Stockholm School of Economics

Master's Thesis in Accounting and Financial Management

Customer Profitability –

A Case Study on Measurement Methods within a Manufacturing Company

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Abstract
The aim of this paper is to examine how customer profitability is measured within a manufacturing company and analyze whether the measurement method is institutionalized or not. A case study has been conducted on a Swedish manufacturing company that has applied different measurement methods throughout the years. The paper presents a theoretical approach of customer profitability and management accounting change, and this approach is contrasted with the empirical study. The main finding of the study is that customer profitability is only partly being measured within Kanthal, even though the company has a well developed measurement tool kit. The reasons for this are that customer profitability has different meanings within the organization, old routines are preferred over new routines, and that the task of measuring and managing customer profitability has been assigned to the sales team. The demands on the sales team are too high and due to the lack of support from the rest of the organization, it becomes clear that the measurement of customer profitability is not fully institutionalized.

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1. Introduction

Customer profitability has been ranked as one of the most prominent features within current general management and has become increasingly important for companies today (Bates and Whittington, 2005). To be successful, a company needs to formulate and implement a strategy that reveals the truth about its customers, i.e. highlight the activities that add value and those that do not (Balachandran, 2005). When that is done, value added activities can be maximized and non-value added activities minimized.

However, most companies today fail to measure customer profitability and therefore they are not as competitive as they could be (Kotler, 2002). The reason behind the failure is that there is usually very little information about profitability of customers when the accounting management systems are designed in order to analyze product profitability. Today's business is not only about executives managing a portfolio of products, there is a clear need for managing a portfolio of customers (Schoeniger, 2003). When the management is able to identify revenues, costs and profit by individual customer or customer group, better decisions are to be made in the long term (Noone and Griffin, 1997).

An insightful analysis of customer profitability will also serve to support and strengthen financial measures and deliver positive return on investment. In addition, understanding the underlying components of costs and addressing specific root causes of poor profitability will result in a significant improved bottom-line performance (Reid and Detiveaux, 2004).

The environment which affects management accounting practices has changed dramatically since the late 1980s when the company in our study, Kanthal, became a well-known textbook example.[1] Today's information technology is more advanced, the competition is more intense, the organizational structure of the market has been developed, and improved management accounting practices have been implemented (Ezzamel et al, 1993 and 1996).

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[1] Kaplan (1989), "*Kanthal (A)*", HBS Case 9-190-002 and "*Kanthal (B)*", HBS Case 9-190-003.

With this observation of the changed circumstances, we found it interesting to study how customer profitability is measured today within Kanthal. When the empirical research was collected, we found that Kanthal had changed their approach regarding customer profitability, due to the changed environment. New business systems and projects have been implemented in order to meet today's challenges in the market. However, the organization has not succeeded in creating a unified measurement system, which has led to the fact that customer profitability has an ambiguous meaning within Kanthal. In addition, the lack of clear linkages between business systems and projects affect the ambiguity of the definition of customer profitability and full institutionalization of the different tools and projects is hindered.

The aim of this paper is to study how customer profitability is measured within the manufacturing company Kanthal and further analyze whether the measurement method is institutionalized or not. We are examining the intentions behind the system and investigating whether the intentions are successfully carried out. The discrepancies between the intentions and the outcome are then explained using a conceptual framework grounded in institutional theory. The framework is designed by Scapens and Burns (2000) and is aimed to study the processes of accounting change within individual organizations. A conceptual framework is necessary to apply in this kind of research, in order to capture the change in its specific context. Due to the scope of the thesis, we have limited our study to cover the micro processes of management accounting change within Kanthal, Hallstahammar.

There are two reasons behind the choice of company to study the phenomenon mentioned above. The first reason regards that the company has been in a front position in earlier studies within management accounting, and it has been used by several scholars as a classical example of the importance of customer profitability analysis. During the 1980s, when the present method of profitability measurement could not manage to reveal hidden profits and costs, the company moved away from the traditional way and designed its own method. The new method was customized to fit the operations and the result showed that only 40 percent of its customers were profitable (Kaplan, 1989a).

The second reason to study the company is a spin-off of the first reason. After the results from the new method were presented, immediate actions were taken to increase the customer profitability (Kaplan, 1989b). Thus, Kanthal has previously demonstrated how changed circumstances have affected their management accounting system and we found it interesting to study how customer profitability is measured today.

Our interest in the development of the measurement of customer profitability resulted in the following research. These questions will serve as a guideline through the paper:

How is customer profitability measured and has the measurement method been institutionalized throughout the whole organization?

The case study has been conducted on Kanthal, a Swedish manufacturing company that is specialized in the production and sales of electric resistance heating material and heating elements. There have been dramatic changes in the market, in the industry and within the company since the cases about Kanthal were written by Kaplan in 1989, and therefore we wanted to study how customer profitability is measured today.

The remainder of this paper is structured as follows. First, the theoretical background of customer profitability measurement will be outlined. With this basis, we are presenting a framework of management accounting change, which is designed by Scapens and Burns (2000). In the following section, we will explain the method used in the performed case study. In the third section a description of the case company Kanthal and the empirical findings of how customer profitability is measured will be presented. This will be followed by an analysis where the empirical findings are contrasted with the theoretical framework. This analysis will lead up to main conclusions and also suggestions on how research can be taken further.

2. Theory

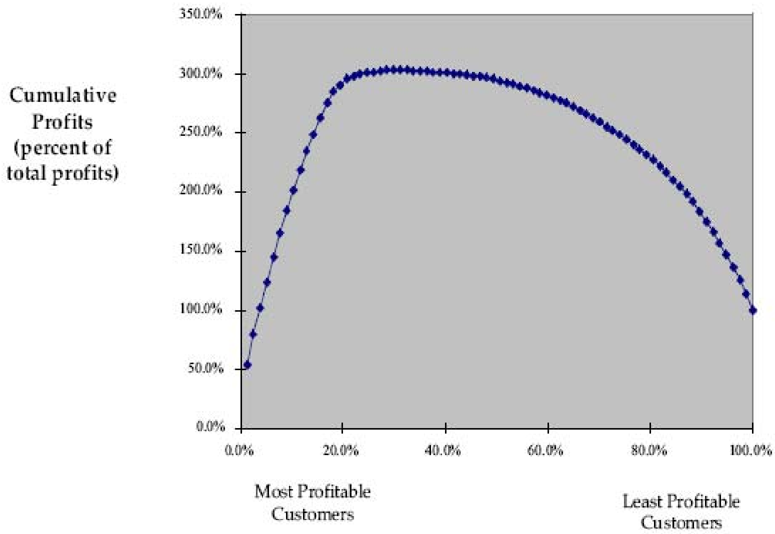
2.1 Customer Profitability

An analysis of customer profitability measures the contribution to a firm's profit per customer (Lind and Wedin, 2006). There are several existing terms in the literature referring to customer profitability (Mulhern, 1999). Pfeifer et al (2004) uses a definition where customer profitability is connected with the current understanding of the concept of accounting profitability.[2] According to Pfeifer et al (2004), the design of the definition does not require the users to include specific categories of costs. The design of the models in use can be customized by the company and even the characteristics of the customer relationship influence how the costs are assigned. However, the different approaches all measure customer profitability, i.e. the difference between revenues and costs, assigned to a specific customer relationship (Pfeifer et al, 2004).

An analysis of customer profitability can be portrayed and plotted as a whale curve (Kaplan and Narayanan, 2001). The whale curve represents the relation between cumulative customer profitability, as a percentage of total customer profit or in monetary terms, and the cumulative percentage or number of customers. The graph illustrates how customers can be sorted by decreasing order of profitability (Sievänen et al, 2001). The outcome of customer profitability analysis plotted as a whale curve illustrates each dollar of the total earned revenue that has an unequal contribution to the overall profit. The customer that generates the largest revenue does not necessarily have to be the customer that is the most profitable to the firm (Kaplan and Narayanan, 2001; Pfeifer et al, 2004). Information about customer profitability is a prerequisite for the management and they will be able to make various decisions both regarding short and long-term planning based on this information (Sievänen et al, 2001). In addition, the causes and effects of measuring customer profitability can help the firm to develop strategies in order to improve its profitability (Pfeifer et al, 2004).

[2] The accounting construct of profit is: (1) the arithmetic difference between earned revenues and associated costs—where revenues and costs are measured on an accrual basis, not a cash basis; (2) the profit measure applies to a discrete time period such as a quarter or a year (Pfeifer et al, 2004, p.6).

Figure 1. **The Whale Curve of Cumulative Profitability**



Source: Kaplan RS, Narayanan V.G, "Customer profitability Measurement and Management", Working Paper, Harvard Business School. 2001.

As previously mentioned, analyses of measuring customer profitability differ among users. An analysis can range from using forms of full product costing, based on amount of products purchased, to more advanced forms including activity-based costing (ABC) (Malmi et al, 2004). Even if all analyses measure customer profitability financially, the analyses can also differ in form of management and time periods. Some firms measure by customer, while other measure by group or segment. The different time periods can be monthly, annually, or up to a lifetime (Lind and Wedin, 2006).

2.2 Management Accounting Change

The nature of management accounting has over time changed from financial control to business support. Management accounting is considered to be a multifaceted phenomenon that could be reduced to a specific system to optimize the result and it is an ongoing process needed to be studied within the organizational context where it is located (Scapens and Burns, 2000). In addition, changes within management accounting are path-dependent, i.e. the nature of the change process is tightly linked to the specific setting of the organization. When the micro-processes are studied, it is crucial to have an understanding of the context and history of the organization in focus. To be able to get a broader perspective, one has to have knowledge about the general trends in the field and understand external institutions and their role in the development of management accounting. These institutions are for example the professional environment, i.e. accounting bodies, newspapers, books, networks of managers, training and education processes. Furthermore, Scapens and Burns (2000) highlight different changes that directly impact management accounting and the most important ones are changes in competition, technology and management structure. On one hand, these external factors are not primarily in focus in our particular case. On the other hand, we believe that in order to analyze the findings correctly, a brief understanding of the external factors is necessary.

2.2.1 A Framework for Studying Management Accounting Change

The conceptual framework that is used to analyze the case in our study is built upon the institutional perspective of management accounting described by Scapens (1994). The basis for the institutional approach is the thought that accounting routines both shape and are shaped by the institution where the activities occur. Giddens (1984) explain this phenomenon in his work about structuration theory and he sees institutions as an outcome of a process driven by routinization of human activity. Hodgson (1993) discusses the linkages between habits and action and he defines habits as personal tendencies of engagement in previously implemented forms of action. Routines, on the other hand, are not personal and can involve groups of individuals. In the relationship between actions and institutions, routines play an important role. Even if habits and routines affect human behavior, people also have reasons for doing things, and that is when rules come in to play. In order to coordinate actions of groups of individuals, the important role of rules cannot be neglected.

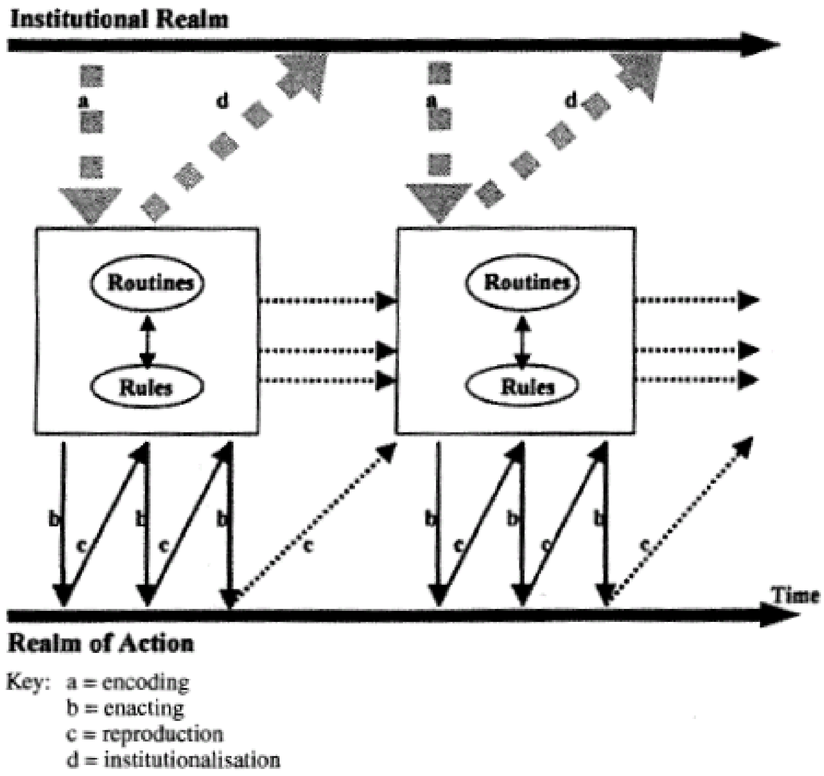
The framework is based upon the following assumptions; rules are considered to be the formalized statements of procedures, and routines are the procedures actually in use. Whereas routines are in a constant process of change, rules are usually only changed occasionally and in specific settings. However, the modification of routines may depend on control procedures. In the field of management accounting, rules form the accounting systems as described in manuals of procedures, whereas routines serve as the basis of the accounting practices carried out. It is clear that there is a relationship between rules and routines and it is important to be aware of the difference between the two concepts (Scapens and Burns, 2000).

The definition of institution used in the framework is the following: *"the shared taken-for-granted assumptions which identify categories of human actors and their appropriate activities and relationships"* (Scapens and Burns, 2000, p.36). Thus, institutions are the result of the different behaviors of social groups and communities (Scapens and Burns, 2000).

2.2.2 The Process of Institutionalization

The framework is based upon the process of institutionalization. Whereas institutions are shaped at specific points of time, actions are both producing and reproducing institutions on an ongoing basis.

Figure 3. **The Process of Institutionalization**



Source: Scapens, R.W., Burns, J., (2000), Towards an Understanding of the Nature and Processes of Management Accounting Change. Acta Universitatis Upsaliensis. *Studia Oeconomiae Negotorium* 47. 70 pp. Uppsala

The first process is represented by *arrow a* and leads to the encoding of institutional principles into rules and routines. While existing institutions shape new and existing rules, the process of encoding both form and/or reform ongoing routines. The process is influenced by the taken-for-granted assumptions, i.e. the institutional principles which are based on existing meanings and values.

Arrow b demonstrates how the second process involves the actors enacting both the rules and routines which then encode the institutional principles. The enactment process is influenced by conscious choice, reflexive monitoring, and the application of tactic knowledge. Rules and routines influenced by this process might challenge the existing rules and routines and can therefore be source to resistance. If that situation occurs, the resources of power among the actors will come into play.

The third process, *arrow c*, illustrates how repeated behavior results in a reproduction of the routines, and both conscious/intended changes and unconscious/unintended changes can be involved in this process. The latter is likely to occur if a monitoring system of the execution of the routines is absent, or if the rules and routines are not clear or accepted among the actors.

The final process, represented by *arrow d* in the figure, is the institutionalizing of rules and routines that previously have been reproduced by individual actors' behaviors. This is the process when the rules and routines are disconnected from historical contexts and they become basically the way things are. They are now institutionalized and will then be encoded into the ongoing rules and routines, and the process will continue again and again.

The presented framework by Scapens and Burns (2000) describes how institutions are structural properties comprising taken-for-granted assumptions about the way things should be done. Institutions shape and limit the rules and routines, influence the meanings, values and the powers of the individual actors. When they are disconnected from the historical settings, they only exist in the understandings of the individuals and groups that have knowledge about them. Rules and routines are more concrete than institutions, which is illustrated by the use of dotted *arrows a* and *d*. In addition, these arrows also represent ongoing processes instead of specific movements.

Rules can be imposed and become implemented in two ways, i.e. either through the establishment of routines or through routines that are emerging from already established routines. In both cases, it is an ongoing process of enacting and reproduction of rules and routines. Furthermore, more distinct changes can also occur, illustrated by the movement from the first to the second box of rules and routines in the figure. To summarize, the substance of the new routines will be affected both by the encoding of the structural properties of ongoing institutions and by the existing routines that are reproduced.

2.2.3 Evolutionary Change

Management accounting changes that are consistent with the existing routines and institutions are more likely to be completed than those that are not. The emerging routines will indirectly be influenced by the meanings and norms that are embedded in the existing routines and institutions. In addition, the powers of individuals will also play an important role as well as cost control and a concern for economic efficiency. Nelson (1995) describes the process of institutionalizing, i.e. the emerging routines become widely accepted in the organization and are a feature of the management control system. When this has occurred, the emerged routines represent definitions of behavior and relations between various groups within an organization. A management accounting change like this, when the routines are influencing the activities within an organization, the change is characterized as evolutionary. This category of changes all involves movement over time, random elements, systematic mechanisms, and existing institutions.

To sum up, to be able to change the existing management accounting system entails a deep understanding of the context of an organization, i.e. the existing routines and institutions. It is not only the formal systems that are important, habits of organizational members and taken-for-granted assumptions are also playing major roles (Scapens and Burns, 2000).

2.2.4 Accounting Routines and Meanings

The understandings, norms and beliefs of the organizational members influence the meanings and are highly associated with the institutionalizing process. The meanings are reproduced on an ongoing basis within the organization and are therefore essential for the reproduction of institutions. Meanings reflect past experience and accumulated knowledge and can be either individual or shared by groups or the entire organization. Due to the fact that meanings might differ among organizational members, individuals and groups can attach different meanings to the same phenomena which can lead to an organizational problem (Scapens and Burns, 2000).

2.2.5 Accounting Routines and Power

Since accounting routines set the rules for organizational actions and carry know-how, they are means that more powerful members of the organization can use in order to secure their own interests. In the implementation process of new routines, the outcome is dependent on the hierarchy and the personal power of the organizational members involved. In the previous outlined framework, power is drawn into the process of enactment and reproduction. A successful implementation of new accounting routines is based on either a routine that is powerful itself, or powerful individuals that are able to embed the new routines into the existing system (Scapens and Burns, 2000).

3. Method

3.1 Why this case?

Kanthal became famous during the 1980s when the ABC-method was implemented to study customer profitability within the firm. The actions taken and the effects were observed and documented in two cases by the world-renown Harvard Business School Professor Robert A. Kaplan. Today, 17 years later, researchers have started to examine other phenomena within this field, and even though it was recognized that the once known textbook example Kanthal had abandoned the ABC-method, no one has really studied how the company is measuring customer profitability today. When this was recognized, we decided to contact Kanthal and examine how customer profitability is measured today, in order to analyze the intentions behind the chosen system.

3.2 Choice of Method

According to Denscombe (2004), methodology for a research project can be divided into three parts, i.e. strategy, method and analysis. In this thesis, the form of strategy chosen is a case study;

"*A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident"* (Yin, 2003).

The targeted case company is intended to illustrate a phenomenon in a specific situation, with the surrounding setting described, i.e. procedures, interactions, and processes. The decisions about both employed strategy and method are to be taken before the research begins.

3.3 The Design of the Case Study

When performing a case study, an appropriate method has to be chosen. Yin (2003) refers to the *six sources of evidence,* which he believes are the most common when performing a case study, as documentation, archival records, interviews, direct observations, participant-observation, and physical artifacts. This research is mainly based on interviews, and even though these are said to carry potential weaknesses, this method has been favorable in the case of Kanthal due to the nature of the case study method. In addition, the interviews provided us with a broadened perspective and insightful information about the specific situation. Further on, the research has gained on the documentation that has been received from the observed company. Internal presentations and documents, annual reports and documents from internal meetings have appeared to be unobtrusive and although documentation is said to be retrievable, we believe that they point to the strengths or weaknesses of the project given the time observed.

The analysis of the research rests on qualitative data because there is no existing quantitative data available in this specific case. Many scientists argue that single case studies, and in addition, an analysis not supported on quantitative grounds cannot be used for generalization. Yin (2003), though, claims that case studies are, like experiments, generalizable to theories, but not to populations or universes. Instead of enumerating frequencies, which is also referred to as statistical generalization, the case study will try to expand and generalize theories – analytic generalization. The goal will be to perform a generalizing analysis instead of a particularizing analysis.

3.4 Completion of the Case Study

After having found an interesting phenomenon to study on an exemplary case, a decision was made to limit the study to the trend of customer profitability, since that had previously been a hot topic within the organization. The aim of the project was then decided upon, and the method chosen for the research was defined by the nature of the problem. Over time, this aim and its description has changed and developed to become more focused, once the organization and topic was examined closer. Once the case was found and the method was decided upon, theories and examinations about customer profitability were studied, together with general information about the company. During the visits at the targeted case company, internal documents were requested and these were later on examined and used as empirical research. The limitations of the project were set after all the interviews had been conducted, since the documented information that was studied before the interviews was not clearly limited to a specific area.

3.4.1 Interviews

To be able to approach an answer to our research question, several people working within Kanthal were contacted. Predominately the management was interviewed, but to receive a more complete view of the changes and the success of the implementation, operational staff was also interviewed. One characteristic of the firm is that the employees tend to be very loyal and their employments usually last over a significant number of years, and often up to a life-time. Due to this situation, it was important to interview both newly hired employees about their first impressions, and the people who had experienced the actual changes implemented by the management. This was done to observe whether or not the newly hired employees had been informed about the measurements implemented by the management, and to examine whether or not the measurement methods were actually used by the operational staff. In addition, we wanted to examine how, and if at all, the employees that had been employed for a longer period of time were affected by the changes and how they were affected when the changes were put into practice.

Since all human beings are individuals, they tend to prioritize and notice different aspects. Their observations will normally be affected by their responsibilities, how long they have been working within their position, and for how long they have been employed by the company. One person will not have the same experience and knowledge as another person has. This can sometimes lead to sub-optimization of one problem and an exaggerated notice of another problem. It has therefore been important to stay neutral during the interviews, in order to find a common pattern in what has been said, and to put attention to obvious contrasts that might be a result of positions.

Totally nine interviews were made, and all the questions were sent to the interviewees in advance. Nevertheless, the interviews mostly ended up in informal discussions, were the interviewees talked freely about what they found important in their role. All of the interviews were made at the headquarters in Hallstahammar, apart from one that was made at Sandvik's office in Kista, Stockholm. The interviews lasted between 45 and 90 minutes and both of us attended them. They were all recorded on tape and transcribed immediately afterwards. If we felt that further information was needed to fill certain gaps, interviewees were contacted for a second time. The documented interviews were then sent back to the interviewees for comments, to guarantee that there had been no misunderstandings.

The first person that was contacted at Kanthal was the Business Controller Eva Fransson, and she assisted in coordinating the interview process. Her knowledge about the different roles at Kanthal was helpful for the empirical research. She explained the different areas of responsibility and she contacted a representative group of people within the firm that she thought would be applicable for our research. In her role as Business Controller, she could provide us with her knowledge and experience from different reporting units, as well as her overview of ongoing projects and implemented business systems. The Chief Financial Officer (CFO), Björn Sandström, provided us with information about the business model and the top management point of view, which was very useful for the analysis. The Middle Managers provided us with insightful information and experience from their respective area, which gave us different perspectives of the same phenomenon in our study. Lastly, the results from the interviews with project managers and the sales men were valuable for the analysis of the empirical study because they presented their operational experiences with the different measurement methods and control tools.

3.4.2 Validity and Reliability

Whether the case study is credible and applicable to similar or other cases is a discussion about validity and reliability. Validity is a term connected to the precision of the research and describes to what degree the results correspond to the reality. Thus the challenge is to prove that the quality of the explanations and empirical findings concur with the reality (Denscombe, 2004). Reliability is related to the method chosen for the gathering of empirical data. Here the researcher has to discover empirical findings that do not vary at different occasions, to receive high reliability (Denscombe, 2004). This also means that the result will not depend on who was interviewed, or when and where the interview was held.

In this case we believe that the reliability is high due to the choice of research method. We believe that the interviewees all wanted to provide us with an accurate picture of the specific situation. However, when the application of interviews is chosen as a method, there is always a possibility of an unfavorable bias to occur. During an interview, the interviewee's personal experiences and opinions might be acknowledged as true facts, or he or she might be biased or not tell the whole truth. This risk can be reduced if a number of interviews are held, and in addition, potentially biased information might serve as a basis for a more balanced picture of the actual case. Different views and experiences of the same situation are also useful in order to find possible sources of conflicts.

Another concern with interviews might affect the validity. The questions asked might be misunderstood, or lead to a different discussion than was intended. This can though be prevented by the interviewers through asking similar questions during the interview that should all lead to the same answer, if the questions have been correctly understood. If a different discussion than the one that was intended comes up, this does not necessarily have to lower the validity all at once, but can concurrently illuminate other issues that serve as important findings.

3.4.3 Limitations to the methods employed

It is of great importance for the researchers to stay focused and critical when the whole research process is conducted, i.e. from the ideas about the research were born, through planning and performance, to the final results. As previously mentioned, the interviews did not follow a predefined pattern in any cases. The result can both be considered either a strength or a weakness, since the data collected might be biased. There is a potential risk that the questions asked lead the interviewee to provide the researchers with answers that he or she believes want to hear. In addition, some existing information might be considered to be a business secret. Lastly, it is understandable if employees try to give a better picture of how the work is carried out than the actual case.

4. Kanthal

4.1 Company History of Kanthal

Kanthal was formed in 1931 and is headquartered in Hallsthammar, Sweden. In 1997, Kanthal was acquired by Sandvik and is since then part of The Sandvik Group, a global, high technology enterprise with 38,000 employees and annual sales of approximately SEK 55 billion. Kanthal is specialized in the production and sales of electric resistance heating material and heating elements. The world wide market organization consists of 24 subsidiaries and 32 representatives and the firm is today represented in 130 countries through Sandvik's global sales organization (www.kanthal.com ; www.sandvik.com). Kanthal is one of the few manufacturers in the world with integrated production from raw material to finished products and the company has about 10 000 registered customers (Björn Sandström, 2006-04-06). Sales during 2003 through 2005 have been at the level of about SEK 2.2 billion (Sarah Palm-Larsson, 2006-04-07). The aim of the company is to offer business solutions, covering a complete product range of the best products in the market, which contribute to the customers' profit. The products are intended to create a more efficient, reliable, and cost effective production for the customers (www.kanthal.com ; www.sandvik.com).

4.2. Customer Profitability Background

Kanthal became well-known in the academic world in the late 80s after a publication of a Harvard Business School case written by Professor Robert S. Kaplan. The purpose of the case was to demonstrate how the company had successfully changed the method of measuring individual customer profitability (Kaplan, 1989a). A whale curve was used to illustrate the effect of plotting the company's cumulative profits as a function of customers ranked by their profitability and this type of curve has been known as the "Kanthal Curve" in the academic world of management accounting. The analysis of the findings in the research revealed an eye-opener for the management that understood that actions needed to be taken. First, 40 percent of the customers were profitable and these generated 250 percent of total profits. Secondly, a loss of 120 percent of the profits was caused by the 10 percent of the customers that were least profitable (Kaplan, 1989a).

The revealed information resulted in a new design of the management accounting system and the company has implemented an ongoing development of the methods of measuring customer profitability. Today, Kanthal has abandoned the old method presented in the case by Kaplan 1989, and we found it interesting to study what role customer profitability plays in the firm today.

Customer profitability can be characterized as a cyclical control tool at Kanthal. In the late 1980s and the early 1990s, activity-based costing was applied and lots of time and resources were spent on measuring customer profitability (Eva Fransson, 2006-04-06). Every week Kanthal had internal campaigns and sales competitions to improve customer profitability, and the bottom-line result was benefiting from these strategies. In 1992 and 1993, Kanthal was suffering from increased competition and a weakened profit and time became a scarce resource. Focus was shifted from controlling to rationalization and cost cutting, as well as increased order volumes. Customer profitability was no longer on the agenda and the strategies to increase the competitiveness were successful and Kanthal was able to win market shares and strengthen the position in the market. The following years were characterized by large profits and stable prices, and the only thing that remained from the activity-based costing methods was more structured price lists (Göran Källström 2006-04-

06). Two employees that have worked at Kanthal for over 25 years describe the evolution like this:

"During the good years, we could take any order; we did not need to think because we could always show a positive result. Therefore customer profitability was ignored. When the competition increased from low-cost countries we realized that our prices were too low and that we needed to change strategy. Customer profitability was in focus again." (Göran Källström, 2006-04-06)

" One important aspect is that the role of Kanthal has changed dramatically. In the late 80s we almost had a monopoly in every market and due to this the profits were large. We were making so much money and potential errors in the administration were hidden. One could do a bad job and make money anyway. The last twenty years the competition has changed significantly. All frontiers are under pressure and when we are forced to lower our prices, all errors can be observed. Then one realizes, we need to do something! Nowadays, we are very focused on customer profitability."
(Hans Södervall, 2006-04-07)

Now, when customer profitability is in focus again, and used as a control tool, it is important to understand how it is defined within Kanthal.

"A profitable customer is a customer that pays for everything we invest in, both in form of costs and efforts. A profitable customer is loyal and pays off well. Our duty is to deliver customer value and create customer satisfaction. In addition, we need to measure invoiced price, cost cover ratios, and gross margins per customer" (Björn Sandström, 2006-04-06)

Kanthal has implemented business systems and company specific projects to measure customer profitability. A description of each business system and tool will be described in the following section.

When customer profitability previously was in focus within Kanthal, activity-based costing was implemented. The intentions behind that system were to identify the orders which demanded low costs, and the opposite, the orders that looked profitable but in fact demanded significantly large shares of resources (Kaplan, 1989a). The actions that were taken were the following; pushing customers to more profitable invoices and larger orders, reduced order lines, and increased price levels. The management also decided to drop some of the loss customers to create capacity for new customers with more potential (Kaplan, 1989b).

The intentions with today's method of measuring customer profitability are the same as before, but Kanthal has now applied a more customized measurement system, in order to create a more suitable fit with the current business model. Activity-based costing is considered to be very resource demanding and Kanthal has not had the capacity to apply the method accurately. Today, customer profitability is intended to be used more as a tool for monitoring costs, which is a complement to the existing control system in order to create the highest possible margins. The objectives of the measurement of customer profitability are to highlight areas of improvements regarding costs, and to serve as a guideline for production and pricing policies (Eva Fransson, 2006-04-06). The parent company Sandvik demands that Kanthal reaches a return of capital employed (ROCE) that is equal or higher than 20 percent. The measurement of customer profitability is part of the overall strategy to optimize both prices and the customer portfolio, and to be able to reach this targeted return (Eva Olofsson, 2006-04-06).

Employees at Kanthal in Hallstahammar often see the firm as a source for life time employment. Kanthal offers its employees a fixed salary that is not based on their performance. Since neither procedures nor activities within the company are documented or formalized, a great concern arises when an employee leaves the firm. Considering the age structure of the employees working at Kanthal, a lot of knowledge is lost every time an employee leaves the firm (Hans Södervall, 2006-06-07).

4.3 Customer Profitability Measurement Systems

4.3.1 Movex Multiple Unit Coordination – The Overall Business System

Due to the organization of Kanthal, with the production and headquarters in Hallstahammar and the subsidiaries all over the world, an automated solution makes an important contribution to the operations. Movex was implemented in 2003 and it enables all subsidiaries to enter orders in one country, while the logistical transaction automatically takes place in Hallstahammar, where the stock is available. The administrative transaction is then carried out entirely within Movex without a lot of paperwork. For example, a German subsidiary is able to check every single item in stock in Hallstahammar. When the customer calls a subsidiary, the order can be placed immediately and the subsidiary can provide the end customer with all information about the logistics and the products ordered. For Kanthal, this is added value, because the market is characterized by increasing competition from low cost countries (Björn Sandström, 2006-04-06).

It is essential for Kanthal to offer additional value to its customers rather than only compete with price, since the firm differentiates itself through high quality products. In order to operate successfully, service orientation, innovation, delivery reliability and price are all important components. The benefits of a business system and database like Movex are many, and it includes reduced inventory and obsolete stock, improved service levels, higher turnovers and margins, and increased cooperation among the companies (David Öquist, 2006-04-04).

The implementation of Movex in 2003 brought considerable improvements to Kanthal. A core model was developed for the entire organization whereby all of the processes and databases were standardized. Several of the intended improvements were realized shortly after the implementation. The advantages for Kanthal were greater transparency between the companies, clearer guidelines for the pricing system, and fewer queries between Kanthal and the subsidiaries (Björn Sandström, 2006-04-06).

"The decision to implement Movex MUC is in line with our business model, to create the best possible productivity and at the same time offer an improved and expanded customer service. It comes hand in hand." (Björn Sandström, 2006-04-06)

With the same structure in all countries, the financial information can be compared much faster and it also gives the subsidiaries an insight in Kanthal. The created transparency and the improved information sharing have lead to enhanced cooperation between the different units and indirect increased customer value (Björn Sandström, 2006-04-06).

"It is the combination of customer value, efficiency and productivity that creates the advantages of Movex. The business system has given us the opportunity to rationalize and shorten lead-times. Kanthal has been able to offer better service and at the same time cut indirect costs. In addition, the customer has access to all information online. It is a clear win-win situation." (Björn Sandström, 2006-04-06)

A standard solution like Movex helps Kanthal to respond quickly to the challenges in the market and it is clear that the firm benefits from the business system. There are many possibilities with the system and a further development has resulted in increased business benefits.

4.3.2 Qlickview – A Valuable Analysis Tool

One extension of Movex is Qlickview, which is the name of a program used by the sales team. Qlickview is used as an analysis tool that is linked to Movex, and all data is tailored to help the sales team to get an insightful overview of each customer, i.e. country information, customer data, invoiced price, orders, and margins (Eva Fransson, 2006-04-06; David Öquist, 2006-04-12). The program is also linked to different price control tools, which are intended to assist the sales team when negotiating with customers. Qlickview makes the daily work of the sales team much more efficient. Before the system was in use, the sales team had to find the correct price in a price list, and the prices were usually customized due to the type of customers. The information about the customers could be found in another data base, which had to be updated manually. Now all data is linked and updated on a daily basis (Jonas Ekström, 2006-04-06).

The instrument has shown to be an advantageous tool, especially when analyzing the results and outcomes, since one can easily derive all necessary figures from Movex. On the other hand, when it comes to the analysis, the sales team has found that the numbers do not always represent a true and fair view. In order to analyze the results correctly, one needs to have experience and access to inside information about specific circumstances. In this way, the Sales Manager is considered irreplaceable at the management's meetings. In order to be able to carry out correct information from the numbers from Qlickview, one also needs to know what type of perception Kanthal has of each customer, and in what conditions the customer is currently in (David Öquist, 2006-04-12).

Even though the sales team can proactively strive towards improving the profitability of the customers by using Qlickview, the instrument is based on historical customer facts, since the figures are derived from transactions made in the past. It is thus impossible to apply

Qlickview on newly acquired customers, and the sales team becomes totally dependent on the standardized business system Pocket Price Costing when negotiating with these customers (Jonas Ekström, 2006-04-06).

Another disadvantage is that some of the prices that the organization relies on are variable and have not been inserted into Qlickview. In some cases, the sales team will thus have to find these prices in price lists that are still updated manually. Some of the sales men feel more comfortable in using price lists rather than Qlickview (Göran Källström 2006-04-06; David Öquist, 2006-04-12).

4.3.3 PPC – Provides customized prices

The sales team uses a computer based program called Pocket Price Costing (PPC) when interacting with customers. PPC has rules and guidelines built into the program so the sales team knows what price is acceptable and it also gives the users a quick overview of how costs are associated with the negotiated price (Eva Olofsson, 2006-04-07). This tool is in line with the pricing project and is aimed to contribute to the creation of a more consistent pricing policy. PPC is a combination of all prices listed and includes the customer specific costs as freight costs, packing costs etc. The program calculates break even prices per customer and provides the sales team with a tool to set the fair and correct price. The calculations help the sales team to understand how the costs indirect influence the price level and how they can cooperate with the customer to improve the results of both parties in the negotiation situation (Jonas Ekström, 2006-04-07; David Öquist, 2006-04-12).

The experienced sales men illustrate how the system "breaks down" when a too low price is being charged, even though the sales men might have a good feeling about the customer and his future. A couple of years ago, Kanthal decided to break the cooperation with many of their smaller customers by dramatically raising the prices, which led to a situation where only the largest customers could afford to buy from the firm. Afterwards, the management of the organization has realized that this did not only bring positive consequences (Göran Källström, 2004-04-06).

4.3.4 Kanthal Pricing Project – More accurate and consistent policies

The background of the Pricing Project was that Kanthal could not meet the profitability targets set by Sandvik and the management had also identified inconsistencies in their current pricing policies. They realized that they needed to take action to implement a more congruent pricing model. Firstly, there were large differences in price levels overall, as well as between different size customers, different countries, and sales persons. Secondly, sales persons sometimes pushed the price levels downward due to increased competition. Lastly, central guidelines were unclear, the decision rules were confusing, and the tracking and follow-up of pricing were limited. All this together created an acute need for new pricing policies to be implemented (Eva Olofsson, 2006-04-07).

Kanthal has identified that pricing has significant impact on their bottom-line result and a price increase by 1 percent leads to a profit improvement of 20 percent and therefore pricing is a corner stone in their business model. The pricing project has been carried out within the organization and it is tightly tied to both The Waterfall and the concept of Value Based Selling (explained further down). The objective of the Pricing Project has been to achieve "Pricing Excellence" and the focus has been on "Value Pricing", which is based on Kanthal's real value positioning, and "Transactional Pricing" based on focusing on the more profitable customers (Eva Olofsson, 2006-04-07).

Value Based Pricing is based on the formula *Value Based Price = Customer Values * Communication*. A considerable amount of resources needs to be assigned to implement this pricing model compared to a cost or competitor based model, and this is necessary for justification of the chosen price level. The intention is to be able to argue for the additional value that the customers receive for choosing Kanthal's products. This is demanded since simply communicating the technical features of the products is not enough, which is an essential feature since Kanthal's products are significantly more expensive than its competitors, i.e. customer value needs to be well understood and communicated to the customers. Communication is thus the key and careful customer analysis will create a win-win situation; it proves the mutual benefit of the relationship between Kanthal and the customer.

"Transactional Pricing" is intended to shift the orders taken towards the higher end pocket price customers, and the sales team uses the Waterfall to identify which these customers are. It should be used to improve the pricing discipline, offer discounts to the right customers, and then reduce potential value leakages. This strategy also defines how pocket price can be increased if costs are reduced and this provides the sales team with tools to make more accurate pricing decisions that are in line with the overall strategy of the control system. In addition, monitoring price performance of each customer is valuable for analyzing where improvements are needed (Eva Olofsson, 2006-04-07).

4.3.5 Value Based Selling – Communicate and Deliver Customer Value

To be able to communicate customer value and increase bottom-line profit, Kanthal has driven a project based on a concept called Value Based Selling. This is something that Kanthal has practiced throughout the years, but it has recently been renewed and presented to the subsidiaries in order to educate newly hired employees and underline the importance of the concept as part of the Kanthal business model. The objective is to communicate and deliver value to the customer that justifies a raised price that results in a growth in high margin segments. This strategy can be seen as an upward going spiral. The main idea behind this concept is that the price of the product is driven by customer value instead of price. The outcome is that one product can have different prices depending on application or customer (David Öquist, 2006-04-12).

The price is determined according to Value Based Pricing described above, and it includes the methodology and tools for systematic identification, communication, and delivery of value to the customer. The objective of this project is to enhance the skills to identify and communicate the value to the customer and the model is designed to give the sales team support from all units within the organization. To be able to identify customer value, all expertise has to be combined to identify and prioritize opportunities for each customer. The individual customer value analysis gives the sales staff a platform to prepare value arguments in a selling role. Value Based Selling is also a tool to identify where actions need to be taken to improve the results of the less profitable customers (Eva Olofsson, 2006-04-07).

When the methodology of the project had been presented to the employees at Kanthal, the first step was to identify opportunities and select target customers. For these customers, action plans were designed. For each customer, targets were designed and concrete actions were listed for the sales staff, in order to highlight the specific potential. The second step was to hold customer interviews about customer value to be able to identify potential ways to improve the economics of the customers and highlight areas of improvement. The information collected served as a value model for more detailed action plans and a customer cash flow model was built for each customer to find the value factors. The model calculated and estimated the economic impact for the customer using Kanthal's products. The third and last step was to summarize the project and implement it to the sales organization's daily work. Important findings from the project design phase were that there were several ways in which Kanthal could create win-win situations and there was inconsistency in perceptions of customer value (Eva Olofsson, 2006-04-07).

4.3.6 The Waterfall – Customized Cost Analysis

When the outcome of the Kanthal Pricing Project was evaluated, the project group realized that to be able to run this project accurately and successfully, a price analysis tool was needed. A consulting firm was contacted and the consultants worked together with the project team, and the idea behind the price analysis tool called the Waterfall was born (Eva Fransson, 2006-04-06).

Kanthal has implemented the Waterfall to analyze production, sales, and administrative costs. The Waterfall is the name of a tool that is used to analyze, control and follow up customer prices. The target users are sales management, sales force and Product Managers. The objective of the Waterfall is to create transparency of transactions, understand the specific cost drivers, and use benchmarking of reference prices at a global level. The basis of the tool is the historical invoiced statistics in each country, which is collected from Movex. The main idea behind the Waterfall was to create a global reference price per product that the sales teams could use for benchmarking world wide. The reference price is a starting point and after it has been calculated, it is adjusted for potential quantity and customer specific discounts and metal surcharge resulting in "Adjusted Reference Price". This is the opening price presented to the customer, and this number can be adjusted one more time after a negotiation with the customer. The outcome of the negotiation is the "Invoiced Price". Based on previous transactions, costs are assigned to each customer and subtracted from the "Invoiced Price". The calculations of the costs are based on activities that have occurred for every order confirmation and that are likely to occur again for that specific customer, (Eva Fransson, 2006-04-06).

"We identified a need to add the transaction costs that could be assigned to each customer because that is something that the sales person can affect. When a price is set, this has to be taken into consideration. Freight costs, order costs, and consignment costs cannot be ignored and might be difficult to find, therefore we wanted them to be built into the Waterfall to visualize the true costs to the sales team." (Eva Fransson, 2006-04-06)

When the costs are deducted from the invoiced price, the "Pocket Price" is derived and this is the price which is intended to be maximized for each transaction. This way of calculating the price is new to the sales team, but it is designed to go hand-in-hand with the methodology of transactional pricing (Eva Fransson, 2006-04-06).

As described, the Waterfall demonstrates both the different price categories and the different cost drivers. The tool gives the users a customer specific overview of different factors affecting customer profitability (Eva Fransson 2006-04-06).

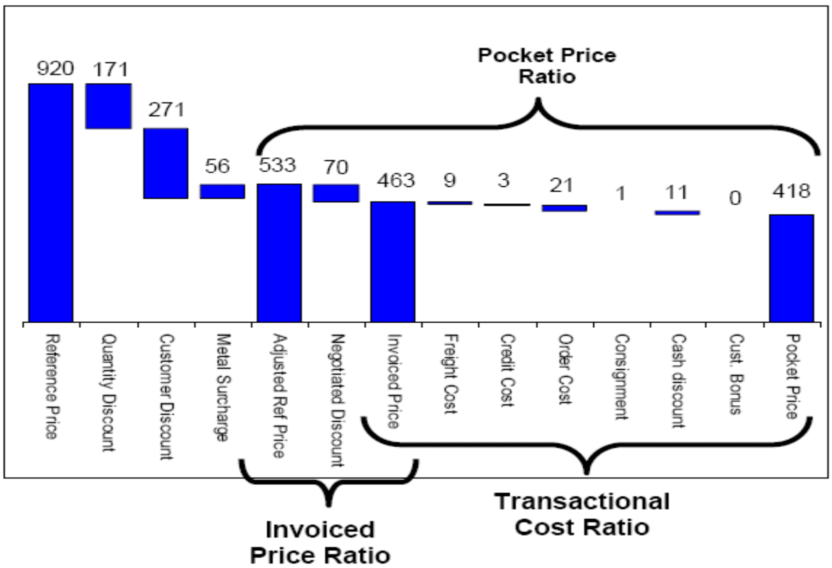
Three ratios are calculated, i.e. invoiced price ratio, transactional cost ratio and pocket price ratio. These ratios can be used to compare customers and contrast potential areas for improvements. The project was part of the actions of improvements that were implemented during 2002-2003, and it was embedded in the IT-development within Kanthal. The Waterfall has gradually been implemented throughout the subsidiaries and has resulted in increased transparency and data analyzing (Eva Fransson 2006-04-06). The tool is intended to demonstrate costs per customer, costs per product, and costs per market and provides the user with extraordinary information. With this specific information, the users are able to analyze the data and the customer profitability (Björn Sandström, 2006-04-06).

The CFO underlines that since the Waterfall was implemented, customer profitability has become more and more important. The IT-development has been essential for the success of the business systems. One of the main tasks of the CFO is to create a consciousness among the management about the advantages of such a system. When the management knows how to use the Waterfall one is able to implement it successfully. Kanthal uses a dialogue with its customers when they discover potential areas for improvements, i.e. cost reductions and capacity improvements. The main advantage of the Waterfall is that it is transactions based and it gives Kanthal a true and fair view of each customer (Björn Sandström, 2006-04-06).

One issue with the Waterfall is that the project is not as well anchored in the day-to-day operations. What certainly hinders the Waterfall's acknowledgement is the fact that it is a transactions based tool for follow-up. Since the sales team is over-loaded with work and other tasks, they do simply not have the time to follow up all their customers to see whether the deal was successful and profitable or not (David Öquist, 2006-04-12).

Furthermore, it is difficult for the sales staff to see the real sense with the tool. The Waterfall makes an exact division of all costs that are chosen to be supervised, but simultaneously, the administrative and sales costs are arbitrarily divided over a few of the largest customers, since one believes that these customers are able to carry these costs (David Öquist, 2006-04-12; Sune Hansson 2006-04-06)

.***Figure 4.*** **Calculation of the Pocket Price**



Source: Transcribed interview with Eva Fransson, 2006-04-06.

4.3.7 A-B-C Classification – Prioritizing the Most Profitable Customers

The main idea behind the customer classification system is to prioritize the most profitable customers in order to provide them with the best possible service and assign production capacity especially for them. The intention is to control the production units, so the capacity is used according to the classification of the customers, i.e. A-customers should have shorter lead times and there should always be capacity free for orders from these customers (Eva Olofsson, 2006-04-07).

Kanthal has the intention to classify which type of customers that are worth investing time and resources in. The characteristics that serve as the basis for the classification are first of all the contribution to overall profit in monetary terms, which leads to that the largest customers will always be classified as A-customers, i.e. size is very important. Another characteristic is the age; a newly acquired customer will always be classified as an A-customer because there is no historical data stored. After a year, the customer is reclassified if the requirements of an A-customer are not met (David Öqvist, 2006-04-04).

The Project Leader for Markets and Support, Eva Olofsson, is accountable for the classification of the customers. The decision criteria that are used, in addition to monetary profitability, are order volume and potential to improve profitability. The classification system is not only used as a guideline for the production units, it is also a tool for the sales team. The A-B-C Classification gives them an insight where they should put in more effort and offer more preferable deals. However, there are no explicit guidelines on how to make a B- or C-customer into an A-customer (Eva Olofsson, 2006-04-07). The Sales Manager David Öqvist explains how the system is used by the sales team:

"Within the sales team, we always try to chase the black sheep. We always try to hit the least profitable customers every year, and when one is improved, there are always ten in line. Somebody always has to be the least profitable. Instead of focusing on the profitable customers, we try to improve the bad customers. We use Qlickview to assist us with this. It is easy to derive information about the customers at the bottom. We have found that it is usually not the customers' fault that they are not as profitable as we would have wished, it is rather our own mistake." (David Öquist, 2006-04-04)

According to Hans Södervall, who is accountable for all production within Heating Systems, the classification system is not in use due to scarce time resources. He claims that they are dealing with too many small customers who together demand too much time and capacity. The time spent on each customer is not measured and all incoming orders are treated on first-in-first-out-basis. The largest customers are usually well-known and prioritized but otherwise the employees in the production do not know if it is an A-customer or a C-customer order. Within Heating Systems, the classification system is not applied; all customers are considered to be equally important (Hans Södervall, 2006-06-07).

A perception among the employees is that the classification is more of paper tiger implemented by a project team from Sandvik and is not taken as seriously as intended. The essential dialogue between the production and the sales team about the classification has been neglected. For example, at Heating Systems, the management made it simple and classified all customers as A-customers, so then they did not have to deal with the project at all. This simple solution does not mirror the reality that the division is facing, but due to lack of time and resources, the problem was solved by assigning all customers A-classification. Heating Systems has many small customers that are not as profitable as Kanthal had wished, and there are cases where an increased price is well justified (Hans Södervall, 2006-06-07).

Figure 4. **Linkages between Business Systems and Projects**

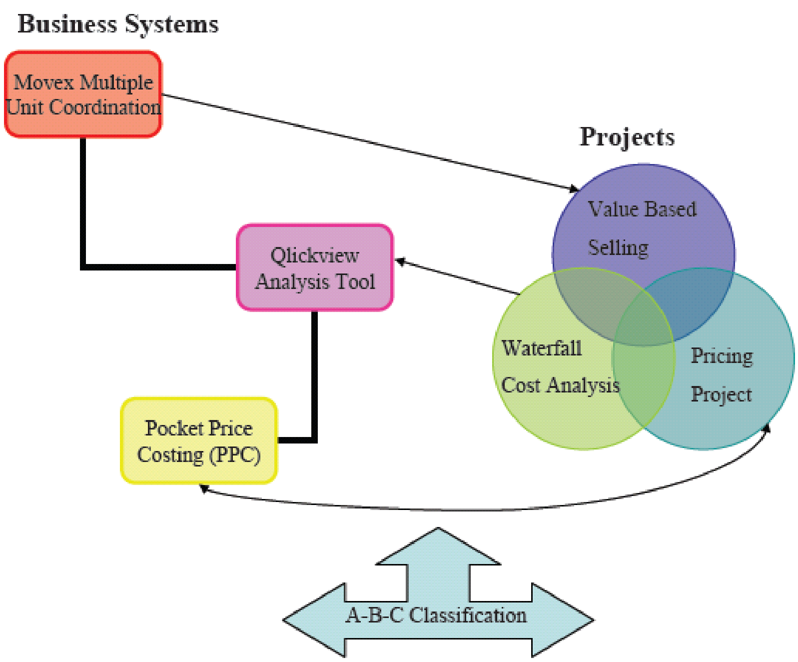


Figure 4 illustrates the linkages between the business systems. Movex feeds business information into the analysis tool Qlickview, which is, together with the computer based program PPC, used for price setting. The different projects are developed to improve the business systems and increase customer profitability. The A-B-C Classification is an independent categorization of customers, intended to prioritize the most profitable customers.

5. Analysis of the Case Study

5.1 Business Systems

5.1.1 Movex – The perfect fit

Movex is the automated system that is intended to coordinate units and create transparency throughout the whole organization of Kanthal. Through Movex one has achieved an overall greater understanding, both from the organization's point of view towards their customers, and from the customers' point of view towards Kanthal. In this way, customer profitability has been positively influenced, since the customer, who can also access the database, can directly see if, for example, his products are in stock or not, instead of having to call the sales department and receiving personal service. Thanks to this tool, users with access to information stored in the database can use it simultaneously, but in different ways. This means that, through this system of automation that has in recent years had very substantial impact, especially on the accounting nature of work, this has in the long run led to lower costs and the sales unit has been able to focus on other issues than answering basic questions. The sales team has been able to improve their service level and, according to the Sales Manager, lowered both the administrative and sales costs, and its service can now be provided more efficiently. This enhanced service, in turn, means value for the customer, and improved profitability per customer for the firm, due to increased margins.

How the implementation of Movex has been institutionalized can be explained using Scapens' and Burns' (2000) approach:

When the system first was implemented, it went through a process of encoding. Since one can expect that the previous absence of an automated and standardized system created frustration within the firm, and as immediate results were experienced when using the system, it was not difficult to find organizational support for it. Routines were more or less subconsciously changed and reproduced, and so new rules emerged that supported the new tool. Over time these new rules and routines have become accepted and thus institutionalized.

The intention behind applying Movex is to implement a tool that affects the whole organization, increases the stringency and lucidity, and gives the sales team a good basis for pricing. Indeed, Movex has reduced the pricing problems; it has turned out to be a convenient and flexible tool that actually decreases the ambiguities between the customers and the organization, and between the organization and its subsidiaries. It has also been relatively easy to implement, since Movex gives a perspicuous result and immediate effects, and the system has thus found recognition and been institutionalized at Kanthal.

5.1.2 Qlickview – Partly disregarded

The internal prolongation of the coordination system Movex has resulted in the development of the analysis tool Qlickview. Its intentions are to give the sales team an insight of specific costs per customer and to serve as a basis for the prices offered to the customers. Since Qlickview is pedagogically linked to Movex, all sales costs and volumes are documented and every customer is then assigned to a certain price or cost level. With the assistance of Qlickview, the sales team can proactively strive towards reducing their customers' costs and thus increase the profitability of each customer.

However, since the organization is dependent on the knowledge and experience from the sales department when interpreting the figures, one can find that the numbers collected from Qlickview become arbitrary. In line with the problems of today's cost management, one should mention that in the struggle towards reducing and correctly measuring costs there is always information about customers that creates so called specific circumstances. The question is thus why this argument is being used. Is it because one as a sales man needs an excuse for keeping a customer or not being able to further reduce costs?

Qlickview has not been fully institutionalized throughout the organization and this can be explained in terms of Scapens and Burns (2000); the disadvantages with the analysis tool prohibit the enacting of new rules and routines, which in turn leads to the consequence that the new rules that should subsequently emerge from this new tool do not reproduce themselves. Further on, the usage of price lists has become an embedded behavior in the customs of the group of sales men. One can say that through routinization, the usage of paper lists has become an institutionalized behavior and is thus a difficult routine to break.

Even the resistance towards the system might have become a routine, and is thus an unconscious activity. An arising problem is that this behavior might get passed on to new members of the organization and will thus become even more difficult to break. This argument is also in line with what Scapens and Burns (2000) state in their model of the process of institutionalization. The only way to break this behavior ought to be a revolutionary change, e.g. eliminating the price lists totally so that the sales team has no other choice than only using Qlickview. For this to work, the organization is in need of a powerful manager, or else the experienced sales men, who can be seen as very powerful members of Kanthal, will secure their interests at the expense of the less powerful, for example the new employees. This is an example of how old employees influence the younger, i.e. they might be mobilized to resist the new organizational accounting systems if the new rules are too conflicting to their own routinized behavior.

5.1.3 Pocket Price Costing – A guideline for new employees

When negotiating with a customer, what ends up in the cashbox of the firm, i.e. the pocket price, is found in the system called Pocket Price Costing (PPC). This is a convenient system, especially for new employees, since it gives the sales men quick "go or no go" decisions. It gives them a basic price to start negotiating at and they will through receiving red figures directly know if they are heading towards unprofitable deals. New sales men will find PPC to be a valuable guideline and it is immediately routinized amongst them, in their first stage of negotiating with customers.

However, the device is not very suitable when negotiating with new, small customers that might grow, since the system does not promote a relationship between customer and supplier. If all of today's customers had to go through this system, the organization could easily "cut off the unprofitable tail", but on the other hand they would only end up with the larger volume customers again, since profit is not measured according to the firm's size, but as an absolute measure at Kanthal. After all, the sales unit believes in working with every customer to make him or her profitable and, according to one Division Manager, one cannot simply throw away a possible source of profit. The system does in other words not incorporate possible future benefits, but is, like previously mentioned, a tool for standardized yes or no decisions.

Because of this, the sales men that have worked at Kanthal for many years find no reason in using the system of PPC. The tool is thus only used by the new employees, who will probably abandon it when they have gained more experience, and so the routine of using PPC is not being reproduced. In this way, the system will never become institutionalized, especially when one considers the fact that negotiating with customers that are small today, but possible future sources of profit, will always lead to a no decision, which indeed conflicts with the sales men's belief for a customer.

5.2 Projects

5.2.1 Kanthal Pricing Project – Inconsistent views cause issues

The Pricing Project is a newborn idea that has just recently been implemented in the organization. One can discern certain advantages and possible complications with the project.

Even though the Pricing Project is implemented in order to create fair and standardized criteria in classifications of customers, one can observe obvious problems, especially in the first two phases of creating transparency and analyzing the leakages, since the answers to the questions are by no means easy to find, in many cases not quantifiable and in no way the same for all customers. This means that the search for each customer's right price is a very time-consuming process and there is no guarantee that the right price ever will be found. Moreover, demanding that all the sales men should go through these steps might be seen as an absurd thought, since this might look like an activity that questions their knowledge, experience and integrity.

In line with the theory by Scapens and Burns (2000), prevailing routines and institutions within the organization will make it difficult to implement the pricing project, due to the reasons mentioned above, and since the sales men might see the new tool as a device that only makes their work more difficult to perform. Moreover, since the effects might not be seen instantaneously, the project will have more difficulties in gaining a hearing throughout the organization. Furthermore, because the sales men might perceive that they already perform these task in a somewhat similar way, they might develop resistance towards the project per se, since it is just a formalized document of how things ought to be performed, in addition stemming from the headquarters' that do not have the same experience about the business activities performed.

Further on, the sales men believe that going through these steps is what they are in fact doing. If there is discrepancy throughout the organization when it comes to the knowledge about what is or is not actually done, and the sales unit feels innocently convicted, they will rather resist the project than incorporate it, which might in the end lead to failure. In line with Scapens and Burns (2000), one might expect that a top-down imposed management accounting change will have its initial and most direct impact on the formal rules, a bottom-up change is more likely to have an impact at a tacit level and shape informal as well as formal management accounting practices, and thus lead to a successful implementation of the project within the organization. Institutionalization can thus be achieved through letting the operational members in the firm encoding the rules and routines and the top management needs to let the emerged rules and routines reproduce themselves.

5.2.2 Value Based Selling – An underlying concept

The concept of Value Based Selling is a way of thinking that has pervaded the organization for many years. It has become a successful idea that has through the process of institutionalization managed to become well incorporated in the business model, and one has managed to raise the prices according to its vision. The success has not been flawless though. To be able to implement the concept of Value Based Selling, the organization has had to choose which customers to focus on, in a rather controversial manner. Previously, when Kanthal did not have any competition at all due to their monopoly, the economic climate surrounding the organization formed the way the management accounting system was perceived and thus one did not care all too much about how or whether customer profitability was measured at all. Now, when the circumstances have changed, it is crucial to inform the organization about these changes, but one also has to acknowledge them.

This argument is further on consistent with Scapens and Burns (2000); that customer profitability has today become an urgent matter arisen from a change in the firm's circumstances, i.e. increased competition and price sensitivity, has lead to the fact that efficiency and costs have become important issues. The problem is thus that earlier employed methods and processes are grounded in the specific context and history of the company. Routines, that have again and again been reproduced, have shown to play a crucial role in the implementation of the measure of customer profitability. At Kanthal, the sales men have proved to have great control over the implementation, which the management does not have, partly because they also lack market orientation.

The history of what happened to the implementation of activity-based costing, once the instigators left the firm, might thus reproduce itself once prompters of the customer profitability measure leave the firm, if they do not posses a sufficiently strong power-base. Moreover, in line with Scapens and Burns (2000), such a conflict origins in the structural contradictions between the new accounting systems and the existing rules, routines and institutions. In our case study we have observed that resistance has emerged from difficulties in adapting the new beliefs. This in turn stems from, what we believe is both competing interests between the different levels within the company and lack of capability, knowledge and experience to cope with such change. The new beliefs have not yet been accepted within the firm, and one thus needs more time to let these encode and reproduce themselves before one can expect them to become institutionalized.

Nevertheless, the sales team has shown an enormous flexibility and even though the concept of Value Based Selling might be a new and abstract way of handling the customers, they have managed to incorporate it in their every day working procedures. This is due to a rather revolutionary change in management accounting that has resulted both from a major external change, a competitive market, and a change in the sales team's perceptions of how customer profitability should be created, that stem from mutually accepted methods of working. According to how Scapens and Burns (2000) explain it in their theory of management accounting change, the concept of Value Based Selling has over time managed to become accepted and thus an unquestionable form of management control. Today, the concept of Value Based Selling represents the expected form of behavior and has become a set of routine procedures.

Still, like shortly mentioned, the concept has not gained acceptance throughout the whole organization. We believe that this is due to others' perception of the economic climate – or rather a denial of that the circumstances are not as they once were. Other people within the organization do not work as close to the market as the sales team does and can thus not sense how the customers have reacted to the market change. This is why they have not come that close to working with the concept of Value Based Selling as the sales team has, and it has therefore not been possible to become institutionalized throughout the whole firm. Again, discrepancy in perception between the top-management and the operational units of the firm can be noticed.

Value Based Selling has, like earlier mentioned, been exposed to internal criticism, even in those situations when deals are made between the sales team and an end-customer. Like with the definition of customer profitability, there is a discrepancy in the perception of the concept of Value Based Selling between the management and the sales team. One party claims that the profit and the margins are the decisive factors in whether a deal will be settled or not. On the other hand, the other party, who actually works directly towards the customers, has a problem with neglecting their relationships with their customers and their belief in high future customer profitability. One can clearly see that the pressure, demands and expectations on the sales team are indeed enormous, and unfortunately often conflicting. This leads to great confusion, where the sales team in the end chooses to follow their definition and perception of what ought to be done, since the concept has become institutionalized into their every day routines. However, the management has not been able to institutionalize its own, actual perception of the concept of Value Based Selling.

5.2.3 The Waterfall – Just another tool

The Waterfall is a tool for following up transactions based data which is linked to the concept of Value Based Selling. It is a system for measuring and documenting different costs and it has its roots in activity-based costing, where all cost drivers are the same for all customers. At the same time, like in every calculation system, one has to keep in mind that, after all, you cannot see everything. Some figures are interesting to one organization, and not interesting at all to another. So, when the organization chooses to focus on certain numbers, they simultaneously reject numerous others. This is of course a dilemma, but on the other hand a matter of course. Concurrently it is thus important to understand that what one measures is what one gets.

The Waterfall is a very straightforward tool and serves perfectly when it is combined with a concept like Value Based Selling, which takes in other dimensions, aspects and non-financial measures and not just figures. Together with the other tool, the sales team will have a chance to see what costs or causes might be hidden under the surface. The organization has gained a lot on having these two tools that complete each other. Like just described and also explained by Scapens and Burns (2000), absolute numbers do not show the whole truth, but on the other hand pure non-financial figures can also give an incomplete representation of the business.

The intention with the Waterfall was to create a tool that could, through greater transparency, enable all subsidiaries to use reference prices, even at a global level. One basic condition ought though to be, that everyone who uses the system, actually understands it. The Waterfall is a perspicuous system with clear guidelines, but in Hallstahammar, the heart of the organization, it is not used as frequently as desired. How then, is one going to implement it world wide, when one has not even handled to optimize it domestically?

The Waterfall is thus just another tool that falls into the sales team's toolbox, and if one cannot see the consequences immediately, it becomes, like previously mentioned, just another tool. One can thus say that since the sales team has other tools for measuring costs, they do not see the obvious advantages with this instrument, and since the effects do not appear immediately, the tool has not been seen as relevant or useful for the sales men and has therefore not been routinized within the organization. Here one finds an excellent example of were an advantageous tool has not been able to gain acceptance in the firm, since it is partly hindered by all the other, more or less efficient tools.

This fact carries two problems; first of all, the Sales Manager makes himself irreplaceable, since he needs to attend all the management meetings to explain which costs belongs to whom and why. Secondly, the fact that the company does not distribute all the costs when they actually possess such an advanced but at the same time perspicuous tool, diminishes the legitimacy of the project, as well as its chances to become institutionalized.

5.3 A-B-C Classification and the Missing Linkage

The intention with the classification of the customers is to prioritize the most profitable customers and save capacity within the production for these customers. However, we have found that the A-B-C Classification is malfunctioning and has failed to highlight where improvements are necessary and where action should be taken.

We have also discovered that there is no linkage between the A-B-C Classification and the other systems. Since these parts have not been integrated, it will be difficult to motivate the sales unit to apply the classification system. The system therefore looks like a loosely hanging tool that has not been able to root in the organization. Since one can clearly see that there is no linkage between the A-B-C Classification and for example the concept of Value Based Selling, the sales team finds no meaning in applying the A-B-C Classification, but it rather works together with every customer to make him profitable.

Also, since there are no clear guidelines on how to advance within the classification system, this has led to the fact that the sales team works on every customer to make him profitable according to their own perception of how an A-, B-, or C-customer ought to be. Like earlier argued, and supported by Scapens and Burns (2000), the classification system has not gained acceptance throughout the organization, since both discrepancies between the instigators and the sales men exist in how to use the tool, and confusion has arisen due to the fact that there is no clear linkage between the aim of the classification and the other tools. The classification has therefore neither been routinized nor institutionalized throughout the organization.

The absence of a dialogue between the production and the sales unit might be one of the reasons why the classification system seems to be a rather loosely connected system to the other measurement tools. Since the sales unit has been disregarded throughout the whole development of the system, their input and knowledge of the market and their customers has been ignored, and that is why the classification system has not gained any acceptance within the sales unit and has thus not become institutionalized. Simultaneously, the resistance towards the classification might stem from the fact that it is one of Sandvik's tools, and Kanthal has maybe not yet been able to accept that they now have to adjust to someone else's rules.

5.4 Reflection of the ambiguity of customer profitability

Currently there seems to be a widespread opinion within Kanthal, that customer profitability should be measured and analyzed by the sales team. If the task was only to measure revenues against costs, this equation would not be a very demanding task for the sales team to perform. The problem is though that the definition of customer profitability is not homogenous throughout the organization. This stems from the fact that all the people that play different roles have dissimilar interests and focus on unlike variables within the measure, and the differences between peoples' understandings of the business are a major source of conflict. Kanthal has come across the same problem that accountants have tried to solve for ages – the question of how costs ought to be measured. This is why Kanthal has numerous projects that all seek to find the ultimate way of measuring costs. In the end, all the roles seem to have agreed upon, whether consciously or unconsciously, handing over the task to the sales team. Simultaneously there seems to be a belief that one has provided the sales men with the right tools to be able to perform the task. This is only true in part. Indeed, the sales team has the right instruments, databases and guidelines to find the right measure of customer profitability, but when employing all the systems, the workload concurrently increases immensely and one realizes that there is a long way and numerous tasks to perform before one finds the cost that can be compared to the revenue that eventually creates profitable customers. In the end, the sales team chooses the system that it finds most useful and corresponds to its means and definition of customer profitability. One can therefore say that the measure is only partly computed.

Figure 5. **How the whole organization is *intended* to support the Sales Person**

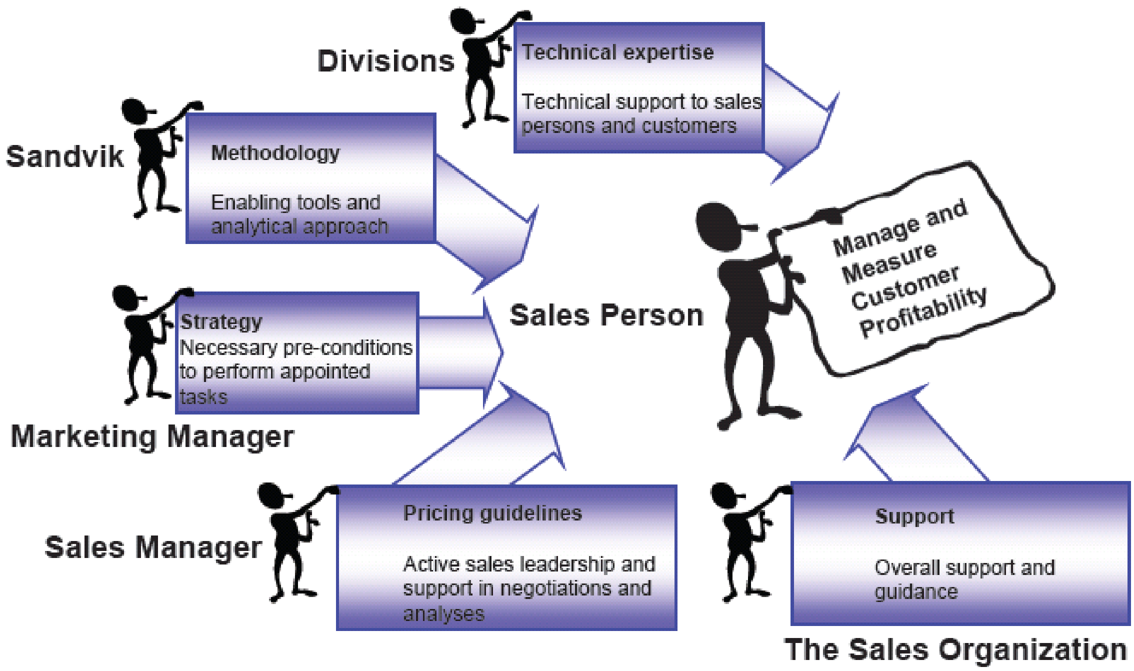


Figure 5 illustrates how the different units and people are supposed to support the sales person whose task is to manage and measure customer profitability.

The argument about the different definitions of customer profitability is further on consistent with Scapens and Burns (2000), which mean that trying to encode existing institutions into the new rules that are characterized by contradictions and ambiguities might lead to resistance, anxiety and possible failure. Moreover, the new rules and projects created by the management may, for numerous reasons earlier mentioned, be incompatible with established ways of thinking and will thus never gain a hearing throughout the whole organization. This is dependent on who has the dominating power within the organization. We believe that the not outspoken power, but though the dominating, is possessed by the sales team, since they have proved to have the decisive, but unspoken vote in whether a project is going to be successful or not.

It is important to mention that the sales team is well aware of many of the problems and willing to cooperate to increase the customer profitability. However, both the sales department and the Managing Director of Heating Systems seem to have realized what is really needed to reach maximal customer profitability, and they both know that there are not sufficient resources to work towards optimal profitability. Again, each interviewee's role in the organization becomes obvious. The top management's goal is to strive towards the target of a 20 percent return on capital employed (ROCE) set by the parent company Sandvik. This is justifiable since the top management at Kanthal is accountable for and evaluated on the basis of its performance based on the ROCE. The management will be directly affected if the target is not met, while the operational staff might not be hit as hard. After all, ROCE is measured and understood by the management, whereas it is just an abstract combination of letters to many others within the organization.

Presumably, the measure of ROCE has to become translated into other words when implemented in the organization. What then happens to the service when the focus purely falls on the measure of ROCE? There is obviously a risk that the management disregards the sales team's necessary relationships with their customers when looking only to the measure. The belief in different customers and the risk aversion differs depending on which role a person has within the organization. Accordingly, they all share a different perception of how to define customer profitability. Since the sales team has to defend its results towards their own management, and the top management at Kanthal has to defend and explain its results to a different management, i.e. the management at Sandvik, they all suffer from different demands. If the top management at Kanthal is the one who feels the hardest pressure to perform, they should get the sales team to understand what they are all striving towards. We believe that the whole organization needs an outspoken and congruous vision and an action plan on how to reach this goal. Since everything in the end falls on the sales team, the management should understand that they possess the power that is needed to attain the return on capital employed.

Further on, the argument is consistent with Scapens and Burns (2000), which argue that the same performance measures have to be used at each level in the hierarchy to achieve aggregation. Moreover, to achieve integration, discussion is required, to see how each part of the business interacts with other parts, throughout the hierarchical organization. Furthermore, one will need a consensual view and approach a bottom-up perspective.

Since the sales team is market-oriented and very experienced, the rest of the organization should value this priceless source of knowledge. If one decides to put customer profitability in focus, the sales team should be provided with more resources, in order to have the ability to focus on the measure. If the management has the objective to increase customer profitability, a suggestion would be to engage the sales team more in the process. The way it looks today, the sales team cannot find any incentives to put more effort into their work to increase the profitability, both for the reasons mentioned so far and for the way their salary is set. Which are then the incentives for the sales team to focus on customer profitability when they are rather awarded for selling large volumes?

This again leads to high demands on the sales team and expectations on the sales men's competence. The problem gets even more complicated when one considers the fact that almost nothing at Kanthal is being documented. There are continuous improvements in the product development, in the techniques for monitoring the staff and measuring systems, but nothing seems to be documented within the firm. This implies that if anyone leaves the firm, whether it is a manger or a worker, he will take all his knowledge with him. Bearing in mind that most of the people working at Kanthal often see their job as a life-time employment and they stay at the firm for a very long time, one can only imagine how much knowledge leaves the firm once an employee quits his job. It is in some way unbelievable that the management does not take more advantage of the sales team and manage the firms human capital in a better way, for example through documentation.

As just concluded, Kanthal has created a problem through not documenting their working procedures. Concurrently, the organization has gone through numbers of improvements and consultancy firms have numerous times thrown their wise words and modern theories over the firm. One can say that the sales men, which have been employed at Kanthal for more than 20 years, have had to try most of the systems and have been exposed to all of the management's experiments. A possible scenario is that the older parts of the sales team have become immune to the management's constant strives for the perfect calculation systems.

Figure 6. **The different demands on the Sales Person**

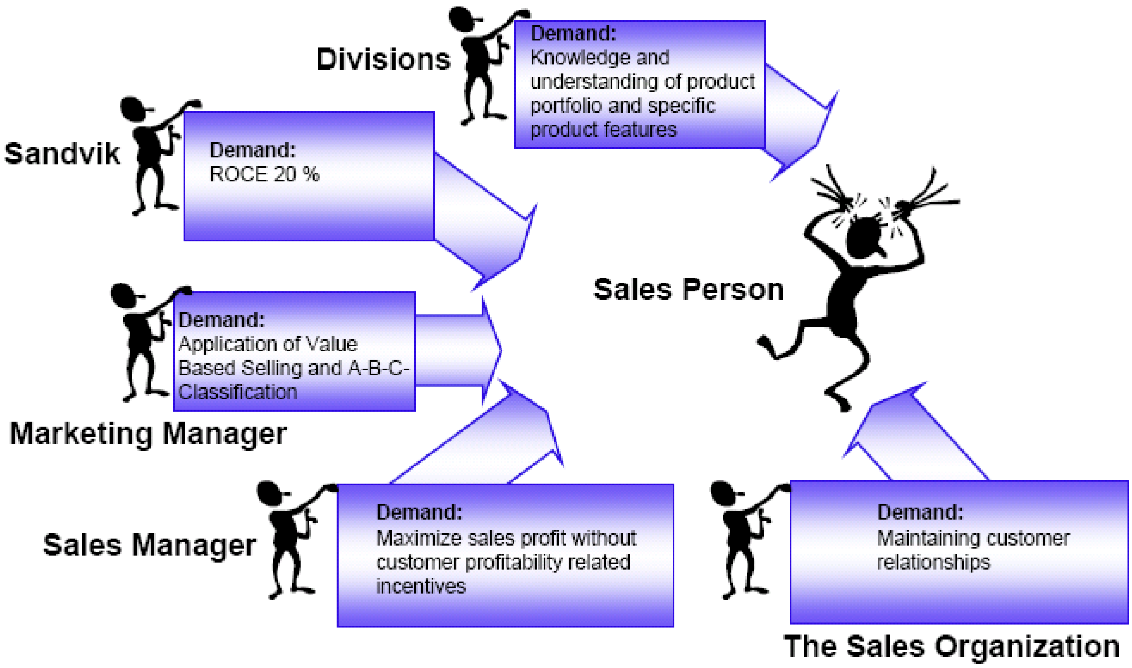


Figure 6 illustrates how the different units and people instead of supporting, place demands on the sales person. This situation causes frustration and confusion within the organization because the sales person is not able to meet the demands due to limited resources.

6. Conclusion

In the late 1980s the story of Robert Kaplan's implementation of activity-based costing within the Swedish manufacturing firm Kanthal became a famous textbook example. Today the case is still used in business schools all around the world, for the purpose of teaching business school students about activity-based management. However, we noticed a gap in the research about the firm and their current accounting practices. In our study of Kanthal, we had an objective to find out how customer profitability is measured within the company today when the market and environment have changed.

Kanthal has since the last study gone from being in a monopoly position to be an actor in a very competitive market. Additionally, the company has also been acquired by another firm, Sandvik. Due to these changed circumstances, the firm has needed to become more cost efficient in order to stay competitive enough and face the challenges that have evolved. The measurement of customer profitability can thus be considered to be a natural reaction to the demands of improved cost efficiency.

Within the firm there are different tools to measure customer profitability. All customer data is stored in the database Movex and this information is further fed into the analysis tool Qlickview, which works as a tool for pricing together with the system called Pocket Price Costing. These three business systems are supported by three complementing projects, the Pricing Project, the Waterfall and the project focused on creating customer value, the concept of Value Based Selling. There is also a system that divides the customers into different categories, the A-B-C Classification, based on the volume size or the total profit Kanthal earns per customer. All these tools have been developed by different people within the organization, and they are all intended to assist the sales team in measuring and managing customer profitability.

However, the firm has, while implementing the focus on customer profitability, come across different kinds of problems. Our observations have resulted in a question of whether customer profitability is in fact measured or not.

Movex has increased the stringency and lucidity within Kanthal and new rules have emerged that support the tool. The perspicuous result and immediate effects of the tool are other reasons why the tool has found recognition and been institutionalized at Kanthal.

Qlickview has not been fully institutionalized throughout the organization. This is due to the fact that the tool is not applicable on newly acquired customers and that variable prices are not covered. New rules are not reproduced and the routinized habit of using old methods has not been changed.

Since PPC only gives an instantaneous yes or no decision, and does not take possible future benefits into account, the tool is only used as a guideline for new employees. As the sales men gain experience, they abandon the system and thus the routine of using PPC is not being reproduced and therefore not institutionalized.

The Pricing Project might conflict with the perception of the sales men's activities which cause resistance towards the tool and its institutionalization. However, through letting the operational members encoding the rules and routines, institutionalization can be achieved.

The concept of Value Based Selling represents the expected form of behavior and has become a set of routine procedures among the sales team. However, the concept has not been accepted throughout the whole company, which will harm the encoding and reproduction of the emerging rules and routines. As a result, Value Based Selling is not fully institutionalized.

There are two disadvantages that hinder the institutionalization of the Waterfall. Firstly the Sales Manager is the only person who has the overall knowledge about each customer, and secondly all costs are not correctly distributed. These issues diminish the legitimacy of the project, as well as its chances to become institutionalized.

The A-B-C Classification is suffering from inconsistency in classification and from the fact that the sales unit has been disregarded throughout the whole development of the system. The classification system has not gained any acceptance within the sales unit and has neither been routinized nor institutionalized. The A-B-C Classification was invented in order to support the measurement of customer profitability but it has not been linked to the other tools. Instead of prioritizing the most profitable customers and provide them with special service, the categorization is used to improve the least profitable customers. This is due to the fact that the project is not used for production purposes at all and the sales team applies it, and adjusts it, according to their own routines.

It is clear that customer profitability is defined differently dependently on whom in the organization is defining the term. This definition is also affected and colored by the role that the person is representing and playing within the organization. Thereby there is no uniform definition of customer profitability, and the measure thus carries numerous expectations on what is to be seen.

Since there seems to be an overall consensus within the organization that the sales unit should carry through the measurement process, all the other divisions pass their different desires of how this should be done to the sales department. The sales persons then have an additional task, i.e. managing customer profitability, apart from their old main task, that is selling products. The problem is though that measuring is more than just measuring customer profitability with one single tool; it is also associated with the application of different business systems and implementation of projects which raises demands of following-up, training, and documentation.

Nevertheless, due to the differing perceptions of what customer profitability actually is, the sales team does not know how all these business systems and project should be coordinated to maximize customer profitability. Since the tools have been developed by different people, each tool has been influenced by its creator's perception and definition of customer profitability. In the end, the sales team uses the tool that corresponds to their definition of customer profitability, which is in turn affected by their role within the organization. The role is moreover influenced by the demands set by the organization, or the parent company, and prevailing routines and institutions.

Customer profitability is thus not a simple theoretical equation, to become a complete and informative measure that is insightful, more information is needed than just an absolute number.

Lastly, there is a great need of documentation at Kanthal. Today, no standards or procedures are documented or stored, and the consequence is that that when people leave the firm, they will take all their knowledge with them. Kanthal needs to take immediate action and take more advantage of their large share of human resources.

To summarize, Kanthal has developed and implemented several tools in order to measure customer profitability and the management has assigned this task to the sales team.

However, the sales team does neither have incentives to measure the profitability, nor does it have time to measure it, since using the systems fully, means increased workload to the sales team's already limited time. The demands on the sales team are too high and due to the lack of support from the whole organization, it becomes clear that customer profitability is only partly being measured.

7. Final Comments and Future Research

The conceptual framework presented by Scapens and Burns (2000) is used to illustrate how management accounting change processes and routines can become institutionalized. However, in our case study, we have observed that accounting routines cannot be predicted to be institutionalized for various reasons. In addition, there are more organizational routines than the accounting routines that are influencing the institutionalizing process. As a result, accounting routines need to be studied as part of a broader set of organizational routines, in order to enhance the outcome of a case study.

When accounting routines are used on a continuous basis, they influence the institutionalized thoughts and actions within an organization, and can then be used as explaining factors of management accounting change. The institutionalizing process plays a major role in order to explain the complex process of management accounting change, and it is crucial that the process gets recognition. On the other hand, as our case study illustrates, management accounting systems and practices are very complex and it is thus a challenge to find and apply a framework that is able to capture and explain the different features and phenomena. The reason for this is that the systems and practices can be placed in no-man's-land between the structuring properties of institutions and organizational member's individual thoughts, routines, and actions. For example, whereas it might be possible to illustrate the rationales and intentions behind each business system and project, the explanations of the problems and challenges evolved within the organization are far more complex.

It is not only management accounting that is going through an ongoing change, so is the environment in which management accounting is practiced. The increased competition in the markets where Kanthal operates, developments within the information technology used, new management accounting practices, and organizational restructuring are all external factors that influence our study. Though we know that these factors cannot be ignored, it is not in the scope of our thesis to study the contextual setting of Kanthal, and hence our research does not illustrate all perspectives of management accounting change. Our study gives the reader an insight in the micro processes within Kanthal at a specific point of time and we would like to point out that to get a more accurate perspective, the study should be performed over a longer period, in order to capture the ongoing and cumulative process of management accounting change. However, the majority of the interviewees had all been employed by Kanthal during such a decisive time period that we therefore believe that they were able to provide us with collective information and experience that in some way can illustrate this cumulative process. Also, the study should not be isolated from the context where it is located as we have done in our case. To explain an actual change process, knowledge of the institutional setting is necessary, which requires a thorough examination of the existing rules and routines. Due to the fact that the intention of the case study was not to study the actual change process, rather to study how and whether customer profitability actually is measured today, we think that this can be neglected.

We would also like to emphasize that management accounting is highly influenced by the behavior of individuals and groups within the organization and we have only interviewed a limited amount of the employees. In order to circumvent this weakness, we chose to interview different people at different levels and units within Kanthal with the intention that they would represent the group of individuals that they belong to. This was also done to capture the phenomena of hierarchal power, since institutions both shape behavior and are shaped by actions of individuals.

Since the problem chosen cannot easily be answered through quantitative data, we believe that a qualitative approach through interviews is justifiable. All the data found points to the same direction and a clear pattern in the answers and opinions of the interviewees can be observed. We believe that this is the reason why the reliability of the case study is high, given the premises that the research was conducted during a certain time period and only a limited amount of interviews were held. Bearing in mind that all the people interviewed play different roles within the organization, and have different perceptions of what customer profitability means, we also consider the validity to be high. It is our belief that since we have collected and analyzed both biased and unbiased data, from different sources of information, we have been able to get a balanced point of view of the studied phenomenon.

According to the theory used in the thesis, there are several definitions of customer profitability, which is in line with our findings, i.e. that several definitions do exist, so this conclusion might be considered to be a vague finding. Nevertheless, we believe that in order to measure customer profitability efficiently, an organization needs to have a unified definition, as well as a shared belief of what customer profitability means to the organization's operational activities.

The different and often contradictory definitions within the organization have lead to confusion and the development of numerous projects and tools to find the perfect measure. In this way, different systems that provide different information have come up and these systems reflect the different hierarchical roles and predilections within the firm. In the prolongation, the role of measuring customer profitability, together with everything that is associated with the measurement, has been delegated to the sales team, which is already occupied with its main tasks. Apparently, a clear dilemma has risen because the sales team will try to perform the measure according to the definition of customer profitability that is the most applicable to them. But as the other roles start uttering their opinions, the question of responsibility and accountability comes up. It becomes clear that there is no one who has taken the ultimate responsibility for the measurement, and consequently the overall objective and intentions with customer profitability falls through.

It can be seen as a weakness that we have not discussed the concept of accountability in our thesis, since it is obvious that this is one of the main reasons why Kanthal has difficulties with measuring customer profitability. The conceptual framework used in our study was not intended to focus on such research; we consider accountability of customer profitability to be an area for future research. As previously mentioned, the complexity of studying management accounting change is due to its position in between the day-to-day activities performed within a company, and the structural properties of the institutions. As a result of this position, more research is needed in this field. To summarize, case studies where accountability is studied and contrasted with existing institutionalized thoughts and actions would be helpful to explain and solve the accountability dilemma.

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Olofsson Eva, Project Leader Markets and Support, (2006-04-06)

Palm-Larsson Sarah, Accounting and Reporting, (2006-04-07)

Sandström Björn, Chief Financial Officer, (2006-04-06)

Södervall Hans, Managing Director Heating Systems, (2006-04-07)

Öquist David, Sales Manager, Nordic and Agents, (2006-04-04) and (2006-04-12)