



UNIVERSITY OF GOTHENBURG
SCHOOL OF BUSINESS, ECONOMICS AND LAW

Efficiency within shared service centers

Case study of Volvo Financial Services

Graduate essay in management accounting

University of Gothenburg

School of business, economics and law

Business administration

Tutor

Ingmar Claesson

Authors

Dan Girdea

Peter Nilsson



Acknowledgements

Firstly we would like to thank our respondent at VFS Nordic for taking the time for the interview and to answer our questions in a detailed and knowledgeable way.

We would also like to thank our tutor, Ingemar Claesson, for the support and tips during the process of writing.

Lastly, we would like to thank our family and each other with patience and understanding.

University of Gothenburg School of Business, Economics and Law
Gothenburg, May the 31st, 2010

Dan Girdea

Peter Nilsson



Abstract

Bachelor thesis in Business and Administration, School of Business and Law at the University of Gothenburg, Management Accounting, spring term 2010.

Authors: Dan Girdea & Peter Nilsson

Tutor: Ingmar Claesson

Heading: Efficiency within shared service centers - Case study of Volvo Financial Services.

Keywords: Financial control, Management control, Performance measure, Efficiency, Balanced scorecard, Internal units, Service oriented, Shared services, Business process re-engineering, Resources consumption accounting, Activity-based costing and Lean administration

Background and problem description: Today, within a core-business of a company there are established tools in order to measure effectiveness and productivity in the form of financial and non-financial performance measures. Regarding the internal aid processes within a company are considerably more difficult to measure with traditional economic terms. In order to measure the effectiveness of an aid process, companies must focus on models that include both financial non-financial performance measures.

Purpose: The aim of the study is to examine which measures are applicable in order to evaluate the effectiveness of aid processes. It is also to find a mix of concrete tools in order to create or increase the effectiveness.

Delimitations: The focus of the essay is on the tools of management accounting that can measure and create effective processes. Reward-systems lay outside the essay's boundaries.



Methodology: In order to increase our knowledge of the subject and to create a theoretical framework, we have studied literature and research articles. The empirical research consists of a case study based on an in-depth interview.

Empirical results and conclusions: By creating the shared service center, companies take the first step to a cost efficient business. In connecting to the first step, companies should automate and standardize the processes and activities at the same time as involving and motivating the employees.

Proposals to further research: We have elucidated the activity within an aid process in a specific company. In order to confirm the study's validity, a similar study on another aid process within another company is desirable. We also suggest the subject to find standardized performance indexes for similar processes that companies can measure and benchmark against the average of a group of companies.



Table of contents

1	Introduction	3
1.1	Research question	3
1.2	Background and problem description	3
1.3	Aim & demarcations	4
1.4	Outline	4
2	Method	6
2.1	The case study as method of investigation	6
2.2	Literature search	6
2.3	Choices of methods.....	7
2.4	Choices of case study companies	8
2.5	Choices of respondent.....	8
2.6	The study's fulfill requirements of validity.....	8
2.6.1	Science	8
2.6.2	Faith dignity	9
2.6.3	Validity.....	9
2.6.4	Reliability	9
3	Theory	11
3.1	Management control	11
3.2	Shared services	13
3.3	Inner and outer efficiency	14
3.4	Performance measurement.....	14
3.5	Management control systems	15
3.6	Financial results control system.....	16
3.7	Shortcomings of financial measures	17
3.8	Non financial performance measures	18
3.9	Balanced scorecard	18
3.10	Activity-Based Costing.....	20
3.11	Business process re-engineering.....	21
3.12	Resource consumption accounting	23
3.13	Lean administration	24



4	Empiric research.....	25
4.1	History	25
4.2	Organization structure	25
4.3	Management control - unit level.....	26
4.4	Management control - finance & accounting department	27
4.5	Work processes	28
4.6	Efficiency of the work processes	28
5	Analysis.....	30
5.1	The shared service center.....	30
5.2	Current control system.....	30
5.3	Efficiency.....	31
6	Conclusion.....	33
6.1	Major structural changes.....	33
6.2	Minor adjustments	33
6.3	Measuring performance	34
6.4	Proposals for further research	36
7	List of references	37
7.1	Books and articles.....	37
7.2	Internet.....	38
8	Attachments.....	39
8.1	Interview questions (swedish)	39
8.2	KPI Nordic.....	41



1 Introduction

In this first chapter, we will present our choice of subject, research question and the reason to examine the effectiveness within aid processes. We begin with describing the background to our choice of subject and which problems we intend to study. Then we present the study's purpose and demarcations. Finally, we describe the study's outline.

1.1 Research question

How do companies create effective shared service centers?

1.2 Background and problem description

What has happened with the economy and its processes? Today, within each accounting department there are requirements on increased precision and effectiveness. When companies grow in size and spread out geographically, they often come across control issues and the reporting tend to increase in complexity. In large companies, the simple becomes often more difficult. The global financial market sets increased requirements on transparency and a fast and precise reporting. Even the legal reporting has been tightened, especially because of the number of scandals and actions executed by persons in management positions. In USA, there are examples such as Enron, WorldCom and Swedish examples are ABB, Trustor and Skandia.

When we searched for articles and facts, we found that there is a lack of discussion about our subject, efficiency in aid processes and shared services. We believe that companies' performance measuring is more focused on production and sales while the costs of aid processes are not as easily influenced.

A company management able to produce quick and correct reports with high quality also shows a good control over the activity (Larsson, 2008:52). Within marketing, sale and production, being near the market, there are established tools in order to measure effectiveness and productivity in the form of financial and not financial measures. Within an aid process performing internal services, the performed activities are difficult to measure in economic terms, alternatively mixing financial measures with non-financial. The non-financial measures focus more on the business and its activities. The deficiency of implemented performance measures causes managers to evaluate employees in a subjective

way. The evaluation becomes simple and emotional relations and personal relationships can easily influence it.

Since a shared service center only sells to units within the group, the communication between the shared service center and the external stakeholders is limited. It is a challenge measuring the performance for shared service centers such as VFS Nordic since non-financial measures, which are close to market such as customer satisfaction; numbers new customers and frequency of complaint are not relevant performance measures since the shared service center's performance is not reflected in these measures.

1.3 Aim & demarcations

Our aim is to define efficiency for aid processes, examine financial and non-financial performance measures describing the activity's efficiency and to find a mix of concrete tools that a company can use in order to create or increase the efficiency of aid processes.

As a reference, we study the finance & accounting department, located at the headquarter in Gothenburg, which is an internal aid process and a shared service center within VFS Nordic. VFS Nordic is active in Sweden, Norway, Finland and Denmark. The essay focuses on measuring performance and on factors or models that can contribute to creating effective units. Reward-systems lay outside the essay's boundaries.

We study a number of control systems such as Activity-Based Costing, Business Process Reengineering, Balanced Score Card and Lean Administration and will only include the suitable control systems for our purpose.

1.4 Outline

Chapter 1 Introduction

In this first chapter, we will present our choice of subject, research question and the reason to examine the effectiveness within aid processes. We begin with describing the background to our choice of subject and which problems we intend to study. Then we present the study's purpose and demarcations.



Chapter 2 Method

In this chapter, we begin with describing the method of investigation that we chose in order to implement the study; furthermore, we leave a description on how the data is acquired. We submit also a description of the interview's structure. Finally, we describe the studies faith and dignity.

Chapter 3 Theory

The chapter begins with an overview of the management control followed by a description of shared services, which are the bases of our study. After that, we include the relevant control systems for our study.

Chapter 4 Empirical research

Our empiric research consists of an interview with the Finance director for VFS Nordic.

Chapter 5 Analysis

In this chapter, we tie together the theory with the empiric research, looking for connections and discussing the question at issue.

Chapter 6 Conclusion

In this chapter, we summarize the most important arguments discussed in the analysis, answering our research question.

2 Method

In this chapter, we begin with describing the method of investigation that we chose in order to implement the study; furthermore, we leave a description on how the data is acquired. We submit also a description of the interview's structure. Finally, we describe the studies faith and dignity.

2.1 The case study as method of investigation

Before writing the essay, we agreed that the subject would be financial control. When choosing the subject, we found that performance measurements within aid processes were poorly discussed. One of the authors works within such a process at Volvo Financial Services. We contacted the finance director and got permission to study the company's finance & accounting department. Our request for the case study at VFS Nordic was welcomed and appreciated.

We chose to use a study case as methodology in the empirical study. A study case means that we examine what occurs in reality but the researchers do not need to contribute to a change.

Case studies are used when researchers want to examine complex and special subjects in detail. The purpose with our case study is to create a comprehensive picture about and an insight in the concrete subject we are about to study.

The research itself may give the employees a revelation, thinking about the business' structure, which might trigger changes (Wallén, 1993:105). The advantage with a case study is the fact that we study the business in real conditions. The disadvantages with a case study is that we do not know if the subject studied is commonly occurring and neither if about the conditions required for the subject to occur in other organizations.

2.2 Literature search

The intention with our literature search is to find theories and background facts within the subject. A collection of facts intends to increase the knowledge and understanding about the subject. We got access to a number of databases, through Gothenburg's University Library, such as Business Source Premier, Emerald and Gunda and literature, dissertations and scientific articles. We have also followed other authors' reference list in order to find more information about our subject. The keywords we have used in our search have been

management control, performance measurement, balance score card, lean and corresponding Swedish words.

2.3 Choices of methods

The choice between qualitative and quantitative method as source of knowledge has remained an unresolved dilemma since the end of 19th century when the sociologist as Emile Durkheim and Max Weber contributed to the social research culture. Both representatives contributed with fundamental knowledge regarding differences in theoretical perspectives.

For it the quantitative method the central arguments are reliability, representativeness, reproduction, cumularity and verity. For the qualitative method, the central arguments are understanding, intersubjectivity, theory generating, validity, detection, variation and above all curiosity (Starrin et al, 1995:9). According to Starrin quantitative researches suits the macro level while the qualitative research suits descriptive and overall informatory studies within premise societies or organizations. Regarding our purpose, we have the qualitative choice of method.

In order to examine how the chosen company measures performance and effectiveness, a good insight in the company's business is required. According to Wallén (1993:69), qualitative studies can be carried out in two different ways, qualitative categorization or soft facts. The first concerns the phenomenon of the article, the relevant factors, etc. Soft facts can be seen as a subgroup of qualitative studies where the description and characterization is the main problem. The essay's study will be implemented according to the latter method. Our aim is not to find connections or statistical phenomena. Our study aims to examine how performance measurement of aid processes occurs and to possibly find appropriate tools that can measure and render efficiency.

Within the qualitative methodology there are a number of different methods to study, for example field studies, observation, studies of intervention and in-depth interviews (Wallén, 1993:70). We collect our primary facts for the empirical research through an interview.

Secondary facts will consist of information materials, which will be submitted to us during the interview and information about the company found in databases and on the company's website.

An interview can occur as a telephone interview or a personal interview. We have selected the latter alternative, booking the interview in good time. The respondent also received the questions in good time before the interview.

The interview questions are split into three different parts. The first part concerns overall questions about the company, its business and about the respondent. The second part concerns questions about the shared service center and the third part concerns questions about financial control, performance management and general effectiveness.

We have agreed with the respondent to record the interview because we consider that voice recording is the best way to document an interview. It allows us to analyze the replies, writing the correct details.

After the interview, we offer the respondent to read our documentation straighten out any possible misunderstandings.

2.4 Choices of case study companies

When we agreed on the subject, we discussed potential companies for the case study and concluded that Volvo Financial Services would be a good choice because we had some insight in the company. We contacted the finance director for VFS Nordic, asking if there was an interest for our type of study, which was positively received. Volvo Financial Services is a good case for our study since the company is part of the international Volvo group and is among the foremost companies in their line of business.

2.5 Choices of respondent

When choosing the respondent, we decided to interview the company's finance director since he has a very good insight in the company's business. He has also worked on different positions within the Volvo group for many years.

2.6 The study's fulfill requirements of validity

2.6.1 Science

Each scientific work shall be businesslike, objective and balanced (Ejvegård, 1993:15).

The objectivity refers the fact that information should be correct and that the information is retrieved from a primary source. As author of scientific documents, one shall strive for

objectivity and avoid using value loaded words. Both businesslike and objectivity are included in the balance concept.

2.6.2 Faith dignity

Within traditional quantitative research, one has developed a number of concepts such as reliability and validity as a measure on the survey's faith dignity (Norén, 1990:1). Norén means that a big advantage with case study is that the researcher can let go of a part of the requirements on an intentional design and instead work with emerging design, creating possibilities to apply for knowledge. In order to achieve faith dignity in a case study a researcher must answer a number of questions. For example, to what extent are the results from a study applicable in other contexts (generalization). Another example is how the researcher can make it plausible for the results to reflect some mould of "truth" (validity). A third question is to what extent the results are depending on exceptional circumstances and if there are any random errors in the drive of facts (reliability).

2.6.3 Validity

Validity refers to measuring what the researcher actually intends to measure; it means that there is compliance between the average language and the reality (Smith, 2006:27).

In order to achieve a great validity, we have tried to create interview questions that are pertinent to the study's purpose and issue.

2.6.4 Reliability

A high reliability means trying to eliminate the absence of random measuring errors, repeated studies shall give the same result as previous ones. There are number of methods of measuring reliability. One method is through testing, for example, the respondent may answer the same questions again. The half method and the parallel method are two other methods that measure reliability, they commonly occurring with questionnaires. Finally, another method is to use control questions, same questions but with reversed wording. An identical reply means a good reliability (Ejvegård, 1993:68).

Our study includes an in-depth interview; because of the limited time there is a small possibility to carry out another interview with same respondent in order to confirm the



reliability. The respondent in form of commenting our documentation of the interview, confirming that we interpreted the respondent's replies objectively, will give feedback on our study's reliability. Since one of the authors has an insight in the business at Volvo Financial Services, we will further confirm the reliability by comparing the documentation with the author's idea of the business.



3 Theory

The chapter begins with an overview of the management control followed by a description of shared services, which are the bases of our study. After that, we include the relevant control systems for our study.

3.1 Management control

Management control occurs on different levels: strategy, tactic and operational control.

Strategy control involves a long time perspective and the measurements are mainly aggregate and financial. The company's tactic control intention is to implement the company's strategy all the way thorough the company. The time perspective is shorter, usually one year and the measurements are mainly financial. The tactic control is equivalent to what is known as traditional management control. The operational control is lowest in the control pyramid where the company's activities are performed. The time perspective is short and there are mainly business related measurements with only a few financial measurements. Concurrently with the subject's development, the boundaries of the three levels have been erased (Lindvall, 2001:52).

An organization consists of a group of people working together to achieve common goals, the organization's goals. The organization has a hierarchy structure including a CEO, managers, business units, departments, etc (Anthony, 2001:3). The purpose of management control is to influence the group of people within the organization to act in the organization's best interest, achieving its goals (Merchant, 2007:5). This creates a relation between the managers and the subordinate employee, also known as the principal-agent theory. The decision-makers, often managers, within an organization make decisions that other employees must adapt to. The agent-principal theory studies this relationship between the manager's will to ensure that the subordinate employee acts in consensus with the manager's intentions and the subordinate employee's will or resentment to accept the manager's decisions. An arising challenge is the facts that most of the time, the subordinate employee's knowledge about the activities performed are greater than the manager's is. The manager lacks the details of the activities the subordinate employee performs but the manager is the one in charge (Olive, 2006:6).

There are four different types of management controlling the organization. The company's regular management control is defined as organizational control and its focus is the ordinary

business measuring the profitability or the turnover. The financial control is characterized by accounting measures and focuses on business ratios, for example return on investment or return on equity. Business control involves what the company produces, markets and production efficiency. The fourth type of management control is corporate governance, the shareholders control of the board and top management, for example dividend policy (Samuelsson, 2004).

The company's main mission is to develop, produce and market products or services on targeted markets. The shareholders set the main objectives by defining the business idea. They also decide about other business acquisitions or disposal. The top management executes the board's directions and strategy and responsible for the regular operations. To ensure the company's efficiency, four different types of management control systems (Samuelsson, 2004).

The formal control system contains the company's the strategy and the short-term plans. The short-term plans stretch up to a year, containing the required capacity, financing policy, solidity, etc. Budgeting and forecasts are also a part of the formal control system, which focuses on the daily operations (Samuelsson, 2004).

Another control system is the choice of organizational structure, which defines the working environment. The structure of the company may differ from the regular structure of the group company. It also defines the authority levels and the path of decisions (Samuelsson, 2004).

The company's control system also includes a incentive system to motivate the employees. It is generally known that individuals are more motivated by the opportunity to be rewarded than the fear of being punished. Incentives are founded on financial and non-financial measures. A good incentive system measures each individual objectively and gives the individual the opportunity to determine the result of the performance measures (Samuelsson, 2004:139).

The fourth control system includes less formal elements as training and company culture. The formal control systems created bureaucracy and centralization and the purpose of the less formal control system was to counteract that by decentralizing decision-making, making the most of the individual's competence. The focuses of the less formal control system are the individuals and the company's culture as a guide the employees (Samuelsson, 2004).

3.2 Shared services

Our study focuses on the efficiency in a shared service. The shared service stands out from regular services within a company because it consists of processes supporting the operative processes with resources. According to Ax, a shared service indirectly creates customer value. Examples of shared services are human resources, IT departments and staff departments, all lying outside the core activities of a company (Ax et al, 2009:472).

Within the English government, they created a shared service center in order to reduce the costs. The service center is not permitted to profit from supplying services to other government organization. The service center may not charge different prices to different customers for the same service. The three main risks concerning the service center is the investment risk, employment risk and the risk of sudden variation in volume (Turle, 2010:184).

A company normally contains a number of business units and units acting as shared service centers for the common activities. The costs of the shared services is questioned when the profit requirements for the business units are increased. A local profit requirement encourages acting independently and shared services are seen as unnecessary (Samuelsson, 2004).

Common resources can be categorized into four different types. Some shared resources could be decentralized to the different units. Some shared resources can be restructured into an independent financial responsibility center, selling the services within the organization. A third option is to liquidate the shared resources. Shared resources may also be kept centrally within the organization, not dividing the costs between the different units (Samuelsson, 2004:795).

To completely manage all resources according to one of the above options occurs rarely. There are always some resources that benefit the whole company and shall not be allocated to the different units (Samuelsson, 2004).

Shared services restricting the freedom of choice of buyers and sellers should be identified in order to minimize the risk of internal monopolies, risking hiding inefficiency. In order to handle a service center, its tasks and processes must be analyzed and assigned to one of the following categories: service facilities, indivisible services, strategic services.

Example of service facilities are IT, human resources, office services. Profit centers are suitable for the service facilities. Indivisible services are non-strategic services with an imperfect market. Examples of indivisible services are special technical systems such as intranet, phone exchange, company specific IT-systems. These services should be debited with a mix of constant and variable costs (Larsson, 2008:54).

By creating, a shared service center and implement standardized systems and routines, costs can be reduced by up to 30 percent (Larsson, 2008:54).

3.3 Inner and outer efficiency

Within a company, efficiency can be divided into inner and outer efficiency. Outer efficiency focuses on the external operations and implies "to do the right things" which includes the company's relations to its surroundings. Outer efficiency can also be described as customer value. Inner efficiency has an internal perspective and implies "to do things right" which can be associated with high productivity, cost efficiency, "law and order" and well developed systems and routines. (Ax et al, 2009:33)

According to Lindvall, outer efficiency can be defined as efficiency and inner efficiency as productivity. The main rule of management control is to improve the company's efficiency and productivity (Lindvall 2001:47).

Lindvall also argues that it is hard to measure efficiency for a shared service because it does not create customer value. The company's end customers are not willing to pay for the costs caused by the shared services (Lindvall, 2001:257).

3.4 Performance measurement

In 1989, Cink and Tuttle published Planning and measurement in your organization of the future, the first description of performance measuring. The theory says that, if the company is efficient, well developed, and its products, services and processes follow given specifications, the company will probably be productive. The company is forced to keep the quality of work and continuously renew itself. These are conditions securing the company's survival, creating growth (Andersen, 2006:5).

The purpose of measuring the employee's performance is to follow up their success in the work. Measuring performance creates general information, which can be used for decisions

made by the managers and employees, including strategic and daily planning (Andersen, 2006:5).

A company should avoid measuring each individual's performance and instead measure the performance of the group or the process. This because the some individuals experience it as treating and other diligent individuals may risk a burn out in order to reach their goals. Other employees interpret the goals as a limit not willing to perform beyond the goals (Andersen, 2006:13).

The quality of the performance measures is determined by four qualities. The first quality, precision, refers to the amount of randomness in the measure. Precision is important because without it, the measure loses its information and value. There is also the risk of misevaluating performance (Merchant, 2007:34).

Objectivity is another important quality. Low objectivity is common when the person whose performance is evaluated, for example self-reports does the actual measuring. To increase objectivity, have the measuring done by people independent of the process or have the measurements verified by independent parties (Merchant, 2007:34).

The third quality is timeliness referring to the lag between the employee's performance and the measurement. Delayed measures and feedback loses most of their motivational impact. Timeliness may also help detecting and preventing developing problems if the performance is measured in shorter intervals (Merchant, 2007:34).

Understandability is the fourth quality. It is important that the employees understand the measure and what they are held accountable for. They must also understand what they must do to influence the measure (Merchant, 2007:34).

3.5 Management control systems

Norbert Wiener founded the cybernetics model and was the first one to develop a management control system, using the model. Cybernetics is the study of structure and regulatory systems. His model became the building stone of future management control systems, which have been completed with behavioral and cultural aspects (Samuelsson, 2004).

A management control system contains four components: determination of objectives, determination of plan of actions, evaluating results and determining deviation compared to the objectives and determination of new plan of actions based on the results (Samuelsson, 2004).

3.6 Financial results control system

The vast majority of organizations uses this control system. The results are defined in monetary terms such as revenues, costs, profits and returns. Financial control systems consist of three core elements: financial responsibility centers, planning and budgeting systems and incentive contracts (Merchant, 2009:269).

There are four types of financial responsibility centers: investment centers, profit centers, revenue centers and cost centers. There is a distinction between profit and investment centers. The performance measure of investment centers involves a ratio of the profits earned to the investment used, such as return on investment. Managers of profit centers are only held accountable for the profits, not for the investments made to generate them. A cost-focused profit center is based on a cost center with assigned revenue responsibility. Typical examples are administrative departments supplying unique services, for which sometimes-external market prices cannot be determined, to internal customers only. Revenues for these centers might be calculated as cost plus a markup. If the internal customers can outsource their purchases, then the employees supplying the services will be motivated to produce quality services, provide good customer service and provide superior delivery schedules (Merchant, 2007:271-272).

A common example of a revenue center is sales managers. Revenue centers provide an effective way to encourage sales and marketing managers to attract and retain customers. Revenue centers may also encourage employees to make easy sales rather than profitable sales (Merchant, 2007:273).

Planning and budgeting systems clarifies the organization's goals, strategies and expected results. It also forces managers and employees to think about the future (Merchant, 2007:329).

The effectiveness of the financial results control systems depend on if the financial performance targets are set correctly. Issues related to financial performance targets are

finding the optimal amount of challenge in a target and giving subordinates the proper amount of influence in target settings (Merchant, 2007:335).

Highly achievable budget targets increase the managers' commitment to achieve the targets and are motivating, making the managers feel like winners. They also increase the managers' self-esteem, making them more eager to go to work and take prudent risks, which benefits the organization (Merchant, 2007:337).

Allowing employees to participate in the process of setting their performance targets has several benefits such as commitment to achieve the targets, information sharing between employees and managers, clarifying expectations and encouraging employees to think about the best way to achieve the targets (Merchant, 2007:340).

3.7 Shortcomings of financial measures

To maximize short-term profits does not guarantee a good return on equity because the shareholder's value is represented by the net present value of future earnings. Using financial measures, a company must measure and evaluate its performance at least once a year in order to fulfill the measure quality timeliness (Anthony, 2001:441-442).

Short-term financial performance measures may encourage employees to actions that are contrary to the company's long term interests. For example, a sales manager may decide to deliver products of inferior quality to the company's customers in order to achieve the short-term sales goals, affecting the customer relations and future sales (Anthony, 2001:441-442).

Long-term investments and research & development are long term benefits, lowering the short term results. This may prevent managers from long term thinking, focusing only on the costs of investments instead of future positive cash flows. Another consequence of the short term financial measures is managers becoming more conscious of risks, giving up risky investments (Anthony, 2001:441-442).

The short-term financial measures may also encourage managers to set lower goals in order to achieve them easier, preventing the company from reaching its true potential. Manipulations of figures may also occur when managers are experiencing high pressure to meet their goals. (Anthony, 2001:441-442).

Most organizations base their higher managerial-level results control to a great extent on summary accounting measures of performance. They have some significant advantages over other measurement alternatives. In particular, at minimal incremental cost, they provide a useful summary of results of the many actions that managers take. It must be recognized, though, that even the best accounting measures are not perfect: they only surrogate indicators of changes in firm value. (Merchant, 2007:436).

The use of accounting performance measures as surrogate indicators or changes in firm value creates some significant control problems. Most managers are well aware of these problems, but they choose to use accounting measures anyway because of the advantages these measures provide. They can take steps to minimize the effects of the problems. One of the most significant problems accounting performance measures cause, are a tendency to make managers excessively short-term oriented, or myopic. Even the issue of sub optimization, a form of behavioral displacement caused particularly by the use of accounting based ROI-type measures (Merchant, 2007:436).

3.8 Non financial performance measures

There are several reasons to that companies use non-monetary measures combined with financial control. Non-monetary measures complement short-term monetary numerical values through that they indicate success as they fulfill the long-term strategic objectives. The monetary measures such as profit are historical measures. The non financial measures focus on activities that are implemented at the moment, and will affect the future monetary measures (Banker et al, 2000:89).

3.9 Balanced scorecard

Today companies are interested in measurements including assets that are absent on the balance sheet such as high quality services, intellectual capital, skilled employees, prompt and reliable services, responsiveness efficient and adaptable business processes. The balanced scorecard emphasizes both financial and nonfinancial measures as part of the basic data for managers. It can be used as strategic management system to manage long run strategies (Chavan, 2009:395).

The balanced scorecard is perhaps the most widely publicized combination-of-measurement system by Kaplan and Norton. It consists of four measurement perspectives: financial

performance, customer relations, internal business processes, and organizational learning and growth. The first one includes financial leading indicators that are short-term oriented while the last three includes nonfinancial leading indicators of future financial performance (Merchant, 2007:473). The measures should be tailored to the business unit's specific goals and strategies (Lipe, 2000:286).

Financial measures can include return on assets and net income but also measures that are more relevant to the business unit such as revenues per employee for a sales unit. The leading question of the financial perspective is: - To succeed financially how should we appear to our shareholders (Chavan, 2009)?

Customers related measurements can be taken from customer surveys, customer's relationships, and customer profitability. The question of the customer perspective is - To achieve our vision how should we appear to our customers (Chavan, 2009)?

Internal business process measures relate specifically to the operational processes of the business unit. Develop products and services, deliver products and services and "post-sales" services are examples of the internal business process. The leading question is to satisfy our shareholders and customers, at what business processes must we excel (Chavan, 2009)?

Organizational learning and growth measures are the most difficult to select. Those can be measures of employee capabilities, information systems capabilities, and employee motivation and empowerment. To achieve our vision, how will we sustain our ability to change and improve (Chavan, 2009)?

The balanced scorecard is a balanced performance measurement tool because it aims for a complete description of the business unit through its four perspectives, it includes both internal and external aspects of the business and finally because it is linked through cause-and-effect assumptions (Chavan, 2009:398).

The development of the BCS is relatively costly so the net benefits gained in adopting the BSC depend on the extent to which it improves the managers' decision (Lipe, 2000:284). The cost consists of both designing and implementing the system as well as the time spent by the firm's own personnel. An example of the latter is the administration of customer satisfaction surveys (Merchant, 2007:477).

The balance scorecard may require some substantial changes in the company culture. It requires understanding, commitment and support from the top of the business and further down (Chavan, 2009:405).

As culture changes and develops, the balanced scorecard needs to evolve in order to make it even more balanced and effective. The organization will find new things to measure, new goals, and new strategies (Chavan, 2009:405).

Adopting the balanced scorecard comes with difficult learning, substantial culture change, and a lot of hard work (Chavan, 2009:405).

3.10 Activity-Based Costing

The point with Activity-Based Costing is to create attention-directing information, which draws attention to problems originating from different products, services or customers. It also reveals the potential for effectiveness and cost-saving operations (Ax et al, 2009:143).

ABC is based on two central concepts: activity and cost driver. ABC views the company as a group of activities each representing a task or a process. The purpose of ABC is to measure each product's and service's consumption of these activities. By relating to the cost of each activity and the proportion consumed by the product or service, it reveals an accurate cost of the products and services produced by the company (Ax et al, 2009:144).

Cost driver is the link between the product or service and the activities consumed by it. A cost driver example is 'number of guests' of the activity 'cooking' in a restaurant. The daily cost of the activity 'cooking' in a restaurant is determined by the daily number of guests. (Ax et al, 2009:146-147).

To achieve the accurate costs of each product and service produced by the company, companies must determine the direct costs and allocate them to the respective products and services. Then allocate the indirect costs to the determined activities and by identifying the cost drivers and the consumption of activities by each product and service, the indirect costs can further be allocated to the respective product and service. It is important to understand that ABC is resource consumption model. Only the cost of the activity capacity consumed by products and services should be allocated to respective products and services. Unemployed activity capacity should not be included in the calculations (Ax et al, 2009:147-150).

Criticism against ABC like high implementation costs as well as long implementation time and high maintenance and update costs, led to a time driven activity-based costing in an attempt to conquer or soften the criticism. Other problem accompanying ABC is determining how each employee's time is allocated between the different activities, which are mostly determined by subjectivity. Experience show that employees tend to underestimate or exclude leisured or unused time when they are asked to determine how their working hours are allocated between different activities (Ax et al, 2009:154).

Time driven activity-based costing is simpler and easier to implement. It is also less costly to maintain and update. Instead of using three types of cost drivers (transaction related, time related and intensity related), time driven activity-based costing uses only time related cost drivers. This means that time driven activity-based costing allocates the cost of the activities by focusing only on the activity time consumed by a product or service (Ax et al, 2009:154-155).

3.11 Business process re-engineering

BPR refers to productivity breakthroughs, when organizations must abandon outdated business procedures and create new ones combined with new work practices and technology improvement (Romney, 1995).

A business process is a task or activity that adds value to an organization. Through analysis and fundamental rethinking, these processes can be reengineered in order to achieve dramatic improvement in service, quality, speed and cost (Romney, 1995).

The organizational structure is also significantly changed. Applying BPR transforms the organizational structure into a horizontal flow of activities while most organizations are formed into vertical functional groupings (Childe, 1994:22).

BPR focuses on why business processes are done rather than how they are done, challenging organizational structures, rules, work flows, job descriptions, management procedures, controls and organizational values and culture (Romney, 1995).

BPR must be applied in large and determined steps in order to achieve radical performance improvements. It must be viewed as an all-or-nothing preposition (Childe, 1994:27).

The process-oriented viewpoint originating from BPR emphasizes cross-functional performance rather than encouraging departmental optimization. This is one of the benefits from adopting BPR, creating a chain of organizational activities independent of departments, geography or cultures (Childe, 1994:30).

By utilizing the information technology, BPR also offers the opportunity to radically reduce the number of activities it takes to carry out a process. This in turn may reduce costs and/or improve service levels (Childe, 1994:30).

According to Michael Hammer, there are seven principles to take in consideration when re-engineering business processes. We mention the most relevant below (Romney, 1995).

One principle focuses on entire processes than on the individual tasks composing the processes. Companies often divide business processes into tasks and assign them to different employees. These results in documents waiting for hours or days at each desktop as they are passed between the employees involved in the process (Romney, 1995).

Another principle argues for centralization and dispersing data within the company to achieve economies of scale and to provide better service for the customers. For example, centralizing the purchasing process may improve vendor relations and reduce purchasing prices by negotiating quantity discounts. Dispersing data decentralizes customer related operations, which improves responsiveness and customer relations (Romney, 1995).

Eliminating data processing delays is also important. Many organizations have a number of separate information systems, each collecting and processing some of the same information. By capturing data once and storing it on in a common database, companies can save both time and money (Romney, 1995).

Hammer requests companies to let information producers to process the information in order to become more effective. An example is assigning purchasing agents the task to enter purchase orders directly into the company's database instead of registering the purchase at first when the vendor invoice arrives (Romney, 1995).

By empowering employees with decision-making responsibilities, they achieve a higher quality product and service, faster responses to problems and fewer levels of management, flattening out the organization structure (Romney, 1995).

Successful examples of companies adopting BPR are Citibank who increased profits by over 750 percent by reengineering a credit analysis system, CIGNA RE who sped up document processing even though the number of employees was reduced almost by half and Kodak who reduced the time required to develop a camera by more than half (Romney, 1995).

Complex business processes are often divided up and assigned to independent teams, integrating their tasks when their work is done. This may cause misfits when integrating the different parts of the complex process. The problem can be solved by assigning different teams completing the whole process.

A successful BPR implementation requires, among other factors, a top management commitment, cross-functional approaches and a willingness to overcome internal barriers such as organizational overload, resistance and inertia (Drew, 1994:39).

According to Drew's studies, BPR is not a quick fix. The re-engineering project may take one to two years and it may take weeks or months until results are visible (Drew, 1994:39).

3.12 Resource consumption accounting

Resource consumption accounting focuses on linking costs and resource consumption by allocating costs to different resources or resource pools in order to provide better information for decision support, planning and control. It is based on German management accounting, activity based costing, the theory of constraints and traditional management accounting and thinking (White, 2009).

RCA creates a model of the organizations' operations, the costs associated with those operations and the cause-and-effect relationships between inputs and outputs allowing the managers to simulate the effects of different decision alternatives. The reason why RCA focuses on measuring the costs and not the revenue of resources is simply that costs are more certain than revenues and typically must precede revenues (White, 2009).

To create a RCA model, it is important to understand that resources, for example people, buildings, equipment and the like, cause all costs and revenues. In other words, every cost and revenue can be traced back to a specific resource, which caused it partly or completely. Stopping an activity or operation in the organization does not save costs unless the resources engaged in the activity are eliminated or significantly redeployed. The resources are organized

into resource pools, each applying its inputs to produce an output supporting another resource pool within the organization or producing a product or service for a customer (White, 2009).

Every resource has its own capability, capacity and cost structure or behavior, which needs to be taken into consideration when creating the RCA model. Unlike capacity and cost structure or behavior, the capabilities of the resources are not directly factors into a model but they may factor into decision-making (White, 2009).

3.13 Lean administration

Lean is a concept that is in general associated with Japanese enterprise and in particular Toyota. The Americans have been applying the concept, naming Lean Production. The fundamental idea behind lean is continuously work with permanent improvements. The Swedish manufacturer Scania is a company that has succeeded applying these principles. Year 1995 the number produced trucks was 3,6 per employee. Ten years later this figure has increased to 6,3 (Larsson, 2008:16).

The interest for Lean has also grown outside the manufacturing process. Within the service sector, municipalities, county councils and the healthcare sector there is a great interest of introducing the Lean concept. In Sweden, there are approximately 1 million working within administrative aid processes. Applying Lean eliminates administrative spills, waste, inequalities and overload. Reduced lead-time improves processes and releases more time to focus on improvements. (Larsson, 2008:16).

There are five principles guiding the organization when adopting the lean model: the first is to understand and identify the real customer value, the second is to visualize the value stream, which are the different processes or steps within the business generating customer value, and the steps that do not add value to the customers, should be targeted for elimination. The third principle is to make the processes flow immediately. The fourth to implement pull based responsive systems, also known as kanban. The fifth and last principle is to continually engage managers and employees towards eliminating all areas of waste not contributing to the customer value. (Piercy & Rich, 2009)

Lean Administration works both as guidance and as a source of inspiration. Lean is 80 percent about culture, working with permanent improvements to become a natural part of the activity, and 20 percent about applying a number tested tools (Larsson, 2008:16).

4 Empiric research

Our empiric research consists of an interview with Mats Petterson, Finance director for VFS Nordic, and information from VFS's website and the website of Volvo Group. The interview took place at VFS Nordic's office in Gothenburg on April 29, 2010.

4.1 History

The Volvo Group is one of the world's leading producers of trucks, buses, construction equipment, driving system for marine and industrial applications as well as services for aircrafts and aircraft engines. The Volvo Group also offers complete financial services. There are about 90 000 employees working at production plants in 19 different countries. The company's products are sold on over 180 different markets and year 2009, the Volvo Group's turnover was 218 billion SEK. The company is noted on OMX Stockholm (About us, Volvo Group)

The tradition of financial products and services within the Volvo Group goes all the way back to 1959, when the different product companies within Volvo completed their offer with specific financial solutions. (About us, Volvo Group)

Volvo Financial Services (VFS) was founded year 2001 with the purpose to create a new and common structure for the financial products and services within the Volvo Group. At the start, VFS offered services within customer financing, insurance and real estate. During 2006, the company's strategy and objectives changed to only focus on customer financing while the other services were transferred to the parent company. (Our company, Volvo Financial Services)

VFS largest competitors are banks, which are operating in different circumstances and are often able to offer lower rates. VFS matches that by offering a complete package of services and not just financing. VFS global loans to customers are 90 billion SEK of which 6 billion SEK to customers in the Nordic region.

4.2 Organization structure

There are three different functional working areas within Volvo Financial Services Europe: commercial, credit & operation and finance & accounting. In the Nordic area, Volvo Financial Services is divided into four legal units, each operating in one of the following

countries: Norway, Finland, Denmark and Sweden. The working areas commercial and credit operation are present at each unit while finance & accounting is a shared service for the four units, located at the Swedish unit in Gothenburg, which is also the headquarter for the Nordic region.

There are 52 employees working within the Nordic region of which 28 are working at the headquarter in Gothenburg. The reason why the Nordic region is divided into four independently legal units is the legal and currency related differences between the countries.

Mats Petterson leads the finance & accounting department and subordinate to him are one finance controller, one chief accountant, four senior accountants and a number of accountants. Each senior accountant is responsible for the accounting in one of the four units. The services sold by the accounting department to the other units are priced according to Volvo's transfer pricing policy, which consists of the department's costs including a small markup in order to coincide with tax rules. The four units do not pay the same amount for the services, the department's costs is allocated to the units based on each unit's average credit portfolio during one year.

Customer service is important for Volvo Financial Services and that is one of the reasons why the work areas commercial and credit & operation are kept close to the concerning customers. Financing & accounting is not directly related to the customers, which enabled the company to create a shared service instead of having four different financing & accounting departments.

4.3 Management control - unit level

The Nordic units are assigned a profitability objective to reach 12-15% return on equity during an economic cycle. Another objective measures the operational efficiency and is known as operating expense ratio. It is the sum of all operating expenses in relation to the average credit portfolio, which should be below 1%. For example, with the current credit portfolio valued at 6 billion SEK, the operation expenses should not exceed 60 million SEK. The operating expense ratio measure allows for bench marketing between different units within Volvo Financial Services.

Focusing on the working areas, the commercial part has a well-established evaluating system, which is built in the sale system, PriceManager. This way, each sales representative's performance can be evaluated, by measuring volume, penetration and profitability.

Credit & operation has also an established evaluating system, through PriceManager, based on key performance indexes measuring, for example, the ratio of all offers that are approved for credit and the ratio of approved credit offers that result in businesses, to ensure efficiency.

Finance & accounting lacks a quantitative evaluating system. Today, finance & accounting is manually evaluated by a key performance index report containing ten yes or no questions. It does not properly measure the performance of the work area; instead, it is more like an overview of the situation. An example of the key performance index report is included in chapter 8.2.

The company is striving to create systems for evaluation built in the ordinary systems. This should ensure that the cost of measuring does not exceed the value of obtained information and that the information is correct and objective. However, as described, the quality of the evaluating systems varies across the different work areas.

The company's strategy and objectives originates from the Volvo Group's, which are broken down to each individual unit and further to the working areas within Volvo Financial Services. Volvo's strategy plan stretches three years forward and is updated once a year. To ensure the company's progress is according to plan, follow-ups and forecasts occur periodically.

4.4 Management control - finance & accounting department

The unit's objectives and strategy are communicated through monthly meetings. To ensure that the employees' work concur with the company's strategy and objectives, each employee has a personal business plan with personal objectives which build on the employee's area of responsibility. Each employee has personal meetings with his or hers superior, occurring three times per year. During the personal meetings the personal plan is discussed along with evaluating the personal objectives. The personal plan can be described as a fragment of the company's main objectives, defining what the employee will achieve to ensure that the company's objectives will be fulfilled.

As mentioned earlier, finance & accounting lacks a quantitative evaluation system. Beside the key performance index report, the personal business plan is the only evaluation system within the finance & accounting department and the objectives consists mostly of routines performed correctly, documentation of processes, training, progressive activities, etc.

The accounting department's costs consists of 70-75% personnel cost and the rest concerns IT, property, marketing and other costs.

4.5 Work processes

The main processes within the accounting department are documented in form of a checklist. Some examples are registering incoming, registering, and executing outgoing payments, registering incoming invoices, reporting and liquidity planning which are performed daily. Monthly main processes are monthly closing of accounts and also paying taxes and VAT. These processes are performed for each of the four Nordic units.

Each employee within the accounting department is responsible for a number of parts of processes. In case of sickness, the responsibility of the sick employee is spread across the other employees, assuring the tasks are completed before deadlines. To improve and ensure the employees' knowledge about different tasks, job rotation has been introduced which means practically that the employees swap responsibilities and learn each other's jobs. There is also a strive to create uniform tasks regardless of which of the four units it concerns, which is not easy considering the differences between the four countries, for example the bank systems.

The current reporting is a time-consuming process and may sometimes appear as unimportant but it is required by authorities and by the superior organization. Most reports are first created in excel before reported in different systems depending on the report. The company uses a number of systems and most of them are automatically integrated but a few require manual integration.

4.6 Efficiency of the work processes

The common accounting department for Nordic Region was created in 2005. At the same time, a new main system was introduced, Coreview, to all four units. In the beginning, time and resources were spent on transferring the finance & accounting routines to the newly

created shared service and adapting to the new system. Today the employees are able to focus on adjusting the current routines to make them more efficient.

Most of the routine efficiency involves automating within system and that way eliminating monotonous and repetitive routines. For example, instead of manually registering transactions, a file is uploaded to the system, which automatically registers the transactions.

The time and resource consuming activities, within the finance & accounting department, are updating the system and adjusting the routines. It can take up to a year until a new update and routine are fully tested and reliable. Some updates may also cause problems for the links between the systems, which reduces the efficiency. To minimize the problems caused by the updates and improve the testing, the headquarter in Gothenburg has an IT-department with good competence in the main system, Coreview.

There are no great efficiency projects, the focus lies instead on continuous small process adjustments which results in a more efficient operation. When processes are adjusted, the employee responsible for the process is also responsible for testing the new routine and documenting it. Some of the efficiency projects include minimizing or eliminating the differences in tasks and processes between the units. This makes it easier for the employees to perform tasks for more than one unit. The development of some processes is limited by external factors, making it harder to minimize the differences. For example, in Denmark, paying by the direct debit system is very common due to the country's culture, meanwhile in Sweden, companies are unfamiliar with the direct debit system. This meaning that the Danish unit requires a unique routine.

The employees often appreciate automated routines and system updates improving efficiency because it eliminates the monotonous and repetitive work. So far, no one had to leave the company because of more efficient operation, mostly because the company's business has expanded. The employee turnover has varied over time and during the last two years; there was no recruitments or discharging.

Training is also increasing the efficiency. When we asked Mats how much time and resources the department spent on training, he explained for us that during 2009 and 2010, all employees working at the finance and accounting department were trained in Excel. The training has varied over time, depending on the needs, available time and budget.

5 Analysis

In this chapter we tie together the theory with the empiric research, looking for connections and discussing the question at issue.

5.1 The shared service center

We would like to compare a shared service to a manufacturer, but instead of producing goods, the shared service center produces services supplying the company's internal demand. Like manufacturers' products, the shared service centers produce both simple and quantitative services as well as more complex and qualitative services. Since a service center does not create customer value, it is even more important to measure its performance and reduce its costs.

Since the industrial revolution, manufacturers have standardized and automated the production in order to become more effective. The same applies to shared service centers, standardization and automation of services is fundamental for creating efficiency such as less faults, lower costs, less time consumption and higher quality. Often the employee's full potential is not used since they have to perform monotonous tasks. Employees have the ability to solve problems and therefore processes should be automatic. Employees get also more motivated when involved in problem solving.

We have identified the shared service center as a cost center since the price paid for the services is based on the department's costs.

5.2 Current control system

Currently the finance and accounting department is directly evaluated by the key performance index report and the personal business plan. Indirectly the department is evaluated by the profitability objective and the operation expense ratio. There is no performance measure directly evaluating the department's financial performance.

The personal business plan gives the employees a good understanding of their contribution to the company by setting goals and measuring their progress. The personal business plan also reveals the employee's potentials and will to develop and get more responsibility, which gives the managers a good picture of which employees are satisfied with their area of responsibility and which employees would want more.

The operating expense ratio measured for the four different units is slightly misleading because of the shared services cost allocation between the different units. As Mats described, the costs of the department are allocated based on each unit's credit portfolio, implying that the unit with the largest credit portfolio are charged with the largest part of the costs. At the same time, the unit with the largest credit portfolio may require the least time and system updates, causing the least costs. To get the correct accounting costs of a unit, the cost allocation system should be more detailed and include at least allocation of working hours and system updates required by the units, which represent the majority of the department's costs.

5.3 Efficiency

Since the services produced by the finance & accounting department does not add customer value, efficiency implies to minimize the costs. The department's costs consists of 70-75 percent personnel costs, whose driver is working hours. That leads to the conclusion that efficiency implies reducing working hours retaining the service quantity and quality, either by automation or by reducing the time it takes to perform the activities, or create new value adding processes and retain the working hours.

To automate all the processes is nearly impossible because of the system's limitation to adapt to the constant changes in procedures and in the company's surrounding. But any process able to automate should be automated because employees are flexible compared to machines or programs, that is why they should spend their time solving problems instead of performing monotonous actions such as manually registering transactions, a task which the system can perform.

In order to encourage employees to problem solving, they must understand the company, its activities and systems. Volvo Financial Services is already applying the factors required, training the employees, communicating strategy and objectives and keeping the employee turnover on a low level.

The business process re-engineering control system recommends that one individual should be assigned all tasks composing a process in order to diminish waiting times while documents are passed between different employees. To further generate more efficiency, the managers should inspect each activity regularly, asking the questions: What is the purpose of this activity? Is the activity necessary for the operation?



Retaining a low employee turnover also benefits the efficiency. The company spends less time and resources on training newly recruited employees as well as tasks are performed faster by the experienced employees with fewer mistakes.

Documenting procedures and job rotation is also affecting the efficiency positively. The documents work as a knowledge database used by employees to learn new routines. In order for the documentation to be effective, it has to be updated frequently. Another important aspect is the level of detail of the documents. Less detailed documents are more pleasant to read for the experienced employees since they have good knowledge of the company's systems and business. Great detailed documentation may be frustrating to read for experienced employees, besides it costs more to develop and update. Another way of spreading and containing the knowledge within the company is to use job rotation, as VFS Nordic does. To succeed spreading the knowledge among the employees, it is important to continuously work with job rotation, but not only in case of sickness or in case of vacations. Otherwise, employees do not get the recurrent training needed to contain the knowledge and they have to start all over again.

Minimizing the number of system used within the company and integrating the existing systems is also making the business more efficient. Although integrating systems might be costly, especially when one system is upgraded, creating problem for the integration.

6 Conclusion

In this chapter we summarize suggest the mix of concrete tools in order to answer our research question.

To answer our question, how companies do create effective shared service centers, we have developed a model containing three processes: major structural changes, minor adjustments and measuring performance. The model is based on the theories of business process re-engineering, activity-based costing and resource consumption accounting, lean administration and the balanced scorecard.

6.1 Major structural changes

Every five to ten years, systems, routines and organization structure become ineffective requiring a business process re-engineering. Organizations are forced to think outside the box and create new business procedures combined with the latest technology. The frequency of a business process re-engineering process depends on the company's ability to continuously adapt to revolutionary business procedures and improved technology. In other words, organizations that have fallen behind are in need of a major structural change in order to remain competitive.

At VFS Nordic, a business process re-engineering project occurred in 2005 when the shared service center for the finance & accounting was created, supplying services for the four business units. The company gradually developed new business procedures along with technology improvements replacing the outdated ones.

The structure of the organization and the main activities and processes seem optimal for the operation. The only task remaining is fine-tuning the activities and processes. A new business process re-engineering project is not necessary.

6.2 Minor adjustments

Fine-tuning consist of three steps. The first step required is to create a map of the activities and routines included in the business in order to give the managers a concrete overview of the business. The second step involves planning the changes in routines and activities, increasing the efficiency. The third and last step is to implement the changes before starting all over again.

A part of the activity-based costing model and of the resource consumption accounting model suits the first step, to identify the business' activities. The difference between the models is that the resource consumption accounting model allocates the costs to different resources, which are supplying the activities, while the activity-based costing model allocates the costs directly to the activities through cost drivers. Both models focus on allocating the costs which makes either of the models suitable to map the activities since costs levels represent the efficiency of a shared service center. Identifying the activities and routines is crucial for the next step, planning the minor adjustments.

Lean has been used within the manufacturing industry to increase the efficiency. Recalling our comparison between the manufacturing industry and the shared service centers, we can conclude that lean is applicable within shared service centers when planning changes for routines and activities. Fine-tuning applying lean includes eliminating the delays between activities, avoiding duplication and copy of data, eliminating unnecessary moments, developing routines preventing errors and engaging the employees in the pursuit for quality and efficiency.

Lean also focuses on the customer value, such as eliminating processes not adding customer value, a component of the model that should be ignored by the shared service centers supplying services disagreeing with market conditions. The shared service center at VFS Nordic is an example since the units buying the services are now allowed to choose another supplier.

The last step is to implement the planned changes for the routines and activities within the business, hopefully increasing the efficiency. The cycle of the three steps should be performed continuously because there is always potential for improvements and business development, which is why companies should never stop chasing efficiency

6.3 Measuring performance

An organization has to set goals and measure performance in order to become efficient. By adopting the balanced scorecard and selecting relevant key performance indexes, it gives a wide description of the operation, both financial and non-financial. We find the following four internal business process measures most suitable for the shared service department.

Number of payments relative to those paid on due date. If an invoice is paid past due date, there is a risk of receiving reminder fees, unnecessary costs which can easily be prevented. Invoices paid before due date reduces the accounts payables which is a part of the interest-free loans, forcing the company to increase the interest-bearing loans to maintain the liquidity, also unnecessary costs which can easily be prevented.

The number of registered faults in the system required to be corrected. Correcting faults requires time, which is driving the costs of the service center, reducing the efficiency. This performance index encourages employees to be cautious when registering transactions manually and when creating or changing routines.

The number of manually registered transactions compared to those requiring a follow-up. Problem solving consumes a large part of an employee's working day. By measuring this performance index, routines causing many follow-ups compared to the number of transactions, can be identified creating opportunity for improvements.

The employee turnover affects the training costs caused by newly recruited employees. The newly recruited employees also require time to adapt to the assigned routines and activities. Other employee's performance is also affected since the newly recruited employees ask more questions requiring help.

To measure the financial performance of the department, the suitable measures would be the budget's accuracy, describing the manager's degree of control, and the department's costs in relation to the activity in the company, which can be defined by number of active customers. A larger number of customers should include a larger number of transactions, requiring more time which results in higher costs. The latter performance index describes the department's cost efficiency.

Customers related indexes are difficult to measure since the shared service's customers are internal and do not have the opportunity to outsource the service offered by the shared service department.

Whether an organization chooses the balanced scorecard or another method, it is important to measure the performance moderately because extensive measuring might result in data manipulation and burnouts while small-scale measuring will not be effective. Since employee's possess different qualities, performing different tasks differently, measuring the



performance of a group instead of the individuals will result in a more correct evaluation. According to Andersen, employees might experience individually performance measurement as threatening or it might result in burnouts.

6.4 Proposals for further research

We have elucidated the activity within an aid process in a specific company. In order to confirm the study's validity, a similar study on another aid process within another company is desirable. We also suggest the subject to find standardized performance indexes for similar processes that companies can measure and benchmark against the average of a group of companies.

7 List of references

7.1 Books and articles

Andersen, B & Fagerhaug, T. (2006) *Mät företagets prestation*. Stockholm: SIS Förlag AB

Anthony, R. N. & Govindarajan, V. (2001). *Management Control Systems*. New York: McGraw-Hill

Ax, C., Johansson, C. & Kullvén, H. (2009). *Den nya ekonomistyrningen*. Malmö: Liber Ekonomi

Banker, R., Potter, G., Srinivasan, D. (2000) "An Empirical Investigation of an Incentive Plan that includes Nonfinancial Performance Measures", *The Accounting Review*, Vol 75, No 1, pp. 65-92

Chavan M. (2009). "The balanced scorecard: a new challenge", *Journal of Management Development*, Vol. 28, No. 5, 2009

Childe S.J., Maull R.S., Bennett J. (1994). "Frameworks of Understanding Business Process Re-engineering", *International Journal of Operations & Production Management*, Vol. 14, No. 12, 1994

Drew S. (1994). "BPR in Financial Services: Factors for Success", *Long Range Planning*, Vol. 27, No. 5, 1994

Ejvegård, R. (1993). *Vetenskaplig metod*. Lund: Studentlitteratur AB

Larsson, L. (2008). *Lean administration*. Malmö: Liber AB

Lindvall, J. (2001) *Verksamhetsstyrning – från traditionell ekonomistyrning till modern verksamhet*. Lund: Studentlitteratur

Lipe Marlys Gascho, Salterio Steven E. (2000). "The Balanced Scorecard Judgmental Effects of Common and Unique Performance Measures", *The Accounting Review*, Vol 75, No. 3, July 2000

Merchant Kenneth A., Van der Stede Wim A. (2007). *Management Control Systems*. New York, Prentice Hall

Norén, L. (1990), *Fallstudiens trovärdighet*, Göteborg: FE-rapport 1990-305, Företagsekonomiska institutionen, Handelshögskolan vid Göteborgs Universitet

Olve N-G., Petri C-J (2006). *Icke-monetär styrning: sex doktoranders perspektiv*. Linköping: Economic Information Systems

Piercy Niall, Rich Nick (2009). "*High quality and low cost*", *European Journal of Marketing*, Vol. 43, No. 11/12, 2009

Romney M. (1995). "*Business process reengineering*", *Internal Auditor*, Vol. 52, Issue 3, June 1995

Samuelson, L.A. (red). *Controllerhandboken*. Stockholm: Industrilitteratur AB

Smith, D. (2006). *Redovisningens Språk*. Lund: Studentlitteratur AB

Turle M. (2010). *Computer Law & Security Review*, Volume 26, Issue 2, March 2010, p178-184

Wallén, G. (1993). *Vetenskapsteori och forskningsmetodik*. Lund: Studentlitteratur

White Larry (2009). "*Resource Consumption Accounting: Manager-Focused Management Accounting*", *The Journal of Corporate Accounting & Finance*, May/June 2009

7.2 Internet

Our company, *Volvo Financial Services*, <http://www.vfsc.com/financialservices/global/en-gb/volvogroup/Pages/VolvoGroupHome.aspx>, Retrieved 2010-04-09

About us, *Volvo Group*, <http://www.volvogroup.com/GROUP/GLOBAL/EN-GB/VOLVO%20GROUP/Pages/landingpagevolvogroup.aspx>, Retrieved 2010-04-09

8 Attachments

8.1 Interview questions (swedish)

Bakgrundsfrågor

- Hur länge har du arbetat inom koncernen?
- Hur länge har du varit anställd på din nuvarande befattning?
- Vilka arbetsuppgifter omfattar din befattning?
- Vad är VFS affärsidé/roll inom Volvo-koncernen? Strategi? Vision?
- Hur många anställda på VFS Nordic?
- Hur ser organisationsstrukturen ut på VFS Nordic, övergripande?
- Vilka krav ställs på VFS Nordic utav koncernen, något specifikt nyckeltal?
- Finns det några specifika krav beträffande effektiviseringen av verksamheten?

Om ekonomiavdelningen

- Vilken roll har ekonomiavdelningen i VFS Nordics organisation? Är det en stödprocess? Utför ni tjänster internt och/eller externt?
- Är internprissättningen enligt marknadsmässiga villkor eller till självkostnadspris?
- Konkurrerar ekonomiavdelningen med externa aktörer?
- Hur många anställda arbetar på avdelningen?
- Hur kommuniceras företagets strategi och mål till de anställda inom ekonomiavdelningen?
- Har ni någon strategi/vision för ekonomiavdelningen?
- Vilka är avdelningens övergripande processer?
- Hur säkerställer ni att alla era processer är nödvändiga och skapar mervärde för organisationen och/eller kunden?
- Hur fördelar ni processerna mellan de anställda? Är en person ansvarig för en process hela vägen eller är flera inblandade i processerna?



- Hur många olika informationssystem har ni? Uppskattningsvis, hur mycket tid går åt för att kopiera information från ena systemet till den andra?
- Hur ser avdelningens kostnadsstruktur ut (rörliga/fast kostnader)?

Ekonomistyrningsfrågor

- Planerar eller driver ni något större effektiviseringsprojekt för ekonomiavdelningen?
- Hur mycket tid avsätter ledningen och anställda till att effektivisera verksamheten, dokumentation, utvärdering och förbättring av processer?
- Hur säkerställer ni att era anställda jobbar för företagets mål och vision?
- Hur mäter och utvärderar ni prestationen hos de anställda, olika arbetsgrupper samt för hela avdelningen?
- Vilka styrmedel/prestationsmått använder ni er av?
- Hur ser uppföljningen ut, tidsintervall?
- Hur använder ni utav den information som prestationsmätningen skapar?
- Hur kommuniceras resultaten utav prestationsmått till de anställda? Hur vill du att de anställda ska använda informationen, syfte?
- Hur öppna är era anställda för förändringar och nya rutiner? Hur lätt är det att genomföra förändringar?
- Använder ni er utav benchmark för att bedöma verksamhetens effektivitet? Har ni något erfarenhetsutbyte med VFS enheter globalt?
- Vad innebär effektivitet för er?



8.2 KPI Nordic

#	Process	sub-Process	Results	Measurement frequency
1	Reconciliation	Reconciliation of GL accounts	Quality assurance/Correctness of financial data	monthly
2	Refinancing	Credit portfolio Matchfunding - interest and liquidity matching	Number of times per month refinancing is done, minimum 2	monthly match funding report due dates
3	Refinancing	COF	Match Funding +/-5%	
4	Refinancing	development	Daily monitoring	monthly
5	Refinancing	COF development	Weekly update in commercial pricing process/system	monthly
6	Treasury	Clearing of customer accounts	All customers accounts are cleared	monthly
7	Treasury	Recording of bank accounts	All bank accounts are recorded	monthly
8	Treasury	Liquidity report	Reporting to VTAB on time, complete and correct	monthly
9	Statutory closing	Statutory accounts are filled	Filled statutory accounts	End of June
10	Statutory closing	Management letters to audit	On time submission of management letters	End of June
11	Internal control	Risk identification & evaluation	All relevant risk are identified, evaluated and (if needed) provisioned	monthly
12	Internal control	Key controls	In place and working effectively (tested)	monthly
13	Internal control	Internal control/audit issues	Defined action plan with action, responsible person and deadline	monthly
14	Month-end-reporting	BCS on-time reporting	On-time reporting	monthly
15	Month-end-reporting	Validation of reported financial data	Data is accurate, verification and analysis of the data are made	monthly
16	Month-end-reporting	Disclosure check	Disclosure checklist analysed, completed and signed-off	quarterly
17	Month-end-reporting	Submittance of hard close review comments	Submitted comments to VFSE HQ	Oct, Jan
18	HR	Recruitment	All recruitments (incl. temporary) is executed according to VFSE approval process	monthly
19	Expenses	Expenses approval	Expenses approval carried out in line with VFSE policy	monthly
20	Investments	Investments approval	Investment approval carried out in line with VFSE policy	monthly