it is more decentralized than in professional bureaucracy. (Mintzberg, 1979, 431-464).

2.9. Research Framework

Control is a process that ensures desired objectives will be achieved and all the activities are planned to conform according to this. Control can not be carried out without objectives and plans. According to Anthony (1965) control can separated to strategic planning, management control and operational control.

Management control is necessary for organization to operate according to its purpose and execute the business strategy. The management control package is build on many different elements and mechanism which in combination are controlling the organization to perform efficiently and creating value-add for the owners.

Chenhall (2003) indicated that contingency-based research is widely adopted and has long tradition in management control systems research. As control systems do not exist in a vacuum, the environment has to be taken into account. According to Chenhall (2003) future value in MCS research is particularly found when concentrating on contemporary dimension, contextual factors and organizational as well as social outcomes. This research attempts to give more insight into all of these three fields. Understanding the organization culture is necessary while controlling according to contingency-theory based MCS literature. Organizational culture is individual for each organization; different organizations have their own characteristics, ways of working, values etc. This research is based on same assumption.

This research is aiming to present the relationship of formal and informal control. The traditional literature suggests that informal and formal controls are separated. More recent literature conducted is suggesting that the controls are interplaying. In Alvesson & Kärreman (2004) study control mechanism were complementing, supporting but also contradicting. This research concentrates on describing the interfacing controls and as a side product distinct their importance in organisation's control as strategic initiative.

This thesis divides control mechanisms to formal and informal control according to Alvesson & Kärreman (2004) division to technocratic and socio-ideological controls. According to them technocratic controls are objective and affecting directly behavioural aspects of control and socio-ideological control are management control practices that intend to affect on behaviour indirectly.

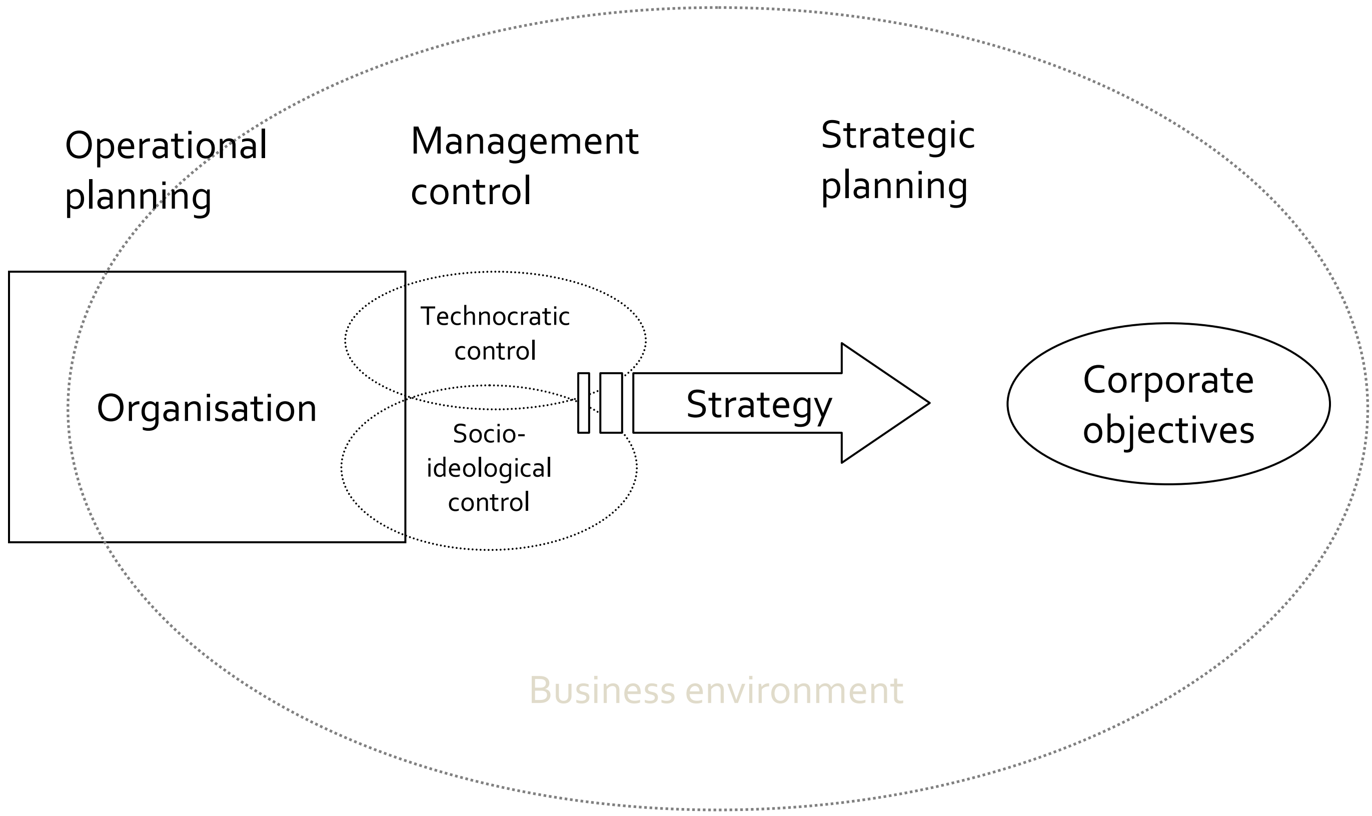
Their division is categorized as following:

technocratic control	socio-ideological control
technical (planning, measurement)	organizational culture (norms, values)
bureaucratic (rules, instructions)	social (relationships)
professional (occupational self-control)	ideological (beliefs, desired state)

The research is concentrating due to researches pre-observation on technical and organizational culture controls. However other controls are not excluded from results.

Simons' levers of controls are suggesting the package is built on formalized control package. While discussing the importance of budgeting as strategic initiative (Simons 2000, Frow et al. 2005), this study goes to deeper level in this and investigates can informal control mechanism in form of organizational culture be creating strategic initiative and be part of formalized control package. According to Roberts (1991) there is an urge for more profound control package. This could be found with more careful utilization of informal control methods. In the importance of culture and socio-ideological controls are stated in many researches (Ouchi, 1980; Alvesson, 1989, 2002; Kunda, 1992; Abernethy & Stoelwinder, 1995; Falkenberg & Herramans, 1995; Das & Teng, 1998, 2001) Alvesson & Kärreman, 2004; Kärreman, 2006) This study is describing the organizational planning processing according to Covalevski et al (2003) view for its purposes. Organisational culture is understood as Alvesson's (1995) definition on professional organisations.

The framework for this thesis is following:



Contemporary understanding on management control as research framework

3. METHODOLOGY

This chapter contains the methodology employed in this master's thesis. The design of this study is Alvesson & Kärreman (2007) framework of research work. It includes two stages: mystery discovery/creation and subsequent mystery solving. The section 4.1 introduces the research method adopted in this study. The section 4.2 discusses the data collection mode,

3.1 Research Method

The research method in this study is qualitative case research. Lukka & Kasanen (1995) recognizes the increased number of case studies particularly in the field of management accounting studies in the 1990's. Scapens (1990) argues that the importance of case studies has been realized. Lukka & Kasanen (1995) suggest that the potential for generalization from case studies is greater than considered in general. However, according to Scapens (1990) the generalisability of the case studies is difficult to achieve.

According to Otley & Berry (1998) management science still urges for case studies in the areas of management and control. They argue the validity of case-based approach in the MCS study is justified, because “the role of the accounting and other controls cannot be fully understood in isolation, and that more contextual approach is required”. Vaivio (2007) argues that qualitative management accounting research able the researcher go beyond the functionalist, economics and consultant view, and therefore provides valuable understanding of management accounting in its organizational context. The importance of realizing contextual environment is emphasized in the contingency-theoretical school of management accounting studies (Chenhall, 2003, 2007).

Scapens (1990) stated it is an undeniable fact that case studies have limitations and weaknesses. The researcher distinguishes three sources:

- boundary limitations,
- objectivity

- information gathering.

Yin (2003) also founds three reasons why the case study as research method has been widely criticized:

- objectivity
- generalization
- ambiguity

It is seen as being unreliable for the reason that the researchers personal understanding, preconceptions and negligence can affect on findings and conclusions. To avoid this gap in reliability the researcher has to report carefully all the stages of the research and explain thoroughly the made choices. The case study as qualitative research is not able to generally accepted findings as the quantitative research. In respond, the case studies are able to correspond with theory. The finding can be seen as ambiguous and manifold. However, this feature can be understood as case study methods can be applied and reported differently in respond to the case and research object.

Lukka & Kasanen (1995) discuss on the generalizability of the case study method. They argue that despite the fact that case study method does not have statistical generalizability, but the generalizability lies in the contextual setting.

Scapens (1990) distinguishes main steps in case study: preparations, collecting evidence, assessing evidence, identifying, explaining patterns, theory development and report writing. He emphasizes that case study as research method is “a complex iterative process which cannot be characterised by simple linear model”. Therefore these steps can be understood as directive and applicable in different studies.

Scapens (1990) suggest that case samples should be chosen experimental. Sprinkle (2003) discussed on experimental case studies

Scapens (1990) identifies five types of case studies:

- Descriptive

- Illustrative
- Experimental
- Exploratory
- Explanatory

Descriptive case studies describe and/or compare accounting methods used in case companies. The objectivity is to describe the practices used in the case companies. Illustrative case studies try to provide illustration of new accounting practices which are implied in the case company. Experimental case studies focuses on implementation of new accounting methods developed by researchers or evaluate the benefits of such methods. Exploratory case studies try to generalize the reason for specific accounting practices. Explanatory case studies are used to explain the reasons for used accounting methods. It is not used for generalizations, its object is to understand and explain the specific case. Scapens (1990) stated that the type of the research is not clear-cut.

The method in this case study is a single-organization study. This research is descriptive, but it has both illustrative and explanatory implications. The study has a managerialistic approach, which is supported by the theory. The basic setup of this research is build on framework introduced by Alvesson & Kärreman (2007). This framework is based on two steps: mystery discovery/creation and subsequent mystery solving. As stated already in the introduction chapter, they suggest that empiria is a source for develop theoretical ideas “through active mobilization and problematization of existing frameworks”. The ideology behind this is to employ the empirical data to “facilitate and encourage critical reflection”, as an input for building theories. The empirical evidence is used to challenge, revise and clarify theories.

3.2 Data Collection

Interview methods can be categorized into three classes:

- Structured
- Semi-structured
- Unstructured

In the structured interview the interviewer has standardized set of questions with predetermined answers that are consistently applied across all interviews. Unstructured interview is an informal discussion with no strict guidelines which allows the discussion to be open and not necessarily concise in its topic. Semi-structured interview posits in the middle of those two approaches. There are designed questions, but not predetermined answers. All the questions may not be stated or some new questions maybe stated on the basis of the discussion. This offers the researcher opportunity to flexibility to concentrate on details or discuss issues in general. (Hirsjärvi & Hurme, 2000)

Interview method in this case study is a semi-structured theme. Structured interviews for this case study are seen too restrictive and unable to provide a tool to understand the organizational and other contextual factors which are affecting in the case organization. Structured interview may lead to ignoring relevant issues which emerge during the interview. However, the unstructured interview may be seen too informal and ineffective in this research setting to serve the purpose of gaining information about the organizational and other contextual factors related to case organization.

The theme interview method differs from a focus interview in that the situations need not be experimentally produced. It is assumed that all individual experiences, thoughts and beliefs can be studied through theme interview method. The purpose of the theme interview is to clarify interviewees' subjective experiences in the field of the specific theme. The researcher has the opportunity to analyze the presumed essential parts of the phenomenon under research. The themes are derived from the theoretical pre-analysis.

The amount of interviews depends on the purpose of the research. In qualitative research case is a carefully chosen sample, because instead of generalization the aim of the study is to achieve profound understanding on events, gain knowledge on local phenomenon or explore novel theoretical approaches (Hirsjärvi & Hurme 2001: 58–59).

The data is collected by semi-structured theme interviews. According to Yin (2003) theme interviews enable open-ended discussion and enable to interviewer get more profound understanding on subject.

The themes conducted in the interview are following:

- Financial planning as formal control mechanism in R&D work
- Organizational culture as informal control mechanism in R&D work
- The relationship of these controls

The questions were formulated from the theory, which illustrates management control literature. The empiria is built on eight interviews. To guarantee the total anonymity, they will be referred as interviewee A, interviewee B etc. Shortest interview lasted for 45 minutes, the longest 90 minutes. Average length is one hour 15 minutes. Interviewees belonged to upper middle-level management and all of them were responsible either for financial planning or business result. With one exception they all had at least one academic level degree from economics, business sciences or engineering. Two of interviewees had doctorate dissertation in technical sciences.

Themes are sent to interviewees in advance in order to familiarize them with these and gain some thoughts concerning the agendas. The interview followed closely to themes, but different structure was applied in case by case depending on interviewer's perception on most value-adding dimension on discussion.

The case organization is part of global information technology firm. Case study was made in organization's R&D unit. This R&D unit's operations are concentrated on USA, Western and Northern Europe and Asia. It produces global consumer products. The case organization in thesis is labeled as High-tech. Hichtech has over 15 000 people participating R&D work in their organization.

3.3 Reliability and Validity of the Study

Reliability deals with the random factor. This means that the results of the study can explained by other unrelated set of specimens. According to Yin (1994) the reliability as a concept does not fit into the case study context as its purpose is not draw statistically sound conclusions about a phenomenon. In this case it can be understood as a viewpoint which analyzes the interviewee's subjective assumptions on a phenomenon and identify the factors affecting on these assumptions. In better words, reliability in this context can be understood as whether two researchers would have same conclusions from the same data.

According to Hirsjärvi & Hurme (2001) the validity in the case study context relates to four different factors: selection of the interviewees, concept validity, content validity and transcription accuracy. For validation, the interviewees need to be representative of the interest group of the study. The concept validity will be reached when there is assured a shared understanding of the concept used in an interview. The content validity is including the equivalence of the interview outline and the research topic. Transcription accuracy is achieved though the analysis process of the data collected through interviews.

According to McKinnon there can multiple reasons why the reliability and validity of the study is compromised. The presence of the interviewer might have affected on behaviour and given answers. The interviewee might mislead consciously or consciously the interviewer. The answers are interviewee's percept view of reality and therefore this view is biased. The interviews are tied to the specific situation and context, which might lead to forgetting important aspects or things, or paying attention to false or unessential factors.

Also the inexperience of the researcher and his insider status as being part of the organization can be interpreted as limitation to the study.

4. EMPIRIA

This chapter begins with short description of the organizational culture. Due to its characteristics following section will be handled organization's financial planning routines and their role in order to understand the financial planning processes which are controlling the organization's business. Third section of this chapter discusses the interface of planning and organizational culture. It will also cover the controlling mechanisms which ties up individuals to organization and engages them to participate business targets set by the organization.

4.1. Short Description on Organizational Culture

"Our way of planning is value itself" (Interviewee C)
"Planning is our way to work. This is in-build to our organizational culture." (Interviewee G)

These remarks came up strongly while gathering the data. The organization is really planning oriented and ways of working all were closely tied to planning. This is on contrary what have been thought about professional organizations and also assumed in this case presumably. Empiria is giving clear evidence that case organization is clearly planning oriented. While questioning that is it even too planning concentrated, a following comment arised:

"I would say that we are not too planning oriented. I see that the driving force for this organization is to keep up with market demands. If the plans are not realistic, we can change them according to situation. This organization is about meeting customer requirements with profitable business cases. Therefore business planning is necessary and high-valued characteristic of the organization. "Interviewee E

While planning is deeply embedded to organization culture, this might also explain the emergence of performance orientation and structured ways of working which also seen as characteristic for organization:

> "In general, in our company we are performance oriented. (Interviewee D)

> "I see that people regards highly of our structured way of working. It is inbuilt to everything that we do" (Interviewee C)

"Well, planning controls our outputs and it is highly integrated to our way of working. Changing planning processes drastically would in matter a fact change our culture.
I believe that our processes support efficient way of working. Our processes define our culture." (Interviewee G)

Similar characteristic were found Alvesson & Kärreman (2004) and Frow et al (2005) studies, where knowledge-intensive firm individuals were driven by personal desire to perform according to organizational targets.

In addition to planning concentrated and performance oriented culture, case organization has clear characteristics of professional organization, where freedom of work, professional expertise and values are regarded highly:

"People can have free hands to develop and work. This has never been prevented in our organization" (Interviewee A)

"High-tech has a problem solving culture; issues are solved when they occur. We are not that process oriented. Process orientation means more procedures and bureaucracy; I have experienced that in previous company. We have more flexibility; issue solving is not prevented by boundaries, but handled with experts…We are not hierarchical, if you have the knowledge in profession, we can affect despite your position in organization" (Interviewee B)

"Hierarchies are not appreciated too much. Expertise empowers you more than your hierarchical position." (Interviewee D)

"People can have free hands to develop and work. This has never been prevented in our organization" (Interviewee A)

According to empirical evidence High-tech has universal culture which is separated subcultures around the organization in terms of ways of working and personal values:

"I have had always global role, I see that our company culture is universal, but there can be small difference between sites and entities" (Interviewee D)

"It can be different around organization; it depends on the organizational mode" (Interviewee B)

> "I see clearly two cultures: there are these guys find work for them even if we would ramp-down the whole organization. On the other side, there are these contributors who need a project where participate. And usually they participate these projects with high commitment." (Interviewee C)

> "In some local organizations might be different culture. But after a while, when new organization is either acquired or established and people recruited, organization learns in our planning oriented way of doing". (Interviewee H)

Organizational values are regarded highly when thinking of how people are connected to organization. In fact according one statement, values can be tied to organizational targets and actually values can be in-build with formal controls:

> "I believe that the company values are in everyone's mindset. I believe in managing with values and that it is essential to leaders to go these through with their people…I see that company values drive our doing. I see that targets clarify the end results, but the values embedded to us drive our every day work" I see that our values work. I think that most of the people are working here because they are agreeing with our values" (Interviewee B)

As conclusion, this case organization can be understood as professional organization according to Alvesson's (1995) division which is embedded with traditionally considered untypical characteristic for this type of organization such as performance orientation and acceptance for financial targets.

4.2. Financial Planning as Control

The interviews concluded that planning is made in many levels and on continues basis. Organization is having three streams where continues planning processes in place: portfolio planning, execution planning and cost estimation. Portfolio planning is including products, execution is putting strategy in financial terms. Cost estimation follows-up the cost and enables management-by-exception. According some interviewees financial planning are having too deep affect on business planning and overruling product planning.; it is empowered to affect on areas which it should not have mandate on:

:

> "Financial planning is overruling the execution and portfolio plans. Finance can be deciding what we do, even when we have finalized our strategy work. It can be that sometimes we discuss product cancellations in financial planning, it should be that financial process sets targets and scope and portfolio plans are optimized according to this in another process." (Interviewee B)
>
> "Sometimes I wonder what the role of F&C is, it should support business not to make decision what we do and what not. In real life F&C can be saying everything in terms of financials and that is really bothering me. They are doing management by mathematics, just by calculating without knowing the content" (Interviewee C)

4.2.1 Financial Planning Processes Controlling R&D Work:

The company has four planning processes which contribution directly to financials: strategic planning (here SP), execution planning (EP), short-term planning (STP) and latest cost estimation (LCE). Strategic planning is done for 3 years time frame. It is done yearly basis. It covers corporate strategic objectives. Execution planning is done bi-yearly for 18 months and it linking strategy to actions and spending accordingly. It is linking the corporate strategy to business planning. In execution plan major investments and future direction is written out to plan. Execution plan also sets financial targets for R&D operations. Short-term planning is done for 6 months two times in a year, respectively for first and second half of fiscal year. Purpose for is to set clear detailed action plan for organization to next six months. Execution plan's financial targets are also used as basis for short-term planning work. In this plan basically every R&D item is agreed in terms of scope, time and cost. Cost estimate is done for next five quartiles. It should be purely rolling monthly process which follows principles of rolling forecasting. It sets action plans to monthly cost estimates.

For individual, short-term plan has one important feature: part of the individual incentives plans are tied short term plans. In this process desired objectives are set as individual targets and this way partly linked to short term incentives. Other part of the changing factor is determined according to corporate financial success. For incentives there is also a fixed multiplier which is determined according to individual job degree.

While questioning the relationship of financial processes and how these should control, following statement came up:

> "This has been now cleared. Challenge is that 18 months in this downturn is long period and despite the EP is done reflecting the strategy work, still it might not be the target for STP. STP is probably too short timeframe for change. Certain activities need longer term. But due to business setting, we need to be able to adjust our spending to be profitable…On the other hand this might set some shortsighted vision to R&D work. We need find balance between long term investment and short term profitability". (Interviewee E)

EP process is seen the most powerful control mechanism. Reasoning for this is that it states a clear picture by setting business targets and this way give frames on what is coming in next 18 month in cost terms:

> "In ideal world we should concentrate of keeping EP more close strategy and not so much in details. EP could be device for following up the business and investments to meet these business targets e.g. are we afford to invest into new SW platform" (Interviewee B)

On the other hand, here is a seen also different opinion:

> "LCE is most significant planning method in money and delivery-vise." (Interviewee H)

This was explained by having flexibility to adjust the business according to latest changes in environment and organization.

This picture enabled with EP is ensured with financial targets. These targets are agreement on cost level what is going to be achieved in next 12-18 months level. However on action terms there are disagreement concerning the visibility and how to develop planning processes to gain improvement in this:

> "With organizational costs view in EP period is clear visibility. In delivery aspect the view is much shorter, I would say a year." (Interviewee A)

> “STP is accurate view. For EP we have flat rates. This is due to the fact that we can not know the strategy changes. In practice we can not have any understanding over two years” (Interviewee B)

> “18 months is impossible to see clearly, 3-4 months tops can be forecasted properly. Top level does not always understand this, and tries to change our perspectives for example by changing planning periods. This does not change the original problem of lacking the visibility, I think that we must admit to ourselves that we have to make careful planning all over again, it is just a must in this business.” (Interviewee D)

> “We know the cost what we are spending, but we are missing exact view where exactly. We especially should understand more carefully where we spend in asset point-of-view. Technology asset split is only in EP level accuracy, we should improve with this.” (Interviewee A)

Persistent on-going financial planning can result some overlapping plans and processes which might cause confusion in organization.

> “EP is for long-term planning; it puts our strategy into monetary terms and sets financial targets. STP is more about short term actions. They overlap. In EP we can plan our investments in details. In STP we do this again, in many cases with new financial targets, and this means new plans. LCE and STP are also mixed up. STP sets targets, LCE should be bet understanding on STP. But in practice LCE can be set for target. STP looses its purpose. (Interviewee B)

On the other hand this fits with budgeting practice and can be necessary process for ensure profound and comprehensive planning. (Hansen et al, 2003). Other issue widely discussed in budgeting practice (Hansen et al, 2003; Covalevski, 2003; Wallin & Ekholm, 2000) is the improvement of the processes and malfunction of the whole planning process. Same evidence is found in this research as execution planning is seen too detailed. Detailed planning for next two years was criticized with justification that business environment is on constant change and there should more upper-level thinking instead detailed planning. Execution planning in financial terms is partly seen too heavy process and currently not fitting to its purpose. Targeting according to percentage cost-cuts and giving flat financial rates gained criticism:

> "We should plan in more upper level, a bit less accurate and change plans more according to market demands." (Interviewee E)

> "It is sometimes impossible plan for EP. Business changes so rapidly. And change is constant; we have to ensure that our organization is capable to this. Whenever targets are changed, we should be this way able to roll-out the new plans to bottom level quickly." " (Interviewee D)

> "EP planning is frustrating in financial terms. People might plan really carefully everything but response in financial terms is either flat or less spend. I have solved that the way that we make plans according to priority. We the targets come, we just cut the list from bottom and exclude thing that we can not afford" (Interviewee C)

In general STP is not so highly regarded. While comparing different financial planning processes, short-term planning did get both positive and negative comments:

> "STP is good to have; we need snap shot vision for a half year. However, STP must not command us what we do for next half year. We need LCE's" (Interviewee D)

> "LCE is really important process; it gives most recent situation on business environment. Every change compared to STP and EP is visible with LCE. In principle we could forget STP, LCE more carefully worked could give same end-result in control; EP could work as the strategic guidance." (Interviewee A)

> "In practice STP can be only used in some reviews and of course in our incentives programs" (Interviewee B)

STP can be interpreted as inflexible budget plan, which concentrates on history and leads to unwanted behaviour in financial planning thinking.

"Short-term plans can be seen as budgets" (Interviewee F)

Short-term planning has a characteristic for changing thinking in sort of 6 months understanding and this way short-term planning can be seen tying up people not to initiate profitable investments that were not originally planned. STP process was even seen useless for having extra-investments:

> “Short-term plan is good to have, we need snap shot vision for a half year. Extra-investing is easier in STP, but of course LCE process enables this as well. However, sometimes people do not understand that they can do things in despite of the fact that they are not in short-term plans. But it is not problem of process “ (Interviewee D)

> “LCE is right place for these. It is pointless to get these into STP. STP will not grant any extra fund. It is so mechanic routine. If you have a good business case, it is no problem of getting extra money with LCE process. I just recommend to managers not to put extra items to STP.” (Interviewee C)

This six months thinking is also affecting biased to project planning because projects are not planned in STP time frames

> “STP do not understand project because usually they last more than six months. We are not having complete understanding in project costs because we do not look properly projects in their time window.” (Interviewee B)

> “We should plan deliveries in reasonable timeframe and accuracy. STP planning drives that everything should be planned similarly”. I think one of our biggest problems is that currently planning in time frame context in STP controls the way that we will deliver something according to that period which is not necessarily most best way of doing. We should get more agile way of doing to meet market demands. This current setup drives us to deliver in certain time frame.“ (Interviewee E)

Overall STP as planning device is seen many ways in controlling the R&D cost:

> “For some managers STP target is like dogma” “If I am over my STP target, I have done bad job or if I am under the STP I have done bad job. The truth can be something other” (Interviewee F)

STP was seen necessary as motivating effect while it is linked to incentives and its nature as statement of commitment. When managers’ financial incentives are tied to STP, there is a clear danger that operations are sub-optimized.

> “We should not stare into scorecard metrics…. It means that we are only following up the old plans. We have to able change plans in the middle of terms. When having STIPs, we need check whether we need updates.” (Interviewee D)

Cost estimation process should be monthly bottom-up process which is more casting financial spend for next 5 quartiles in details. It is important in controlling accurately short term financials:

> “I would say estimating costs is controlling upcoming in really short term, how it is happening in financial terms. Cost estimate sets plans in to periods and enables efficient cost management to meet the accuracy“(Interviewee H)

Intention for cost estimation process is rolling forecasting on future but in practice evidence in controversial:

> “I do not believe that we have real rolling forecasting process in place. I do not even see that is necessary. It is essential that we follow-up the bigger investments in top level” (Interviewee B)

> “I see that rolling planning is not working the way it should work. We are planning accurate for on-going STP, but the next unplanned STP target is set according to runrate. Activities are not completely recognized for up-coming unplanned STP what should be the idea in rolling planning. (Interviewee E)

Cost estimation process is also seen important due to its flexibility and process lightness.

> “STP is more structured process than LCE, LCE plans can be changed if you just keep on your target” (Interviewee B)

> “STP had for second half certain internal resource plan. However the changes in business environment forced to change in LCE plans and after all drop all the additional resource plans” Every change is reflected to LCE. It is the latest understanding what is happening in

delivery terms. (Interviewee H)

"This one program had extra investment item according LCE process and thanks to that we could deliver the product in time". (Interviewee H)

Really beneficial controllership was seen the frame thinking. For delivering certain financial frames for given but detailed spend was given to entities. Controllers see that targeting enables freedom in deliveries without compromising the profitability.

"Well, of course these gives certain financials frames, but freedom in between" (Interviewee F)

Organization has process for continues extra-investing and reallocation, this is part of organization's way of working and planning culture and enabled with financial frame setting. Re-planning is possible in all financial processes. Reallocation process is seen as business as usual because top-level target setting process creates financial frames and creates ability to free planning within the frames. However, extra-investing is experienced hard bureaucratic process even though it was encouraged whenever a good business case was found:

"LRP gives top level frame, EP 18 frame is more detailed to every bigger level action, and we should be able to shift that money to most value-adding R&D work. In EP should be able to put corporate strategy in details. In STP we agree what we are doing in next half year period to achieve the frames and targets given by EP. This should guide the R&D work. But there is still some slack left for prioritizing and strategic moves. This is road-mappers responsibility to analyse what gives the most economic benefit." (Interviewee A).

Organization is willingness to continuing reallocation, but between frames is clear challenge of allocating the funds. This process is partly handled with persistent planning processes. However many of the controllers and managers see this process too heavy:

"Challenge is to allocate the target correctly, otherwise we could get bad results in the end. We try to review and monitor these targets constantly. This can be a bit bureaucratic process" (Interviewee A)

Constant challenge in planning and controlling is understanding of time frames which are problematic in current setup. R&D work is investment to the future and balancing between current profitability and future income is philosophic challenge. Way of thinking can be built on leadership experiences and background:

> "There is always a risk in R&D planning that are we thinking in short-term or long-term. It depends on perspectives, especially on where the leaders are coming from, are they platform or program oriented guys. R&D is balancing between short-, mid- and longer term and organizational structure as well as operational mode drives our balance and objects. In theory the accountability is lost here because usually these responsibilities last only for couple of years." (Interviewee A)

One particular issue which emerged from interviews is that financial planning processes do not necessary understand the organisation' way of working. The financial processes were accused for setting actions for certain time frame which does not respond to operations in practice:

> "In these project organizations we need to be able to plan the next upcoming project. This affects on our current project. This is a clear challenge, we should be able identify the similarities and conflicts in these R&D programs. If we are able to develop this, I would say that we could find savings in our resource usage. But this is not possible in LCE process." (Interviewee H)

> "STP does not understand projects because usually they last more than six months. We are not having complete understanding in project costs because we do not look properly projects in their time window." (Interviewee B)

> "I think our biggest problem is that currently planning in time frame context. STP controls the way that we will deliver something according to that period which is not necessarily most best way of doing. We should get more agile way of doing to meet market demands. This current setup drives us to deliver in certain time frame. "(Interviewee E)

4.2.2 Controlling with Cost Targets

According to empirical evidence the target setting is experienced most important controlling mechanism in controlling case organizations spending. Preset targets are agreement on future spending. They are particularly needed for commitment communication:

> "Accuracy is important because we have commitment certain profit level to our owners. It is an agreement which commits us. Our leaders will in hard spot if we do not contribute profits' according to commitment." (Interviewee A)

Most important control mechanism to ensure that set targets are employed in organization is planning accuracy measurement.

> "Plans need to be reliable. It increases risk level, if we do not identify all the saving items. In order to manage planning risk, we need to have excellent planning accuracy. This enables us to make commitments to and communicate with our owners. Planning accuracy is also needed to get the planned items in correct priority. If the plans are not realising accurately, we would probably do wrong actions and still will reflect in our sales" (Interviewee A)

According to empirical data managers are really committing to meet their targets. In this case study commitment orientation can be in some level derived from the organizational culture where performance is highly regarded value:

> "I see that our managers are really committed to the plans." (Interviewee A)

> Why they are so committed? (Interviewer)

> "This is a good question, but if you want to play the game you have to be committed. Punishment follows if you do not play by the book, you just have to play the game, it is organization's way to work." (Interviewee A)

Interestingly the commitment can be achieved even though it would not be based on management's plans. To these upper-level targets can be affected with the incentives mechanism:

> "It depends. If the targets are given from top then commitment might a challenge. In these incidents commitment is employed through with good incentives. " (Interviewee E)

Also cost-cutting procedures to meet latest business environment challenges are seen unfitting and not working. Cost-cutting is seen as unreal sub-optimising plans, which are not getting true commitment.

> "We have been really proactive in cost-saving targets. We understand that these are necessary, we are committed to these…Commitment is not gained by percentage cost cutting. We can not manage by dictating without having a proper discussion. Percentage cutting is running away from real accountability" (Interviewee C)

Targeting is seen as effective control. As previously stated, it establishes an agreement on investing to short-term activities. Targeting is seen affecting through frame setting:

> "Targeting gives a good cost-benefit ratio. It gives frames for certain activities and enables people to concentrate on certain focus areas." (Interviewee G)

Targeting is also seen as manifold issue. It is appreciated as very effective way to successfully controlling the costs of the R&D operations. Targeting is seen as delicate art, balancing between cost efficiency and financial risk. Too tight targets is seen highly risky in terms of deliveries which is in highly volatile technology business one of the key areas. After all target is in first priority an agreement of spending level. This might lead to thinking that EP and STP must cover every potential investment just to ensure that the money is there when it is needed:

> "Managers think that they have to plan STP's and LCE's detailed to ensure that this money is in their use for sure. This leads to overoptimistic plans in terms of costs and timing. This means overbudgeting, business people want just make sure that finance people do not interrupt their work" (Interviewee C)

> "Positive about this targeting concept is that we have excellent planning accuracy. We are enable to adopt in changing conditions and provides more predictability. Also we are able to deliver large product portfolio in time. There will be small deviation compared to milestone plans" (Interviewee G)

Also rolling out the cost targets to lower level can be challenging process. This challenge creates an uncertainty to business managers and can partly explain the plan buffers in organization:

Does targeting lead to spending that meets the targets? (Interviewer)

"This might happen, but we do not know about this for certain. In larger scale I noticed in last STP that the targets in my entity were in too low cost level. I started to challenge the target. Simultaneously we noticed that there were entities given too high targets in other parts of the organization. After some periods the money was transferred to me when we noticed that the target was too low. This kind of sub- optimization can happen; managers can build buffers in their plans." (Interviewee G)

Where this sub-optimization comes from? (Interviewer)

"It can be result on incentives, fear of using future plans, fear of underachievement. Sometimes it can be result of misunderstanding the total view" (Interviewee G)

Targeting can also be seen as deteriorating factor that affects negatively on financial planning processes:

"Targeting can ruin the basis of our planning process. It drives to budget style, funding, that this way defines how we are taking our organization forward instead of a genuine bottom-up plan. With this bottom-up plan we could take though the organization and after that we should do the targeting…Targeting leads to budget constraint thinking. For example yesterday we started to discuss on EP planning and first thing which we talked about was targets. Now we do the targets in advance and no genuine planning is done and entity needs are not seen. This might result resource gaps and lagging with deliveries" (Interviewee G)

This can be understood serious problem at first sight. But when understanding the whole nature of this planning process and true meaning of financial target, the deteriorating factor is out-scoped with the benefits of targeting. As stated below targeting has created a working cost controllership and actually in some sense created a functional planning culture to the organization:

"I remember the time when planning was done genuinely bottom-up. Resourcing was management's responsibility. Programs were global and initiated with high speed. Sometimes the situation was complete chaos. For every innovation was a new project setup. This lead to huge gaps in resources….control was lost and no deliveries were finished. Costs were spend but nothing came out" (Interviewee G)

4.3 Interfaces of formal and informal control

4.3.1 Interface between Financial Planning and Organizational culture

> "Planning is highly implemented to our culture. "I can see no conflict in our culture and planning. It is built on our setup" (Interviewee G)

> "Our organizational culture enables us to drive to objectives. We do not need control for that. It is more about deliverables management to optimize the financials." (Interviewee H)

Organizational culture is found important in case organization while controlling. This is probably due to its characteristic as valuing performance and planning oriented ways of working. Therefore the insight that culture as informal and planning as formal control is interfacing. This is on contrary to traditional literature which states that formal and informal control is separated.

Planning is seen necessary control. Evidence indicates that in order to make profitable business cases plans are necessarily needed. There is some understanding that organizational culture controls by setting up the direction for operations, but in order to be efficient and meeting the customer requirements controls are needed. Also organizational complexity due to global organization and high-technology business sets clear necessity for control.

> "You can always put punch of coders into one place and wait what they can come up with. But when the organization is complex as ours, many products and platforms, you have to plan your activities; otherwise this simply would not work" (Interviewee A)

Financial planning is widely accepted by R&D managers. Obviously it is found as negative, but as necessary corporate procedure. However, manager is complaining about the heaviness of the planning processes. It is said that they are taking too much time and concentration or their core competencies.

> “Managers can be harmful about the cost cuts. Otherwise planning is seen positive, as something they should do. However, we have received feed-back that we have too many planning rounds, it is raised up that could STP or EP lighter processes.” (Interviewee A)

However experience amongst the personnel can still vary:

> How do you see that planning is experienced in R&D management and personnel?” (Interviewer)
>
> “I feel that people understand that we need to have plans and we are doing business.” Sometimes with the open-source world I feel that they are not business-oriented. People might be so attached to their projects and doings that they do not realize that in next five years there is no business use for this” (Interviewee F)

Financial planning processes are seen rather multi-layered and ambiguous processes. Partly, these processes are seen conflicting and not potential to meet highly variable business requirements. This can be understood as diminishing meaning of financial planning as a control mechanism and increase the purpose of organizational culture as control. In other words culture is the constitutional layer where other controls are built on. There is also evidence on this:

> “In the knowledge intensive business the professionals are really experts in their field. They know more than the managers. This sets a challenge to controllership; we must take account that we are managing sometimes professionals who are human beings. For this we need to understand the culture, you just can not do this by numbers“(Interviewee F)
>
> “I think the controllership in this context is more how we do it, not what we do” (Interviewee C)

Dedication on organization and its values is in high level. Organizational values are regarded widely and highly according to empirical evidence. Dedication to organization can be seen formed through these values, social control and formal control mechanism as forms of planning targets and incentives which itself are regarded as values.

Expectations as targets are in addition to values and performance measures also a highly controlling social control mechanisms. Data indicates that social control is embedded tightly to organization and employed in many levels.

> "Our people are aiming for organizational targets. Social discipline is high in our organization. People just want to meet the expectations and let down other." (Interviewee H)

> "People can be really dedicated to their work and do many hours while working in projects. This is really setup in people minds. It can be partly organizational culture thing, but partly a social pressure. (Interviewee A)

> "Social connections are strong. I see that working in teams and projects is our way. Good example of this was in one release where we had great difficulties schedules. We worked night and days 7 days a week to achieve to target. I managed the target with this common effort. It is not about the incentives, the target motivates people, and there is high pressure of not letting others down. We want to show everyone that we can do this. This highly integrated to our culture. Losing a face is highly feared. There could be no worst feedback than being no-good after a failure". (Interviewee G)

Financial success can be also created through attraction of competition and beating others:

> "I create a competition, and that has been successful. People hunger for recognition. It motivates to cut down underachievement"(Interviewee E)

As stated, it is seen that management is socially controlled. In this case there can be many mechanisms for gaining social control: competition, fear, dedication and pressures. In addition to these organization has ideology of good corporate citizenship. This means that business managers have a desire to implement financial plans set from upper-level. Background for this is the company values. Similar indication is seen in Alvesson & Kärreman's case study.

4.3.2 Connecting Organization to Plans

The case organization can be seen as an exceptional professional organization. Usually professional organizations are seen as in financial and performance measurement sense uncontrolled and people contributing only through their commitment which is based on their beliefs, values and professional identity.

In this particular organization, empirical evidence concludes that R&D professionals are really motivated to achieve planned objectives. For motivation itself people is found to have many reasons. There is found indications that people found motivating the possibility to participate work which contributes global markets. They enjoy that they have a possibility to affect on global markets and way of living. R&D people have in some sense a need for getting public recognition over their work. This indicates that social control is strong, people want to show that they are doing that receives gratitude.

> "Work itself can be found motivating. Receiving recognition and meriting of creating excellent products. People might be really fanatic about our products. And they are committed and ambitious. They might spend great deal of their free-time to contribute on R&D project, meeting the planned targets is really important for them." (Interviewee H)

> "I see that personally I enjoy on the fact that my work is actually in globally sold products and how they have affected people lives. " (Interviewee D)

> "What gets people motivated? This is hard question. Some of the people are motivated by monetary compensation; others by letting them do what they desire. Also working environment can attract competent, team work oriented and enthusiastic colleagues. Leaders can make you motivated. Good values and spirit can motivate. People can also be motivated getting their work, even sometimes revolutionary inventions into global products." (Interviewee A)

> "We are more development than research. Everyone has certain goal, and this motivates them. It is important in motivation that they are doing something which ends up in consumer product. This sound obvious, but we have much functionality where let's say 70% of work ends up in trash bin. You can work for year or two and probably your might not end up anywhere. That might be seen frustrating. So whenever your or your team's product is in market, it is rewarding." (Interviewee F)

Social connections and environment have been attracting people to participate. Social and emotional commitment is strong and keeping people performing. Case company is a work-oriented organization where people can spend their leisure time to work. In this study the social connection have more positive effect than Alvesson & Kärreman (2004) research. However, this might be biased data due to different setup while in empirical data gathering.

However respect and value for professional work are having lack of full recognition according to empirical evidence. Appreciation and recognition, which are typically characterised as part of professional organization is not seen important factors for motivating and this way methods for informal control. In fact, interviews revealed contrary comments:

> "Professional expertise is not valued enough. You have to be a business manager or leader to be compensated in a good level. However, in theory these experts can be more valuable and more difficult to onboard than business people." (Interviewee A)

> "In other companies the software developers and coders can be the kings, but I do see that we treat them sometimes like they are in the lowest level of food chain. The leaders do not set the R&D in to pedestal like in other IT companies…I do not know that if there is conflict, but still I somehow feel that we do not appreciate the human resources as we should, I think that the lowest level of R&D people feel that they are treated as herd…We do not have the culture where arise the so-called every day champions up from the floor level, on the other hand I feel that the business managers and planners get appreciated more than they should" (Interviewee B)

One interviewee stated that performing itself can be motivating. This was also indicated in Alvesson & Kärreman's (2004) study, where keeping up with performance measurement even with untruthful methods was seen critical way of working.

> "Being late is not motivating. We have teams who are having meetings on daily-basis where they update their status in their work. This is real evidence on how committed we are careful planning and follow-up…I have experience that this daily-based monitoring gives good results. It enables to split everything in easily achievable phases and these small steps are seen easy to achieve and therefore rewarding" Quality improves, time schedules are kept." (Interviewee C)

4.3.3 Controlling with Incentives:

On discussion concerning the motivation many things came up, but probably most noticeably incentives were talked about many interviews. Actually incentives is even seen part of the organizational culture. This evidence is reasonable in light of what is concluded in the beginning in this empirical chapter. As the organizational culture is seen planning, performance and objective -oriented, it is logical to presume that controls that measure and benefit for achievement are one of the most controlling methods. Alvesson & Kärreman (2004) in their case study indicated that financial motivator there is not the incentives, but the possibility advance in career. In Frow et al. (2005) study compensation was utilized in formal management tool and this way was implemented to organizational culture. This case study has similar characteristics, but in sense the incentives are more deep-down integrated to the organization. Like one interviewee pointed:

> "I would say that the incentives are essential part of this organizational culture and way of operating" (Interviewee E)

The role of financial compensation is seen controversial in generic professional organizational cultural aspects. In this case organization financial compensation is given in forms incentives and benefit in addition to basic salary. Cash can be also given in forms of achievement awards and patent compensation. It is rather interesting how often the monetary compensation came up in discussion on motivation as traditionally incentives are not seen major motivators in professional work. The overall level compensation is not found to meet the general level expectations:

> "We do not have compensation mechanism which would reward key R&D personnel. This is one reason why we can have problems to have required people in certain countries. Our HR policies are not line with local standards. The compensation and job classification policy is too hierarchical" (Interviewee B)

> "Professional expertise is not valued enough. You have to be a business manager or leader to be compensated in a good level. However, in theory these experts can be more valuable and more difficult to onboard than business people. We have to give more credits to lower level experts. You have to understand that if there is excellent guy working, he can be really profitable for the firm" (Interviewee A)

In interviews the incentives are credited as really important compensation method. Though for motivation incentives is seen both as strong and weak motivators. But at least in theory incentives are seen very functional control device.

> "I see that incentives are really motivating. People follow-up their bonus targets really carefully and control their work accordingly. You get what you measure." (Interviewee E)

> "I see that there not that motivating, but in reasonable level. But overall it might impossible to get incentive systems to work properly in professional work context" (Interviewee B)

> "In theory incentives are great way to control. If I am thinking my partners, some of them would not do anything for me without incentives" (Interviewee C)

On the other hand, the utilization in practice can be manifold and actual control effect can be weak:

> "Following up incentive targets is really difficult task. I bet half of the manager could not tell instantly that what they have agreed to be the targets for their subordinates and what is the status of these. In this sense I do not think in this case incentives manage our doings" (Interviewee C)

In matter of fact, the actual motivational factor there might not be the financial compensation, but the nature of target setting. Incentives can motivate also in process vise. Setting up the targets can be a vehicle for communication what is important and desirable.

> "Incentives can both motivate and de-motivate. Sometimes these get things done and sometimes prevent of doing the important things. It is not about money itself; it's more about communication what is important and what is needed to be done. You can say that the process itself is controlling, not the end-results" (Interviewee D)

> "Measuring and controlling is important. We need to ensure by communicating that what we do and why we do is clear to everyone" (Interviewee C)

R&D people are seen motivated by monetary compensation, but at the same time incentives have factors in-build which could have lead to sub-optimisation. Organization has two sorts of incentives programs for R&D personnel: short-term incentives which are for management. Management incentives are linked this short term financial plans. Management incentive targets are derived from this short term plan. For lower level R&D people, who are doing the actual R&D work, is program incentives. Management incentives are basically covered with four factors: salary level, individual achievement, hierarchical position and corporate business results. Program incentives are covered with program achievement which is replacing the hierarchical position factor set in management incentives; otherwise the factors are the same. Main forces affecting to total compensation is corporate business results and individual achievement which is compared to original targets. This is problematic due to constant re-planning and prioritization and can lead to sub-optimizing behaviour.

This sets as serious dilemma for organization. Incentives are really empowering method and this lays pressure in this control device to work as planned. This in-build logic is leading according to empirical evidence to situation where monetary compensation as control in form of incentives is seen two-fold and having factors that are tearing them apart:

> "I see that problems with incentives are that company results have too heavy impact. For example nowadays we as R&D organization are more predictable in terms of deliveries. A few years ago this was not the case, but however market conditions enabled massive bonuses. It can be experienced de-motivating when markets are in downturn, but people can deliver their output as targeted." (Interviewee E)

> "It can be de-motivating when company results drive compensation lower level than program would have let. This is clearly a disadvantage, on the other hand this is good way to affect on company's financials" (Interviewee A)

> "I think that incentives motivate, sometimes they can motivate too much, and lead to sub-optimization. Generally people are participating one project. Let's say that we have two programs: research program for two years and development of end product for one year. We are schedule-oriented and we put more effort to that project which is easier to manage. The focus is clearer, the result is more visualized and driving forces are easier to identify". They are same factors which are put for incentives. And guess what, people wants to attend the shorter program" (Interviewee F)

Financial motivation is not commonly understood force which connects people into organizations target in professional organization. This case organization was opposite to prerequisite, according to interview material peoples minds were widely affected with financial compensation

Financial planning is set into organization culture. It is described to be most efficient control. It is embedded to individuals through their emotional commitment to organization and financial incentives. Incentives are based on agreement which defines planned actions and desired deliverables. However, problem with incentives is that they can mislead organizational behaviour if they are misplaced. In this case this fear is quite reasonable due to high commitment to planned targets and ambition to achieve them. Conservative time frame derived from financial routines can also be misleading people's thoughts. In addition to these commitment and time-frame issue, controlling organizations financial performance through common corporate factor can jeopardize functional control mechanism if corporate results are not correlated with lower level success.

4.3.4 Planning Games Decaying Planning Culture?

Targeting is unfortunately leading to unwanted phenomenon, buffering. Partly buffering can be seen part of the whole organizational business planning game, cost-cutting can be understood as part of the normal planning routine and therefore it should not be seen such crucial problem. Buffering effect is in empiria described as part of the organizational culture. Problematic in financial planning is current setup that can lead to over-planning i.e. buffering:

> "Managers can think that they have to plan STPs and LCEs detailed to ensure that this money is in their use for sure. This leads to overoptimistic plans in terms of costs and timing. This means over-budgeting, business people want just make sure that finance people do not interrupt their work" (Interviewee B)

> "I would say that this is our way of working and efficient way. However, this takes grounds of genuine planning process. In EP process some people might protest that why need to make bottom-up plans if we receive a target. This can lead to sort of double planning because either way something will be cut off. This is not working genuinely. But this might be a generic problem" (Interviewee G)

> "Buffering is a difficult problem, we as controllers should be able to clear this. But

managers know that costs will be cut –down so they want to keep as much loose money as possible for meeting the cost targets". (Interviewee A)

"Budgeting is a political game. In product planning it can be said that we can not deliver everything with that sort of frame. In practice we always delay or cancel products, and then the frame was enough" (Interviewee B)

However, buffering is theoretically visible probably in all bottom-up budgeting, and in theory this phenomena should be part of the bottom-up planning process. (Hansen et al 2003.)

"In our way of planning in our organization includes a risk of buffering. It is part of human nature, get stock for stake of safety." (Interviewee A)

"This is always in budgeting. But how much of this is intentional, it is hard to say. This is more making sure that they get things done. In upper-level buffering can be more intentional making sure that there is easy savings when costs are cut." (Interviewee B)

By buffering, managers can lower the risk of uncovered costs. Financial planning as stated is a competition in internal market of capital and unreal plans can cause sub-optimization and inefficient use of resources:

Does targeting lead to buffering? (Interviewer)

"That might happen. It is challenge. People might not understand that underspending might be as bad as overspending in planning sense. It is built in mindset that there must be reserve for surprises. When these buffers are all around organization it is huge problem. It is our controller's responsibility to understand whether there are buffers and adjust that accordingly." (Interviewee E)

Miscommunication with financial planning is highly possible. In organization controllers have power to make their own judgments on underlying plans and adjust business managers' plans. Process is necessary for meeting the targets, but it can have deteriorating effect on planning culture and lead to too risk-avoiding planning. There are different views how this financial planning target should be communicated to management

> "I do not reveal to the lowest level that I have adjustments, I let them to plan according to their target, and they are committed to that. I just adjust in upper level." (Interviewee E)

> "We are committed to targets and therefore the communication needs to be very clear in management meeting. I have sat in management meeting and together we have wondered why we are overrunning. The figures seemed to be ok. Controller never told us about the adjustments, and therefore we never realized that this was the cause for our overruns. I understand that we need adjust. It makes control effective because it is always impossible to drop down the targeted figures to bottom level. But this commitment must be communicated to responsible managers" (Interviewee C)

It can be understood that buffering effect is about minimizing the planning risk. While continues re-planning processes concerning the deliverables are on-going, financial planning is not able to follow-up. Planning accuracy was presented as part of the reason for buffering. In this organizational context buffering could be explained by the planning accuracy measurement. In an organization like this where planning is highly appreciated, planning accuracy is dogma, which is heard in many discussions concerning the financial planning. This is partly hard to understand but in overall underachievement in planning accuracy context can be as bad as overachievement. Planning accuracy is accepted measurement amongst the managers. There are only arguments that state measurement is in too deep level.

> "Why planning accuracy is important due to fact that our company is having information on how much we are going to spend. In lower level it is necessary to know how much we can spend. We can not manage ourselves if we do not understand how we are going to achieve the targets. However, I think that we have gone into too down with this" (Interviewee B)

Planning accuracy was presented as part of the reason for buffering. In this organizational context buffering could be explained by the planning accuracy measurement. This is a paradox because planning accuracy mechanism should be partly controlling the buffering Planning accuracy as measurement is also important for owners because it is reducing their risk.

In some parts, planning accuracy measurement was tied to management incentives. Tying up cost planning accuracy to incentives management commitment is explicitly agreed in monetary terms. Common understanding is that by doing this, the plans correctness is increased and they are more accurate:

> "Implementing planning accuracy resulted better forecast on costs." (Interviewee G)

Planning accuracy measurement and incentivizing accordingly is seen controversial. Though, common understanding is that getting managers plan accurately in order to enable agreed business targets. Basic dilemma of controlling can be seen here too: you get what you measure and reward accordingly, thus this can lead to unwanted behaviour:

> "When you commit to certain target cost and it is in your incentives, of course you hit that figure, no matter if it is reasonable or not. This leads to inefficiency in terms of costs, you might spend more than necessary or loose some potential investments." (Interviewee B)

4.4 Interpretations on Empirical Data

This chapter presented the empirical data on the case organisation. First was introduction to organisational culture. Culture of this organisation was mixture of typical professional organisation's characteristics (definition according to Alvesson) and business orientations. This is characteristic Alvesson & Kärreman (2004) and Frow et al (2005) studies, where knowledge-intensive firm individuals were driven by personal desire to perform according to organizational targets.

Planning processes are in fact in this case part of the organizational culture. In this case study can be understood that culture is the constitutional layer where other controls are built on. This is also suggested in literature (Kunda 1992, Falkenberg & Herremans 1995, Alvesson 2002). Kärreman (2006) even suggest that professional organizations can only be controlled with organizational culture. As conclusion socio-ideological controls can be place where technocratic controls need to be implemented in order to be functional. Similar indication is in Alvesson & Kärreman (ibid.) study. However, in Frow et al. (ibid.) case this seems to vice versa, formal control mechanism in form of budgetary target is dominating informal controls.

Planning and performance measurement was highly appreciated. Financial planning is done in multiple levels with two different bi-yearly and one monthly planning process. Partly these planning processes are understood as complementary and each process is not clearly adapted to practice reflecting their true purpose. This is also widely discussed in budgeting literature (Hansen et al, 2003). The planning systems have characteristics of traditional budgeting, strategic initiatives and rolling forecasting. This system is sort of hybrid system described by Ekholm & Wallin (2000). Management incentives are linked to short-term plans and the target evaluation is made accordingly in 6 month periods. This is suggested to lead sub-optimization as rewarding is linked to measurement of executing historical plans. In Frow et al. (ibid) study incentives are utilized through common targets. In practice in their case financial plans are joint responsibility. However, their case study does not open enough the importance of the incentives which is considered critical in this study.

Planning process is both bottom-up and top-down planning in multiple iterations. Planning process is matter of planning and allocation of activities, committing, motivating and communication. This is according to Covalevski et al (2003) view of purpose of financial planning. Top-level targeting is seen very powerful control as all the planning is adjusted according to rolled-out financial targets. Target setting is experienced most important controlling mechanism in controlling case organizations spending working as agreement on future spending and communication. Target is setting organization certain frame where the management is free to execute. Management seems to be very committed to targets. This is in some level in line with Frow et al (ibid) case study where management has shared responsibility to execute in given financial targets. Targeting can be seen as manifold and ambiguous concept which is creating organizational inertia regarding financial controlling in forms of over-planning and buffer creation.

Execution planning is seen most powerful control as it sets a target for financial performance. Execution planning is connecting the financial plans to strategy which according to organizations purpose and existing literature (Simons 1995, 2000; Frow et al. 2005). However execution planning is not incentivised in management. This means that motivation purely set on the commitment which is embedded to organizational culture. In Frow et al (ibid) case commitment was created through social control.

Short-term plan as budgetary control is partly experienced as unnecessary control. After studying the empirical evidence through, the importance of short-term plans as control device is on reviewing the incentives targets against the actual performance. Short-term plans are working as diagnostic control. Its strategic value is controversial. Cost estimation process is seen as enabling business changes and it is really important for late investment and reallocation giving flexibility and this way diminish the structure building effect on execution and short-term planning. This cost estimation process can be understood quite crucial on professional organization context.

Financial planning is part of organization culture in case organisation. In practice it is understood to be most efficient control mechanism. It affects to individuals through their emotional commitment to organization and financial incentives. Same phenomenon is seen in Alvesson & Kärreman (ibid) where individuals have personal ambition to comfort with performance measurement. Incentives mislead organizational behaviour if they are misplaced. R&D people have high commitment to planned targets and ambition to achieve them. In Frow et al (2005) responsible managers are committed to achieve financial targets. While understanding the commitment degree, noticeably it should be understood that in this case organization incentive plans had in-build logics that can lead sub-optimized behaviour. In empirical data is not evidence how individual solve these possibly existing conflicts.

Miscommunication with financial planning adjustment is highly possible and actually occurred in practice. This process is needed, but can deteriorate planning culture and create planning games and financial buffers as described by Otley (1990). In this case organization buffering is part of the organizational culture as buffering is part of management's risk-management. It lowers the risk of having unplanned cost increases. Financial planning process is allocation of internal capital and sub-optimization lead inefficient use of resources and thus lowered return on investment. Therefore buffering effect can not be accepted in theory. There is a paradox between planning accuracy measurement and buffering effect. Planning accuracy which is created to ensure achievement of preset targets and cut-off the extra-fat from plans is accused to create buffering effect. Planning accuracy measurement is in some levels tied to incentives. This can lead to basic dilemma of management accounting: you get what you measure.

Financial planning is widely accepted by R&D managers and these managers are committed to planning process and to the actual plans. Commitment is gained through organisational values, social control and financial incentives. Similar indication can also be found in Alvesson & Kärreman (2004) and Frow et al. (2005) case studies.

Organizational culture is important factor in controlling. Similar results in their studies have been concluded e.g. by Kunda (1992), Abernethy & Stoelwinder (1995) and Falkenberg & Herreman (1995) This is probably due to its characteristic as valuing performance and planning oriented ways of working. This creates evidence on interfacing controls. This is on contrary to traditional literature which states that formal and informal control is separated and in line with Alvesson & Kärreman (ibid) & Frow et al. (ibid) studies. This case study also presents evidence that financial planning is embedded to organizational culture. This can be understood as decreasing value of formal controls and increasing need for informal controls to balance out decreasing control. .

Incentives are experienced as highly affecting control mechanisms. Financial motivation is not commonly understood force which connects people into organizations target in professional organization. This case organization was opposite to prerequisite, according to interview material peoples minds were widely affected with financial compensation. On the other hand the motivational effect can be the process itself, not the financial compensation. Incentives have seen as process and communication device. In process terms it is motivating and as communication method in states the business objectives desired to be achieved. This kind of indication is also in Frow et al (2005) study where formal HRM and incentives process worked as strategic initiative.

This case organization is significantly socially controlled. This is supported strongly literature (Das & Teng, 1998, 2001; Ouchi, 1980). This is similar what was presented in Alvesson & Kärreman (2004) where resource measurement process was highly intervened with social controls. There the resource measurement results figures that met the set target. In their case the actual outcome was untruthful as the individuals filled their hour bookkeeping according to planned, not real hours spend. In Frow et al (2005) case study middle-management were held highly responsible for financial and delivery success. Partly the control was utilized through incentives, but partly also with social pressure and even coercion. This control mechanism was build to be joint and no one were held individually accountable. Probably this could be explained by the fact that in the professional organization individuals are willing to contribute as planned. Professional people have a fear of not following the organizational rules. This is in their case organization highly embedded; everyone wants to be a good student. In this case social control is utilized more positive way compared to Alvesson & Kärreman (ibid) and Frow et al (ibid) studies. In their studies social control lead to untruthful actions and commitment creation true coercion, but in this case social control is created through competition and desire to perform. In this case there can be many mechanisms for gaining social control: competition, fear, dedication and pressures. In Frow et al (ibid) case social control is gained by creating a group commitment by setting common targets. Similarly group controlling formed social control mechanism in Alvesson & Kärreman case. In addition to these organization has ideology of good corporate citizenship. This means that business managers have a desire to implement financial plans set from upper-level. Background for this is the company values which is according to Kunda's (1992) and Weiss' & Miller's (1987) definitions. Similar indication of ideologies is seen in Alvesson & Kärreman's case study.

5. CONCLUSION

This research contributes more information on interfacing controls. Traditional control literature states that formal and informal controls are separated (Abernethy & Chua, 1996; Chenhall, 2003). More recent studies (e.g. Alvesson & Kärreman, 2004; Tuomela, 2005; Frow et al. 2005) have indicated that the formal and informal controls can be interfacing. This case study is no exception. This study indicates that financial planning can be organizational culture value itself and it can embedded to organizational realm with social control and financial compensation.

Actually literature can be seen two-fold. Traditional management control literature understands that organizations are generally controlled with formal control mechanisms such as objective setting, measurement and bureaucracies (e.g. Anthony & Govindarajan, 1998; Simons, 1995; Langfield-Smith, 1997). Literature concentrated on professional organization controllership (e.g. Alvesson, 1989, 2002; Kunda, 1992; Abernethy & Stoelwinder, 1995; Falkenberg & Herramans, 1995) suggests that professional organizations are controlled with informal controls such as culture, social relationships and ideologies. This case study fits into contemporary academics concentrating on modern organizations and indicates contrary evidence: professional organizations can be affected by tight planning. In matter of fact, planning can be so embedded process that it forms part of the organizational culture. Other issue which emerged strongly from empirical data is that financial compensation in form of incentives is actually part of the organizational culture.

Incentives are experienced as powerful control and motivator. Incentive plans are also seen as communication device on organizational targets and being part of the management communication. Its controlling force should be noticed and understood while planning organizational activities. Disregarding this sort of highly recognized factor can lead unwanted results in product delivery and inefficiency in cost control due to the fact that continues re-planning is not reflected in individual incentive plans and this can enable sub-optimizing behaviour. Alvesson & Kärreman (2004) in their case study indicated that financial motivator is not the incentives, but the possibility advance in career. In this case incentives are most significant compensation method. When incentives are having huge impact in motivation and controlling, this will emphasize the role of short-term plans. The control mechanism of incentives is linked to short-term plan and this can result a sub-optimized actions if individuals are acting according to out-dated plans.

Planning routines in organization are multilayered. This constitutes with existing literature and practice. (Hansen et al. 2003) As being part of the culture, it drives responsible people to persistently plan, monitor and re-plan if necessary. Planning itself was seen really positively, it was understood as necessary component of successful business. There is some misunderstanding on each planning processes purpose and suitability. Somewhat levels and ways of planning is also experienced too hard, time-consuming and detailed. There is indication financial planning is done continuously thoroughly because it is highly appreciated routine in upper-level management, not because it is necessary. This employs business managers and consumes their resources. Top-down target setting can have deteriorating effect on planning culture and therefore it should be critically reviewed how it is employed. Targeting process itself is found effective enabler for delivering agreed targets and gaining cost control.

Financial commitment amongst the business managers was seen in high level. In organization is a common understanding that profitable business in a necessity. Business managers generally wanted contribute on financial planning. Top level target setting got emotional commitment if they were found to be based on real plans. There is indication that this commitment is not gained only by setting up control mechanisms but it is part of the organization culture that financial planning is done on continues basis and properly. Despite high-level acceptance on planning there was clear message that organization is planned in too deep level. Low level planning process was seen too detailed in low level. Also commitment was ensured in low level through planning accuracy measurement. However, empirical evidence suggests that there lies a paradox between planning accuracy measurement and buffering. Several impressions were made on that planning accuracy can lead to buffering. On the other hand planning accuracy measurement is presented as mechanism to control buffering.

Organizations planning routines in case organization can be creating organizational structures and bureaucracies. This is seen in empirical evidence, but this evidence can be understood as universal and restricted to this case organization. (Hansen et al. 2003). There is some indication that planning processes for execution plans to implement the strategy and determining short-term deliverables and financials can lead to too structured ways to plan and operate. It is clearly stated that short-term plan can be seen as budget. This set an interesting light to financial motivation in forms of incentives as compensation objectives are possibly outdated historical plans.

Evidence on management control as strategic is quite weak. Clear indication is achieved that execution planning strategic importance, but otherwise planning procedures did not indicate contribution to this question. In organizational culture aspect people's commitment can be regarded as strategic. This question is hard to investigate and concept hard to understand i.e. investigation of relationship between organizational culture and strategy

This case study also presents evidence that financial planning is embedded to organizational culture. This can be understood as decreasing value of formal controls and increasing need for informal control. In this case study can be understood that culture is the constitutional layer where other controls are built on. As on conclusion socio-ideological controls can be place where technocratic controls need to be implemented in order to be functional. Similar indication is in Alvesson & Kärreman (ibid.) study. However, in Frow etl al. (ibid.) case this seems to vice versa, formal control mechanism in form of budgetary target is dominating informal controls.

5.1. Future Research

This research investigated the interplay of controls in IT firm. This setup can be tested in other organizations in the same field as well as in other business areas. Particularly it would be interesting to study how some other R&D organization is controlled as this research was able only to enter in shallow level to this field. The research should be longer and profound in terms of study size. To contribute significantly to management control literature, the experience of professionals to different control mechanisms should be tested to find the efficiency of current control and to create more optimal control package to control professional organizations. Particularly in this context, more profound understanding to organizational culture should gained in management control studies. As the case organization is under constant change, it would also be really beneficial to understand how management control can ensure successful organizational change process.

Interesting would be also to investigate in sociological aspect planning as organization cultural characteristic. As case presented, planning as formal control was part of the organizational culture which in traditional management control literature is considered to be separated. Also performance measurement in forms of incentive plans was integrated highly to culture. Therefore it would be beneficial study how this mixture of controls has been implemented and has it been conscious process.

To strengthen the understanding on planning in contingency-based approach, more research on planning in professional organizations should be conducted. Also financial commitment and motivating with incentives are issues that needs more investigation in professional organizations.

In management control literature, overall while aiming to achieve more profound view on professional organizations and their controllership, more studies in sociological and psychological aspects must be conducted. Management control literature and management accounting as a discipline should be investigated with wide perspective combining more behavioural sciences.

In addition to these research opportunities, new aspects and understanding can also be gained through research methodology. This research employed Alvesson & Kärreman (2007) framework, which has ideology of creating and discovering questions and mysteries from empirical material and reflect these mysteries to existing theories. Using this ideology for future study methodology can create a new understanding on managerial accounting and management control academics.

5.2. Limitations of research

The generic challenges of case studies also apply to this research. The objectivity is jeopardized as researcher being an insider. This has affected on research proposal formation and understanding of the research results. On the other hand, this insider status has given the researcher a possibility to participate in discussion longer time period and create understanding regarding the issue and the organization itself. This has enabled researcher to understand the contextual settings and organizational processes. In this research design the insider status has enabled to employ mystery creation ideology and in matter of fact facilitated more profound analysis opportunities for empirical data.

In addition to this, researchers' position has provided him valuable contacts and given him opportunity to interview true experts regarding the research problem. However, as all being active participants of the organization and sharing their insights, confidentiality and anonymity is critical for this research's success and therefore needed their sayings are disguised. Empirical data was mainly gathered from middle level management and business controllers. While four of total eight interviewees had previous experience on R&D work, two of them really had participated in the lowest level R&D work. This might leave a gap of understanding of the organization culture shallow and biased.

This research is concentrated on management control. It has some sociological aspects in terms organizational culture, but this aspect is only lightly grasping the surface. Psychological and sociological view in this study are not acknowledge with needed intensity and understanding on concepts and definitions do not receive the theoretical discussion in deep enough level. The purpose of the theory is to introduce management control in generic level, but this can lead to situation where understanding on controlling mechanism in theoretical aspect can remain shallow.

The results on strategic initiatives for management control remained weak. This is probably due to research setup which apparently was not able to contribute any evidence on this. However research setup enabled rich empirical material and this way served for its purpose.

This study holds basic dilemma of contingency-based research work and generalization issues also stand in this research. This case study must be understood in its own context. The organization has its own characteristics and settings. The interviewees have also their own beliefs and thoughts as well as they are subjective of the organization itself. This means that the results are compromised with objectivity. However this is generic issue in conducting case studies.

REFERENCES

Abernethy,Margeret A. & Stoelwinder Johannes U, 1995. *The Role of Professional Control in the Management of Complex Organizations*. Accounting, Organizations and Society, Vol. 20, No, 1, 1-17

Abernethy, M.A. & Chua,W.F., 1996. *A Field Study of control system "redesign": the impact of institutional processes on strategic choice.* Contemporary Accounting Research, 13, 569-606

Ahrens, Thomas & Chapman, Christopher S., 2004. *Accounting for flexibility and Effiency: A Field Study of Management Control Systems in a Restaurant Chain.* Contemporary Accounting Research, Vol. 21, No.2.

Alvesson, Mats, 1995. *Management of Knowledge-Intensive Companies.* Walter de Gruyter. Berlin.

Alvesson, Mats & Kärreman, Dan, 2004. *Interfaces of control. Technocratic and socio-ideological control in a global management consultancy firm*. Accounting, Organizations and Society, 29, 423-444

Alvesson, Mats & Kärreman, Dan, 2007 .*Constructing mystery: empirical matters in theory deveplóment.* Academy of Management Review, Vol. 32, No. 4, 1265-1281

Alvesson, Mats & Sveningsson, Stefan & Kärreman, Dan, 2002. *The Return of Machine Bureaucracy? The Management Control in the Work Settings Professionals*. International Studies of Management, Vol. 32, No. 2, 70-92

Anthony , R . N ., 1965 . *Planning and Control Systems* : *A Framework for Analysis* , Boston , Boston Graduate School of Business Administration , Harvard University .

Anthony, Robert N. & Govindarajan Vijay, 1998. *Management Control Systems*.9th Edition, Irwin/McGraw-Hill, Boston, MA.
Burns, T. & Stalker, G.M. 1961, *The Management of Innovation*. Tavistock, London,

UK

Byles, C. M. and Keating, R. J. 1989. Strength of Organizational Culture and Performance: Strategic Implications. *Journal of Business Strategy,* 6(1), pp. 42-54.

Covalevski, M.; Evans III, J; Luft, J & Shields, M. 2003. *Budgeting research: Three Theoretical Perspectives and Criteria for Selective Integration.* Journal of Management Accounting Research, 15, pp. 3-49.

Das, T.K & Teng, Bing Sheng, 1998. *Between Trust and Control: Developing Confidence in Partner Operations in Alliances*. Academy of Management Review. Vol 23, No. 3, 491-512

Das, T.K & Teng, Bing Sheng, 2001. *Trust, Control, and Risk in Strategic Alliances: An Integrated Framework*. Organization Studies, 22/2, 251-283

Dekker, Henri, 2004. *Control on Inter-Organizational Relationships: Evidence on Appropriation Concerns and Coordination Requirements.* Accounting, Organizations and Society, 29, 27-49

Drury, Colin, 2000. *Management and Cost Accounting.* 5th Edition, Thomson Learning, London, UK

Eisenhardt, Kathleen M., 1985. *Control: Organizational and Economic Approaches*. Management Science, 31, 134-149

Ekholm B. and Wallin J, 2000. *Is the annual budgeting really dead?* The European accounting Review, vol9, pp. 519-539

Falkenberg, L. & Herremans, I., 1995. *Ethical Behaviours in Organizations: Directed by the Formal or Informal Systems?* Journal of Business Ethics, 14, 133-143.

Flamholz, E.G. ,1983. *Accounting, Budgeting and Control Systems in Their Organizational Context: Theoretical and Empirical Perspectives.* Accounting, Organizations and Society, 153-174.

Flamholz, E.G & Das, T.K. & Tsui, A ,1985. *Toward an Integrative Framework of Organizational Control.* Accounting, Organizations and Society, 35-50

Frow, Natalia & Marginson, David & Ogden Stuart. 2005. *Encouraging strategic behaviour while maintaining management control: Multi-functional project teams, budgets, and the negotiation of shared accountabilities in contemporary enterprises.* Management Accounting Research, 16, 269-292

Fryxell, Gerald, E & Dooley, Robert, S. & Vryza, Maria, 2002. After the Ink Dries: The Interaction of Trust and Control in US-based International Joint Ventures. Journal of Management Studies, 39, 6, 865-886

Giddens, Anthony, 2006. *Sociology.* Fifth edition, Polity Press, Cambridge , UK

Goold, Michael & Quinn, John J, 1990. *The Paradox of Strategic Controls.* Strategic Management Journal, Vol 11, 43-57.

Hansen, S.C.; Otley, D.T. & Van der Stede, W.A, 2004. *Practice developments in budgeting: an overview and academic perspective.* Journal of Management Accouting Research, 15, 95-116.

Hansen S.C. and Van der Stede W.A, 2004. *Multiple facets of budgeting: an explonatory analysis,* Management accounting research, vol 15, pp. 415-439.

Hatch, Mary Jo, 1997. *Organization Theory: Modern, Symbolic, and Postmodern Perspectives.* Oxford University Press, New York.

Hirsjärvi S. & Hurme H, 2000. *Tutkimushaastattelu: teemahaastattelun teoria ja käytäntö.* Helsinki University Press

Hopwood, A, 1987. *The Archeology of Accounting Systems.* Accounting, Organizations and Society, 12, 207-234

Jensen, Michael & Meckling, William, 1976. *Theory of Firms: Managerial Behaviour,* *Agency Costs and Ownership Structure.* Journal of Financial Economics, 3, 305-360.

Katzenbach, Jon R. & Smith, Douglas K, 1993. *The Discipline of Teams.* Harvard Business Review, 162-171

Kloot,L 1997. *Organizational Learning and Management Control Systems: Responding to Environmental Change.* Management Accounting Research, 8,1, 47-73

Kober, Ralph & Ng, Juliana & Byron, J. Paul, 2007. *The Interrelationship between Control Mechanisms and Strategy*. Management Accounting Research, pages in press

Kunda, Gideon, 1992. *Engineering Culture – Control and Commitment in a High-Tech Corporation.* Temple University Press, Philadelphia

Langfield-Smith, Kim, 1997. *Management Control Systems and Strategy: a Critical Review*. Accounting, Organizations and Society, 22, 207-232.

Langfield-Smith, Kim & Auzair, Sofiah ,2005. The Effect of Service Type, Business Strategy and Life Cycle Stage on Bureaucratic MCS in Service Organizations. Management Accounting Research, 16, 399-421.

Lukka, K & Kasanen, E, 1995. The problem of generalizability: anecdotes and evidence in accounting research. Accounting, Auditing & Accountability Journal, Vol. 8, No 5, 71-90.

Marchan, Rebecca, 1996. New Structural Forms and Inter-Unit Communication in Multinationals – The Case of Kone Elevators. Helsinki School of Economics And Business Administration A-110

Martinsuo, Miia, 1999. *Promotion of Values in a Multinational Enterprise. HUT Industrial Management and Work and Organizational Psycholohy, Report No 10*

Merchant , K . A ., 1985 . *Organizational Controls and Discretionary Program Decision Making : A Field Study.*, Accounting Organizations and Society , 10 , 67 – 85.

Merchant, Kenneth 1998. *Modern Management Control Systems: Text and Cases.* Prentice Hall Inc., Scarborough.

Merchant, Kenneth A. & Van der Stede, Wim, 2003. *Management control systems: performance measurement, evaluation and incentives*. Prentice Hall, New York.

Merchant, Kenneth & Van der Stede Wim, 2006. *The field-based research in accounting: Accomplishments and Prospects.* Behavioural Research in Accounting, Volume 18, 117-134.

Mintzberg, Henry, 1979. *The Structuring organizations.* Prentice-Hall. Englewood Cliffs.

Mintzberg, Henry, 1983. Structure in fives: Designing effective organizations. Prentice Hall, Inc. Englewood Cliffs, New Jersey

Mintzberg, Henry, 1987. *The Strategy Concept. 5 Ps for Strategy.* California Management Review, 30, 1, 11-24.

Otley , David, 1980 . *The Contingency Theory of Management Accounting : Achievement and Prognosis.* Accounting , Organizations and Society , 5 , 413 – 428 .

Otley, David, 1990. *Issues in accountability and control: some observation from a study of colliery accountability in the British Coal Corporation.* Management accounting research, vol1, pp.101-123.

Otley, David, 1994. *Management Control in Contemporary Organizations, Wider Perspective.* Management Accounting Research, 5, 289-299.

Otley, D.T. & Berry, A.J. Control, Organization and Accounting. Accounting, Organization and Society, Vol. 5, No. 2, 231-244

Ouchi, William, 1977. *The relationship between Organizational Structurea and Organizational Control.* Administravie Science Quarterly, 22, 95-113.

Ouchi, William, 1979. *A Conceptual Framework for the Design of Organization Control Mechanisms*. Management Science, 25, 833-848.

Ouchi, William, 1980. *Markets, Bureaucracies and Clans.* Administrative Science Quarterly, 25, 129-141.

Roberts, John 1991. *The Possibilities of Accountability.* Accounting, Organizations and Society, 16, No.4, 355-368.

Scapens, R.W, 1990. *Researching Management Accounting Practice: The Role of Case Study Methods.* British Accounting Review, 22, 259-281

Schein, E. H. (1984). *Coming to a new awareness of organizational culture,* Massachusetts Institute of Technology, *Sloan Management Review,* Winter, 3-16.

Schein, Edgar, 1985. *Organizational Culture and Leadership.* First edition, Jossey-Bass Publishers, San Francisco

Schein, Edgar H, 1999. *The corporate culture survival guide : sense and nonsense about culture change.* Jossey-Bass, San Francisco

Simons, Robert 1990. *The role of Management Control Systems in Creating Competitive Advantage: New Perspectives.* Accounting, Organizations and Society, 15, 127-143.

Simons, Robert 1991. *Strategic orientation and top management attention to control systems*. Strategic Management Journal 12 (1), 46–62.

Simons, Robert, 1994. *How newtop managers use control systems as levers of strategic renewal.* Strategic Management Journal 15 (3), 169–189.

Simons, Robert 1995 *Levers of Control: How Managers use Innovative Control Systems to Drive Strategic Renewal.* Harvard

Business School Press.

Simons, R., 2000. *Performance Measurement and Control Systems for Implementing Strategy: Text and Cases.* Prentice-Hall, Upper Saddle River, NJ

Tuomela, Tero-Seppo, 2005. *The Interplay of different levers of control: A case study of introducing a new performance measurement system.* Management Accounting Research, 16, 293-320.

Weiss, Richard M & Miller, Lynn E. 1987. *The Concept of Ideology in Organizational Analysis: The Sociology of Knowledge or the Social Psychology of Beliefs?* Academy of Management Review, Vol 12, No 1, 104-116

Yin, Robert K. 2003: *Case Study Research. Design and Methods*. 3. edition, Sage Publications, Thousand Oaks