

## Balanced Scorecard for Finnerz B.V.

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<p>Finnerz B.V. is a small accountancy company located in the Netherlands with its headquarters in Rotterdam. They offer clients financial services and advisory.</p> <p>The objective of this research and case study was to create a Balanced Scorecard, a performance management tool, designing a strategy map and an additional updateable excel tool for the company Finnerz B.V. The case company was without a clear performance measurement and management tool, and has limited insights on the four perspectives as their software's were mostly customer and internal process' based.</p> <p>The data collected for this case study includes both qualitative and quantitative research methods. Data collection tools consist of interviews, questionnaire's, company documents, and feedback from the company.</p> <p>A Balanced Scorecard is a performance measurement and management tool. It connects various components of strategic planning and management and creates visible connections between projects and programs by tracking key performance indicators (KPIs). Further, it is used to attain objectives, measurements and goals that result from the four primary functions of a business; Financial, Customer, Internal Process and Learning and Growth.</p> <p>The result of this thesis was a static BSC with strategy map for the upcoming year that the company is able to implement to provide a more visual image of the company's goals. Further, the BSC can be seen and used by all employees to create a common goal amongst the company and its stakeholders. In addition, a simple and updateable excel tool was created that helps the company implement a BSC for further upcoming years with ease and gives extra visualization.</p>	
<b>Keywords</b> Balance Scorecard, BSC, Measurement, Performance Management Tool, Performance measures, Strategy Map, Strategy, Management Accounting	

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## Abbreviations

ACV	Average Client Value
API	Application Programming Interface
AR	Annual Revenue
ARR	Annual Recurring Revenue
B2B	Business to Business Sales
BSC	Balanced Scorecard
CEO	Chief Executive Officer
ERP	Enterprise Resource Planning
KPI	Key Performance Indicator
KRI	Key Result Indicator
MAS	Management Accounting Systems
MCS	Management Control Systems
MRR	Monthly Recurring Revenue
PI	Performance Indicator
PMS	Performance Management Systems
PT	Project Task
RI	Result Indicator
ROI	Return on Investment
UBL	Universal Business Language
VBA	Visual Basic for Applications

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# **1 Introduction**

In this chapter, the general information and framework for this project is introduced. This chapter begins with explaining the motivation and background of the research followed by several aspects of the project. The thesis further consists of 6 chapters.

Chapter 2 describes and explains the framework and theory used for this project. It introduces the history and base that led to the creation of the balanced scorecard and what it consists of.

The third chapter explains the methods and timeline for this project. There are different data collection methods used which contributed to this project.

The fourth chapter focusses on the performance measures and implementing the theory explained in chapter 2 on the case company. This further continues in chapter 5 where the second part of the balanced scorecard is implemented given merging the theory and the case company's current strategy and values.

Chapter 6 contains a full analysis and overview of the balanced scorecard created. Explanations regarding choices are further detailed and the introduction of the balanced scorecard within Excel are explained and visualized.

The final chapter forms the evaluation of this project, including self-evaluation of the authors and conclusions are drawn.

## **1.1 Background**

Performance measures help management in an organization to evaluate whether previous decisions made were effective and ethical. This relates to performance management systems which contains the measures and supports the continuous process of improving performance. It is a key aspect and tool used in management accounting. (Franklin, Graybeal & Cooper 2019, paragraph 2.1)

For many small to medium sized companies, management accounting is overlooked as it is seen as time or money-wasting which results in business owners not focusing on the bigger picture. There are many services that provide detailed and visualized reports and dashboards used for performance management. These services tend to be avoided by small companies as it's believed as being costly. Performance management systems or tools are not necessary to cost money and can often be created via free tools such as Excel. This does however require more manual input which takes time.

The author was previously employed in the case company and took on the project of implementing a performance management tool for the company. Previously, the organization had no form of performance management tools and were using the data displayed in their dashboards which tracks the actualization of certain data within their accounting software. The dashboards and data are scattered around in different parts of their software and do not display past data against current data nor targets.

With this project, a tool, the balanced scorecard, will be created for the case company. This tool will hold their key data in one place and includes the initiatives that have to be taken to reach the company's targets. It further will help the company visualize, analyze and update their strategy for future decisions. In addition, it will help align the objectives and goals amongst all employees which results in the entire organization working towards the same goal.

## **1.2 Project Objective**

The objective of this project was to create a balanced scorecard for the case company. In addition, it was created using excel which requires manual data-input and projects the data in a visualized overview in a separate dashboard.

The project tasks were:

1. Identify the theoretical framework
2. Collect data to establish the requirements for the tool based on the company's needs.
3. Design the balanced scorecard
4. Implement and evaluate the tool
5. Finalize tool
6. Evaluate the project

Table 1. Overlay Matrix

Project Tasks (PT's)	Theoretical Framework	Project Management Method	Outcome
PT 1. Create Theoretical Framework	Balanced Scorecard Strategy Map	Desktop research	Theoretical framework
PT 2. Collect data to establish the requirements for the tool based on the company's needs	Needs assessment	Interviews, calls, e-mails, use of company's software	Practical framework
Design the Balanced Scorecard	Outcome of previous task	Work with/in software	Beta-version of the tool
Implement and evaluate the tool	Outcome of previous task	Work with/in software Feedback collection Evaluate results and automations	Ideas for improvement and an updated version of the tool
Finalize the tool	Outcome of previous task	Work with/in software	Final version of the tool
Evaluate the project	Outcome of previous task	Review of the project	Reflection and successfulness measurement

### 1.3 Project Scope

The focus of this project was to provide the case company with insights and possibility to track strategic performances using the balanced scorecard. The main focus within the balanced scorecard are the internal and customer processes due to the size of the company. The financial perspective contains the result indicators which show the effect of both internal and customer perspectives. In general, learning and growth are the least important items for small companies as there is little room for error and with few employees easily trackable via internal communications.

### 1.4 International Aspect

The company is positioned in the Netherlands and has some clients who operate internationally as well as few clients close to the Dutch borders. The tool created is in English and was designed based on the company's feedback.

## **1.5 Benefits**

The wished outcome of this project was the case company understanding their strategy and key focuses within the entire organization, and that leading to organizational and financial growth to make the company more profitable. The Balanced Scorecard serves as a base for building a strategy and tracking performances. The Strategy Map within the scorecard visualizes the strategy and serves to create a better understanding amongst all employees. With the use of initiatives, it creates a better understanding of the actions that need to be taken to reach the desired targets and helps employees link their own goals and actions to the company strategy that will align all actions taken towards the same goal.

The author was an international business student majoring in the field of finance and accountancy and therefore wishes to gain a better understanding in management. With this project the author was able to learn and discover links and effects between different components of a company that leads to a strategy.

The case company requested research regarding performance management and agreed with the research and implementation of a balanced scorecard.

## **1.6 Risks**

There were few risks and difficulties associated with this project concerning analysis, creation, interpretation and use of the balanced scorecard.

The issues surrounding the analysis and use of the performance measures for the case company can arise from different interpretations between the author's and company's view. In addition, the information and performance measures used for this project were given and decided upon by the case company with some feedback from the author.

The balanced scorecard is created by the author using excel and involves a variation of macro's, formula's and basic coding. It is not recommended for any of the users within the case company to change these and therefore a security measure is set in place. The tool is made to be useable by all employees and simplified to avoid misunderstandings in regard to the input of data, changes within the tool and understanding of the outcomes.

There are few possibilities for automations between accountancy software used and Excel. These are possibly not always viable. To establish a link between the software and Excel might be unsafe. Since the software is web-based, Excel can, with the use of a basic functions, identify and extract tables. This is depending on the layout of the software and might transfer incorrect or incomplete tables. Further, the software can only export certain data to excel. This results in manually inserting and updating information within the tool which can cause implications with the data displayed.

## 1.7 Key Concepts

**Management Accounting** is concerned with identifying, measuring and analyzing of accounting information that can be used by managers to make necessary decisions to efficiently manage a company's operation. The information can be of both financial and non-financial nature and is focused in using the past information for future activities. (Coombs, Hobbs & Jenkins 2005, 2-7.)

**Key Performance Indicators** are the most important indicators of progress towards a preferred result. They are of nonfinancial nature that can be traced back to a single team or department. It provides a focus for strategical and operational improvement of a company. These key indicators are ones that are most critical for the current and future success of an organization. (Parmenter 2015, 7.)

**Key Result Indicators** are measures that are the result of many actions carried out by more than one team or a departments input. The key result indicators are more focuses on specific summaries and form the most important result indicators of a company. They give a clear vision of the direction and speed that the company is travelling in. (Parmenter 2015, 4.)

**Result Indicators** are measures that reflect on a summary of more than one team or department's input. It reveals an overview of how teams work together. It is an overall summary of activities that have taken place and look over a wider time horizon. (Parmenter 2015, 5-6.)

**Performance Indicators** are of nonfinancial nature and focuses on singular activities from a team. They are important for a company although not crucial for business. The

indicators help teams to align themselves with the organization's strategy and compliment the KPIs. (Parmenter 2015, 7.)

**Balanced Scorecard** is a performance management tool that translates a company's strategy into measurable objectives. It provides information on the strategy and can be used to focus on it. The scorecard is made from four important perspectives; the customer perspective, financial perspective, internal perspective and learning and growth perspective. (Kaplan, Norton 1992, 2.)

A Strategy map is a diagram that shows an organization's values created by connecting strategic objectives to show the cause and effect chain between the four perspectives of the balanced scorecard. (Soundview Executive Book Summaries 2004.)

## **1.8 Case Company**

Finnerz B.V. is a private limited company from the Netherlands, operational in the financial service sector. The company offers accountancy services to business owners to help their companies stay financially organized. The services provided include the general bookkeeping, reporting, advisory and tax returns.

The company currently holds two offices. The headquarters of Finnerz is located in Rotterdam and the second office in Amsterdam. During the year of 2021 the company expects to expand and set up an office in Breda. The company currently holds a small team, total of four employees, and aim to grow further during 2021 as their client base consistently grows.

In May 2014, N. Langendoen founded the accountancy company NPL Advies. The company provided financial services and operated with the use of ERP systems. Communication and collaboration between the company and its clients proved to be inefficient due to the nature of the software used. The company decided to change the software and way of operating which led to the founding of Finnerz at the end of 2017.

The company transferred their clients to the new company which started working with robotic accounting software that in addition simplifies the communication between company and client via click-to-call communication.

## **2 Theory Behind the Project**

In this chapter, the theoretical framework for this project is explained. The chapter starts with the origin and transition from financial accounting to managerial accounting which forms the basis of the further developments used for this project. It highlights the terms and theory in balanced scorecard which is the key tool used.

The background of the balanced scorecard is given, and the explanation of the concept and framework of the balanced scorecard are described. It is followed by a further discussion of each perspective and the relationship between them.

### **2.1 MA, MAS and MCS**

Financial accounting is said to already being existent from the time before Christ, with counting already in the stone ages. Over the years before Christ there have been many findings of counting systems in. From around the 15th century the double-entry bookkeeping's systems were created. Banks were using the debit and credit systems during these times which translates in Latin to "he owes" and "he trusts".

Management accounting (MA) was founded much more recently in the early 19th century with the rise of the industrial revolution. Factories started hiring workers for a long-term period and the workplaces developed into organizations. With these developments, information systems were required to increase, and efficiency of the workers needed to be analyzed. The management accounting systems (MAS) that were created served to motivate and evaluate the efficiency of internal processes while leaving the profits out of these systems. This led to a development in financial accounting systems to separately operated, resulted in financial and management accounting being operated separately.

Before 1995, management accounting was mainly focused on using financial measures such as cost determination and financial controls. A later review suggested that the traditional product costing systems provide misleading information which negatively impacted decision-making purposes. In addition, management accounting was almost entirely focused on internal activities with little attention for the external environment in which the businesses were operating. There were several stages in the early 19th century in which management accounting involved, but until 1995, non-financial measures and external environments were not included. At that stage, the creation of value through effective use of resources was founded. This included the perspectives of customers and

organizational innovation as opposed to financial and internal perspectives. (Waweru 2010, 165-175.)

Today, we understand management accounting as a vital part of businesses and all organizations practice both management and accounting. Management uses accounting information that includes items which are both of financial and non-financial nature as well as accurate or broadly correct. The accounting information produced for management further contains more than just actual or past data as it also focuses on the future and supports in decision-making. The goal of this role is the process of identifying, interpreting and analyzing information to help achieve company goals.

These data reports are offered timely and accurate containing the statistical and financial information important to managers. The data and reports are received and created in MAS and vary per type of application. Often these systems include items such as inventory management, cost accounting systems, budgeting systems and other items important to managers and organizations. The practice of collecting the data is referred to as management accounting while MAS is the use of MA to achieve goals. In addition, a system called Management Control systems (MCS) is a broader term that includes MAS as well as other controls.

Simons (1994) described MCS as the formal, information-based routines and procedures used by managers to maintain or alter patterns in organizational activities. Within MSC there are two concepts; Planning and Control. Planning systems use financial numbers and provides a 'language' that can be used to compare results. It is concerns itself with feedforward, which is the process of determining whether strategies are likely to achieve the results. Control systems are more concerned with feedback, which is the process of measuring performance and comparing it with the plan to help in decision-making on whether the activities need correction. (Collier 2003, 37-42.)

## **2.2 KPIs, KRIs, PIs and RIs**

Worldwide, organizations use the term key performance indicator loosely, referring to all performance indicators which leads them to working with the wrong measures. In addition, a common misconception is that measures will always lead to better performance. The reason companies use performance measurements is due to it being essential to identify

their strengths and weaknesses and allow to analyze the company on areas for improvement that could be beneficial for the organization and individuals.

According to D. Parmenter, performance measures can be categorized in four types of measures. There are two groups of performance measures: result indicators (RI) and performance indicators (PI). The result indicators reflect on a summary of more than one teams input while performance indicators can be directly tied to a singular team or small cluster of teams working towards a common purpose. Within each group, the most important measures are the “key” indicators, and thus the differences between Key result indicators (KRI) and result indicators, as well as the difference between Key performance indicators (KPI) and performance indicators. (Parmenter 2015, 3.)

Key result indicators are measures that are often mistaken for KPIs. The main difference between the two is that KRIs can be of both financial and nonfinancial nature, whereas KPIs are nonfinancial measures only and are not expressed in currencies. With most financial measures, they are recorded on monthly, quarterly or annual time periods. They are the results of many activities within an organization and managed through various performance measures. Measures that fall under KRI which are often seen as KPI are for example “customer satisfaction” and “revenue”. With the example of customer satisfaction, there are many underlying activities and performances measured which results in the satisfaction score. These specific activities are the KPIs, as they are measured more frequently, and the responsibility of each element can be tied down to a specific team or department. KRIs look over the past activities while KPIs are more current but can also be future oriented. The difference with result indicators and performance indicators is that those are measures that are not most vital to the success of a company or organization although important. RI and PI are the indicators that helps teams or departments align themselves with the organization’s strategy. (Parmenter 2015, 3-21.)

In the table 2 the main differences between KRI, KPI, PI and RI are shown.

Table 2. Performance indicator types

Key Result Indicators (KRIs)	Can be both of financial and nonfinancial nature. They tell the summary of activities over multiple teams.	Are measured monthly or quarterly
Result Indicators (RI)		Are measured 24/7, daily, weekly, monthly or quarterly
Key Performance Indicator	These measures are nonfinancial and target a specific activity and tell a team or department what to focus on.	Are measured 24/7, daily or weekly.
Performance indicator		

A common misconception and myth surrounding performance measures is that they lead to an increase in performance and work successfully within an organization. Many organizations do not have sufficient knowledge on how to successfully choose and implement performance measurements and their initiatives. Without the proper understanding of the consequences of the measures and the initiatives, it can have an unintended negative effect on the performance of the organization. One measure is able to affect other's when incorrectly used. (Parmenter 2015, 26.)

### 2.3 The Balanced Scorecard

In the beginning of the 1990s Robert Kaplan and David Norton were conducting a research at the Harvard Business school. They were identifying key problems in the then-current era of business, motivated by the idea that the traditional approach of using financial accounting measures were becoming obsolete. Companies were failing and neglecting other performance measurements. Financial measures are important for both internal and external parties but only measures the performance of the past. Kaplan and Norton developed a new management system that would provide businesses and managers with additional information on objectives and strategies using measurements as its key aspect, labelled the balanced scorecard. It is the framework for strategic measurements and management system that translates a company's vision, mission and strategy and enables them to track progress. (Hannaberger, Bunchman & Economy 2007, 9-11.)

The balanced scorecard includes, as traditionally, financial measures but is accompanied by operational measures on customer satisfaction, internal processes and the learning and growth perspective. The name reflected the balance between short-and long-term

objectives, financial and nonfinancial measures, lagging and leading indicators and the external and internal perspectives. (Kaplan & Norton 1992, 2.)

These four perspectives are measured, analyzed and improved together continuously. The measures represent a balance between the perspectives and links external with internal measures. The process of the scorecard starts with the development of the general strategy of the organization, including the vision, mission and guiding principles. The strategy is focused on the long term and based upon analysis of the goals and strategies set by management and the executive team. With this information the strategy map is developed and contains plans, goals and objectives. These objectives can be further drilled down to creating measures that track the objectives. This is the balanced scorecard. In here further plans or initiatives can be created that will lead to the targets set of the measures. The balanced scorecard and strategy map are necessary to be continuously analyzed and adjusted to achieve success. (Hannaberger & all 2007, 32-49.)

To set financial targets, the organization must emphasize what financial data is most relevant. This can be in terms of market growth, profits or cash flow. The financial measures used must reflect the value that the organization is providing, and therefore usually reflects the customer perspective. To know what the customers want in terms of quality, cost and delivery, it is important to start identifying the customers and segments. With the establishment of the financial and customer objectives, an organization can then continue to identify the objectives and measures for its internal processes. The internal process measures typically consist in two key areas: time and quality. Time is associated directly with costs as the longer a good or service takes to reach the customer, the greater the costs will be. The quality measures tend to be reactive rather than proactive, which is a common mistake amongst companies when creating internal measures. The key measures for quality should include both reactive and proactive objectives. The final linkage in the balanced scorecard is the learning and growth perspective which focuses on improvement and innovations within the organization and often include investments in employees, systems and procedures. These investments can relate to improvements within internal processes. In the strategy map the linkages between the objectives across the perspectives are shown with cause and-effect links. (Hannaberger & all 2007, 9-29.)

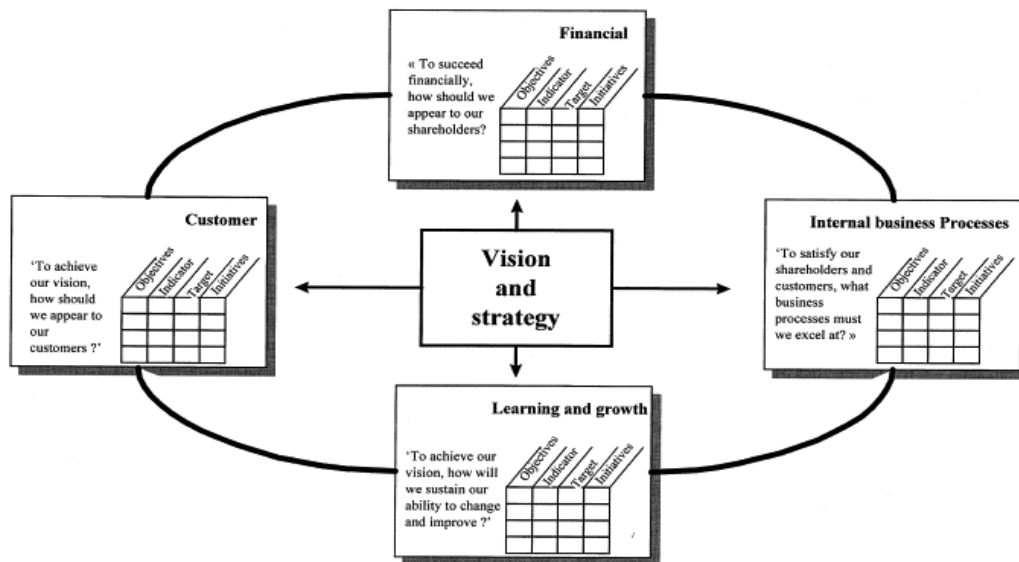


Figure 1. Framework of a balanced scorecard (Kaplan and Norton 1996,13.)

### 2.3.1 Financial Perspective

The financial performance measures show how well the strategy is achieving its goals and serves as the focus of objectives and measures in other perspectives of the scorecard. Typically, the financial objectives are long-term and link with the financial measures within the other perspectives. For most organizations, the financial measures include growth, profitability and shareholder value. They can be measured by operating income, cash flow, return on equity and sales growth. (Kaplan & Norton 1992, 8.)

Many organizations use the same financial objectives and measures across their departments and units, including identical targets. What they fail to recognize is that different departments of an organization can follow different strategies which makes it unlikely that all can hit the same targets. The financial objectives can define both strategy and the target for all objectives across the balanced scorecard.

Kaplan and Norton identified three stages of an organization's life cycle that suggests strategies that business units can follow. These stages are growth, sustain and harvest. Organizations within the growth stage are often in the early stages of operating and have potential to grow larger. Within this stage, organizations tend to focus on investing in operating capabilities and therefore have the tendency to operate with negative cash flows. Financial objectives for such business might include growth rates in revenue and sales.

Most companies reside in the sustain stage. They require to earn good returns and are expected to maintain their market share and position within the industry. Companies in this stage often focus on profitability measures. The final stage, harvest, are more mature companies. They do not look for great investments, but rather investments to maintain their capabilities. The main goal here is to maximize cash flow back to the company. Financial objectives are therefore often related to operating cash flow. (Kaplan & Norton 1996, 79-85.)

For each of the stages, there are three financial aspects that drive the strategies of the stages. These are the revenue growth and mix, improvement and asset utilization. Revenue and growth is focused on the products and customers to create higher values in their offerings and increase customer value and market share. Common measures for revenue and growth include sales growth and increase in market share. The focus lays upon new products or mixes, new customers, markets, relationships and pricing strategies. Improvement or cost reduction aspect refers to reducing costs in general. Asset utilization strives for utilizing the fixed assets and disposing of inefficient assets. In addition, cash-to-cash cycle, is looked at for improvement of the working capital efficiency. These cross-references between the stages and financial aspects or themes are shown in figure 2. (Kaplan & Norton 1996, 79-97.)

### Customizing Measures for Business Strategies and Financial Themes

		Financial Themes		
		Revenue Growth and Mix	Improvement	Asset Utilization
Business Unit Strategy	Growth	Sales growth rate by segment Percentage revenue from new product, services, & customers		Investment (percentage of sales) R&D (percentage of sales)
	Sustain	Share of targeted customers and accounts Cross-selling Percentage revenues from new applications Customer and product line profitability	Cost versus competitors' Cost reduction rates Indirect expenses (percentage of sales)	Working capital ratios (cash-to-cash cycle) ROCE by key asset categories Asset utilization rates
	Harvest	Customer and product line profitability Percentage unprofitable customers	Unit costs (per unit of output, per transaction)	Payback Throughput

Figure 2. Strategic and financial themes (Kaplan & Norton 1996, 87.)

### 2.3.2 Customer Perspective

The customer perspective helps organizations to let their employees focus on the customer. The first step companies must take is to identify the customers and market segment in which they compete. The customer perspective directly represents the source that will deliver the revenue component of the company's financials perspective. It focuses on the value that customers can bring to the company, and vice versa. The customer perspective is often translated from the company's mission and strategy statement and turned into specific objectives about the targeted customers. With the understanding and identification of the customers and their value creation, the next step is to translate this into tangible measures that can be tracked.

Generally, existing and potential customers are not equal. They have different preferences and value the products and services differently. Customers can be separated into separate groups to distinguish their needs. This segmentation can help managers to focus better on the customers and avoid the risks of unsatisfying their customer segments.

Apart from customer segments, Kaplan and Norton describe five basic strategic goals that are commonly used in the customer perspective of the balanced scorecard. These five are market share, customer retention, customer acquisition, customer satisfaction and customer profitability as can be seen in figure 2. These core measures are linked with causal relationships and are generic for all companies. The difference what these measures bring in companies is linked with the customization to the organization's target customer groups.

Market share is the percentage of an industry that is earned by a company. Measuring the market share is straightforward given that the customer groups or segment has been identified.

Customer retention and acquisition are ways to maintain and increase an organization's market share. Loyalty can be a measure that contributes to customer retention and customer retention can be readily measured from period to period. Customer acquisition could be measured in two different ways depending on the business model of the company. The first being the number of new customers and the second being the total sales to customers in the chosen segments.

Both retention and acquisition are driven by satisfying the customer's needs. This can be tracked via feedback systems that provide the company with information on how well their product and services are for their customers. The drivers for customer satisfaction include time, quality and pricing. Based on these drivers a company can successfully increase customer satisfaction. Succeeding all four customer measures can, but does not guarantee profitable customers. It is important to keep good customer relationships which will translate into the emotional aspect that the customer has about the company and brand. (Kaplan & Norton 1996, 100-128.)

### Customer Perspective – Core Measure

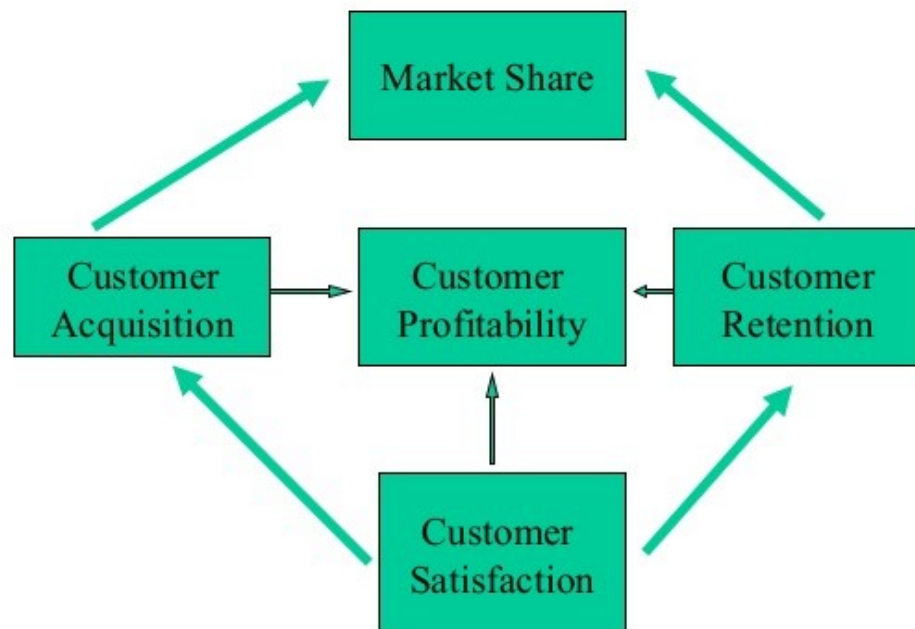


Figure 3. Customer Perspective - Core Measures (Kaplan & Norton 1996, 97.)

#### 2.3.3 Internal Processes Perspective

The customer-based measures should be translated into what the company has to do internally to satisfy the customers' needs, but also is needed to satisfy the expectations of the shareholder of good financial returns. Managers will identify these processes which are critical for achieving the customer and shareholder objectives. A common issue in identifying and creating measures for internal processes is that many processes don't relate to customer or shareholder objectives and therefore not linked within a BSC. The

measures should relate to customers, preferably directly. (Kaplan & Norton 1996, 139-156.)

Most of these measures are ones that are or can be influenced by individuals within the company. This way, it will link the most important processes to the actions that employees take. This also means that the employees will have a clear vision and target and work towards the goals of the company. (Kaplan & Norton 1992, 5.)

It is important for managers to define the value chain that starts with identifying and developing solutions for current and future customer's needs through the operating processes. Traditionally, performance management systems (PMS) was focusing on controlling and improving the existing departments which limits to using financial measurements for developing internal process measurements. Both the BSC and traditional PMS attempted to improve individual departments rather than integrated business processes. The difference with companies today is they tend to have multiple measurements for both cross functional and integrated business processes which have shown improvements against older systems and early uses of the BSC. These companies look to improve the quality, reduce cycle times, increase yields and lower costs for their processes.

The generic value chain model for companies to create their internal process measures looks at three principal processes: Innovation, operations and post-sale service. See figure 4.

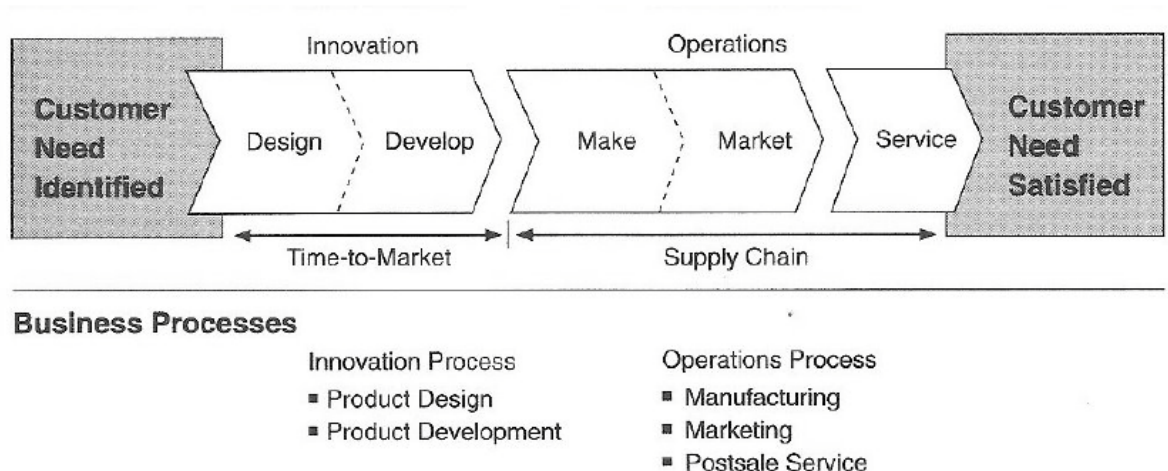


Figure 4. Internal Business Processes (Kaplan & Norton 1996, 144.)

Many organizations focus on improving the existing operating processes as opposed to developing and innovating new ones. In the early stages of the development of the BSC by Kaplan and Norton, innovation was a separate perspective created. However, they came to realize that it was a critical internal process. Innovations are often costly and time-taking during the research and development stages, but can create long-term value in which an organization can first identify and enter new markets, gain traction of new customers and retain existing customers with their innovations.

The operations process represents a shorter wave of value than the innovation process and is centered around the idea that products and services start with the order of a customer and ends with the delivery. It is important that the processes involved in this cycle are consistent and efficient. Most processes and operations are repetitive, and by using management techniques these processes can be easily controlled and improved to increase them. Traditionally, these processes were monitored and controlled using various financial measures including costs, budgets and variances. The financial measures used for this had limitations and created the possibility for taking wrong actions. In today's business, companies tend to focus on other measures in addition to financial measures. These include the quality and cycle time of processes.

The final stage in the value chain model as shown in figure 3 is the post-sale services. Post-sale services typically include items such as warranty, repair activities, treatment of defects and returns and payment processes. Dependent on the goods and services a company provides, there may be other additional services including after sales. A way of measuring the post-sale services performance is to apply the same measures used for operating processes, such as time quality and costs. In addition, invoicing and payment collections is seen as part of the post-sale processes. (Kaplan & Norton 1996, 139-156.)

#### 2.3.4 Learning and Growth Perspective

The learning and growth perspective is the fourth and final perspective found on the balanced scorecard. It is focused on the infrastructure that a company builds to ensure growth for the future. The objectives established in the other perspectives identify where the company needs to excel in. This perspective looks at the long run and stresses on the importance of investing in the infrastructure of the company, the people, systems and procedures. The three principle categories derived from those are the employee capabilities, information system capabilities and motivation, empowerment and alignment.

Most routine work is automated in today's business using computer-controlled operations which replaces workers for tasks such as machining, processing and assembling operations. Service companies are giving their customers direct access through advanced information systems. Further, routine work is not a main driver for organizational success. This is replaced with continuous improvement of performances and operations. Employees need to be reskilled for more creative abilities to achieve organizational objectives.

Employee objectives are typically drawn from three common outcome measures: employee satisfaction, retention and productivity. The satisfaction objectives recognize employee morale and can be measured with for example surveys on annual basis. These surveys often include topics regarding the involvement with decisions and recognition of the employee's work. Further, other topics regarding support, information access and the overall satisfaction with the company are included. Employee retention refers to the long-term, loyal employees within a company, which carry the values and the knowledge of the company. They are seen as long-term investments. Employee productivity indicates the result of various processes such as employee skills and morale, innovation, internal processes and customer service. The most simplistic way to measure employee productivity is in using the revenue per employee. Limitations of this way of measuring is that costs are not included, and the pressure on employees lies on financial targets rather than customer focused.

Many companies undergo changes or try to improve the knowledge of employees. This often leads to a reskilling of the work force. Depending on the company needs, there are various ways objectives are identified, created and measured. Organizations can track the number of certain qualifications or general qualified employees, or measures in skills, knowledge, attitudes are used. Another measure could be the length of time that is required to reskill employees to the new target levels if an organization is in need of a large-scale reskilling.

Employee skills and capabilities alone are often insufficient to reach all targets. This is where the possibilities within information systems comes in. Employees need information as accurate as possible and within a timely manner. It is important for organizations to have systems in place that give feedback and includes programs to eliminate the number of defects and drive excess costs and time. Information systems support employees to improve processes. Measures of such system capabilities are tracking the percentage of processes with real-time quality as an example.

Even with skilled employees and excellent information systems, it is not guaranteed that they result in organizational success. Without the right motivation and alignment of employees these targets may not be achieved. Hence, the third principle category is the motivation, empowerment and alignment of the employees. One way of measuring the motivation, or number of motivated employees is via measuring the amount of suggestions made, per employee. This measure shows the participation of the employees which can be linked to their motivation. Measuring alignment could involve multiple steps to include separate levels of an organization, and drill down from top management to each individual employee. By gaining information of the personal goals and values of employees, this measurement will show how many employees have personal goals alignment with the goals of the organization. (Kaplan & Norton 1996, 185-214.)

## **2.4 Strategy Map**

The strategy map is a tool created Kaplan and Norton as an addition to the balanced scorecard. It is meant for describing strategies and shows its intend to create value for shareholders, customers and communities. The strategy map is a visual representation using cause-and-effect links between the components of the strategy. The BSC offers a framework for describing strategies for creating value. Enhancing and aligning intangible assets leads to improved process performance, which in turn drives success for customers and shareholders.

Companies and managers don't always see the strategies in the same way. Just using or looking at individual measures, one could interpret the strategy differently. Whether they look at the lagging financial or customer indicators, or at the leading learning and internal process indicators. The strategy map plays an essential role in communicating the strategy amongst entire organizations with the BSC as framework which describes the organization's value creation. The financial perspective provides the definition of an organization's success. The customer perspective is the central element of the strategy as an organization's mission and vision are typically customer oriented and translate the core of the strategy. The internal process creates the strategy to reach the value proposition for the customers. Finally, the learning and growth perspective shows the source of the sustainable value creation.

The map is based on several principles. First being that the strategy balances contradictory forces of the short-term financial objectives for cutting costs and improving the long-term objectives for profitable revenue growth as its focus.

The most important principle is the customer value proposition. An organization's strategy is centered around the customer and the value proposition required to satisfy them. The value propositions for the customers define the attributes that must be delivered.

The value created through internal processes drive the strategy. As result, these show how an organization can implement its strategy. For each perspective a theme can be clearly seen. By creating strategic themes for enhancing processes in each of the perspectives and ensuring alignment between them, an organization can realize the benefits created.

Finally, organization's must align their strategies to the fourth perspective of learning and growth to determine, sustain and create value in all three categories of the intangible assets: Employee, Information systems, and motivation, alignment and empowerment of organizational scale.

The total value creation consists of three segments: Value captured by supplier, company and customers. The value created is distributed between these three segments depending on their strength and bargaining power. Depending on the strategy of an organization, it should develop a custom strategy map that represents the value proposition and alignments. Kaplan & Norton describe the four common strategies as a low total cost, product leadership, complete customer solution and lock-in strategies that are typically used by organizations. (Kaplan & Norton 2003, 2-13.)

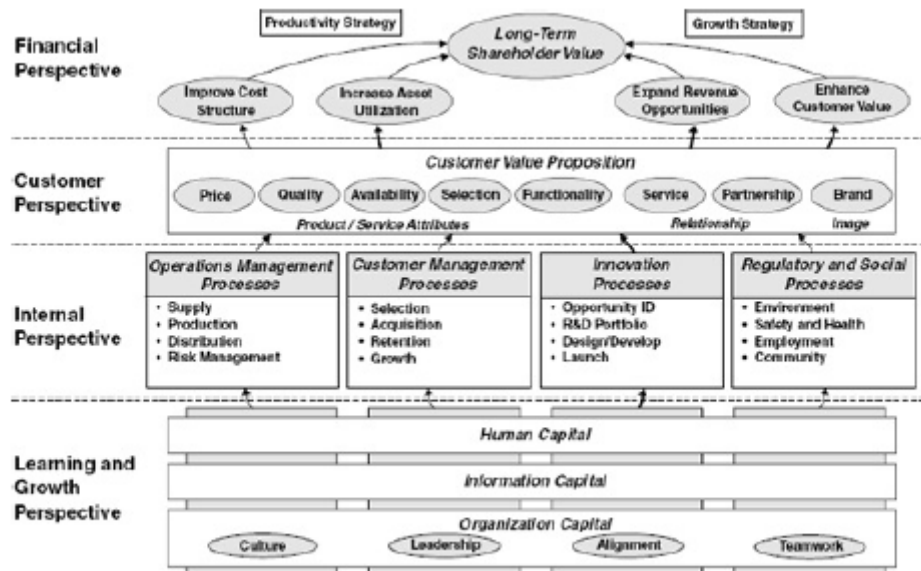


Figure 5. A strategy Map Represents How the Organization Creates Value (Kaplan & Norton, 2003,10.)

### 3 Project Management Methods

The project is built up with a mix of quantitative and qualitative data. The information for the theoretical framework used in this project was conducted with a desktop research, using reliable sources. These include various books, articles and web sources.

The second stage, the information used in the tool and analysis was obtained via few sources. Information was obtained using interviews, e-mail and text exchanges and further by direct access to the company's software. In addition, the data collected was discussed and further specified to understand the data better and establish key aspects.

The task of designing the tool involved using the main software, Excel. In addition, tutorials and books were used in creating the tool for its full potential. The tool was discussed and reviewed with the feedback of the CEO, and changed where needed. Multiple testing and evaluating the tool on regular occasions were needed to improve the overall tool.

With the main user of the tool being the CEO, this was the main contact person for collecting data.

	Task 1	Task 2	Task 3	Task 4	Task 5	Task 6
Project task	Create Theoretical Framework	Collect data to establish requirements	Design Balance Scorecard	Testing and Evaluating	Finalize tool	Evaluate Project
Data Source	Books, articles etc.	Interviews, calls, emails, use of company's software	Data collected in task 1&2	Test BSC from task 3	Data from task 4	All outcomes of previous tasks
Project Management Method	Desktop research	interviews, skype calls, email exchanges, desktop research	Working with Excel (or other software)	interviews, skype calls, email exchanges	Working with Excel (or other software)	Analysis
Task outcome	Theoretical Framework	Finalized project outcome	Beta Version	Improvement ideas	Final version	Reflection
Project outcome	Create a Balanced Scorecard tool that can help the case company					

Figure 6. Project Management

## **4 Developing the Balanced Scorecard**

This chapter focuses on the analysis and implementation of the theory about the balanced scorecard for the case company Finnerz. It discusses how the measures for each of the perspectives can be implemented and which measures the case company wishes to use.

The financial perspective is the first to be discussed in accordance with the steps that the original theory of the balanced scorecard suggests. It continues with the customer, internal and learning and growth perspectives.

### **4.1 Financial Perspective**

Many standard financial measures such as sales, expenses and profit have been traditionally used. The information that these gives are generally basic and inefficient to use for internal analysis. There is a wide variety of financial measures to choose from and use. When selecting the key measures, it is important to focus on the ones that align with the company strategy. There are three levels in which financial measures can exist. Strategic, operation or tactical. At the strategic level the objectives are often long-term and often can relate to performance, efficiency and profitability predictions. The operational level is more concerned to performances such as improving yield and variable costs. They center around delivery and budget versus the actual numbers. The tactical objectives are more specific and related to certain product or service lines and looking to improve yield. (Hannabarger & all 2007, 159-160.)

It is important to be able to interpret the financial measures correctly and understanding what they tell. One of Finnerz' measures is the average client value. The original objective is to increase client value. Finnerz' services are subscription based. Since customers are subscribed with a certain package deal, tracking the average value of the clients within a certain package is the way to measure the average client value (ACV). Most of the company's packages have seen to start and end irregularly. Including the advisory that they provide. For the entirety of the financial perspective, the company therefore measures within their main offered service packages, called "Finnerz Complete". In its current state, there are roughly 89 customers making use of this package deal. Within the package there are varieties of choices clients can make to include. This results in different levels of income per client. The current average client value, calculated by dividing the number of clients by the total monthly income within the service package, is stated to be 205€. With the goal to grow, they hope to attract larger companies as clients and

estimated what would be the ideal services to include for such organizations. The estimate is set at 215€, which forms the target for the measure.

Since the company provides services mainly based on subscriptions, a key financial objective is to increase the revenue that recurs monthly. Not only does the monthly recurring revenue tell the amount of income generated each month, it looks at the revenue trends over time. It can be compared to monthly growth in clients and customer retention. It helps with forecasting sales and budgeting. For a small company as Finnerz this is of utmost importance as it shows whether the company can generate a positive free cash flow and meet their expenditures yearly. In addition, this KRI is useful for managing cash flows which is one of the most important aspects in small and growing businesses.

The monthly recurring revenue is calculated using the number of clients subscribed to the Finnerz Complete service, times the average client value. The current MRR for Finnerz therefore is 18.245€. Besides the goal to attract larger organizations as clients, the ideal monthly growth in clients is estimated at 8. Using this customer target, both the monthly and yearly increase can be calculated, resulting in the total MRR goal for year's end. With the measurement of the ACV and the monthly customer growth target, the monthly increase of MRR results in a target of 20.640€ yearly. Using the base client number, the ACV and the yearly calculated increase, the total year's end target for MRR is set at 39.775€.

Rather than focusing on the generic and common measure of total revenue, which typically falls under the strategic and operational levels, the final measurement for the case company uses the total revenue indicator on a tactical level. Staying focused on the specific service line they offer; the indicator measures the revenue within a year. As opposed to the annual recurring revenue (ARR) measurement, which is the yearly calculation of MRR, the annual revenue measure used for this financial objective is calculated using the targeted MRR in each month. Table 3 shows the result of using the client growth, AC and MRR Target which calculates the yearly revenue target.

Table 3. Revenue and MRR targets.

Month	Clients	ACV	MRR Target
BASE	89	€ 215,00	€ 19.135,00
January	97	€ 215,00	€ 20.855,00
February	105	€ 215,00	€ 22.575,00
March	113	€ 215,00	€ 24.295,00
April	121	€ 215,00	€ 26.015,00
May	129	€ 215,00	€ 27.735,00
June	137	€ 215,00	€ 29.455,00
July	145	€ 215,00	€ 31.175,00
August	153	€ 215,00	€ 32.895,00
September	161	€ 215,00	€ 34.615,00
October	169	€ 215,00	€ 36.335,00
November	177	€ 215,00	€ 38.055,00
December	185	€ 215,00	€ 39.775,00
<b>Year Target</b>	<b>185</b>	<b>€ 215,00</b>	<b>€ 477.300,00</b>
<b>Year Revenue</b>			<b>€ 382.915,00</b>

Using the information shown in table 3, the company can calculate their set target over a 4-5-year period of reaching 1.000.000€ in revenue. These calculations are shown in table 4 using the number of clients at year's end and the total year's revenue. In addition, using these targets, Finnerz can manage their cost and income variables with the growth in clients and client value.

Table 4. Revenue targets for future years

Year	Clients (Dec)	ARR	Revenue
2021	185	€ 477.300	€ 382.915
2022	281	€ 724.980	€ 651.235
2023	377	€ 972.660	€ 919.555
2024	473	€ 1.220.340	€ 1.187.875

To summarize, table 5 shows the financial measures, targets and initiatives that will support to achieve the set targets. All financial measures are based on the tactical level.

Table 5. Financial Performance Measures

Objectives	KPI	Target	Initiatives
Increase Client Value	ACV	215€	Attract larger organizations
Increase Recurring Revenue	MRR	39.775€	Customer growth
Increase Revenue	Revenue	382.915€	

## 4.2 Customer Perspective

Many organizations have a system that tracks data and information on their customers. For most companies the measurement or growth of customers is not the right measure to use for their customer perspective. For Finnerz, customer acquisition is one of the main goals which relates to the financial measures. The company makes use of lead generation tools and services not their own, making it more difficult to track other measures such as average lead conversion rate which indicates how many or how much percentage of visitors are captured as clients. The company aims to grow steadily with an estimated 8 clients per month. Besides aiming on growth, the goal is also to attract larger organizations which support the ACV and MRR in the financial perspective. The initiative of using a lead generation service helps the company reach more potential clients. The service in use is a website called "offerte.nl". A lead generation tool is a form of online marketing in which you try to lead potential clients to your website. The service offers visitors a tool that filters and compares companies offering similar service. They fill in their wishes and company information. Based upon this information they receive a list of quotations from companies that suit them best.

One of the most common customer measurements is customer satisfaction. This measure is part of the tactical levels of scorecards and reveals early warning signs for strategic and operational scorecard levels. Customer satisfaction relates heavily on the vision, mission and guidelines of the company as it sets expectations for the customers. Typically, it is measured using various tools depending on the company; surveys or online feedback systems. Having a digital platform which both company and client simultaneously can use, a feedback system is included in which customers can give on regular basis feedback. In addition, clients can send in questions or additional information regarding their administrations. While the speed of answers and solutions are separately tracked for internal use, this contributes to customer satisfaction. The initiative to obtain a higher customer satisfaction is to increase the speed and quality in which the questions and problems are handled. The expectations of customers are high as the company's platform is fully digital and their mission is to give businesses real-time insights in their administrations. The speed in which questions and solutions should be given is within 24H as set by the company. Due to their mission and platform, the target of customer satisfaction is set at 10 out of 10.

An issue arising from using the customer satisfaction as measure, is while it does measure the satisfaction, it does not measure whether the target of handling all incoming

questions are done within the 24-hour time period. Customers might be satisfied even if questions or documents are handled after the preferred time period. This objective is measured under the last performance measurement that is most important for the case company. This is the measurement of timeliness. Timeliness stands for the fact or quality in which something is being done or occurring at a favourable or useful time. The software used by the company tracks this separately under multiple rules. It relates to how fast administrations are done and at the speed with which transactions and questions are handled. Furthermore, the priority of planning plays an important role in this measurement. Administrations, questions or transactions that are not handled within 24 hours transfers to the next day. These items should be considered as high priority. A target of 100% is preferred but unrealistic. There are variables which are unavoidable that contribute negatively to the timeliness measure. Customers wishes and questions can vary from simple solutions to long-term based solutions. The company's software is considered to be a robotic accounting software. This means that the company learns to recognize documents to be instantly handled and although an internal process, plays a role in the overall timeliness score. With these reasonings, a target of 94% is set to leave room for the time that the software will learn the documents of new clients and give the company the possibility in taking on additional time for difficult questions. In table 6 the summary of the objectives, measures, targets and initiatives are given.

Table 6. Customer Measures

<b>Objectives</b>	<b>measure</b>	<b>Target</b>	<b>Initiatives</b>
Customer acquisition	Clients	185	Use of lead-generation to gain more attraction of potential clients.
Improve Customer Experience	Customer Satisfaction	10	Improve the speed and quality in which documents and questions are handled.
Improve platform experience	Timeliness	94%	

### 4.3 Internal Processes Perspective

There are a wide variety of measures that can be used for internal processes. In comparison to the other perspectives of the balanced scorecard, many more. However, there is a common mistake that many organizations make when identifying their key measures for their processes. Where many measures can be insightful, the measures that matter are customer oriented. Figure 6 shows the "Input-Process-Output" diagram. This is a simple tool that will help with identifying the key measures. When using this diagram to identify them, it is recommended to always start with the Output requirements. These are essentially the measures for the customers perspective. Typically, common and critical

measures for processes include measures in speed, quality, costs and some unique measures. Delivery time, response time and process cycle are those in the category of speed. Sales returns yield and process capabilities in quality. Cost per transaction, break-even cost and inventory costs in the category cost. What is referred to as unique measures for internal processes can include floor space utilization and turnover rates. (Hannabarger & all 2007, 230-232.)

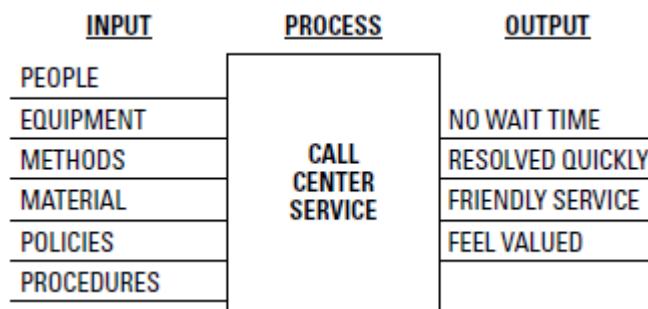


Figure 7. Input-Process-Output diagram (Hannabarger & all 2007, 232.)

Just like the financial and customer perspective, the internal process has the three levels as well. The levels in this perspective has less different types of impact, and are differentiated based on the time-period of the measurements. Strategic being the long-term view. Operational levels are often measurement annually and contribute heavily to the strategic levels. The tactical level contains the measurements on day-to-day basis. While most of these measures can be tracked on day-to-day or weekly basis, they are popular measures for tracking annually and operational. (Hannabarger & all 2007, 235-237.)

For the case company, this applies for both their measurements identified. Both their measurements are heavily focused on quality with one having a tendency to learn towards being quantitative. Using the diagram in figure 7, the measures were identified. Apart from client growth, the output or objectives for the customer perspective are the overall experience of the customer on the company's platform, and the speed, timeliness of the processes, both contributing to the customer's satisfaction. Looking at the software of the company, there were two clear key indicators that linked strongly to these objectives.

The first measurement is the overall quality of the bookkeeping processes. Within the company's software, the quality of bookkeeping of each individual administration is being monitored based on a set of 8 factors: Bank, Purchases, Sales, Tax, Employees, Assets

and Processing. These factors are both dependable on the company's employees as outside parties.

The section 'Bank' has 2 controls. The first item checked is whether the bank is up to date. Although linkages update information usually automatically, in case of any issues the client is responsible for updating this item. Further, it ensures whether there is a begin balance for the account created and if this is correct.

The Purchase and Sales have similar checks. They first check whether there are missing invoices. This is done by checking for payments. It checks all accounts possible, including the section containing payments that have yet to be completed. When a payment is not yet made, but a match is found against an invoice, it is shown in a separate section. Lastly, a check is made whether a document is suspicious. Typically, it checks for double documents on basis of supplier, date, invoice number and amount.

The tax control checks for tax-transactions that are missing or not sent at all. It also checks if there are matches with payments or tax returns.

For staff or employees, the system checks the pay slips against payments. An error, possibly leading to a lower grading, indicates that there are missing payments.

For the assets it is important that employees check new incoming assets, and they must approve the assets. This is necessary to create the monthly or yearly depreciation for the approved or incoming assets. Apart from checking both new assets and depreciation of the assets, the system usually automatically matches ledger accounts with assets. If there is a ledger not setup correctly or missing, it shows in the last check.

The most important factor of the checklist is the processing of transactions and invoices. Transactions that are not matched with suspense accounts with a date older than 30 days are shown in this check. This also includes missing intercompany transactions. From all transactions there are 2 separate reports created. One called 'account unknown' and the other 'unspecified transactions'. The unspecified transactions contain transactions unable to match against invoices, or transactions without details.

Altogether, it evaluates the quality of the bookkeeping of either a single domain, or all domains together. In the current state, the overall quality is at a 7,8. The item that requires most improvement is the processes factor. This item is mostly dependent on the performance of the employees and makes it the highest internal control. The target for overall score is set at 9,5. Some factors are highly influenced by the clients; thus, mistakes can easily be made. This means that communication between Finnerz and its clients is vital for the quality of the bookkeeping done. See figure 8.



Figure 8. Quality of Bookkeeping (in Dutch)

While the first measure was centered around the quality of processes, the second measure for the case company is related to the speed category identified via the customer perspective. This measure relates to the timeliness of the administrations within the 24-time period. The software used by the company is defined as robotic accounting software. Using universal business language (UBL) systems, it learns and recognizes documents which it then can automatically process without any additional inputs of a human-being. UBL is often seen within electronic documents that help software read, categorize and recognize individual items via standardizations created. The measure for automation is expressed in percentages, and via a monitor monthly tracked. Since the system has to learn documents from new clients, automation percentages have a tendency to decrease. With the growth of the company, Finnerz aims to have a full-time employee helping to teach and improve the software to learn and process all incoming documents. Currently, roughly 52% of all documents are automatically processed via the software. The target set, above average within the industry, is 75%.

In addition, to identify which domains are in need of improving the automation as well as the bookkeeping quality, they set an initiative to check all domains on a monthly basis to analyze the mistakes of the 5 worst performing domains in the bookkeeping processes, and improve the system's recognition of documents. Coaching clients is another important aspect of improving automation. Clients could request their suppliers to receive invoices that contain UBL, and teaching clients how to more effectively use the additional benefits that the system offers can help clients in their navigation and sending information within the system.

Table 7. Internal Process Measures

<b>Objectives</b>	<b>KPI</b>	<b>Target</b>	<b>Initiatives</b>
Improve quality and accuracy of administrations	Bookkeeping Quality	9,4	Improve handling and processing of various items, mainly different types of transactions.
Increase automated processing	Automation	75%	Continuously teach the software. Teach clients on the systems and improve 5 worst scoring domains monthly.

#### **4.4 Learning and Growth Perspective**

Growth and development of companies is driven by the continuous desire to improve performance using a vision as main goal. Measures on this perspective varies from the others as it is based on the employees and information systems rather than starting with the objectives of customers. Key goals start with looking at the strategic intents and continues from there on the look at the operating processes to which are linked to support the company's growth. (Hannabarger & all 2007, 285-304.)

For smaller companies such as Finnerz, this perspective is possibly one of the least important ones while in larger organizations it can play a significant role. To further explain, the common measures of employee satisfaction and employee alignment don't need to be measured in smaller companies. Mostly, all employees, including the CEO or managers are directly and daily in contact with all other employees, making it easier to communicate on issues or improvements for the environment in which they all work. Alignment might play a role in certain cases. If the strategy and targets are not clearly discussed during meetings which often involve all employees, then alignment of the employees working towards the same goal is non-existent. By simply including additional information on these topics, the company can easily be alignment towards the same goal.

For larger companies, this sounds impossible and therefore measures can be implemented.

With its current number of clients and a fully digital accounting system, improving information systems is still unnecessary. Hence, the main focus falls on the employee capabilities. Still focusing on the objectives for both customer and internal processes perspectives, measures can be drawn from the concern on development and reskilling employees. The skills most needed are those specifically related to their accountancy software. In addition, another software used to compile annual reports and interim figures requires other type of software skills. There are continuous trainings, webinars and courses given for the software's. Both are modern cloud-based systems and under continuous development. It is therefore essential that employees not only have the basic skills in them, but develop them further.

The last objective is improving the knowledge of the employees. While difficult to track all learnings of each employee, even in small companies, there is one item that is essential to all accountants and those employed in accountancy offices. That is to stay up to date with the fiscal changes each year. According to the CEO, being up to date with the fiscal system and changes is mandatory and most important aspect for the financial service industry. Whether laws are being altered, added or removed, they are a complexity that every accountancy firm needs to stay on top of in order to make sure that the company or the clients will run optimized in terms of financial administration.

The targets, as seen in table 8, are set by a preferred amount of 2 courses for each employee and studying and following the fiscal update is set as one for each. The reason for having the target number for Vision Planner lower than Yuki is due to one employee having exemptions for the software as he is solely using the main software, Yuki.

Table 8. Learning and Growth Measures

<b>Objectives</b>	<b>KPI</b>	<b>Target</b>	<b>Initiatives</b>
Improve Software skills	Yuki Courses	8	Taking trainings, webinars and staying up to date with developments.
	Vision Planner Courses	6	
Improve Knowledge	Fiscal Update	4	Learning the yearly fiscal updates in the country of operations.

## **5 Designing the Strategy Map**

This chapter introduces and describes the current strategy and the mission, vision and guidelines of the case company. Using this information and the framework of the balanced scorecard a strategy map is designed. It further provides insight on the decisions and measures used in the balanced scorecard

### **5.1 Service Design and Strategy**

Since the transition from NPL Advies B.V. to Finnerz B.V., the company has adopted a new strategy for the clients of Finnerz. However, clients which did not yet transfer with the change of their services and model are still following the old service offering and have yet to be transferred. Due to this, the company has ensured the separation between the two which can be clearly seen within their financial statements.

The new service model of Finnerz is based upon subscription-based services. These services include different packages such as the mentioned “Finnerz Compleet”. For the company, this results in having a steady stream of monthly income without evaluating or creating customized quotations for clients. The benefit of such service model helps to improve the company’s financial perspective for management accounting practices such as planning and budgeting. The value created for customers using this model is the passive payment process which makes purchasing more convenient.

The initial idea of using one platform which gives clients direct insights, gives opportunity for faster and easier communication and allows for faster processing by the company was succeeded using the accounting software called Yuki. The company distinguishes itself with the use of this platform and their service model. In addition, the software is fully digital which is in this modern era both a cost and time saver and contributes to the increase in communication flow between company and client. Due to this, the company becomes more sustainable as well as no paper is necessary to use. In these modern days, being sustainable in operations is not just a hype that created the importance of sustainability for customers but contributes to being more ethical in operations.

These differentiating factors and strategy are highly centered around customer’s interest. As result of these strategies, it can be concluded that Finnerz has adopted the “Complete Customer Solutions” strategy, which certain aspects from the Low Total Cost strategy.

The complete customer solutions strategy stresses on building long-lasting relationships with customers. Using the software Yuki, and allowing for customization within each client's domain to meet the clients wishes, the customers gain a more specialized experience with modern technology. Companies using this strategy often offer the completeness of the solution like bundled products and services, and offer exceptional service throughout the sales cycle. Customer acquisition is the most expensive part of using this strategy as start-up costs exceed the costs of maintaining the service. For customers to start using the software, additional start-up expenses need to be paid, customization within their domain and time to help the software automate document processing. The key in this strategy is to retain the customers and broaden the relationship.

## **5.2 Vision, Mission and Values**

A vision statement is the desired future position of the company or group. It is often an inspirational statement and describes what the company intends to be experienced as by the clients of the company.

Finnerz' vision is to become 'The smartest online bookkeeper of the Netherlands'. With the use of Yuki, they aim to make bookkeeping fully digital and instant. To achieve this vision, Finnerz aims to gain the highest automatization of bookkeeping by continuously teaching their software to learn and automate the bookkeeping. This requires continuous updates and teaching of the software. The result of this vision will lead to clients gaining improved insights on their financials as well as the peace that comes with it.

The mission of a company simply states the goals of the company and summarizes simplistically what they want to do for their customers and can include the company's culture, value or ethics as well. It simply answers the question of 'why do we exist'. Finnerz' mission statement is to give each employer in the Netherlands real time insights in their administrations. This compliments their vision statement and goals to achieve their mission. They want to make bookkeeping faster, easier and better for their clients.

Company values are the fundamental beliefs of the company and act as guiding principles to dictate behavior. Whereas business plans and strategies tend to change, company

values usually remain the same as it shows what the company stands for. For most companies, three to ten values are ideal. Company values need to be clear and easy to remember.

Following Finnerz' vision to become the smartest and online bookkeeper in the Netherlands, it is no surprise that their company values support this view. One of their values emphasizes on digitalization and sustainability as they aim to become fully 'paperless'. Further, besides giving clients insights in their administrations, they also value transparency of their own company to be open, honest and straightforward about their business operations. Lastly, they value integrity and stand by their work while remaining accountable and owning up to mistakes.

### **5.3 Strategy Map Finnerz**

A strategy map that is long-term based using the complete customer solutions strategy often involves measures heavily focused on customer retention and services leading to the financial measures of reducing costs, maximizing assets and increase customer value. Further the internal processes stresses on operations that lead to increased customer satisfaction and retention. The fourth perspective lays its focus on employees skills linked to skills useful for customers and improved CRM systems. Organizational this perspective is customer focused. Figure 9 shows a generic strategy map for such strategies.

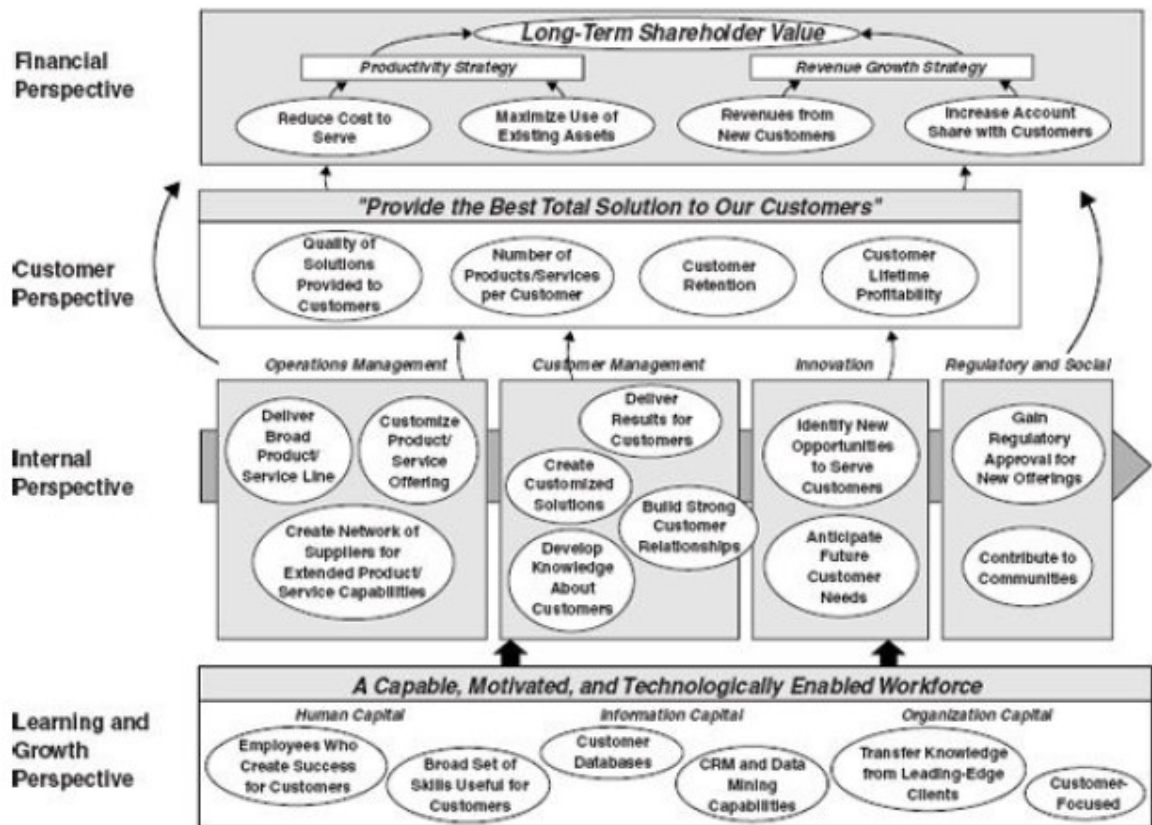


Figure 9. Strategy Map Template: Complete Customer Solutions (Kaplan & Norton 2003, 302.)

The strategy map created for Finnerz shows many similarities, but differentiates on the perspective of time. The map in figure 9 is generally a long-term plan. Being a small company, Finnerz is mostly focused on the short-term and therefore the framework for the strategy map, the BSC and the strategy map are focused on the short-term strategies, objectives and measurements. Figure 10 shows the strategy map of Finnerz.

The differences between the generic model and the model for Finnerz as mainly based within the financial perspective. The generic model focuses on reducing costs whereas Finnerz map for the short-term shows its main target in growth. This is typical for smaller companies as they are in the growth stage as opposed to larger companies which reside in the sustain or harvest stages. As the strategy is customer centered, it is no surprise to see that both maps include customer experience and customer value. Where the long-term map is built on retaining customers, short-term for small companies are focused with acquisition.

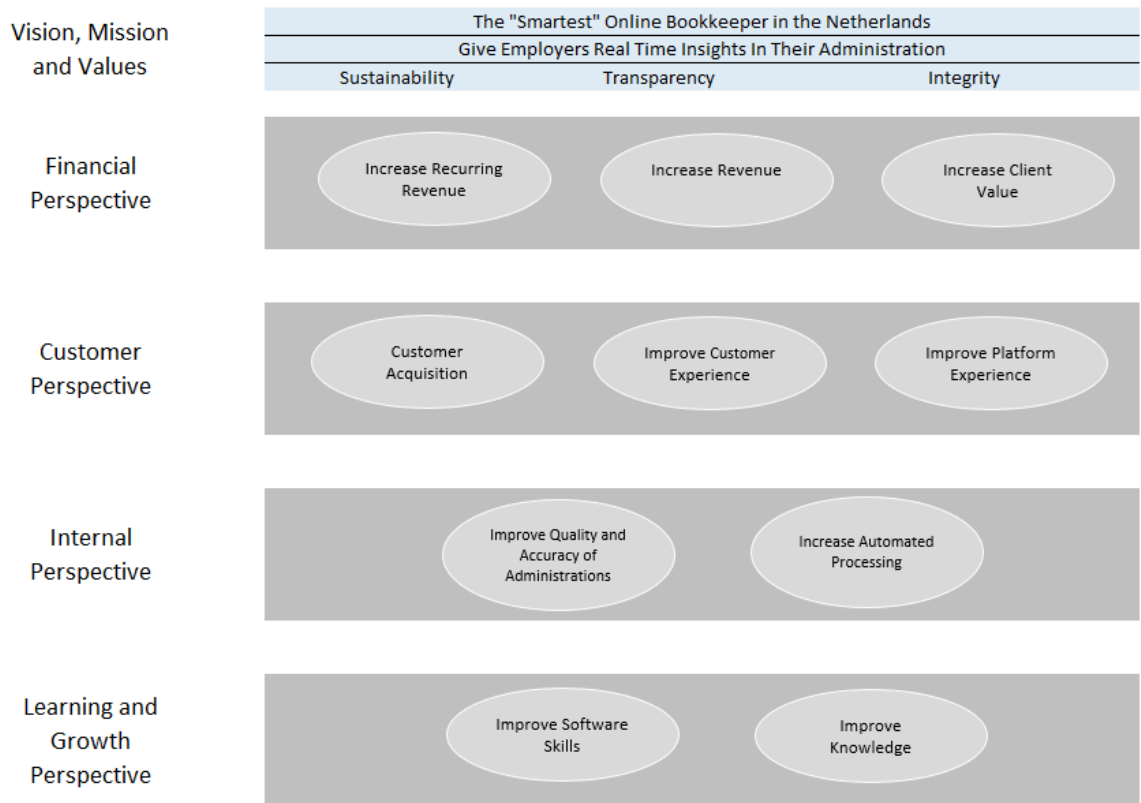


Figure 10. Strategy Map Finnerz.

Thus, can be concluded from the strategy map of Finnerz that they are clearly short-term focused and centered around creating value for customers.

## **6 Scorecard Analysis**

This chapter discusses the balanced scorecard and strategy map developed for the case company. It explains and evaluates the effectiveness, the process and additional information related to the decisions made, including a brief research regarding various BSC tools. In addition, the Excel tool created will be explained. How it is created, setup, formulas and includes snapshots of the tool.

### **6.1 The Balanced Scorecard**

Generally, the scorecard and strategy map look at the tactical levels (the short-term). Via the case company's system, their measures are tracked on a daily to weekly basis with the exception of the learning and growth measures. It is recommended to be tracked on quarterly basis and used finally on yearly basis. In figure 11 the complete scorecard is shown.

Smaller companies tend to look at the short-term, whereas larger organization's measure both short- and long-term objectives. With the growth of the company, it would be suggested to implement a long-term strategy as well. In doing so, certain measures would be best to be replaced. As the strategy is customer focused, with a larger client base, customer retention would prove more useful than growth. In addition, the financial measures and client growth are strictly from their main service package only, rather than the complete services offered by the company. For short-term goals this will help in decision-making for adjusted and marketing this service. For long-term goals, after the company has grown and expanded, strictly using these measures might lead to decisions with opposite effects. Each year, organization's should re-identify their key measures and objectives to maintain the relevance of the objectives used for their strategy.

The objectives for the learning and growth perspective are currently least important due to the size of the company. With growth comes an increase in assets. Asset utilization will become more important in the future.

	Objectives	Measurement	Target	Initiatives
Financial	Increase client value	ACV	€ 220	Attract larger organizations
	Increase recurring revenue	MRR	€ 39.775	
	Increase revenue	Revenu	€ 382.915	Customer growth
Customer	Increase Client Base	Number of clients	185	Use of lead-generation to gain more attraction of potential clients.
	Improve customer experience	Customer satisfaction	10	Improve the speed and quality in which documents and questions are handled.
	improve platform experience	Timeliness	94%	
Internal processes	Improve quality and accuracy of administrations	Bookkeeping Quality	9,4	Improve handling and processing of various items, mainly different types of transactions.
	Increase automated processing	Automation %	75%	Continuously teach the software. Teach clients on the systems and improve 5 worst scoring domains monthly.
Learning and growth	Improve Software skills	Yuki Courses	8	Taking trainings, webinars and staying up-to-date with
		Vision Planner Courses	6	
	Improve Knowledge	Fiscal Update	4	Learning the yearly fiscal updates in the country of operations.

Figure 11. Balanced Scorecard for Finnerz

## 6.2 The Balanced Scorecard in Excel

Excel is a powerful and helpful for various management purposes, including management accounting. Creating balanced scorecards in excel work well when the organization functions at a single level or a few. Initial development of balanced scorecards is preferred using Excel. For many small to medium businesses a scorecard created in Excel works well for the first years that help organizations evaluate their objectives, links and refine measures. Dashboards can be created within Excel with some of the most powerful charts and dashboard possibilities.

Organizations that require large scaled business intelligence solutions should look further than Excel as there are limitations within Excel. (Person 2009, 169-171.)

For this project, the author and case company discussed the use of Excel upon which both parties agreed to creating a tool with the software. The tool contains instructions within each sheet and certain safety measures are included.

## 6.2.1 Dashboard

The dashboard of the balanced scorecard tool in Excel is the first sheet in the file. It visualizes the data inputs from each perspective via additional calculations. The dashboard displays the percentage of which the actual numbers are reaching its targets. In addition, a bar chart is included showing both actual numbers against the target and against the previous years. The data seen can be adjusted using the slicers and macro-buttons created.

Multiple links, macro's and calculations are used for this sheet. The top contains two buttons, removing all excel-functions shown, to create a 'feel' of using a different software. In addition, each sheet contains a row of buttons that can be used to navigate throughout the tool.



Figure 12. Dashboard BSC Excel

## 6.2.2 BSC

The second sheet is the balanced scorecard as seen in figure 11 with a different look to fit the overall style. Rather than including the measures, the objectives are written down here. The cells are linked to the shapes used for the strategy map. The input of the measures is manual.

### 6.2.3 Strategy Map

The strategy map is the only sheet in the file that needs to be adjusted manually. Although the objectives from the previous sheet are linked to the shapes used for the strategy map, inserting additional measures requires the map to be adjusted. Instructions to do so are included. Shapes can be copied as well as the cause-and-effect arrows. The arrows connect automatically to the shapes.

Further, the vision, mission and core values can be written down here as a start of designing the objectives per perspective of the balanced scorecard.

### 6.2.4 Data sheets

The most important sheets are those of the data inputs of each perspective. The data input contains manual and semi-manual inputs. Due to the company's software, certain measures' data are pre-calculated within the software and hence manual inputs easier. Further, there are limited options for any type of automations or pre-calculations.

The objective and measure can be typed in, the unit symbol selected from a dropdown, and the data of the previous year, actual year and the targets to be edited or updated via linkages. The formula's for information shown in the dashboard are pre-made and require no further handling. In addition, analysis and notes can be written in regard to the indicators. For the perspectives in which data can be updated via exported files from the company's system, an additional sheet is created, and a link provided to quickly enter these. Further instructions are given there.

Measures	Unit	Previous Year	Actual Year	Targets	Act/PY	Act/Trgt
Monthly Recurring Revenue	€	9.627	18.483	39.775	192%	46%
Annual Revenue	€	144.879	148.734	382.915	103%	39%
Average Client value	€	140	205	220	147%	93%

Figure 13. Financial Perspective Data Input Excel.

### 6.2.5 Linkages

The company's software, Yuki, had no possibilities for direct linkages with Excel or other free applications such as power BI. There were limited possibilities to export data to csv files for the information needed. Two linkages have been created for few measures used in this scorecard. Using power query, the link between this tool and the csv files were possible to be established. Power query extracts data from csv files found in the maps that it is linked with, searching for the file with the name given in power query. This results in the need for placing the csv file in the designated map, and ensuring the name is exact to the one placed as link.

As most data was pre-calculated and shown in different sections of the company's software, there was no need for creating many linkages.

Certain data was however not pre-calculated, and was unable to be exported to a csv or excel file that power query can read. To tackle this problem, a pre-formatted table was created in an additional sheet. By selecting the data shown in table format in the software, copying this and pasting this in the excels table using "paste using destination formatting", the data is automatically calculated correctly and send to the data input sheets for instant results.

More options would have been available if using paid services or links would have been an option. Most modern, cloud or web-based software's have the possibility to use an application programming interface (API). This is a concept that refers to how separate applications can interact with one another to send and obtain data. Creating an API is often costly, but requires investing in it only once.

### 6.2.6 Disadvantages using Excel

Excel is a widely used numeric analysis and financial software in the world, and its use for creating maps, scorecards and dashboards are popular. While using Excel for creating a BSC has its advantages, there are several disadvantages in using Excel as opposed to other software's and paid services.

A common issue with excel is the documentation and origin of the data used in excel. Exporting data from one software into excel, and then manipulating the data with tables, formulas and other edits to fit the need of the user and information requested removes the ability to track back to the raw data. Excel can further create issues depending on the

scalability needed for its function. For balanced scorecards within Excel, scalability is unimportant if for smaller companies which don't need scaling to larger levels.

Users of excel can modify variables and formulas quickly, and can use their own rules or assumptions. The power that the users have can cause issues when there is a possibility for different interpretation of the data shown. Users with inadequate training or knowledge of Excel can lead to problems with maintaining and documenting data. Because of this power that users have, it can lead to hidden errors within formulas or macros. When spreadsheets are poorly constructed, mixing formulas and data can become difficult and errors might not reveal until later. Going back through spreadsheets and formulas is time-consuming.

Issues regarding data documentation and tracking could be resolved using linkages with larger BI systems to automate data flow. This is not always possible nor viable. Within Excel there are basic functions build in that can extract data in tables or other formats. Excel can not always recognize the data accurately leaving automation between BI systems and Excel unviable and unreliable depending on the BI system used. (Person 2009,163-167.)

#### 6.2.7 Advantages of using Excel

The power in the hands of a knowledgeable user can have its advantages. There are countless possibilities within Excel, and it can be used for any type of data collection, analysis and other functions. Excel is a basic application that most customers and companies have. Being able to use Excel to the full extent of it can be cost saving. For management Excel can be a good working system to test concepts and analyze data. Training users in using Excel as opposed to other systems is generally easier as the accessibility of information, trainings and community is open worldwide instead of closed knowledge bases.

One of the most important advantages of the use of Excel is that data can be instantly exported, collected and edited for immediate analysis purposes for the person who needs the data quickly. The software is flexible and extendible and has since launch updated repeatedly to brush out any issues. With additional software links and other add-ons Excel can become the most powerful tool available for managers. (Person 2009, 168-169.)

### **6.3 Other Applications**

In addition to Excel, there are various other software's and applications that can provide similar and more in-depth information for strategic objectives, measurements and tracking. Typically, these are paid services. Examples of such services are Culture Amp, Quickscore and Commandi. Often there are links available with the organization's software and performance management tools and services that allow for automated reports and ease of use analysis.

For small to medium sized companies, these can be too costly to be implemented. This was a similar situation for the case company of this project. The author discussed the use and need of such paid services, but the costs outweighed the profits to be gained.

## **7 Evaluation**

This chapter discusses the data collection and challenges of the project. Further, the final product is discussed and future development on the tool are explained. The last subchapter contains the feedback given from the case company, which was collected during the project.

### **7.1 Sources and data**

There were significant challenges regarding the validity and reliability of the sources researched for this project. Certain concepts and methods were wrongly interpreted in various sources which was eventually explained and validated in one of the sources that the author used for this project. To ensure the validity and reliability of all sources, the data collected was compared one another and the reliability checked via the publishers and authors of the sources. Additional webpages have been used for understanding the references mentioned and the reliable sources. The performance measures and data used were given by the case company via official statements and interviews.

Additional data used for the creation of the tool were collected via direct contact with the software developers and official sources of Microsoft.

### **7.2 The product**

The final product, the balanced scorecard and strategy map tool, proved useful for the case company. It fulfilled the basic needs, but did not match the initial idea given to it due to the limitations of the linkages between the case company's software and excel. The tool is easy to use and read, and provides visualized information on the data given. The basic needs of having all measures and information used for managers, and ensuring that there are no additional costs for using the tool are met.

The tool can help in decision-making and be seen by all employees using it. However, with the possibility of establishing a paid link to excel or Power BI, the tool can be further automated and more carefully designed so that more additional information is shown. The issue surrounding this idea is the costs of establishing such links. There are currently paid software's that can be linked to the company's software, which a monthly cost. In order to analyze which option could prove more useful and is least expensive, a quotation has to

be obtained from a third party who offers to establish API's with Excel or Power BI as there currently is no estimated costs on such links. The lack of automation between software and excel is the main weakness in this tool.

Further, there is extensive use of formula's, and macro's via VBA. With changes to certain names, cells or data, errors could occur. These will be clearly shown, but to solve the problem some knowledge of Excel's VBA might be required.

The last weakness is the amount of manual inputs, including the strategy map sheet. Although it is known that strategy maps will always include manual inputs, knowledge of basic functions must be known. For other sheets that require manual inputs, human error can affect the usefulness of this tool.

### **7.3 Author's learning**

The main knowledge obtained by the author was via the learnings on the topics mentioned in the thesis. A deeper understanding of management accountancy and construction of balanced scorecard was gained. In writing the theoretical framework the author obtained a deeper understanding of the theory behind the terminology and understands the practical implications of management accounting. Further, he gained experience and learned more about the Microsoft Excel software which could prove useful for future projects.

In addition, the author learned the importance of time-management and organizing projects whilst facing the challenges of the previous decisions made. This project taught him that it is important to face the reality of an initial idea, which possibilities and implications it can have and how to overcome the issues and risks associated with these whilst in the planning phase of a project.

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## Appendices

### Appendix 1. Questionnaire; Assessing the Need for a Balanced Scorecard

To complete the exercise read each statement and determine how much you agree with what is stated. The more you agree, the higher the score you assign. For example, if you fully agree, assign a score of 5 points.

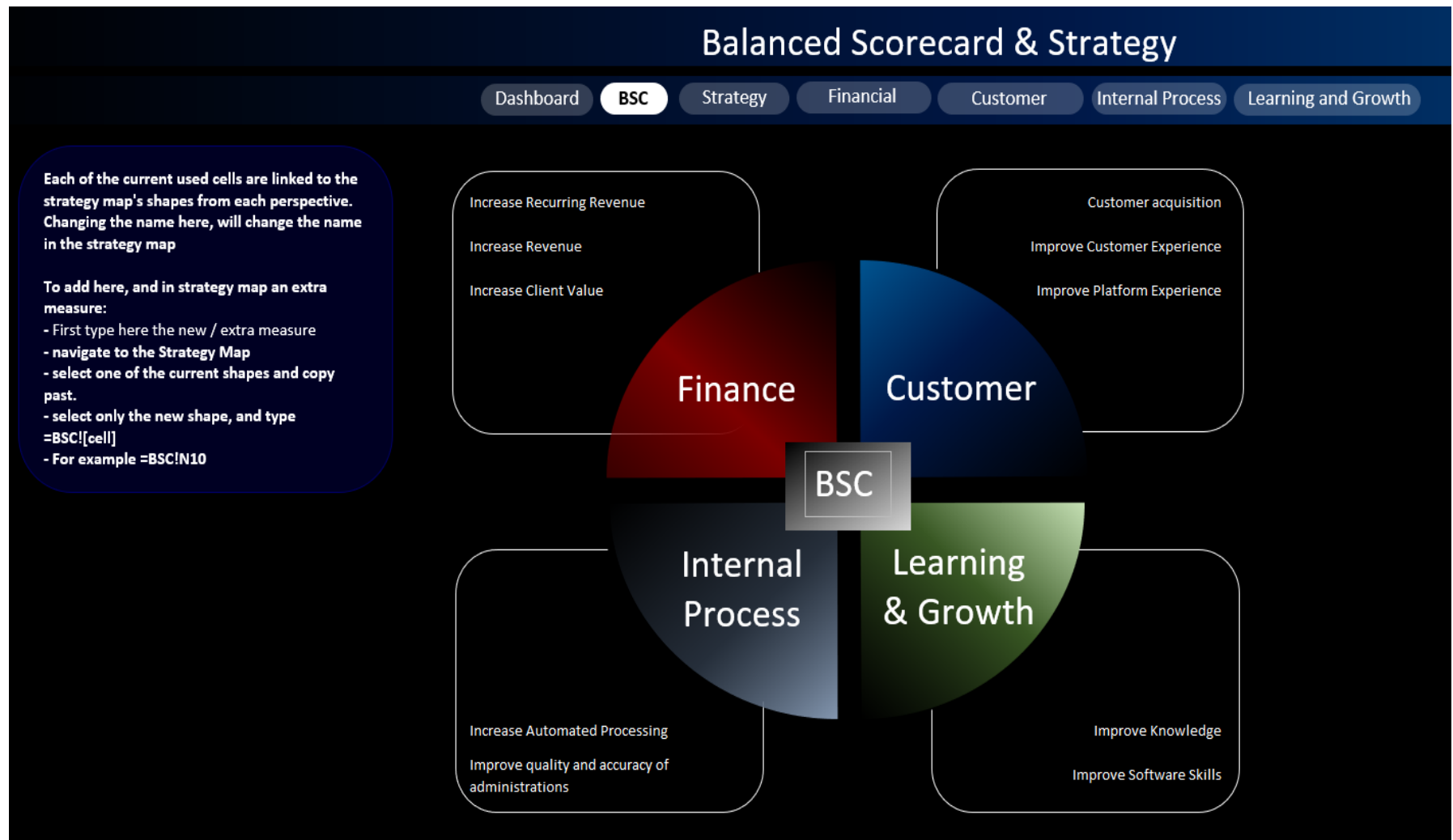
- |          |          |          |          |          |   |
|----------|----------|----------|----------|----------|---|
| 1        | 2        | <b>3</b> | 4        | 5        | 1. Our organization has invested in Total Quality Management (TQM) and other improvement initiatives, but we have not seen a corresponding increase in financial or customer results. |
| 1        | 2        | 3        | 4        | <b>5</b> | 2. If we did not produce our current performance reports for a month nobody would notice.   |
| 1        | 2        | 3        | 4        | <b>5</b> | 3. We create significant value from intangible assets such as employee knowledge and innovation, customer relationships and a strong culture.   |
| 1        | 2        | 3        | <b>4</b> | 5        | 4. We have a strategy (or have had strategies in the past) but have a hard time implementing them successfully.   |
| 1        | 2        | <b>3</b> | 4        | 5        | 5. We rarely review our performance measures and make suggestions for new and innovative indicators.  |
| <b>1</b> | 2        | 3        | 4        | 5        | 6. Our senior management team spends the majority of its time together discussing variances from plan and other operational issues.   |
| <b>1</b> | 2        | 3        | 4        | 5        | 7. Budgeting at our organization is very political and based largely on historical trends.  |
| 1        | 2        | <b>3</b> | 4        | 5        | 8. Our employees do not have a solid understanding of our mission, vision and strategy.   |
| 1        | 2        | 3        | <b>4</b> | 5        | 9. Our employees do not know how their day-to-day actions contribute to the organization's success.   |
| 1        | 2        | 3        | 4        | <b>5</b> | 10. Nobody owns the performance measurement process at our organization.  |
| 1        | <b>2</b> | 3        | 4        | 5        | 11. We have numerous initiatives taking place at our organization, and it's possible that not all are truly strategic in nature.  |
| 1        | <b>2</b> | 3        | 4        | 5        | 12. There is little accountability in our organization for the things we agree as a group to do.  |
| 1        | 2        | <b>3</b> | 4        | 5        | 13. People tend to stay within their "silos", and as a result, we have little collaboration among departments.  |
| <b>1</b> | 2        | 3        | 4        | 5        | 14. Our employees have difficulty accessing the critical information they need to serve customers.  |
| 1        | 2        | 3        | 4        | <b>5</b> | 15. Priorities at our organization are often dictated by current necessity or "firefighting".   |
| 1        | 2        | 3        | 4        | <b>5</b> | 16. The environment in which we operate is changing, and in order to succeed we too must change.  |
| 1        | <b>2</b> | 3        | 4        | 5        | 17. We face increased pressure from stakeholders to demonstrate results.  |
| 1        | 2        | <b>3</b> | 4        | 5        | 18. We do not have clearly defined performance targets for both financial and nonfinancial indicators.  |
| 1        | 2        | 3        | 4        | <b>5</b> | 19. We cannot clearly articulate our strategy in a one-page document or "map".  |
| 1        | 2        | 3        | 4        | <b>5</b> | 20. We sometimes make decisions that are beneficial in the short term but may harm long-term value creation.  |

### Scoring Key

- 20-30** If your score fell in this range, you most likely have a strong performance measurement discipline in place. The program has been cascaded throughout your organization to ensure all employees are contributing to your success and is linked to key management processes
- 31-60** You may have a performance measurement system in place but are not experiencing the benefits you anticipated or need to succeed. Using the Balanced Scorecard as a strategic management system would be of benefit to you.
- 61-100** Scores in this range suggest difficulty in executing your strategy successfully and meeting the needs of your customers and other stakeholders. A Balanced scorecard system is strongly recommended to help you focus on the implementation of strategy and align your organization with overall goals.

**Score Finnerz 67**

## Appendix 2. Balanced Scorecard in Excel



Appendix 3. Strategy Map in Excel

