TAMPERE UNIVERSITY OF TECHNOLOGY

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BUSINESS INTELLIGENCE AS SALES ANALYSING TOOL AND SOURCE OF SUPPORTIVE INFORMATION IN CRM

Master of Science Thesis

Prof. Mika Hannula has been appointed as the examiner at the Council Meeting of the Faculty of Business and Technology Management on June.16.2013.

ABSTRACT

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In rapidly changing business environment companies must be able to steer quickly their sales department in to wanted direction. This situation can be achieved with business intelligence and performance management, which enables companies ability to recognize changes in business environment and also street their activities in to right direction.

This research is done for Mepco Oy's CRM- business division. Its purpose is to recognize *what are the main BI- tools for providing better performance for sales departments in medium size companies.* Research is executed by creating theoretical framework that enables recognizing of best practices from six researched companies. Framework combines sales management, performance management and business intelligence. In research five main sales management's issues were identified: sales forecasting and budgeting, time and territory management, sales force motivation, training the sales force and sales force performance evaluation. Empirical research was executed by doing one half structured interview in each company concerning performance measures and decision supportive information needs related on earlier mentioned sales management issues. Best practices could be identified based on interviews' results.

For *sales forecasting and budgeting* main BI-tools were: sales pipeline, comparison between current sales, sales budget and last year's sales, estimation of market potential, competitors' turnover and profit development compared to own development, balance between lost on won deals for different competitors and newsfeed concerning changes in business area. For *time and territory management* main BI-tools were: sales activity monitoring by type of activity and territory and statistics of how many different types of activities have caused monthly sells. For *sales force motivation* main BI-tools were: individual and team activity and sales results based bonus systems. For *training the sales force* main BI-tools was statistics of purchase decisions. For *sales force performance evaluation* main BI-tools were: comparison of activity levels and sales results to set goals, and statistics of reason of why customers were or were not satisfied.

TIIVISTELMÄ

TAMPEREEN TEKNILLINEN YLIOPISTO
Tietojohtamisen koulutusohjelma

MARTIKAINEN, RIKU: Liiketoimintatiedon hallinta myynnin analysointityökaluna ja tukitiedon tuottajana asiakkuudenhallinnassa.
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Nopeasti muuttuvassa liiketoimintaympäristössä yritysten pitää pystyä ohjaamaan myyntiorganisaatiotaan nopeasti haluamaansa suuntaan. Tämä tilanne on mahdollista saavuttaa liiketoimintatiedon hallinnan ja suorituskyvyn johtamisen avulla, jotka mahdollistavat yritykselle kyvyn huomata ympäristön muutokset ja toisaalta ohjata toimintojaan oikeaan suuntaan.

Tämä tutkimus on tehty Mepco Oy:n CRM-liiketoimintayksikölle. Sen tavoite on *tunnistaa keskeiset liiketoimintatiedon hallinnan työkalut, joilla keskisuuret yritykset pystyvät tehostamaan myyntiosastojensa toimintaa*. Tutkimus toteutettiin luomalla teoreettinen viitekehys, joka mahdollisti parhaiden käytäntöjen tunnistamisen kuudesta tutkittavasta kohdeyrityksestä. Viitekehys yhdistää myyntijohtamisen keskeiset osa-alueet, suorituskyvynjohtamisen ja liiketoimintatiedonhallinnan. Myyntijohtamiselle tunnistettiin viisi keskeistä osa-aluetta: myynnin ennustaminen ja budjetointi, myyntialueiden- ja ajankäytönhallinta, myyntiorganisaation motivointi, koulutus ja suorituksen arviointi. Empiirinen tutkimus toteutettiin tekemällä yksi teemahaastattelu jokaiseen yritykseen liittyen edellä mainittuihin myyntijohdon suorituskyky mittareihin ja päätöksentekoa tukevaan tiedon tarpeeseen. Näiden pohjalta oli mahdollisuus tunnista aihepiirin parhaat käytännöt.

Myynnin ennustamisessa ja budjetoinnissa keskeiset työkalut olivat: oman tarjouskannan seuraaminen, myyntilukujen vertaaminen budjettiin ja viime vuoden toteumaan, markkinan myyntipotentiaalin arvioiminen, kilpailijoiden liikevaihdon ja liikevoiton kehitys verrattuna omaan liiketoimintaan, hävittyjen ja voitettujen kauppojen suhde kilpailijoittain ja uutisvirta liiketoimintaympäristön muutoksista. *Myyntialueiden- ja ajankäytönhallinnan* osalta keskeisiä työkaluja olivat: myyntiaktiviteettien seuranta tyypeittäin ja myyntialueittain, sekä eri aktiviteettien määrä verrattuna voitettujen kauppojen arvoon. *Myyntiorganisaation motivoinnissa* työkaluna olivat tiimin- ja henkilökohtaisen myyntisuoritukseen perustuvat bonusjärjestelmät. *Myyntiorganisaation koulutuksessa* tärkeäksi työkaluksi tunnistettiin ostopäätöksien syiden tunnistaminen. *Myyntiorganisaation suorituksen arvioimisessa* keskeisiä työkaluja olivat myyjien aktiviteetti- ja myyntimäärien vertaaminen tavoitteeseen, sekä jakauma asiakkaiden tyytyväisyyteen ja tyytymättömyyteen johtaneista syistä.

FOREWORD

This Master of Science Thesis was done on a subject received from Mepco Oy. Additionally, also funding for this research was received from Mepco Oy. The research was supervised and examined by Professor Mika Hannula and Ph.D. Carl-Erik Wikström, who works as a President of CRM- consultant division in Mepco Oy. I would like to thank both of these gentlemen from comments and advices they gave me during this project. All these comments have helped me to write this research on right direction. And naturally, I want to also thank the case companies which participated to this study.

Especially I want to thank my family and good friends of mine, who have supported me during for this long project. Thank you very much for that.

Helsinki, 7.05.2013

Riku Martikainen

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ABBREVIATIONS

BI	Business intelligence includes architectures, applications, databases, methodologies and tools needed to transform data into information that can be used to make smarter decisions, which results to better actions (Turban et al. 2008, p. 9).
B to B	Business to business means business between companies.
CRM	Customer relationship management is a system, which includes all the aspects of organization's interactions with its customers (Cunningham 2002, p. 6, 112).
CSF	Critical success factors are in central position in order to company success in its strategy or business (Lönnqvist, 2002). They are knowledge, skills, resources, features and accomplishments
KPI	Key performance indicator represents a set of measures focusing on those aspects of organizational performance that are the most critical for the current and future success of the organization. (Parmenter 2010, p. 4.)
ROI	Return on investment means how well invested money is making profits.
ROTI	Return on time invested means how well invested time is making wanted results. (Anderson 2010.)

1. Introduction

In today's business environment knowledge and know-how have been raised to most important features for companies' success. Traditional factors of production are available for all companies, which means that differences between companies are created by their employees' knowledge and effective management. In the same time role of service aspect is rising, which means that companies must be more creative and able to serve more added value than before. (Kodama 2007, p.1). This means that if company can create new or manage existing knowledge effectively, it can operate more effectively and profitable than its competitors. Better knowledge management can mean better storing, sharing or usage of knowledge in new or old context. Business environment is also changing fast. Time frame in which decision must be made is getting smaller and companies are looking for support to keep their existing customers and also getting new ones. In the same time there is more information easier available than ever before. Challenge is to find right information at right time in understandable format.

Another challenge for companies is that only 4% of unsatisfied customers actually complain if they do not feel satisfied. 75 – 90% of unsatisfied customers will never return in the future. Each unsatisfied customer tells another nine people about it. Customer retention costs are 1/6 of acquisition costs. Satisfied customers are willing to pay more for products and services. Each satisfied customer tells another five people about it. (Straus 2010, p. 10.) According to Wagner (2007) customer satisfaction is straight connected to return on investment of customer relationship, showed in picture 1.

Picture 1: *Return on investment (ROI) compared to Customer satisfaction (Wagner, 2007)*

Based on all that, companies must be able to use their existing knowledge efficiently for supporting decision-making. They also must be able to manage and monitor their performances, in order to be adaptable under ongoing changes. This research focuses on defining group of business intelligence tools, which enables middle size companies' sales managers control their company's sales performance better and have support for decision-making.

1.1. Background of the thesis

Mepco Oy is Finnish Software Company that provides solutions for customer relationship management, finance management, enterprise resource planning and human resource planning for private and public sectors. This thesis is focused only for their customer relationship management division. As a solution for CRM they provide Microsoft dynamics CRM that can be modified for different kind of customer needs. System can cover marketing, sales, customer service and also other elements, when it can be seen as extended CRM. In this thesis focus is on sales management, because intensification of this tool usually has most rapid affection to customer's revenue and profit increase. Customer can also buy additional CRM-tools like web-intelligence or customer information from external information providers like CoreMotives ltd or Asiakastieto Oy. This information can be integrated with existing customer data and used for making different kind of analyzes or reports. In Microsoft Dynamics CRM is built-in reporting tool, which is called as reporting wizard. With it user can compare two types of information against each other's and draw different types of diagrams about them. User can also build dashboards that consist of six small windows, which can be chart, list, web-resource or I Frame.

Mepco Oy has noticed that their customers are continuously looking for new ways to increase their sales revenue and profits. In many cases companies are aiming to these through new sales strategy, which goal is to maximize effectiveness of their sales operations. By analyzing these typical goals for sales organizations, Mepco Oy has realized that their customers must be able to control and monitor their sales organizations' performance in more effective ways. In addition, they need to understand their different performances of a sales organization as a whole, in order to have them work efficiently together. Mepco Oy is now interested to know what information their medium size customer sees important in order to steer their sales organizations into right direction and have more profits. Furthermore they want to know, which sales department's performances must be monitored and what information is needed to support decision-making. Main idea from Mepco Oy's perspective is to define set of BI-tools, which makes all described easily controllable. BI-tool for Mepco Oy means group of easily understandable dashboards, which include different types of meters that are based company's own or externally acquired information, which is related on their business.

Thus the research constitutes the following tasks:

- Recognize what are the most important business intelligence tools for medium size companies' sales management
- Identify main responsibility areas of sales management
- Identify what are important performances that should be monitored and what supportive information is needed in each sales management's responsibility area

1.2. Research questions and limitations

Main objective for this thesis is to define BI-tools that Mepco Oy's existing customers' sales departments sees as most valuable for them and what is the structure of those tools. Thus the main research question for research is: *What are the main BI- tools for providing better performance for sales departments in medium size companies?* Nature of the main research question is wide, so it is reasonable to create group of secondary question, which makes it easier to answer. Those secondary research questions are listed below:

- *Theoretical secondary questions:*
  - What is sales management in general and what are main responsibility areas of it?
  - How performances can be managed and monitored?
  - What is business intelligence and how it can produce supportive information for decision-making?
  - How BI is related to performance management and monitoring?
- *Empirical secondary questions:*
  - What are critical success factors for medium size companies' sales departments?
  - What performances should be monitored?
  - How those performances can be monitored?
  - What additional information is needed to support decision making?

First four secondary questions are theoretical in nature and will be answered on literature point of view. Rest four are empirical, so those will be answered in empirical part of the thesis. By combining theoretical and empirical parts main question can be answered.

Aim of theoretical part of the research is to define theoretical framework that connects theory of sales management, performance management and monitoring, and business intelligence all together. This can be done by first defining how sales organizations operate in general from management point of view, and what type of issues there concerning the sales management. Next step is to understand, how organization's performances can be managed and monitored. Focus is finding method that enables building a link between measurable objective and sales management's main issues. Lasts theoretical goals are defining theoretical model for identifying decision-makers' information needs and understand connection between business intelligence and performance management.

Aim of empirical part is to find answer to four last secondary questions based on theoretical framework. Mepco Oy have defined that medium size companies from their perspective got between 50 – 250 CRM users in business unit where they have implemented the software.

Selected companies need to have CRM –related business model in their sales departments, which makes their business intelligence needs more comparable. This means that case companies have sales process time over 3 weeks and their process can be identified by parameters shown in picture 2.

Picture 2: *Sales process in CRM.*

First step of sales process in picture 2 is, when sales lead is generated by marketing and is processed via several possible channels. This means that company has recognized someone who might be interested to buy their product or service. *Second step* is, when sales lead is sorted and qualified. After this step company knows that potential customer have interest to buy their product or service. *Third step* includes a number of sales activities that pushes the business opportunity forward. Aim is to recognize the potential customer's need, purchase schedule and budget. *Fourth step* is, when an offering is proposed to the sales lead. This offering should be now modified to meet customer need and on the *step five* company either wins or loses and the sales lead is closed.

Companies CRM-maturity must also be in certain level. Basically this means that company must first be able to run their business processes systematically in order to develop their sales processes analytically. Mepco Oy sees that researched companies must be at least on third CRM-maturity level. CRM-maturity level consists of five steps:

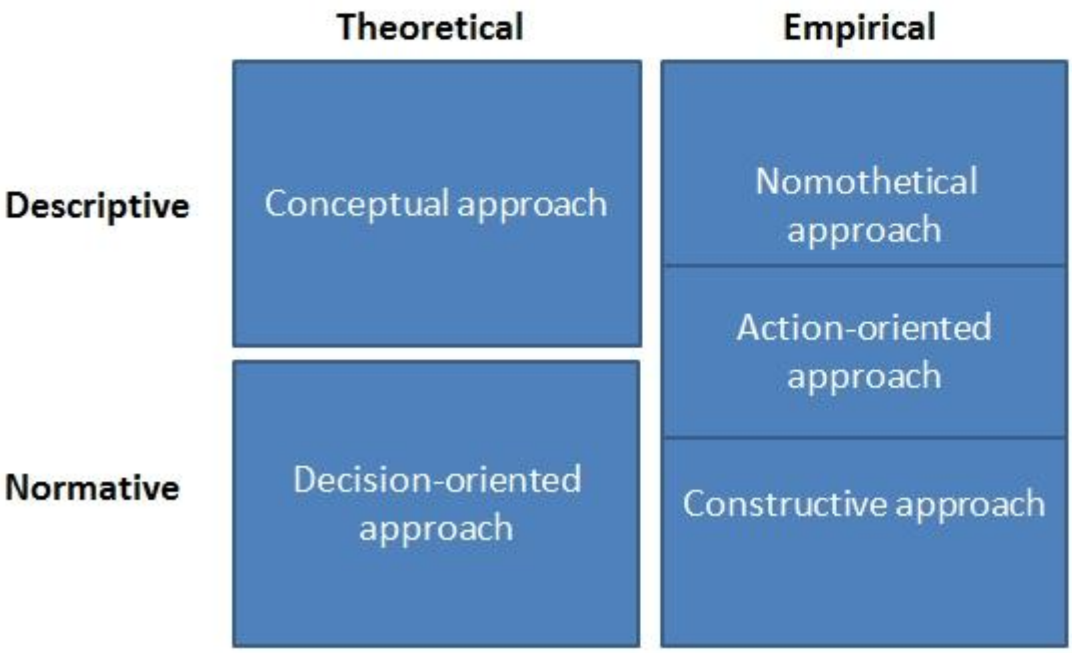
1. *Pre-CRM planning:* organization recognizes the importance of CRM but CRM project not yet fully scoped
2. *Building a data repository:* collecting and reviewing existing data and cleaning and de-duplicating customer records; identifying who are our customers
3. *Moderately developed CRM*: full data warehouse but limited to a single business unit; tools like sales force automation in use; call-center, campaign management in use but stand alone, not integrated

4. *Well-developed CRM*: enterprise-wide data warehouse, developed front-office tools, customer prioritization, sophisticated segmentation
5. *Highly advanced CRM*: fully integrated, advanced segmentation, DW access over business unit boundaries, “best in class”. (Payne, 2006.)

1.3. Research approach

According to Olkkonen (1994, p.24) two main research approach are positivism and hermeneutics. Those can be seen as opposites of each other’s, because they are based on two different philosophies: realism and idealism. Positivism is scientific approach that is based on facts and it denies all uncertain thoughts, which cannot be observed. Positivism is clearly based on realism and it highlights observable facts. Hermeneutics instead is science approach that underlines conception of observable reality, meaning of different things and their relation to each other’s and understanding. Hermeneutics can be described as explanation and interpretation skills. It is strongly based on idealism, whereby things occur only as awareness and ideas, which can provide information. (Olkkonen 1995, pp. 26 – 27.) Based on earlier described information sources and recognition of it, every branch of science has individual perspective of science approaches and results that them can make. These ways of working are called research paradigms or research approach. (Olkkonen 1994, p. 28.)

According to Neilimo and Näsi (1980, p. 50) commonly used classification in business economics is dividing them to four approaches: conceptual, decision-oriented, nomothetical and action-oriented. These four research approaches are recognized by researching usage and information acquisition of researches. Based on usage of scientific research it can be either normative or descriptive. Descriptive researches are focused on describing phenomenon whereas normative tries to define results that can be used for developing operations. (Olkkonen 1994, p. 44.) Research can be either theoretical or empirical based on information acquisition way. Goal of theoretical research is to develop new theories based on already known theories. Empirical research instead is based on measuring single occurrences and how these related to each other’s and causality of them. (Olkkonen 1994, pp. 50 – 51.) In addition of Neilimo’s and Näsi’s (1980, p. 80) definition Kasanen et al. (1993, p. 257) have mentioned that constructive approach is also one of the main classification in business economics. In picture 3 are shown five research approaches, which are categorized by information usage and acquisition.



Picture 3: *Research approaches used in business economics (adapted from Kasanen et. al. 1993, p. 257)*

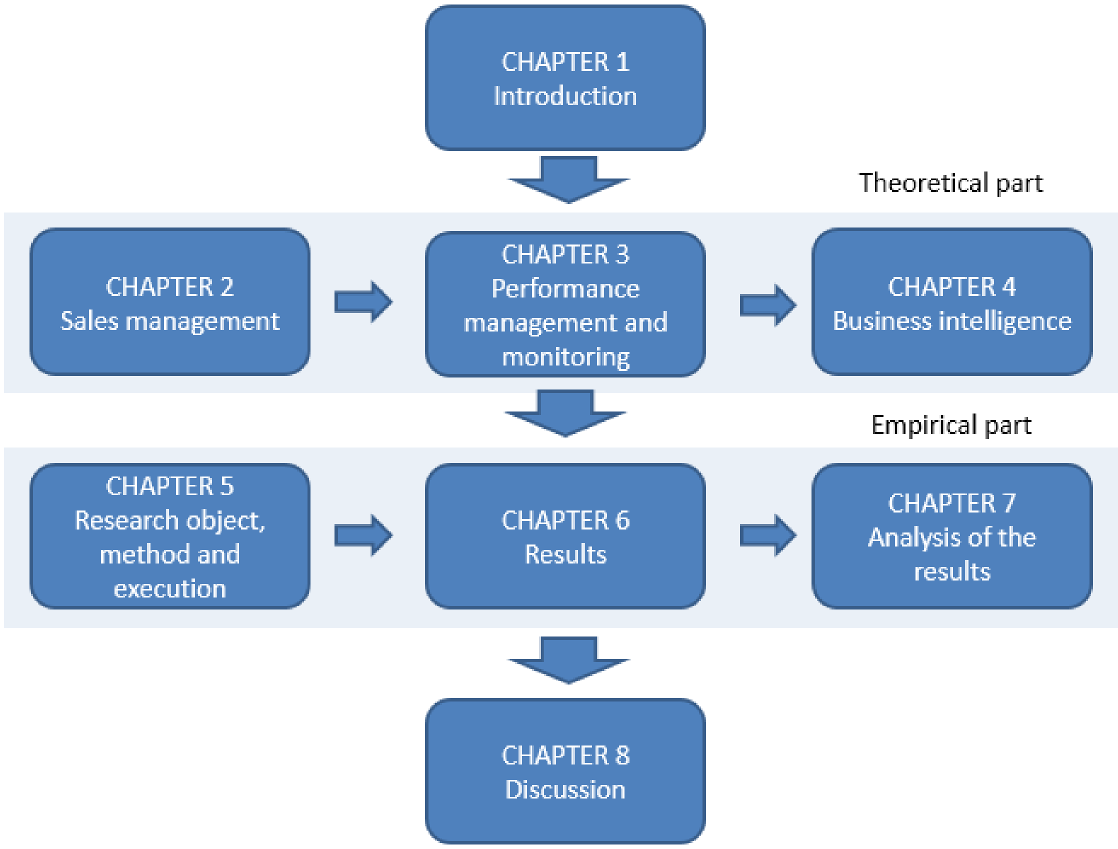
In this research are used two different research approaches: conceptual and action-oriented. Research approach for theoretical part is conceptual approach. For business economics research is typical that conceptual approach is also used in empirical part of research, which can be used for creating framework that can be used in beginning of empirical part (Hannula et al. 2002b, p. 8). According to Olkkonen (1994, p. 65) goal of conceptual approach is to create term systems, which can be used for describing, recognizing and categorizing different phenomenon. This is also goal for this research' theoretical part, because based on it, framework for doing empirical part and it analyzes can be made.

Empirical part's research approach is action-oriented approach. According to Olkkonen (1994, p. 72) this approach is based on hermeneutical approach, which focus is on understanding research problem. Usually this type of research is related for example to organization's operations, management, problem solving, decision making processes or development processes. Often problems are not structured, situation is new or it environment is under fast changes. Typical for this type of research is also close relationship between research's topic and researcher and his interpretations. (Olkkonen 1994, pp. 72 – 73.) According to Olkkonen (1994, p. 73) results for action-oriented approach researches' are typically for example are executed changes in researched organization or goals related on them. Also material and analyzes of it are empirical, even though material is gathered from small amount of cases.

All described action-oriented approach's characteristics, general goals and typical results are close to this research also, so it is logical selecting it for this research's empirical part's approach also. Research approach is closely related to research method, so research method for this research is half structured interview, which is described with more details in section 5.1.

1.4. Structure of the study

Thesis consists of four main parts: Introduction, theory, empiricism and discussion. Theoretical and empirical parts consist of many chapters. In introduction part research's background, goals and research strategy are described. Theoretical part go through sales departments, performance monitoring and business intelligence theories, which are used together for creating framework that can be used in empirical part's interviews. In empirical part is analyzed target industries' business intelligence needs based on framework build in theoretical part. Discussion part summarizes research results and evaluates them. Picture of the structure is shown in picture 4.



Picture 4: *Structure of the study*

Chapter 1: Introduces thesis' topic, goes through scientific aspect and used research methods.

Chapter 2: Begins theoretical part of thesis. In its first chapter is introduced sales management's main issues. Aim is to define issues that cover sales management's responsibilities from general point of view.

Chapter 3: Second theoretical section defines how performance and business are related, what performance management is and what type of framework is needed to monitor performances. Aim is to define framework that connects sales management's issues together with actual measurable performances.

Chapter 4: Business intelligence chapter defines, what knowledge management is, how knowledge management is related to business, what business intelligence is and how information needs can be categorized. Aim for this section is to connect theory of business intelligence to theory of performance management.

Chapter 5: Begins empirical part. Section begins with introduction of interviewed companies. Research method and research execution are described. Aim is to describe research in a way that it could be done by any researcher.

Chapter 6: Research's results are shown by company and by sales management's issue. Aim is to describe interviews themselves and define company specific best practices for each sales management's issue.

Chapter 7: Second last chapter compares different companies' best practices and aims to identifying general best practices for each sales management issue.

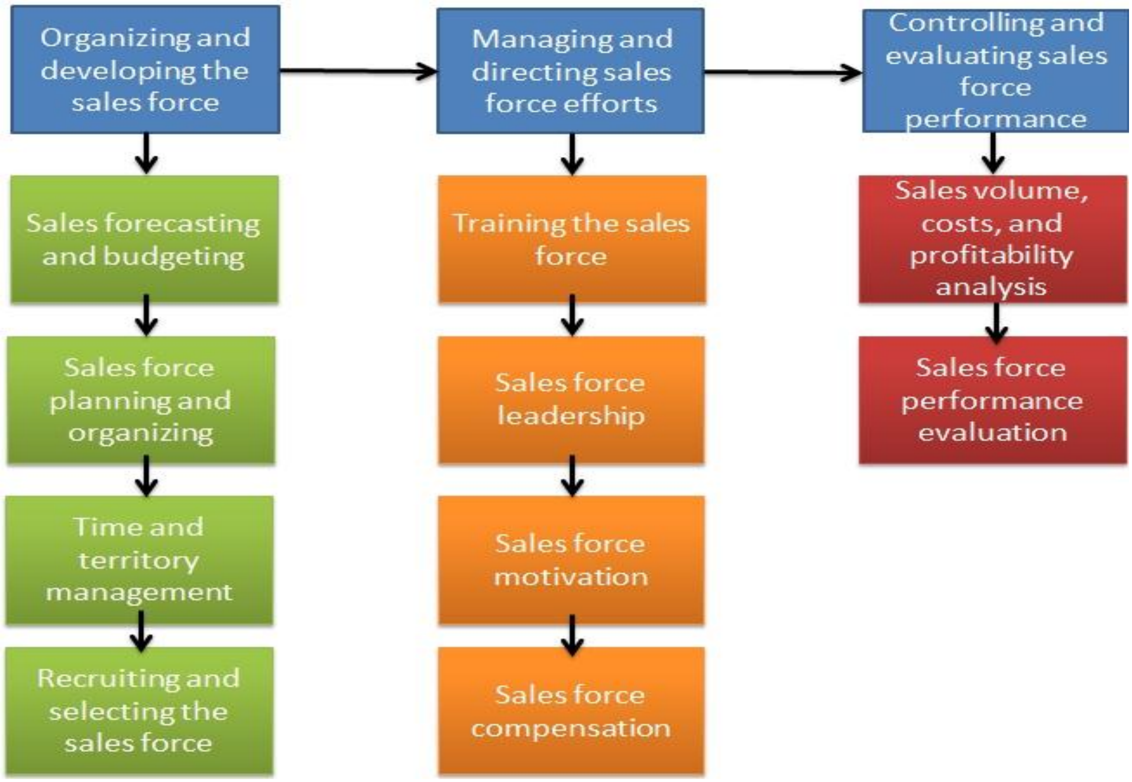
Chapter 8: Last chapter's aim is to present answers to research questions that are introduced in first chapter, give action recommendations to Mepco Oy, estimate how well research have completed and possible topics for future research.

2. Sales management

There is no commonly accepted definition of what is included into sales management and what is not. In some organizations sales manager can be for example little more than a supervisor of the sales force, like a super salesperson, who shows people how to do their jobs in a best way. Other example is the sales manager has also marketing manager's jobs, but he still uses sales manager's title. Typically sales manager's works are located somewhere between these two examples. (Anderson et al. 2010, p. 4.) Because in literature there is not one commonly accepted definition of sales management, there is not any commonly accepted definition of issues that sales management should cover. Jobber & Lancaster (2009, p. 381) sees that sales management has five issues to cover: *recruitment and selection*, *motivation and training*, *organization and compensation*, *sales forecasting and budgeting*, and *sales force performance evaluation*. Anderson et al. (2010, p. 5 - 6) calls issues as responsibility areas and duties related on their job. In his model three main responsibility areas, which sales management should cover are:

- Organizing and developing the sales force
- Managing and directing sales force efforts
- Controlling and evaluating sales force performance

According to Anderson et al. (2010, p. 5 - 6) each responsibility area has group of duties to cover shown in picture 5.



Picture 5: *Conceptual framework of sales management responsibilities and duties. (Anderson et al. 2010, p. 6)*

Both Anderson's et al. (2010) and Jobber & Lancaster (2009) sees sales management's issues from quite the same point of view. Anderson's categorization is more detailed so it is used as template in this research for identifying the group of sales management's issues that covers department's tasks. In this research sales management duties and issues are seen as a same thing, and later after this, word issue is used to describe them. Aim for this research is to recognize issues, which can be defined based on quantitative information. In the end of this chapter issues must be divided into categories, so that later is possible to recognize, how performances related to each issue are managed and monitored, and also what supportive information is needed in decision-making.

2.1. Organizing and developing the sales force

Sales forecast and budgeting

Forecasting is important for all sales organizations and without it, it is hard to allocate the resources on a right way. Sales forecasts and budgets affect a lot marketing, so those must be coordinated in co-operation. Sales forecast can be divided into two categories: short and long-term forecasts. Short-term forecasting sets up workloads more effectively and long-term forecasting helps defining size of sales force and promotion plans for them. Sales forecasts are based on estimations of market potential and sales potential. Market potential is quantitative analyze, in monetary units, of how many products can be sold in a market. Sales potential is share of market potential that organization among its competitors can reasonable have. This information is used for setting up sales goals for different sales territories and individual sales peoples, which are known as quotas. (Anderson et al. 2010, pp. 119 – 129.)

According Jobber & Lancaster (2009, p. 461) sales forecasts are divided on: short, medium and long-term forecasts. He means by short-term forecast time range from 1 to 3 months ahead and sees that general trend for sales is more important than see short term fluctuations. However he sees it valuable for production. Medium-term forecast are used for adjusting production, so that it can adapt to demand. Time frame for this is likely to one year ahead. Long-term forecasts are mainly based on macro environment factors and they are mainly used for company large scope future planning. Typical time-frame for long-term forecasts is 3 – 10 years depending on industry. (Jobber & Lancaster 2009, pp. 461 – 480.)

Organizations' needs to set up sales budget that basically outlines how resources should be allocated to achieve the sales forecast. They are used in planning, coordinating, and controlling sales activities. Task of the planning function is to translate sales goals and objectives to actionable tasks. Basically budgeting is operational planning process in financial terms. It should cover long, medium and short term goals, which makes sales managers continually responsible of internal and external problems and opportunities. Task of coordinating function is to follow up that marketing and sales budgets are focused on same objects. Resources between these functions must be allocated on the way that designed sales goals can be met. The aim of controlling function is to evaluate results against sales budget expectations. These budget variances approach enables sales managers to more quickly recognize problems and make better plans for unexpected developments. (Anderson et al. 2010, p. 137 – 141) Jobber & Lancaster (2009, p. 461) sees also that budgeting is plan for allocation resources. He sees that starting point for budgets is medium-term sales forecast, which variances are most critical to recognize.

Both of these definitions see sales forecasting and budgeting as mandatory issues for sales management. All the facts are mostly based on monetary and quantitative units, which are in research's scope.

Sales force planning and organizing

Sales force planning aims to anticipate the possible outcomes and future implications of current decision. It minimizes shocks in changing environment where competition, political and economic issues, and new technology are moving fast. Planning consists of three hierarchy levels: strategic, tactical and operational planning. On strategic level organization's top sales management set up mission, vision, goals and overall budgeting. On tactical level general sales management set up departmental, yearly, and quarterly plans, policies, procedures and budgets. On the operational level sales supervisors set up unit plans and budgets. (Anderson et al. 2010, pp. 149 – 151.)

The sales management planning process includes seven steps: *analyze situation*, *set goals and objectives, determine market potential and forecasts sales*, *develop strategies*, *allocate resources and develop budgets*, *implement the plan,* and *evaluate and control*. First step, *situation analyze*, demonstrates where organization is today and where it is going if chances are not made. According to Anderson et al. (2010, p. 152) it is mainly based on following variables:

- *Market characteristic:* a number and types of potential buyers, their demographic and behavioral profiles, their attitudes and shopping patterns and servicing needs.
- *Competition:* a number and types of competitors; their weaknesses and strengths; their products, prices and brands; and their market shares.
- *Sales, cost and profit data for current year*: by product, market, territory, and time period
- *Benefits offered as perceived by potential customers:* products, brand names, prices, packages and service.
- *Promotional mix:* personal selling, advertising, sales promotion, and publicity programs, particularly emerging website strategies.
- *Distribution systems:* channels of distribution, channels patterns, storage and transportation facilities, and intensity of distribution.

Idea of the list is to recognize your competitors and made SWOT-analysis about each of them. Then compare, what are company's own strengths, opportunities, weaknesses and against competitors in different market segments.

Second step is to *set goals and objectives*. Goals are not specific itself and they are more like strategic visions, like "we want to become best in the industry". Objectives are clear and measurable that must be met in order to achieve set goals. These goals and objectives must be connected to *situation analyze* in order to them to be realistic. (Anderson et al. 2010, p. 153 – 154.) Third step, *determine market potential and forecasts sales,* is closely related with section 2.1.1. Aim is to understand organization capacity against market capacity and define better what needs to done in order to achieve earlier set goals and objectives. Forth step is *developing strategies* to reach set goals and objectives. (Anderson et al. 2010, p. 155.) Fifth step, *allocate resources and develop budgets*, is also closely related with section 2.1.1. Focus is to set up budgets and allocate resources in order to achieve strategic goals. Sixth step is *implementing the plan*, which is get basically getting strategy to action. Last step of planning is *evaluating and control*. All ongoing performance must be compared to industry averages, past performance and managerial expectations. Good performance measures for sales managers are for example: sales volume, number of new accounts, selling costs, sales force turnover, market share, profit margins, customer service and website visits. (Anderson et al. 2010, p. 155 – 160.)

Jobber & Lancaster (2009) sees planning process as mix of budgeting and evaluation process. They do not integrate it to one process like Anderson et al. does. However both authors see that if budget variances express, budgets or strategy must be adjusted. This section is mix of many issues regarding sales management, so its role will be discussed later when other issues have also described.

Time and territory management

Time and territory management help sales managers define which accounts are called and how often. Sales territory usually consists of a specific geographic area that contains present and potential customers and is assigned to particular salespersons. First step is to determine sales territories based on size, political system or geographical location. Second step is selecting important territories based on area's sales potential versus sales efforts. Most potential territories must be recognized, because normally 80% of income is caused by 20% of customers. Next step is estimating salespersons workloads based on company's position on the market and customers' attractiveness. After recognizing effective sales territories working time must be used effectively and measuring return on time invested (ROTI). Return can be defined in numerous ways, such as dollar sales to a customer, profits on a certain product category, or new customers won. ROTI identifies return divided by the hours spent achieving it. Salesmen's daily activities need to be categorized and linked with daily and weekly goals so that pain points and progress can be recognized. (Anderson et al. 2010, pp. 181 – 205.)

According to Jobber & Lancaster (2009, pp. 445 - 447) territory management is important issue concerning to sales force motivation. Challenge is to divide accounts equally between sales people that they do not feel unsatisfied. He recommends mathematical equation that enables sales people's workload designing based on number of customers, call frequency per year and customer's size. Both authors see *time and territory management* as important issue and it is definable with quantitative units, which should also be covered in this thesis.

Recruiting

Both Jobber & Lancaster (2009) and Anderson et al. (2010) sees recruiting as important issue in sales management. However recruiting process is in its nature hard to measure with quantitative meters. Both authors have process models for recruiting, but in this thesis it is seen as external activity that is excluded.

2.2. Managing sales force efforts

Training the sales force

Long-term goal for training is to increase profits. This training teaches effective ways to plan, sell, serve customers and implement company procedures. Unfortunately many researches illustrate that only 10 – 30% of all the training is being used on the job a month later. This is why training must be based on salespersons performance and organizations' must measure ROIs of different training programs. Two of most important steps in sales training are defining training needs and determination of training objects. Training needs are recognized weaknesses in individual's performance that affects his sales results. Training objects must be set up as performance objects so that focus is in what individual does with new knowledge not what he have learned. (Anderson et al. 2010, pp. 249 – 270.)

Jobber & Lancaster (2009, p. 419) states that "in today's business environment it is no longer enough to have best product, it must be also sold". They see training as a mandatory issue in which sales management should be fully committed in order to success in competitive market. Main benefits are: enhanced skill levels, improved motivation, improved self-confidence, reduced costs, fewer complaints, lower staff turnover, reduced management support, higher job satisfaction and higher sales profits. They see that most important is to recognize individual training needs and define skills that need to be improved. Jobber & Lancaster (2009) does not emphasize training cost as much as Anderson et al. (2010) and they are more focused on mandatory nature of it. Both authors see this issue very important part of sales management, which is why it needs to be covered.

Sales force leadership

Leadership is closely related to manager's personality and style to lead and manage. Often sales manager present combination of certain character and leadership as itself is difficult to support with quantitative information. (Anderson et al. 2010, pp. 283 – 286.) Jobber & Lancaster (2009, p. 417) sees leadership as a part of sales force motivation and process to lead them in the right direction. Because of the strongly subjective issue, which is hard to support with quantitative information, this issue is not covered in this research.

Sales force motivation

Motivation is multi-faceted concept that has been the subject of many intensive researches. Anderson et al. (2010, p. 323) defines motivation as a set of dynamic interpersonal process that cause the initiation, direction, intensity, and persistence of work-related behaviors of subordinate salespeople toward the attainment of organizational goals and objectives. There are three important elements in definition: direction, intensity and persistence. Direction means objectives where individual should focus his effort. Intensity is amount of physical and mental activity that individual is willing to use for task. Persistence refers to duration of the effort an individual will exert. (Anderson et al. 2010, pp. 323 – 325.) Motivational theories can be divided in to: content theories, process theories and reinforcement theory. For this thesis best general model is process theories, because they can be estimated with quantitative meters.

Two well-known process theories are expectancy theory and goal setting theory. Expectancy theory of motivation proposes that individuals contemplate the consequences of personal actions in choosing different alternatives to satisfy their needs. In this theory motivation consists of three elements: expectancy, instrumentality and valence. Expectancy is salesperson’s perspective that certain amount of extra activity will lead to higher achievement. Instrumentality is salesperson’s estimate of the probability that achieving a certain level of performance will lead to the attainment of specific reward. Valence is the desirability of potential outcome or reward that the salesperson may receive from improved performance. Basically motivation expended by salespersons is a function of the probability of an expectancy estimate multiplied by the probability of the instrumentality estimate multiplied by the valence for the reward. (Anderson et al. 2010, pp. 327 – 328.) Challenge in this theory is define all subjective values numerically. Goal-setting theory is easier to use. It attempts to increase motivation by linking rewards directly individuals’ goals. Goals must be one’s that individual want to achieve, realistic and measured in tangible ways. (Anderson et al. 2010, pp. 328 – 330.) Good way to motivate is a sales contest that has potential for undesirable as well as desirable results. In this it is important to put a lot of effort for planning objectives, goals and purposes of this act. (Anderson et al. 2010, pp. 335 – 340.)

Also According to Jobber & Lancaster (2009, pp. 405 – 407) sees Maslow’s hierarchy of needs and Vroom’s expectancy theory good solutions for creating more motivation. He also states that encompassing motivation design is mandatory issue for sales management. Sales force motivation must be seen one of the key issues in sales management and it must cover in this research also.

Sales force compensation

Compensation plans are often situation and person specific combination. Well planned compensation system contains: reward preferences, reward levels, reward satisfaction, and managers’, subordinates’ perceptions of the adequacy of their rewards are known to differ. Compensation can be straight salary, commission or mix of them. All got their plusses and minuses but often in sales performance based pay is often most effective way of reward. Compensation must be designed based on salesperson personality like: creatures of habit, goal oriented individuals, satisfiers, trade offers and money-oriented individuals. (Anderson et al. 2010, pp. 357 – 360.) Jobber & Lancaster (2009, pp. 448 – 449) identifies five types of sales people: creatures of habit, satisfiers, trade-offers, goal oriented or money oriented. After this choose suitable salary method, which are same as Anderson et al. They empathize compensations role in sales force's motivation.

Main idea in compensation is to estimate what type of compensation plan affects mostly to salesperson performance and maximize it. Good analyze of the best compensation plan for individual requires sales management's good knowledge of human nature and individual person, which makes it difficult to support with quantitative information. From research scope interviewed companies might also see compensation as a part of motivation, why it is clearer to not cover it.

2.3. Controlling and evaluating sales force performance

Sales volume, costs and profitability analysis

Sales manager must analyze sales volume, costs, and profit of relationships by product line, territories, customers and salespersons as well as across sales and marketing functions. It usually takes a long time-frame to complete estimation of the sales department's effectiveness and efficiency. Analyzes are often made by market segment, it can also be made by something else, but then marketing costs and sales profits are easier to compare. Analyzes includes organizations' sales volumes, costs that indicates organization's profitability, weaknesses and strengths by segment. These statistics compare present numbers to past sales, budgeted sales or competitors' sales. From these managers decide a direction and size of a sales force. These analyses can be divided in to two main categories: sales volume and profitability analysis. (Anderson et al. 2010, pp. 388 – 392.) Jobber & Lancaster (2009) do not handle this issue as separate part and great part of it is cover in *sales forecasting and budgeting* issue. Because this part is hard to recognize as individual part it is excluded in this research.

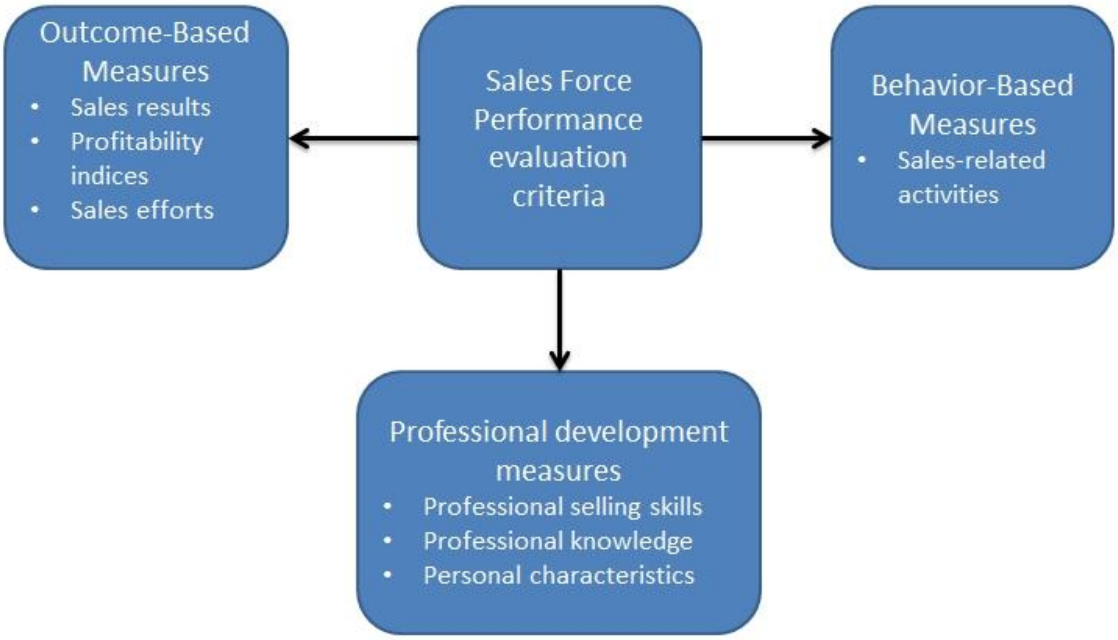
Sales force performance evaluation

Performance is one of the most important concerns of sales management, because their goals are often like: increasing sales profits, revenue or market share. This is reason why individuals' performance based goals must be directly linked to sales organization's objectives. Company's goals must be based on sales plan, described in section 2.1.2, that includes analysis of: market situation, opportunities and problems, action programs and performance evaluation systems. This plan basically answers to questions: where are we know, where do we want to go, what's the best way there and how much progress we are making towards that goal. (Anderson et al. 2010, pp. 425 – 427.)

Evaluation process begins by setting up performance standards that individual should achieve during upcoming measuring period. These standards are based on job description, so that both leaders and subordinates know what need to achieve and what objectives are.

For each objective sales management must define performance standard that is based on factors of sales employee's performance. These standards must be stable and consistent, and by using them evaluator must be able to recognize between outstanding, average and poor performance.

In picture 6 is shown three kinds of evaluation criteria for estimating salesperson effectiveness: outcome-based measures, behavior-based measures and professional development measures. (Anderson et al. 2010, pp. 427 – 429.)



Picture 6: *Sales force performance evaluation (Based on: Anderson et al. 2010, p. 429)*

Outcome-based measures: Results generated by salesperson can be divided into three categories. Specific outcome-based performance measures include: sales volume, percent of quota, market share, gross margin, contribution margin, number of orders, average order size, number of new accounts and number of lost accounts. These measures are quantitative and therefore objective. (Anderson et al. 2010, p. 429.)

Behavior-based measures: Every organization must develop their own behavior based measures for estimating less quantified results. For example sales call preparation, new product ideas and follow up with customers. Measuring of these criteria should be based on objective measures because subjective measuring often affects results. These measures should support individual to perform in a way that supports organization's image. (Anderson et al. 2010, p. 429.)

Professional development measures: These measures have more indirect and long-term impact on sales so they need to be evaluated more largely, which is often needs subjective perspective. These measures fall in to three categories: personal selling skills (product and customer knowledge), professional knowledge (awareness of organizational policies and marketing and sales strategies) and personal characteristics (enthusiasm, judgment, an ethical code of conduct and personal appearance). (Anderson et al. 2010, pp. 429 – 430.)

The best measuring system is often combination of all three of this that is based on selling framework and goals of the organization. In establishing goals for individual, sales management should choose criteria that focus on the most important features of the sales job, provide a complete picture of the salesperson's performance and are generally controllable by the salesperson. (Anderson et al. 2010, pp. 431 – 432.)

Jobber & Lancaster (2009, pp. 493 - 495) sees sales performance evaluation as five step process: sales force objectives, determine sales strategy, set performance standards, measure and compare with standard and action taken to improve performance. Authors' models differentiate a little bit, but main idea is the same. In both individual's performance standards must be based on the whole company's objectives and strategy, and actual performance is compared to it. Sales performance evaluation can be seen one of the key issues for sales management in order to control and monitor its goals and objectives, which is why it is included in this research also.

2.4. Sales management issues and sales force planning

Companies have many issues that are related to each other. The sales management planning process, described in section *2.1.2 Sales force planning*, can be seeing consisting of many other duties, shown in picture 7.

Picture 7: *Sales managements planning process's relationship to sales management's issues (Based on Anderson et al. 2010)*

First step, *analyze the situation*, includes parts of following duties: *time and territory management and; sales volumes, costs and profitability analysis*. Market characteristic and competition analyzes are parts of situation analyze, which are also related to time and territory management. In both, *time and territory management and situation analyze*, there is information need for recognizing potential buyers and their demographics, and also for recognizing competitors and their strengths and weaknesses. Also in, *sales volumes, costs and profitability analysis and situation analyze*, there are need for sales, costs and profit data for current and recent years by product, market, territory and time.

Third step, *determine market potential and sales forecasts*, includes parts of following duties: *sales forecasting and budgeting and, sales volumes, costs and profitability analysis*. Sales forecast is based on estimation of market potential and sales potential, which also must notify recent sales. Basically from planning process point of view, *sales volume, cost and profitability analysis*, can be seen as a supportive function to *time and territory management* and for *sales forecasting and budgeting*.

Fifth step, *allocate resources and develop budgets*, includes parts of following duties: *sales forecasting and budgeting, sales force motivation and training the sales force*. Sales budgets must be based on earlier defined forecasts and depending on selected strategy, company must realize also sales force motivation training costs.

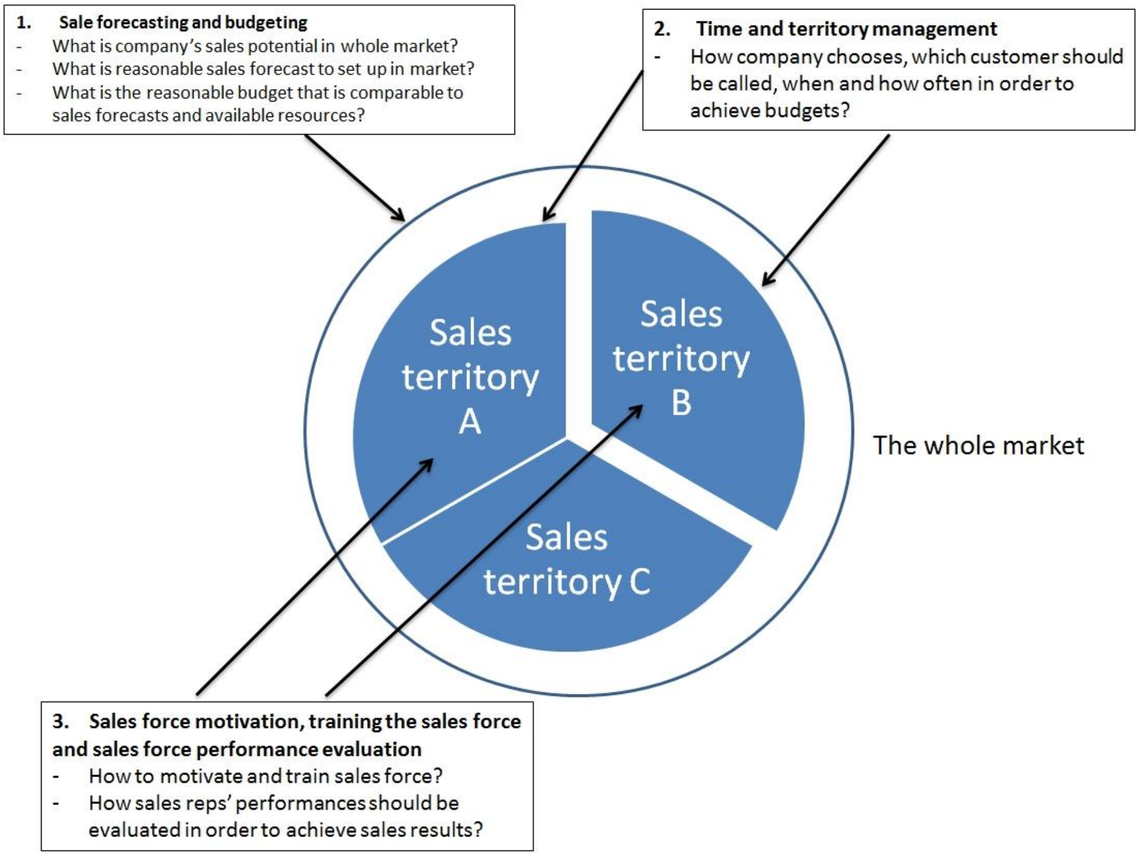
Seventh step, *evaluate and control*, includes *sales performance evaluation*. All the key performances must be evaluated and if they are not in a wanted level company must re-define its strategy or set new goal or goals and objectives.

2.5. Sales management scope in this research

As earlier mentioned in section 2.4 issues that cover sales organizations' operations have many commonalties with sales management planning process. For this research it is mandatory only to recognize general issues, which information needs can be later estimated. In order to have clear results from interview companies *sales volume and profitability analysis* have also been excluded from the scope, because it has many commonalities with time and territory management and sales forecasting and budgeting, which may confuse interviewed companies. Covered issues are showed in picture 8.

Picture 8: *Scope of sales management's issues in this research*

If those issues are seen from more action oriented perspective we can divide these responsibilities in three groups, show in picture 9.



Picture 9: *Scope of sales management's issues in this thesis*

In picture 9 idea is, that first company must be able to understand what kind of market environment surrounds it and how big part of the market share they can have based their available resources. This means that company must create sales forecasts and budgets in order to achieve wanted position in a market. Second step includes recognizing potential sales territories and designing sales forces time usage in order to reach budgets. Third step is to manage sales force performances in order to achieve results. This includes sales force motivation, training and sales performance evaluation that must be designed in order to achieve aimed sales budget.

3. Performance management and monitoring

As said in the last chapter, if sales management wants to be able to know how sales organization is performing against set goals, company must be able to manage and monitor its performances. Now we know the sales management's main issues in general, but in this chapter is defined how individual performances must be managed and controlled.

This chapter consists of four parts: *business and performance*, *management*, *performance monitoring and scope for performance management in this thesis*. First part includes definition of performance and describes how it is related to business. Second part introduces different performance management theories. Third part introduces, how performances can be monitored. Fourth chapter describes, how performance management is seen in this research.

3.1. Business and performance

According to Lönnqvist (2004) organization's performance means how well it can reach its goals. Another definition is Laitinen's (1998), in which performance means "*organization's ability to produce results compared to set goals"*. Both of these definitions underlines, how well companies are reaching their goals. According to Laitinen (1998) these goals are normally related to owners' and other stakeholders' goals. Performance itself consists of many factors, which are emphasized differently in different organizations. However from management's point of view performance is measured in the end by how well company has executed its vision and how profitable a business is. (Lönnqvist, 2002.)

Two performance elements can be recognized from earlier definitions: achieved results and goals. Idea is to define goals for these performances, which can be used for comparing them against achieved results. In literature this is called performance measurement. Measuring usually focuses on achieved results, like costs or delivery volumes. So measuring is related to what actually happened and not what is potential performance level. Instead of that is remarkable that performance have different meaning for different stakeholders, so it can be seen from various points of views. (Lönnqvist, 2002) In this thesis performance means performances that are related to sales departments' issues in order to achieve set goals.

3.2. Management

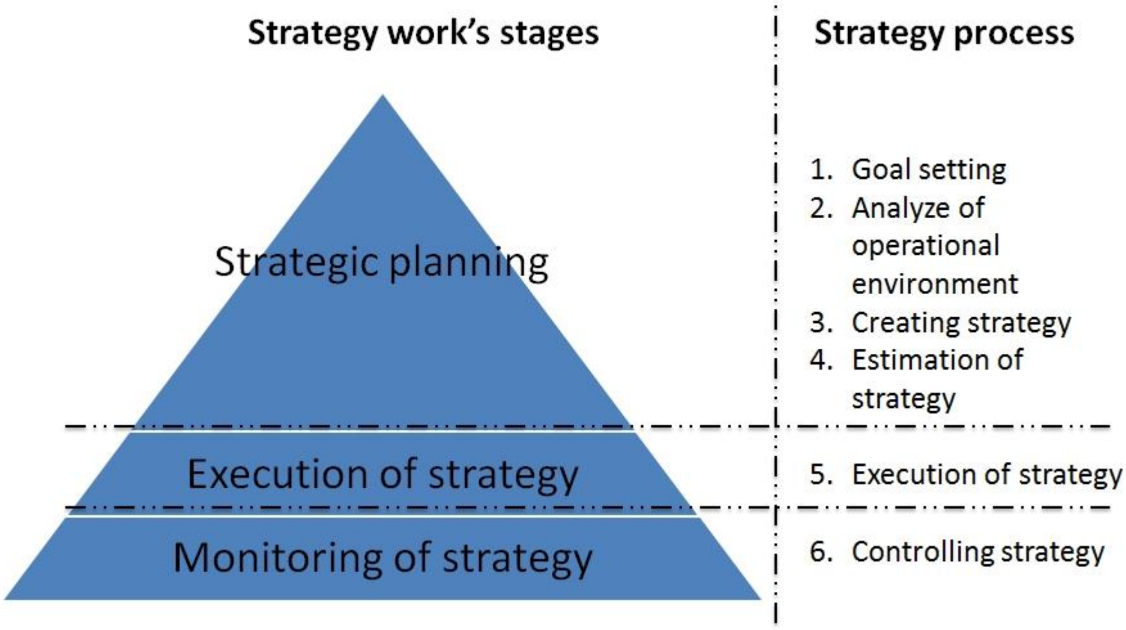
3.2.1. Strategic management

Strategy as a term has changed since the 1970's, when it meant action plan to reach organization's goals. Today's strategy is more controlled by list of needed updates and management's initiatives, like increase market share in Asia or extending product portfolio. (Neely, 2002.) These goals create value, but they are not final goals as themselves, which must be aimed. All these activities are done in hope that if they succeed, organization can create more value to its stakeholders, like investors, customers or suppliers. According to Neely (2002) perspective of stakeholders is very important in performance. From management's perspective there is a group of procedures that can help organization to design, share and follow execution of its strategy. These procedures lead management away from bookkeeping perspective and focus more to activities, which support strategic goals. This can be done by changing strategy to measurable form that can be monitored and followed. These action plans are typically organized into causes and consequences, which supports in organization planning by notifying different operations and their relationship with strategy. (Coveney, 2003.)

Schendelin & Hofer (1979) have presented model for strategy process, which is used as base in modern strategy process models. Process consists of 6 steps:

1. Goal setting
2. Analyze of operational environment
3. Creating strategy
4. Estimation of strategy
5. Execution of strategy
6. Controlling strategy

These steps can be combined into three different strategy work's stages: strategic planning, execution of strategy and monitoring of strategy, shown in picture 10. In strategic planning step organization defines its mission, sets main goals, analyzes internal and external environment, and chooses best strategy alternatives. (Falshaw et al., 2006.) Mission in this context means procedure, which presents the way of how organization's executes its purpose (Harisalo, 2008). In execution of strategy step, organization aim to execute its strategy by for example communicating it to employees. Typically organizations use more time for strategic planning than its execution, which is reason why it often fails. However succeeding in strategy is necessary for organization's success. Without communicating and sharing strategy with employees, it is cannot be executed (Kaplan & Norton, 2001). During last step, monitoring of strategy, organization defines concrete and measurable goals, which will be monitored. With meters and goals strategy can be communicated to employees. Furthermore meters' controlling effect makes employees focusing more to reach their goals, which are connected to strategy and its succession. (Lönnqvist, 2002) By monitoring strategy, organization get information from its strategy based meters, which enables company estimating how well it is reaching strategic goals.



Picture 10: *Strategy work's stages compared to strategy process (Based on: Falshaw et al., 2006)*

Strategy process has strong connection with performance management (Bittlestone, 1997). Through performance management gap between different strategy process' steps is possible to narrow down and through performance management all steps can be supported (Ariyachandra & Frolick, 2008). Because strategy process itself affects directly to performances, it must be developed systematically, in order to get better performances in organization (Falshaw et al., 2006). From strategy process point of view performance management is related to strategic planning, its execution and monitoring. Performance management supports strategy work in its creation; because it is systematic way to execute analyzing of external and internal environment, gather data from different steps and analyze information. Monitoring is executed through meters, budgets and plans, which are also tools for execution of strategy. Through performance management is also possible to see how strategy should be edited and executed in future.

Strategic planning should be done at the same with performance management planning, so that they could support each-others and not seen as a separate functions. This is also big challenge. (Fahey, 2007) In strategy work performance management must be real time and proactive. Especially external environment is under ongoing change, which makes availability and timeliness of external information very important (Azvine et al., 2005). Timeliness can be achieved by making information gathering and processing faster, and by shrinking the guild between them.

Strategic management can be seen as important part of this thesis. Many of sales management's issues are related on strategic planning and information produced to support them can be used in many different ways also support it.

3.2.2. Process management and management by objectives

Today's organizations have more strategy and process focused perspectives to management, which is focused on developing processes and systems so that budgeting, forecasting and management's reporting can be done more effectively. (Robbins, 2009.) Process management refers traditions and contracts, which are used to manage single or group processes. Performance management is seen from top to down and it is based on execution of strategy. In it management and employees are using plans, budgets, reports, meters and dashboards to execute strategy, and measure and monitor how well organization is performing compared to their strategic goals. Aim is to help organization operate more effectively, when in performance management focus is in accuracy and scope, in which goals are achieved.

Process management is instead from down to top, which is designed to automatize, optimize and integrate existing business processes. It is based on modeling, workflow designing and integrating tools that are aimed to make business process more effective, to have better quality and customer satisfaction. Process management supports organization to operate more effectively, which means that it focuses to compare achieved results compared to used resources.

Management by objectives (MBO) refers to management, in which organization management is based on aim to achieve to goals that have been set (Peter Drucker, 1950). Also Edwin Locke (1968) has target theory, which is based on management by objectives. It is based on idea to support employees' will to work more effectively, get better results and face new challenges (Harisalo, 2008). Target theory provides way to organization's to set goals for individuals and teams and measure how they are achieving them. Management by objectives is based on prearranged goals, which are used for measuring organization's and individual's performances. Typically these measures are based on financial numbers and in optimal situation they are also connected to organization's strategic goals. It is important to notice that goal setting and responsibility sharing are key components in creating management system; otherwise it is just management's information system. (Malmi et al., 2005.)

Both process management and management by objectives can also been seen as ways to manage organization performance oriented. However in interview's designing, it must be noticed that this research's focus is not companies' strategic goals and in this point it is more important understand the hierarchy structure for selecting, which performances will be monitored.

3.3. Performance monitoring

Two main performance measures are effectiveness and efficiency. Effectiveness refers to scope where performance has affected and efficiency instead is a measure for indicating how company's resources are used. (Najmi & Kehoe, 2001.) As a term measure means precise method, this can be used for monitoring critical success factors of the performance (Hannula et al., 2002a). Sometimes terms indicator and metric are used as a synonyms for measure. These terms does not however mean the same thing, because performance meter refers to parameter, which is used for indicating effectiveness or efficiency of a past performance, and metric refers to wide scope performance measurement, and its contents and components. For example customer satisfaction is a performance measurement, which can be divided to components, like on time delivered products and how satisfied they are to product compared to price, which are called metrics. (Neely 2000.) Meanings of these terms are not however so indisputable, because for example indicator, metric and measure can be seen as synonyms of each other's and be used for meaning same thing (Lönnqvist, 2004).

Meters can be categorized in many different ways. Most common way for doing it is to divide them to financial and not financial. Meters can also be seen as a qualitative and quantitative or direct and indirect meters. Direct measures measure directly success factor and indirect instead measure correlating factors of it. (Lönnqvist, 2004.) Example of direct meter is manager's or employee's view point of efficiency or produced product per person. Correspondingly indirect meter can be for example customers' notified waiting time or employee's sick leave. (Kemppilä & Lönnqvist, 2003.)

Financial meters are based on monetary information. With these meters company can control and supervise its economic goals and see how they are achieving them. Purpose of these meters is to describe company's economic success factors. These meters are typically delayed type of meters, which can be affected indirectly by developing not economic matters. With not economic meters company can measure different aspects of its performance, like customer satisfaction, quality, delivery time and motivation. These represent company's production and operation related matters. Not economic meters are close to company's business and with them it is easy to recognize problems earlier. Challenge with these meters is however bad comparability. Often these types of meters give situation specific results, which are hard to summarize. (Hannula et al., 2002; Kapplan & Atkinson, 1998.) In literature are also mentioned soft and hard meters. Hard meters are based on unambiguous output values, like business transactions. Soft meters instead are based on peoples' attitudes, feelings and visions. (Lönnqvist & Mettänen, 2003.) Hard meters are quantitative meters and soft meters qualitative ones.

Meters are important for communication, because it can be used as a support for discussion and experience analyzes (Hannula et al., 2002). When all different parts of the organization use same meters, they can understand relation of organization's different parts and develop it in a cooperative way. Organizations must also have effective operations for recognizing meters, which are related to strategic business drivers. (Frolick & Ariyachandra, 2006.)

3.3.1. Measuring

Performance measuring refers to process that is used for defining the state of measured feature. (Lönnqvist, 2004; Hannula et al., 2002a.) From this view point features, which will be measured are known beforehand. According to Kaplan (2009) performance measurement is "assessing business results to determine company's effectiveness and to address performance shortfalls and process problems". According to Neely et al. (2005) performance measurement is "quantification process for operations' features, in which measuring is quantification process and action leads to performance". Later definition is based on happened operations' features that define what will happen in future. Performance measurement can also be seen from wider perspective. One example of it is Olkkonen's et al. (2002) definition:" Performance measurement is a continuous and dynamic process in which measures are first constructed, based on strategically important success factors, then the measures are used to help implement planned strategies and, finally analysis of measurement results provides feedback for new strategy formulations".

According to this definition, choosing of meters is based on strategy, created performance meters are used as a helping tool for executing the strategy and metered results as a help in creating new strategy. From this view point performance measurement supports whole strategy process. However this definition is quite wide and often performance measurement refers more passive type of performance reporting, than proactive product management (de Waal, 2007). Measurement can still be seen as important part of any kind of management and performance controlling (Anderson et al., 1994). Performance measurement works as a link between strategy and the performance, because meters are based on company's strategy, include all key performances and end results of them. (Najmi & Kehoe, 2001.)

Performance measurement is seen differently in different organization levels. Top management is interested on how well company is performing against strategy, how well they are executing strategy and do they need change performances to reach strategy (Kaplan, 2009). Performance measurement is also often related to human resource measuring and purpose is follow individual performances and use data in management (Stevens, 2008). Middle management can use performance data, for estimating and motivating their employee from performance and efficiency point of view. From this aspect employee can learn how they can better found a way that helps company to reach its results. If this data is also given to outside of organization (stakeholders, customers and media), it can be used for making judgments of how effective and fair company is, which may effect on investment decision. (Kaplan, 2009.)

Often performance measuring is seen from economic or human resource point of view (Packová & Karácsóny, 2010). This is important aspect, because it is necessary guide employee to reach goals that are related to organization's general goals. Economic meters are most accurate, but measuring should not be only focusing on those. Problem is getting good picture about developing and executing the strategy. (Ariyachandra & Frolick, 2008.)

Performance measuring is tool for strategic management, which enables guiding of employees' performances to same direction with strategy (Lönnqvist, 2002). In strategic performance measuring meters are based on strategy and through these meters individual goals and strategy can be clearly communicated for them. In ideal situation individuals can focus only for they own work and developing in it, when also employee are executing company's strategy. Now management can see from meters results how well they are executing strategy. Performance measuring has dualistic meaning. It is a controlling tool but also ongoing process, which is based on measured success factors, which are based on strategy, which must be developed based on meters results. (Lönnqvist, 2002) In this thesis performance measuring covers all business related measuring that effect on sales department's responsibilities and duties.

3.3.2. Critical success factors and performance indicators

One of the key terms in performance measuring is Key Performance Indicator (KPI). Through these indicators management goals can be quantified. Compared to traditional meters, KPIs' have goals that are related to one or more strategic goals. (Eckerson, 2009) So it is important that KPIs reflect company's goals and affect a lot for its success (Bose, 2006). KPIs can be seen as a picture of how well company is performing in certain segment (Kapplan, 2009). KPIs also support organizations to monitor more than just economic meters, so that they understand better how they are performing in different areas. Goals for KPIs are multifaceted: they have limits, timetable, when they need to be reached and comparison value (Eckerson, 2009). Typical KPIs for different focus areas are shown in table 1.

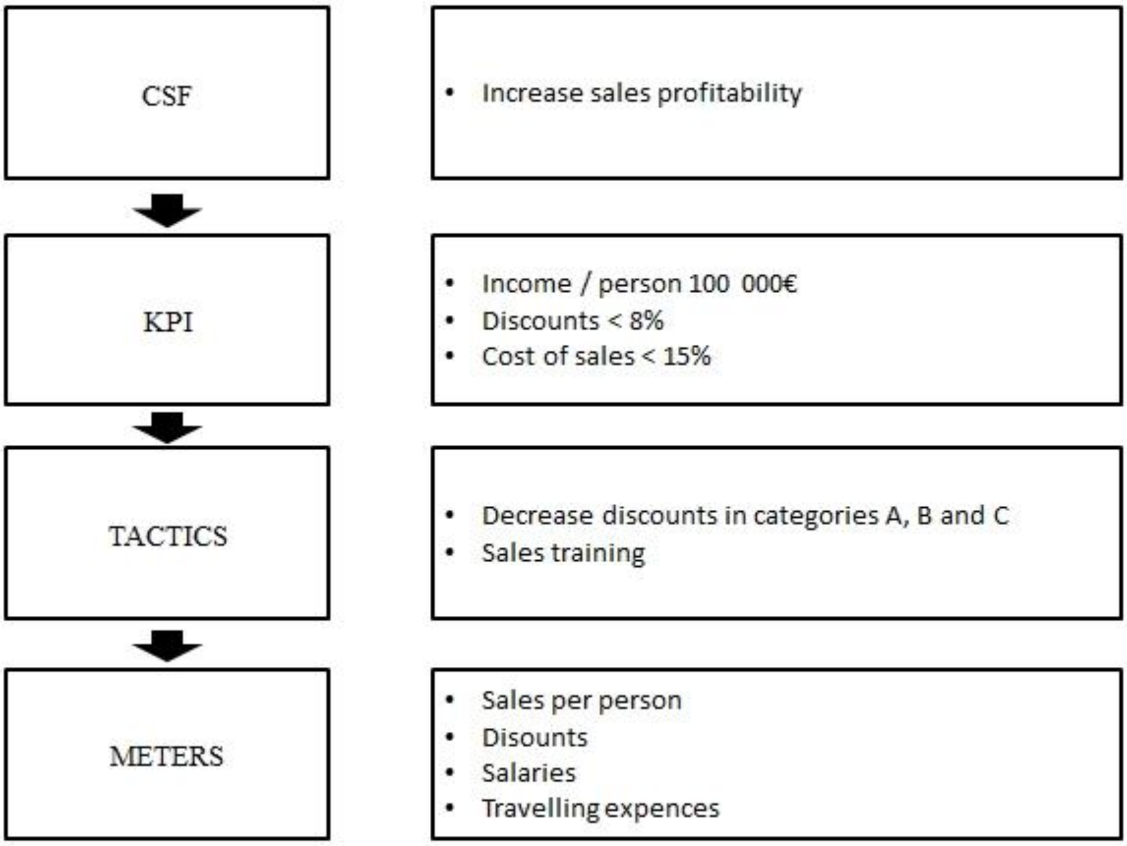
***Table 1**: Examples of important key performance indicators (Bose, 2006)*

Strategic focus	Potential key performance indicators
Cost leadership	- Cost meters, like production and supply costs, costs per unit - Period time, like production time, time for servicing a customer - Conformity about the standards of product and services - Volumes of production and service - Utilization rate of capacity - Profitability - Quality meters, like TQM and Six Sigma
Specialization (products and services)	- Time to market for launching product or service - Service or product modifications - Results of product development and research, new patents - On-time delivery - Knowledge about customers and personalization - Feedback management
Growth	- Knowledge sharing - Customer acquisition and sustaining - Market share - Customer penetration

During the 1960-decade success factors was in center of management literature. Later research expanded to cover especially critical success factors. (Rockart, 1979.) Success factors are in important position from strategy's and business success points of view (Lönnqvist, 2002). These factors are knowledge, skills, talents, resources, features and pieces of work that are reason for organization's success (Toivanen, 2001). Critical success factors are instead a function that is needed for achieving the strategic goal (Cokins, 2009). Critical success factors must also be executed at least well that organization can success and they need management's ongoing attention. For doing that they must be measured all-time and information should be easily available. (Rockart, 1979) Typically organization can recognize small group of critical success factors that are related to its strategic goals. One critical success factor typically has one or more key performance indicator

(KPI). For example customer satisfaction is one typical critical success factor that organization could have. In one example KPIs for it were availability (can organization say yes to clients request) and reliability (Does Company keeps its promises).

For achieving wanted results organization must continually measure its critical success factors. It is remarkable that some KPIs are very easy to define and measure and others might be very subjective, like customers' empathy or morality of employees. According to Bose (2006) also turnover forecast, gross profits, stock levels and list of biggest clients can be also key performance indicators, if they are important to business and they are measurable. In picture 11 is shown critical success factor's (increasing sales profits) two KPIs. Goals for KPIs' are that sales per person are more than 100 000€ per person, discounts must be lower than 8% and cost of sales are lower than 15%. For achieving these goals company must build action plan. In this case these tactics could be for example decreasing discounts in certain product categories (for example A, B and C) or sales training. Now company can make meters for each person for comparing profits against costs, like: sales per person, salaries and travel expenses.



Picture 11: *Critical success factors' relationship to meters (based on Coveney, 2003)*

Often company can get data from their operative information systems, which can be used for comparing to KPI's performance. More challenging is to compare KPI's performance to strategic goals. Good example is that unlikely 10% increase in customer satisfaction increases turnover with one percent. Maybe customer satisfaction is better meter for measuring customer loyalty. Important in this is however fixing KPIs and refocus them often enough so that them point to the right direction. However timeframe for refocusing should not be too short, so that company is able to recognize trends in performance changes. Remarkable is also that meters should not be goals themselves, but instead they should be a tool for reaching greater goal. (Niemelä et al., 2008) KPI are also in important role from strategic point of view. According to Bose (2006) definition of KPIs is equally important than strategy. They are often designed based on long-term goals that do not change that often.

3.3.3. Performance measurement system

With single meters, it can be difficult to have a good picture of organization's operations as a whole. According to Laitinen (1998) organization's decision makers should have big picture about the organization so that they could make good decisions. This is why it is important that meters create reasonable combination, where meters supports each other's and are important also from measured feature's point of view (Hannula et al., 2002a). This kind of process is called *performance measurement system.*

In literature models for performance management systems are often based on economic meters, which itself are not enough for controlling company's performance. This also general perception in the days, which is focused on comprehensive view and meters that are based on organization's vision and strategy. Now meters can be chosen in order to reach organization's strategic goals. This kind of system can be called a *strategic performance measuring system*. (Hannula et al., 2002) This kind of system usually contains meters that are related critical success factors, which must be achieved for reaching strategic goals. Now meters drive staff's actions to strategically right direction, which makes concentrating on right performances easier for staff and execution of strategy also comes easier (Malmi et al., 2005). From another aspect by measuring critical success factors, company can follow how company is executing the strategy.

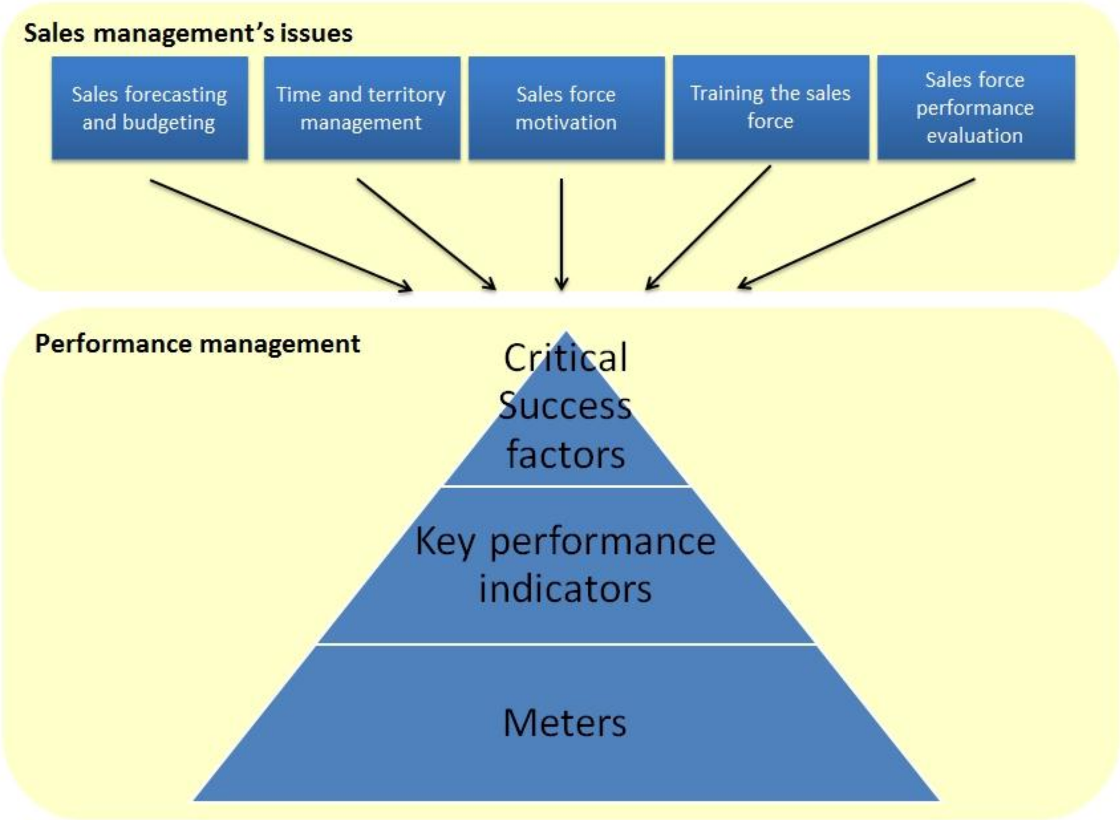
Good measuring system covers all dimensions that matters from decision making point of view, it is useful while measuring and also while developing organization's performance, and it is logical. (Laitinen, 1998) Measuring system should not however include overlapping information from the same aspect. However the main thing is to see what company itself sees critical factors for its business.

3.4. Scope for performance management in this thesis

As said before performance management can be seen large process that connects companies mission to measurable action, which is modeled in picture 12. This perspective is however too detailed to use in context of sales management's issues, because their relationship with strategy cannot always be clear.

Picture 12: *Performance management's framework (Based on Bititchi et al., 1997)*

Process shown in picture 12 probably includes too many steps in order them to be identified from middle size companies. From this research point of view, it is only necessary to understand which performances should be monitored and why, and not focus too much on reason behind them. Reason is that it is very likely that only big companies set their performance measures based on this type of hierarchy. That is reason why model must be simplified and only important from Mepco Oy's aspect is to recognize critical success factors, key performance indicators and meter related on each sales management's issue, shown in picture 13. This model is a lot simple than Bititchi's et al.'s (1997), but in this context it is precise enough to serve its usage.



Picture 13: *Scope for performance management and sales management's issues relation on them.*

Picture 13 includes earlier defined sales management's issues and performance management hierarchy that will be used in this research. As said this model is accurate enough in order to be able identify which performances should be monitored and why.

4. Business intelligence

This chapter consists of three parts: knowledge management, domain of business intelligence and BI's relationship to performance management. *First part* presents basic terminology of knowledge management and how information needs can be categorized. *Second part* defines what BI means and *third part* is about how relationship between BI and performance management is seen in this research.

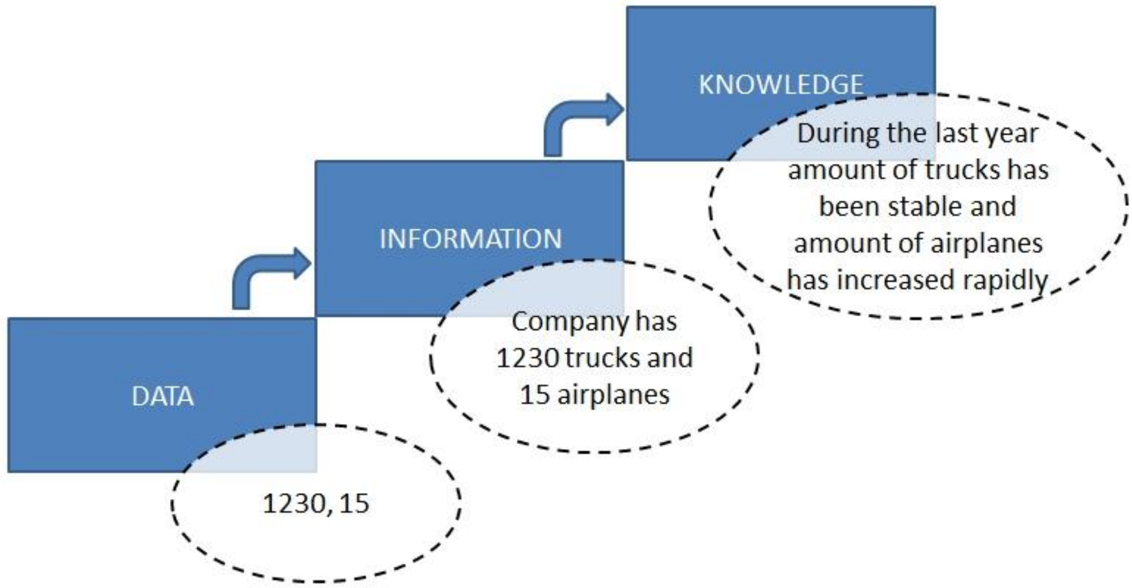
4.1. Knowledge management

Knowledge management has important role in business intelligence. In today's business environment role of knowledge management has increased, because with it company can manage and develop its most important resource, their employees' know-how. In this section is described basic theory of information management and how information can be classified. Aim is to build framework that enables classification of information so that later it can be used for analyzing information needs of sales management.

4.1.1. What is information?

Information types are usually divided into four levels data, information, knowledge and intelligence. Data is defined as unstructured facts and number, which itself does not have a great meaning. Information instead is structured data that is useful in analyzing and problem solving. (Thierauf, 2001) In corporate world great amounts of data is saved for example in different operative information systems.

Information can be seen as messages that have certain meaning or rendition (Ståhle & Grönroos 1999). Information has a meaning for person who receives it and it is basically framed for some certain usage. Often information locates in organizations for example in documents. So typically data can be only understood, if person who receives it can understand its context, when data itself has transformed to information or knowledge. Data can be transformed to information with information technology for example by transforming operative systems' data to data warehouse. More challenging is to transform information to knowledge, which needs human's analyzing. So information turns to knowledge, when receiver interprets it in certain context. According to Davenport and Prusak (1998) knowledge is mix of organized experiences, values, information and professional realizations. Knowledge creates circumstances for estimating and creating new experiences and information. Basically knowledge is created and used in person mind. In organization knowledge is committed in routines, process, practices, norms and also parts of it in organizations' data marts and documents. According to Nonaka and Takeuchi (1995) knowledge also contains belief and commitment that are not included on data or information. They also define that information transforms to knowledge through learning and understanding of information. So information can be transformed to knowledge by comparing, making conclusions, combining and discussing. This means that human must process information before it transforms to knowledge. (Nonaka & Takeuchi 1995) In picture 14 is described how data turns to knowledge.



Picture 14: *Data refines to knowledge*

Intelligence is knowledge and foreknowledge of the world around the company, and it can be used for making upcoming decision and actions (Herring 1988). This means that receiver can use information and knowledge to solve a problem or to carry out an assignment. Intelligence focuses on detecting critical trends and patterns as well as relationships between customers' and organization's own activities to identify significant changes and opportunities, and to make better decisions (Thierauf 2001, pp. 10 - 11). Difference between knowledge and intelligence is that intelligence is not only a summarized information, but also active knowledge of how to apply the content of information.

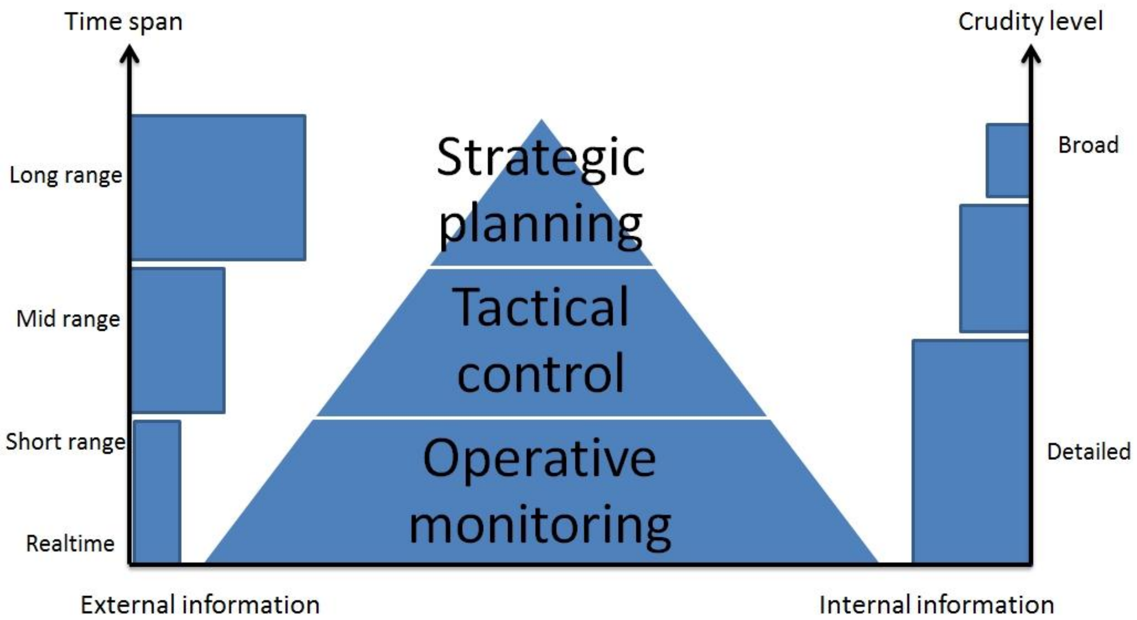
Another well know categorization of knowledge is to divide it to explicit and tacit knowledge. First who presented this definition was Polanyi (1966), who said that we know more than we can tell, and referred tacit knowledge. Better known definition is Nonaka's & Takeuchi's (1995), who presented these terms and relationship between them more precisely. Explicit knowledge is objective, impersonal, easily transferable and savable. Tacit knowledge instead is subjective, person committed, context related, and hardly savable and transferable. (Nonaka & Takeuchi 1995, pp. 59-61.) Explicit knowledge is for example all written material. Tacit knowledge is instead for example person's own knowledge that be seen as know-how and experience. Typical for tacit knowledge is that it is hard to describe with words, which makes it more difficult to share in organizations than explicit knowledge.

When two most common presented theories are compared, connection between knowledge and tacit knowledge and also between information and explicit knowledge, cannot be easily identified. For example person can have some tacit knowledge, which is information in its nature, like door passcode. This example demonstrates that categorization is hard to build. In performance management all information types are used. Performance data shown on dashboards locates often in organization’s operative system, in which it is transformed to information that is often saved in organization’s data warehouse. This information is used for showing performances and it can be also used for recognizing mega trends when it turns to knowledge. From performance management point of view information about performances is also related to strategy and it can be used for developing better performance measures.

4.1.2. Importance of information for decision-making

Importance of information has increased in decision-making and management. Knowledge management has become more common, which has influenced to increase of human capital to be one of the most valuable factors of production. Companies have also understood possibilities that ICT creates for storing and using the information and knowledge that are in the company. According to Sydänmaanlakka (2001) information itself does not have important role and the most important role arises when it is used for real life situations. So if organization wants its information to be used efficiently, systematic management of knowledge is needed. One of the main goals for management of knowledge is to have level of unused tactic knowledge as low as possible. Second goal is unbarred information flows in organization. (Sydänmaanlakka, 2001.) Huotari (2000) defines management of knowledge goal more precisely to control and manage processes that aim to recognize, share and use organization’s knowledge and information. Both of these definitions see that knowledge can have two perspectives from management point of view. It can be either the process or object. When knowledge is managed as an object it is seen explicit and it is managed as process, the role of social perspective and tactic knowledge increase. From performance management point of view knowledge is often seen as an object, but organizations are also interested to share and use information effectively in the organization.

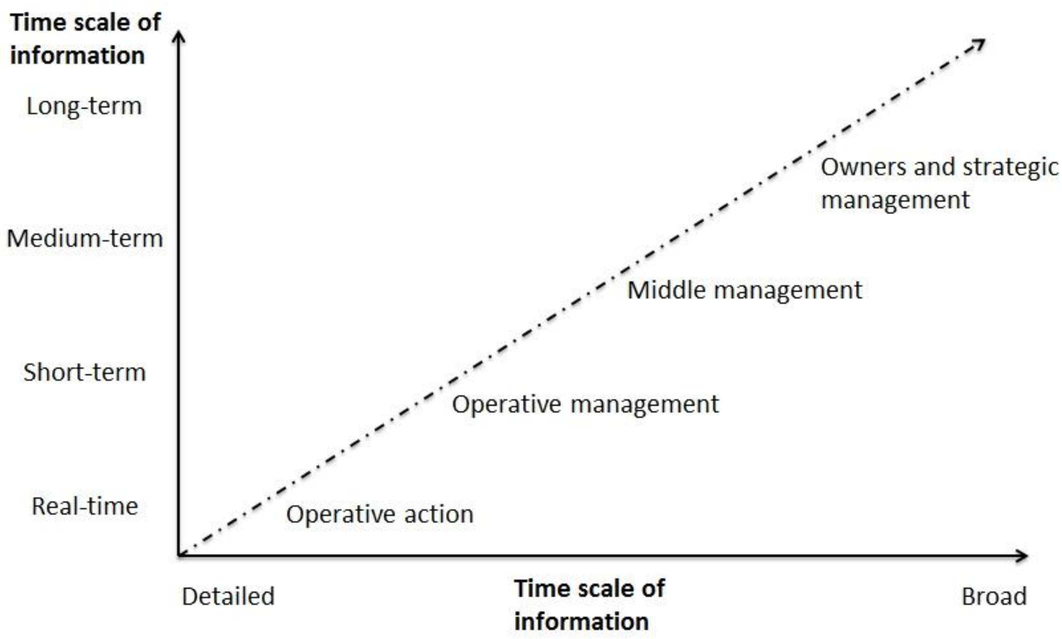
When company begins using knowledge to manage instead of managing of knowledge, often availability and reliability of information rises to be problems (Jalonen & Lönnqvist 2009). Often important decisions are made on early steps of decision making process, when all the needed information is not available. Idea in performance management is to decrease this uncertainty by providing information in early steps of decision making process. Challenge is however that information needs in different organization levels differ radically. Business information needs can be divided into two categories external and internal information. (Uusi-Rauva 1994, pp. 5 - 6) Internal information is typically company-specific information that is for example sales figures and know-how of employees. External information consists of information about business environment, technological advances, competitors, partners and customers. Decision making can be divided to three levels: strategic, tactic and operative. (Marakas 2003, pp. 90 – 91.) Balance between external and internal information differs on each level. On operative level information needs mainly consists of organization's internal information and on strategic focus is more in external information sources. This is shown in picture 15. According to Uusi-Rauva (1994, p. 6) organizations needs information can be divided to three categories: situation facts about organization or its environment, quantitative and qualitative objectives, and methods, means or factors that affects company's operations so that it can change to match objectives.



Picture 15: *Information needs at different levels. (Based on: Pirttimäki 2006, p. 45)*

Strategic level is more interested of long term decisions and aim is to work proactively, and find new ways to develop business. Operative level is more focused on estimating own work environment and finding more effective ways to develop business. Typically operative management is based on experiences of the past. By nature strategic management has more influence to organization's future than operative, why information quality requirements are also higher. (Harwood 1994, p. 31.)

In picture 16, Laitinen (1998, pp. 144 - 146) defines the nature of information need in different levels. Basic idea is that owners defines business idea and vision and create outward circumstances to match them. They also need to supervise implementation of business idea and follow up effectiveness of implementation. Their information need is rough information about trends in business environment and information of their own performance so that preconditions at operative action are in wanted level.

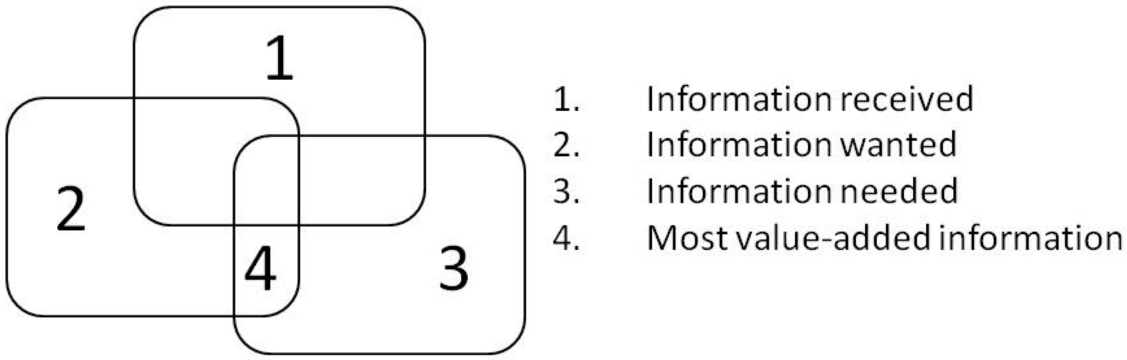


Picture 16: *Information needs on different management levels (Laitinen 1998, p. 148)*

Task of strategic management is to create strategy to fulfill owners' plans, which makes them want extensive but only rough information. This information consists of forward looking information from company's own activities but also external business environment. Middle management's role is to supervise effective implementation of strategies and share resources that make them want both medium and short term information. Operative management is responsible for effective use of resources in different operations. Information is quite detailed and related to short term decision making. At the lowest level people need very detailed information about the moment in real time. (Laitinen 1998, p. 144 – 146.)

Both of these information needs models are based on same type of categorization. It is clear that different organization levels have different kind of needs, but were they get the information. Operative systems often include a lot of useful data, but rare decision maker have accessibility on those (Schauer et al., 2005). From corporation perspective one single operative system does not provide any value for decision making. Data must be processed and combined with data of different business units, before it can be used for supporting decision making. Often this process is executed in organization's data warehouse. Business intelligent and data warehouse systems are coming more common, but we still have challenges in decision (Davenport, 2010). According to Choo (2002, p. 26) it is waste of time and resources to gather and analyze information that decision-makers want but a company does not need for success. In many situation information wants and needs are also two different things and between them is a gap (Kotler, 2003). Five most common type of information gaps are: decision stop (an individual got many choices for going forward), barrier stop (the only way continue is blocked), spin-out stop (there are no options for going forward), perceptual embeddedness (Unclearness of the options is not known) and situational embeddedness (possible options are not known) (Choo, 2002).

There is area were information needs and wants overlap that is shown in picture 16. According to Pirttilä (1997) this area got greatest potential to support information need, but it cannot be always gathered.



Picture 16: *Information gap (Based on Aguilar 1967)*

As shown in picture 16, there can be needs that could be valuable to fill, which decision makers do not feel valuable or needed for them. They do not might even know that information even exists. (Pirttilä, p. 46.) According to Aguilar (1967) information gaps can be categorized into three classes. One is gap between information that decision makers want but do not need. Two is gap between information that decision makers want and really need. Three is gap between received and wanted information. In today's business environment information sources are almost unlimited, which makes selection and use of right information very important. This underlines that in some situations it is almost equal important to know what information is not needed than to what is. Finally information should be shared through value adding information products that gap between collected and required information decrease (Choo 2002).

According to Davenport (2010a) good analyzing tools are most import to support decision making. Second important are changes in organization culture or management, higher quality of data and changes in employees' performances. Average amount of different meters per decision is five or more. (Davenport 2010a.)

In this research information needs are likely to be related only to strategic and operative levels. Reason is that in medium size companies have rarely three levels categorization of their planning functions. In picture 9 that was in section 2.5 sales management's issues were categorized into three categories. First and second ones, *sales forecasting and budgeting*, and *time and territory management*, can be seen as strategic level planning functions. Third level, *sales force motivation*, *training the sales force and sales force performance evaluation* can be seen more as operative level monitoring tools. Information gap probably also exists, because only information needed can be analyzed.

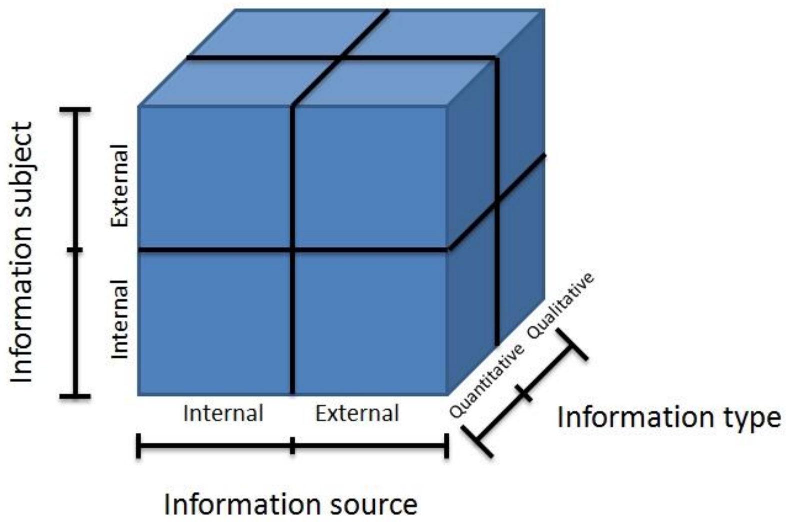
4.1.3. Methods for identifying information needs

Definition of information needs is not simple, because decision making is not always straightforward or rational. (Turban et. al. 2001, p. 441) Way for identifying information need is convert perspective from identification to demand. (Pirttilä 2000, pp. 66 – 67.) Reason is that, demand for information is conscious, which means that it can be defined and measured. Still this method does not remove information gap because it is hard to estimate is this information really needed for decision-making. According to Vuori & Pirttimäki (2006, p. 590) information need identification method should be chosen based on situation-specific requirements. Reynolds (1995, pp. 342-343) see that company must first identify its business processes in order to define what decisions need to be made and what kind of information is needed to support them. Further company must monitor its critical success factors constantly and the key business units must be identified also. According to Fisher (2004, pp. 10-15) information needs of the most important business units and processes must be identified. Then key decision-makers in each unit must be identified so that information can be given to right person.

It seems to be clear that quantitative and qualitative information are needed in successful decision making. Typical hierarchical categorization of data, information, knowledge and intelligence is discussed in section 4.1.1. According to Hannula & Pirttimäki (2005) this pragmatic classification is not enough. Solution for defining managers' information needs in real business situation is well grounded practical framework shown in picture 17. Main axes of the framework are information source (X-axis), information subject (Y-axis) and information type (Z-axis). This cube model is based on three dimensions for classifying business information needs.

1. *The source of information:* Information can be gathered even inside (sources like: operational databases, operational databases etc.) or outside (sources like: research reports, internet, newspapers etc.) of organization.
2. *The subject of information:* Subject can be internal or external. This means content of information. If information relates to company it is internal and if not it is external.
3. *The type of information:* Information can be quantitative or qualitative. Quantitative information is easy to process and it mainly consists of statistical information. Qualitative information mainly includes information like visions and

ideas, which are harder to formalize and communicate than quantitative information (Frishammar 2003, p. 319)



Picture 17: *A cube of business information (Hannula & Pirttimäki, 2005)*

This cube of business information is useful tool for approaching different information needs. It can also be used for analyzing organizations and BI-related vendors. (Hannula & Pirttimäki, 2005) Challenge with this model is that dimensions are often subjective. The same information may be available from external or internal sources, it may relate to internal or external subjects, depending on decision-maker and his position. The line between internal and external sources is unclear in situations of networking because the goal of it is to have visible information flows. Typically information is gathered and analyzed from several of sources before it reaches end user (Choo 2002, pp. 157-158). This makes identifying of the source difficult. Information type and subject are more unambiguous and thus more practical for identifying information need. For this thesis it is more important to recognize needed information than source, type and subject of it. This model is good for executing actual BI-tools and good to show, because it probably will be needed in estimation of how needed information can be provided.

4.1.4. Internal and external information

Key to company's success is its ability to recognize and use new external information and weak signals. (Rouibah & Ould-ali, 2002) Moreover company must take advantage of existing information within the company. So company must gather relevant business information from both internal and external sources, to be successful, as discussed in earlier sections.

Companies must have plans for how information is gathered, to maximize finding of relevant information. (Choo 2002, pp. 31-32) Typically grouping of information sources is based on their nature. Sources can be divided to internal sources, which are in the company, and external, which are from outside. According to Choo (2002, p. 32) external information consists of published materials, like newspapers and journals, and internal information instead is generated from internal material. Furthermore Miller (1996, p. 209) divides external environment into competitor, customer, the legislative, the market, the sociodemographic and technology. The scope of internal environment is composed in of company's culture, resources, and structure. Culture includes expectations, values and beliefs, which are created and shared in company. (Wheelen & Hunger 1992, p. 47). According to Choo (2002) employees are the most valuable source of information but are rarely taken into account in planning information gathering. People can get information from many different sources by interacting with other peoples, summarizing that information and communicating it forward. This is probably more effective way to share and combine different ideas in a company, which makes notifying the importance of human source remarkable. This research is not focusing on defining, what is the source of information. Still it is very important to notice in execution of them.

4.2. Domain of business intelligence

First time in context of business, this process can be recognized in 1970s in United States, where companies begin use intelligence practices for their businesses. In those days more common term for business intelligence was competitive intelligence. (Greene 1966; Prescott 1995). Today business intelligence can be understood in many different ways.

As a concept it has dualistic meaning: From one perspective it is information or knowledge that presents how business environment and organization self are performing against markets, competitors and economic questions. From another perspective it is analytical process that produces suggestions and viewpoints for managers and decision makers. (Pirttimäki, 2006)

The information technology based systems that are used for analyzing raw data and information and for storing and sharing valuable information and knowledge are seen as part of BI (Moss and Atre, 2003). Some authors see that that is all about there is in BI (Kalakota and Robinson 2001, pp. 349 - 350). However as it said there is no common conception of what BI is. According to Ghoshal and Kim (1986, p. 49) BI is an activity where information about competitors, customers, markets, new technologies, and broad social trends is gathered and analyzed. Also Tyson (1998, p. 6) has defined BI as an analytical process, which converts raw data in a usable, relevant and strategic knowledge or intelligence. According to him, BI consists of variety types of intelligence:

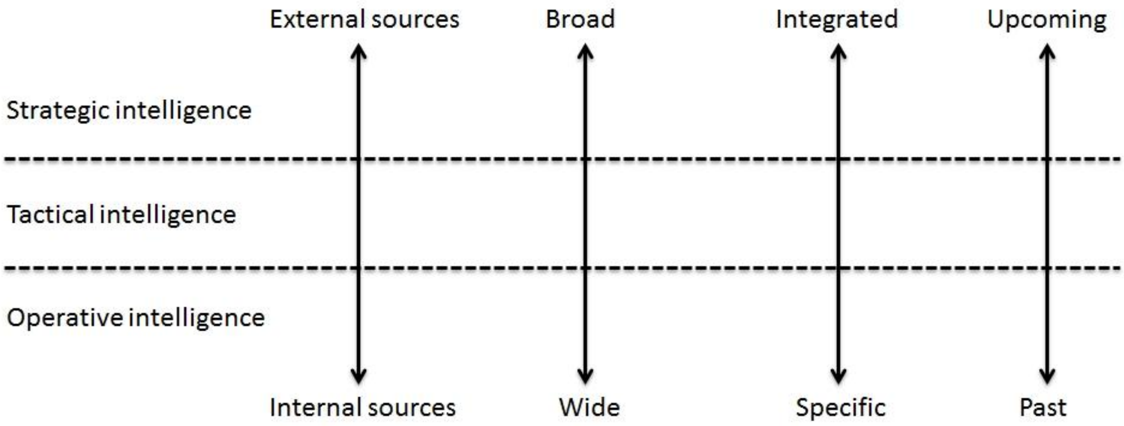
- Customer intelligence

- Competitor intelligence
- Market intelligence
- Technological intelligence
- Product intelligence
- Environmental intelligence

Collins (1997, p. 4) defines BI as a process in which information about customers, and markets is systematically gathered by legal means and analyzed to support decision-making. Collins (1997, p. 19) divides BI's main objectives into three categories. First, organization can avoid unpredictable things and identify threats and opportunities. Second, BI establishes a baseline for performance estimation. Third, BI provides more reacting time for business changes. According to Prior (2004, p. 4), BI is combination of any data, information and knowledge concerning organization's operational environment that leads to decisions creating competitive advantage for the organization. Sawka's (1996, pp. 47 - 52) is close to Prior's. According to him BI focuses on the gathering external information and the prediction of changes in the markets. He also sees BI as requirement for conscious decision-making.

All the earlier mentioned definitions ignore the importance of internal information. In addition of screening the external environment, BI includes information inside the company. By integrating external and internal information, organization can easier have large picture of its success in different business areas. Brackett (1999, p. 1) defines BI as a series of concepts, methods, and process that enable monitoring of economic trends and effective utilization of business information in strategic and tactical decision making. According to him information should be gathered from both internal and external sources, and he also emphasizes importance of employee's experiences and hypotheses. Brandt (1994, p. 22) instead underlines the role of internal information in BI, because he sees that decision-making is based on organization's strategy, resources and operational opportunities. All to all, the main idea in BI is in identifying right information needs and process gathered data and information into useful and valuable knowledge and intelligence.

Some authors emphasize strategic role of BI. For example Buskard et al. (2000, pp. 46 - 47) notifies that BI is not a separate technology or application, but a series of productions that includes both analytic tools and the information required. Also McGonagle and Vella (1996, p. 18) emphasize different roles of BI by dividing it into three categories: strategic intelligence, competitive intelligence and market intelligence. Thierauf (2001, pp. 66 - 67) has also categorized BI into three levels: strategic intelligence, tactical intelligence and operational intelligence, which is shown in picture 18.

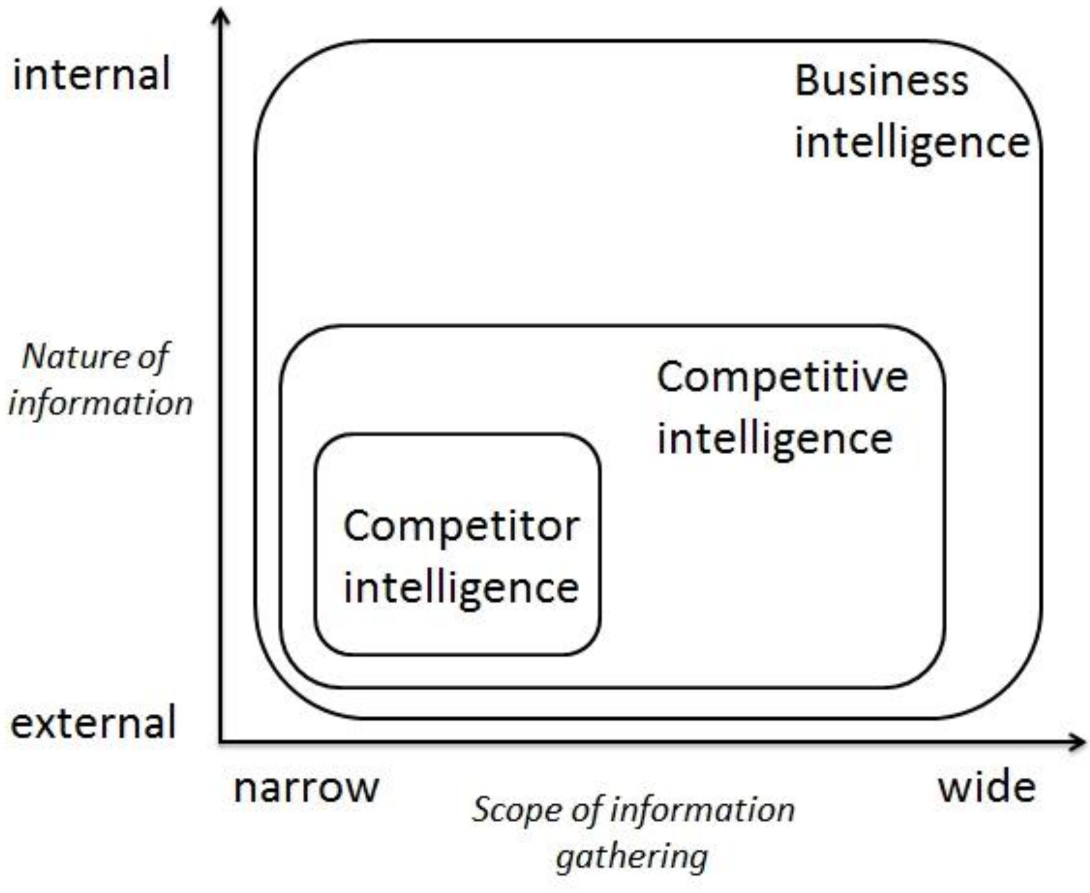


Picture 18: *Levels of BI (Based on: McGonagle & Vella 1996, p. 18; Thierauf 2001, p. 66).*

The information needed is different in different levels of BI, but financial intelligence is needed at every level (Thierauf 2001, p. 66). According to Thierauf (2001) strategic decision-makers mostly need extensive and enriched information for managing upcoming decisions and steer organization to right direction. At the operative level required information is more detailed to implement daily activities. Tactical level is between operative and strategic levels, where the data are gathered and enriched (Thierauf 2001). Thierauf (2001) divides information to external and internal in his framework: information from external sources is needed on strategic decision-making, whereas internal information is mainly needed in operational level. Organizations' strategic decision-making needs however information from internal sources, and operational level from external sources. Strategic decision makers must have knowledge about internal resources and so on, which is from internal sources, to make reasonable long-term strategic planning. At operative level, external information is also needed, like trends, for marketing, development and so on.

Vitt et al. (2002, pp. 13 - 22) sees BI is more than just management philosophy or an enabling technology. According to them BI is ongoing cycle; it is a performance management framework via which organization sets goals, analyzes development, gains insight, takes action, measures success, and begins all over again. They sees that BI is about problem solving and rational decision-making, and they emphasize the relationship between BI and the strategy. (Vitt et al. 2002, pp. 14 – 16.) Like Vitt et al. also Thomas (2001, pp. 48 - 49) defines BI as systematic process, which collects, analyzes and classifies the important business information. He sees that BI process, in which sources of information including published information as well as information from human sources are in central role.

There are also related intelligence concepts including: competitive intelligence, competitor intelligence, market intelligence, product intelligence, customer intelligence, environmental intelligence and technology intelligence. All these are mainly based on external information sources (Vibert, 2004) and they can be seen as subgroups of BI (Pirttilä, 2000). On the other hand, most of related concepts share the same purpose as BI and aim to turn raw data and information to knowledge (McGonagle & Vella 1996, pp. 9, 202). The difference between BI and related concepts is hard to define, because it seems to be situation specific and related to organizations' information needs. However according to Choo (2002, pp. 86 - 88), BI has widest scope among intelligence concepts. BI is used in various ways and it is based on information needs from several sources. Also long-term strategic decisions are often based on information produced by BI. Relationship between business intelligence, competitive intelligence and competitor intelligence is show in picture 19.



Picture 19: *Relationship between business intelligence, competitive intelligence and competitor intelligence (based on: Choo 2002, p. 88; Fleisher 2003, p. 62; Weiss 2003, p. 49)*

In the left top corner of it is internal information, which includes company specific information like key figures and financial accounting information. Basically BI covers the whole relevant environment of the company, not just itself. The scope of competitive intelligence is smaller. It covers several parts of external environment, like competitor, industry and market, and it mainly supports a company to assess the competition and market conditions. According to Choo (2002, pp. 86 - 88) competitor intelligence aims to facilitate decision-making especially at tactical level. Typically competitor intelligence is something that interests sales and marketing departments, but it can be used also in strategic decision-making. Also Fleisher (2003, p. 62) and Weiss (2003, p. 49) sees that competitive intelligence in somewhere between business intelligence and competitor intelligence, because its focus is on competitive environment and the improving organization's competitiveness.

In this thesis BI is understood as intelligence process that includes a series of systematic activities, being driven by the specific information needs of decision-makers in sales organization and the objective of achieving better sales results. Through this BI-process organization can collect, analyze, store and share accurate and timely information that is needed for its business activities and decision making. BI includes both internal and external information sources.

4.3. Relationship between BI and performance management in this thesis

Business intelligence and performance management have close and multidimensional relationship. Performance management can be seen as a part of business intelligence (Bose, 2006) or these two can be seen as concepts that fulfill each-others (Turban et al., 2007). From ICT's perspective performance management is often seen as advanced version of data warehouse based business intelligence, because it provides new options for organization to modify and execute its strategy effectively (Frolick & Ariyachandra, 2006). In this type of perspective traditional business intelligence's technologies are fulfilled with analytical advances, which provide balanced and strategic picture of a whole company that breaks functional borders ("Business or Corporate Performance management", 2003). From ICT's perspective business intelligence also includes gathering of raw data from different sources, which is integrated to data warehouse during this process. Some authors see usage of this information as performance management (Cokins 2009; Miranda, 2004).

Business intelligence and performance management are often used as a synonyms in business life, but they are clearly different terms (Frolick & Ariyachandra, 2006; Cokins, 2009). Performance management extends concept of business intelligence into two directions. First, performance management is more focused to support process oriented organizations than business intelligence. Second, performance management aims to closed process, which connects strategy development, process development and execution together with business intelligence. (Melchert et al., 2004) Now performance management can be seen as concept for initialization of business intelligence's strategic solution, because business intelligence is used as a base for execution of performance management. Performance management instead includes business processes that use business intelligence (Miranda, 2004). So performance management provides ways to integrate business strategy and technological structure, so that whole organization can be lead towards its organizational goals. Business intelligence and performance management together create a bridge that connects data to strategy based decision making.

In this thesis performance management and business intelligence is seen as concepts that complement each-others and have some overlaps. This view point is shown picture 20.

Picture 20: *Business intelligence's relationship to performance management*

Based on Mepco Oy's experience business intelligence is often missing direct connection to organization's strategy work, what performance management has instead. It is also clear that performance management main focus is in organization's internal processes, while business intelligence is interested also analyzing of external business environment. This is reason why business intelligence is seen more as analyzing tool that is linked to key performance indicators.

When definitions are looked in more detailed way, often in definition of performance management does not cover all possible data that is analyzable, and it focused only to limited amount of data that is shown to managers through different kind of dashboards. In literature performance management is often seen as predefined group of measurable features, and business intelligence instead covers more extensive amount of data and measurable features, which are not predefined (Jalonen & Lönnqvist, 2009). Both perspectives are needed and from this thesis point of view in performance management analyses should be based on both internal and external information sources, which is often seen as a part of business intelligence. In a way, business intelligence can be seen focused on knowledge management, when performance management is instead focused on information and data based management. Often business intelligence tools are usable for data analyzing from different points of view, data categorizing and making reports based on them. Example of typical business intelligence tool is traffic lights, which are based on performance meters. However this type of meter does not focus other sides of performance, like risks and executions. This type of business intelligence should be seen as tool for data analytics and persons, who need performance data to certain business sectors. However business intelligence is not just a technology or tool and it should be seen as extensive analytical process, which produces information, perspectives and recommendations for managers and other decision makers (Pirttimäki, 2006).

Practically it is hard to draw clear line between business intelligence and performance management. Organization may have for example certain profit margin defined by top management, which is under business intelligence's environment. This goal may have affection to overall performance of organization, for example characteristic. Then there is connection between the meter and strategy, which is closer to performance management than business intelligence. Basically every time when organization has meter, which is connected to strategy, it is performance management. When this link is not direct and meter focuses more on basic reporting it can be seen as business intelligence. However in this thesis performance management is seen as part of business intelligence, because it is clearer to talk only by using one term.

5. Research methods and execution

This chapter consists of three parts. First is description of empirical part's research method. Second handles research execution. Last chapter describes used material and analyzing methods. Aim is to present the research well enough that it could be repeated by other researcher as well.

5.1. Half structured interview as a research method

Interviewing methods can be categorized in to three main groups: structured interview, half structured interview and unstructured interview. Category is based on how strongly interviewer controls interview, its structure and answering opportunities. (Koskinen et al. 2005, p. 104; Hirsijärvi and Hurme 2008, p. 44.) In structured interview interviewer typically presents pre made questions in certain order and often also gives answer alternatives. (Koskinen et al. 2005, p 104; Hirsijärvi & Hurme 2008, pp. 44 – 45.) Unstructured interview instead focuses on minimizing interviewer's affection to interview situation, when things that interviewer have not though may occur during the interview. Typically unstructured interview is used when researcher is just interested on some topic, which he would like to discuss. Then interviewed person answer with own words and he can lead discussion on a way he want. (Koskinen et al. 2005, pp. 104-105; Hirsijärvi & Hurme 2008, pp. 45 – 56.)

In between of these two interview methods is half structured interview, which is often called as theme interview. In this thesis theme interviews is research method. Theme interview is widely used research method in business economics and it can be seen as a synonym for qualitative research (Koskinen et al. 2005, p. 105). This research method is based on different themes that are discussed during the interview. Researcher has decided these themes in beforehand and builds structure for interview based on them, which will lead interview forward in certain order. This order is not mandatory and themes can be discussed in way they pop up during the interview. In a way theme interview has more commonalities with unstructured interview than with structured interview, just themes are more clearly defined in theme interview than in unstructured interview. In a well-used way, theme interview is powerful research method, because researcher can lead the interview in the right themes, but does not control interview too much, and gives time and space for interviewed person's own analysis. Theme interview is often motivating experience also for interviewed person and it does not require a lot of preparations, which is the why peoples are easy to have for interview. (Koskinen et al. 2005, pp. 105-106; Hirsijärvi & Hurme 2008, pp. 47 – 48.)

5.2. Executing research in case companies

Research material consists of six interviews. All of them are recorded and notes during the interview are made. Selection criteria for companies were that they need to have certain type of sales process, they must be under certain size and they must be at least on level three at CRM-maturity, described in section 1.2. Selection criteria for interviewed persons were at high managerial position in sales, at least 2 year experience of their current work and they know how performance management and business intelligence are done in a company. Focus in selection was finding persons, who have the best possible knowledge of how their sales organization operate and how their performances are managed. Reason for having one person from each company, is to have as wide perspective of medium-size companies as possible and not estimate how well interviewed person knew researched topics.

Searching of suitable companies was started by first selecting group of suitable companies from Mepco Oy's customers. Next step was Mepco Oy's contact persons' call for potential interview persons and having permission for researcher to contact them and book interviews. When they had accepted interview, they got guidance material and example questions with answers, which are in appendixes one and two. Purpose was to describe research to them beforehand in order to get more comparable answers. Interviews were executed in customers' offices between 27.2.2013 – 22.4.2013. Only interviewer and one spokesman were present in each company. After the interview results in chapters 6.1 – 6.6 were sent to interviewed person, so that he/she can comment them and correct possible misunderstandings. Interviews were aimed to be done in short time space, because then routines for keeping them and technical details were well in interviewer's mind.

Interview consists of five main questions and 4 secondary questions of each of them, which is shown in appendix 3. Main question represents category of the sales management's issues and secondary questions was about how they execute their performance management and business intelligence in each issue.

5.3. Analyzing methods for research information

Interviews were recorded and notes were made during them. Collected results were gathered in chapters 6.1 – 6.6. Later in chapter seven best practices were summed based on the commonality of answers. Procedure was seen as best practice if three out of six used it in their business. It was seen as high enough limit for describing general best practice. There is no commonly accepted definition for best practice so it must be defined by researcher and Mepco Oy. Because of qualitative nature of research quantitative analyzing methods for data was not used.

6. Results

This chapter consists of interviews' results. All companies are first introduced shortly and after it is described, what they saw as most important business intelligence tools for different sales management issues. All interviewed persons were in high management position and they knew well, how their sales organizations operates. More detailed descriptions of interviewed persons cannot be given, because they do not want be identified.

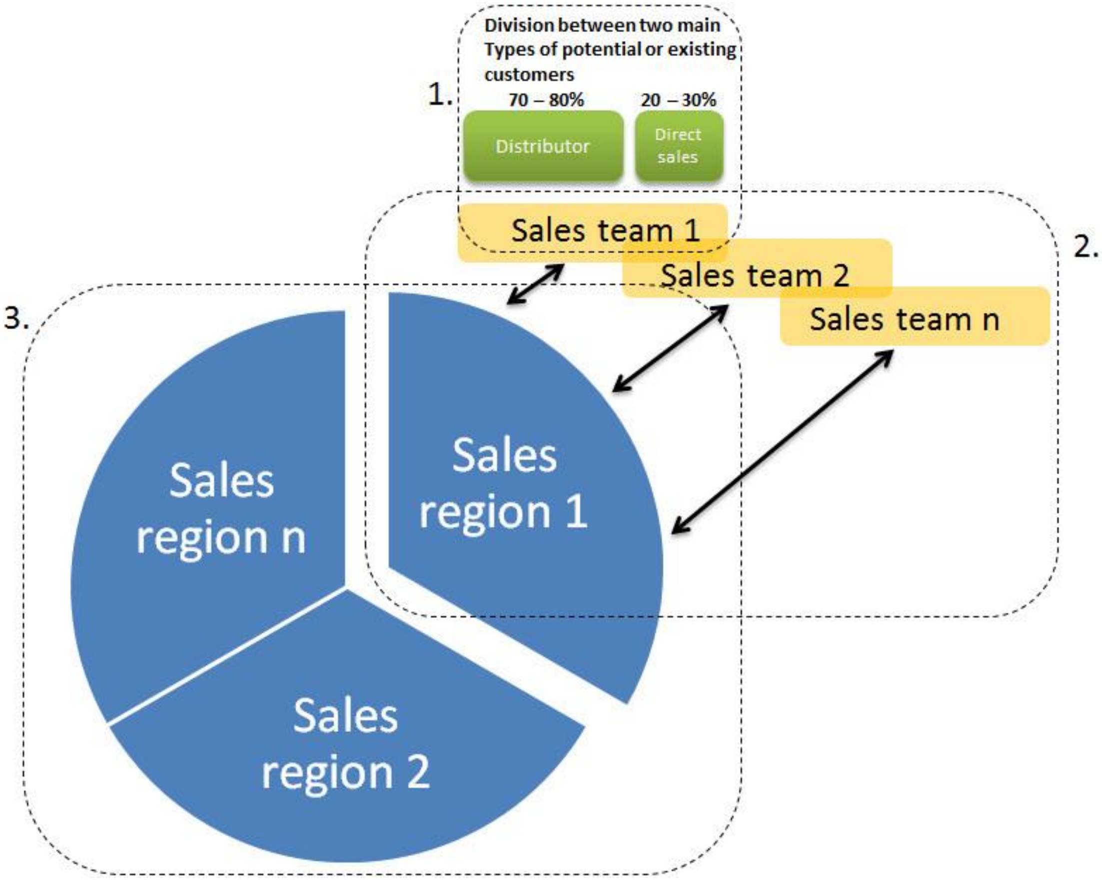
6.1. Company 1

Company is Finnish origin family business. They have built their business on people, trust and environmental values on a long-term basis. Their customers' real needs lead them in finding right solutions to build added value to their customers' business. Their reliable and complete solutions are developed to face customer´s today´s and future needs. Their goal is to create genuine partnerships with their customers. Company is one of the leading technology companies in the world and sustainable energy expert. They promise to save customers' energy and guide how they can make it. They are known for advanced, highly energy efficient and reliable products and solutions, which reduce degradation of whole planet. Their business consists of three business units, which are utility networks, industrial solutions and building technology. Each unit has their own sales management.

In general this company got great experience of running profitable and extending business for long. They have used to work with KPIs, but they would like know better what their CSFs are from customer point of view. CSFs in this interview, represents their own vision, which is focused on providing great quality and service for their customers.

Sales forecasting and budgeting

Company one uses from down to top planning method for setting up sales forecasts and budgets, shown in picture 21. Number of hierarchy levels depends on how large region is, but planning method is always same. Their planning period for sales is fifteen months ahead, which they see as a minimum time for estimating how market is developing. Planning process begins by estimating locally how much one team can sell and how much profit they need to make. Typically one team includes at most 10 salesmen and one manager. These forecasts and budgets are based on estimations of how their distributors' market share and size are developing, and also how markets for direct selling are developing. Teams' forecasts and budgets are made in stage one, in picture 21. Then they are accepted or fixed by sales region manager, who compare them to general market growth and his own estimation, stage two. During the final stage sales director estimates all sales regions' sales forecasts and budgets, and compares them to last years' ones and general market situation development.



Picture 21: *Sales forecasting and budgeting in company one. Amounts of sales teams and regions are imagined.*

Critical success factors, key performance indicators and meters are gathered in table 2. As can be seen, their budgeting is strongly focusing on estimating market potential, which in their case means number of new construction projects. This typically indicates how sales through deliver and will develop in future. In other sales division there might also be other indicators for describing how market is developing, but interviewed person did not know them for sure.

Table 2: *CSFs, KPIs and meters concerning sales forecasting and budgeting for company one.*

CSF	Increase sales and profitability for current and for new customers
KPI	- Sales must increase at least as fast as distributors markets and sales potential making direct sales. - Sales also must increase compared to last year.
METER	- Existing customers' market situation development in percent during last six month. - Number of new construction projects in a market and total value of them. - Last years compared current sales

For making better forecasting and budgeting, they would need better information about market potential. In this case it means knowing better stakeholder structure in the market, their contact information, who is buying, what, when, who influences on decisions and what is their situation in market compared to competitors. Interviewed person said that he sees that today this information is mainly in region's sales manager mind, but it would be good to support with external objective opinion.

Time and territory management

Sales forecasts and budgets are designed from down to top, and they are divided to correspond to different sales territories. In all hierarchy levels sales managers estimate how many activities are needed in order to achieve set budget. Then they estimate how much sales power they do have and how much they need it more. Time management is mainly focused on monitoring activity levels and current sales compared to budget. There are no management rules for dividing time between delivers and direct selling or between existing and potential customers. Their CFSs, KPIs and meters are gathered in table 3.

Table 3: *CSFs, KPIs and meters concerning time and territory management for company one.*

CSF	Achieve sales budget and keep existing customers satisfied
KPI	- Call at least annually each existing customers - Current sales and pipeline in line with a budgeted goal - Limits for potential and existing customer visits
METER	- Number of calls for customer who have bought or influenced purchase - Sales and pipeline compared to budget - Number of visited existing customers - Number of visited potential customers

For estimating better, which accounts should be called and when they would need to know their existing and potential customers in both segments. In sales, which go through deliver, they would like to know stakeholders' decision making roles (influencer, decision maker, supporter, gate keeper etc.), contact information and competitor situation. Often if all the stakeholders recommend one product to purchaser, he buys it without questions in their business. So they would like to know all available projects in each sales team's territory and persons who run these projects. In direct selling helpful information about existing customers would be customers' buying potential. Nowadays new customers are not interesting enough, because potential for getting sales through them is harder than calling the old ones.

Sales force motivation

Company uses mainly monetary bonus benefit system, which is based on individual, team and regions performances. Described model is gathered in table 4. Measuring period is 6 months. They also have other types of motivation methods, like sales competitions, but they are created randomly.

Table 4: *CSFs, KPIs and meters concerning sales force motivation for company one.*

CSF	Reach budgeted sales goal
KPI	- Individual sales budgeted goal - Team's sales budgeted goal - Region's sales budgeted goal
METER	- Monetary value of individual sales - Monetary value of team's sales - Monetary value of region's sales

Interviewed person did not know any supportive information needs for motivation.

Training the sales force

Training is based on two systems development discussion and their level based system. Development goals in development discussion are not numerical, that could be easy to follow. Good examples of themes in discussion are employee's personal improvement plans, but also development plans based customer feedback. Level based system is indicating training needs of different people in different jobs. Based on results of it different types of training session are arranged. It is focusing on the key improvement areas and is just in test use. They do not see that training needs should be directly based on some factors in sales performance. They see this soft approach more humane and effective.

Interviewed person did not know any supportive information needs concerning training the sales force.

Sales force performance evaluation

Sales forces' evaluation criteria are based on strategy and goals that team leader have set. Strategic approaches are typically emphasized by two different approaches, either expanding sales through new customers or through existing ones. In both situations, they do not forget completely either segment, but the main focus is only in one. Strategy of course depends on market situation. Performance management for sales consists of two different types depending on company chosen strategy for the territory. CFSs, KPIs and meters are gathered in table 5. Basically CFSs for both are keeping contact levels high and increase sales more rapidly than the target market is expanding.

Table 5: *CSFs, KPIs and meters concerning sales force performance evaluation for company one.*

	***Strategy*: Focus in new customers**	***Strategy*: Focus in existing customers**
CSF	- Contact all potential customers in a sales territory - Increase sales in a territory at least as fast as the market is growing (if markets are not totally new) - Go over the budget	- Contact all important customers - Increase sales more than market is growing - Increase sales compared to last year - Go over the budget
KPI	- Cold call level high - Number of new customer visits high - Territory's market growth more than last year's sales budget	- Key and existing account calling and visiting levels high - Current sales have to be more than budget goals or lasts years sales
METER	- Number of answered phone calls for customers never answered before - Number of customer visits for customers that never visited before	- Number of calls and visits for account who have bought something.

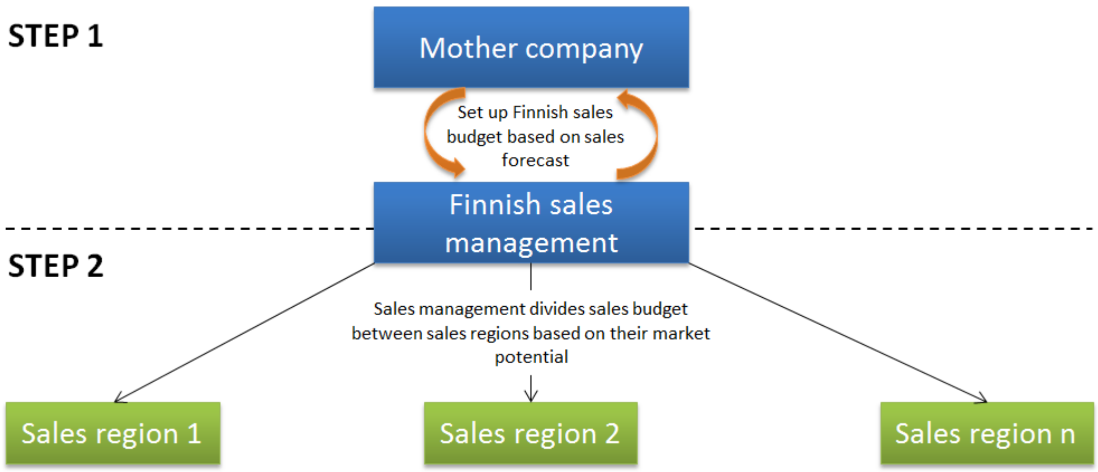
Supportive information needs is for understanding, which new accounts are most potential for them. Problem in cold calling is that hit percentage is too low, which of lowers sales forces' motivation. Solution could be systems that recognized very potential customers and generates leads based on that. Interviewed person did not know any concerning sales force performance evaluation.

6.2. Company 2

Company 2 is a part of the international corporation. It aims to be the trendsetter and an innovative developer in this field. They always think what is best to its customers and launches new and customer-tailored service solutions to its customers. Company offers versatile and comprehensive service solutions to its customers. Company`s professional personnel always works for the benefit of its customers, taking into consideration the individual waste management needs of each customer. The best service package is tailored with the help of a wide and reliable cooperation partner network. This company has increased rapidly during last years. Company has several years' experience of CRM and launched new application two years ago. They have started using measuring KPIs for steering their sales better in right direction.

Sales forecasting and budgeting

In company 2 sales forecasting and budgeting consists of two steps, shown in picture 22. Their planning is based on from top to down method, which in their case meant that international mother company has sales forecast and budget framework for Finland. However this is not completely one way negotiation, because Finnish sales management can have information about market potential that must be noticed in order to them to be fully committed for budgets.



Picture 22: *Sales forecasting and budgeting in company two. Amounts of sales teams and regions are imagined.*

Second company's CFS, KPI and meter is shown in table 6. They have very budget oriented method for following their sales. Company compares their past month's real sales numbers to budget. They had sales pipeline in CRM for forecasting upcoming sales, but they did not use it as a budgeting tool and it was more designed to give roughly estimation about what will be coming. Reason for this is that their sales period is changing between

1 to 12 months, which makes usage of sales pipeline really hard. It is a lot more trustworthy to compare the whole budget to real sales numbers than have very approximately guesses. Challenge is however in to see clearly what is coming.

Table 6: *CSFs, KPIs and meters concerning sales forecasting and budgeting for company two.*

CSF	Increase sales and profitability
KPI	- Sales regions' sales must meet set budget
METER	- Past month's sales compared to set budget

For making better forecast they would like to know five facts about their potential customer in each region. *First*, what type of service customer need? *Second*, how big customer i.e. what is its potential? *Third*, does customer locate geographically in some existing logistics route? *Fourth*, what are customers' industries and how stable is the need for services? *Fifth*, what is their purchasing policy (are they buying services from one service provider or do they buy them as separate services)?

Furthermore they would like to know, how their market environment is changing. Basically this means two things. *One* is to know new competitors, which in their case is not most business critical information. Reason is that coming to market needs quite big investment, which limits all the small companies off. *Two* is to know how relevant legislation is chancing and also sales regions' local instructions. They had trade union related information source for providing this information, but it was mainly based on human communication in different conferences.

Time and territory management

Finland is divided to geographical sales regions. In each region is 1 to N amount of salesmen. Each region and each person in them has budget based goal, and common goal for all is a Finnish sales budget. Sales management sees that for achieving these budgets certain amounts of sales calls, customer meetings and offers needs to be done for each region and each person. Their CSFs, KPIs and meters are gathered in table 7. They understand that different size of deals requires different amount of activities, which means that if salesman is working mostly with big clients, person may not have as many new offers as person who works with small ones. However salesmen personal activity goals are now set as standard level and will be adjusted in future more precisely, when they have more experience of suitable activity levels. Challenge today is that they did not have measured data of how much different activities are needed to achieve wanted sales results. They said that it took more than a year to get sales person committed to fulfill their activities in CRM and this year is the first, when they will get comparable numbers from all sales regions. In future they can understand better, which activities are most critical to have more sales, but this will take more time. Now all the activity goals are based on estimations and bench marking.

Table 7: *CSFs, KPIs and meters concerning time and territory management for company two.*

CSF	Achieve sales budget
KPI	- Amount of activities in current measuring period must be more than last year during the same time
METER	- Number of sales calls - Number of customer visits - Number of made offers - Number of made deals

For making better time and territory management they would like to know, how many calls they need for getting one customer visit, and how valid different leads are. More precisely, if they had information that leads who had certain characteristic are likely to have a meeting in certain percent and it takes in average 3 sales calls to book the meeting, it would be make time estimation for different regions. For getting this working they would need customer classing information described in last chapter plus sales call statistics. Big idea is to use sales force time as efficient as possible.

Sales force motivation

Company two has two main motivation methods, *monetary rewards* and *team rewards*. Monetary rewards are individuals and they are mainly based on activity levels. Idea is that that if sales person is active, he/she will get reward even if actual immediate sales are missing. Basically this steers sales force for doing right activities day after day and through them having wanted sales results and personal benefits. Sales persons are also rewarded by extremely good performance and made big deals. Big deal bonuses give salesmen possibility to balance their work time between achieving activity goals and have big deals. Extremely good performance reward are judged by sales management and based on subjective estimations. All monetary rewards CFSs, KPIs and meters are gathered in table 8. Company has every second month sales meeting in where sales management set team goal for next two months. If this goal is achieved, promised reward will be given to all. This goal and reward changes every time so any common way for describing it cannot be described.

Table 8: *CSFs, KPIs and meters concerning sales force motivation for company two.*

CSF	Keep activity level high and meet the budget
KPI	- Individual activity levels - Amount of big deals
METER	- Personally made sales calls - Personally made customer visits - Personally made offers - Personally made deals - Monetary value of big deal

Useful information for designing motivation methods would be sales results compared to different salesmen personality profiles and used bonus methods. Interviewed person said that they have made personality profiles tests for their salesmen, but they are not enough accurate for making comparison, which makes them more or less not useful. However if they would have trustworthy and comparable personality profiles, they would like to know, which motivation method is most effective to it.

Training the sales force

Training needs appear on development interviews and training plans are also made in them. They have also trainings in all sales meeting every second month. Often these are based on mother company’s best practices or something local issue, for example changed laws etc. Information that could support decision making related on training are waste treatment law changes and sales regions local instructions. This information is also needed in sales forecasting and budgeting as said before.

Sales force performance evaluation

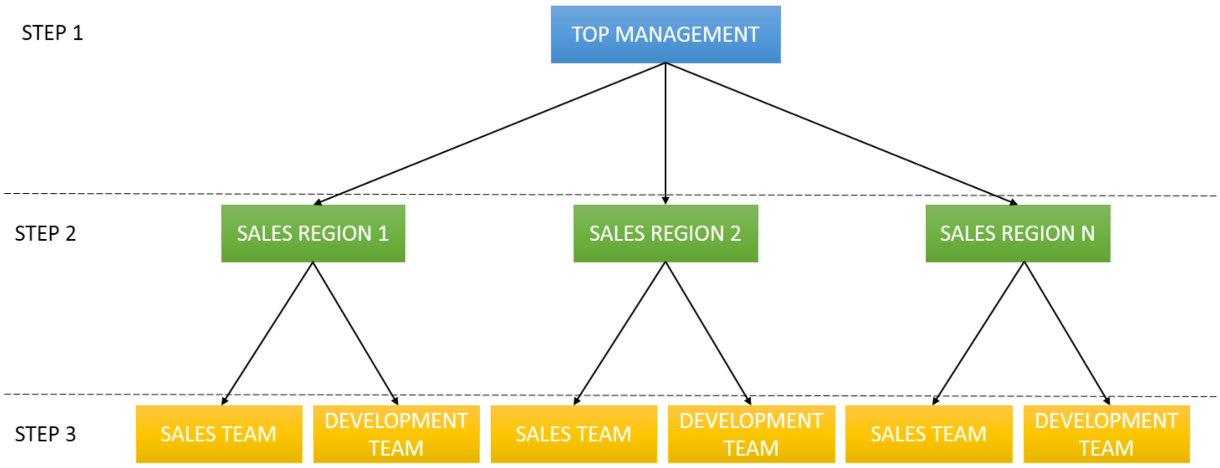
Company two uses sales forces activity monitoring as key for motivating them. Other evaluation criteria is following that salesmen focus on their own target customer group, and achieve set activity levels related on them. Basically this means that salesmen should not call their colleagues’ customers. Company does not have any needs for supportive information concerning sales force performance evaluation.

6.3. Company 3

Company three’s mission is to build a better world through better leadership and to educate a new generation of leaders. The organization's strengths lie in its global operating model and versatile offering. They got multidisciplinary approach to executive development along with innovative learning methods. Company operates in international market, which is mainly focused to Scandinavia and Asia.

Sales forecasting and budgeting

Company three has three steps from top to down forecasting and budgeting method, shown in picture 23. *First*, top management set budgets for whole company based on market development analyze and main customers' economic analyzes. Their main customers were in close relationship with them, which enables quite accurate estimations of development of existing accounts. Sales forecasts for new potential customers were based on market analyze, which was based on their position in a market and general economic growth. *Second*, each region estimates given forecast and budget, and they may demand some fixes to be fully committed to them. *Three*, sales regions divides their budget between sales team and development team. Task of sales team is to sale existing products and development teams develops new products and sales them mainly for existing customers. All sales regions not homogenous so budget structure differentiates between them.



Picture 23: *Sales forecasting and budgeting in company three. Amounts of sales teams and regions are imagined.*

CFSs, KPIs and meters are gathered in table 9. Their planning period is one year, which is divided to three sub-periods. Main indicator for estimating their forecasting and budgeting is to compare month's current sales to month's, sub-period's and year's sales budgets. Idea is to have long-, medium- and short-term views of sales in order to be react more rapidly critical changes in a market.

Table 9: *CSFs, KPIs and meters concerning sales forecasting and budgeting for company three.*

CSF		Increase sales and profitability
KPI	-	Sales regions' sales must meet set budget
METER	-	Current and past month's sales compared to set budget

Supportive information needs concern competitor information. They would like to know their bench marked competitors have succeeded compared to them and to last year. They would also like to compare their competitors sales forecast to their own and information about competitor's profit margins could be useful.

Time and territory management

Each sales region has its own activity goals, which needs to be achieved in order to reach budget. Activity goals are based on history knowledge, which indicates how many different types of activities must be achieved for having x amount of euros. These activities consists of steps of their sales process, but they change between countries and teams, because markets are different for them. As general view, this enables having suitable amount of sales people and ordering sales force to right direction. However local sales management's know-how is in important role for recognizing right activities to follow. They divide their sales calls and sales meetings in to many different categories, but CFSs, KPIs and meters change too much between each territories that generalizations could be created.

As a supportive information they would like to know better potential customers' monetary circumstances and education investment plans in order to focus more to most potential ones. They see this as a way to increase sales force efficacy, because their sales process is long and demand a lot sales peoples' time.

Sales force motivation

Company three has two main motivation methods for sales teams, *monetary rewards* and *week rewards*. *Monetary reward* consist of three levels: organization level, team level and individual level. Goal in organization level is to meet sales budget as a company. Measuring period is year and reward is same amount of money for all. For team and individual levels measuring period is four months. Goals in this two levels consists of three parts: budget, sales activities and customer satisfaction. Budget and activity goals are based on set goal, and affect directly to salary. Customer satisfaction goal is more used as a tool for sales management to give feedback to salesman, like mention good feedback in front of all colleagues. They have a certain average rate that they want to achieve, but it does not affect directly to salary. *Week rewards* given for best performance of the week, which is often is biggest deal. Idea in this reward is to give reward in circumstances where appreciation of colleagues is greater than price itself. Furthermore they have habit that always when you make a deal you hit the drum.

Table 10: *CSFs, KPIs and meters concerning sales force motivation for company three.*

CSF	Keep activity level high, meet the budget and keep customers satisfied
KPI	- Budget in set level - Sales activity levels in set level - Customer satisfaction rate in set level
METER	- Current sales against budget - Amount of different types of sales goals - Amount of different types of sales meetings - Customer feedback information from given form after deal

Company three would like to have better feedback information from their sales calls and meetings. Aim is get real reason why someone bought or did not bought their product. They want to know were the reason in sales performance, in product or in somewhere else. Aim is to get customer satisfaction rate very high and give feedback to their sales force that motivates them to make better results.

Training the sales force

Sales manager controls the aim of different sales teams. Training program consists of sales team based program, which is modified to meet local markets' needs. They have a system that all new employees pass their own sales tactic educations and other educations are planned together with team manager during the year in formal on informal meetings. They also have training program for person who have just graduated. Company is now developing quality measuring methods to indicate that new employees meet quality standards. In training they see customer feedback also important to steer focus of training into right direction.

Sales force performance evaluation

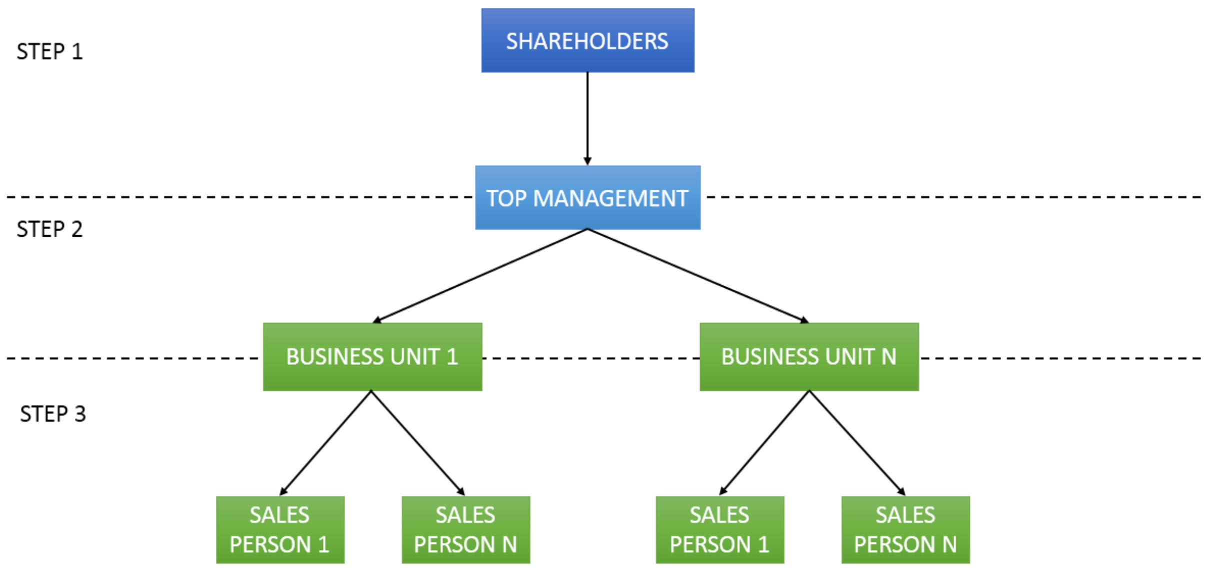
They would like to know better how well their sales force can identify their existing and potential customers' pain point. Sales management sees this as a key success point, but they do not have tool for it and they do not know how it should executed.

6.4. Company 4

Company four's service offering is aimed to businesses and other organizations with high-volume IT needs, helping them to manage the financing, use and replacement of IT equipment in a transparent, cost-effective and sustainable way. The services they provide are intended for large businesses or other organizations with significant IT acquisitions. Their unique concept was originally developed for managing IT equipment, but it is equally suitable for the management of other types of equipment and hardware.

Sales forecasting and budgeting

Their sales forecasting and budgeting process include three steps, shown in picture 24. *Step one*, sales budgets are based on shareholders' set interest rates that top management must achieve. Typically this is one way negotiation and it is top management issue, in *step two*, to divide budget realistically between different business units based on sales forecast of them. Business units consist of sales persons that takes care of geographical area. In *step three*, manager who are responsible for a business unit, divides budget between sales persons.



Picture 24: *Sales forecasting and budgeting in company four. Amounts of business units and sales persons are imagined.*

Company four's budgeting is strongly depending on business units sales forecast, why accuracy of it is important. In order to be able reacting agile on changes in business units, they want to know how their sales are developing compared to forecast, last month and to budget. Company's CSFs, KPIs and meter are gathered in to table 11.

Table 11: *CSFs, KPIs and meters concerning sales forecasting and budgeting for company four*

CSF	Meet the shareholders set interest rate
KPI	- Business units' sales forecasts accuracy - Business units' sales must meet set budget
METER	- Month's actualized sales compared to forecast - Past month's sales compared to set budget, sales forecast and last month

They use IDC (international data corporation) as a source for market knowledge. Interesting information is how much economy in certain area's is developing, which indicates in their case how big investments they are ready to make.

Time and territory management

Each business unit covers one sales territory. Because company is in international business and local business is different between territories, they do not use common sales activity based territory management. They see that local sales manager is responsible for sales results so he can decide used tactics. In general company is only interested to see how much and how potential sales cases each business unit has in its sales pipeline. Their pipeline consists of their sales process steps. When business opportunity goes forward in a process its probability increases and worth in a pipeline also. Each local business areas must have offers in certain steps in certain stage, to be able forecast their sales, but company is not interested to manage in general, which activities are most important ones to do. Because company four gives responsibility of local time and territory management to its local business area managers, interview person did not know, what information could generally support all of them.

Sales force motivation

Company four uses both monetary and non-monetary methods. *Monetary* bonuses consist of personal compensation and half yearly given bonuses. Personal compensation comes directly through made sales. Half year bonuses consists of three parts, personal activity, company budget and business area's budget. Personal activity is estimated by own manager and cannot be identified mathematically. If company or business area reach its budget everybody will get same size of reward. *Non-monetary* rewards are worker of quarter and once in a year company rewards 6 – 8 workers in a kick-off. Worker of a quarter get his diploma and rewards in his own business unit, but whole company is present in kick-off. Idea is show respect to hard working employees. Company four does not see supportive information needed in sales force motivation.

Training the sales force

Company uses 360 degree estimation for recognizing training needs. In their case this means that all sales persons are evaluated by their stakeholders, which are superior, customers and colleagues. This enables identifying training needs that are discussed during development talk every 6 months and if needed earlier. As a supportive information they would like to have bench marking about new and effective selling techniques in different business areas. This is also seen more local sales management issue, so interview person did not know exact need.

Sales force performance evaluation

Company four uses balanced score card for performance evaluation. It is based on economic, customer, internal business process, and learning and growth perspectives. Financial meters are related to sales results and upcoming sales. Customer perspective is based on customer feedbacks. Two last ones are went through in development talks. CSFs, KPIs and meters are gathered in table 12.

Table 12: *CSFs, KPIs and meters concerning sales force motivation for company four.*

CSF	Meet the budget and keep customers satisfied
KPI	- Budget in set level - High customer satisfaction rate
METER	- Current sales against budget and forecast - Customer feedback scores

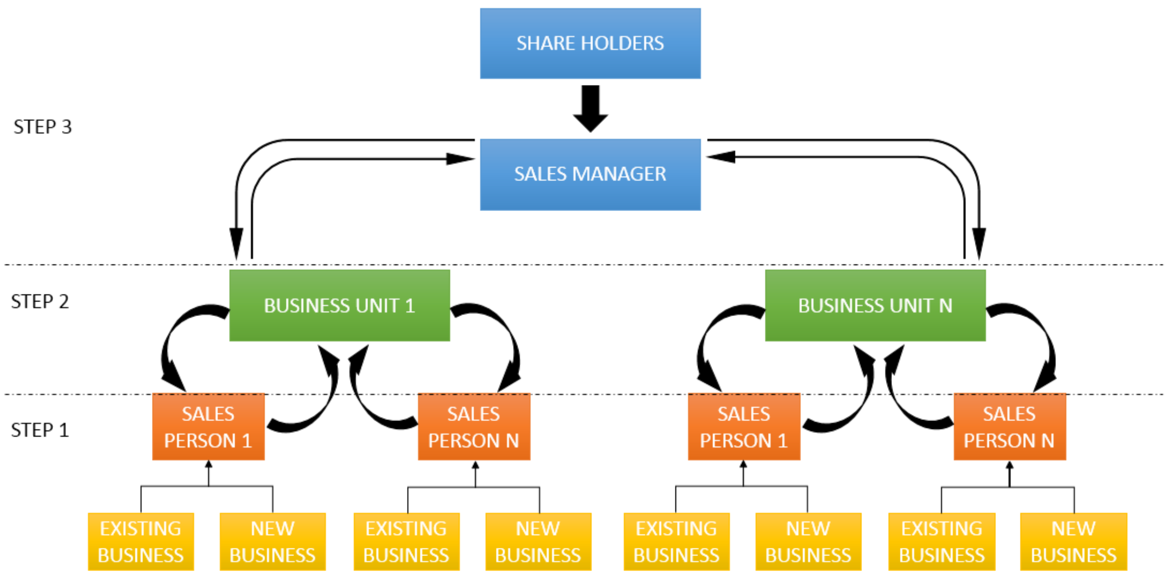
They would like to have more extensive information from customer visits. Information should include details about pain points and best practices of every visit. This would help them to identify which performances should be evaluated more carefully need more efforts.

6.5. Company 5

Company five is leading composite profile manufacturer in the world and concentrates on growing niche segments. The core of the operations is based on their own, internally developed composite technology, product range based on it and a strong market position in selected segments with a strong quality and brand image. Profitable growth is pursued by a relentless search for new applications and development in co-operation with customers.

Sales forecasting and budgeting

Company five uses from down to top forecasting and budgeting method, shown in picture 25. Model consists of three main steps and planning period is one year forward. *Step one* is that each sales person estimates their own sales forecast, which consists of two parts. Part one consists of current business that includes ongoing product selling to their existing customers and part two is new products for existing customers or new ones. Biggest part of turnover comes through existing customers and products, so sales growth logically comes through new products and customers. *Step two* is that business unit managers discusses with sales persons and estimate units total forecast. Practically each business unit has its own product and one customer may be in interaction with several business units. *Step three* is sales manager's discussion with shareholders who have certain profit expectations and dividing sales that budget between business units based on their own estimations. In this case sales persons' role in forecasting and budgeting is highlighted, because sales persons must know their customers well in order to be able to estimate their upcoming demand.



Picture 25: *Sales forecasting and budgeting in company five. Amounts of sales units and persons are imagined*

Company five CSFs, KPIs and meters are gathered in table 13. Their success factor logically were increasing sales and profitability, but they were really interested on seeing how much their existing and new businesses grows. In their case it means how much they can rise sales volume with current products for their existing customers, but also how much different product lines (business unites) are rising.

Table 13: *CSFs, KPIs and meters concerning sales forecasting and budgeting for company five*

CSF	Increase sales and profitability
KPI	- Business units' sales must meet set budget - Growth of existing business - Growth of new business
METER	- Current month's sales compared to set budget - Last year's sales compared current year/customer - Last year's sales compared current year/product line (business unite)

As a supportive information they would like to have better knowledge about three factors. *One*, competitor analysis, which means who won the deals, in which products and why? *Two*, their business is to produce half-finished products, so they would like to have statistics of what are the main end products, how demand of them is developing and what is use of them? *Three*, how legislation is chancing in EU, USA and ASEAN business areas.

Time and territory management

Company five consists of business units, which covers certain product line. One business unit can sell customers around the world and several business units can sell different products for same customer. Greatest part of business is ongoing deals with customers and they are concentrating keeping their customers satisfied. They have divided their customers into three different categories based on how important they are. Based on this category they identify activity plan that must be achieved. Activity plan defines frequency of different type of meetings and calls. Furthermore they have project type of business with their existing customers, which require high frequency contacting with customers. Focus is keeping customer close and notice how their needs are developing. CSFs, KPIs and meters are gathered in table 14.

Table 14: *CSFs, KPIs and meters concerning time and territory management for company five.*

CSF	Keep customer satisfaction high
KPI	- Meet activity plan's set activity levels / customer - Meet set activity level / projects
METER	- Number of different type of calls - Number of different type of customer visits

As a supportive information they would like to know two things. *One*, what is good activity frequency for achieving very good customer satisfaction and also keep competitors away. *Two*, how their customers are growing. This would enable of seeing what is potential to rise sales volumes. Most interesting is to know how customers' sales related to their products are developing.

Sales force motivation

Company five has two level motivation plan, which is executed through compensation. *Level one* is company level bonus, which is paid annually. It is based on whole company's sales and profits compared to set goals. This bonus is meant to motivate in long term. *Level two* is personal level bonuses, which are paid monthly. It consists of amount and size of new customers, amount of new products for existing customers, sales budget and achieved profit. Combination of which of those criteria are most paid depends on company's focus and salesmen's goal, which can be new or existing customers. CSFs, KPIs and meters are shown in table 15.

Table 15: *CSFs, KPIs and meters concerning sales force motivation for company five.*

CSF	Meet the budget and profit margins
KPI	- Budget in set level - Profit margin in set level - Rise amount of customers - Rise existing customers
METER	- Current sales against budget - Current profit against set goal - Amount of customers last year compared current year - Sales/customer last year compared current year

They would like to have information about how different motivation methods affect customers' satisfaction and which one is most effective for each sales person. Good solution would be for example use two different motivation methods for different business units and compare, which type of goals work for best. Method for gathering feedback could be calling customers day after sales call and ask few questions and let them define their satisfaction rate.

Training the sales force

Company five's has three steps education system. *Step one*, consists of basic training that includes selling skills and company knowledge. It is designed for new employees and its agenda depends on people who joins it. *Step two*, is custom training for all sales people, which include more advanced selling techniques and market knowledge. This is event, which is kept every 6 to 12 months. *Step three*, is business unit training that is meant to keep business unit's salesmen informed about new products. Basically all salespeople in same business unit have same training and it does not differ between them. Additional training needs are discussed in development talks.

Supportive information needs concern about what are each salesperson's individual strengths and weaknesses. This information could be gathered on customer feedbacks. Another useful information would be statics from training. This could be for example short exam after the training.

Sales force performance evaluation

Individual sales performances are evaluated based on budget and territory management goals, shown in table 16. All of these affect compensation criteria's discussed before. All criteria are evaluated ongoing, but each salesman must perform his numbers in monthly sales meeting to all his colleagues and business unit manager.

Table 16: *CSFs, KPIs and meters concerning sales force performance evaluation for company five*

CSF	Increase sales and profitability
KPI	- Sales must meet set budget - Sales must meet set profit level - Growth of existing business - Growth of new business - Meet activity plan's set activity levels / customer - Meet set activity level / projects
METER	- Current month's sales compared to set budget - Current month's profits compared to set budget - Last year's sales compared current year/customer - Last year's sales compared current year/product line (business unite) - Number of different type of calls - Number of different type of customer visits

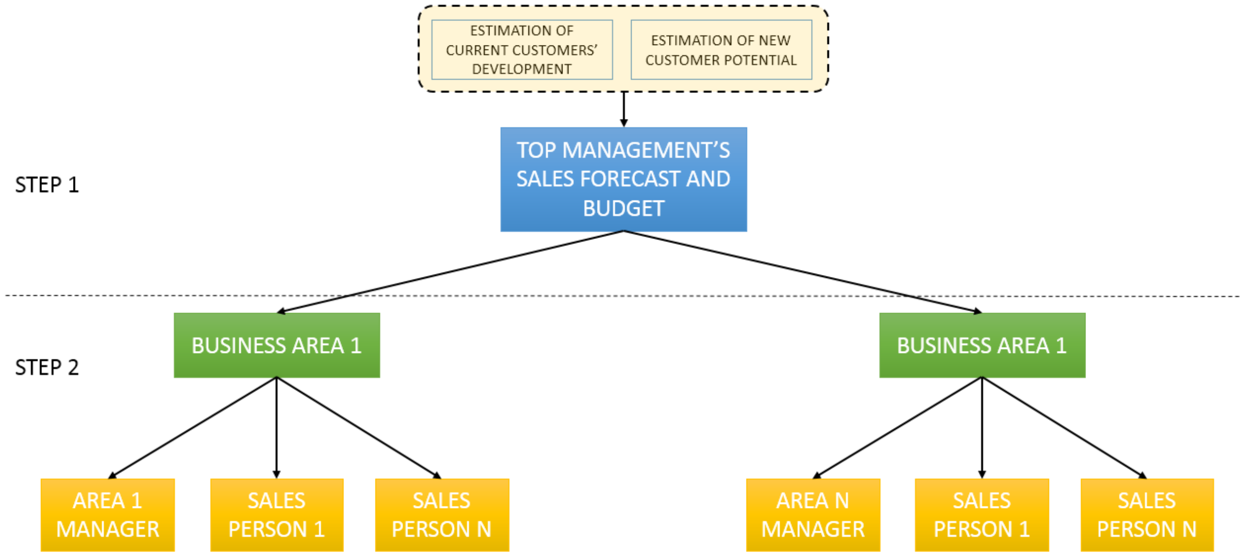
As a supportive information for performance evaluation they would like to know better, which customers' persons they should meet, how often and what type of meeting/call in order to keep them satisfied. They would also like to able to estimate better which activities must be made in order to win new projects, sell new products and get new customers, because now they are focusing much to existing ones.

6.6. Company 6

Company six provides financial and human resources management services. It provides services and software solutions that support administration and business operations both in enterprises and in public sector organizations. They support their clients with financial and human resources management so that it releases clients' resources for management of core businesses and makes a profit through accurate information and efficient practices.

Sales forecasting and budgeting

Company six has two step sales forecasting and budgeting process, shown in picture 26. It is based from top to down method. *First* step begins top management's estimation of market potential. In their case most critical in order to have good forecast is to estimate customer dearth correctly and also potential of new customers. This step ends to sales coordinator's made budgets for each business area. *Second* step includes dividing of sales budget between area manager, who is responsible of existing customers, and sales persons who are responsible of new customers.



Picture 26: *Sales forecasting and budgeting in company six. Amounts of business areas and persons are imagined.*

Company six is following their development of their budget, customer dearth rate and balance between lost customers and new ones. Their CSFs, KPIs and meters are shown in table 17. Their goal is to lower dearth rate, because their business is based on long customer relationships and typically their customers do not change them if they do not make any mistakes. In order to keep their business growing, they must also have more new business than lost, which is reason why they are following balance between lost and get customers. They are following all these meters in quarters and compare results to whole year's forecast and to last year.

Table 17: *CSFs, KPIs and meters concerning sales forecasting and budgeting for company six*

CSF	Lower customer dearth and acquire new customers
KPI	- Business areas' sales must meet set budget - Get customer dearth rate smaller - Acquire new customers more than loss existing ones
METER	- Current month's sales compared to set budget - Last year's customer dearth rate compared current year - Amount and size of new customers compared to lost ones in current year

Company would like to have supportive information about how business areas' legislation concerning bookkeeping, company taxes and salaries are chancing. Changes in legislation require changes in customer's services, which require often consulting that must be sold to them. Information is available in government internet pages, but it should be integrated with the system like, which customers it concern and how much change cost and execution of them take time.

Time and territory management

As said company's business is divided to geographical business areas and each of them have own area manager and group of salespeople. Area manager is responsible of existing business and his goals are related to customer service process, which is aimed to keep customer dearth rate as low as possible. Service process is different for different class of customers, which means that better customers get more service. Sales peoples' goals are focused on auguring new customers. Their salespeople get already booked meetings from another company and they have estimated size of their sales force based on amount of companies in each business are. Their activity levels are calculated from estimation how many customer meetings are approximately needed to have one deal. CSFs, KPIs and meters are gathered in table 18.

Table 18: *CSFs, KPIs and meters concerning time and territory management for company six.*

CSF	Achieve sales budget and keep dearth rate low
KPI	- Meet service process standards - Reach activity standards for new customers - Current sales compared to budget
METER	- Amount of check-up meetings with existing customers - Amount of feedback from existing customers - Answering time for customer feedbacks - Amount of different type of potential customer meetings - Monthly agreements plus current sales compared to budget

Company's business is based on long term customer relationship, which is necessary in order to get business profitable. When new customer comes typically establishing cost are quite high and it may takes 6 – 36 months to get customer profitable. This is reason why they would like to have more information about signals, which indicates is or is not customer willing to change service provider. This information could help them to modify service process and estimate amount of needed area managers better. This information could be gathered for example from customer feedbacks in which they can tell if they were not satisfied.

Sales force motivation

Company six uses two motivation methods, monetary and non-monetary. *Monetary* method consists of two parts, personal bonus and business area bonus. Personal bonus is paid by achieved sales and it is paid monthly. Business areas' bonuses are teams' sales budget goals that is annually paid for all member of it as same size. *Non-monetary* method is weekly email, in which sales coordinator sends mail to all business units that highlights three best salesmen. CSFs, KPIs and meters are shown in table 19.

Table 19: *CSFs, KPIs and meters concerning sales force motivation for company six.*

CSF	Reach budgeted sales goal
KPI	- Individual sales goal - Business area's sales goal
METER	- Individual sales compared to budget - Business area's sales compared to budget

Interviewed person did not know what supportive information could be useful for identifying effective motivation methods.

Training the sales force

According to interviewed person they only employ senior salespeople, who know how to sell. They only provide product and legislation trainings, which are held when changes occur. Additional trainings needs are discussed in the development talks. Supportive information could be needed concerning customer feedback that indicates lack in sales performances, like product and legislation knowledge.

Sales force performance evaluation

As said company six has salespersons and area managers and because they are aimed to do different types of sales their performances are evaluated differently. Both must meet their budget, but furthermore they need to achieve set activity goals. For area manager goals are based on service process and amount of customers that it covers, and for sales person goals are based on estimations of how many different activities should be done in order to achieve set sales budget. CFSs, KPIs and meters are shown in table 20.

Table 20: *CSFs, KPIs and meters concerning sales force performance evaluation for company six*

CSF	Increase sales and profitability
KPI	- Sales must meet set budget - Sales must meet set profit level - Meet service process plan's set activity levels / customer - Meet set activity level for acquiring new customers
METER	- Current month's sales compared to set budget - Current month's profits compared to set budget - Number of different type of customer visits

Company six sees customer feedback about success rate of customer visit important supportive information. This means information like, does customer feel satisfied after the visit and if not why.

7. Analysis of the results

Discussion consists of five paragraphs that are same as interviewed topics. In each of them is described how companies saw this topic, what best practices are and how suitable dashboard would look. Practice is seen as a best practice if more than 50% of companies. Through this main research question ”*What are the main BI- tools for providing better performance for sales departments in medium size companies?”* can be answered. In each paragraph is described topic’s CFSs, KPIs, meters and supportive information needs, which gives answers to empirical secondary questions:

- *What are critical success factors for middle size companies' sales departments?*
- *What performances should be monitored?*
- *What data is needed to monitor those performances?*
- *What additional information is needed to support decision making?*

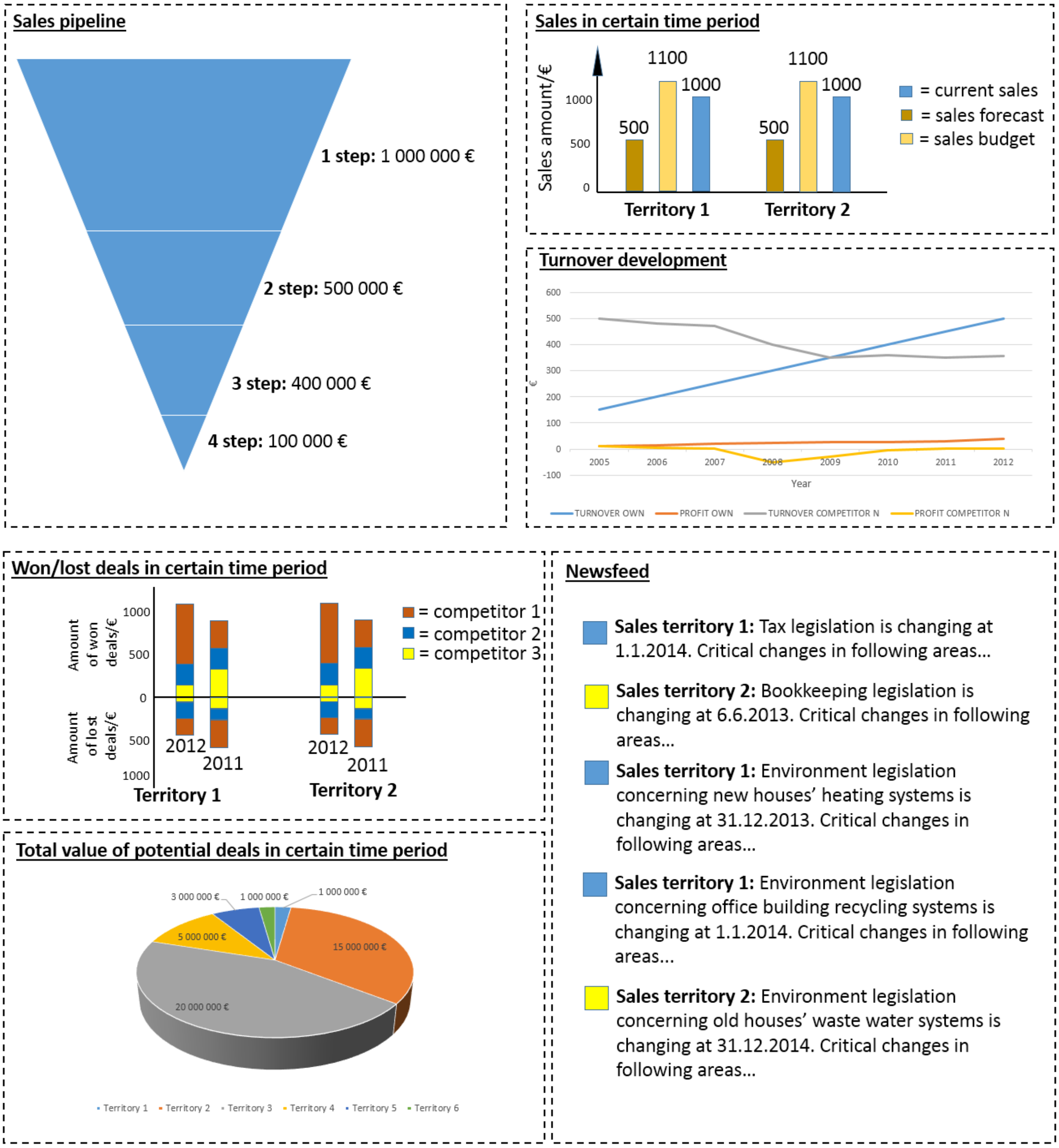
7.1. Sales forecasting and budgeting

All the companies share the same goal in their budgeting, “this year company must sell more and make more profit than last year”. Companies budgeting methods differ, which makes comparing of them challenging. 4/6 used from top to down method and all rest used from down to top method. This means that about 67% of interviewed the companies saw that management can estimate better upcoming sales than their sales force. This method supports performance management ideology, which is seen from top to down method. In all companies management was interested on seeing how their sales are developing compared to budget, forecast and last year at the same time. 4/6 companies saw sales history data as a main tool for making budgets. Common for both methods were that sales pipeline was seen as a key forecasting tool, which indicates how much sales is likely to come in future. Time period for this forecasting changed between companies, because nature of their business and sales period. Three out of six were also interested to see how their different product lines are developing compared to last year for estimating upcoming sales and budget. Based on research results, best practices

Table 21: *CSFs, KPIs and meters, which are seen best practices for sales forecasting and budgeting*

CSF	Increase sales and profitability
KPI	- Current sales ≥ budget goal, sales forecast and sales at last year on same time - Value of sales pipeline > x amount of euros
METER	- Sales per person/sales territory/company - Purchase probability percent * value of the deal

Three main areas for supportive information can be recognized. *One*, 5/6 companies need information about their competitors and their own performance compared to them. They want to know, how many deals they won/lose for each competitor per territory/product line. Important is also to know, how much their competitors have increased compared to them. Answers for describing it differ, but good measure is for example comparing development of turnover and profit, for last five years. *Two*, 3/6 companies need information about amount of potential buyers in each sales territory and their purchase schedule. *Three*, 3/6 companies need to know how legislation in their different business areas is developing. Dashboard that fulfills all described needs in this paragraph is described in picture 27.



Picture 27: *Example dashboards concerning sales forecasting and budgeting*

Dashboard consists of six main parts: sales pipeline, sales in certain time period, turnover development, won and lost deals in certain time period, newsfeed and total value of potential deals in certain time period. In production version information depth dimension must be designed in a way customers want them. This means for example that companies set their sales territories differentiate, and information for newsfeed changes also between industries.

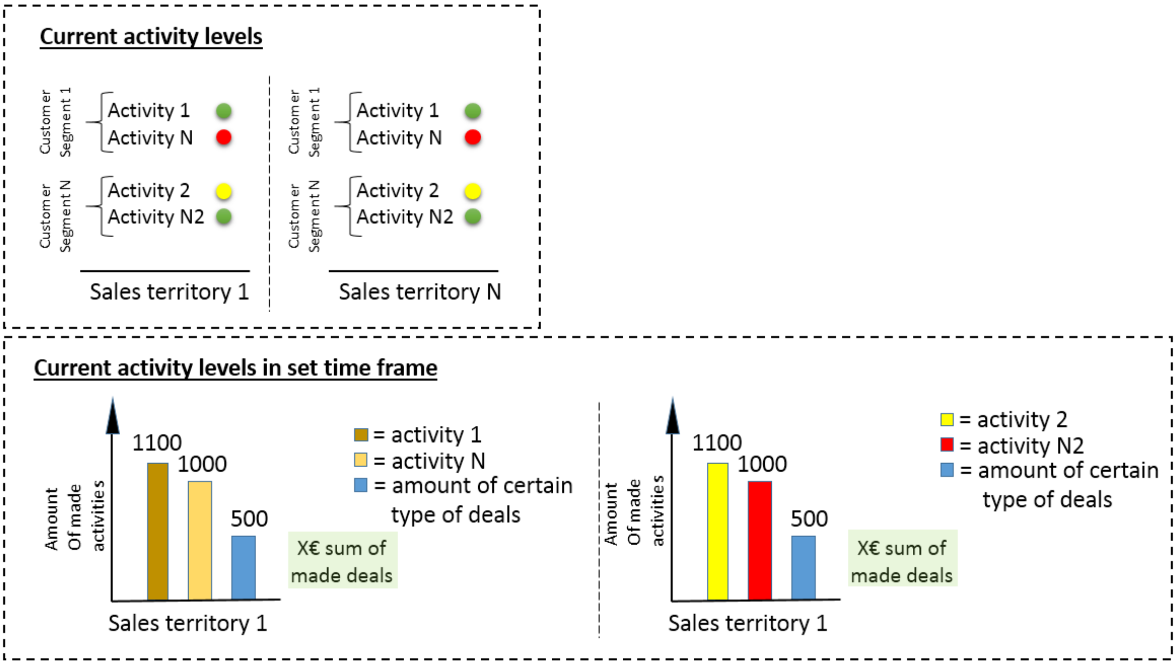
7.2. Time and territory management

All companies share the common interest to allocate their resources effectively, by recognizing suitable activity levels for each sales territory. 50% of the companies were in international business that affected to followed activities, which were different between sales territories. Reason is that local markets are different between each other's and business cannot be run identically in them. Identical for all companies were that they want to focus on different activities concerning different type of customers. In some case this meant different activities between new and existing customers or between different customer importance classes. Activity goals in all companies were based on sales management experience and history knowledge. This issue is emphasized in international environment, where local sales managers know better key activities than higher ranked non-local manager. Common for all companies were interest to follow activities by territory and by customer segment. Different types of sales activities are not mentioned because they are different between industries. Often companies want monitor activities, like meetings, emails, calls and quotes, but it is hard to narrow down, which type of calls and meetings etc. are the ones to follow in general. If company's business is based on existing customers, monitored activities are different than companies' that businesses are based for getting new customers. However it is important to notice sales territory's local sales manager must understand that sales processes are different between new and existing customers and both include many type of sales calls and meetings. Basic idea of CFSs, KPIs and meters are gathered in to table 22.

Table 22: *CSFs, KPIs and meters, which are seen best practices for time and territory management*

CSF	Meet the set activity standards
KPI	- X-amount of different types of sales calls per sales territory > set level - X-amount of different types of customer visits per sales territory > set level
METER	- Amount of different type sales calls / sales person - Amount of different type customer meeting / sales person

As a supportive information, 50% of the interviewed companies want to know how many different type of activities are needed to have wanted amount of sales in each sales territory. Idea is to be able to set better activity levels and also be able to estimate how many sales people are needed to full fill wanted amount of deals. From dashboard point of view company must consider do they sell in the same way to different customer segments. If company sells differently to different customers, sales process has to been seen different ones even if they are in same sales territory. This is common for companies who sell regularly both new and existing customers in same sales territory. In picture 28 is shown dashboards for time and territory management.



Picture 28: *Example dashboards concerning time and territory management*

Dashboard consists of two parts. *First one*, shows with traffic lights is certain territory reaching its set activity levels in certain customer segment. *Second one*, shows how many different type of activities are needed to get one deal and sum of those deals in monetary units, in set timeframe. All activities are named as N, because they need to be set specifically to respond company's own activities.

7.3. Sales force motivation

In all interviewed companies' sales people motivation methods was related to individual monetary monthly compensation. 50% of these companies used team bonuses that were related to team's results. This was seen as a good way to build individual persons' commitment to team's budget also. Only one company had partly activity based compensations, which means that if sales people do all their activities, they get part of their bonuses even if they do not meet the budget. Challenge in this method was seen in understanding right activities to lead sales people at right direction. Non-monetary motivation methods differentiate a lot between companies and common ways cannot be described. 0/6 of companies used any comparison about affectivity between different used motivation methods. Sales force motivation was seen really budget related, which is understandable, because monetary goals are achieved, when them are met. Challenge is how ever to guide salesmen to do right activities, if they are not a way to motivate them. Common CSFs, KPIs and meters are gathered in table 23.

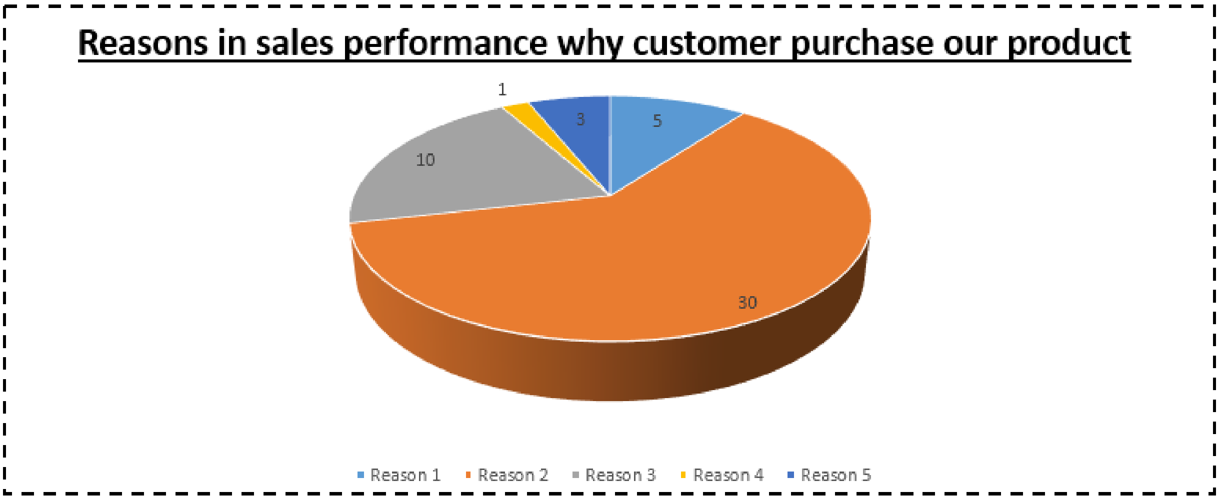
Table 23: *CSFs, KPIs and meters, which are seen best practices for sales force motivation*

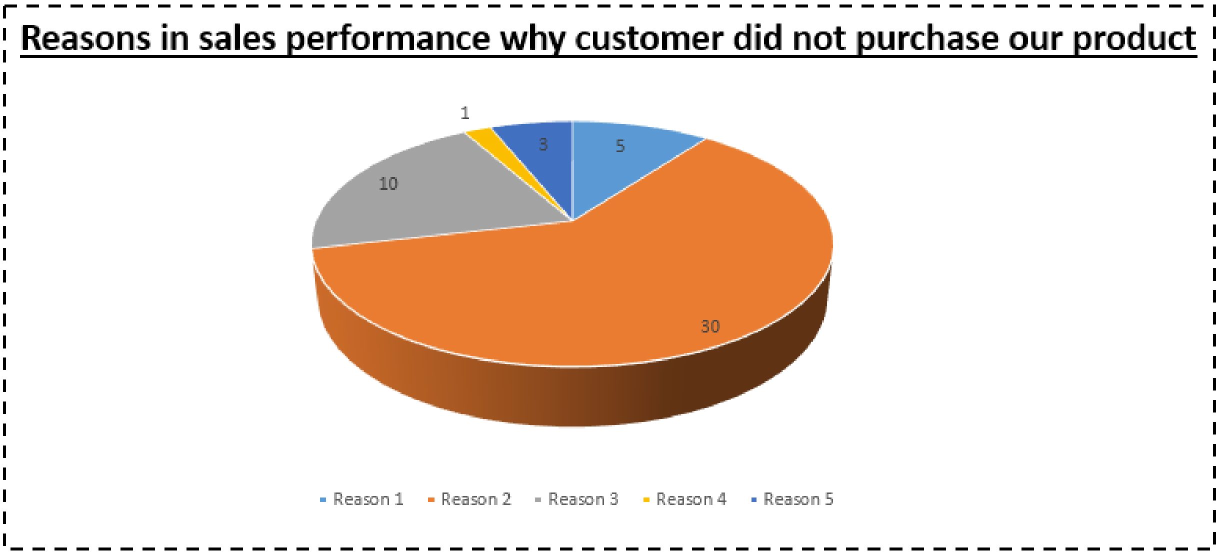
CSF	Reach budgeted sales goal
KPI	- Individual sales goal > set budget - Team’s sales goal > set budget
METER	- Individual sales - Team’s sales

50% of interviewed companies did not know what supportive information could help them to recognize better motivation methods. 50% saw some supportive information useful, but they were interested on different things. 2/6 were interested to know what motivation method is most useful for individuals, but even they see thing a little bit different. As a result companies seems to be quite satisfied to their motivation methods, because they do not see need to systematically develop them. Another reason can be work contracts that can be hardly changeable and if sales are going well sales managers probably do not want to take risk spoil them. Dashboard that can be used to see how current sales are compared to budget, is shown in picture 27.

7.4. Training the sales force

All companies had basic training for new people and for all about new products. Development talks were seen also seen good place to talk about training. 5/6 of the companies saw that customer feedback could support/supports recognizing of individual’s / team’s / sales territory’s training needs. This feedback should be asked from customer randomly after they have made a decision to buy or not buy the product. This can be seen as supportive information, when sales managers make training plans. This enables recognizing best sales practices in a company but also development areas. Dashboard for describing this is shown in picture 29. Interviewed persons did not see any needs for performance management concerning sales force training.



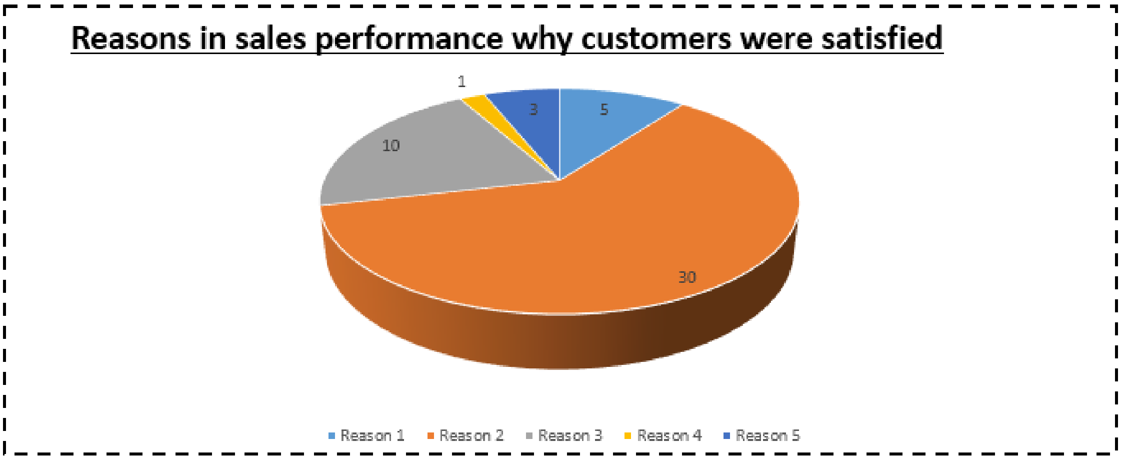


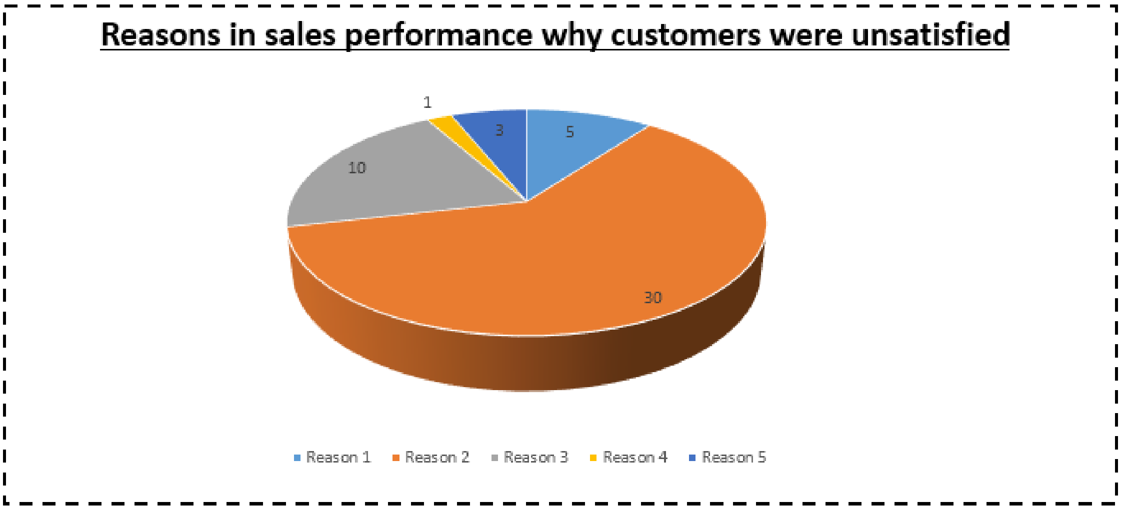
Picture 29: *Example dashboards concerning training the sales force*

Dashboard consists of two parts: reasons in sales performance why customer bought or did not bought our product. As said this information should be gathered by someone else than company itself, in order it to be objective. Also reasons should be designed to fit to company.

7.5. Sales force performance evaluation

All interviewed companies saw that most important sales people evaluation criteria were amount of different activities and budget goals. Followed activities are depended on sales territory and customers in then as said earlier in paragraph 7.2. Budget goals were based monetary numbers and companies like to compare current sales between sales forecast and budget. Both of earlier described evaluation criteria are based on CFSs, KPIs and meters described in paragraphs 7.1 and 7.2. They can be followed by using dashboards described in pictures 27 and 28. 4/6 interviewed companies need feedback information from customer meetings. 3/6 would like to know better how satisfied they customers were made calls and meetings. Furthermore they would like to reasons, why they were satisfied or not satisfied. This information is useful for aiming sales performances on to right direction and recognize pain points in it. Dashboard for describing this is show in picture 29.





Picture 29: *Example dashboards concerning sales force performance evaluation*

This dashboard looks quite same as dashboard in picture 28. Now the focus is finding the reasons why customer were or were not satisfied. This information is very important to provide positive feedback for sales force even if they do not get deal every time. Dashboard also indicated if customer were unsatisfied even if he bought the product or service. Limitation for this dashboard is that it can only describe one sales territory’s situation, because reason probably change between them.

8. Discussion

Purpose of last chapter is to show research's conclusion, give action recommendations for Mepco Oy, estimate how well research succeeded and finally give some topics for future research.

8.1. Conclusion

Goal for this research was answering main research question "*What are the main BI- tools for providing better performance for sales departments in medium size companies?* ". Answer to this question was created as a conclusion from answers of eight secondary questions.

First *secondary question was "What is sales management in general and what are main responsibility areas of it?".* This question was answered in chapter two. First two sales management theories were introduced and main areas of it recognized. These two theories were compared between each other's and main areas of sales management were recognized in sections 2.1 – 2.4. Section 2.5 defines sales management's scope for this research, which consists of five main issues: *sales forecasting and budgeting, time and territory management, sales force motivation, training the sales force and sales force performance evaluation.* Scope was based to cover all critical sales management responsibility areas, which relationship between each others are shown in picture nine. Idea is that company must first be able setting budgets and make sales forecast. Next it must divide its sales resources between different sales territories and last it need to motivate, educate and evaluate sales force performances.

Second *secondary question was "How performances can be managed and monitored?".* This question was answered in chapter three. In first paragraph 3.1 business's relationship to performance was described. Performance was said to mean in this thesis performances that are related to sales departments' issues in order to achieve set goals. Paragraph 3.2 describes different management methods mainly focusing strategic management, management by objectives and process management. Important was to notice that it is not important for this thesis interviews to build direct link to strategy, because it changes a lot between companies and knowing it does not provide any better answers. Paragraph 3.3 introduces performance monitoring theories. Idea in performance monitoring is to get company easier controllable so that management can easier see how well company is executing set strategy. Performance monitoring is based on performance management, which consists of critical success factors, key performance indicators, tactics and meters. For this research's goal it was necessary to be able understand main factors that enables making company's performance easier controllable. CSFs, KPIs and meters were seen as good way to get general picture of interviewed companies' sales performance, described in paragraph 3.4. Performance management is inclusive system from company's vision to real actions, but it was narrowed, because it was seen too extensive to middle size companies. Scope for performance management and sales management's issues relation on them is shown in picture 13.

***Third** secondary question was "What is business intelligence and how it can produce supportive information for decision-making?".* This question was answered in chapter four. In paragraph 4.1 was described what knowledge management, information, why information is important for decision making and how it can be identified from company. In general, information is needed in all organization levels and it changes radically depending on level where decisions are made. To be able understand what information is really needed to support decision, company must find persons who really know what information is important, because of the information cap, shown in picture 16. Method for recognizing information need is based on understanding source, type and subject of it, shown in picture 17. After this company can estimate is information available and how it should be gathered. Business intelligence itself was defined in paragraph 4.2. Definition of it changes a lot between authors. Term is also developing and good determination of it is shown in picture 19. It shows that BI can provide better information for all people in a company and it is more extensive term than competitor or competitive intelligence, which can be seen as parts of it. Basically business intelligence is analyses concerning subjects, which company's sees important and worth of analyzing.

***Forth** secondary question was "How BI is related to performance management and monitoring?".* This question was answered in paragraph 4.3. BI and performance management can be seen as overlapping terms, shown in picture 20. Typically performance management has straight link to company's strategy and business intelligence is seen more as support for decision making. BI is also often based on both external in internal information sources were performance management is mainly consisting internal sources. In some cases performance management is also seen as business intelligence. For being able to answer main research question, performance management tools must be seen as a part of BI.

***Questions five – eight** were: what are critical success factors for medium size companies' sales departments? What performances should be monitored? How those performances can be monitored? What additional information is needed to support decision making?* These questions are answered in chapters six and seven based on research's results. Each company have own critical success factors concerning sales management issues, which differentiate between companies, shown in paragraphs 6.1 – 6.6. Most common ones, which are seen as best practices are shown in chapter seven. Shortly, for *sales forecasting and budgeting* main BI-tools were: sales pipeline, comparison between current sales, sales budget and last year's sales, estimation of market potential, competitors' turnover and profit development compared to own development, balance between lost on won deals for different competitors and newsfeed concerning changes in business area. For *time and territory management* main BI-tools were: sales activity monitoring by type of activity and territory and statistics of how many different types of activities have caused monthly sells. For sales force motivation main BI-tools were: individual and team activity and sales results based bonus systems. For training the sales force main BI-tools was statistics of purchase decisions. For sales force performance evaluation main BI-tools were: comparison of activity levels and sales results to set goals, and statistics of reason of why customers were or were not satisfied.

8.2. Action recommendations

Action recommends for Mepco consists of three parts: recognizing their customers who can benefit for dashboards shown in discussion, building test environment for these BI-tools and selling product for customers.

Recognizing their customers who can use dashboards shown in discussion can be done by using same parameters, which have used in this research for selecting companies. Company must be at least medium size, it must have sales process that are longer than 3 weeks and it must be at least at third level on CRM-maturity model. First it is easier to focus on companies that run same type of sales process in all of their sales territories, so that it does not require so complicated analytics to build wanted tools. In this case establishing costs for customers could be lower and commitment would be easier to get.

Building test environment for these BI-tool would be first done in Microsoft Dynamics CRM cloud environment, because in it sales processes are process oriented, which makes execution of these BI-tools probably easier. After test environment works perfectly, it could be demonstrated to some customers who are interested of it and few pilot project could be done. That is how level of problems in BI-tools can be decreased.

Selling product for customers requires that Mepco commercialize these BI-tools. Their benefits must be clear and BI-tools should be sold at least at two different variations, like basic tools and professional tools. Basic tools could include dashboards for budgeting and forecasting, shown in picture 28. Professional tools should include those meters plus all rest described in discussion chapter. Pricing must be calculated and different methods compared before can be said, which works as best.

8.3. Evaluation of research and future research topics

First criteria for evaluating how well this study has succeeded is estimating does it met set goals. Earlier in this chapter is research questions and answers on them, and also action recommendations. From this point of view all questions can be seen answered and research can be seen successfully. Also from Mepco Oy's point of view research can be successful, because BI-tools were identified.

From theoretical point of view research are often estimated based on reliability and validity of them. Reliability means trustfulness and repeatability of research. Typically trustfulness can be seen high, if research is repeated, its results were exactly the same. Validity instead means how well used research methods and meters can be used for measuring research topic. High validity means that changes in results are caused by changes in researched phenomenon and not in nothing else. Typically validity is divided to internal and external validity. Internal validity means how logical and consistent interpretations are. External validity means how well interpretations can be used also for other than researched cases. (Olkkonen1993, pp. 38 – 39; Hirsijärvi & Hurme 2007, pp. 186-187.)

Reliability and validity are challenging for qualitative research and cannot be used directly for it, because they have been created for analyzing quantitative research. In quantitative research reliability is used for estimating likelihood that results are truth. In qualitative research this kind of numerical value cannot be calculated. Some authors see that some other terms should be used for estimating qualitative research. (Olkkonen 1993, pp. 38 – 39: Koskinen et al. 2005, pp. 254 – 255.) According to Koskinen et al. (2005, p. 257) estimation criteria should be trustfulness instead of internal validity, portability instead of external validity and dependence instead of reliability. Trustfulness can be increased by using many different research methods and actively researching deviances. Portability can be increased by inclusive description of research target and results. Dependence can be increased with accurate and clear documentation, so that other researchers can examine it. (Koskinen 2005, p. 257.)

This research includes both things that increases its trustfulness but also things that decreases it. Research is done by single researcher and analyzes are based on his interpretations and understanding of researched topic. This is why it is possible that researcher has misunderstand interviewed persons or theory. However all frameworks, which are used as a base for research, analyses and conclusion, are tried to describe as clear as possible. Before the interviews interviewed person got descriptions of research background, which makes easier for them to understand framework and questions beforehand and made answer easier comparable.

Portability in this research is noticed by describing used research method, selection criteria for research companies and execution of research as clear as possible, when its execution in different organizations should be possible. All selected companies were same sized in CRM-users, in same CRM-maturity level and presented different industries that makes portability of results higher. Results should not differentiate much even if researcher change. Also theory behind the research should be solvable also other same type of researches.

Dependence of the research have been proved by documenting it as extensive as possible and by using general scientific methods, which enables other researchers' be able for estimating it. All interviewed persons were unknown for interviewer, which increases research objectivity. In general from scientific point of view research's trustfulness, portability and dependence seems to be in good level. Ways for improving them could be for example using more researchers, using more different research methods or interviewing more peoples. However this was not possible, because of limited resources, so research can be seen successful also from scientific point of view.

Research's topic "*business intelligence as sales analyzing tool and source of supportive information in CRM*" is not much researched topic in literature. Most researches focus performance management, business intelligence, customer relationship management or sales management itself, but do not handle them together. This is why it increases knowledge of sales management needs for business intelligence in CRM. In future role of sales is probably increasing, because customers come more knowledgeable and they require great service instead of good one. Challenge is that BI systems, which improve that experience, costs a lot and customers must understand the benefits of them in order to use their resources on them. This is why it is important to create more understanding, which BI- tools are most useful ones. As a future research topics it would be good to do same research from marketing or service point of view. These two areas are often included to CRM and it would be good to know, which type of BI they need. Today's business is going through new marketing, sales and customer service standards, where traditional ways to do these does not work effectively anymore. Customer experience is created as a combination of those elements and product itself. This is why general understanding of all needed BI-tools in different areas of CRM would be good to increase.

Last it is good to estimate research from researchers own point of view. Execution of project all away from writing a theory, designing of the interviews, executing interviews and making conclusion has been great learning process. Theoretical part increased a lot of researches knowledge of sales management, performance management and business intelligence. Interviews increased researcher's knowledge of how business intelligence is used in everyday business, which is hard to get from literature. It was also nice to notice if company would not be able to run its sales processes at least on CRM-maturity level three, it does not need any business intelligence. Reason is that if do not operate systematically it cannot be controlled based on its operations analyzes. Important to notice is that companies had many different type of information needs concerning market environment and it is hard to recognize in general way. Role of professional local sales management also was highlighted in many companies, because they got the best knowledge what is important in current market. This probably also decreases information gap, because then we do not provide information that does not support or describe local business's development. Sales seems to follow the rules of local business environment and it is very hard to use same processes in all territories. All in all research can be seen successful also from researcher's point of view, because it full filled all set goals and increased researcher's professional knowledge a lot.

References

Anderson, R., Babin, J., Hair, J. & Mehta, R. 2010. Sales Management: Building customer relationships and partnerships, USA, South-Western, 462 p.

Anderson, H., Karjalainen, J. & Laakso, T. 1994. ”Suoritusten mittaus ohjausvälineenä”. Tampere, Metalliteollisuuden keskusliitto, 111.p (In Finnish)

Azvine, B., Cui, Z., Nauck & D. 2005. “Towards real-time business intelligence”. BT Technology Journal, Volume 23, Issue 3, pp. 214 – 225.

Ariyachandra, T. R. & Frolick, M. N. 2008. ”Critical Success Factors in Business Performance Management – Striving for Success”. Information Systems Management, Volume 25, pp. 113 – 120.

Aguilar, F. J. 1967. Scanning the Business Environment. Macmillan, New York, 239 p.

Bititci, U. S., Carrie, A. S. & McDevitt, L. 1997. “Integrated performance measurement systems: a development guide”. International Journal of Operations & Production Management, Volume 17, Number 5, pp. 522 – 556.

Bittlestone, R. 1997. “From Performance Measurement to Performance Management”. Measuring Business Excellence, Volume 1, Number 4, pp. 8 – 13 Brackett, M. H. 1999. Business Intelligence Value Chain. DM Review. March.

Brandt, W. D. 1994. User-Directed Competitive Intelligence: Closing the Gap between Supply and Demand. Quorum Books, Westport, CT.

Business or Corporate Performance management, 2003. Featured article. International Journal of Productivity and Performance Management, December 2003, Volume 52, Issue 7

Buskard, D., Glassey, K., Mollot, M. & Richards, T. 2000. Business Intelligence Made Easy. Solution: Know Where You Are Today / Solution: Deliver Dynamix Info. Insurance & Technology. No. 9, pp. 46 – 47.

Bose, R. 2006. Understanding management data systems for enterprise performance management. Industrial Management & Data Systems, Volume 106, Number 1, s. 43 – 59.

Choo, C. W. 2002. Information management for intelligent organization: The art of scanning the environment. 3rd edition. Information Today, Medford, NJ.

Cokins, G. 2009. Performance Management: Integrating Strategy Execution, Methodologies, Risks and Analytics. John Wiley & Sons, Hoboken, New Jersey

Coveney, M. 2003. Corporate Performance Management (CPM): Systems and steps to CPM. [WWW]. [Referred: 1.12.2012]. http://www.business-forum.com/Comshare01.html.

Collins, R. J. 1997. Better Business Intelligence: How to Learn More about Your Competitors. Management Books, Chalford, UK.

Cunningham, M. J. 2002. Customer Relationship Management. United Kingdom, Oxford, Capstone Publishing. 124p.

Davenport, T. H. 2010. Are you Ready to Reenigineer Your Decision Making?. MIT Sloan Management Review, July 2010, pp. 1 – 7.

Davenport, T.H. & Prusak, L. 1998. Working Knowledge: How organizations manage what they know. Harvard Business School Press, Boston

de Waal, A. 2007. Successful performance management? Apply the strategic performance management cycle! Measuring Business Excellence, Vol 11, number 2, pp. 4 – 11.

Eckerson, 2009. Performance Management Strategies. Business Intelligence Journal. Vol 14, Number 1. pp. 24 – 27

Fahey, L. 2007. Connecting Strategy and Competitive Intelligence: Refocusing Intelligence to Produce Critical Strategy Outputs. Strategy & Leadership, Volume 35 Issue 1, pp. 4 – 12.

Falshaw, J. R., Glaister, K. W. & Tatoglu, E. 2006. Evidence on Formal Strategic Planning and Company Performance. Management Decision, Volume 44, Issue 1, pp. 9 – 30.

Fisher, M. 2004. Developing an Information Model for Information- and Knowledge-Based Organizations. Gilchrist, A. abd Mahon, B. (Eds.). Information Architecture: Designing Information Environments for Purpose. Facet Publishing, London, pp. 5 – 26.

Fleisher, C. S. 2003. Should the Field Be Called “Competitive intelligence” or Something else? Fleisher, C. S. and Blenkhorn, D. L. (Eds.). Managing Frontiers in Competitive Intelligence. Contoversies in Competitive Intelligence: The Enduring Issues. Praeger Publiehers, Westport, CT, pp. 56 – 69.

Frishammar, J. 2003. Information Use in Strategic Decision Making. Management Decision, Vol. 41, No. 4. 318 – 326.

Frolick, M. & Ariyahandra, T. 2006. Business Performance Management: One Truth. Information Systems Management, Winter 2006, pp. 41 – 48.

Ghoshal, S., Kim, S. 1986. Building Effective Intelligence Systems for Competitive Advantage. Sloan Management Review. Vol. 28, No. 1, pp. 49 – 58.

Greene, R. M. 1966. Business Intelligence and Espionage. Dow Jones-Irwin, Homewood, IL.

Hannula, M., Leinonen, M., Lönnqvist, A., Mettänen, P., Miettinen, A., Okkonen, J. & Pirttimäki, V. 2002a. Nykyaikaisen organisaation suorituskyvyn mittaus, Research report of faculty of Industrial engineering 1/2002, Tampere university of technology, Tampere (In Finnish)

Hannula, M., Korsman, U., Pajarre, E. & Seppänen, M. 2002b. Ohjeita opinnäytetyön kirjoittajalle: Tuotantotalouden osaston diplomi-, seminaari-, ja harjoitustyöohje. Tampere, Tampereen teknillinen korkeakoulu. 36 p. (In Finnish)

Hannula, M. & Pirttimäki, V. 2005 A Cube of Business Information. Journal of Competitive Intelligence and Management. Vol. 3, No. 1, pp. 34 – 40.

Harisalo, R. 2008. "Organisaatioteoriat". University of Tampere, Tampere, 332 p. (In Finnish)

Harwood, G. 1994. Information Management. Logistics Information Management. Vol. 7, No. 5, pp. 30 – 35.

Hirsijärvi, S., Hurme & H. 2008. Tutkimushaastattelu : teemahaastattelun teoria ja käytäntö. Helsinki. Gaudeamus Helsinki University Press. 213 p. (In Finnish)

Huotari, M.-L. 2000. Tietohallinto. Mäkinen, 1 (Ed.). Tiedon tie: Jodatus informaatiotutkumukseen. 4th edition. Gummerus, Saarijärvi, Finland, pp. 144 – 175. (In Finnish)

Jalonen, J. & Lönnqvist, A. 2009. Predictive business – fresh initiative or old wine in a new bottle. Management Decision, Volume 47, Number 10, pp. 1595 – 1609.

Jobber, D. & Lancaster, G. 2009. Selling and sales management, England, Prentice Hall ltd, 545 p.

Kasanen, E., Lukka, K. & Siitonen, A. 1993. The Constructive Apporach in Manage-ment Accounting Research. Journal of Management Accounting research. Vol. 5, pp. 243 – 264.

Kapplan, R. S. & Atkinson, A. A. 1998. Advanced Management Accounting, 3. edition. New Jersey, Prentice Hall. 798 p.

Kapplan, R. 2009. Measuring Performance (Pocket Mentor), Harvard Business Press, Boston, Massachusetts.

Kalakota, R. & Robinson, M. 2001. e-Business 2.0: Roadmap for Success. Addison-Wesley, Boston

Kaplan, R. S. & Norton, D. P. 2001. Transforming the balanced scorecard from performance measurement to strategic management: Part 1. Accounting Horizons, Volume 15, No 1, pp. 87 – 104.

Kemppilä, D. & Lönnqvist, A. 2003. Subjective Productivity measurement, The Journal of Balanced Scorecard Implementation, Management accounting Research, Vol 13, Issue 3, pp. 23 – 343.

Kodama, M. 2007. Project-based organization in the knowledge-based society, Imperial College Press, London, p. 269.

Kotler, P. 2003. Marketing Management. 11th International Edition. Prentice Hall, Upper Saddle River, NJ, 637 p.

Koskinen, I., Alasuutari, P. & Peltonen, T. 2005. Laadulliset menetelmät kauppatieteissä. Tampere, Vastapaino, 350 p. (In Finnish)

Laitinen, E. 1998. Yritystoiminnan uudet mittarit, Jyväskylä, Gummerus Kirjapaino Oy, 360 p. (In Finnish)

Lönnqvist, A. 2004. Measurement of Intangible Success Factors. Doctoral Dissertation, Tampere University of technology, Tampere, Finland

Lönnqvist, A. 2002. Suorituskyvyn mittauksen käyttö suomalaisissa yrityksissä, Licentiate thesis, Tampere university of Technology, Tampere (In Finnish)

Lönnqvist, A. & Mettänen, P. 2003. Suorituskyvyn mittaaminen – tunnusluvut asiantuntijaorganisaation johtamisvälineenä. Helsinki. 147 p. (In Finnish)

Malmi, T., Peltola J. & Toivanen, J. 2005. Balanced Scorecard - Rakenna ja sovella tehokkaasti. Talentum Media Oy, Helsinki, 270p. (In Finnish)

Marakas, G. M. 2003. Decision Support Systems in the 21st Century. Prentice Hall, New Jersey, USA, 611 p.

McGonagle , J. J. & Vella, C. M. 1996. A New Archetype for Competitive Intelligence. Greenwood Publishing Group, Westport, USA, 225p.

Melchert, F., Winter, R. & Klesse, M. 2004. Aligning Process Automation and Business Intelligence to Support Corporate Performance Management. Proceedings from the Tenth Americas Conference on Information Systems, New York, August 2004, pp. 4053 - 4063

Miller, S. 1996. The Role of Intelligence in Strategic Planning. Gilad, B. and Herring, J.P.(Eds.). The Art and Science of Business Intelligence Analysis. Part A: Business Intelligence Theory, Principles, Practices, and Uses. JAI Press, Greenwich, CT, pp. 199 -215.

Miranda, S. 2004. Beyond BI: Benefiting from Corporate Performance Management Solutions. Financial Executive, Volume 20, Issue 2, pp. 58 – 61.

Moss, L. & Atre, S. 2003. Business Intelligence Roadmap: The Complete Project Lifecycle for Decision-Support Applications. Addison-Wesley, Boston, USA, 543 p.

Najmi, M. & Kehoe, D. F. 2001. The role of performance measurement systems in promoting quality development beyond ISO 9000. International journal of operation & production management, Volume 21, Number ½, pp. 159 – 172.

Neely, A. 2002. Business Performance Measurement: Theory and Practice. Cambridge University Press, Cambridge, United-Kingdom, 366 p.

Neely, A., Gregory, M. & Platts, K. 2005. Performance measurement system design: a Literature Review and Search Agenda. International Journal of Operations and Production Management, Vol 25, Issue 12, pp. 1228 – 1263.

Neilimo, K. & Näsi, J. 1980. Nomoteettinen tutkimusote ja suomalainen yrityksen taloustiede: tutkimus positivismin soveltamisesta. Tampereen yliopiston Yrityksen taloustieteen ja yksityisoikeuden laitoksen julkaisuja, sarja A 2: Tutkielmia ja raportteja 12. 82 p. (In Finnish)

Niemelä, M., Pirker, A. & Westerlund, J. 2008. Strategiasta tuloksiin – tehokas johtamisjärjestelmä. WS Bookwell Oy, Juva. (In Finnish)

Nonaka, I. & Takeuchi, H. 1995. The Knowledge Creating Company. Harvard Business Review. Vol. 69, No. 6, pp. 96 – 104.

Olkkonen,T. 1994. Johdatus teollisuustalouden tutkimustyöhön. Toinen painos. Espoo, Teknillinen korkeakoulu, Tuotantotalouden osasto, Teollisuustalouden laboratorio. Raportti 152/1993/Teta., 143 p. (In Finnish)

Olkkonen, J., Pirttimäki., Lönnqvist & A., Hannula, M. 2002. Triangle of Performance Measurement. Business Intelligence and Knowledge Management. Euram 2002, Stockholm

Parmenter, D. 2010. Key performance indicators: Developing, implementing, and using winning KPIs, John Wiley & Sons Inc, New Jersey, 295 p.

Packová, V. & Karácsóny, P. 2010. Designing and Implementing Performance Management Systems. Springer, London, United-kingdom, 373 p.

Payne, A. 2006, Handbook of CRM, Butterworth-Heinemann, Oxford, 293 p

Pirttilä, A. 2000. Kilpailijaseuranta. WSOY, Helsinki, 192 p. (In Finnish.)

Pirttilä, A. 1997. A Competitor information and competitive knowledge management in a large industrial Organisation. Doctoral Dissertation, Lappeenranta University of Technology, Lappeenranta.

Pirttimäki, V. 2006. Business Intelligence as a Managerial Tool in Large Finnish Companies. Doctoral Dissertation, Tampere University of Technology, Tampere.

Prior, V. 2004. The Language of Business intelligence. [WWW]. [Referred: 15.12.2012]. http://www.scip.org/ci/languagebi.pdf

Prescott, J. E. 1995. The Evolution of Competitive Intelligence. International Review of Strategic Management. Vol. 6, No. 1, pp. 71 – 90.

Reynolds, G. W. 1995. Information Systems for Managers. 3rd Edition. West Publishing Company, St. Paul, MN, 387 p.

Robbins, J. 2009. "The Return on Corporate Performance Management", Business Intelligence Journal, Volume 14., Issue 1, pp. 8 – 13.

Rockart, J., F. 1979. Chief executives define their own data needs. Harvard Business Review, Vol 57, No 2, pp. 81 – 93.

Rouibah, K. & Ould-ali, S. 2002. PUZZLE: A Concept and Prototype for Linking Business Intelligence to Business Strategy. Journal of Strategic Information Systems, Vol. 11, No. 2, pp. 133 – 152.

Sawka, K. 1996. Demystifying Business Intelligence. Management Review. Vol. 10, pp. 47 – 52.

Schendelin & Hofer 1979. Strategic management: A new view of business policy and planning, Little Brown, Boston, 538 p.

Schauer, J. & Foster, B. S. 2005. "Financial Performance Management: A Business-Level Value". DM Review, August 2005, pp. 42 - 44

Stevens, H. 2008. Gartner Survey Shows Corporate Performance Management is the Highest Priority in Business Intelligence in Europe. Gartner Newsroom press releases, February 6, 2008. Available: http://www.gartner.com/it/page.jsp?id=597910 (Referred 1.11.2012)

Straus, R. 2010. Marketing planning by design: Systematic planning for successful marketing strategy. Wiley. New Jersey, 370 p.

Ståhle, P. & Grönroos, M. 1999. Knowledge Management – Tietopääoma yrityksen kilpailutekijänä. WSOY, Provoo, Finland. (In Finnish)

Sydänmaanlakka, P. 2001. Älykäs organisaatio. Tiedon, osaamisen ja suorituksen johtaminen. Series of Enterprise Adviser, No. 17. Kauppakaari. Gummerus, Jyväskylä, Finland. (In Finnish)

Thierauf, R. J. 2001 Effectice Business Intelligence Systems. Westport (CT), Quorum Books, 370 p.

Tilastokeskus, 2013a. 4669 Muiden koneiden, laitteiden ja tarvikkeiden tukkukauppa. Statistics Finland. [WWW]. [Referred: 15.1.2013]. http://www.stat.fi/meta/luokitukset/toimiala/001-2008/4669.html (in Finnish)

Tilastokeskus, 2013b. 4673 Puun, rakennusmateriaalien ja saniteettilaitteiden tukkukauppa. Statistics Finland. [WWW]. [Referred: 15.1.2013]. http://www.stat.fi/meta/luokitukset/toimiala/001-2008/4673.html (in Finnish)

Tilastokeskus, 2013c. 5229 Muu liikennettä palveleva toiminta. Statistics Finland. [WWW]. [Referred: 15.1.2013]. http://www.stat.fi/meta/luokitukset/toimiala/ 001-2008/5229.html (in Finnish)

Thomas, J. J. Jr. 2001. Business Intelligence – Why? AI Journal. July, pp. 47 -49

Toivanen, J. 2001. Balanced Scorecardin implementointi ja käytön nykytila Suomessa. Lappeenranta University of Technology. Acta Universitatis Lappeenrantaensis 108. Doctoral Dissertation, 216 p. (In Finnish)

Turban, E., Sharda, R., Aronson, J. E. & King, D. 2008. Business Intelligence – A Managerial Approach. Upper Saddle River, New Jersey, US, Pearson Education Inc, 225 p.

Turban, E., Leidner, D., McLean, E. & Wetherbe, J. 2007. Information Technology for Management: Transforming Organizations in the Digital Economy. 6 edition, John Wiley & Sons.

Turban, E., McLean, E. & Wetherbe, J. 2001. Information Technology for Management: Making Connections for Strategic Advantage. John Wiley & Sons, New York.

Tyson, K. W. M. 1998. Business Intelligence: Putting It All Together. Leading Edge Publications, Lombard, IL.

Uusi-Rauva, E. 1994. Ohjauksen tunnusluvut ja suoritusten mittaus. 2nd Edition. Tampere University of Technolog, Tampere, Finland. (In Finnish)

Vibert, C. (Ed.) 2004. Competitive Intelligence: A Framework for Web-based Analysis and Decision-Making. Thomas South-Western, Toronto.

Vitt, E., Luckevich, M. & Misner, S. 2002. Business Intelligence: Making Better Decisions Faster. Microsoft Press, Washington

Vuori, V. & Pirttimäki, V. 2006. Identification of Information Needs in Seasonal Management. Frontiers of e-Business Research 2005, FeBR 2005. Vol. 2, pp. 588 – 602.

Wagner, W. 2007. CUSTOMER RELATIONSHIP MANAGEMENT: A PEOPLE, PROCESS, AND TECHNOLOGY APPROACH, Thomson Course Technology, USA, p. 191

Weiss, A. 2003. What's in a Word: Business, Competitor and Competitive Intelligence. Competitive Intelligence Magazine. Vol. 6, No. 2, p. 49

Wheelen, T. & Hunger, D. 1992. A Descriptive Model of Strategic Management. de Wit, B. and Meyer, R. (Eds.). Strategy – Process, Content, Context: An International Perspective. West Publishing Company, Minneapolis, pp. 46 – 55

APPENDIX 1: Sent guidance

Introduction

Thank you for taking part in this research. This interview is part of empirical study in my master thesis and will give Mepco Oy information so that they can identify their customers' needs for Business intelligence from sales perspective. All started when Mepco noticed that their customers are becoming very interested of maximizing effectiveness of their sales processes. Their customers are also looking new ways to increase their sales revenue and profits. By combining these two criteria Mepco has realized that their customers must be able to control and monitor their performances in more effective ways. In addition Mepco also need to understand how their customers' different sales performances are related to the whole sales department's performance. Mepco is now interested to recognize general performance parameters, which must be monitored to have more effective sales operations. In addition they also want to know what information can support decision-making that are related to those operations. As a solution for this, they see a great potential in simple interface that includes group of quickly readable meters. These meters gathers information from different information sources and combines it to easily understandable dashboards.

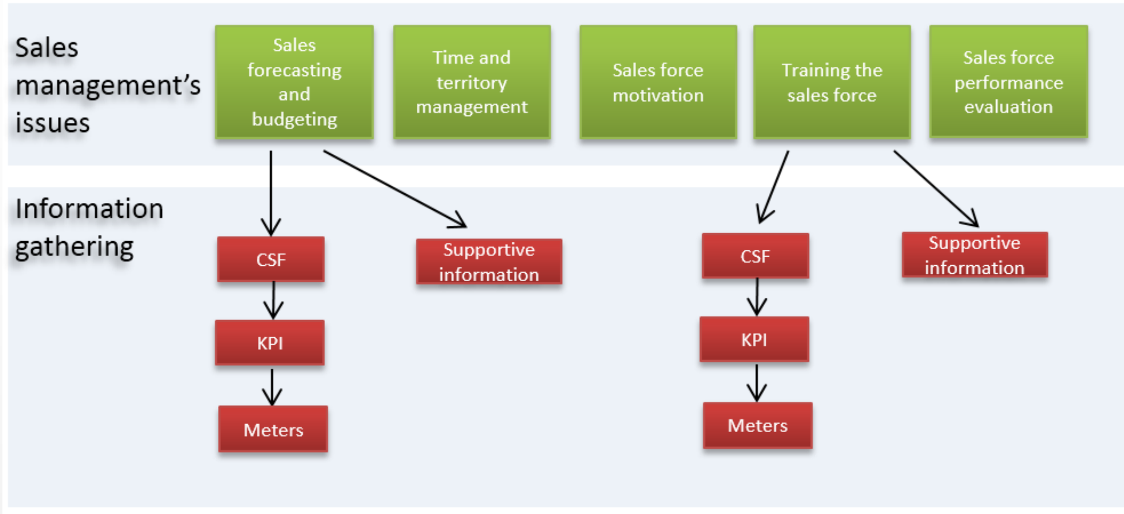
Before interview, it would be very good you to know theoretical framework behind the research, so that we understand performance management and business intelligence as a concepts in a same way. I have also described how we see sales management in this research. Information gathered during the interview is handled confidentially and companies or interviewed persons names aren't shown in any part of thesis. Information is only used for comparing business intelligence needs in different companies from sales management point of view.

After research is completed I will send you list of recognized effective ways to use business intelligence in sales management. This list can be used for recognizing development areas in your sales department and finding new ways to increase sales and profits. If you like I can also send you a copy of my master science of thesis, which helps you to understand framework behind performance management and business intelligence and also to design new ways to improve sales organization's performance.

Thank you very much for taking part for this research, Best Regards, Riku Martikainen

1. STRUCTURE OF RESEARCH

We see that in general company's sales management have five types of issues that they must cover. All of them and their relationship between each others are described in section 2. Each sales management's issues have one or more critical success factors (CSF), which must be met in order to achieve companies' strategic goals. Each CSF has key performance indicator (KPI) and meter that are used for managing and monitoring performance. For doing right decisions concerning each sales management issue there is also likely to be need for supportive information.



Critical success factor (CSF) is the term for an element that is necessary for an organization or project to achieve its mission. It is a critical factor or activity required for ensuring the success of a company or an organization. The term was initially used in the world of data analysis, and business analysis. For example, a CSF for a successful Information Technology (IT) project is user involvement.

Sales managers should ask themselves "Why would customers choose us?". The answer is typically a critical success factor.

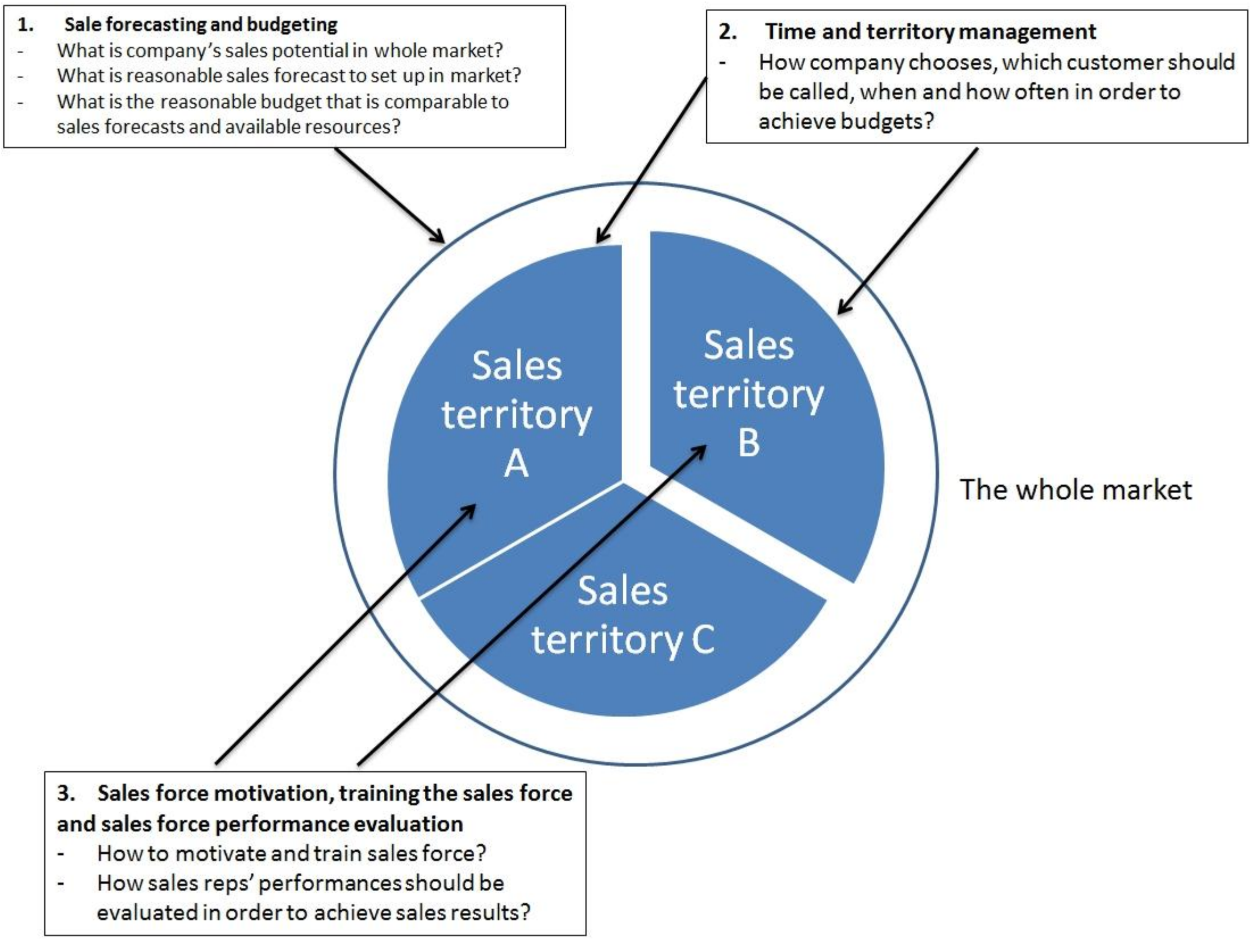
Key performance indicators (KPIs), on the other hand, are measures that quantify management objectives, along with a target or threshold, and enable the measurement of strategic performance.

An example:

- KPI = Number of new customers. (Measurable, quantifiable) + Threshold = 10 per week [KPI reached if 10 or more new customers, failed if <10]
- CSF = Installation of a call center for providing superior customer service (and indirectly, influencing acquiring new customers through customer satisfaction)

2. SALES MANAGEMENT'S ISSUES

We see that sales management can be covered by five issues, shown in picture below. In picture issues are divided in three groups. Idea is that first, company must be able to understand what kind of market environment surrounds it and how big part of the market share they can have based their available resources. This means that company must create sales forecasts and budgets in order to achieve wanted position in a market. Second step includes recognizing potential sales territories and designing sales forces time usage in order to reach budgets. Third step is to manage sales force performances in order to achieve results. This includes sales force motivation, training and sales performance evaluation that must be design in order to achieve aimed sales budget.



2.1. Sales forecasting and budgeting

In this research sales forecasting and budgeting represent estimation of market potential and sales potential before developing final sales forecast, which to base operational planning and budgeting. The purpose of sales plan is to allocate resources in a most effective way during the measure period.

2.2. Time and territory management

Time and territory management in this context means recognizing accounts (potential customers), which sales people should call on and designing when them should be called, and how often. By sales territory is meant a market segment or group of present and potential customers who usually share some common characteristics relevant for purchasing behavior. Sales forecast and budgets should be comparable with estimations of territory's market potential, otherwise they are not realistic.

2.3. Sales force motivation

Sales force motivation means that what type of motivation should be used in different situation in order to achieve great results. Motivation methods can be monetary or non-monetary and they can be mix of individual and group goals. Idea is to design motivation methods that goals are connected with budget goals.

2.4. Training the sales force

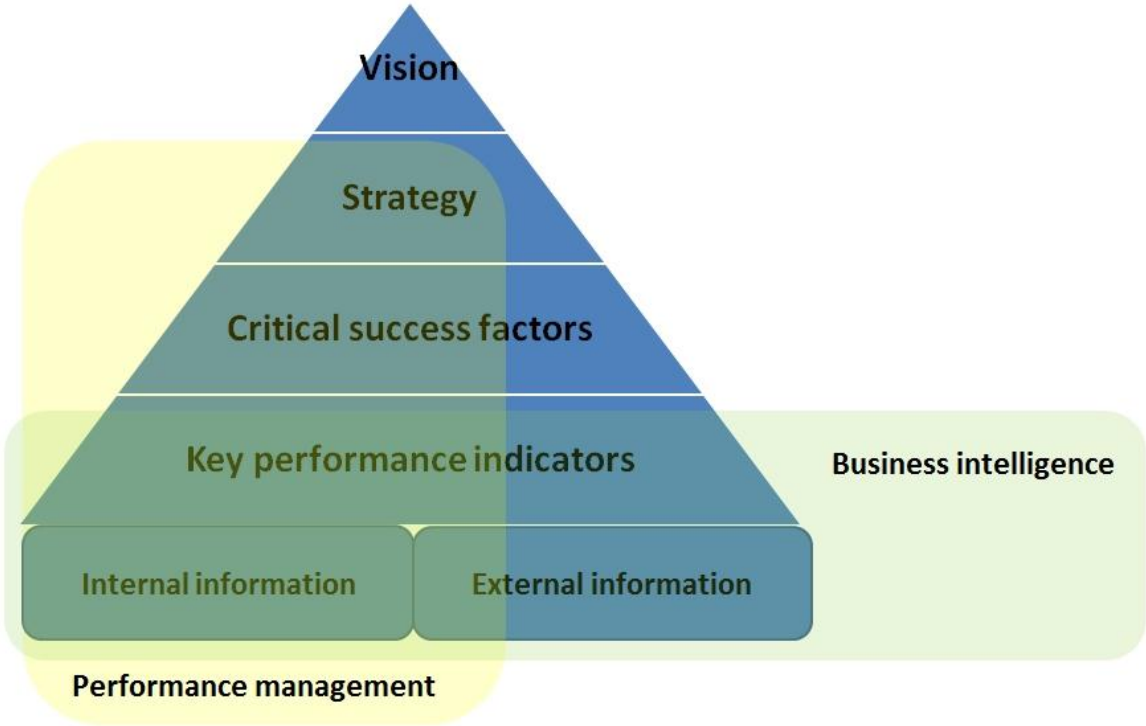
Training in this context means things that need to be taught for sales rep in order to get performance in a wanted level. This means all type of training that make sales rep's performance better. Training can be related to product knowledge, selling technique or anything else that is recognized to be train. Idea is to found parameters in sales rep's performance what need to be developed. Then find ways to support his performance and also monitor that performance will also develop.

2.5. Sales force performance evaluation

Sales force performance evaluation means recognizing parameters in every individual sales rep's performance that need to be achieved in order to meet budget and strategic goals. This can include many different types of evaluation methods, but these should in a line with set budget and other goals as well.

3. RELATIONSHIP BETWEEN PERFORMANCE MANAGEMENT AND BUSINESS INTELLIGENCE

Performance management is focused on monitoring the actual performance, which has strong connection to strategy. Business intelligence is information that supports decision-making in all organization levels and doesn't always have straight connection to strategy.


Vision
Strategy
Critical success factors
Key performance indicators
Business intelligence
Internal information
External information
Performance management

APPENDIX 2: Sent example questions

QUICK QUIDE:

In over all, I would like you to think what actions you do, and how follow it up in the following five sales management areas:

1. **Sales forecasting and budgeting:** In this research sales forecasting and budgeting represent estimation of market potential and sales potential before developing final sales forecast, which to base operational planning and budgeting. The purpose of sales plan is to allocate resources in a most effective way during the measure period.
   1.1. *How do you estimate the company/division sales budget?*
   1.2. *What indicates that you are performing in line with budget?*
   1.3. *How do you measure it?*
   1.4. *What supportive information is needed in estimating company's or division's sales budgets?*

2. **Time and territory management:** Time and territory management in this context means recognizing accounts (potential customers), which sales people should call on and designing when them should be called, and how often. By sales territory is meant a market segment or group of present and potential customers who usually share some common characteristics relevant for purchasing behavior. Sales forecast and budgets should be comparable with estimations of territory's market potential, otherwise they are not realistic.
   2.1. *How do plan/divide regions into sales districts? How do you plan for appropriate sales activities in the district? How do you follow that the activities are at the right level?*
   2.2. *What indicates that you are performing in line with your plans*
   2.3. *How do you measure it?*
   2.4. *What supportive information is needed in planning/dividing regions into sales districts?*

3. **Sales force motivation:** Sales force motivation means that what type of motivation should be used in different situation in order to achieve great results. Motivation methods can be monetary or non-monetary and they can be mix of individual and group goals. Idea is to design motivation methods that goals are connected with budget goals.
   - *3.1. What motivation methods you use in different situations, monetary or other?*
   - *3.2. What indicates that the sales force is motivated?*
   - *3.3. How do you measure it?*
   - *3.4. What supportive information is needed for finding effective motivation method for different situations?*

4. **Sales force training:** Training in this context means things that need to be taught for sales rep in order to get performance in a wanted level. This means all type of training that make sales rep's performance better. Training can be related to product knowledge, selling technique or anything else that is recognized to be train. Idea is to found parameters in sales rep's performance what need to be developed. Then find ways to support his performance and also monitor that performance will also develop.
   - *4.1. How do you plan, who should be trained, in what and when?*
   - *4.2. What indicates if the sales force is well trained?*
   - *4.3. How do you measure it?*
   - *4.4. What supportive information is needed for planning who should be trained, in what and when?*

5. **Sales force performance evaluation:** Sales force performance evaluation means recognizing parameters in every individual sales rep's performance that need to be achieved in order to meet budget and strategic goals. This can include many different types of evaluation methods, but these should in a line with set budget and other goals as well.
   - *5.1. How do you measure your sales force performance? Sales, activities, customer retention or other?*
   - *5.2. What indicates if they are doing well?*
   - *5.3. How do you measure it?*
   - *5.4. What supportive information is needed in sales forces' performance evaluation?*

EXAMPLE QUESTIONS:

1. **SALES FORECASTING AND BUDGETING**
   1.1. ***How do you estimate the company/division sales budget?***
   - We look at this next years expected sales force capacity versus last years – employees, experience etc.

   1.2. ***What indicates that company is performing in line with 1.1?***
   - We compare sales monthly versus budget

   1.3. ***How can you measure each indicator that you described in 1.2?***
   - It is all sales together minus last year sales divided by last year's sales in compared time frame

   1.4. ***Do you have additional information needs in sales concerning sales forecasting and budgeting?***
   - We also monitor market share and how the competition is developing
2. **TIME AND TERRITORY MANAGEMENT**
   2.1. ***How do plan/divide regions into sales districts? How do you plan for appropriate sales activities in the district? How do you follow that the activities are at the right level?***
   - We estimate what is our market situation in that market and we estimate how much time we need to use for reaching all important customer

   2.2. ***What indicates that company is performing in line with 2.1?***
   - We check that we are cold calling for all potential existing customer at least once a year

   2.3. ***How you can measure each indicator that you described in 2.2?***
   - We divide amount of all potential customers in four and check quarterly that we are meeting the goal

   2.4. ***Do you have additional information needs concerning which customer your salesmen should call, when and how often?***
   - We want to compare how much different potential customer segments are growing and how our market share is developing in that market
3. **SALES FORCE MOTIVATION**
   3.1. ***How do plan what motivation method you use in different situations, monetary or other?***
   - Each sales team can choose one out of three bonus methods (big bonus if dream goal is reached, percent bonus, bonus event + small bonus if average goal is reached)

   3.2. ***What indicates that company is performing in line with 3.1?***
   - Sales are increasing more than set budget target

   3.3. ***How you can measure each indicator that you described in 3.2?***
   - Team's sales minus set goal
   - Reached sales minus set goal minus motivation method's costs

   3.4. ***Do you have additional information needs in sales concerning which motivation method you use in different situations?***
   - What are the average salaries in our industry

4. **TRAINING THE SALES FORCE**

   4.1. ***How do you plan who should be trained, in what and when?***

   - We monitor how our sales rep's performance is compared to last year's performance in a same timeframe

   4.2. ***What indicates that company is performing in line with 4.1?***

   - If the sales rep's total sales result development is less than 5%, sales in important product segments are decreasing or customer satisfaction is under 90% we will execute performance developing training

   4.3. ***How you can measure each indicator that you described in 4.2?***

   - Sales development: Comparing sales rep's total sales to last year's existing in last year. Comparing 5 most important product segment's sales development to last year's result
   - Customer satisfaction: Calculating average results of feedback forms and checking that it is more than 90% of maximum score

   4.4. ***Do you have additional information needs in sales concerning who should be trained, what should be trained and when?***

   - We want to know what is industrial averages in customer satisfaction in our market

5. **SALES FORCE PERFORMANCE EVALUATION**

   5.1. ***How do you plan in sales, which performances should be evaluated?***

   - We first choose 3 focus areas, which will be in sales rep's development plan (individual sales results, worked hours and cold calls). These we monitor yearly and pay bonus if he/she achieve target in each area

   5.2. ***What indicates that company is performing in line with 5.1?***

   - Individual sales results: Last year's sales results during the same time frame + market growth per cent + 5% increase (goal set together with sales rep)
   - Worked hour: More than 30 sales hours per week
   - Cold calls: More than 30 per week

   5.3. ***How you can measure each indicator that you described in 5.2?***

   - Count value of made deals and comparing it
   - Based in time that is used for cold calling, sales meetings and meeting preparation
   - Call for new customer that have never reached before

   5.4. ***Do you have additional information needs in sales concerning which performances should be evaluated?***

   - Based on our customer's opinion, what is three things what they like in our sales rep's performance and three things what they think needs to be developed.

APPENDIX 3: Interview questions

1. **SALES FORECASTING AND BUDGETING**
   1.1. ***How do you estimate the company/division sales budget?***
   1.2. ***What indicates that company is performing in line with 1.1?***
   1.3. ***How can you measure each indicator that you described in 1.2?***
   1.4. ***Do you have additional information needs in sales concerning sales forecasting and budgeting?***

2. **TIME AND TERRITORY MANAGEMENT**
   2.1. ***How do plan/divide regions into sales districts? How do you plan for appropriate sales activities in the district? How do you follow that the activities are at the right level?***
   2.2. ***What indicates that company is performing in line with 2.1?***
   2.3. ***How you can measure each indicator that you described in 2.2?***
   2.4. ***Do you have additional information needs concerning which customer your salesmen should call, when and how often?***

3. **SALES FORCE MOTIVATION**
   3.1. ***How do plan what motivation method you use in different situations, monetary or other?***
   3.2. ***What indicates that company is performing in line with 3.1?***
   3.3. ***How you can measure each indicator that you described in 3.2?***
   3.4. ***Do you have additional information needs in sales concerning which motivation method you use in different situations?***

4. **TRAINING THE SALES FORCE**
   4.1. ***How do you plan who should be trained, in what and when?***
   4.2. ***What indicates that company is performing in line with 4.1?***
   4.3. ***How you can measure each indicator that you described in 4.2?***
   4.4. ***Do you have additional information needs in sales concerning who should be trained, what should be trained and when?***

5. **SALES FORCE PERFORMANCE EVALUATION**
   5.1. ***How do you plan in sales, which performances should be evaluated?***
   5.2. ***What indicates that company is performing in line with 5.1?***
   5.3. ***How you can measure each indicator that you described in 5.2?***
   5.4. ***Do you have additional information needs in sales concerning which performances should be evaluated?***