

SCORECARD FOR X UNIT NEEDS

Case Company: XXX Oy

Abstract

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Title of publication Scorecard for X unit needs Case Company: XXX Oy		
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Abstract <p>This study focuses on finding what kind of a scorecard would be beneficial for a recycling company. The purpose of this study is to answer the question “What kind of a scorecard does the X –unit need to serve and support their vision, values and strategy?” The basis of the research is on the idea that strategy needs to be supported by business tools to reach the preconditions for success. The case company is XXX, and the study was carried out in cooperation with the X –unit.</p> <p>The scorecard theory is based on Kaplan and Norton’s Balanced Scorecard. Over time it has received improvements and other adaptations. The updated, newer theory is mainly based on Niven’s work. Furthermore, the information concerning key performance indicators are gathered from Parmenter’s theories. Additionally, several other relevant theories and authors are used in the research. The theoretical section begins by an introduction to scorecards. Afterwards the focus shifts to the process of creating the tool and moves on to selecting the right kind of measures and mapping the strategies.</p> <p>The empirical part of this study combined both qualitative and quantitative approaches. Gathering data was done by conducting interviews within the X –unit’s managers and employees. In addition, email inquiries were utilized. The findings were collected and compared to each other.</p> <p>The results of the study show that a certain selection of KPIs is needed to make the scorecard useful. These KPIs should indicate and reflect the unit’s strategy. The KPIs chosen are simple, belong to more than one scorecard category and are necessary indicators in measuring the success.</p>		
Keywords Scorecard, KPIs, recycling, stakeholders		

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1 INTRODUCTION

The growing need for sustainable solutions has grown over the time. In addition to stricter legislations, also the opinions towards recycling have changed. Although recycling has been around forever, the focus has drifted. Industrialization and the movement to cities in the beginning of the 20th century forced the governments to start waste management. Increases in consumption as well as the population growth further added the need for disposing waste. In Finland, recycling has been around for over a hundred years. (Halme 2020.)

Investing in technology and research has been a focus point within the industry. Due to the previously mentioned changes in recycling, new innovations and strategies are needed.

It is important to stay ahead of competition. An effective strategy is a key element. But how to make sure that the strategy is followed? How to measure the core values and elements in the strategy? One, efficient, way of measuring the success of a business is a scorecard –tool. They are widely used in major companies across the world. Over fifty percent of the European, American or Asian companies use the tool. Scorecard, “one of the most influential business ideas of the past 75 years”, has been a great impact in the modern business world since 1990s. (Balanced Scorecard 2020.)

The aim of the thesis is to create a scorecard that supports the recycling world – more precisely, the X –unit. The goal is to introduce different measures that support the values and strategies of the company. This will give insight to what is needed from a scorecard, perhaps not only to the recycling industry, but also to other businesses.

1.1 Background of the Thesis

In Finland, recycling has been a visible aspect of the everyday life for a long time. (Weaver 2013). Already in 1950, Finland introduced a deposit refund system to collect and recycle bottles. At first, the recycled bottles were glass bottles and the system was run by the breweries. However, in 1996, Suomen Palautuspakkaus Oy was formed and they announced a deposit refund system for cans. Since 2008, also PET bottles have been included in the refund system. (Ettlinger 2020.) The return rate for glass bottles is almost 100%, for aluminium cans 96% and for plastic bottles 94 percent. In addition, Finland is also a leader in recycling paper: the recycling rate is currently around ninety-three percent. (Weaver 2013.) As can be seen from these numbers, Finns are devoted recyclers and the return rates are very good.

Around a fifth of waste generated by a single household is plastics. The main use for recycled plastic is using it to make energy. (Weaver 2013.) In order to remain sustainable, the recycling process of, especially, plastics, needs to be efficient. (Muovitekartta 2019, 7.)

In addition to paper and bottles, recycling other materials has been made rather easy: electronics, lamps and used batteries can be returned to shops where they are sold, and used tyres without rims can be returned to tyre producers or the Finnish Tyre Recycling's collection points. (Weaver 2013 & Finnish Tyre Recycling 2020.) However, many aspects of recycling and waste still need to be improved: out of the estimated 2.2 million tons of construction and demolition waste generated, (excluding soil, which makes around 20 million tons a year) only around twenty-six percent was recycled. (Okko 2014.)

Since recycling has become a worldwide phenomenon, the demand for it has risen. The industry needs to make sustainable choices while remaining profitable. In order to keep the expenses low and profits high, the businesses need to strategize. (Goldsberry 2018.) To support the success, these companies need a tool that is aligned with the strategy. The tool, scorecard, will help measure the success of the company and promotes the development and growth of the industry.

1.2 Thesis Objectives and Research Questions

Research Objectives

The thesis will provide insight into the need of scorecard tools in the recycling industry. The need for recycling keeps growing and it receives more attention than it used to. The thesis gives valuable information about the needed key performance indicators. Furthermore, it provides the organizations guidelines. These guidelines will then support the organizations' strategies and values. As the world keeps evolving and competition grows, improving the operations and strategies is more important than ever. Having an effective strategy and a tool to measure it means that the preconditions for success exist.

The thesis supports the vision of XXX by carefully selecting the KPIs that best match the strategy. It has a positive effect on both employee and customer satisfaction and will improve the efficiency. The thesis provides XXX a tool that promotes the competitiveness and profitability of the company.

Research Questions

Research question is the main point of the thesis. The aim of the thesis is to answer the research question. It exists because it helps to stay on the topic and to focus on what the

thesis really is about – finding an answer to the problem. (Writing center 2018.) The main research question of the thesis is as follows:

What kind of a scorecard does the X-unit need to serve and support their vision, values and strategy?

Figure 1 Main research question

Figure 1 is shown in Figure 1. It displays the main purpose of the thesis: to find answer to the question. To support finding the answer, sub questions were created. The sub questions for the thesis are illustrated in the following figure, Figure 2:

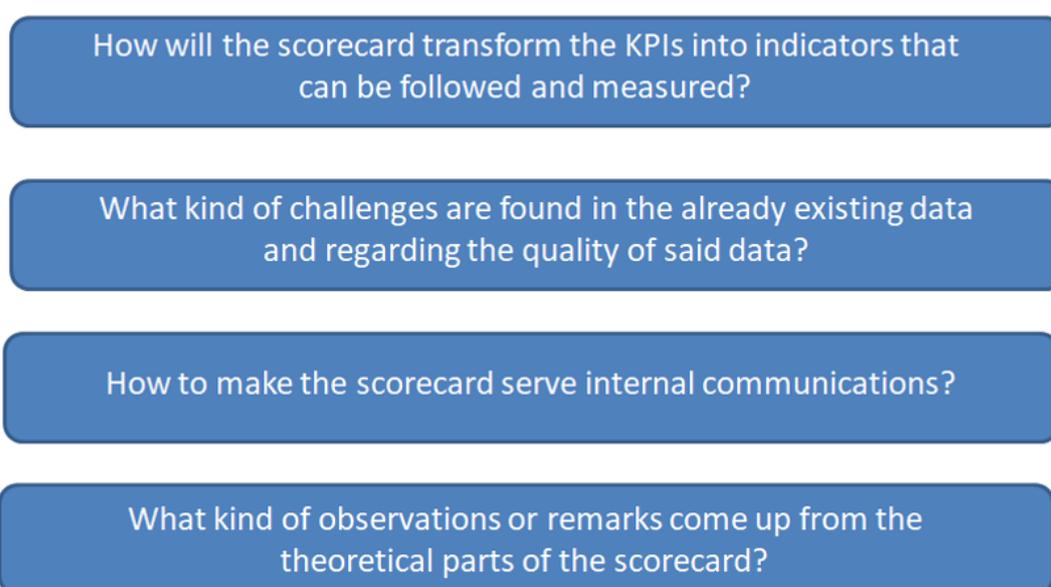


Figure 2 Thesis' sub questions

1.3 Research Limitations

Limitations are shortcomings or “problems” that could possibly influence the way the study turns out. (Thesisrush 2020). As this thesis focuses on the Finnish recycling industry, and more importantly on the X section, it does set some limitations. Furthermore, as this study only focuses on these parts it might not provide reader with sufficient information for other types of businesses. The focus is on Finland, thus another limitation is that the research done in this thesis might not be relevant in other countries. The main goal, however, is to satisfy the company’s needs for a cost-efficient scorecard model to support the X –unit. Another aspect is the data collection which will be done through conducting interviews.

That is why the results might be flawed, as the sample size is rather small and does not represent the whole X –unit.

1.4 Theoretical Framework

The basis of the theoretical framework of the thesis is on Kaplan and Norton's Balanced Scorecard theory. The Balanced Scorecard is the original scorecard tool, hence, all other theories and adaptations introduced in the thesis are merely improved models of the original BSC. Other important theoretical elements of the thesis are key performance indicators, KPIs, and strategy maps. Chapter two introduces scorecards in general and then moves on to the scorecard fundamentals and the implementation phase theory. The theories by Kaplan and Norton, Niven and Keyes are connected to each other in a way that supports the theoretical part of the thesis. Chapter three mainly relies on the theories provided by Parmenter and Graham. The third chapter focuses on the key performance indicators and explains the need of defining the key stakeholders. The chapter strongly links the stakeholders to selecting the measures. The fourth chapter is based on the theories by Parmenter, Lucco, Kaplan and Norton. It shows the need for a strategy map and is very much associated with the previously mentioned theories.

1.5 Research Methodology and Data Collection

Research Approach

Deductive approach is about having a hypothesis and then proving the hypothesis either wrong or right. It mainly focuses on theory that is already known. The research, however, shows whether those theories are, as a matter of fact, valid in all cases. (Dudovskiy 2020a.)

Inductive approach is the opposite of deductive approach. Whereas the deductive approach methods focus on connecting theories to cases, inductive is about connecting cases to theories. It starts by observing and testing, and then, when there is a visible pattern or something that can be followed, a theory is created to support the observations. It is often used with qualitative methods – being subjective and process-oriented, while deductive approach is more about quantitative methods – numbers and facts, objectivity and statistics. (Dudovskiy 2020b.)

Both deductive and inductive approaches will be used in this thesis. The focus, however, will be on deductive approach. At first the theory will be presented, then followed with hypothesis. Then finally, after observing, the idea is to be able to confirm the hypothesis.

Research Methodology

Research methodology means the way of solving the problem. It consists of qualitative and quantitative methods. Both methods are widely used in research. The formerly mentioned is studying behavior, opinions and attitudes, while the latter is about numbers and figures. The data is shown in a quantitative form. (Kothari 2004, 5.) Both methods were used in the thesis. Collecting empirical data was mainly done by interviewing. The recipients represent XXX's X –unit. The interview slides are shown in Appendices 1-8. It consisted of questions regarding each recipient's role in the strategy and the measures needed. The interview, as well as the data, will be more carefully explained in chapter six.

Data Collection

The thesis combines two methods of data collection – primary and secondary data. Primary data is data that is collected for the first time. It can be collected through interviews or other forms of communication, surveys or auditing, to mention a few. Secondary data is “used” information – data that has been gathered before. It includes, for instance, articles and books previously written. (Kothari 2004, 95-100.)

The primary sources used in the thesis are the data gathered from the interviews. They will not be following a strict pattern. Interviews will be made on different levels of management to gain a broad understanding of the needs and wants of the X unit. Other primary sources include email conversations with people who represent the organization.

Secondary sources used for the thesis are all trustworthy sources carefully selected to fit the topic of the thesis. The sources include published (e-)books, electronic sources (including the company's Oneline) and reports. The following Figure 3 describes the methods used in the thesis:



Figure 3 Research methods

As shown in Figure 3, the thesis focuses on deductive approach. The methods are both qualitative and quantitative due to the fact that the data is electronically collected and selected (using Excel) but at the same time, the interview does not have a clear structure.

The questions are more open-end questions and the interview can flow however it naturally does with the interviewees. The data collection methods include both primary and secondary data.

1.6 Thesis Structure

After this introduction, the thesis will continue to more specific theoretical aspects of scorecards. Balanced Scorecard and KPIs will be more thoroughly studied and explained, as well as any other relevant theory in order for the reader to fully understand what and how these things work before going to the empirical part of the thesis. It will consist of a few subchapters, explaining the data and how it was gathered, what the hypothesis before applying the data was, what kind of key performance indicators turned out to be the most relevant and needed, finally ending in a draft version of the scorecard model that will be used throughout the whole organization in order to support the strategy and its actualization.

The structure will be more carefully explained and visualized in figure 4.

Figure 4 Thesis structure

The thesis starts, after the introduction, with a brief introduction to scorecards in general. After that the thesis moves on to the history of a Balanced Scorecard, fundamentals of scorecard, including its subchapters about strategic objectives and strategic execution. The second chapter also includes theory about the implementation of a scorecard. The third chapter of the thesis is focused on key performance indicators. The concept is introduced by explaining stakeholders and why they are important and then discussing how to define the metrics. Strategy map is the fourth chapter of the thesis and it includes theory about strategy maps and why they are needed.

The fifth chapter is the empirical part of the thesis. It gives a larger introduction to the X – unit and explains the methods of gathering data and analyzes the results. Afterwards the KPIs are chosen and the suggestions for the scorecard tool of XXX's X –unit are made. The seventh chapter summarizes the thesis questions, and includes the reliability and validity of the study. The final chapter, Chapter 8, briefly summarizes the entire thesis.

2 SCORECARD

The Balanced Scorecard tool was created because traditional systems did no longer suit the needs of the modern business world. At first it was just a measuring tool, used to build an “interconnected set” that allows the user to further the process of communication, alignment, making decisions, and prioritizing the use of resources. However, the tool kept on being improved and updated, as the early users of the model started adding much needed management processes, such as budgeting, compensation and corporate governance into it. (Niven 2005, xi.) Over time more variations of scorecard models have been adapted. Despite of the Balanced Scorecard being widely known and used, it is important to remember that it usually needs to be tailored to fit the needs of the organization. Although, advertised as being a “one-size-fits-all” type of a tool, it rarely is that: the scorecard model must “reflect differences around organizations in their structure and competitive environment”. (Lawson, Desroches & Hatch 2007, 1-47.) The best scorecard models are no more than one page long reports that focus on 10-20 measures. (Lucco 2020).

According to Niven, the tool might give poor outcomes. Often it is because of faults in implementing the systems. These faults include, for example, using previous data that has no real connection to the objectives and goals that support the strategy, and the use of management systems that focus mainly on financial performance. (Niven 2005, xii.) However, when implemented correctly, the tool should visualize strategy and vision as the key elements instead of the usual approach of control being centered. If these guidelines - strategy and vision come first – are followed, the scorecard tool will often give the organization what it needs to succeed. (Kaplan & Norton 1992.)

This theoretical part will first explain the fundamentals of Scorecard tools, then, how to successfully use the scorecard model, and finally, ending in developing the strategy map.

2.1 History of Balanced Scorecard

The Balanced Scorecard is a model created by Robert Kaplan and David Norton, in 1990. They researched and collaborated with 12 companies and ended up creating the Balanced Scorecard. The idea was to bring together several different factors that were usually not seen together. It emphasizes the need for being customer oriented and focusing on quality control, as well as the level of management. It was a controversial model also due to the fact that before, financial tools were almost always used by financial experts. The Balanced Scorecard, however, requests a manager’s attendance and attention in order to function properly. (Kaplan & Norton 1992.)

2.2 Fundamentals of a Scorecard

The reliance on financial measures has been questioned more and more in the 21st century. According to Niven, financial measures have been seen to be inconsistent, as intangible assets, such as employee knowledge and customer relationships, have become more important in the modern world and provide more and more value to the organization. Furthermore, focusing plainly on financial measures most likely gives the organization a good view of where the organization has been financially, yet offers little implication or explanation to what direction the organization is heading to. Focusing solely on financial aspects also does not inspire employees enough to implement cross-functional work patterns. Furthermore, other important key aspects of developing and growing the business, such as training the employees, might get neglected. (Niven 2005, 4-7.)

Although focusing mainly on financial measures can be bad in a long run, they are crucial parts of an effective, working Balanced Scorecard. However, it should be noted, that putting a price on intangible assets can be hard, yet they are still a crucial part of running an organization. One of the key aspects is customer relationships – building long-lasting, trustworthy connections with both suppliers and customers. (Niven 2005, 6.) This is one of XXX's core values and the company has put a big value on building those relationships. (XXX 2020b.)

According to an article, *The Balanced Scorecard – Measures that Drive Performance*, written by Robert Kaplan and David Norton, the original Balanced Scorecard –model had four performance measures they specifically decided to focus on. Those measures were customer perspective (how the organization is seen by the customers?), internal perspective (in which area does the organization need to excel in?), innovation and learning perspective (can the organization keep improving and creating value?) and, finally, financial perspective (how does the organization look to the shareholders?). (Kaplan & Norton 1992.) These perspectives will be gone through more thoroughly later on in the thesis.

Basically, to get a well-functioning scorecard tool, organizations should first set up goals that are aligned with the four performance measures. After that, the previously mentioned objectives should be converted into specific measures. One of the best ways to learn if these measures, especially in the customer perspective –area, have been met is to conduct surveys. Another key factor that came up when starting to implement this method was that instead of the traditional approach of controllers doing all of the work and focusing on the business model, also senior managers needed to be involved. (Kaplan & Norton 1992.) Another crucial aspect is following through with the new strategies and

operations instead of falling back to the old methods of running the organization. (Kaplan & Norton 1993).

In the four-link –method managers are given important information regarding the company's whereabouts financially, internally, from the customers' point of view and from the learning perspective. However, instead of “overloading” the amount of information is minimized to only a handful of the key measures the organization needs to focus on. (Kaplan & Norton 1992.)

According to Keyes, scorecard models need to be aligned to meet five different objectives: strategic, financial, customer, business process and, finally, promoting learning and growth. (Keyes 2010). Those five objectives will be more thoroughly explained in the following subchapters.

2.2.1 Strategic Objectives

Strategic objectives are key elements in setting out a strategy for an organization. Objectives are also often called goals. In order to create an effective strategy the objectives need to focus on the strategy itself and not be based on the industry. The objectives also need to be focusing on the balanced scorecard perspectives – and also connected to a majority of them. (Jackson 2020b.)

Measures are tracked in five different categories: financial performance, project performance, operational performance, talent management and user satisfaction.

2.2.2 Execution of Strategy

After setting up the strategy comes the time for implementing it. According to Kaplan and Norton, there are four barriers that prevent successful implementation of strategy. Those barriers are as follows:

1. Vision barrier. Only estimated 5% of workforce understands the strategy. Fully understanding the strategy makes the employees work towards the objectives by following the strategic guidelines.
2. People barrier. Often in the management level employees focus on short-term profits at the expense of long-term gains.
3. Management barrier. Over 4 out of 5 managers spend less than an hour a month on strategy.

4. Resource barrier. Budget needs to be connected to the strategy. (Niven 2005, 10-12.)

The first step of creating a successful scorecard is selecting the right measures or KPIs that support the organizations strategy. Then, the measures are given clear, simple, easily understandable definitions. After clearly stating what kinds of metrics are needed, data needs to be collected. This phase includes checking whether the quality of the data is on the right level or not. KPIs will be covered more thoroughly in chapter 3 and its subchapters.

2.3 Implementing a Scorecard

In order to implement the scorecard successfully, it is important to first answer the question *why*. Why does the organization or business need a scorecard, which organizational problems is it meant to be solving? The tool needs to be used to improve the business and to successfully follow up with the strategy. It is not a tool for creating a strategy and should not be treated as such. (Niven 2005, 24.)

In some cases, it might make sense to bring the problems closer to the employees – “to introduce the reality of your situation to your employees”. These kinds of approaches are sometimes necessary in order to understand what has been going wrong and how to fix it. (Niven 2005, 29.)

The results of implementing a scorecard or any other type of a model or plan depend on how much personal commitment is involved in the process. The more the model receives attention and time, the more likely it will thrive in the future. (Paley 2004, 7.) At times, in order to really make the best out of scorecard, drastic measures need to be taken. Sometimes simply calculating and measuring is not enough. Instead, seeing the numbers or figures on a scorecard can lead to shutting down operations, lay-offs, or replacing the employees with new ones. Having a strategy and a scorecard to back it up means that the strategy actually will have to be implemented and the focus needs to be on the KPIs. It might sometimes seem rough and it might be hard to get board members to agree with the implementations, especially, if the measures that have to be taken are drastic. However, it is the only way to succeed. (Niven 2005, 10-30.)

Basically, the whole implementation part of a scorecard begins by choosing whether or not it is worth it – if there are any people, even just a single person, who believe in it? Someone, who is willing to work on implementing the strategy. Only then is it worth creating a scorecard.

3 DEFINING KEY PERFORMANCE INDICATORS

Key performance indicators, also referred to as KPIs, are measures that define the most critical elements of an organization's performance for its success today and in the future. They are nonfinancial, monitored regularly and guide the organization and its employees to right kind of acts. They have an impact on the scorecard perspectives mentioned in subchapter 2.2, and lead the company to better and grow their performance. It is necessary to track the KPIs frequently because they are key elements in the operations of the organization. In addition to the formerly mentioned Balanced Scorecard perspectives, Parmenter suggests adding two perspectives: environment/community and employee satisfaction. In Kaplan and Norton's model employee satisfaction was included in internal processes, however, it is such a crucial part of an organizations success that Parmenter argues it should have its own perspective. Environmentalism is a growing area of interest, and together with community they form an area that is extremely influential and of significant importance in today's world. (Parmenter 2010, 4-17.)

3.1 Key Stakeholders

Before determining the most important KPIs, key stakeholders should be identified. Key stakeholders can be anyone or any group or organization the company is working with or somehow needs a relationship with them: employees, city councils... Performing well with all of the organization's key stakeholders means that the preconditions for success are available. Furthermore, it will also make defining the KPIs easier, due to the fact that the organization will know who to target when setting their KPIs. Identifying those most important stakeholders that the organization should focus on starts by considering whether the stakeholder has a "fundamental impact on your organization's performance" or not. Following this, the organization needs to be able to precisely state what or how they are benefitting from said stakeholder – and – if the relationship between the company and the stakeholder will continue to grow. Furthermore, another significant factor to consider is if the organization could still exist without the stakeholder. Finally, an equally important question is if the stakeholder has already been recognized through another relationship, basically, is the company doing double counting? (Graham 2014.)

In order to create a working scorecard it is essential to include key stakeholders in it. After defining the stakeholders, the organization needs to assess what measure links to that certain stakeholder. For instance, measuring the performance of employees could be one. In addition, elements linked to competitiveness, both objective and subjective, such as

work safety or customer service, are important measures for the scorecard. They are considered from the stakeholder's point of view. (Graham 2020a.)

3.2 Defining the Metrics

After defining who the key stakeholders are, the right kind of measures should be selected in order to show who the metrics are aiming to target in the scorecard model. To understand how the company or a certain unit of it is performing, the chosen KPIs should be measurable, simple enough to be understood, be applicable and be essential factors in measuring the success. It is important to match the KPIs to the company's strategy. (Jackson 2020b.)

For the companies to be able to implement a successful scorecard, it is very important that all members, especially senior team members, of the companies support and actively focus on the scorecard. The idea of scorecard should be presented through emotional drivers, not logic, as that is how people actually get interested and involved in the idea. (Parmenter 2010, 44-45). The next step is to really start implementing the scorecard – choosing someone to build the scorecard, having a scorecard –team who focus on tracking the measures on the scorecard regularly, and to constantly keep improving it. (Parmenter 2010, 55-58.)

4 STRATEGY MAP

As already mentioned, every single employee should completely understand the company's strategy. If everyone is not given all of the information, they will not know what to aim for or how to reach the goals set by the management. (Kaplan & Norton 2000.)

Basically, financial, internal, customer and learning & innovation perspectives (and, if decided so, also environment/community and employee satisfaction) should be the main categories. Objectives, used to explaining what the organization is aiming to become, are then connected to these main categories. Objectives are then further developed by adding measures that show the trends of the objectives: are the goals achieved. The strategy map might also include initiatives, which are actions that help the organization achieve their objectives. (Lucco 2020.)

The first scorecard perspective is financial. It focuses on the economic success of the company. It shows whether or not the strategy and implementation meet the execution, as they are all closely linked to each other. They all need to be working in order for the organization to succeed. The customer perspective focuses on customer satisfaction and adding value to them. The added value leads to happy customers – which leads to returning customers. Internal processes perspective is about the internal operations of the organizations and how to make the best out of them. These internal processes are also often connected to customer satisfaction – quality and employee skills, that are some of the key aspects of internal processes, also affect the customer's satisfaction levels. Measuring success in quality or quantity or productivity gives indications about the organization's operations that are extremely valuable. Finally, the learning and innovation perspective, measure the organization's ability to make new innovations and to keep developing and enhancing. (Kaplan & Norton 1992.)

Those were the four perspectives introduced by Kaplan and Norton. The remaining two, as suggested by Parmenter, are environmental perspective (growing field internationally) and employee satisfaction, which was a part of internal processes in Kaplan and Norton's Balanced Scorecard –tool. (Parmenter 2010, 4-17.) Adding these two will help the organization focus on two very important aspects: working well with the environment and community are key elements that lead to success. Being transparent and allowing "outsiders" to initiate and communicate are crucial parts of the operations. Not to mention the fact that focusing on the environment itself, making long-term, sustainable choices is extremely important. Additionally, separating employee satisfaction into its own perspective, moves attention towards the well-being of employees. (Parmenter 2020.)

5 COMPANY INTRODUCTION

As all of the information about the case company is to be hidden, this chapter will not be publicly available.

6 EMPIRICAL RESEARCH AND DATA ANALYSIS

This chapter, together with its subchapters, will focus on the empirical aspects of this study. As mentioned in the earlier chapters, the goal of this thesis was to create a working, efficient scorecard model that can be used throughout the organization. At first relevant data was gathered by interviewing X –managers and employees to gain better understanding of the topic and what kind of attributes are needed in the process of creating a scorecard.

6.1 Data Acquisition

The thesis was conducted from January 2020 to May 2020. The thesis process started with getting a topic from the company, XXX. After getting an approval and having done the needed paperwork, a thesis supervisor was appointed. The preparation phase began with a discussion with both the thesis supervisor and the mentor from the company. Throughout the process the author kept in touch with the thesis supervisor and had meetings with the company's mentors/supervisors whenever it was necessary.

Gathering and collecting theory was done throughout the whole thesis writing process. At first it was just about the "basic" scorecard theory to gain a full understanding of the whole tool. Afterwards the focus moved on to more complex or detailed theoretical concepts.

The data collection phase was between March 10 and March 30. The data was collected in the form of an interview. Interviewing was decided due to the fact that the sample size was rather small: only eight respondents. It allowed more vivid conversations with a certain type of liberty to discuss whatever the respondents showed the most interest or expertise in. The author also wanted to avoid possibly leading or guiding the respondents towards the "right" KPIs, thus, interviewing seemed like the right kind of an approach. It was also approved by the company mentors who thought that setting up a survey would not give enough answers, and at least, not in enough detail. The interview was formed in a way that forced the respondents to think about their own role in the strategy of the unit. Then, based on that strategy and their personal role in it, they were asked to come up with measures for six different scorecard perspectives.

The interviews were done in Finnish due to the fact that XXX's operations the thesis focuses on are also based in Finland. This was also done to make sure that the managers would feel comfortable enough to share their thoughts and opinions about the scorecard. All the interviews were supposed to be done in a face to face –situation, but due to the sudden impacts of the Covid-19, only three interviews were done in real life. The rest of

the interviews were conducted using Skype or Teams. The interviewees will remain anonymous. This means that the names, roles and the organization will not be public information. The interviewees represented all functions of the X –unit.

The data analyzing phase began already at the time of conducting the interviews. The measures mentioned were collected into an excel sheet. The chosen KPIs will be introduced in Chapter 6.3.

To make sure that there would be no misunderstandings and to keep at least some kind of a structure in the interview, a PowerPoint –show was created. The PowerPoint presentation can be seen in the Appendices of the thesis. (Appendix 1-8). Due to the fact that the interview was in Finnish, also the PowerPoint slides are in Finnish. The questions are translated below. Before moving to the scorecard –relevant questions the interviewees were asked how they see their role in the company's strategy. The idea was to get the interviewees to think about the strategy and to keep it in mind while answering the rest of the questions. The following questions were all part of the interview and will be more thoroughly explained:

1. How do you see your role in XXX's strategy?
2. Who are the key stakeholders of XXX?
3. Financial perspective – what goals does the unit have financially and how to achieve them? What kind of measures would show success in that area?
4. Customer perspective – what goals does the unit have from customer perspective and how to achieve them? What kind of measures would show success in that area?
5. Internal perspective – what goals does the unit have internally and how to achieve them? What kind of measures would show success in that area?
6. Innovation and learning perspective – what goals does the unit have in innovation and learning perspective and how to achieve them? What kind of measures would show success in that area?
7. Environment/community perspective – what goals does the unit have environmentally and how to achieve them? What kind of measures would show success in that area?
8. Employee satisfaction – what goals does the unit have concerning employee satisfaction and how to achieve them? What kind of measures would show success in that area?

Before being asked to define the KPIs that the interviewees thought would suit the needs of different perspectives, they were always asked what they think the goals and objectives in that area are and how they will be achieved. After visualizing the goals and the steps needed to reach them, the recipients expressed the KPIs that were suitable for those specific goals. Interviewing the recipients not only expressed the need for various different KPIs but also many of the interviewees got ideas that might in the future be used in the organization, and perhaps, someday be visualized in the scorecard.

The data was collected into an excel sheet. Because the interviewees had to think of KPIs or measures for a certain perspective at a time, the turnout was rather large. The financial, internal processes and the environmental perspective ended up with the most suggested KPIs: each of them had over 20 suggestions. In all perspectives, some measures were mentioned more frequently than others, which could either mean that the employees simply are made to think about those measures more, or that they are, in fact, crucial aspects for the strategic success of XXX.

6.2 Data Analysis

This chapter focuses on the data analysis side of the study. The data is explained and elaborated. The thesis provides a viewpoint to the needed KPIs in the recycling industry.

In order to choose KPIs that would suit the needs of everyone, be easily available and easily understood, an excel sheet was created. Then the KPIs that got mentioned most often were chosen to be in the scorecard. The KPIs chosen are explained later in this Chapter 6.3. The focus of the chosen KPIs is, as can be seen, on the financial and internal process perspectives. However, all six perspectives are represented in the chosen KPIs and reflect the strategic goals of the X-unit.

6.2.1 XXX's Scorecard Perspectives

To start forming the strategy map for XXX, it was decided that there will be six main categories: internal, financial, customer, learning & innovation, environment/community and employee satisfaction. Each of these categories will be more thoroughly explained.

Financial perspective is about the company's financial success or development. The measurements or metrics used to measure them can be anything from EBITDA to profitability or the operating margin.

Internal perspective includes objectives like productivity or effectiveness of production. Those objectives can be measured by, for example, choosing lead time as one of the KPIs. The customer perspective's focus or main objective could be customer satisfaction or the amount of tons received or sent, and then the measures chosen would be, if not customer satisfaction itself, perhaps delivery time and then simply incoming/outgoing tons. In the learning and growth perspective the organization might choose to pay attention to educating or training the employees; in this case, the KPIs could be hours used to train a single employee. For the environmental side of the scorecard, emissions could be the objective the organization chooses to specifically track: then the KPIs might be measures like "noise pollution" or emissions in general.

6.3 How to Create a Scorecard for X

The author suggests that the creating process should start as soon as possible. A responsible person should be named. That is done to make sure that the implementation phase begins and that the tool will be improved whenever needed. The values, mission and vision mentioned in Chapter 5.1 need to be linked to the KPIs. The KPIs selected by the author should be used, as they are clear and connected to the strategy. In addition, the person responsible for the final, actual version, of the scorecard should continuously communicate with the scorecard users. That is important, as the KPIs need to be reasonable and useful. Over time strategies change and the focus point varies, thus, the KPIs might need updating.

In reality, it will be a hard task to get the users to agree to the benefits of the model. To get them to adapt the model and use it to their advantages will take time. However, the author strongly believes, that once the users see the benefits and the facility of the tool, they will keep using it. At first, the scorecard will need to be promoted, encouraged and pushed. Some users will think they do not need the tool. In those cases, they simply will not use it. That is why the most crucial phase is the implementation phase. After launching the tool, the author suggests that there should be surveys or other methods quite regularly to see whether the tool is functioning properly or not. If it is not, it needs to be improved to better fit the needs of the unit.

It is clear, that not every single employee or senior manager feels that there is a need for this type of a tool. That is why it is very important to begin the implementation process by getting the support of the senior management and managers of the unit in general. The author, however, is confident, that if the forthcoming tool's basis is on the thesis' research and findings, and if the suggestions are approved and adapted, the scorecard will be very useful. It will support the values and strategies by continuously giving insight about the operations and customer and employee satisfaction levels.

7 CONCLUSIONS

This chapter of the thesis is focusing on providing the answers to the research question and sub questions. In addition, this part covers the validity and reliability of the thesis and, finally, includes the suggestion for further research.

7.1 Answers to Research Questions

The main goal of the thesis is to provide the X –unit an efficient scorecard tool. It was done by interviewing X –managers and employees to gain full understanding of what is needed from the tool. The findings of the research are gathered in the following table, Table 1.

Table 1 Research questions and answers

Research question	Answer
First sub-question: How to make the scorecard support X –unit’s goals and objectives?	The measures, the key performance indicators, chosen for the scorecard need to be measures that are needed and that are relevant to the unit’s goals. X –unit’s goals need to be clearly stated so that the KPIs can be matched to these goals.
Second sub-question: How will the scorecard transform the KPIs into indicators that can be followed and measured?	The KPIs need to be simple enough to be able to track the success of each subsector of X. That is because some subsectors focus on different aspects in their operations. The KPIs need to be clear and understandable within just one quick view.
Third sub-question: What kind of challenges are found in the already existing data and regarding the quality of said data?	The data that already exists does not represent the KPIs that the different subsectors really want to focus on when seeing a scorecard.
Fourth sub-question: How to make the scorecard serve internal communications?	Changes in the measures will be easy to recognize and the simplicity of the model allows it to be examined regularly. The scorecard will make it easier for the

	managers to communicate with their employees about sudden changes or possible differences in the model.
<p>Fifth sub-question: What kind of observations or remarks come up from the theoretical parts of the scorecard?</p>	<p>In order for the model to be truly an efficient tool that can be used to track the unit's success, it is important to keep improving and updating it regularly. It should also be used on a regular basis, e.g. weekly or at least monthly. Additionally, a scorecard team or a person needs to be named to take care of the tool.</p>
<p>Main research question: What kind of a scorecard does the X –unit need to serve and support their vision, values and strategy?</p>	<p>The X –unit needs a scorecard that reflects the KPIs that matter the most to them. The KPIs cannot be unnecessary or useless measures, but metrics that the unit needs to regularly measure. It needs to be simple, easily accessible and provide all the relevant information the unit should need.</p>

The research questions are answered to in Table 1. As can be seen, the biggest factor to consider is making sure that the tool is actually usable and contains the most relevant KPIs.

7.2 Validity and Reliability

The purpose of the thesis was to answer the research questions. As all the questions were answered, the purpose of the thesis is fulfilled. Both, the validity and reliability are guaranteed. The secondary data applied in the thesis was gathered using trustworthy articles and electronic sources, including e-books and reports that were all related to the topic of the thesis. The primary data was gathered through interviews. Only the interviewees were shown the PowerPoint –show and no one was given the questions before the interview. The interviewees remain anonymous in the thesis. They were advised to be as honest as possible in order to gain the best possible answers from the interviewees. Every question asked in the interviews was based on careful research of the topic. Due to the main language of the company, the interviews were conducted in Finnish. In order to

avoid possible, unfortunate faults in translations of the chosen KPIs, the author decided to include the KPIs in Finnish as well.

The findings, suggestions and conclusions are included in the thesis. It should be noted, though, that the research was done keeping the company and its vision in mind, and that the interviewees all represented the same company and the same unit. Therefore the opinions the interviewees expressed are all reflecting the strategies and ideas of the same unit.

7.3 Suggestion for Further Research

As the thesis was solely intended for the use of XXX's X –unit, the author suggests that in order to gain a broader view of the situation, the study should be expanded to other companies. It most probably reflects the needs of recycling companies. As the thesis was conducted in Finland and the case company for the thesis is also based in Finland, it does not give a clear indication as to how a scorecard tool should be formed or created elsewhere. Perhaps studying the topic in a different country would give more insight into it.

Further research on the topic would be beneficial for most organizations and companies all around the world, as scorecards are not tied to only organizations that are seeking profits, but also to non-profit organizations. Having an efficient scorecard will help the organizations stay on track with their success, thus, the author recommends that every organization that has yet to implement a scorecard, would research the topic. It would certainly add value to most companies.

8 SUMMARY

The topic of the thesis is to study the needs from a scorecard to suit XXX's X –unit. The thesis analyses this by responding to the main research question, “what kind of a scorecard does the X –unit need to serve and support their vision, values and strategy”. Furthermore, questions about how to make the scorecard support X –unit's goals and objectives, how the tool will transform the KPIs into indicators that can be followed and measured, what kind of challenges are found in existing data, how to serve internal communications, and finally, what kind of observations come up from the theoretical part are answered.

The research consists of both a theoretical and an empirical part. The theoretical part introduces Kaplan and Norton's original theory and moves on to later improvements by Niven. This includes chapter 2 and its subchapters about the history, execution, perspectives and implementations. In addition, Parmenter and Graham are the basis for the theory concerning the key performance indicators. These five authors' theories are further supported by several other authors and their input on the research.

Data acquisition and data analysis were the two major parts in the empirical part of the thesis. The data was collected by conducting an interview. The interview was based on the original balanced scorecard model perspectives. However, as suggested by Parmenter, two additional perspectives were included for the purpose of the research. The questions highlighted the importance of strategy and objectives. Recommendations for the development of the tool and suggestions for further research were given by the author. All research questions, including the main research question and five sub questions were answered. Validity and reliability has been guaranteed and confirmed by the author. A conclusion to the topic has been given.

LIST OF REFERENCES

Written References

Keyes, J. 2010. Implementing the Project Management Balanced Scorecard. CRC Press.

Kothari, C.R. 2004. Research Methodology: Methods and Techniques. New Delhi: New Age International Ltd.

Lawson, R.A., Desroches, D. & Hatch, T. 2007. Scorecard Best Practices. Wiley.

Niven, P. R. 2005. Balanced Scorecard Diagnostics: Maintaining Maximum Performance. Hoboken: John Wiley & Sons, Inc.

Niven, P.R. 2014. Balanced Scorecard Evolution: A Dynamic Approach to Strategy Execution. Hoboken: Wiley.

Paley, N. 2004. Successful Business Planning: Energising Your Company's Potential. London: Thorogood.

Parmenter, D: 2010. Key Performance Indicators (KPI): Developing, Implementing and Using Winning KPIs. Hoboken: John Wiley & Sons, Inc.

Electronic Sources

Balanced Scorecard. 2020. What is a Balanced Scorecard? [accessed 4 May 2020]. Available at: <https://balancedscorecard.org/bsc-basics-overview/>

Dudovskiy, J. 2020a. Deductive Approach (Deductive Reasoning). Research Methodology [accessed 24 April 2020]. Available at: <https://research-methodology.net/research-methodology/research-approach/deductive-approach-2/>

Dudovskiy, J. 2020b. Inductive Approach (Inductive Reasoning). Research Methodology [accessed 24 April 2020]. Available at: <https://research-methodology.net/research-methodology/research-approach/inductive-approach-2/>

Ettliger, S. 2020. Deposit Refund System (and Packaging Tax) in Finland. Eunomia [accessed 30 April 2020]. Available at: <https://ieep.eu/uploads/articles/attachments/9d526526-d22b-4350-a590-6ff71d058add/FI%20Deposit%20Refund%20Scheme%20final.pdf?v=63680923242>

Goldsberry, C. 2018. Recycling is big business, but is it profitable? Plastics Today [accessed 4 May 2020]. Available at: <https://www.plasticstoday.com/recycling/recycling-big-business-it-profitable/19442800958772/page/0/1>

Graham, K. 2014. Five Questions to Identify Key Stakeholders. Harvard Business Review [accessed 11 March 2020]. Available at: <https://hbr.org/2014/03/five-questions-to-identify-key-stakeholders>

Graham, K. 2020a. Create KPIs That Reflect Your Strategic Priorities. Harvard Business Review [accessed 12 March 2020]. Available at: <https://hbr.org/2020/02/create-kpis-that-reflect-your-strategic-priorities>

Graham, K. 2020b. Don't Mistake Execution for Strategy. Harvard Business Review [accessed 11 March 2020]. Available at: <https://hbr.org/2020/01/dont-mistake-execution-for-strategy>

Halme, K. 2020. Jätehuollon kehitys itsenäisen Suomen historiassa. Suomen Kiertovoima [accessed 4 May 2020]. Available at: <https://kivo.fi/jatehuollon-kehitys-itsenaisen-suomen-historiassa/>

Jackson, T. 2020a. A Closer Look At The Balanced Scorecard Financial Perspective. ClearPoint Strategy [accessed 28 March 2020]. Available at: <https://www.clearpointstrategy.com/balanced-scorecard-financial-perspective/>

Jackson, T. 2020b. How To Create & Write Out Your Strategic Objectives. ClearPoint Strategy [accessed 10 April 2020]. Available at: <https://www.clearpointstrategy.com/how-to-write-strategic-objectives/>

Jackson, T. 2020c. 18 Key Performance Indicator (KPI) Examples Defined. ClearPoint Strategy [accessed 26 March 2020]. Available at: <https://www.clearpointstrategy.com/18-key-performance-indicators/>

Kaplan, R. & Norton, D. 1992. The Balanced Scorecard – Measures that Drive Performance. Harvard Business Review [accessed 24 February 2020]. Available at: <https://hbr.org/1992/01/the-balanced-scorecard-measures-that-drive-performance-2>

Kaplan, R. & Norton, D. 1993. Putting the Balanced Scorecard to Work. Harvard Business Review [accessed 24 February 2020]. Available at: <https://hbr.org/1993/09/putting-the-balanced-scorecard-to-work>

Kaplan, R. & Norton, D. 2000. Having Trouble with Your Strategy? Then Map It. Harvard Business Review [accessed 24 March 2020]. Available at: <https://hbr.org/2000/09/having-trouble-with-your-strategy-then-map-it>

Kaplan, R. & Norton, D. 2004. Measuring the Strategic Readiness of Intangible Assets. Harvard Business Review [accessed 24 February 2020]. Available at: <https://hbr.org/2004/02/measuring-the-strategic-readiness-of-intangible-assets>

Lucco, J. 2020. A Full Balanced Scorecard Example (Including 6 Templates). ClearPoint Strategy [accessed 24 March 2020]. Available at: <https://www.clearpointstrategy.com/full-exhaustive-balanced-scorecard-example/>

Muovitielkartta. 2019. Reduce and Refuse, Recycle and Replace – A Plastics Roadmap for Finland [accessed 30 April 2020]. Available at: <https://muovitielkartta.fi/userassets/uploads/2019/03/Reduce-and-refuse-recycle-and-replace.-A-Plastics-Roadmap-for-Finland.pdf>

Okko, S. 2014. Construction-waste recycling gets a boost. Good News from Finland [accessed 30 April 2020]. Available at: <https://www.goodnewsfinland.com/feature/construction-waste-recycling-gets-a-boost/>

Parmenter, D. 2020. How to implement a balanced scorecard in 16 weeks not 16 months [accessed 20 April 2020]. Available at: <https://davidparmenter.com/files/how-to-implement-a-balanced-scorecard-in-16-weeks-not-16-months-april-for-publication.pdf>

Rengaskierrätys. 2020. FAQ [accessed 30 April 2020]. Available at: <https://www.rengaskierratys.com/en/consumers/faq>

ThesisRush. 2020. The Limitations of A Study: Tips For Students [accessed 24 April 2020]. Available at: <https://thesisrush.com/blog/limitations-of-study/>

Virtanen, L. 2020. VS: Strategia, mission & visio / opinnäytetyö X. Email correspondence. Recipient X. Sent on 23 April 2020.

Weaver, F. 2013. Finnish Families Get to Grips With Trash. This is Finland. [accessed 30 April 2020]. Available at: <https://finland.fi/life-society/finnish-families-get-to-grips-with-trash/>

APPENDICES