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# **How to develop a Balanced Scorecard into a Strategy Map**

**--- A case study of Ericsson**

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**Purpose:** The purpose of our study is to examine how to develop a model from a Balanced Scorecard to a strategy map. The information acquired from our subject company, Ericsson, supports our study of this model.

**Methodology:** In this study, the data collected originated from both primary and secondary research. A thorough interview with manager of Ericsson's internal audit department was conducted, and data from Ericsson's website as well as relative articles and journals were collected which served as the basis of the study.

**Results and Conclusion:** Through the case study of the Ericsson, we think strategy map is necessary to complement Balanced Scorecard to be better strategic management tool. For this reason, we build an initial but overall strategy map for Ericsson group. We think this should be the sample for Ericsson in their future business to develop their strategy map.

**Contribution of the thesis:** This study might be useful for people or students who are interested in the performance measurement, Balanced Scorecard and Strategy Maps. It might also be useful for a management team which is seeking to complement drawbacks of their Balanced Scorecard.

**Key words:** Strategic management, Balanced Scorecard, strategy maps, innovation

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# 1. Introduction

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*In this chapter the background of the thesis is described, followed by the purpose and research problem. Finally research questions, limitations and the outline of the thesis are presented.*

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## 1.1 Background

Strategy is a plan of action which is designed in order to achieve a particular goal. In business field however, we can not make a definition in this simple and general way. Business strategy must have its special characters. Nowadays, the business situation is in a complicated and competitive environment. This kind of environment requires companies being flexible and to respond rapidly to competitive and market changes. They must benchmark in order to be one of the best; they must nurture a few core competencies in the race to stay ahead of rivals. Porter (1996) has argued that a firm's strengths ultimately fall into one of two headings: cost advantage and differentiation. However, even if the companies' goal and vision is clearly defined, executives are still worried if employee can successfully understand and implement the right actions to achieve the goals. Companies always face the fact that it's not problem to set a goal, but it is a problem of how to do it.

Under this concern, a developed performance measurement is needed to monitor and measure the progress that employees made to get the strategic operation effectively. Described as the most comprehensive performance measurement, the Balanced Scorecard (BSC) proposed by Kaplan and Norton translates companies' strategy into operation objectives; it combines both financial and non-financial measures into a framework. There are four perspectives: financial, customer, internal process and learning and growth. The logic behind these perspectives are following a cause-and-effect relationships. According to Kaplan and Norton: employee need

information, knowledge and skills (learning and growth) to effectively capture the right strategic capabilities (internal process) which delivers the main or core value to the customers (customer), to finally achieve a high shareholder value (financial).

One important factor about the BSC is that it puts significant role of non- financial measure and integrates it into the organization management in today's competitive environment. Traditional financial measures on performance are losing the competitive advantage since they fails to consider customer satisfaction or flexibility in the operating process. (Norreklit and Mitchell, 2007) Non- financial measures are providing great opportunities to the management team to improve the operation and the process of evaluation. Non-financial measures are reflecting future financial measures (Kaplan and Norton, 1996) and in long-term, non- financial performance measures reflect better financial returns than the short-term traditional financial measures. (Lothian, 1987)

However in the process of implementing the BSC into business, theory does not support the practices as well as it should. The BSC is a hierarchical and top-down process and in order to get the BSC to work, as the infrastructure of the organization, employees have to get the clear picture of what executives want. Whereas, under cover of dozens of measures and targets in each perspective, important or core value can easily being abandoned or ignored in the process of implementation. Furthermore, due to the limitations of employee's knowledge and inexperienced workers will also make it hard to achieve executives' desire. (Norreklit and Mitchell, 2007)

The strategy map was developed by Kaplan and Norton in 2004 based on the BSC, to help firms develop a strategy. It provides clear line of sight to employees about the overall objectives in the organization and connected their jobs in a visible way to the company's desired goals.

However, the strategy map concept is rarely known in the business world. The BSC is widely used in companies however as we know most companies did not succeed in

getting the expected results. The reasons for the failure can be many. For example, it can be due to executives who keep the BSC at the top or don't empower those measures to underlying. Failure can also occur due to the ignorance of value drivers in the implementation process or the employees' lack of experience as mentioned above. *'Where does the executive team want the company to go?'* This question maybe easily answered with the company's strategy mission and goals. The problem faced when taking the BSC into implementation, the executive team should worry about *'how can the company get there?'* The BSC strategy map may give a satisfied answer to this question. It has a line of sight with navigational tool to lead the company and achieve the strategy goal. As the saying goes: 'a picture is worth a thousand words'.

## **1.2 Problem description:**

The Balanced Scorecard is widely used in companies, but there are so many pitfalls when the execution teams take it into implementation, causing many failure cases when using it. We believe the reasons leading the BSC to failure for example the empowerment failure, the value driver missing or the complex of the perspective measures can be solved with the embedded of strategy map. The strategy map is developed based on the BSC and it provides a way for the companies to communicate and describe the strategy to various stakeholders. It maps each companies activities into a visible frame, links the process from employee performance to customer satisfaction and then to the shareholder value achievement.

A strategy map is a simple and effective way to communicate with employees about how to achieve the companies' strategic goals and won't miss any value drivers in the management process. We believe that companies that implement the BSC should also implement strategy map in order to achieve the organization's desired goal effectively. A strategy map can serve as a complement tool to improve the performance measurement tool.

For our case study, Ericsson as a technology leading company has been using the BSC for many years; however they don't use a strategy map, which caught our attention. After analyzing Ericsson's strategy, we felt it was necessary for Ericsson to use a strategy map. Thus, as a contribution to our work, we build a strategy map for Ericsson.

### **1.3 Research questions:**

- How to develop a Balanced Scorecard into a strategy map?  
Explore and explain how the Balanced Scorecard is implemented into a strategy map.

### **1.4 Purpose:**

The purpose of our study is about how to develop a model from Balanced Scorecard to strategy map. We will choose Ericsson as our case study, so the situation of Ericsson and the information which we get from the Ericsson will support and illustrate this model.

### **1.5 Disposition:**

We will divide the paper into six parts and excluding the appendix and references. The first chapter is the introduction. It is the guideline for the reader and tells the reader why we have undertaken the study. Then chapter two is the methodology. It will explain the details about the process of data collection. Then chapter three is the theoretical part that was divided into books and literature reviews and internet information. The research result is presented in chapter four as the empirical study. We will combine the theory part and empirical part and result in the analysis part in chapter five. Final part is a result and discussion in chapter six which includes the conclusion of the whole context and our recommendations about the strategy maps in real companies and our future study. Furthermore, we put the interview questions

and questionnaires together in an appendix. In addition, both written resources and internet resources are listed in the references.

**Figure 1.1: Dispositions**

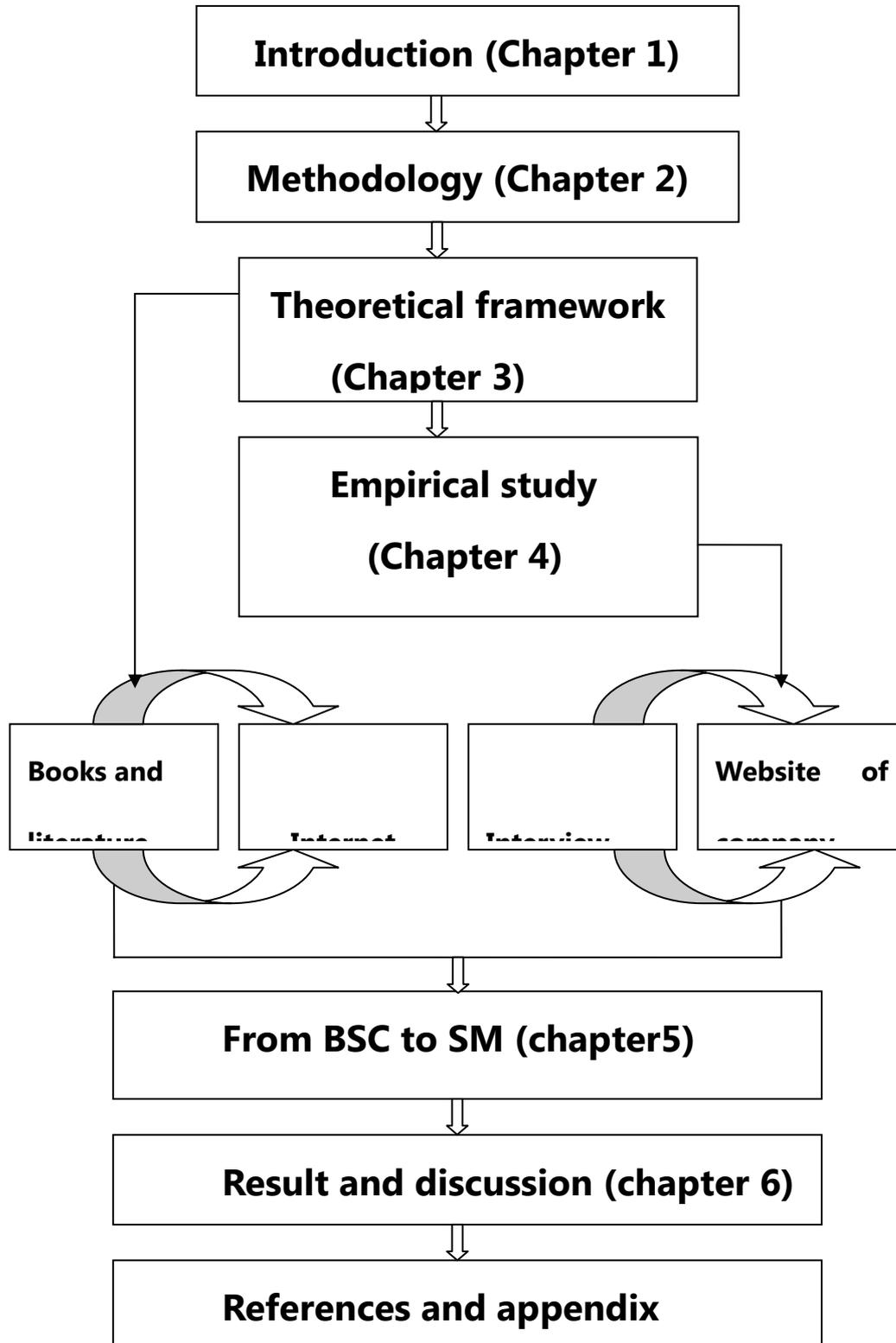


Figure 1.2 the construction of our thesis

Source from: own construction

## 2. Methodology

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*This chapter will represent discussion of the scientific philosophy and chosen methodology. The data collection process about our thesis will be presented.*

---

### 2.1 Choice of subject and case company

The interests in the Balanced Scorecard starts from a course assignment, with the aspiration of the deep understand in a real company. Thus we decide to choose this subject. We learned about the BSC from management control and performance management knowledge. Nowadays, the BSC is mostly used as a performance tool in many companies. However, the BSC has received a lot of criticism in today's competitive and changing business environment. This competitive situation and business environment require the improvement of the BSC. Thus, we choose a strategy map as our research topic. With the knowledge of the BSC and strategy map, we start to wonder if they can work together, complement each other or even combine the each advantage which will achieve to be a better and integrated performance tool. We think this is an interesting topic, as we did not know much about the subject we tried to get a deeper understanding about it by gathering information, articles and literature about the BSC and strategy map and its relevance for a company.

Then the next step is to find a suitable and relevant company, we want to choose a Swedish company as our case study. Ericsson is a typical Swedish company, and it is also a leading company in the whole world. When we check Ericsson's BSC through their website, we know it is a successful case in the BSC knowledge. Since BSC has been using as the performance tool in Ericsson for almost 15 years, with the changing of business environment, there are some problems arising. Thus, we think the characters and the advantages of the strategy map can complement or strengthen it.

Based on these key points, we think Ericsson should be a good case target.

## **2.2 Research approach**

Two different method-reasonings used in scientific research are called the deductive and inductive approaches. The deductive approach can be seen as a top-bottom approach as it starts with coming up with a theory and narrowing it down to a hypotheses which is then tested by different researchers. A collection of observations is used to address the hypotheses. Inductive reasoning works in the opposite way. The inductive approach is a bottom-top approach where data which is analyzed is collected and used as a source for developing a theory. Compared to the deductive approach the inductive reasoning will allow for a deeper understanding of the problem. It is important to choose between the deductive and inductive approach as the first one aims at describing what is happening and the second one aims at understanding why something is happening (Saunders et al., 2006). In our thesis, we look at Ericsson's data first and then form the hypotheses, in order to prove and find the solution of our research question. We then go back to the theory part and try to find the support. So the study will be based more on an inductive approach.

According to Yin (2003) the research strategy was divided into survey, archival analysis, histology and case studies, the appropriate strategy for our thesis is the case study, since its character as a deep study through small selection of organizations. In general, case studies are the preferred strategy when "how" or "why" questions are being posed. Our research problem is "How to develop a Balanced Scorecard into a strategy map?" Case studies also preferred strategy when the focus is on a contemporary phenomenon within some real-life context. In our paper, we choose Ericsson as a representation of the contemporary phenomenon.

## 2.3 Research design

Research design is the plan and structure of investigation so conceived as to obtain answers to research questions. (Blumberg, Cooper and Schindler, 2005, P127) The data we used in our research is divided into three steps (see figure 2.1): literature review, secondary research & primary research, and qualitative analysis. Secondary data is from books, website and company documents. Primary data is based on an interview.

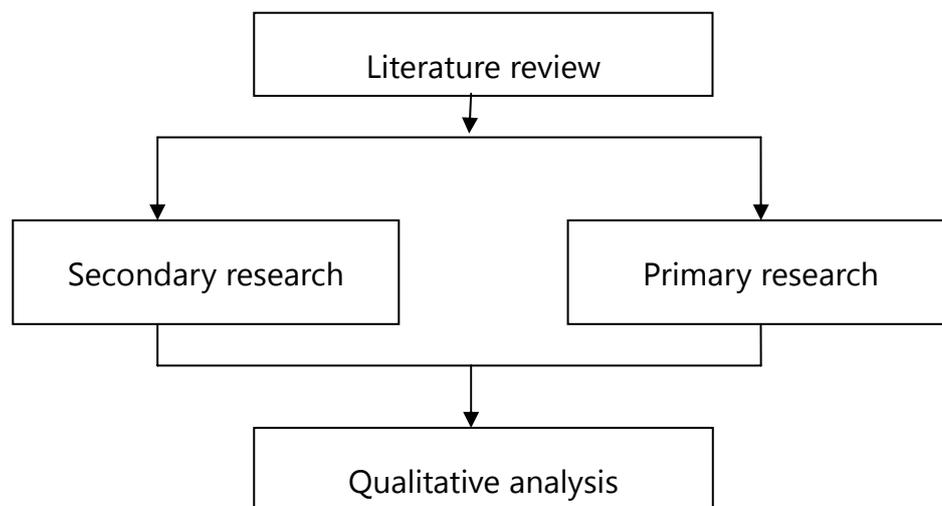


Figure 2.1: research design

Source from: own construction

### 2.3.1 Literature review

Literature review constitute of theory part, the red line of our literature resource is Kaplan and Norton's books, which relative with the Balanced Scorecard and strategy map, since they are the founder of these two concepts. These books give us clear pictures about the BSC and Strategy maps and relevant theory use the inductive method again, through a amount of research and study. We think the content of the KPI and intangible asset should also play a role in our thesis. Thus, our theoretical

framework starts with the content of the BSC and finishes with a detailed explanation. We also show some critical views about the BSC from the different authors. For the reason that our thesis aim is to implement BSC into strategy map, so the following part is strategy map and the literatures which was showed more about the advantages of the strategy map. Then the final part of our theoretical framework is the combination between the BSC and the strategy map. Like we mentioned before, the BSC and the strategy map are popular performance measurement tools in the changing business environment since they have a strong linkage between different business objectives and measures. Thus, the cause and effect relationship was shown in different perspectives measures of the BSC, in different objectives of the strategy map and stronger linkage in the combination of the BSC and strategy map.

### **2.3.2 Primary and secondary data**

#### **Secondary data-primary research**

Secondary data is information or data that has already been collected and recorded by someone else, usually for other purposes. (Blumberg, Cooper and Schindler, 2005, P342). The advantages of the secondary data: save data collection time and money, easy to gain the high quality data which offered by well-respected institutions. (<http://ec.hku.hk>) The choice of approach lies to ground for how the researcher will collect and analyze the data and should be decided dependent on the nature of the research topic. (Saunders, Lewis, and Thornhill, 2006)

In our thesis, secondary data conducted to the preliminary research. We start from the literatures examination which refers to previous studies with successful case in the BSC and strategy map, and then we get an overview of our study problem in real company. This step strengthens and complements the knowledge from the literatures review. We should mention that in these cases, we chosen some innovation company

to conducted preliminary research, since our research target Ericsson is an innovative company.

The next stage of our research was to analyze the annual report of Ericsson and the correlative websites. Based on the information gathered from this area, we got an easy step to conduct the in-depth interview.

### **Primary data---in-depth interview:**

Primary data refers to the collection of data that is unique to the specific research and that has never been used by others before. There are different ways to collect primary data and some of the more common ones are through interviews, questionnaires, and case-studies. ( Saunders, Lewis, and Thornhill, 2006)

In our thesis, the main approach of primary data collection is interviews in Ericsson. Our research problem is about the strategy, so we think the interview target should be the manager from Ericsson headquarters in Stockholm. Therefore we send the email to them, and then Lars Jacobsson (Manager of Compliance and Disclosure in Ericsson's internal audit department) give us the answers. He has been working in Ericsson since 1970 with familiar and integrated knowledge about the BSC and the strategy map. We have three interviews with Lars Jacobsson: The first one is about the initial framework of their strategies and Balanced Scorecard. We asked the general strategies and what the major objectives of Ericsson's BSC, from this interview we got the general information about their BSC framework and have new and deep ideas about how to research Ericsson. As researchers, we consider external views and broader views also are indispensable information. So we start searching the information from websites and articles about Ericsson. Many times we combine the discussions of his answers and the information where we found from other sources. We take the second interview; the main point of the second interview is to gain the information about the linkage between the different objectives in those BSC perspectives. After completing the linkage between objectives and some measures in

Ericsson's BSC, we show our final work again to Jacobsson, to get feedback from him.

## **2.4 quality of the study**

The quality of the qualitative research can be determined by validity and reliability of the study. Patton (2002) states that validity and reliability are two factors which and qualitative researcher should be concerned about while designing a study, analyzing results and judging the quality of the study.

According to Joppe (2000), reliability is the extent to which results are consistent over time and an accurate representation of the total population under study and if the results of a study can be reproduced under a similar methodology, then the research instrument is considered to be reliable. In our thesis, we try our best to achieve the reliable result and study. We consider that the experience, opinion and bias from us may have affected the findings; however the thesis is reliable for purpose.

Validity refers to the research and indicates whether the study truly gives the best view of the problem studied. Our thesis, validity can be shored up by the fact that findings are largely supported by the theoretical views presented in the theory part of the thesis.

## **2.5 limitations**

We try our best to be the qualitative research, but there are still some limitations existed in our thesis.

In our thesis we only focus our subjects on Ericsson. However, in other industries and companies may use other types of BSC and strategy maps. The comprehensive

research in each industry might find more problems and solutions. When we conducted our interview, we did the following. We used email which caused us to waste too much time in waiting for a reply as we were not able to get an immediately response. Communication and interview with the manager of the Ericsson by email can also cause transfer mistakes. In order to confirm the information, we would have spent even more time.

Our subject is relative with the company strategy and sometimes the research questions will be related with the company's secret. Thus, we have paid more attention on separating it. This problem prevents us from gathering the deep information on occasion. Thus, our research therefore was influenced by this point.

The next methodological problem is also occurred during the primary data research. The manager who was interviewed didn't give us detailed answers based on secret information of Ericsson. As we know, Ericsson group was divided into several parts including network, service and multimedia. There is little strategy difference in each part, but our research purpose requires us to focus on the general strategy for the whole group, so in some aspects we ignored some information.

## 3. Theoretical framework

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*First of all, a short discussion about the theories connection to each other and place in the strategic process is provided, followed by a presentation of the BSC, strategy map. Then, a better overview of combination between Balance scorecard and Strategy map (BSC and SM) is given.*

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### 3.1 Strategy

Strategy is a plan of action designed to achieve a particular goal. (Oxford English Dictionary (2nd ed) An organization's strategy describes how it intends to create value for its shareholders, customers and citizens. (Kaplan and Norton, 2004)

In the real practice, there are no two organizations that thought about strategy in the same way. Some described strategy as their financial plans, it is about the revenue and profit growth, others from a quality and process orientation, and still others from a human resources or learning perspective.

When we are researching business strategy we cannot miss the strategy idea from Porter, where he argued that a firm's strengths are ultimately fall into one of two headings, cost advantage and differentiation. (Porter, 1996) Going through a company, strategic doctrines existed in the every part, like shareholder value, customer management, process management, quality, core capabilities, innovation, human resources, information technology and so on. As the dynamic view of strategy, it is the first step for the company to identify, after identifying the strategy, company can recognize and colonize a distinctive strategic position in its industry and then excel at playing the game in this position, thus make it the most attractive position in the industry.(<http://d.wanfangdata.com.cn>). Thus, the company's strategy is an important point, but if without a comprehensive description of strategy, executives

cannot easily communicate the strategy among themselves or to their employees. Thus the company needs a measurement system that describes the strategy in order to build a general model of strategy. In this way, BSC offers just such a framework for describing strategies for creating value.

## **3.2 Balanced Scorecard**

### **3.2.1 Basic view and development of the Balanced Scorecard**

The Balanced Scorecard was first introduced in the early 1990s by Kaplan and Norton of Harvard Business School. From that time, the BSC concept was well known and widely adopted by the world companies. (Cobbold and Lawrie, 2002)

The balanced scorecard (BSC) is a component of an organization's strategic management system. Its main purpose is to translate the organization's vision and strategy into a set of measurable objectives, at the same time it provides the framework for strategic measurement and management. It uses the rational and ordered view to measure the organizational strategy. Based on Kaplan and Norton's BSC concept, they divided it into four perspectives: financial perspective; customer perspective; internal business (process) perspective; learning and growth perspective (sometimes called development, or renewal). Each perspective should include the strategic goals, critical success factors, measures, and action plans.

### **The development steps of the BSC:**

In the early 1990s the Balanced Scorecard was proposed as a framework to provide a structure for related sets of organizational performance measures. (Kaplan and Norton, 1996) Based on this basic feature, balanced scorecard design through three distinct

generations.

At the beginning, the BSC choose the very simple way: Balanced Scorecard was initially described as a simple “4 box” approach to performance measurement (Kaplan and Norton, 1992) Goal and limited measures are only components in each perspective. In 1st generations, among the four perspectives they illustrate with simple “causality” but not used for specific purpose. Kaplan and Norton’s original version of BSC have no specific observations concerning how the Balanced Scorecard might improve the performance of organizations.

So the market and some practical experiences show many problems which focus primarily on the architecture of the BSC design, (Butler, Letza and Neale, 1997) less link with the organization’s experiences (Ahn, 2001) and often more partisan (Lingle and Schiemann, 1996). Most of the companies just see the BSC as a famous and fashionable measurement tool, so they just copy it from other company without the self experiences. At times companies just put the BSC there without any action otherwise do not put it in the long-term planning. All these are deadly mistake of the BSC.

When they moved to the second generation, there are two significant areas were concerned, filtering (the process of choosing specific measures to report), and clustering (deciding how to group measures into ‘perspectives’). And another significant development point comparing with the first generations is the causality. Only simple causality is developed at 1<sup>st</sup> generation which is just among the perspectives, Second generation BSC attempts to indicate linkages between the measures themselves. When the measures have the linkages, then the causality becomes richer than before. The consequence of this change from the 1<sup>st</sup> generation is more emphasized on the organization’s strategy goals. Another key consequence was that it increased the strategic alignment between management units. (Olive, 1999). Although the 2<sup>nd</sup> generation is more advanced, it still has some problems that are hard

to deal with in some real companies. The collective vision and strategic goals are different, some cases show that the vision and plans are often either poorly defined, lacking continuity or something that the management team didn't fully agree on. Thus, the management team thinks that it is necessary to select priority elements within their collective vision and strategic goals difficult. Then the objectives selection problem arises. Based on the same problems the target is also hard to make. This strategic linkage model was proven less helpful when used for broadcast communication of strategy. (Cobbold and Lawrie, 2002)

Face to these real problems, the 3<sup>rd</sup> generation BSC arised. The 3<sup>rd</sup> generation Balanced Scorecard model is based on a refinement of 2<sup>nd</sup> generation design characteristics and mechanisms to give better functionality and more strategic relevance. The key components of 3<sup>rd</sup> generation of BSC include destination statement which means that at the end of the process they will check the objectives, measures and targets chosen. This destination statement includes the estimate of the consequences implementing the strategic objectives previously selected for the strategic linkage model. Then based on this destination statement the manager can check how many key things have been achieved. With the development of the company, they will have more and more measures and when they have multiple Balanced Scorecards, the value of the destination statement will help the company toward the same strategic goals and achievement of strategic alignment. (Guidoum, 2000) "The creation of a Destination statement describing what the organization is likely to look like at an agreed future date ensures that a shared view of the strategic plan and its intended consequences is agreed prior to making decisions about the organizational activity and setting targets for those activities." (Cobbold and Lawrie, 2002.) This is the function of the 3rd generation and in this way it solves the 2nd generation issues described above. The big different between the 2nd and the 3rd the generations of the BSC is found in how the strategic linkage model is designed, not the way it looks. Thus it is clear that the primary focus of the BSC is a control tool, with the development, this control move from the simple management control to

strategic control. Nowadays, the current BSC is more helpful in supporting the complex organizations. (www.bettermanagement.com)

### **3.2.2 Status of the Balanced Scorecard**

The concept of BSC has been widely adopted as a new approach to management control and performance management both in business and government. A scorecard let the organization's ambitions or achievements easy to understand and describe. (Olve, Sjöstrand and Petri, 2006)

The important position of BSC was proved by several different ways, and when business firms want to pursue long-term profitability, they should focus more on these aims. And these aims will be achieved by BSC:

- “Communicating strategic intentions, as companies increasingly need to involve managers and employees; communication between manager and employee, let the employee easy to catch the company's strategy.
- Discussing activities that are motivated by strategic aims rather than current necessities, such as development of competencies, customer relationships, and IT and how these will pay off in the future;
- Monitoring and rewarding such activities

(Olve, Sjöstrand and Petri, 2006, p2)

According Lawrie's research, Balanced Scorecard has been gradually increasing in both usage and satisfaction rate. In the 2004 Bain and Company survey of top management tools where the Balanced Scorecards were being used in 62% of the organizations survey and satisfaction with the tool had increased considerably – out of 25 tools Balanced Scorecard was now ranked 8th in terms of satisfaction. (www.bettermanagement.com)

### 3.2.3 In-depth explanation of the four perspectives

As we mentioned before, the BSC provides a quantitative representation of key variables and financial perspective on outcomes. Thereby, it takes a primarily accounting-influenced perspective on organizational performance. Its structure goes through the 4 perspectives (financial, customer, internal business process and learning and growth perspectives) on organizational performance. See figure 3.1, the figure shows the four perspective which defined by Kaplan and Norton, in each perspective they divided into four small parts: objectives, measures, targets and initiatives:

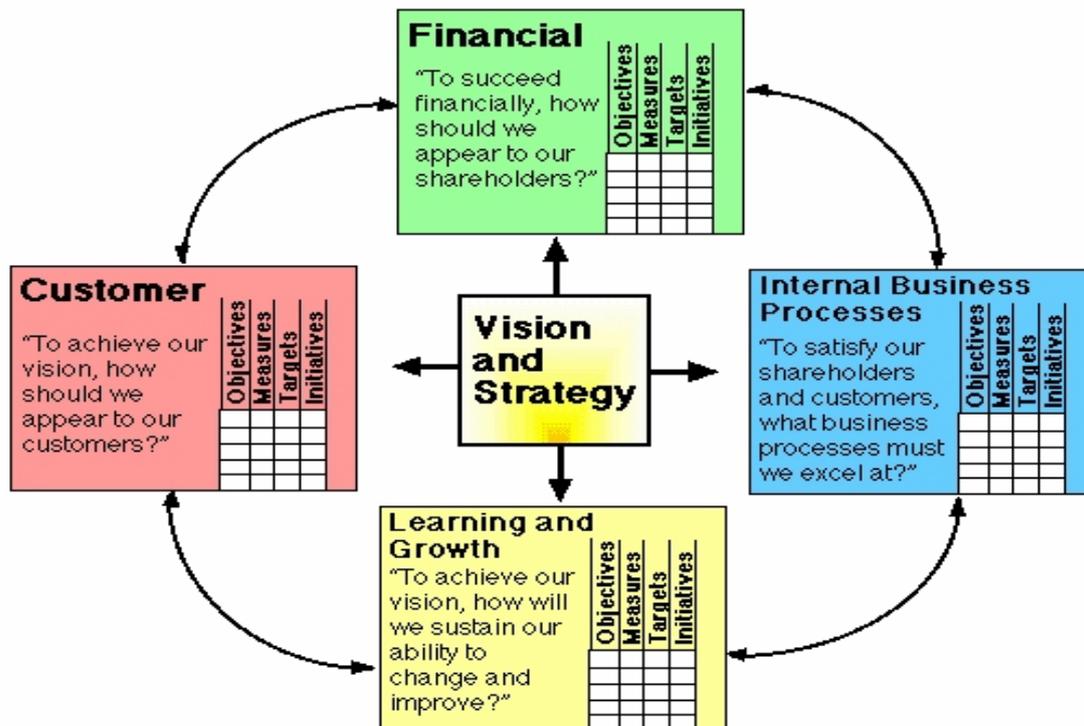


Figure 3.1: the BSC framework

Source: adapted from Kaplan and Norton

“In the corporate terms the financial perspective identifies how a company wished to be viewed by its shareholders. The customer perspective reflects how it wishes to be viewed by its customers. The internal business process perspective indicates the areas where the company has to be particularly adept in order to satisfy its customers and shareholders. The organizational learning and growth perspective involves the

improving developments that the company needs to realize if its strategy and vision are to be achieved” (Kaplan and Norton, 1996a, pp.30-1)

### **The key performance indicators--KPI**

When talk about KPI, it is always with the question “How an Organization Defines and Measures Progress toward Its Goals?” Key performance indicators are quantifiable measurements, reflect the critical success factors of an organization, help an organization defining and measuring progress towards organization's goals. Once an organization has analyzed its mission, identified all its stakeholders, and defined its goals, it needs a way to measure progress toward those goals. Key performance indicators are those measurements.(<http://management.about.com> )

KPI represent a set of measures focusing on organizational performance aspects that are the most critical for the current and future success of an organization. There are only a few KPIs in an organization (no more than ten), and they have certain characteristics. KPI should be non-financial measurement, frequent measurement (it's not measured monthly), acted upon by the CEO and senior management team on the daily, staff understanding of the measure and what corrective action is required, responsibility that can be tied down to the individual or the team, a significant affect on the organization,([www.bettermanagement.com](http://www.bettermanagement.com))

### **Detailed description for these four perspectives:**

Organizations should have their own mission and vision statements. Mission is described as how the organization expects to compete and deliver value to customers; it is internally focused statement for the organizations' existence. Vision is viewed as how the organization wants to be perceived by the world, it should be external and market- oriented. Vision defines the mid- to long- term goals of the companies.

### **Financial perspective:**

In the most of organizations, the financial topic are more focus on increasing revenues, improving cost and productivity, enhancing asset utilization and reducing risk can provide the necessary linkages across all four scorecard perspectives. The emphasis is to achieve long-term financial objectives. ( Kaplan and Norton, 1996, p 47 )

In the innovation company, financial objectives are also related to revenue growth and enhanced margins from new products and services, at the same time, it is also related to cost reduction( lower the cost of maintenance, repair and disposal of their products ) and the product environmental issues, this point is especially pointed out by European companies. (Kaplan and Norton, 2004, p151)

### **Customer perspective:**

“In the customer perspective of the BSC, companies identify the customer and market segments in which they have chosen to compete. These segments represent the sources that will deliver the revenue component of the company’s financial objectives. The customer perspective enables companies to align their core customer outcome measures- satisfaction, loyalty, retention, acquisition, and profitability- to targeted customers and market segments, it also enables them to identify and measure.”  
(Kaplan and Norton, 1996, p 63)

Most of companies have the goal: “number one in delivering value to our customers”, but it is impossible that all companies to be the number one. Consequently, the organizations should gain the competitive advantages in their targeted segments, and they should achieve the customer satisfaction. Kaplan and Norton (1996) mentioned

in their book that in most of companies the customer core measures group includes: market share, customer retention, customer acquisition, customer satisfaction and customer profitability.

These five measures may appear to be all the types of the organizations according to Kaplan and Norton, and they are grouped into causal chain of relationships (seeing figure 3.2 below):

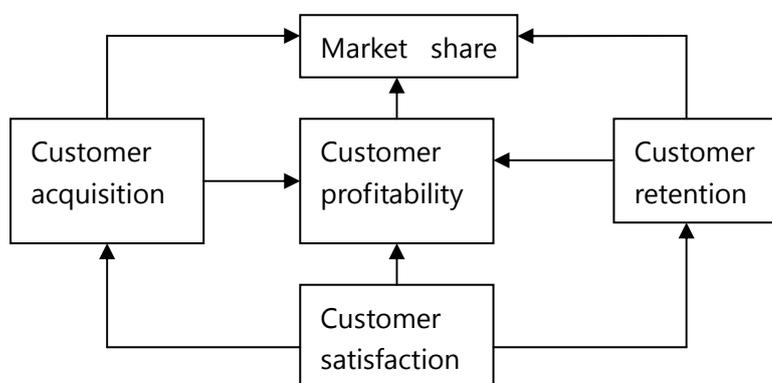


Figure 3.2: the causal chain of relationships between

*Source: Kaplan & Norton, The balanced scorecard: translating strategy into action, 1996, Harvard Business Press, p68*

Customer satisfaction means assesses the satisfaction level of customers along specific performance criteria with the value proposition; it leads to customer profitability directly because customer profitability is relative to the measures of net profit of a customer (segment), after allowing for the unique expenses required to support that customer.

The amount of customer satisfaction causes customer acquisition and customer retention. Customer acquisition means the measures in absolute or relative terms, the rate at which a business unit attracts or wins new customers or business; customer

retention means tracks in absolute or relative terms, and the rate at which a business unit retains or maintains ongoing relationships with its customers. Customer acquisition, retention and profitability together reflect the market share, which is reflecting the proportion of business in a given market that a business unit sells.

### **Internal business perspective:**

This is the third part of BSC, companies normally develop their objectives and measures for this perspective after create objectives and measures for the financial and customer perspectives. For the BSC, Kaplan and Norton recommend that: “managers define a complete internal-process value chain that starts with the innovation process---identifying current and future customers’ needs and developing new solutions for these needs---proceeds through the operations process---delivering existing products and services to existing customers--- and ends with postsale service-offering services after the sale that add to the value customers receive from company’s product and service offerings.” ( Kaplan and Norton, 1996, p92)

In this perspective, cost, quality, throughput, and time measures would be defined and measured. Based on these several points, Kaplan and Norton said that most companies make the objectives down to: improving quality, reducing cycle times, increasing yields, maximizing throughput, improving distribution and services, improving innovation and R&D, and lower costs as key indicators for their business processes. (Kaplan and Norton, 1996. P93) In this process, manager will know how well their business is running and weather its products and services conform to customer requirements (the mission) then they should explore ways of improving the internal system and functions.

## **Learning and growth perspective:**

This perspective includes employee training and corporate cultural attitudes related to both individual and corporate self-improvement. In the current climate of rapid technological change, it is becoming necessary for workers to be in a continuous learning mode. In any case, learning and growth constitute the essential foundation for success of any organization.

This perspective describes the organization's intangible assets, intangible assets have been defined as "knowledge that exists in an organization to create differential advantage". (Stewart, 1991) In 1998, Stewart extended his definition, said that intangible assets also means the capabilities of the company's employee to satisfy customer needs. (Stewart, 1998) Generally, patents, copyrights, workforce knowledge, leadership, information systems, and work processes are all the components of the intangible assets. Kaplan and Norton organize these organization's intangible assets into three categories: human capital, information capital and organization capital.

Human capital: the availability of skills, talent, and know-how required to support the strategy. Information capital: the availability of information systems, networks, and infrastructure required to support the strategy. Organization capital: the ability of the organization to mobilize and sustain the process of change required to execute the strategy."(Kaplan and Norton, 2004, p49)

**Human capital:** the main requirements in this content are skill, knowledge and value. Knowledge means the general background knowledge required to perform the job, like "subject matter expert", "know the customer". Skill should be the skills required complement the general knowledge base. (Negotiating, consulting). The value is talking about the set of characteristics or behaviors that produce outstanding performance in a given job. Like some work require teamwork but some other companies think about the customer focus. (Kaplan and Norton, 2004, p231)

Employee skills are the main support of the company performance, improving the employee skills and knowledge will improve companies' bottom line. Face to the global economic crisis, adding new skills, taking on increased responsibilities then improving performance is the good way to reduce the layoff pressure, and it also can help the company to seek long-term competitive advantages. (Clinton, 2009)

**Information capital:** Organization Information system and infrastructure put emphasis on communication, information system and infrastructures, such as internet has enabled a networked computing and communication environment. This communication happened between different participants (e.g. customers, employees). That is, participant A will satisfy the need of other participants, at the same time participant A also can received some other information which he needs. In this way, resources are made available to use by anyone. (Ye and Lai, 2001)

**Organizational capital:** “An enterprise with high organization capital has a shared understanding of vision, mission, values, and strategy led, has created a performance culture around the strategy, and shares knowledge up, down, and across the organization so that everyone works together and in the same direction.” (Kaplan and Norton, 2004, p275) Culture, leadership, alignment, and teamwork are the components of this part.

Culture: Studies show that most of the mergers and acquisitions were failed because they failed to deliver synergies. (Chadturi and Tabrizi, 1999) In this way the culture is the barrier for the organizations; there are also successful cases like IBM services and EDS, they have built successful outsourcing businesses, since they combine the staff of the outsourced units into their culture. Then the role of culture in these companies is enabling and it is a good asset of the organization. According to Kaplan and Norton's view, measurement of cultural values relies heavily on employee surveys.

Leadership: Why the leadership topic is more popular? Because of the concept of leadership is relevant to any aspect of ensuring effectiveness in organizations and in managing change. (McNamara, 1997) good leadership not only has the goal, but also sticks to it, to make sure the whole organization could be going one way. (<http://www.calvinwarr.com> )

Alignment: It converge the goals and incentives with the strategy at the all levels of organizations. All the staffs of the organization should toward the same final objectives. “Alignment is the necessary condition before empowering....the individual will empower the whole team.” (Senge, 1990, p235)

Teamwork: it put emphasis on the sharing: sharing the knowledge between the different staffs. “No asset has greater potential for an organization than the collective knowledge possessed by all its employees.” (Kaplan and Norton, 2004, p300)

### **3.2.4 Critical of the BSC:**

Even though BSC is considered as famous performance measurement tool, there are still pitfalls that can not escape from notice that lead companies to failure:

#### **From top to down:**

BSC was built based on the strategy breakdown, and distribute in different perspectives, so the process is from top to down. (Norreklit, 2002) in real companies, top manager can not always get the detailed situation about the bottom work place. So the BSC with this shortcoming must miss some important point from the bottom part. Consequently, the BSC contains control features which have been widely criticized for not being rooted in the organization. ( Norreklit,2000)

**Measures madness:**

In practices, most companies step into a misunderstanding circle, they think the measures are the big and vital part of the BSC, most of them keep going to create the measures and they have the idea: “the more the better”, but in the real business process too many measures will confuse people, and it won’t even be used as part of day-to-day business management.

**Horizontal misalignment:**

There are many different parts or organizations in each company, in some way each part can be seen as an individual, and then the trouble is that individuals which are keenly focused on producing assigned outcomes often develop tunnel vision. They may achieve their own success at the expense of others or the organization unintentionally. (Casey and Peck, 2004)

### 3.3 Strategy map

#### 3.3.1 Background of strategy map

*What is map? “Map is a representation normally to scale and on a flat medium, of a selection of material or abstract features on, or in relation to, the surface of the earth or of a celestial body”.* (Robinson and Petchenik, 1976) Harley and Woodward define it as ‘graphic representations that facilitate a spatial understanding of things, concepts, conditions, processes or events in the human world’ (Turnbull, 1989)

When the questions like ‘*Where am I?*’ or ‘*Which way should I go?*’ are asked, it is always easier way to answer when a map is shown: follow the path that leads to the destination. When looking at the map, it can be seen as the moving from the bottom line to the objectives, as observed from outside. It provides a common language that the entire human can understand and communicate with each other. Maps reflect your relationships with yourself, with others, also with the environment. (Lydon, 2003) The

power of map is that it represents the knowledge and worldwide views which gives unique spatial impact.

### **3.3.2 What is strategy map?**

*“Strategy map is your guide to getting there!”* said by Kaplan and Norton. Norton defines strategy map as a model of helping organization and management creating value. It is always easy to define strategy for an organization to create shareholder value, but the hard part is about how to achieve the goals. (Connor, 2004)

As a visual representation among the components of the companies’ strategy in a cause-and- effect relationship, Strategy map is as big an insight as the Balanced Scorecard itself to executives. Based on the four- perspective model of BSC, strategy map adds a second layer of detailed information that illustrates the dynamics of a strategy at time- based; strategy map provides a consistent way to describe strategies, so that measures and objectives can be established and managed, it provides the links between strategy execution and strategy formulation. (Kaplan and Norton, 2004)

Strategy map provides a normative checklist for the components and interrelationships of a strategy; the strategy is likely flawed if it is missing an element on the strategy map. Kaplan and Norton claim that organizations are often found no connection between internal process measures and customer value proposition, no clear objectives for innovation, or vague objectives for the employee motivation and skills and for the information technology roles, omissions like this on a strategy map generally will lead to disappointing outcomes. (Kaplan and Norton, 2004)

According to Kaplan and Norton, Strategy map links companies’ core objectives into each stage such as the development of employee knowledge, high quality products and customer satisfaction, which are linked to the companies’ value chain. With a strong cause and effect relationship character, strategy map links objectives with

indicators, for instance the lead indicator which comes before any other indicators and lag indicator that comes after. (Kaplan and Norton, 2004)

Therefore to sum up, strategy map as a tool that can graphically depicts organizations' strategy in a manner way in order to make everyone working in the organization can understand, it linked company's main objectives in a cause- and –effect manner, categorized by four perspectives which are part of Balanced Scorecard Methodology: financial, customer, internal, and learning and growth. (Lawson, Stratton, and Hatch, 2005) The figure 3.4 shows that Strategy maps was built based on that four perspectives of BSC

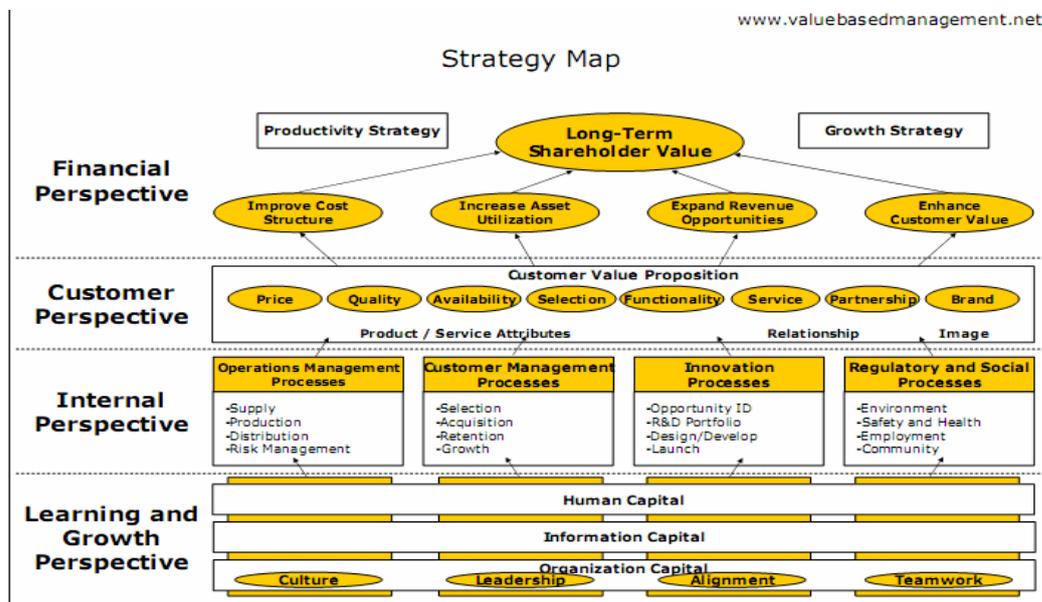


Figure 3.4: the framwork of the strategy maps.

Source: adapted from Kaplan and Norton, 2004

### 3.3.3 What are the advantages of Strategy map?

As a visual presentation of company's critical factors of succeeding, strategy map provides the cause- and- effect relationship between them, and also to represent organizations' strategy in a consistent way. As an effective tool to narrow the gap between the strategy formulation and strategy implementation, strategy map is to

make sure organizations' measures and objectives can be established and managed effectively. (Antola, Lönnqvist, and Rauva, 2004)

The advantages of the strategy map make these things to be truth:

### ***Simplicity***

By showing to people the strategy easily on a single page, strategy map's basic and main advantage enables both executives and employees telling the story of strategy in a nut shell, instead of taking out the thick documents writing about strategy. As the old saying of "one picture is more powerful than 1000 words", strategy map shows the common understanding from the top management team to infrastructures in the organization. (www.excitant.co.uk)

### ***Cause- and- effect relationship***

Strategy map links employees' duties to the companies' overall goals, so employees won't get lost when they get mission from executives. There are problems that without strategy map, sometimes employee doesn't quite understand the order from executives and there is a great chance that they mislead executives' order. (www.information-management.com) With the help of strategy map, it provides the link from the strategy formulation to the strategy execution, aligning intangible assets to strategic themes with the visual cause and effect relationship. (Kaplan and Norton, 2004)

The framework of strategy map links the four perspectives from intangible assets to value creating process. Lag indicators like financial and customers perspectives describes the desired outcomes, financial results can be achieved only if satisfying targeted customers, customer value proposition clarifies how to generate sales from targeted customer. Lead indicator internal creates value proposition and deliver it and intangible assets must be there to support the internal by providing the foundation for the strategy. (Kaplan and Norton, 2004)

By showing the link, both employee and executive can have a better understanding of companies' most important objectives, for them to make the right decision about gain and loss. If managers find out the supposed lead and lag indicators don't exist, then they should reconsider the expected relationships in the business model. (Kaplan and Norton, 2004)

### ***Timing***

Since there are indicators in the cause- and- effect relationship, strategy map can find out the time taking for the change in one lead indicator to the influence on changes in a corresponding lag indicator. For instance executives may want to know how long it takes from training employee to get higher revenue. (Connor, 2004)

### ***Intangible assets***

The fourth perspective of BSC: learning and growth, highlights the important role of intangible assets: human capital, information capital and organization capital. Objectives from each aspect have to be aligned with each other and also with internal process. Strategy map put intangible assets as part of strategy into visible link to tangible financial outcomes. Intangible assets are important in the execution of strategy and value creating as they don't give direct impact on financial outcomes, however there is a strong link between them. For instance the training of the employee will affect the quality of product, and influence the customer satisfaction. Intangible assets don't create value themselves, they have to connect with tangible assets to make them work, and strategy map shows the combination between them. (Kaplan and Norton, 2004)

### ***Magnitude***

Strategy map can help executives to find out the magnitude of the influence from one change in lead indicator to the corresponding lag indicator. By doing so, managers can decide how many resources to devote to the leading indicators; management can

prioritize the resource commitments when knowing the better influence on customer satisfaction and retention. (Connor, 2004)

### ***Objectives rather than measures***

Some studies show that two thirds of US companies which have been using the BSC have failed. Some of the companies are presenting more than 100 measures in the implementation of the BSC. Too many executives and employees take care of the entire process at any given time. ([www.strategyexecutionblog.com](http://www.strategyexecutionblog.com)) A strategy map, however, helps management avoid those madness measures by starting with objectives and assist to describe what the company wants to achieve, and then follow the relevant measures to assist the objectives. By showing this, inappropriate measures will be replaced by suitable objectives. Objectives showing in strategy map better explain the themes and component of a company's strategy. ([www.excitant.co.uk](http://www.excitant.co.uk))

## **3.4 Implement BSC into SM (BSC+SM)**

### **3.4.1 Combine BSC into strategy map**

The relationship between the BSC and strategy map is interrelated. As showed in figure 3.5, based on the development of the BSC, the strategy map shows the objectives of the internal process and the intangible assets that required supporting them, by giving cause and effect linkage. The BSC translates the objectives of strategy map into different measures and targets. With a set of activities given, the objectives and targets will be achieved simply. (Kaplan and Norton, 2004) It can also be said that a strategy map is the cornerstone of the BSC project, by starting with describing the strategy map, with clear strategy themes presenting in front of everyone which will make sure the measures proposing in the right direction. (Olve, 2004)

Pictures can build a very important medium for communicating. Nevertheless various objectives and interrelations were verbally documented to avoid multiple interpretations of lines and the single term; this gives the strategy map the advantage than the BSC that it can present all relevant information about strategic objectives in the company at “one glance”, which is a good support for communicating the objectives and interrelations. (Valentin and Augl, 2008)

(There should be noted that the purpose of showing the figure 3.5 is to make authors as well as readers have a clear picture of how strategy map and BSC work together, the content listed in the table should be ignored since it’s not the case that authors are focusing on. )

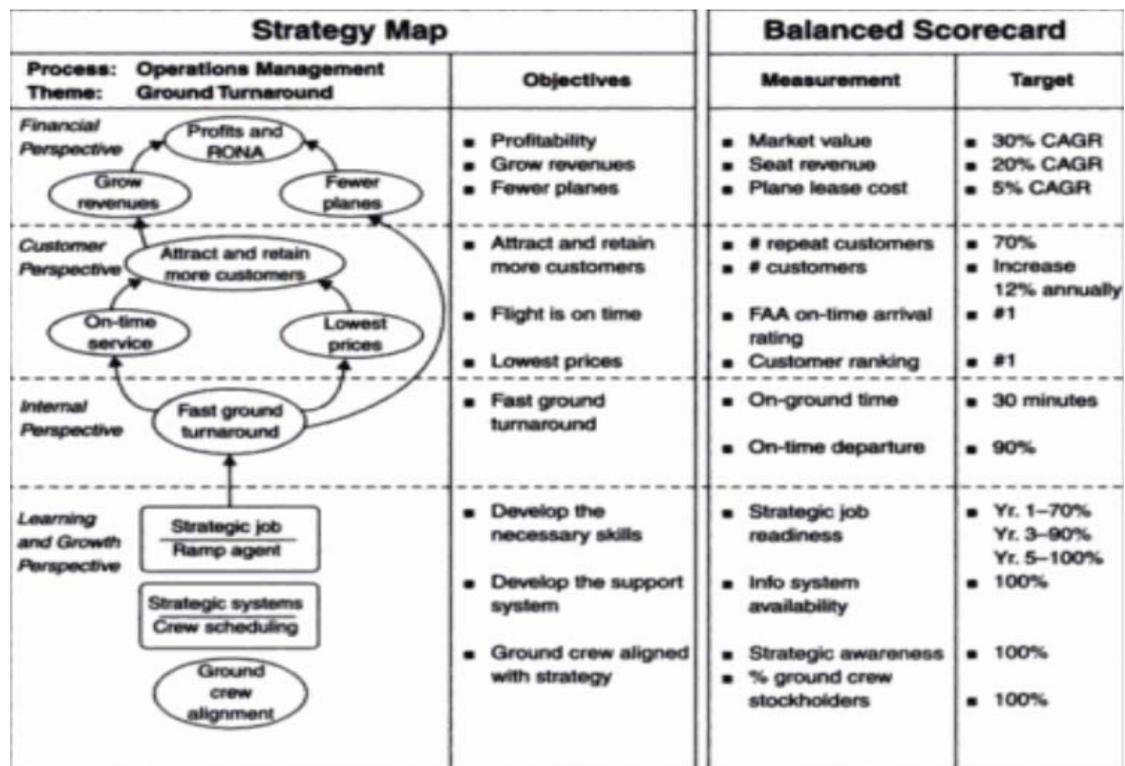


Figure 3.5 the interrelated relationship between BSC and Strategy Map

Source: Adapted from Kaplan and Norton (2004)

### Active process

Strategy is not a standalone process. Making strategy is a continual process. Communication and education are critical in executing strategy. It is also a critical factor for success by aligning incentives and personal objectives. When the cause –and –effect link doesn't exist in a strategy map, the measures supplied by BSC have to be changed accordingly. The BSC allows strategy continually, not just a strategy review session annually. Both the BSC and SM are linked in business intelligence systems as well as the planning and budgeting systems. (Kaplan and Norton, 2004)

According to Vice President Geoffrey Fenwick of Balanced Scorecard collaborative, only 10% of organizations have been able to state their strategy in measurable and concrete indicators. In connection with these problems, Schatz reports as companies can't handle well with the BSC implementation, and as a top down process. The BSC requires executives to part with proprietary information and distribute the information to the lowest level which is employee in the company. (Schatz, 2000) As a complementary, strategy map starts from the bottom of the company, showing managers the process from employee executing the mission and motivation to the financial outcomes and profit increases for the company. With a visual picture of showing profit growing to the company, it would be easier for managers to make the right decision of whether or not sharing and distributing proprietary information to the lowest level to get a multi-understanding. (Kaplan and Norton, 2004)

The BSC+SM tool makes the strategy simple. It avoids drawn- out description of lofty goals. Instead, with clear describing what should and shouldn't do about the company. It ensures the long-term strategy plans assumptions reflect real market economics, as mentioned by Kaplan and Norton. It is mentioned that value creation is started from internal process, that company can alter their performance relative to rivals, being advance with the times. By speaking the same language in the organization, the BSC+SM narrows down the space among unit leaders like the relationship between marketing and finance teams, a common framework and picture show them to assess performance. (BNET.com)

The BSC+SM tool makes strategic priorities more explicit to employees; everyone knows what to do in order to execute key actions at the right time. This combination tool can provide both monitoring and predicting function to continuously develop, by monitoring the real time results, remedy flaws in the plan and then report back to execution. Executions develop their ability same time with strategic planning and changing. (BNET.com) The time perspectives can be categorized into yesterday, today and tomorrow, the companies' financial performance is correlated to the history of how well the company has operated in the past and how is it today, even shows the challenges of tomorrow company prepares. (Skärvad and Olsson, 2003)

### **3.5 Strategy Map in innovation companies**

Mapping Strategy is a cutting-edge way to strategy execution through the processes that depicting organization' main key objectives into graphical and illustrative format. (Armitage, 2007)

#### **3.5.1 Strategy themes**

The art of the strategy is identifying and excelling at the critical few processes that are most important in the customer proposition. Company should manage all the process well, but company should focus on the few strategic processes because those strategic processes create the differentiation of the strategy. Those few strategic processes are recognized often as strategy themes, which allows companies to focus on actions where strategy themes are building blocks around which the execution of strategy happens.

When developing strategy map, companies should identify the process in the internal perspective of which are the most important factors for their strategies. Kaplan and

Norton expanded the internal process into four clusters: operations management, which requires low total- cost strategy at operating process; innovation, which requires product leadership companies stress excellence in their innovation process; customer management: establishing and leveraging customer relationships, requires companies with customer solution strategy to emphasize their customer management process; and the forth regulatory and social, which conforms to societal expectations and regulations to build strong communities. (Kaplan and Norton, 2004)

### **3.5.2 Features of innovation**

In innovative companies, executive teams strive for producing a stream of state- of -the- art products and services continuously, and in this kind of product orientation, 'Creativity', 'commercialize quickly' and 'pursue new solutions' are most emphases in the strategy implementation. (bscol.se)

Successful innovation leads to customer acquisition and growth, enhancing the margin, and causing customer loyalty. The product or service innovation brings the new way of solving customer's problem by benefiting both customer and the sponsoring company. New product innovation leads to growth and prosperity. (Robert, 2002) Value proposition without innovation can be imitated eventually, and will lead the competition based only on commoditized products and services. (Kaplan and Norton, 2004)

As elusive as innovation is, the capacity of innovate has always been important. Over years of experiences show that sustained innovation has become the number one of sure- fire way to gain competitive advantage, and long term business value creating. 90% of companies have agreed that innovation is the core for companies' growth. (Wood, 2005)

Innovation –adept firms should know that the customer is fickle, and difficult to

predict. However, they couldn't stop trying because they know only route for them to success is to creating value for customer. Due to the information available for customers now to compare and contrast an ever-increasing array of value proposition, companies should adapt new ways to remain customers and attract new and potential customers, for instance inviting the voice of customers to implement new concepts. (Tucker, 2002)

### **3.5.3 Strategy mapping in innovation companies**

According to Kaplan and Norton (2004), innovation companies create considerable competitive advantages when they can complete the process from bringing innovative products-- well matched to targeted customers' needs or expectations-- to the market fast and efficiently.

#### ***Innovation process***

There are four important processes in managing innovation according to Kaplan and Norton: first of all, for the long term development, company has to *identify opportunity for new products and services*, to make its business growing. Company can get the idea of new products sources from internal and external. Internal from the ideas based on the skills and technology understanding that accumulated from past process innovation; external sources are also important such as research laboratories, universities, and suppliers and customers especially.

Second, *manage the research and development portfolio*: after generation of new product or services ideas, managers should decide the right project to executive and kill the unreality ones. Project can be done with internal resources, or in a joint venture collaboratively, it can be licensed from another organization, or outsourced.

Third, *design and develop the new products and services*: with the executive, new products and services are designed and developed to the market. A success product

development should be attractive to the targeted customers, therefore consistent quality and cost enabling satisfactory profit margins can be achieved by the process of product development cycle.

Finally, *bring the new products and services to market*: with the effective production and effective market, company can get the desired financial outcomes.

### ***Innovation linkage to customer perspective***

Excellent innovation process offers customers with two important components of value proposition: first one is the specific functionality for customers, which became the basis for measuring value proposition in customer perspective. By communicating the most important functionality aspects of newly products, employees learn about the performance dimensions that companies have to strive for enhancing. The second one is the first-to-market with new products and services, which is vital for company to gain margin growth. Being later than competitors in product or services innovation could cost 20% more overrun than on innovation process itself. (Kaplan and Norton, 2004)

Extending existing or new products to new markets is also the customer objective from innovation process. Companies should strive to get the maximum return from investments on expanding markets, to beyond the one initially targeted by applying the leading services, products to application. (Kaplan and Norton, 2004)

### **Learning and growth**

In this perspective, competencies, technologies and organizational climate are super important in working innovation process effectively. Competencies require employees to be experts in the underlying science and technology, besides that, integrations among departments such as interacting between marketing, operations, and finance effectively to enable project develop meeting goals for launch time, quality, functionality, and manufacturing cost. Employees should have the abilities to work on

multidisciplinary projects with multifunctional teams. (Kaplan and Norton, 2004)

Information technology is a vital component in the process of product development. It enhances the knowledge communication and project experiences across function, department, and geographic unit.

Teamwork in innovation projects is critical for success. Employees should not only work with internal functions, but also should be actively involved with external scientific and technology community. Scientists and engineers should be engaged with scientific conferences, scientific literature and leading universities continually to stay alert for advances that could affect company's products. Teamwork also influences the organizational culture that it has to put innovation, disruption and changes as vital and core values. (Kaplan and Norton, 2004)

## 4. Empirical study

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*In this part we will show the information about the Ericsson which we get from the interview and relative websites.*

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### 4.1 Ericsson and its strategy

Ericsson is the world's largest supplier of network equipment and related services to telecom operators. It has over 78,000 employees and customers in more than 175 countries. Innovation, technology leadership, sustainable business solutions and long-term relationships with all major operators result in Ericsson serving well over 40 percent of all mobile subscribers. Ericsson manages a number of operator-owned networks with, altogether, 250 million subscribers globally. (Ericsson's annual report, 2008)

“Our vision is to be the prime driver in an all-communicating world.” An all-communicating world means a world in which all people can use voice, data, images and video to share ideas and information wherever and whenever they want. We aim to make people's lives easier and richer, provide affordable communication for all and enable new ways to do business.” (ericsson.com) Based on this, when Ericsson knows what they want to be and what is their final aim, they have their strategy. (See figure 4.1)

## THE ERICSSON STRATEGY

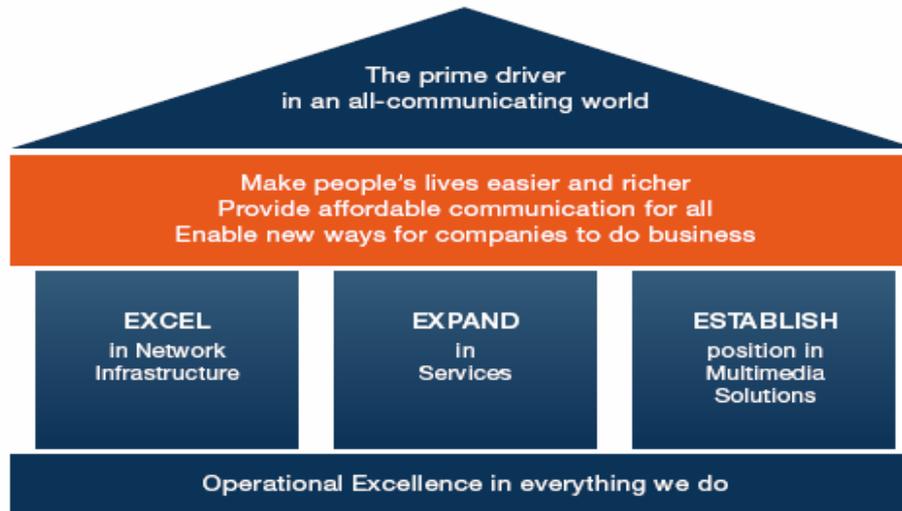


Figure 4.1 the Ericsson strategy

Source: ericsson.com

Figure 4.1 show us the steps of the Ericsson's strategy. Ericsson divides its work into three parts. They provide the communication networks, supply the telecom services and give the multimedia solution. These three parts are closely related. Nowadays, there is more than 40% of all mobile traffic that go through Ericsson's networks. Every 90 seconds they deliver a new radio base station, have approximately 24,000 patents, have a hundred years telecommunications market history and serve more than one billion subscribers.

Long-term relationship with their customer is an important part of Ericsson. They have been present in many markets for more than a hundred years. Building strong, long-term relationships with operators around the world is their significant advantage. At the same time they have a strong ability to offer end-to-end solutions and a local presence in every major market which enables Ericsson to be a true partner to their customers.

Respect, professionalism and perseverance are the core values that are the foundations

of Ericsson’s culture, guiding employees in their daily work- how they relate to people and how they do business. Ericsson’s core value map (figure 4.2) shows that, they are striving for keep leading position in the communication area, based on the company’s vision; they put the innovation as the priority, try to build strength and quality every day. Innovation is a key to Ericsson competitiveness and future success. By early involvement in creating new standards and technologies they are often first to market with new solutions – a distinct competitive advantage. They invest in research and development (R&D) and strongly contribute in the creation of open standards.(ericsson.com)

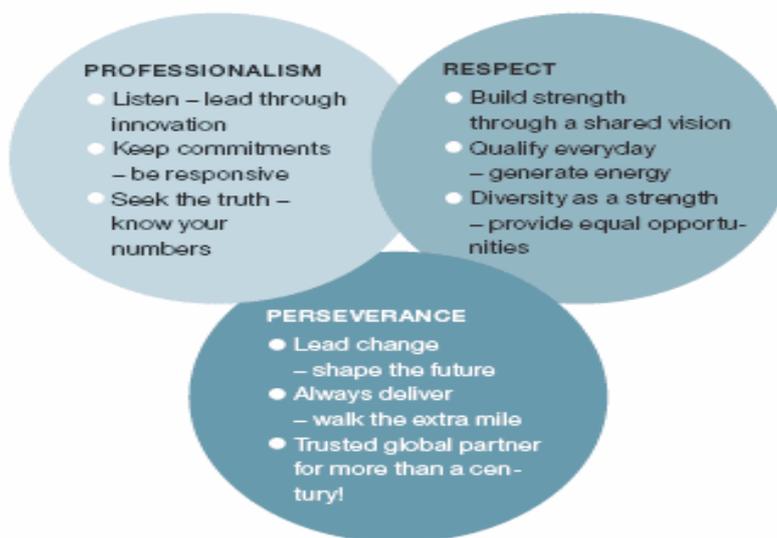


Figure 4.2 Ericsson’s core value

Source: Ericsson.com

## 4.2 Ericsson’s BSC

Before the interview, we first searched all the information about the BSC at Ericsson, however only limited sources were presented. Official website of Ericsson and annual report stated that the BSC is used as a framework for translating strategic objectives into set of performance indicators. We get the information that in Ericsson, there are 5 perspectives in the framework of BSC: financial, customer, competition (operational

excellence), internal efficiency and employee. As stated in the website, Ericsson use BSC as management tool to clarify and track progress towards goals, align personal and departmental goals to overall company goals, and finally link strategic objectives to long- term targets. (ericsson.com)

#### **4.2.1 Case description**

In this section, we combine Jacobsson's interview answer and what we found from web information.

Ericsson has been using the BSC as their one of performance measurement tools for almost 12-15 years and as we know there are no strategy map in today's Ericsson, Since Ericsson is an innovation company, in their strategy work, Ericsson focus on technology and competitive position in a rapidly changing telecom market. The main purpose of our first interview is to know the main objectives and measures in each perspective.

##### ***Financial perspective:***

Shareholder value creation is one of the most important performance monitor in Ericsson. The company's objective is about having a faster sales growth, a best-in-class operating margin and a healthy cash conversion. Company has these three kinds of objectives in financial part, and then they also have some measurement, increase sales at a rate faster than the market growth, deliver best-in-class operating margin, its required better than the main competitors, generate cash conversion of over 70%. (Ericsson's annual report, 2008) Our study is to focus on non-financial perspectives, therefore we didn't go deep of financial perspective.

##### ***Customer/market perspective:***

In the customer perspective, the main requirement is continuing high market share with the largest and most demanding customers and achieving the high level customer satisfaction. In Ericsson's BSC, we can see the strong linkage from the customer

perspective to innovation and operation perspectives. In order to achieve the objectives of the customer perspective, the company puts focus on innovation process, they use high quality and new product and service to satisfy their customer and then take the market share. In the current competitive environment, Ericsson still thinks that first to the market is a vital factor for the company, and they also think this is the advantage to attract customers.

Every year, Ericsson shows that they have many successful customer stories, which means being a trusted partner with their customer, working closely with their customers in order to fully understand their strategic needs and intentions. They have deep communication with their customer, they have active listening, share and explore ways to cooperate and then supply the most efficient solutions. All of these features achieved their competitive advantages. Company's customer segment is global, will build on the current relationship and will have a strong combines offering and broad customer base. They always think forward the customer needs, e.g.: face to the growth of the broadband traffic demand. They work actively to increase speed and capacity. They have more than 40,000 interviews about their customer opinion related to trends and needs and this valuable insight is incorporated into product development, sales and marketing.

In order to create the market-leading company, they try to keep the long-term relationship with their customer and try to supply the superior products and services in order to provide the competitive advantages. Ericsson's solutions for real-time charging and mediation also strengthen the competitive advantages.

Ericsson is always in the front of landing new products or services to the market. For instance, Ericsson is the first company to deploy soft switch technology in both mobile networks and wire line in the world, and it reduced operation fees and provided more efficient networking. It is also the first to implement Mobile Broadband into Cable-TV Network. Ericsson's continued leadership in technology

improved its customers' competitive advantage. (ericsson.com)

In the customer objective, there is an important and basal factor--offer enhanced product/service functionality to customers. It is related to the performance attribute of new product and service including size, speed, and ease-of-use and response time and so on. In 2008, Ericsson broader product portfolio created partnership with leading customers to move forward in network convergence and full service broadband. They provided their customers with tailored education programs to make sure that the customers have the enough skills and competence to deal with the complex technologies. Ericsson focuses their professional services together with managed services, systems, integration, consulting, education and general customer support services. For instance, in the consulting part, experts can provide support like decision making, planning and execution to their customers in order to improve customers' business.

### ***Innovation and operation management***

Generally, they try to have cost reduction plan, and the measures for this objective are capital turnover ratio, operating expenses as percentage of sales as well as the receivable days, inventory days. Less receivable days and inventory days will reduce the cost and bring more profits. In Ericsson, they separate this part into innovation and operation perspective and focus on them.

### **Technology leadership**

Ericsson is a technology company, most of the innovation is inevitably technology driven. With ambitious R&D program, Ericsson has approximately 19,800 employees in 17 countries worldwide and invested 31 billion SEK (excluding SEK 3 billion restructuring charges) or 15% of sales on research and development since 2008. Most of the money is invested in the development of product, of which the majority of the money in the infrastructure of mobile communications network. Ericsson has continued to invest in important areas such as broadband access, mobile system like

LTE, converged networks, IP technology, service layer, and multimedia. (Ericsson annual report, 2008)

Ericsson is the world's leading provider in technology and services to telecom operators. They established R&D center as part of the Global Ericsson organization development. They invest heavily in R&D and promote actively open standards and systems with most comprehensive intellectual property portfolio. In Ericsson, there are highlights in R&D overall:

- 3G development for over a decade
- Unquestionable leader holding patents covering UMTS/WCDMA
- Approx. 20,000 granted patents worldwide
- Approx. >500 patent applications filed each year
- Any company using technology included in the leading standards requires a license from Ericsson (Ericsson.com)

Ericsson has built up a considerable portfolio of intellectual property rights (IPR) related to telecommunications technologies because of so many years of involvement in the new technology development. At December 31, 2008, Ericsson has approximately 24,000 patents worldwide, including patents essential to the standards GSM, GPRS, EDGE, WCDMA, HSPA, MBMS, TD-SCDMA, CDMA2000, WIMAS and next-generation LTE. Ericsson's intellectual property rights are valuable business assets. Those rights are licensed to many other companies in return for royalty payment and/ or access to additional intellectual property right. (Ericsson annual report 2008)

Ericsson Technology Licensing develops state-of-the-art Bluetooth design solutions for the mobile communicating, computing and media devices. Ericsson has been instrumental in the Bluetooth wireless technology development from a simple idea to an acclaimed industry standard widely. Ericsson claims that they have complete

portfolio Bluetooth baseband, software, training and services of all which provides semiconductor and original equipment manufacturers, that is the most reliable information for the Bluetooth wireless technology implementation in new product. (Design-reuse.com)

Ericsson is in the forefront of broadband technology development. From virtually none in 2000, Ericsson has estimated that there are more than 600 million broadband subscriptions in 2008, of which more than 200 million are mobile (HSPA, CDMA 2000 EV-DO, Mobile WiMAX and other technologies are included). Ericsson estimates that there are most likely to be 3.4 billion of broadband subscriptions, and mobile will be taken up to more than 4th -5th of the money. (ericsson.com)

### **World –class innovation**

Ericsson maintains a close corporate relationship with universities and research companies. The tight connection between Ericsson internal research and outside world is core element for Ericsson in the innovation process. Ericsson let employee present their own ideas, which is also a valuable source for the innovation in a real project. (sweden.se)

“Supporting innovation in mobile and converging communications is important to Ericsson” said by Kurt Sillen, head of Ericsson Mobility World, he said in the technology convergence, innovation and consumer- service mobility is more and more important and the position is increasing continually. Supporting innovation is key way to maintain a leading position for Ericsson. (ericsson.com)

Democracy is a key in the process of innovation, as Andréasson and his co-author Steve Strid write in The Viking Manifesto: “The Viking organization is built on the basement that everyone can speak for themselves freely, the Vikings knew that democracy is another means of empowerment and empowerment is a means of

passion and commitment, as it becomes a management theory today, that democracy is not just a nice theory, but also an efficient business.” (Sweden.se)

Ericsson has been standing in the market for 130 years, and stepped business into 140 countries. Ericsson’s markets are all over the world. In September, 2008, Ericsson announced that it will establish an Innovation Center to develop mobile applications in sub-Saharan Africa. The Innovation Center will focus on meeting the needs of most poor and rural populations but finally benefit society as a whole. It will develop business cases which enable the network operators to expand mobile broadband service in emerging markets, with an emphasis on developing sustainable applications and services for the rural community. (itinsight.info) Ericsson never left a market, it considers every single customer. Almost half of the sales are from outside of Western Europe. Ericsson leads customer growth and gets profitability the same time on the business road. (Ericsson internal)

Jacobsson said in the interview that the process of developing new products and updating existing products requires a lot money and commitments to develop, however may not always being succeed as a result. Even so, Ericsson still actively is being engaged in the development of technology standards which are incorporating into their products and solutions. The earnings and sales will suffer if they invest in develop of technology and technology standards don’t function as they expected.

### **Leadership position in energy efficiency**

Improving energy efficiency of Ericsson’s products as well as the network energy optimization overall, make it the vital reasons for Ericsson to be the judging panel of industry experts, and also being selected for the award of university professors. (ericsson annual report 2008)

Ericsson has committed improving energy efficiency of its base station by up to 80% until end of year 2008, comparing to the level in 2001. The introduction of the Ericsson Tower tube is another company’s recent achievement, which led to 30% in

carbon dioxide emission associating with the construction, as well 40% reduction in energy consumption, reducing their environment impact and operational expenditure significantly. (ericsson.com)

Ericsson is also leading the push towards alternative energy sources. Working with solar power and biofuels has significant impact of cutting carbon dioxide emission, and also making telecommunications available in where traditional power options unavailable. As first installing solar site in 2000, Ericsson has a steady rise in interest among operator worldwide basing on such solutions. (ericsson.com)

Mats H Olsson, President of Ericsson China, said that Ericsson pays great attention to the energy efficiency, and Ericsson is dedicated to improving the environmental performance of the telecommunication industries in the future. Ericsson's ongoing focus on environmental area has caused lots of honors, for instance being recognized as the only equipment vendor in the Carbon Disclosure Project's Climate Disclosure Leadership Index. (ericsson.com/ericsson/press/releases)

In the cause relationship, Ericsson's most material environmental impact based on life-cycle assessment is energy-use, by the process of energy efficiency, improving the product operation. By leading top position in energy efficiency, in the benefit of customers as well, leads to competitive advantage. By helping developing countries like China and India improving carbon-lean technology, Ericsson also developed the services by aiming to support the operator energy-consuming analysis on the new and developed networks. (Ericsson annual report, 2008)

### **Operational excellence**

Ericsson is striving for operational excellence as a competitive advantage. They strive for operational excellence in all business they do. Ericsson is continuously focusing on the areas of internal process, supporting system and ways of working. Ericsson treats customers in the best way forward, which requires well developed change

capability, with effective and efficient processes that yield to innovation consistently. Providing high quality products and services to customers with low cost ownership, in order to satisfy the needs of customers, Ericsson strives to be operational excellence as a important factor of being better company. (Ericsson annual report, 2008)

Operational excellence requires innovation and long-term planning to make sure as simplest and smartest as possible in the working process. Ericsson becomes a sharper, more responsive company because of Operational excellence. And this is the vital for today's success in telecoms market. Technology remains important, but developing technology doesn't search a market directly, customers expected better, easier and more affordable to use services with enable them to communicate anytime, anywhere. (ericsson.com)

***Employee:***

Finally, about the learning and growth perspective, in this perspective Ericsson more focus on their employees, so in the Ericsson, we called this perspective is employee perspectives.

In the employee part, the main question in Ericsson is how to achieve the employee's satisfaction? How to improve the motivation of employee? Since, the employee satisfaction is another main monitored of Ericsson's performance. They use competitive compensation scheme to be rewards performance and they side the employee interest with the interest of shareholders. In this way, they can motivate employees' action. At the same time, Ericsson uses the benchmarking to compare with the similar global companies. Through the comparable with the similar companies, they can find the advantages and disadvantages of their employees. About the employee-remuneration, it's based on the employee's performance, competitiveness and fairness. Jacobsson also mentioned that they have stock option plans and stock purchase plans as the compensation to employee. All this action and measures are try to improve the motivation of employee and achieved employee satisfaction.

For Ericsson's key employees, they have the key contributor retention plan. It is part of Ericsson talent management strategy and is designed to give recognition for performance, critical skills and potential as well as encourage retention of key employees. In the year 2008, there were 3415 employee left the company and at the same time 8144 joined. (ericsson annual report, 2008)

For the training program, they have internal training web site. In their 2008 performance highlights, training sessions have a significant place. "Eight auditor training sessions were held, bringing the number of supplier code of conduct auditors to over 50, on-line supplier code of conduct 'observer' training course completed by more than 1300 Ericsson employees"(ericsson annual report,2008)

Ericsson think they are at a leader position in the market and will continue this position, the main contributor is their employee, and they believe that people with ideas, innovative thinking can help them fulfill the vision. By working in teams across organizational and national boundaries, employees will utilize the wealth of knowledge around them to find creative ways to succeed. Ericsson think the employee is their greatest asset. (wheretowork.com )

In Ericsson's business process, there are some other intangible assets also have an important position, for instance, culture, leadership and teamwork: For Ericsson in order to sustain the global leadership in the communications industry, they rely on embrace and live according to their core values. These values describe their culture and support the way to do the business and the way respond to their customers. These values define how the employee work together and how they treat their customers and partners. Ericsson's culture represents at how to share the values and mission, in Ericsson, all the employees must periodically review the code and take the feedback to show that they understand its contents and rigorously follow its spirit in their daily

work. According to CEO Carl-Henric Svanberg, “When employees in 140 countries consistently apply our values and principles, we gain the most powerful advantage we have for attaining our vision of global Leadership.”(ericsson.com)

Another important intangible asset for Ericsson is leadership. Since 1999 they have had a program called Excellerate global management program, the aim of this program is to develop potential Ericsson leaders, take the participants through every facet of the company’s operations and providing them manage skills and academic knowledge and improve the qualified leaders can mobilize all levels of organization toward the company’s strategies. (wheretowork.com ) Teamwork concept was also emphasized by Ericsson. Ericsson encourages international careers and job rotation to improve their global approach. At the same time the company promotes global networking and provides their employees a platform to share their idea and experience across the organizational and national boundaries. They have some projects requiring the different department experts working together in order to share the knowledge and experiences. (wheretowoek.com)

Jacobsson mentioned in the interview that in practice, employees at Ericsson can not easily catch up the executives’ strategies. In order to make up this shortcoming, Ericsson puts in a lot of effort to communicate its strategy within the whole group, aiming to avoid wrong actions due to the misunderstanding of the strategy.

#### **4.2.2 Competition environment**

Ericsson has three top competitors in the communicating industry: Alcatel-Lucent from France, Huawei from China and Nokia Siemens Network from Finland. Alcatel-Lucent focuses on mobile, fixed, IP technology, software and converged broadband networking hardware and services. Operating in more than 130 countries, Alcatel-Lucent is one of the largest innovation and R&D houses as well.

(alcatel-lucent.com)

Another competitor Huawei is leading global telecommunications solutions provider with headquarter in China. Huawei's solutions and products are encompassing wireless products, network products, terminals, as well as applications and software. Huawei has products and solutions deploying in more than 100 countries and serving 36 of the world's top 50 operators. (huawei.com)

Nokia Siemens Networks, which is created as the joint venture between Siemens AG's COM division and Nokia's Network Business Group, with headquarter in Finland. It operates in about 200 countries, with 60,000 employees worldwide. Nokia Siemens Networks has a strong communicating industry service; they also provide solutions for public and corporate solutions. (nokiasiemensnetworks.com)

Ericsson competes hard with its rivals. In 2008, Nokia-Siemens won Ericsson with the contract of building Vodafone NZ's 3G network, as a consequence of Ericsson laid off 300 staff. Alcatel-Lucent also won Ericsson same year by been selected to build the backhaul component of Telecom's new 3G WCDMA/HSPA mobile network, which is the link in a cellular network that connects cell towers to a main network of a telephone company. (nbr.co.nz)

## 5. From BSC to Strategy map

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*In this chapter, we will combine the theoretical and empirical parts, to develop a model from BSC to Strategy map*

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With the detailed information showing in the empirical about Ericsson, we complete the five perspectives of BSC, with a short presentation of financial perspective. We found Ericsson also has some practical problems in the business process. Based on this information which we gathered and the problems which we found, we design a general strategy map for Ericsson, and discuss the necessity of having strategy map to Ericsson. We develop this chapter in the following steps: first is to compare the Kaplan and Norton's version of BSC with specific version of Ericsson's BSC; the second step is analyzing the issues Jacobsson mentioned in Ericsson, and the potential risks that will influence Ericsson's future; the third step is to draw a strategy map for Ericsson, as solutions for the problems and risks.

### 5.1 From BSC in theory to BSC in Ericsson

Ericsson's BSC perspectives are divided into 5 parts: financial, customer, operational excellence, internal efficiency and employee. Different from Kaplan and Norton's model is Ericsson separate internal perspective to internal efficiency and operational excellence. Companies should pay attention to few strategic processes that are most important. In this case, Ericsson based on their vision of being the prime driver in all-communicating world, strives for operational excellence in everything they do. So they focus not only on internal innovation efficiency, but also on excellence in operation.

In the learning and growth perspective, Ericsson focuses on the development of employee. Ericsson put a lot effort to attract top talented employee and to maintain

key-skilled employees. Ericsson takes intangible assets into very important position for their global development, and employee plays a vital role as a lead indicator in Ericsson.

When we looked into each element in BSC, we found there are almost more than three main objectives in each perspective. (We will show them on the table 5.1-table 5.4) Because Ericsson is worldwide international companies with 3 segments in its business, therefore Ericsson is facing more than one category of customers, more than one area's technology predominating, which makes BSC's elements developed in a more complicated way.

## **5.2 Problems in Ericsson's BSC**

From the interview and some other sources' information, we found that Ericsson had some practical problems and potential risks in the BSC implementing process. We summarize them as:

- Jacobsson said in the interview that employees couldn't always follow top managers' orders, they might misunderstand the managers now and then, and therefore Ericsson set many communications meeting for employees to catch up executives' leader.
- There is 'compliance' problem according to Jacobsson, for instance to follow the rules and regulations and to have business continuity plans and security in place is sometimes taken for granted and not among the objectives listed in the BSC.
- There is a risk that Ericsson invests a huge amount of money on technology developing, but the earnings and sales are not always showing as they expected to be. There is a miss link between market results and investment. Without this link, Ericsson will keep going to put a lot effort on investing technology, even though

there could be negative customer response.

- Ericsson is facing global competition from three major rival companies: Nokia Siemens Networks, Huawei, and Alcatel-Lucent. In order to keep the position of being in front line of communicating industry, Ericsson needs a more efficient way to perform its strategy and innovation.

In the third step, we draw a strategy map step by step as a solution to solve the problems mentioned above.

## **5.3 Developing strategy map in Ericsson**

We adopt Kaplan and Norton's way of developing strategy map in innovation companies; therefore we take innovation process as the first step:

### **5.3.1 Internal efficiency**

As most important part of BSC, innovation is the core driver of Ericsson's improvement, and the development of technology drives the innovation process. There are also three main objectives in this process: technology leadership, world-class innovation, and leadership position in energy position. (Showing in Table 5.1)

#### **Identify opportunities with heavy R&D investment:**

Ericsson is a technology driven company, they invest 15% of sales on research and development on their technology develop such as broadband, network and multimedia to develop products. Ericsson has built up intellectual property rights portfolio for telecommunication technologies. They licensed those rights to other companies in return for royalty payment and/ or access to additional intellectual property right.

There are more than 20,000 granted patents in the worldwide and more than 500 patent applications filled each year.

**Design and develop new products, services and market:**

Democracy is a key in the process of innovation, Ericsson let employee present their own ideas, and empowerment shows the internal development. Meanwhile, Ericsson emphasizes the corporation with outsiders, they maintains a close corporation relationship with universities and research companies. Ericsson work actively on expanding customer base, consumer- service mobility is becoming more and more important. Ericsson has stepped business into 140 countries and is still seeking worldwide market

**. Energy efficiency**

Energy efficiency plays an important role in the innovation process. Working with energy efficiency has two directions, for one direction is to reduce cost, improve product operation and then satisfy customers. Another direction is to improve environment performance in the telecommunication industries. Because Ericsson put lot efforts on energy sources, such as cutting carbon dioxide emission, working with solar power and biofuels, which gives Ericsson a great reputation in the world, indeed helps Ericsson easier to expand its business with worldwide.

Therefore based on the theoretical support and empirical data, we summed the main objectives and core measures (KPI) in the following table, to give authors and readers an easy understanding vision.

**Table 5.1**

Objectives	Measures
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Technology leadership (with efficient and high quality telecommunications )	<ul style="list-style-type: none"> <li>● Investments in R&amp;D as % of sales</li> <li>● Standardization and open systems.</li> <li>● Percentage of intellectual property rights</li> <li>● Amounts invested in strategic important areas (like broadband access)</li> </ul>
World-class innovation	<ul style="list-style-type: none"> <li>● relationship with suppliers (including customers, universities, and research institutes)</li> </ul>
Leadership position in energy efficiency	<ul style="list-style-type: none"> <li>● Number of new fuel efficient products (bio-fuel, solar power)</li> <li>● Number of services and researches on energy-consumption analysis</li> <li>● Electricity waste recovery program</li> <li>● Number of new innovations (e.g. towers with wind generators for energy/cooling)</li> </ul>

## 5.4 Operational excellence

### **Bring new services and products to markets:**

In order to get a high profit margin, Ericsson strives for operational excellence in the business section. According to the study in empirical, there are two objectives are highlighted, showing in table which are distinctive competitive advantage of products (with the technology development), and efficient and effective process (with high quality and low cost of products) (showing in table 5.2). All these objectives and measures which we showing in the table are key indicators of the Ericsson. Ericsson provide high quality products and services to customers with low cost ownership, in order to satisfy the needs of customer, the business process is efficient, simple and

better than their competitors, which is considered as Ericsson's competitive advantage.

### **5.4.1 Innovation links to operational excellence**

The development of technology leads to the company offering distinctive competitive products and services, such as the network, broadband, and multimedia gave Ericsson advantage than rivals by providing more advanced technical products/ services to customers. World class innovation requires Ericsson seeking for long-term profitability and high market position; therefore in order to satisfy a huge amount of customers around 140 countries in the world, Ericsson developed change capability, with effective and efficient processes yielding innovation consistently.

Technology is important, but developing technology couldn't search a market directly, as one feature of operational excellence, efficiency and effectiveness offers customer better, easier and affordable services to the customers. Indeed, the development of technology leads to the high quality, distinctive advantage, and low cost of products and services.

The energy efficiency is also key leading to the improving of product operation. Ericsson put much effect on energy efficiency, not only benefits themselves on reducing energy-use, but also benefits customers, which gave Ericsson a competitive advantage.

Table 5.2 (Operational excellence)

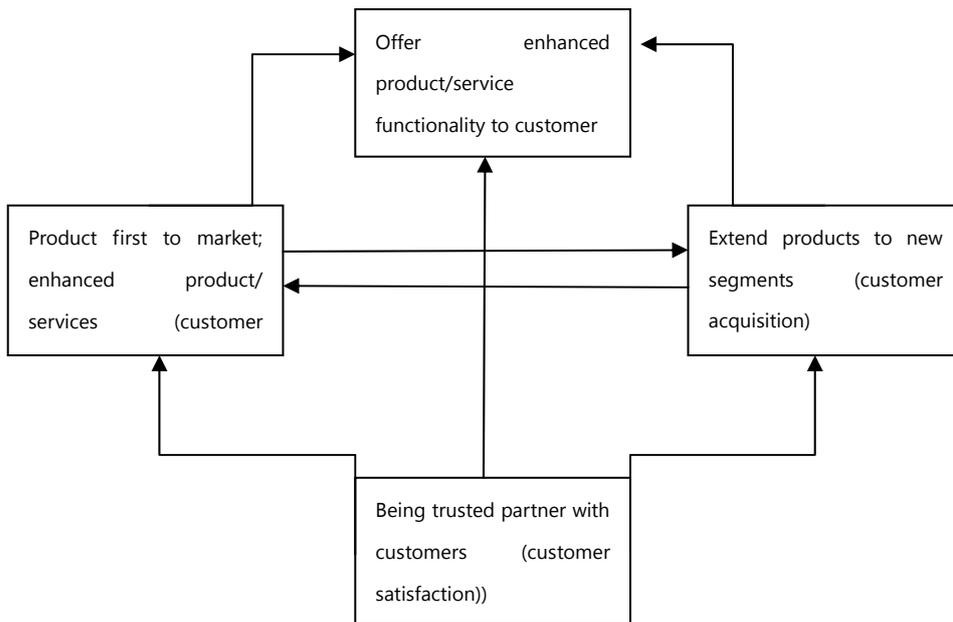
<p>Efficient and effective process; (High-quality products and services with low cost of ownership)</p>	<ul style="list-style-type: none"> <li>● Operating expenses as percentage of sales</li> <li>● Develop of IP technology</li> <li>● Number of joint ventures</li> <li>● Number of patents</li> <li>● Number of outsourcing partnerships</li> <li>● Process efficiency measurements</li> </ul>
<p>Distinctive competitive advantage of product</p>	<ul style="list-style-type: none"> <li>● Level of integration on new technology</li> <li>● Broadband technology ranking (independent peer review of current technology capabilities)</li> <li>● Network technology ranking</li> <li>● Multimedia technology ranking</li> <li>● Benchmarking</li> <li>● Cooperate with broad countries</li> </ul>

## 5.5 Customer perspective:

With the information described in customer section, we summarize the key objectives of customer perspectives are: offer enhanced products/ services functionality to customer; first-to- market with new products and services extend products/ services to new segments; and being trusted partner (showing in table 5.3).

Ericsson's market revenue is relying on limited customers, which gives Ericsson big challenge: maintaining the relationship with current customers, and searching new partners to downside the dependent. There are four core objectives: Being trust partner, offer enhanced products to customers, extended products to new segment, and first to market with new product. With the theoretical support from Kaplan and Norton, we believe there is a logic relationship between these objectives: with the

first- to- market, enhanced products/ services, Ericsson satisfied the customers’ needs with speed and quality; the expanded business with new segments opened Ericsson’s new market, therefore lowered the cost of operation, gained new and potential customers, high level of satisfied customers are willing to have loyal partner relationship with Ericsson. Therefore the cause- and- effect relationship in customer perspective are:



**Figure 5.3 customer objectives link**

In Ericsson’s customer perspective, not only own customers’ interests are focused, research companies, partners and university etc are highly cooperated with Ericsson. In order to be the first to market with new products and services, knowing the marketing environment is a necessary requirement. Therefore customer perspective in Ericsson is analyzing the whole market.

### 5.5.1 Innovation links to customer

The leadership in technology and energy efficiency causes operational excellence, with distinctive complete advantage products, leading to the enhanced product/

services functionality to customer, which in the support of theory from Kaplan and Norton, is the basis for measuring value proposition in customer perspective. First to market gives Ericsson more advantage than its rivals in relevant area, because of its leadership in technology development and new innovation.

### 5.3 Customer perspective

Objective	Measures
Offer enhanced product/service functionality to customer	<ul style="list-style-type: none"> <li>● Specific performance attribute of new product/service(for example, size, accuracy, power consumption, heat generation, speed, brightness, storability, clarity, durability, ease-of-use, response time, competitive SW features)</li> <li>● Number of new customers (customer acquisition)</li> <li>● Quality of services</li> <li>● Whether or not enhanced end-user service</li> <li>● Cost of ownership</li> <li>● Cost of operations (e.g. in managed services)</li> </ul>
Extend products/ services to new segments (For Ericsson's long term performance, convergence of the telecom, datacom and media industries, resulting in new types of competition and customers)	<ul style="list-style-type: none"> <li>● Number of new applications from platform products</li> <li>● Revenue from new markets and segments</li> <li>● Number of customers to a new product portfolio (rate of uptake)</li> <li>● How many customers of new types</li> </ul>
Being trusted partner (achieve customer satisfaction)	<ul style="list-style-type: none"> <li>● The number of the success stories.</li> <li>● Customer satisfaction measurement</li> </ul>

First –to –market with new product /service	<ul style="list-style-type: none"> <li>● Lead time relative to competitors</li> <li>● Number of new products/ services first-to-market</li> <li>● Percent of product launches on-time</li> <li>● Compare with the former revenue, increase or decrease</li> </ul>
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## 5.6 Employee perspective

As the infrastructure of the organization, Ericsson put intangible assets aspect 'employees' as a vital role. We summarize there are 3 main objectives in this perspective: increase and maintain employee motivation; increase the employee skills; attract and retain key employees. (Showing in table 5.4)

According to Kaplan and Norton, there are three categories in intangible assets: human capital, information capital and organization capital. For Ericsson, intangible assets are highlighted into human capital and organization capital from employee perspective:

Human capital: which is related to employee skills and know-how for the business develop, Ericsson have key contributor retention plan to maintain key employees and they set up employee-remuneration program to increase employee motivation. They also have employee training program, letting employee take the courses and then get certification.

Organization capital: Ericsson is primary in the global leadership in the communication industry; they rely on their core values to describe organizational culture, to support their way to do business. Ericsson shares the same value and mission worldwide; employees are required to review periodically about the code to

follow Ericsson's spirit.

Ericsson put emphasize of teamwork, they encourage international careers and job rotation to improve their global approach, and not only internally, externally employees work close with partners and customers, by being actively involved with scientific and technology community such as universities to stay alert for advances that could affect Ericsson's products.

Ericsson have excellence global management program since 1999 to develop potential Ericsson leaders, therefore to improve qualified leaders, who can mobilize all levels of organization toward company's strategies.

### 5.6.1 Innovation links to employee:

Ericsson attract top talented employee actively, in order to keep the technology advance with times. Meanwhile, they have training program through internal website, by improving employees' skills to make sure the competence development being fulfilled. In order to make Ericsson's strategy goal aligning to employees' personal goal, Ericsson set up competitive compensation scheme to attract and satisfy employee, based on employee's performance, setting up employee- remuneration, to attract top talented employee.

Table 5.4 Employee development

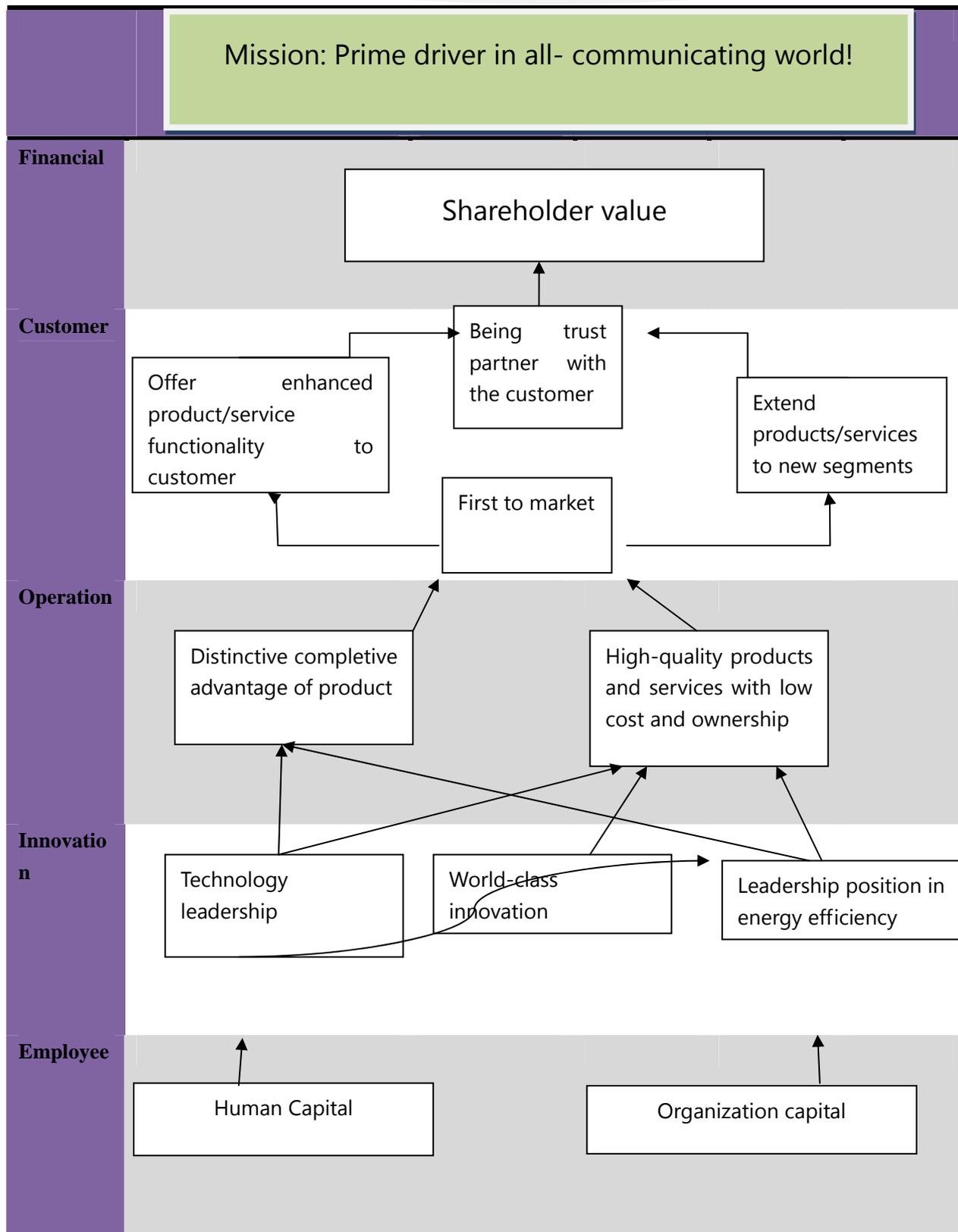
Objectives	Measures
1. Increase and maintain Employee motivation	<ul style="list-style-type: none"> <li>● Benchmarking with similar global companies</li> <li>● Do the survey</li> <li>● The number of Share-based compensation to employees</li> </ul>

2. Increase the employee skills	<ul style="list-style-type: none"> <li>● Numbers of the types of the training</li> <li>● Numbers of the training compare with the similar global companies</li> </ul>
3. Attract and retain key employees	<ul style="list-style-type: none"> <li>● Key employee turnover</li> <li>● Key contributor retention plan</li> </ul>

With the four perspectives' objectives (excluding financial perspective) and measures described and analyzed, we found there are a few strong links among them. So we built a draft strategy map for Ericsson Group, in order to make the work reliable, we asked Jacobsson again for help with the right links, he gave us positive support, here in the table 5.5 is presented our final strategy map.

Table 5.5

## Strategy Map of Ericsson Group



In this map, we give a rather broad view instead of very detailed linkage for instance how employees' specific works link to employees' remuneration. Accurate strategy map should be analyzed and built by the internal management and employees with great experiences in Ericsson's business process. Because some links among factors are based on employees or management's experience. Like Jacobsson said when he helped us with the link that he was not sure if the link is absolutely right, since there is no rules to regulate which indicator to which indicator, but with years of experiences (almost 30 years), he thinks the links should be right with Ericsson's exact works proved.

But is strategy map really helpful for the issues Jacobsson said about BSC in Ericsson?

We will present them individually:

- **Simplicity**

Jacobsson said in the interview that employees couldn't always catch the executives' orders, because of their working experience and misunderstanding of the centre of gravity from top management. Therefore Ericsson has a lot communications such as meetings to make employees get on the right track of the business. But with the help of strategy map, employee doesn't have to be reminded through outside forces. They can rely their dairy works on the company's strategy step by step by themselves.

Ericsson is a big size international company with a lot segments developing. 78,000 employees are working in more than 175 countries, with 250 million subscribers globally. Besides millions of words described the strategy in annual report, we think the piece of strategy map will also help investors or management or employees understand the whole business working process and strategy goal.

- **Magnitude**

Another issue Jacobsson mentioned is "compliance" problem, he gave us an

example: to follow the rules and regulations and to have business continuity plans and security in place is sometimes taken for granted and not among the objectives listed in the BSC. The target setting for employees can be the same over months or years if Ericsson is still stick to the same project with same objectives, therefore some targets came into inertia. With the help of strategy map, if there is any changes in each perspective, strategy map will be changing the same time. Because it is clearly stated in the map, employees will remind themselves everyday with the new objectives setting up with the new targets.

- **Timing**

In the interview, Jacobsson said that there is a risk when developing new products and updating existing products, with the high amount of money invested in technology and technology standards, the earnings and sales don't always come up as they expected, and Ericsson will suffer a lot if this kind of situation happens. Because showing cause and effect linkages on strategy map, when the assumption doesn't go well in the result, management can find the problems quickly related to the source of origin, and then response to the earnings falling with intellectual decisions.

## **6. Result and discussion**

### **6.1 Summary of findings:**

As stated before, the purpose of this research is how to develop a Balanced Scorecard into a Strategy map. We chosen Ericsson as our case study, based on the empirical study, we got the depth information about the company. The analysis is focusing on the process and ways of mapping the strategy for Ericsson.

In the practice, BSC has many shortcomings, there are many critical views about the traditional BSC, such as BSC is a top-down performance measurement tool; it is complicated that employee cannot understand easily, most of the companies' BSC always miss the alignment in vertical and horizontal way.

Although BSC has been existing in Ericsson for almost 15 years, there do still exist some problems that BSC cannot help them to solve. Employee couldn't always catch the orders from executives. As simplicity is one of the strategy map characters, it can solve this problem in a better way. A piece of strategy map can help the manager and employee to understand the whole business working process and easy to catch up the order.

As we know that Ericsson is an innovation company, first to the market is their main objective in customer perspective, so updating and improvement should be their main requirement. In the interview with Jacobsson, we get to know that when they develop new products and update the existing products, sometimes the earning can not balance the amount of the investment, therefore they need effective cause and effect linkages between different measures and between different parts of the working chains. When the assumption doesn't go well in the result, management can find the problems quickly related to the source of origin by the strategy map.

At present, financial crisis may make a big shock for business, if they do not have good forecast, company will face to an even bigger challenge. Face to this kind of business environment, saving the time, making a quick reaction should be a talisman of a company to win the market. Fast reaction by the linkages between different objectives and measures is also an advantage of strategy map.

## **6.2 Discussion:**

Based on our research, we can see that strategy map which we built will solve some problems which have been existing in Ericsson. Therefore we think BSC and strategy map should work together to help company to achieve the strategy goals. Companies should use them in a complementary way.

### **6.2.1 from BSC to strategy map**

As a result of the analysis, we think it is necessary for Ericsson to develop strategy maps to assist Balanced Scorecard, to be more comprehensive strategic management tool. With the case study, we come to the conclusion that strategy map is as important an innovation as Balanced Scorecard itself, it could solve Ericsson's issues which couldn't solve by only using BSC. Therefore, Ericsson should be innovative at this point, and should start to implement this visual representation of strategy, experiencing the nature and power.

We also get to the conclusion that Strategy map is not as simple to make as it looks, it takes a lot effort to study deep about the company, and the comprehensive strategy map should be deeply developed into departments and groups. Therefore we think Ericsson should build more than one strategy map: an overall strategy map and maps for each department which with detailed information being related with each employee's work to the final shareholder value. We believe strategy maps will

strength Ericsson's strategy themes and the close combination of BSC and strategy map will make a better tool for their management.

### **6.2.2 Suggestions for future studies**

The focus of the study was Ericsson Group, and the information we have gathered were mostly from annual report, Ericsson websites and 3 interviews with one manager, there is a matter of fact that only one person's opinion can be tendentious. Therefore we think more interviews from different positions of employees would be more objective to the results.

Interviews should be divided into departments such as marketing, technology department, to make sure employees get the most accurate answers for their questions.

We are only focusing on Ericsson Group as a whole, yet there might be slight difference of strategy defining and business structure among subsidiary companies, and because Ericsson is a world-wide company, national culture influences would be important issue to take into consider. Therefore strategy map should rely on situation based on company specific, not Ericsson group as a whole.

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## **Appendix:**

### **First Interview questions**

For Ericsson:

1. What is your name?
2. What is your position in Ericsson?
3. How long have you been working in Ericsson?
4. Since when did Ericsson use balance scorecard as the management tool. What are the main benefits Ericsson gets by using BSC?
5. What are the flaws BSC has in the implementation process? How do you handle the problems when using BSC?
6. Is Ericsson using Strategy map or considering using it?
7. Ericsson is product leading company focus on innovation, in BSC, what is most focused and heavily invested in the four perspectives.

Financial perspective:

8. What are Ericsson's main financial objectives?
9. What measures are using to help achieving those objectives?
10. What targets are required when using the measurement?
11. What is Ericsson's action to get the required targets achieved?

Customer perspective:

12. What are the main objectives in this perspective? How those objectives link to financial objectives?
13. What measures are using to help achieving the objectives?
14. What targets are required when using the measurement?
15. How does Ericsson achieve the required targets?

Internal perspective:

16. What are the main objectives in this perspective? How those objectives link to customer objectives?
17. What measures are using to help achieving the objectives?
18. What targets are required when using the measurement?
19. How does Ericsson achieve the required targets?

Learning and Growth perspective:

20. What are the main objectives in this perspective? How those objectives link to internal process?

21. What measures are using to help achieving the objectives?
22. What targets are required when using the measurement?
23. How does Ericsson achieve the required targets?
24. Will employees always catch up executives' strategies?
25. Has this kind of situation been happen that employees don't quite follow executives' strategy and goals? Or employees misunderstood the strategy and performing wrong in the action? If it happens, does Ericsson have solution to deal this problem?

**Second interview:**

In the second interview, we ask the manager give us the linkage between different objectives and measures.

**Third interview:**

When we finish the whole paper we sent it back to the manager, we think it is important for us to get some advice and evolution from interal worker.