Tampere University of Applied Sciences

Measuring organizational performance for profitability and operational success

The Case of a private health care organization

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Master's Thesis

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ABSTRACT

Tampereen ammattikorkeakoulu
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The purpose of the study was to establish the relationship between strategy and organizational performance measurement and various methods thereof. The study constituted a research and development project for a private Finnish chain of fertility clinics. The main themes discussed are those of strategy and the concept of organizational performance, including affecting factors and the various methods of implementation. The abstract objective of the thesis was to facilitate the implementation of strategy and strategic management in the case company. The practical objective was to construct a functional framework for measuring organizational performance while considering the company specific strategy and characteristics to provide support in achieving business success and profitability.

The study was carried out as a development project. The main research methods were qualitative research, content analysis, and observative participation, which was solidified with informal interviews and discussions with the CEO of the case company. Due to confidentiality, the interview or discussion notes are not published as part of this study. The case company's status was established to provide foundation for the development project. As a result, it was determined that the company lacked a systematic approach to organizational performance measurement. The outcome of the project was a set of key performance indicators considering the organizational dimensions, industry specifics, and strategic goals. The content of and balance between the dimensions were tailored accordingly.

As a conclusion, it was established that having a strategy that guides an organization towards the future is important, but it is at least equally important to evaluate how the goals set by the strategy are being achieved. A carefully constructed and managed set of meaningful metrics enable the organization to assess whether it is on the correct path, while promoting quality and alignment throughout the organization. With a measuring system in place and advocated across the organization, the efforts are focused towards reaching the common goals. Further development was recommended, for instance, in constructing a system to measure the level of employee engagement to ensure the wellbeing of its staff; searching a joint solution for monitoring the KPIs in one location to facilitate managing and monitoring; harmonizing processes on the operative level to ensure unified processes and comparable indicators across the organization; and revising the method in the future.

Key words: organizational performance, key performance indicators, strategy, profitability

CONTENTS

1 INTRODUCTION

The focal point of this thesis is on how to measure performance on the organizational level. To be able to measure performance requires recognizing first what is the target to be achieved. And to be able to determine the targets, a series of strategic decisions and choices must be made as to where the organization wants to be in the future and what is the purpose of its existence – in short, what is its vision and mission.

1.1 Background

An organization's way to success begins with defining the organization's purpose in the form of a mission statement. The mission statement is the driver behind an organization's strategy as well as its culture by stating where the company is at present and whereas the vision describes where it aims to be in the future (Babnik, Breznik, Dermol, & Trunk Širca, 2014). Strategy, then, defines how that future aim and vision is to be achieved (Haines, 1995, 45). The concept, method and tools of strategy have evolved immensely from a military application used to fight off enemies to something virtually every successful business has deployed effectively (Horwath, 2016, 1). As a modern application, strategy outlines the means with which the organization will attract and meet the needs of customers by differentiating itself from the competition (Porter & Lee, 2015). Once the organization has established its strategic goals it requires a set of carefully considered metrics with specified targets to direct its efforts into achieving them (Peters, 2014). This is where the various approaches of managing and implementing the strategy including defining of methods of assessing performance come in.

This thesis considers the importance and use of performance measurement as a part of strategic management for organizational performance. More specifically, this thesis pursues to determine the most applicable method and set of metrics for a company operating on the Finnish private health care sector considering the particular characteristics of the organization in question. Hence, the key content of the thesis is a development project constructed around the core processes and triggers of the business to establish the most useful method of organizational performance measurement. In other words, this thesis sets out to identify the key performance measures which drive the strategic management on the organizational level with the ultimate goal of a productive and profitable organization realizing its strategy. In addition, the content of the project includes establishing best practices for implementation, follow-up, and update processes thereof.

1.2 Finnish private health care sector

In Finland, the gap between public and private healthcare has been decreasing over the past few years due to structural changes of population (such as increasing number of elderly citizens) and legislative changes deriving from the growing need of social and health services. According to the Finnish Ministry of Social Affairs and Health, private sector complements the public sector and private service providers currently produce over 25% of all social and healthcare services. (Private social and health services, 2021.) These changes and needs call for extra attention to organizational, operational, and financial issues in the private sector. For instance, how can the services be produced in the most cost-efficient manner without compromising quality and employee well-being. Profitability is a key concept since, in the end, “The purpose of a company is to generate profits for the shareholders” (Limited Liability Companies Act). These aspects can be managed through the identification of industry and company specific performance measures driven by strategic operational planning and management.

The case company in the focal point of this thesis operates on the private health care sector providing fertility treatments and related services to both domestic and international customers. Hence, the company’s competitive environment spans beyond the Finnish boarders. According to the Finnish National Supervisory Authority for Welfare and Health, in 2019 there were 20 healthcare units providing fertility treatments in Finland of which approximately 50% were operating on the private sector (Katsaus hedelmöityshoitoklinikoiden toiminnasta vuonna 2019, 2020). Worldwide there are certainly numerous providers, but the Finnish Act on Assisted Fertility Treatments allows for instance treatments with donated eggs from known donors which is not yet common elsewhere in Europe (22.12.2006/1237 section 3).

1.3 Objectives of the thesis

The abstract objective of the thesis is to facilitate the implementation of strategic management of an organization operating on the Finnish private health care sector. The practical purpose is to create a framework of organizational performance measures and their target setting, implementation, follow-up, and development for the purposes of the case company's management to facilitate strategy execution and achieving overall business success and profitability.

1.3.1 Research questions

Based on the premises of the thesis the research questions are as follows:

- How to track and measure the financial and operative performance of a private health care organization most efficiently?
    - Which available performance measurement system to use as foundation, and how to design an effective, functioning follow-up process?
    - Which measures to implement on various organizational and operative levels?
    - How to set ambitious but feasible targets for the chosen measures?
    - How to develop the measures as the business moves forward?

1.4 Structure of the study and applied methodology

The thesis begins with discussing the case company and its background. The content then moves on to establish the theoretical framework on the key concepts based on available literature and studies. Finally, the development project is discussed including:

- description and assessment of the case company’s current position and available resources regarding the scope of the thesis
- evaluation the usability of selected performance measurement systems in terms of the case company and propose the most applicable method
- establishing and suggesting a framework for performance measurement for the case company.

Theoretical research is based on available literature including articles, scientific articles, and books (electronic and printed). Significant part of establishing the case company’s position and of the development project as well as presenting case company details is based on participant observation. This includes also discussions with relevant representatives of the case company’s management and general knowledge the thesis author has acquired through several years of employment in the case company.

2 THE CASE OF A PRIVATE HEALTH CARE ORGANIZATION

2.1 The case company

The case company for the thesis is a Finnish private chain of fertility clinics. The case company was established in 2007 in Tampere as a laboratory service company specialized in fertility treatment related services. The first 5 years the company operated mainly as a laboratory subcontractor to the Tampere University hospital. In 2011-2012 the company expanded its operations and began to offer comprehensive medical and diagnostic services in the field of fertility treatments and has since progressed to be one of the leading service providers in the field.

During the past 8 years the case company has been growing significantly both organically as well as through M&A activities. In 2015, after substantial organic growth, the case company purchased a fertility clinic in Tampere from a competitor and integrated it into the case company. In 2017 the case company purchased two additional fertility clinics from the same competitor. The clinics were integrated under the case company's brand establishing the largest company and chain of clinics specialized exclusively in fertility treatments in Finland. Currently the case company operates three clinics in three cities offering state-of-the-art fertility treatments to Finnish and international customers. The proportion of international customers has been growing steadily thanks to the company's excellent reputation surpassing the national borders.

The case company is a part of a group which is formed by the case company and its sister company in Tallinn, Estonia, supporting the case company's position on the European market (Figure 1). Currently the group employs approximately 60 professionals in four cities, and it has evolved to be a financially solid and profitable organization. The development project of this thesis and the status analysis concentrates on the Finnish chapter of the group referred throughout the paper as "the case company" and "the company" as applicable.

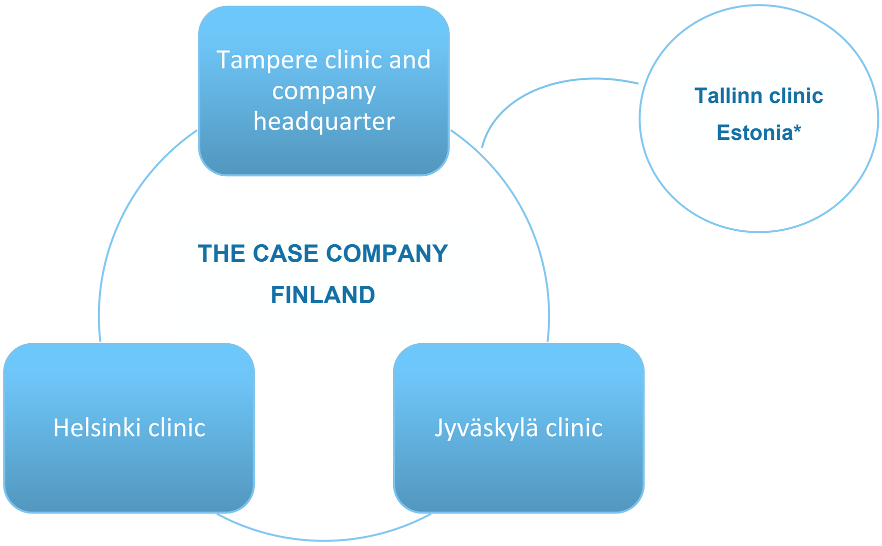

Figure 1. The group (*Governing legislation in Estonia differs from the Finnish legislation)

2.2 Development of financial performance

The recent years of accelerated growth as well as heavy investments in infrastructure and R&D are evident when examining the financial development of the organization. For instance, during 2013-2017 the case company conducted an extensive 2,3M€ R&D project supported by Business Finland which strained the company financially, but simultaneously yielded some clinically relevant know-how. The acquisitions in 2015 and 2017 and subsequent integrations affected the company's financial position as well. Due to the aforementioned factors the company's sales grew approximately 58% from 2016 to 2017, but at the same time the company made losses. However, the acquisitions also laid the groundwork for growth both from the organization's perspective as well as from the financial perspective. Growth was further facilitated by successful integration processes in both acquisitions. Based on current estimates the company will continue growing in coming years even in the unstable economic situation affected by the force of the global pandemic. Figure 2 illustrates the development of sales during five consecutive calendar years.

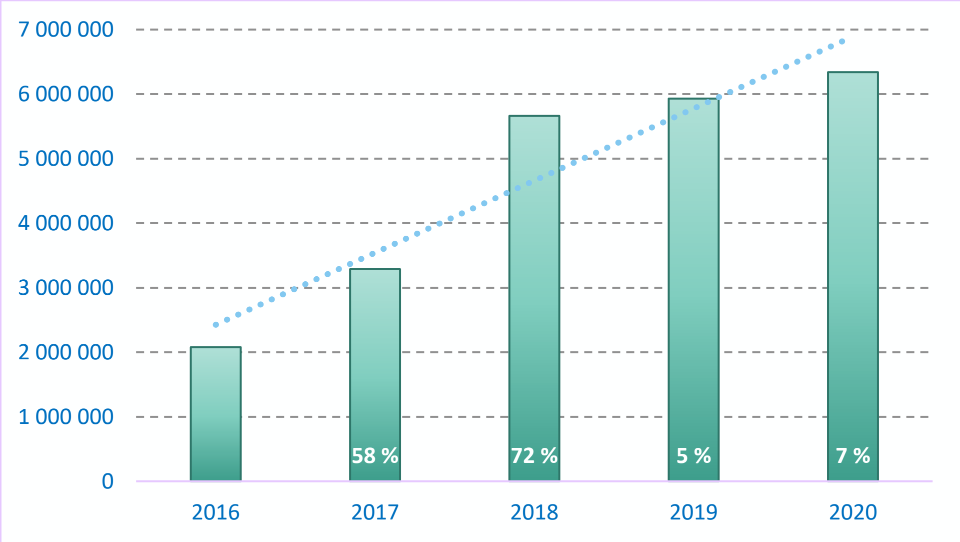

Figure 2. Sales 2016-2020

To support the position of the company and maintain activity level, the case company has developed alternative business models to provide care for its customers without unnecessary interruptions in treatment schedules caused by forces outside the company's influence. The company will continue in investing to its facilities and personnel to enable reaching the targeted growth. Figure 3 illustrates the development of nr of personnel during five consecutive calendar years.

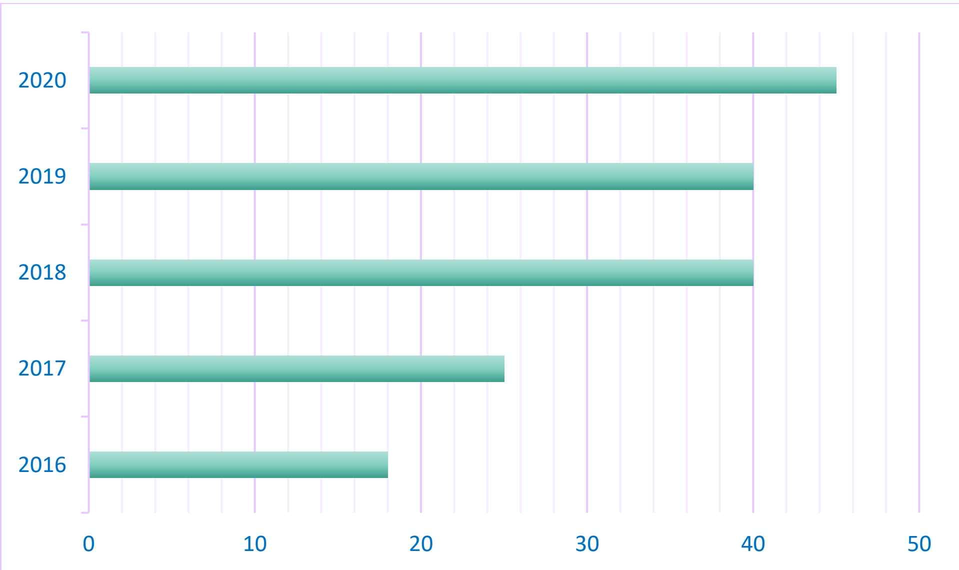

Figure 3. Average nr of employees 2016-2020

2.3 Organization and management

2.3.1 Organizational culture

For the purpose of describing the case company's organizational culture in a concise manner, the mission, vision, and values of the case company are summarized in Figure 4. These provide an overall understanding in how the organization has laid the foundation for its culture. Mission and vision articulate the purpose of the organization, and values guide the behavior of the members of the organization paving the way to achieving the vision. (Coleman, 2013.)

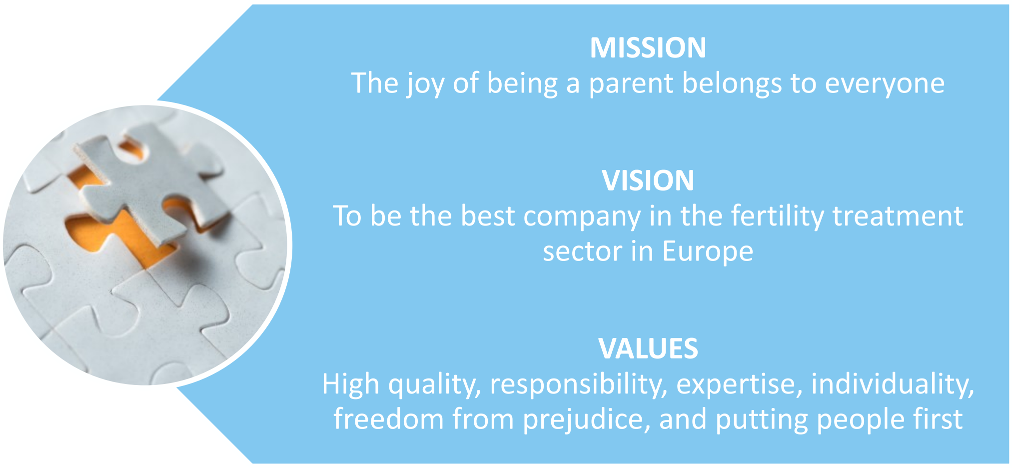

Figure 4. The mission, vision, and values of the case company

These phrases are clearly communicated to all stakeholders and the employees are committed to the norms and structures of the culture. This translates into shared practices and processes (high quality, responsibility, and expertise) and customer orientation in all activities (individuality, freedom from prejudice, and putting people first). The case company has clearly structured operative policies and guidelines, which are introduced to all new recruitments though an in-depth introduction which is meticulously recorded. Organizational culture and unity are re-enforced during organization wide and clinic specific personnel development days. An additional detail creating social cohesion and sense of community in the organization is the case company's slogan (Figure 5).

Figure 5. The case company's slogan

2.3.2 Organizational structure and management

The organizational structure and management of the case company have gradually transformed following the growth of the organization. Supreme authority in corporate decision making is exercised by the case company's Management Board. Figure 6 describes the organization's management structure.

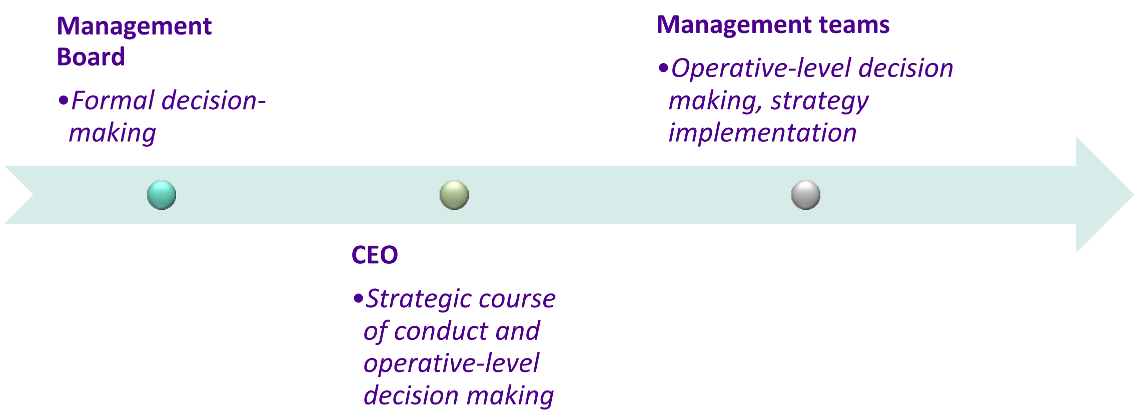

Figure 6. Management structure

On a more practical level, each clinic has its own management team the purpose of which is the operational planning and decision making. The management teams consist of the clinic's medical director, laboratory director, head nurse and the group CEO, and is reinforced with attendance of the representatives of finance and administration. Figure 7 illustrates the organizational structure, which spans throughout the organization and its three units. The structure follows a hybrid model where properties of both matrix and hierarchical models are employed. Authority is applied vertically to ensure timely decision making, and coordination runs horizontally.

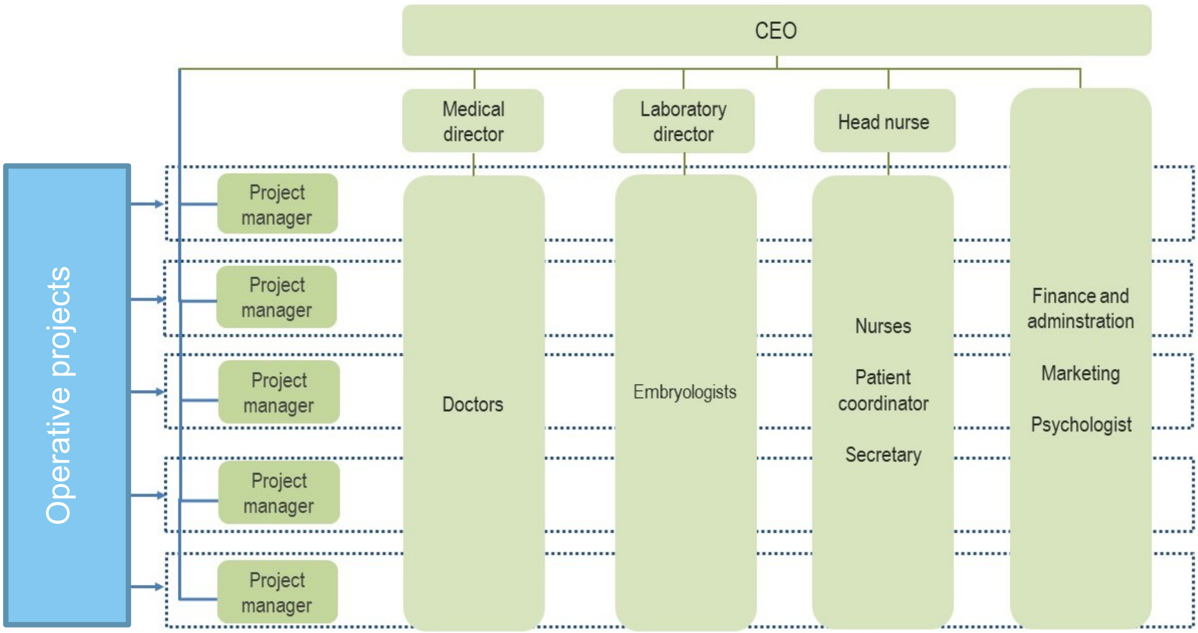

Figure 7. Organizational structure of the case company

2.3.3 Personnel

The case company has been able to build a highly competent multi-discipline staff. Based on observation, the employees in the field of reproductive medicine are passionate about their work and this results in highly invested employees striving to generate desired results for its customers. The company's staff is constructed around 5 professional groups: nurses and midwives, embryologists and biologists, doctors, therapists and psychologists, and administrative personnel. Each professional group is led by a department head or the CEO as described in Figure 6 above. The division of personnel to professional groups in 2020 is illustrated in Figure 8.

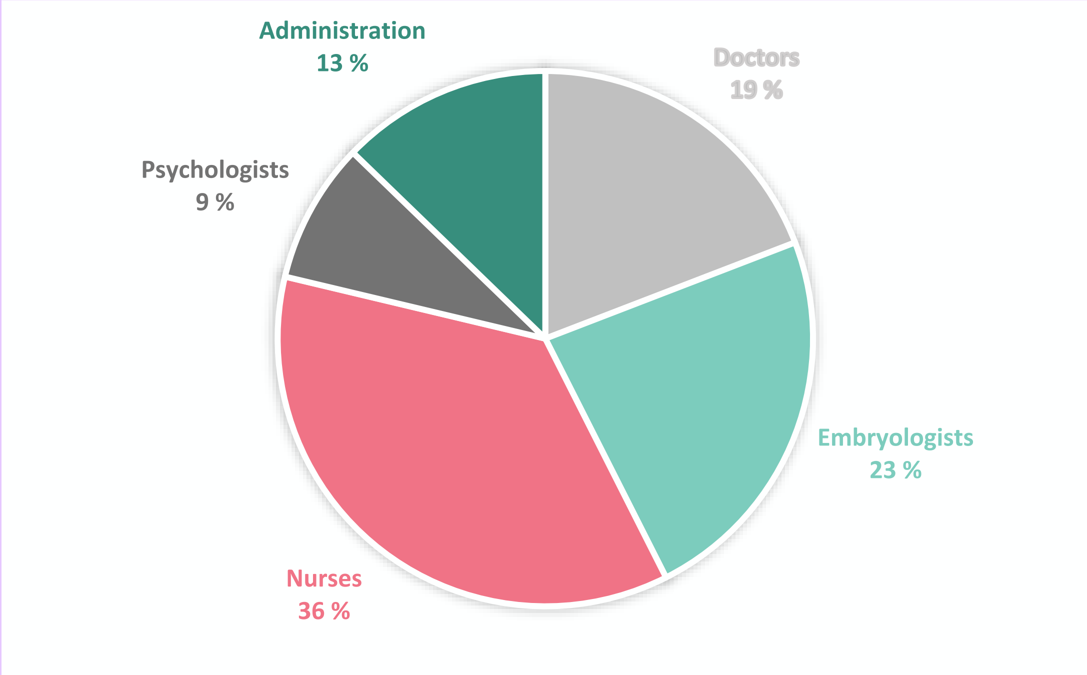

Figure 8. Distribution of professional groups of the case company in 2020

Seamless cooperation among the professional groups is essential to provide excellent care with outstanding treatment results. Responsibilities among embryologists and nurses are shared based on both formal and in-house training. Professional development and training are supported and invested in, in addition to it being a prerequisite to comply with regulations. Table 1 details the number of employees and full-time equivalents in December 2020.

Table 1. Employees and FTEs of the case company (December 2020)

	OF NOE	OF FTE
Employees*	39	31
Management**	9	9
TOTAL	**48**	**40**

*Does not include private practioners / entrepreneurs

**Management = head nurse, medical director, laboratory director

2.4 Critical success factors

The case company takes pride in its well defined and well performing treatment processes yielding high-quality services, its highly professional and experienced staff, as well as its position as the front-runner in all industry-related advancements. The company invests in research and development and has, for instance, completed a Business Finland funded project spanning over 4 years as well as concentrating extensive personnel and monetary resources in developing progressive scientific methods. Innovation is fostered and multiple internal forums have been created to support knowledge sharing and professional achievement. Continuous learning outside the organization is likewise supported. This enables the company to maintain its position at the forefront of advanced treatment methods.

The group provides all treatments and serves all customer groups legally possible with no discrimination providing equal service regardless of background. The case company is continuously searching ways to provide renowned Finnish medical service to international customers focusing also to solutions for providing services such as medical consultation via remote access.

The management of the case company is committed to the company’s success by actively engaging in reaching the long-term objectives through implementing the strategy. The strategy is translated to an operational plan to facilitate stepwise implementation on the operative level. Operative plan is reviewed 1-2 times a year during management review meetings. This cohesive construction enables the company to follow its strategic path.

3 STRATEGY

3.1 Mission, vision, and strategy

A company requires a purpose, a sense of direction. This is articulated to stakeholders through the company's mission and vision. A strategy guides the company to fulfil its mission and reach its vision. A strategy can either emerge through various decisions without a specified common intention or be the intended result of a specific process. The latter is usually the case behind realized strategies. (Grünig & Kühn, 2011, 7.) As Robert Kaplan and David Norton, the men behind the widely adopted Balanced Scorecard, explain, a strategy is essentially composed of theories of cause and effect i.e., what is the result if something happens or is being done (Kaplan & Norton,1996a). Small, simple organizations can manage without a specific strategy, but as the organization evolves to a more complicated entity by growing in the amount of people it employs and the number of activities it involves, the more important an organization-wide strategy becomes. Strategy provides an organization the context in which the organization operates and interacts with its environment. (MacLennan, 2011, 15.)

3.2 Strategic management

Strategic management is a leadership tool, which provides direction for the organization and facilitates change (Ginter, 2013, 6). Moreover, it is a comprehensive combination of methods utilized simultaneously and successively at different stages of the process (Markiewicz, 2013). When properly executed it aligns the scattered operations of even a larger organization to direct its efforts with a common goal in sight. Strategic management includes three main overlapping parts beginning with strategic planning followed by the action stages of implementation and control. The planning is repeated should there be any discrepancies detected in implementation and/or control. (Grünig & Kühn, 2011, 17–18.)

3.2.1 Strategic planning and thinking

Strategic planning is the first step of strategic management (Grünig & Kühn, 2011, 1). It is a systematic process resulting in long-term strategies encompassing the organization as an entity and directed to both maintaining the current potential to success as well as creating new opportunities (Grünig & Kühn, 2011, 8–9). Three types of interdependent success potentials have been identified: 1) strong market positions, 2) long-term competitive advantages in market offers, and 3) long-term competitive advantages in resources (Grünig & Kühn, 2011, 10). Strategic planning details what is required in terms of resources and measures to achieve the potential (Grünig & Kühn, 2011, 18).

What is often overlooked but should be included in the process is the evaluation on the implementation potential of the strategy (MacLennan, 2011, 16). This translates into clearly communicated targets and guidelines on how they can be achieved. Hence, we are talking about communication on the terms of the operative level and the employees doing the actual work.

3.2.2 Strategy implementation

Strategy is realized through implementation, which at the same time is also the main trigger for the failure of strategic management (Grünig & Kühn, 2011, 19–20). According to various studies on the issue, a majority of implementation processes fail (MacLennan, 2011, 1). Furthermore, in some cases the implementation part of strategic planning is non-existent (MacLennan, 2011, 5). This results in serious waste of resources that are aimlessly tied up in the process without clear structure of implementation (MacLennan, 2011, 10). Hence, implementation requires tenacity and consistency. Examining the process and its potential of being successful must be proactively and critically viewed while the execution is taking place. It should be part of the process to analyse the steps along the way rather than stubbornly forcing something to be done just for implementation's sake.

It is not sufficient to merely state the objectives to be achieved, but a description on how these objectives are to be achieved is required (MacLennan, 2011, 16). At best an implementation plan is a comprehensive set of consecutive and overlapping actions detailing objectives, responsibilities, required resources, and methods of measuring the results. When considered carefully, the implementation plan will fight against failure by making the implementation comprehensible and a common cause for the entire organization. (Ginter, 2013, 387.)

3.2.3 Strategic control

Strategic control begins with determining desired results i.e., the outcomes of implementing the strategy, to which actual performance is juxtaposed. Control is generally imposed through a system or a set of systems, which the performance targets to be measured and controlled alongside and as an integral part of the implementation. Control proposes check-up points for implementation to determine whether the direction is aligned with the strategy. The targets and measures can range from financial to non-financial ones depending on the organization in question and its needs. (Andersen, 2013, 170–171.)

As with any implementation and control process, the system is in place to detect possible inconsistencies in terms of the predetermined goals in order to take corrective action. To avoid inconsistencies and the additional effort correcting them requires, it is worthwhile to spend time contemplating the metrics and their targets to produce a combination of long-term and short-term, specific, and more large-scale indicators ranging across the operations and departments of the organization. (Andersen, 2013, 171.) Various control methods and tools are presented in chapter 4.2.

4 ORGANIZATIONAL PERFORMANCE

Organizational performance is the sum of the performance of all the operational activities included in conducting business. On the other hand, all the activities are valued in relation to how they have affected the organizational performance i.e., have they encouraged or discouraged the performance on the organizational level to realize the strategy. Digging deeper, organizational performance, as a dependent variable, is the result of the performance of individuals involved in the organization. (Richard, Devinney, Yip, & Johnson, 2009.)

What is interesting and worthy to consider is the effect a chosen internal measurement system and measurement targets have on the behaviour and decision making of an individual. The effects can be long-lasting and act as independent variables affecting the organizational performance. The impact might not be recognized until it is already realized in the outcome. For instance, financial measures and indicators can guide managerial decision making by, for instance, promoting more frugal approach to investments and consequently expediting achieving the target. However, the measure can also have a counterproductive effect. (Richard et al, 2009.) Hence, measures must be carefully evaluated to consider the behavioural effects with implications on performance.

4.1 Factors affecting organizational performance

Leadership and organizational culture encourage and support the optimal performance on the individual and team levels, and subsequently on the organizational level. Hence, it is worthwhile to include them into the framework i.e., what is required from the organization’s leadership and culture to 1) promote performance, and 2) successfully introduce a performance measurement system. The following chapters discuss these factors affecting organizational performance. However, the purpose of this thesis is not to establish a model or framework for the case organization’s leadership and culture. Hence, the topics are discussed superficially to only acknowledge their importance on organizational performance and measurement thereof.

4.1.1 Leadership

If the concepts of strategy and performance management have been quite widely covered throughout modern history, so have the concept and theories of leadership. Furthermore, and regardless of the myriad of theories, there are as many leadership styles as there are personalities. Hence, the factor of importance is the leader's behaviour. (Kouzes & Posner, 2017, 13.) To discuss leadership in more detail, it is first worthwhile to distinguish between leadership and management. Leadership has been around since the beginning of human history whereas management is the invention arisen alongside the development of modern organizations. Hence, leadership can be found in other areas outside business as well, but both are required for an organization to survive competition and be successful. To make matters complicated, the terms are often used indistinguishably. Essentially, there are a few common as well as differentiating characteristics of leadership and management in terms of their roles within an organization as illustrated in Figure 9. (Kotterman, 2006.)

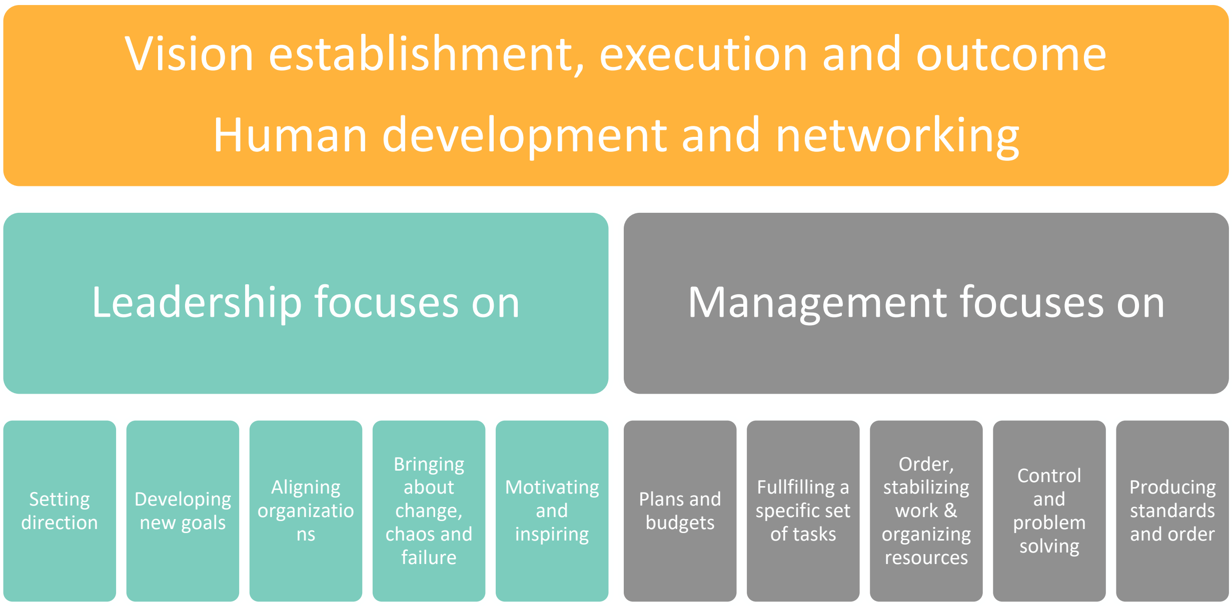

Figure 9. Uniting and differentiating characteristics of management and leadership (Kotterman, 2006)

The most profound difference is that of focus i.e., narrow focus on processes and resources versus wide focus on defining a vision (Kotterman, 2006). Leadership is a process through which an individual, a leader, excerts influence over others.

Leadership requires strong interpersonal skills to be truly influential and lead a group of individuals towards set organizational goals. (Ibrahim, Boerhannoeddin & Kazeem Kayode, 2017.) Both functions, leadership and management, are needed for an organization to operate effectively and successfully and the roles should be distinct and defined to provide the optimal results (Kotterman, 2006).

Leading with knowledge

In the context of leadership and the development project of this thesis, the concept of leading with knowledge surfaced. The case company is an knowledge intensive, expert organization with highly educated personnel where knowledge management is an essential part of the organization's operations and development. But leading with knowledge is much more than merely managing the knowledge of personnel. Leading with knowledge boils down to the organization's ability to utilize the knowledge that the organization contains and produces and how to combine these aspects to make informed decisions based on processed knowledge. (Kosonen, 2019, 3–4) Hence, in order to pursue the organization's strategic goals, the organization must produce knowledge on the performance of its components to make informed decision on how to proceed. Organizations implement leading with knowledge by combining two strategies, codification strategy which relies on the various information systems to process knowledge, and personalization strategy which emphasizes tacit knowledge and sharing (Kosonen, 2019, 6).

Various performance metrics and evaluation thereof are focused at generating knowledge and creating foundation for leading with knowledge (Kosonen, 2019, 8). Whatever the approach and methods used, producing information must be contained and limited to serve decision making by directly linking the process to implementing the strategy (Kosonen, 2019, 7). Producing relevant information and processing it with the use of the tacit knowledge of the organization's personnel the organization can successfully lead with knowledge towards its goals. Performance measurement methods for generating knowledge are introduced in chapter 4.2.

4.1.2 Organizational culture

Two facts of organizational culture are agreed regardless of the source: 1) organizational culture is real and exists, and 2) it plays an important role in the behaviour of an organization. Even though defining organizational culture is difficult, it is fundamental in not only detecting and solving problems but developing better practices. (Watkins, 2013.) Organizational culture is formed around distinctive, repetitive ways of conducting day to day operations. However, it is unclear which comes first: a way of doing things shapes the culture or the culture shapes the ways in which things are done. (Watkins, 2013.) In any case, organizational culture fosters predictability and consistency. The members of an organizational culture may share a number of factors, such as values or language, which differentiate them as a group. Furthermore, culture guides its members to behave in a way that is generally accepted and endorsed. In respect to all these characteristics, organizational culture is far from stagnant, but it evolves as internal and external changes take place. (Watkins, 2013.)

Leaders must consider the organization's culture to facilitate understanding and improving the organization (Watkins, 2013). Culture can be used by organizations to pursue goals, but culture can also cause rifts in addition to promoting unity. What causes the conflicts are disagreements over what the characteristics, such as values, stand for. (Traphagan, 2017.) Hence, the management's actions towards defining and reinforcing organizational culture are essential.

4.2 Performance measurements (PM)

To validate performance, it must be measured. Measuring helps the organization to evaluate its performance against competition and validate development in a specified timeframe in terms of previously set goals. (Richard et al, 2009.) Figure 10 illustrates the three outcome areas of organizational performance and subsequently performance measures.

Figure 10. Components of organizational performance and performance measurement (Richard et al, 2009)

A myriad of methods of performance measurement (PM) and interpretations thereof exists. Regardless, if the management of an organization is acutely aware of the organizations status, direction, and desired outcomes, it is quite possible to build a PM system without following any specific method. But, as is many times the case, it is worthwhile to invest time in the process whatever the way one wishes to proceed. To familiarize on the subject, some popular as well as recent publications on the area were reviewed to form an understanding on the requirements on building a feasible, usable, and sustainable basis for the development project. The results of the literature review are described in the following subchapters leading to analysis and assessment on the methods available in terms of the case company and development project.

What is crucial is to consider all possible factors that may affect reaching the set performance targets. There are usually several both internal and external influences that may contribute to the organization failing to reach the performance targets. (Andersen, 2013, 172.) These factors depend on the area of business i.e., some organizations are more susceptible to, for instance, changes in technology or in the overall economic conditions whereas some organizations are more vulnerable for legislative or regulative developments (Andersen, 2013, 172; Ginter, 2013, 4). The more complex the organization and its operations, the more factors affecting. Thus, measuring performance requires the consideration of the organization's multidimensionality in order to produce valid measurement outcomes (Richard et al, 2009).

Three dimensions have been identified as summarized here (Richard et al, 2009):

1. The **stakeholders** who have varying interest related to the performance and, hence, varying needs for applicable measures. Commonly the most recognized stakeholders are shareholders and managers, which in many cases drive the selection of measures resulting in the focus being primarily on the financial measures. Other, both internal and external stakeholders, such as employees, business partners and so forth, can be considered to fully embrace the dimension of stakeholders.
2. **Heterogeneity** of the landscape i.e., the environment and the market, in which the organization operates, and the diversity of strategic choices and management practices affect which performance measures are emphasized.
3. The **timeframe** for the measures can play a significant role in the validity and comparability of the measure outcomes. Short and medium-term measures are subject to random events resulting in fluctuations in the organization's performance. However, the importance of the timeframe naturally varies depending on the measure to be applied.

To tackle multidimensionality, an organization might find use of the specific methods designed for performance measurement by picking one specific or adopting usable parts of various methods. The measures must be aligned with the strategy to produce information on the efficiency of the strategy – are we achieving what we set out to achieve. Next chapters introduce some widely adopted measuring methods.

4.2.1 Key performance indicators (KPIs)

A carefully selected set of key performance indicators aligned with the organization's strategy and either as a separate tool or as a complementing method provide guidance and direction around which efforts and resources are to be centred. The most important decision in terms of successful measuring is choosing the correct indicators, the correct metrics that provide meaningful information vital to the organization. (Marr, 2012). The underlying function of KPIs is to reveal deviations in performance in relation to strategic objectives. However, detecting the deviations is not adequate, but the existing relationships between different KPIs should be considered. Considering this aspect in designing an organization's unique set of KPIs prevents interpretation problems at a later stage. (Maté, Trujillo, & Mylopoulos, 2016).

Bernard Marr has distinguished six different perspectives for measurement common to most areas of business with numerous subcategories (Marr, 2012):

1. Financial perspective
2. Customer perspective
3. Marketing and sales perspective
4. Operational processes and supply chain perspective
5. Employee perspective
6. Corporate social responsibility perspective.

The difficult task is to choose the ones that best serve the needs of a specific organization and its strategy and to have the patience to interpret the results of whatever the organization chooses to measure (Marr, 2012). Furthermore, the indicators should evolve as the organization evolves (Bishop, 2018).

Goal setting

Probably the most important and at the same time most challenging task is to determine rational targets for each KPI. The target must be measurable, understandable, controllable, current, predictive, and challenging yet realistic to benefit the organization and its strategic goals. The indicators must provide unquestionable information to support management functions. (Bishop, 2018.) Essentially, the goals should not be too easy to attain nor too vague to avoid demotivation and to promote performance (Shahin & Mahbod, 2007). From the leadership perspective goals should also be tied to individual job descriptions in order to consider the abilities required in a certain position. This supports motivation and sense of achievement and facilitates the evaluation of the results in context. Motivation is further supported when the individual goals derive or are at least closely linked to the strategic goals of the organization. (Leonard & Pakdil, 2016, 70.) As a conclusion, employee motivation promotes a higher level of organizational performance making goal setting not just a mere strategic process but a leadership function at the same time.

4.2.2 Balanced scorecard (BSC)

Balanced scorecard is a method developed by Robert S. Kaplan and David P. Norton in the early 90's to "motivate and measure business unit performance". The method introduced four perspectives the purpose of which is to, as the name of the method suggests, provide a balanced view on the current performance and future prospects of an organization. (Kaplan & Norton,1996a.) Figure 11 illustrates the 4 perspectives and their integration and connection to the organization's strategy. Each perspective contains 1) the objectives for what is to be achieved, 2) the measures used, 3) the targets for the measures, and 4) the initiatives required to reach the targets. (Kaplan & Norton,1996a.)

Figure 11. The four perspectives of balanced scorecard (Kaplan & Norton,1996a)

The balanced scorecard is a viable tool when linked with the organization's overall strategy and considering both outcome measures and their performance drivers. An organization's strategy provides the framework for target setting and measuring as well as for revision by directing the focus to the future. (Kaplan & Norton,1996a.) The balanced scorecard communicates the organization's strategy (Peters, 2014). The outcome measures can be described as generic, or lag indicators, such as market shares and profitability, repeating throughout different industries and various strategies. Performance drivers, on the other hand, are more unique i.e., lead indicators, reflecting a particular strategy such as drives behind profitability. (Kaplan & Norton,1996a; Peters, 2014.) Optimally, there is a set of both to complement each other and to provide a causal chain from drivers to outcomes (Kaplan & Norton,1996a). Eventually, all measures that are chosen should contain a connection to financial performance (Peters, 2014).

The balance

The balance in the balanced scorecard does not only come from the variety of the perspectives but also from the different timespans as well as objective and subjective measures the perspectives cover (Kaplan & Norton, 1996a). Below is a brief description of each perspective.

a) **Financial**

The financial perspective relates to how the organization is perceived by its shareholders and the financial measures depend on the organization's maturity i.e., their position on the company's life cycle (Kaplan & Norton, 1996a; Peters, 2014). The problem with financial measures is that they measure performance in terms of something that is already historical information, a part of the past, such as quick ratio, return on equity or other key ratios (Kaplan & Norton, 2001).

According to Kaplan & Norton, there are three sets of financial topics where methods and measures consider the life cycle stage of the organization (Kaplan & Norton, 1996a):

- Revenue growth and mix: repricing, changing, or adding to the offerings; expanding to new markets; attaining new customers

- Cost reduction / Productivity improvement: decreasing costs; allocating resources more efficiently
- Asset utilization / Investment strategy: affecting the required levels of working and physical capital.

b) Customer

The customer perspective is linked to the image the company has among its current and potential customers (Peters, 2014). Related measures revolve around choosing favourable customer and market segments and customized measures of performance (Kaplan & Norton, 1996a).

- The proportion of market share specifically in relation to chosen market and customer segments
- The measures including all aspects of the customer i.e., measuring how the organization is retaining and maintaining its customers; are the customers satisfied; are the selected target customers profitable for the organization.

c) Internal business processes

The perspective of internal business processes involves pinpointing the processes that are critical in terms of satisfying the needs of the targeted customers and market segments as well as meeting the expectations of the shareholders. Considering only existing processes is not adequate but creating new ones as well as including innovation processes to reach the set targets is essential. (Kaplan & Norton, 1996a.)

d) Learning and growth

The main attention of learning and growth is targeted at creating a culture of continuous development by investing in the people, systems, and the organization's procedures (Kaplan & Norton, 1996a). This perspective measures the organization's ability to evolve and improve (Peters, 2014).

Strategy map

The strategy map is a tool with which the different aspects of the Balanced Scorecard are tied together since it illustrates the relationships and co-dependencies between them while validating the strategy at the same time. In the core of the strategy map is the concept of making full value out of the organization's intangible assets in terms of the strategy. For instance, do the current processes contribute to and provide support for the strategy implementation. (Kaplan & Norton, 2004.) Kaplan & Norton (2004) call this concept the strategic readiness which translates to the ability of intangible assets i.e., human, information, and organization capital, to generate profit. Strategy map provides the framework for the concept.

Pitfalls of the BSC

It has been suggested by studies that the BSC might not be the optimal solution for SMEs to measure their performance in relation to their strategy. Difficulties arise from (Malagueño, Lopez-Valeiras & Gomez-Conde, 2018):

- **the multifaceted roles of employees** hindering the possibility to concentrate on a single target
- **limited resources** affecting their allocation to more pressing, usually short-term goals, and
- **limited monetary assets** leading the management to concentrate on short-term results
- **reinforced management systems** preferring efficiency over flexibility.

Conversely, studies have also shown that the size of the organization does not play as significant role in successful BSC implementation as does the complexity of the organization (Malagueño et al, 2018). The more complex the organization, the more complex the strategy, and, subsequently, the more complex the BSC.

4.2.3 Objectives and key results (OKR)

Building on the legacy of various management efforts focused on improving organizational performance is Objectives and Key Results, abbreviated as OKR (Niven, & Lamorte, 2016, 4). In the realm of performance management OKR is a relatively novel theory emerging already before the Balanced Scorecard but gaining wider attention only during and after the 90's after Google, due to recommendation by John Doerr, successfully implemented it in their organization (Niven & Lamorte, 2016, 4; Doerr, 2018). A lot has been written on the Balanced Scorecard, but the literature on the OKR is far less abundant.

OKRs, as any other management system designed to implement the organization's strategy, requires a comprehensive, organization wide adaptation to actually work towards reaching the goals (Wodtke, 2016). Instead of focusing on incorporating the different perspectives as does the Balanced Scorecard, the OKRs place great stress in setting the correct Objectives (Doerr, 2018). Hämäläinen & Sora (2020,18) have summarized the benefits of OKR as the OKR being the tool that promotes clarity and focus and provides quicker results by inspiring and drawing attention to prioritizing the necessary, important actions.

The OKR cycle evaluates past performance with respect to set targets and progress to pinpoint reasons for delays and performance shortages. Staff remains motivated through pursuing team goals, which support achieving the overall corporate goals. Furthermore, the goals are visible to all in the organization promoting responsibility over one's actions. Via constant discussion and evaluation, the management has up-to-date information on the status of the strategy and whether the corporate goals have been correctly interpretated. (Hämäläinen & Sora, 2020, 16–22.) Therefore, for the OKRs to work, the organization must already foster both a unified culture and strong and able leadership (Doerr, 2018).

What are Objectives and how to set the right ones

There are a few key principles when designing a good objective or, as Andy Grove – the man behind the system – simply put it, the What (Doerr, 2018). The objective should be qualitative and inspire both managers as well as employees; be tied to clear deadline; be a responsibility of a specified team; and be challenging but achievable. OKRs are typically implemented to align the focus of the entire organization towards the set Objectives, and measure how the organization is performing. (Wodtke, 2016.)

The Objectives are set on two levels: 1) corporate level, and 2) team level. The goals of a team are derived from the corporate level goals. Teams interact to create goal cohesion to support the corporate level goals in an optimal way. (Hämäläinen & Sora, 2020, 31.) The Objective provides a sense of purpose for the organization, the team, or an individual. Hence, it is far from trivial how the Objective is set. (Doerr. 2018.) According to John Doerr, one of the OKR pioneers, successful Objectives are significant, concrete, action-oriented, and inspirational. They must answer the questions 1) *Why* is it so important to achieve, and 2) *What* is being pursued. The *How* comes along in the form of the Key Results. (Doerr, 2018.)

The OKR model has introduced the concept of *stretch goals* i.e., setting one's goals so high that initially they seem or actually are impossible to be achieved (Hämäläinen & Sora, 2020, 29). This, however, promotes daring, innovative approaches and challenges the usual ways of doing things resulting in quicker outcomes. Fundamentally, stretch goals only work if 1) falling short is not punishable, 2) there are no monetary rewards. (Hämäläinen & Sora, 2020, 30.)

Defining the Key Results

Within the concept of OKRs, key results are the quantifiable, the How in reaching the set objectives. They translate the Objectives into something, anything, that can be *measured and verified*. In other words, it must contain something that can be unambiguously validated. (Doerr, 2018.) Usually this denotes financial results such as growth in sales or net profit, but it can also involve quality and organizational performance. For instance, for the Objective of "Gaining more market share" a Key Result could be "500 new customers during the next 6 months". The Key Results should be chosen carefully to create a well-adjusted set of measures to provide a balanced assessment of the Objective. Yet, the Key Results should not be excessive in number, approximately 1-5 KRs per Objective is sufficient in order to maintain focus. (Wodtke, 2016; Doerr, 2018; Hämäläinen & Sora, 2020, 37)

Furthermore, as well as the Objectives, also the Key Resultss should be challenging, even aggressive, but achievable and realistic to promote motivation and sense of accomplishment. (Wodtke, 2016; Doerr, 2018.) Last but not least, the Key Results should be explicit, and they should be tied to a timeframe. Depending on the Objective, the Key Results are subject for updates i.e., the Key Result for, for instance, the first 6 months must be updated for the following 6 months. (Doerr, 2018.)

How to initiate and implement OKRs

Fundamentally, the OKRs derive from the mission, vision and strategy and denote the implementation (Niven & Lamorte, 2016, 42). The relationship between OKRs, mission, vision and strategy is described below in Figure 12.

Figure 12. The OKR context (Niven & Lamorte, 2016, 43)

When setting out to deploy the OKRs system, there are two phases to consider, 1) planning and 2) development, the latter of which requires far more extensive amount of effort of the two. Planning provides the backdrop for successful implementation and should thus detail the extent of the OKRs i.e., whether the system is deployed on, for instance, business unit, team, or corporate level. Furthermore, implementation plan is included. (Niven & Lamorte, 2016, 39.) Key results should be divided to tasks which are the everyday implementation activities that work towards attaining the key results. Tasks should be explicit and frequently updated. (Hämäläinen & Sora, 2020, 45.) Risk of failure is present, and failure might lead to discouragement and subsequent dismissal of the whole system. Thus, it would be beneficial to begin with small steps by, for instance, starting with only one OKR or having one team test the concept before organization-wide adoption. This will provide valuable information as to what approach works best for the organization and its personnel. (Wodtke, 2016.)

Problems and pitfalls

Although the OKR appears to be a quite modern and flexible approach to realizing strategy and measuring performance, deploying must be done with care and control to avoid a system that is misaligned and difficult to execute and manage. Firstly, the objectives must be carefully chosen, outlined, and described to ensure they actually help the organization achieve its strategic goals. Furthermore, the objectives do not work unless they can motivate and at the same time be within reach (unless stretch goals are applied) as well as be of importance from the perspective of the organization's strategy. (Niven & Lamorte, 2016, 62–64.) The key results, on the other hand, must be something that can be measured i.e., be quantitative (Niven & Lamorte, 2016, 69). Ambiguous key results communicated poorly to the team as well as poor alignment throughout the organization result in poorly directed efforts and wasted time (Niven & Lamorte, 2016, 71–73).

4.2.4 Discussion

As can be seen from this introduction to performance measurement methods, they effectively borrow from each other possessing several common denominators. A widely promoted foundation among them is establishing the company strategy and all methods measure how well the company is able to perform and realize its strategy. Therefore, the strategy must be the underlying guide in choosing the targets and indicators regardless of the method. The importance of considering the company's status is generally stressed, too, as is the significance of setting the correct targets.

There are certainly differences, too. Objectives and Key Results seems attractive since the framework is flexible and allowing whereas the Balanced Scorecard proposes a more rigid context. KPIs on the other hand can be relatively easily adopted, but it might prove difficult to choose the correct ones from the abundance of various metrics and limit the number of indicators to maintain the set under control. Furthermore, the OKRs can be gradually introduced as can the KPIs. The Balanced Scorecard in contrast, being more structured in nature, requires more resources to be adopted for use since, to be able to have the Balance, all aspects should be introduced at once. Overall, there seems to be a method available for businesses of all sizes and the choice should be made based on the status of the company, available resources, and strategic goals.

5 DEVELOPMENT PROJECT FOR THE CASE COMPANY

5.1 Project objectives

The foundation for the development project was set out to be on the mechanism of how the performance measurements facilitate profitability through the strategic management and target reaching of the case company. The company has invested heavily in defining and redefining its strategy and the management of the company is involved in making specific choices. Since the strategy and strategic choices alter alongside related factors such as medical and technological advances and global occurrences, the guidelines and solutions provided must be agile enough to adapt to these alterations.

However, it does not serve the company well to choose the most obvious and generic metrics, but they should be determined with the case company's operations, business environment and targets in mind. It is noteworthy to mention that the author of this thesis has been working for the case company for several years. Hence, the company details including strategy, strategic choices, available technology, processes, and evolution during the company's history are well known by the author. The analysis and evaluation are thus based on experience and information acquired though everyday work as well as participant observation.

5.2 Project progression

To provide structure for the project, the sequence illustrated in Figure 13 was determined. The main actions and/or findings of each step are summarized in the following subchapters 5.2.1-5.2.6.

Figure 13. Development project progression

5.2.1 Establishing the case company's current position

As stated in the introduction on the case company, the company has grown substantially within the past years from a one clinic business to a chain of three clinics in three cities providing an array of top-quality fertility treatments to combat various issues in both male and female derived infertility. The case company has followed its strategy systematically to reach this point. That is not to say there has been a single strategic path which has been implemented throughout the years, but choices have been made and the company has adapted to changes in the surrounding environment. Throughout and after all adjustments, the current strategy still leads to the direction of the mission ("The joy of being a parent belongs to everyone") and vision ("To be the best company in the fertility treatment sector in Europe").

The competitive position and market share of the case company are somewhat tricky to establish since part of the fertility clinics in Finland, such as Felicitas and Dextra fertility clinic, are a part of larger health care companies (Mehiläinen and Pihlajalinna respectively). Based on subjective assessment by the management of the case company, the company is among the leaders of the market with excellent reputation. The case company has conducted periodic customer satisfaction surveys continuously achieving an overall score of 4,5-5 (on a scale of 1-5).

Typically, customers are extremely conscious and do their research. Most shop around multiple clinics before making a commitment. Hence, the case company pays extra attention to provide the best possible customer care from first contact onwards. The service array of the company covers all fertility treatment forms permitted by national legislation. In addition, adjacent services such as 4D ultrasounds are provided. Approximately 35% of the company's customers have been international.

Based on the case company's mission and vision, the company concentrates its efforts to provide the best possible care for customers within and beyond national borders, competing on not only the domestic but also on the European market. What makes competition on the international market possible and feasible is the comparably permissive and progressive Finnish legislation resulting in international customers seeking help from Finnish clinics to apply treatment forms not allowed in their respective home countries (Sadat ulkomaalaiset haluavat hedelmöityshoitoihin Suomessa, 2020). Therefore, from the European perspective, the relatively remote location of Finland is not an obstacle to couples seeking fertility treatments.

Furthermore, the case company has a comprehensive network of European clinics through which its services can be and are, with some limitations, promoted. Consequently, the competitive position of the case company even on the European platform is well founded. What can pose restrictions to growth is the availability of skilled workforce especially of embryologists and clinicians. Thus, the company is keen on both holding on to the current well-trained employees as well as finding new, fresh talents to support the implementation of its strategy.

5.2.2 Discussions with management and participant observation

The management of the case company is formed by the administration complemented by head nurse, head of laboratory and head doctor of all clinics, but the CEO's role in strategic decision making is significant. Since the thesis and project deals with the more abstract issues of profitability and operational success as well as strategy, the decision was made to concentrate on discussing with the CEO. Some key points were picked up alongside the thesis author's regular responsibilities as employee of the case company including participation in the meetings of management teams and selected other workgroups. These observations were discussed with the CEO, too, to establish accurate direction for the project as well as to determine the desired and most applicable set of metrics. The proposed solution of performance measurement is largely based on the specific needs of the company that came forth during the discussions and observation as they were reflected against the theoretical framework and the company's strategy.

5.2.3 Resource analysis

Independent of the method, measuring requires resources whether that is one or several IT systems providing, for instance, readily calculated indicators, information applicable to determine the indicators, and/or one or several employees given the responsibility of gathering and reporting the results of whatever is measured. However, as Bernard Marr suggest, a company should not only choose to measure something that is readily available but invest time and effort in the process to produce meaningful metrics (Marr, 2014). An analysis of the case company's available resources was conducted to determine their applicability and scope, and to verify whether the existing resources were sufficient or if additional resources would be required to implement the suggested solution successfully.

The customer relationship management (CRM) tool Babe used in the case company is specifically developed for fertility clinics. The program has proven to be a useful source of various statistical indicators related to the patient treatment and results thereof. Indicators such as the number of first-time visits and oocyte collections and procedures, as well as the percentage of clinical pregnancies per treatment type can be collected from the Babe program. Babe is used throughout the organization including the case company's sister clinic in Tallinn, Estonia.

For its financial administration and reporting, the company uses Netvisor by Visma Solutions complemented by a connected business intelligence (BI) tool able to automatically produce a variety of financial ratios. Additionally, an integrated management system (Arter IMS) is used as a documentation and quality management portal. The portal features a segment for indicators. The feature has been available for the company to deploy, but it has not been in use so far. The development project of this thesis proposed an opportunity to examine the possibility to utilize the already existing tool and harnessing the full benefit of the portal.

5.2.4 Scope and timeline definitions

During the discussions with the CEO, it was agreed that the proposed solution should follow the established yearly rhythm of the case company’s management and operative planning schedule, which includes regular management and workgroup meetings of various compositions. This construction provides a recurring and proper forum to review the indicators resulting in an active solution without the risk of it becoming obsolete. Management review, organized twice a year, covers all relevant managerial and operative issues including, but not limited to, reviewing past year financial and operative results as well as confirming the operative plan and budgeting for coming fiscal year.

Monthly management team meetings deal with various operative topics, but financial and operative figures are discussed quarterly. Selected items are presented also in weekly clinic meetings as well as in personnel development days organized twice a year. Individual developmental discussions with personnel are held once a year to review professional progression and reset personal goals. Figure number 14 illustrates the events on the yearly schedule as applicable to the case.

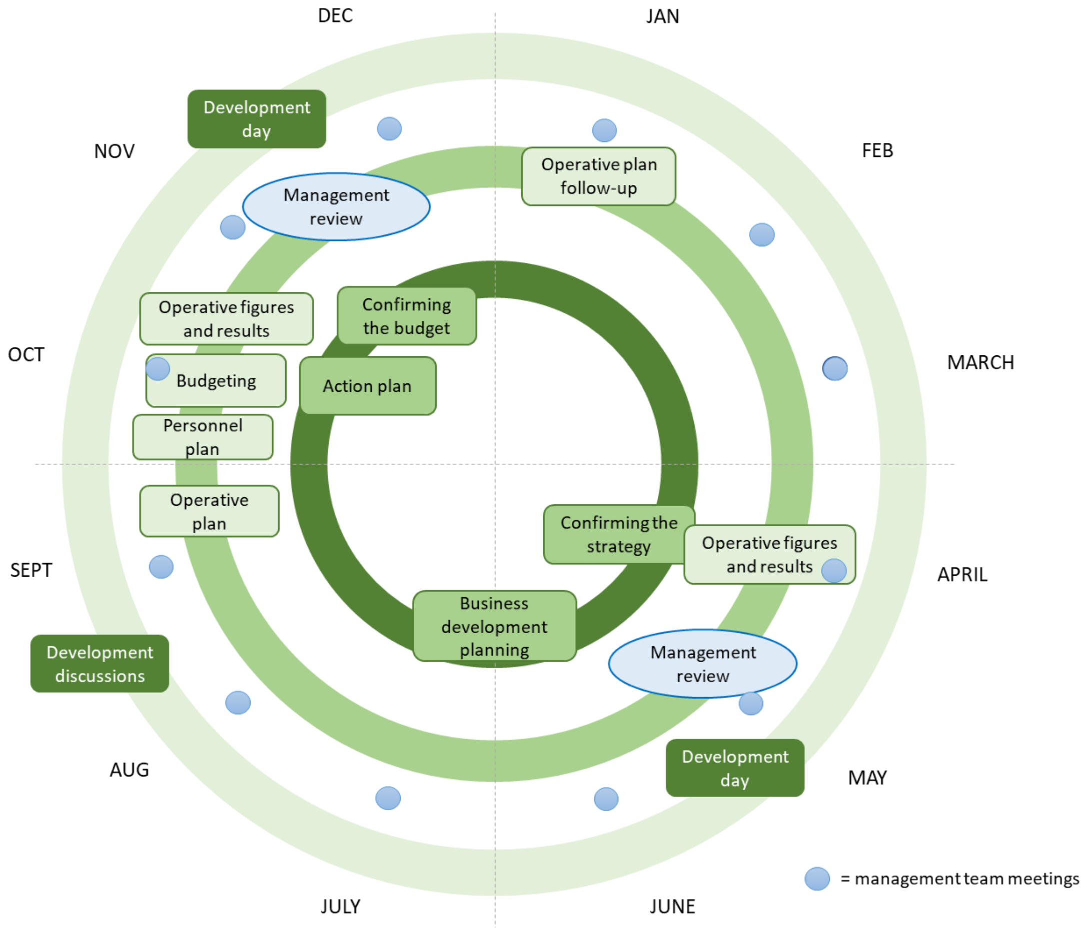

Figure 14. The case company's yearly management schedule

According to the yearly schedule, the checkpoints for the chosen indicators will vary from month to quarter and from half a year to a full year. The forums to concentrate on would be management team meetings and management review. The measuring scope would range from unit to business area to the whole company with some indicators measured at all three levels and some used only to measure the performance of the whole company.

5.2.5 Choosing the measuring and monitoring methods

The available measuring theories and methods were presented to and discussed with the CEO of the case company to establish a working construction. Although the OKR method was perceived potential and at least partially applicable, the common consensus was to concentrate on producing a cohesive set of key performance indicators to streamline the process. However, giving suggestions on how to employ the OKR method were not ruled out. Balanced scorecard, although arguably a very useful tool, was considered too complex for the case company and was also perceived requiring additional investments in resources. Additionally, there was concern that an additional sophisticated system would steer the personnel's attention away from the productive work towards performance measurement. Hence, a more tailored approach was deemed as most appropriate in this case where a structured set of company-wide indicators is introduced for the first time.

While constructing the theoretical framework for the development project and analyzing the case company's position and available resources, it became evident that it is not feasible for the case company to invest in any specific additional KPI software. Firstly, the company already has resources providing and summarizing financial and operative figures as well as a platform to combine the information to a joint dashboard. Secondly, the company is currently investing in growth on both domestic and international markets including significant investments in premises, CAPEX, and personnel and, by doing so, the company is heavily invested in implementing its strategy.

Hence, even though the development project provides an important management tool and a backdrop to the case company's ventures, it was deemed not feasible to invest in a separate software devoted to metrics and indicators. Therefore, the existing resources were agreed to be used for monitoring. For instance, the Power BI -based tool that is already in the company's use provides an adjustable dashboard of financial metrics and key figures as illustrated in Figure 15.

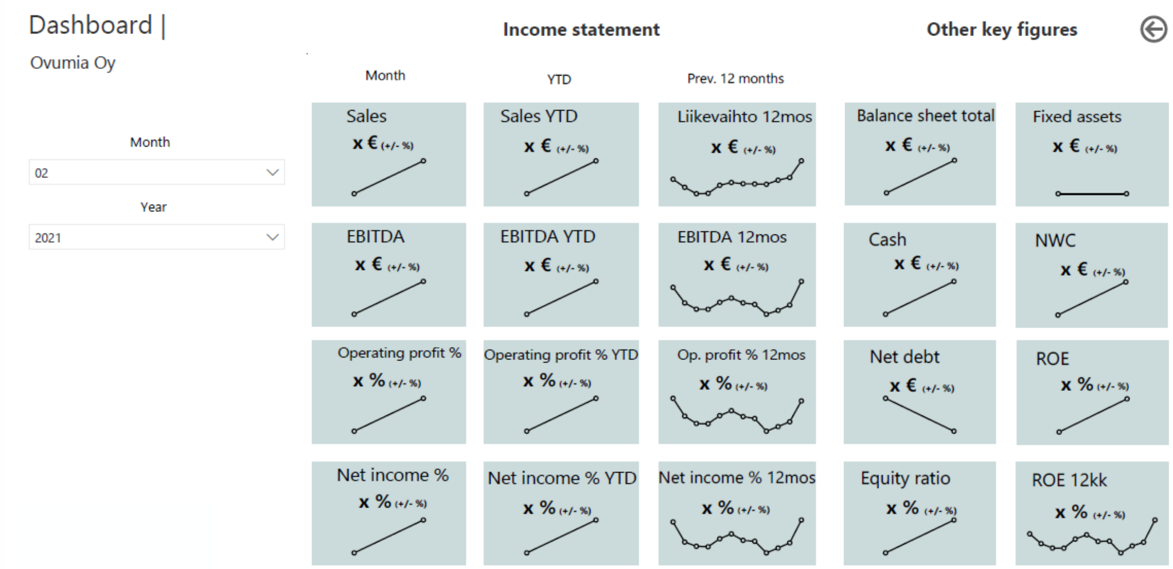

Figure 15. Power BI dashboard for the case company

The dashboard information is directly derived from the case company's financial accounting software Netvisor and is therefore up to date at all times. The content of the dashboard is flexible and can be adjusted based on the indicators chosen. The CRM software on the other hand provides an extensive source of data for various operative statistics and indicators. For instance, the number of customer visits can be measured per clinic, doctor, and type of visit as shown in Figure 16.

Doctor #1												
New patients												
New couples												
New singles												
New female couples												
New receivers												
New egg donors												
Other consultations												
Plans												
Controls												
Gynecology												
Ovum pick-ups												
OPU patients												
OPU donors												
Embryo transfers												
ET fresh patients												
ET fresh donation												
ET frozen patients												
ET frozen donation												
Inseminations												
AIH												
AID												
Procedures												
SONO/SSG												
ERA Test												
Ultrasounds												
US fertility												
US pregnancy												

Figure 16. Customer visits per clinic, doctor, and type of visit

Also, the more medical indicators, such as the number of clinical pregnancies and their proportion to nr of treatment, can be measured per clinic and type of treatment as shown in Figure 17.

TREATMENT RESULTS BY CLINIC 20xx

	CLINIC 1	CLINIC 2	CLINIC 3
IVF			
No. of OPU			
No. of ET			
Positive tests			
Positive tests %			
Clin. Pregnancies			
Clin. Pregnancies %			
Missing			
Mean age			
ICSI			
No. of OPU			
No. of ET			
Positive tests			
Positive tests %			
Clin. Pregnancies			
Clin. Pregnancies %			
Missing			
Mean age			

Figure 17. Treatment results by clinic

As determined, the indicators will be reviewed periodically in management team meetings and during management review. Hence, based on the yearly management schedule (Figure 14) the most appropriate location to introduce the indicators is the yearly updated company operative plan. Currently the operative plan summarizes past performance (year to date or last full fiscal year) financially and statistically. Once a year, during the autumn management review, the plan concentrates on unit and organization specific requirements for the following year to implement the company’s strategy. Therefore, the autumn management review is the most applicable forum to introduce and later review indicators since the indicators should be closely linked to the strategy review and implementation.

5.2.6 Preparing the proposal

The proposal introduced in chapter 6 was prepared based on the theoretical framework, case company analysis, participant observation and experience, and discussions with the management, especially with the CEO. The discussion with the CEO played a major part in choosing the performance measurement method to be applied. After the method was chosen, a long list of applicable KPIs was generated, which was then critically reviewed to rule out overlaps and KPIs with only minor significance to the implementation of the case company's strategy. The resulting short-list was then presented to the case company's CEO. The reasoning behind each KPI was discussed and some modifications were made based on the CEO's viewpoints.

After the main KPIs were mapped, the justification behind, object to be measured, monitoring interval, practice of comparison, target, and monitoring level (unit, area of business, organization) were determined and tabulated (Appendix 1). Once the main principles were identified, the KPIs were grouped under logical categories. As a last step, the suggestions were written out to construct the following chapter.

6 PROPOSED KPIs AND MONITORING FRAMEWORK

This chapter introduces the suggested set of KPIs and monitoring thereof constructed through the theoretical framework and case company analysis. In other words, the suggestions tie together the theory and company specific needs. Even though the balanced scorecard as a specific method was ruled out due to its complexity and inapplicability, some key principles were found useful. As with the balanced scorecard, the suggested set of KPIs are divided into groups, but the groups are based on company specific dimensions rather than preset ones. Furthermore, the dimensions are interrelated, and all are linked to the financial perspective as the original balanced scorecard method suggests (Kaplan & Norton, 1996b, 47).

Based on the framework established through applicable theory and case company observation, the format for grouping the key performance indicators presented in Figure 18 was recognized. The weight of each group was determined alongside choosing the indicators.

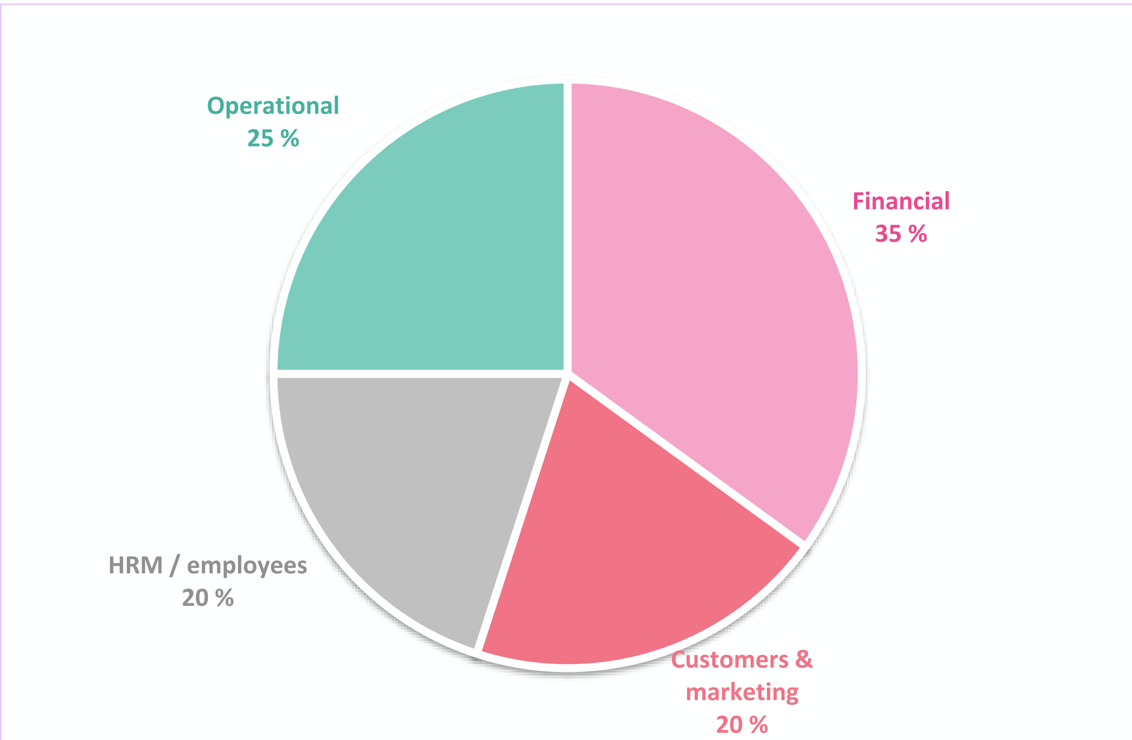

Figure 18. Groups and weight of key performance indicator groups

An additional group of medical and scientific metrics related to the operational metric's group was identified, such as the use of specific stimulation drugs per patient. Due to their explicit nature, they were excluded from the development project since determining meaningful medical and scientific metrics would require a deeper understanding. Furthermore, these metrics are more involved in steering the practical work than implementing strategy. As a result, it was agreed that the working group for laboratory development would be deployed to establish the medical indicators to complement the ensemble introduced in this development project. The following subchapters will establish the significance and more specific content of each group to provide foundation to the indicators suggested deriving from the needs of the strategy and the case company's management.

Target setting in each group of KPIs follows the principle of establishing targets that are ambitious but achievable at the same time. The targets are based on the budget and past performance. In some cases, the target is yet to be set due to not being included in the budget or lacking past performance reference.

6.1 Operational KPIs

The operational KPIs revolve around the case company's day-to-day operations and resources with the objective of measuring and monitoring efficiency and productivity of processes as well as assessing resource sufficiency. The aim is to reach optimal levels of resource allocation to promote profitability without compromising quality. The main source for the operational KPIs is the data provided by the CRM program Babe.

Part of the operational KPIs will measure certain functions and figures in terms of full-time equivalent (FTE) of employees since the case company employs both part and full-time employees. In addition, some employees are considered as resources shared by two or more clinics. With FTE the part-time employees are equaled to what is considered a full-time employee i.e., an employee working full-time is 1 FTE on the FTE scale and therefore an employee working for instance 80% of full-time is considered as 0,8 on the FTE scale. For shared employees this translates into the proportion which the employee is considered a resource in the units in question. Using the FTE instead of number of employees therefore facilitates equal comparison between units with varying employee structures. Additionally, outsourced professionals are considered in the FTE if they work for the company regularly. Suggestions for operational KPIs are summarized in Figure 19.

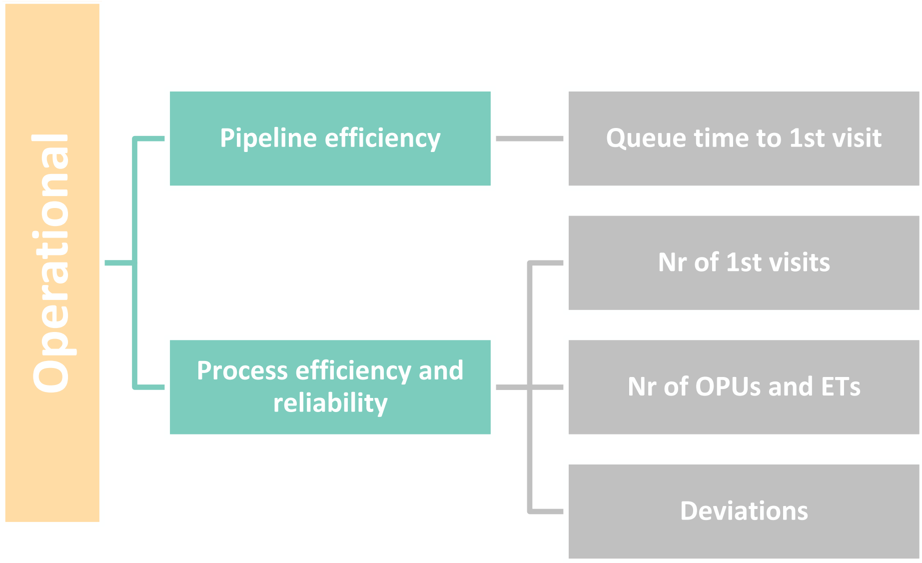

Figure 19. Operational KPIs

6.1.1 Pipeline efficiency: Queue time to first visit

In essence, the more efficient the pipeline the more efficient the process. As a private sector clinic, the case company advocates short waiting times to attract customers. Hence, an indicator to measure the efficiency of the pipeline is essential to determine how well the process functions and how quickly the company is able to provide for its customers. An increased waiting time increases the risk of losing the customer to the competitor. In order to measure the pipeline efficiency, the indicator of queue time to first visit is recommended.

A customer relationship is established with a first visit, which precedes any treatment. The indicator of queue time measures the time it takes for a customer to have a scheduled visit at a doctor for the first time after contacting the clinic to schedule the appointment. A stable queue time indicates sufficient resources and their allocation. Furthermore, the faster first visits are processed and the schedule managed, the faster new first visits can be allotted. Queue time can be measured quite simply by viewing the doctors' schedules in the Babe program to see where the first available lot for first visit is and record the days between now and then.

This indicator is suggested to be monitored monthly (at the beginning of each month) to ensure swift reaction should the queue time increase. Seasonal fluctuations, such as increases in queue time due to staff vacation seasons, should be considered. Hence, the monthly indicator should also be reflected to the previous year average. The indicator should be monitored by unit but compared to company average as well.

6.1.2 Process efficiency and reliability

In relation to pipeline efficiency, the efficiency of customer processes should be measured since the case company has observed that well-functioning, streamlined processes encourage productivity and ultimately profitability. Managing and developing the processes require insight in detail, such as the effectiveness of individual doctors and teams. A simplified, typical customer process is illustrated in Figure 20.

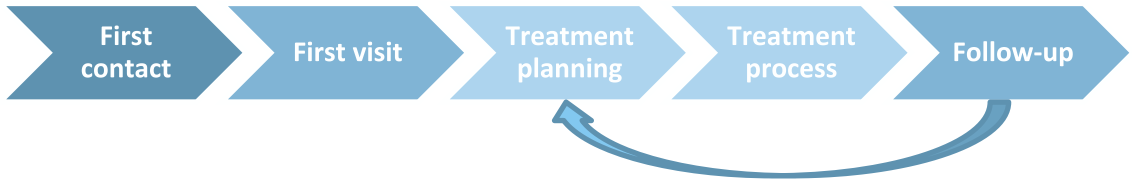

Figure 20. Simplified customer process

The process may vary depending on individual cases and part of the process may be repeated should an unsuccessful treatment cycle be followed by a new attempt or if the customer returns for another treatment. The overall customer process includes multiple subprocesses on the operative levels. The process is similar for both treatment receivers as well as oocyte donors.

The four suggested KPIs to measure efficiency and productivity include process-specific indicators and reasoning for the selected indicators is provided from the management and development perspective.

i. **Number of first visits**

To complement the queue time to first visit, it is suggested that the monthly number of first visits both per unit and per FTE of doctors is monitored. The indicator measures the allocation of first visits between doctors and introduces comparison of monthly first visits per clinic. It is also a viable indicator of future revenues since the tangible customer relationship begins with first visit. The source for the data is the CRM program's statistics where the first visits are categorized according to customer segments. Internal process differences should be considered to properly interpret the results but also to promote process unification should one clinic process first visits per FTE constantly at a higher rate than others.

A monthly interval for monitoring is suggested to make timely decisions. The number of first visits in all customer categories should remain relatively constant taking again into account seasonal fluctuations. Therefore, in addition to monthly reflection, the indicator should be reflected to the average of previous 12 months.

ii. **Number of oocyte pick-ups (OPU) and embryo transfers (ET)**

To put it simply, the more patients a doctor is able to care for the more efficiently the time is spent. In discussions with the CEO of the case company, in addition to the number of first visits, the number of oocyte pick-ups (OPU) and embryo transfers (ET) were determined as the most applicable procedures to measure the productivity, time usage and allocation of workload among doctors and teams.

OPU is a procedure with which the oocytes are collected from the follicles of the ovary. An OPU is done to each customer receiving any form of in vitro fertilization (IVF, ICSI) with own oocytes as well as to all oocyte donors donating eggs to be used in donor egg treatments. An embryo transfer refers to the procedure where the embryo is transferred to the patient's uterus and it is done as part of fertility treatments except artificial insemination. Hence, measuring the number of these two procedures per individual doctor considering respective FTE of each doctor provides perspective on the time consumption of the doctors. In addition to productivity, it also provides insight to how well the processes function. With the help of this KPI the management can make informed decisions on, for instance, recruiting needs, process development and workload division.

The data is extracted from the CRM program's statistics. It is suggested that this KPI should be monitored quarterly with comparison to previous quarter and corresponding quarter of previous year, and the target should be minimal fluctuation since minimal fluctuation indicates steady workload and revenues. The number of performed procedures per each doctor should be assessed within each unit separately as well as between units to determine possible differences in processes and their efficiency.

iii. Deviations

Deviations refer to exceptional laboratory events that take place within the treatment process and are currently categorized as minor, major, and critical. The categorization is based on the case company's quality management and is therefore used as such for the purpose of the KPI. Generally, minor deviations are acceptable in certain quantities as normal part of operative laboratory work. Major or critical deviations are more serious in nature and should be recorded with detailed case explanation. What should be made sure is the similarity of classification across units. By following the number of deviations by category monthly, the management can react swiftly to possible findings and determine underlying issues in the processes.

Due to the specified nature of the KPI, the targets cannot be recommended here, but the case company should determine the target for each category separately. However, it is recommended that all critical events should be reported with full disclosure. Comparison to previous month should be conducted to recognize possible patterns. Comparison to the average of previous 12 months will reveal any variations from standard level.

6.2 Financial KPIs

Financial KPIs suggested to be included in the set have been selected to monitor growth, cash management, and eventually profitability against budget, generally recognized key figure levels, and other specified targets. Certain industry specifics and the case company’s cost and capital structures have been considered to choose the most applicable measures from the extensive variety of financial KPIs. The set of KPIs chosen for the case company to implement are selected for the management to use in financial evaluation and planning as well as informed decision making on resources. Financial data can be extracted from the accounting and financial management systems in use.

Growth and profitability play a major role, since the objective of both is to establish the company as large enough to provide quality service with minimal disturbances and have the ability to invest in superior technique, facilities, and personnel. Usually, as a result of growth, the proportion of fixed costs to sales decreases resulting in increased profitability. The effects of improving sales in the case company are described in Figure 21.

Figure 21. Effects of growth in sales in the case company

Cash flow and liquidity are a focal point due to the business relying on B2C sales, where receivables can at times be difficult to collect and the case company possesses a cost structure heavy on purchases and salaries. Therefore, the Financial KPIs are divided into 2 subcategories per purpose of measurement as summarized in Figure 22.

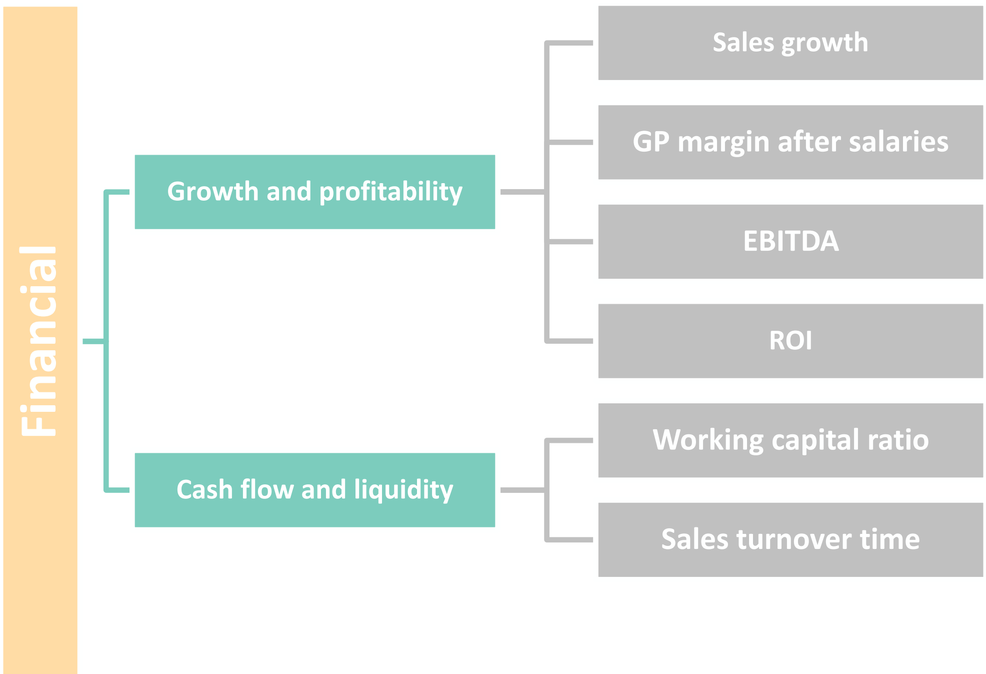

Figure 22. Financial KPIs

6.2.1 Growth and profitability

After several years of growth through both M&A's and organic growth, the case company is still actively looking to grow and increase its already significant market share in Finland, but also to strengthen its position among international customers. In addition to measures indicating growth in sales, indicators of profitability are as important to verify a healthy and sustainable cost structure to ensure that growth is not lost in increasing expenses.

i. **Sales growth**

Sales growth indicates the success of the company's strategy and is one of the financial figures that can be compared to those of competitors to assess the company's position on the market (Marr, 2014). The case company sets its sales growth targets as a part of the budgeting process. Targets are set individually for separate sales categories based on customer segments. Furthermore, targets are set individually for each unit. Reaching targets at unit level is certainly important, but the organizational performance is still the overall focus. Usually there are some unit level focal points, such as increasing the sales to international customers, that are more closely followed per unit, whereas the total sales are more of a company level interest.

The case company evaluates its sales against budget i.e., growth targets, monthly with comparison to corresponding month in previous year. Hence, the case company is advised to continue this practice and record the performance alongside other KPIs. It is also recommended to determine the sales growth year-to-date against corresponding period of previous year.

ii. **Gross profit margin after salaries**

Gross profit margin is an important profitability ratio and measure indicating the profit left to cover salaries and fixed costs after variable costs, such as consumables and outsources services (i.e., cost of goods sold), have been deducted (McLaney & Atrill, 2016, 248). In addition to employees, the case company uses outsourced workforce and the division between employees and outsourced workforce varies from clinic to clinic. Thus, gross profit margin is not an optimal indicator for comparison between clinics. It is therefore suggested that the company should follow gross profit margin after salaries where salary expenses are deducted from the gross profit. This indicator provides a more comparable figure regardless of the structure of the workforce of the units.

Gross profit margin after salaries indicates how efficiently the company is utilizing its variable resources – namely consumables and outsourced services – and employees, which currently constitutes a significant part of the case company's total expenses. The case company prepares financial reports (profit and loss statement and balance sheet) monthly. Hence, it is advised to follow this KPI per unit and entire organization on a monthly basis and year-to-date with comparison between units and to budget where the target has been established. The KPI can also be extended to be used to evaluate the profitability and resource efficiency of selected service areas.

iii. EBITDA margin (earnings before interest, taxes, depreciation, and amortization)

The case company prepares budget and growth targets annually. Earnings before interest, taxes, depreciation, and amortization (EBITDA) plays an important part in the budgeting process as well as forecasts, which are prepared throughout the fiscal year. EBITDA is a usable ratio to measure profitability as it excludes the effect of the capital structure (Marr, 2012). In the case company this translates into excluding the relatively large amount of fixed asset depreciations which the company carries due to past business acquisitions and activations, as well the residue of loan capital raised for business acquisition purposes and related interests. In addition, corporate income tax is excluded. Hence, the EBITDA provides an estimate of the case company's operative cash flow (Tennent, 2018, 40).

As the EBITDA is included in the case company's budget, which is followed against actual monthly performance, EBITDA margin is suggested to be monitored monthly against budget targets. EBITDA margin is calculated by dividing EBITDA by sales and the margin is preferred for more accurate comparison between fiscal years (Marr, 2012). Monitoring should be done at unit-level to compare profitability between units, since the budget is prepared at the unit-level. However, monitoring against budget at organization-level is advised as well to indicate changes in the company's overall profitability. Monthly intervals will facilitate fast decision making should there be indication to react. Monitoring the indicator against budget per year-to-date is also advised to evaluate performance and profitability excluding possible monthly or seasonal fluctuations.

Net profit margin

As the case company evolves and its capital structure develops with some items becoming less significant (mainly fixed assets and bank loans), the company can evaluate if net profit margin would be a more appropriate KPI than EBITDA margin. Net profit indicates the retained earnings of an organization and is thus an indicator of the organization's equity development (McLaney & Atrill, 2018, 84).

Net profit margin is the percentage of net profit to revenue i.e., it indicates the proportion of bottom-line profit against sales. With the net profit margin, the organization can compare the net profit development over several fiscal years and/or against competitors. (Marr, 2012.) By using the net profit margin with sales growth ratio, the management can see whether the two develop in harmony or is part of the sales growth lost in increasing expenses. (Marr, 2012). Should the case company choose to use it, the net profit margin is recommended to follow the same interval and monitoring policy as recommended for EBITDA margin.

iv. ROI (return on investment)

A business is generally built on invested capital for which the investors expect return. The level at which this is actualized is calculated with the financial ratio of Return on Investment (ROI). (Tennent, 2018, 3.) High ROI generates additional value to employees and investors. When calculating

ROI, the invested capital is pitted against profit i.e., ROI equals to profit divided by invested capital. ROI indicates the financial performance of the company and is comparable to other businesses in the same sector. Furthermore, it enables both the management and shareholders to evaluate the performance of the company over a longer period of time. (Tennent, 2018, 280.)

For the case company it is recommended to include ROI as part of the set of financial KPIs quarterly. Although there are generally accepted levels which indicate a good rate of ROI, the case company is suggested to follow ROI based on subjective level with minimum target calculated per latest financial statements. ROI is also recommended to be integrated to the budgeting process in the future.

6.2.2 Cash flow and liquidity

A stable cash position is crucial for business operations to run smoothly and grow (Marr, 2012). Growth especially ties capital, and cash surplus indicates successful business and cash management as well as allocation and effective use of resources. A continuing cash deficit eventually leads to the business requiring outside funding. (Tennent, 2018, 40.) The main factors risking the case company’s cash flow are extensive and accumulating purchases, extensive inventories, and accumulating trade receivables. The company is still growing, which requires investments in, for instance, capital expenditures. The following indicators monitor the consistency of the case company’s cash flow and liquidity.

i. **Working capital ratio**

As summarized by McLaney and Atrill, working capital is the sum of current assets less current liabilities (McLaney & Atrill, 2016, 675). Assets are comprised of current inventories, trade receivables, and cash, and liabilities include trade payables and other short-term liabilities, such as bank loan amortizations within the next 12 months, and accrued expenses. (McLaney & Atrill, 2016, 675; Marr, 2012.) In other words, working capital considers the short-term flow of cash throughout the company and it is used to evaluate the cash position of the company (McLaney & Atrill, 2016, 675; Marr, 2012). Working capital is often company specific due to varying habits and practices in working capital management (McLaney & Atrill, 2016, 675).

For the working capital ratio current assets are divided by current liabilities and therefore it measures whether the company's current liabilities can be settled with its current assets. The ratio is positive if the calculation yields a sum over 1 and generally a ratio over 1.2 is considered adequate. (Marr, 2012.) Since the cash position may vary monthly due to, for instance, short term changes in the consumables inventory, it is suggested that the case company should determine the ratio on the company level quarterly with a target of 1.2 or over. Based on the determined KPI the management can evaluate whether the ratio indicates balance between assets and liabilities and make subsequent decisions on controlling its working capital.

ii. Sales turnover time

The case company provides services mainly to consumers. According to Suomen Asiakastieto's statistics there were over 1,8 million new payment default entries and nearly 400 000 persons with payment defaults in both 2019 and 2020. Furthermore, the age groups with the most payment defaults, over 12% of total per group, were groups between ages 25-49. (Datakatsaus: Maksuhäiriötilastot, 2021). These age groups constitute the target market of the case company. In addition, as per the case company's policy, customers have been primarily invoiced as opposed to billing them on site, which has led to accumulating accounts receivables and subsequent debt collection efforts and costs. Some changes have been made, but accounts receivables still pose a burden on the case company's working capital and cash flow as well as tie resources to sales receivables management. Furthermore, cash tied in sales receivables may hinder possibilities for investment.

Hence, sales turnover time is an extremely important KPI for the management to monitor quarterly and verify whether the policy changes have had the desired effect. Regardless of improvements made, the company will continue to invoice some customers with a primarily 14 days net as payment term consequently facing delays in payments in the future, too. Therefore, the target sales turnover time should be set at less than 18 days, which allows the abovementioned limitations.

6.3 KPIs to measure customer and marketing perspective

The healthcare services the case company is providing are extremely sensitive in nature and require thus extra attention to the quality and attentiveness of customer service. Due to the limited market and competition, the reputation, brand image, and treatment results play an important role in securing a relationship with a new customer. New customer acquisition is more costly than retaining existing customers and therefore quality care and treatment must be ensured in all customer groups (Marr, 2012). Being aware of customer experiences and collecting and analyzing feedback is vital to ensure these factors.

The case company invests heavily on marketing efforts since new customer acquisition is necessary due to the limitations of the duration of customer relationships. The case company utilizes mainly digital marketing such as Google Adwords, Facebook, Adform and Instagram which, with modern technology, provide detailed information on, for instance, leads through website and social media platforms.

The KPIs in this section are divided into two groups: customer service performance metrics and metrics for the efficiency of marketing activities. The KPIs for customers and marketing are summarized in Figure 23.

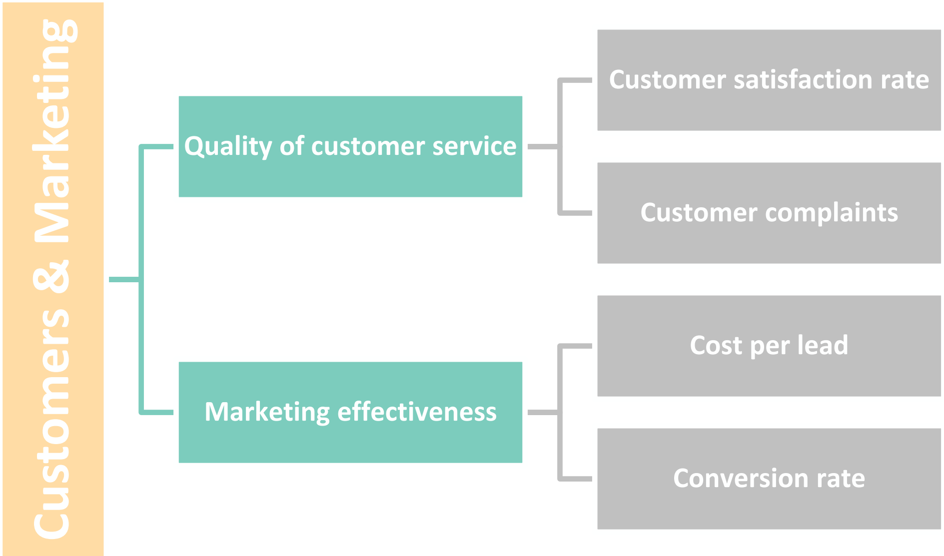

Figure 23. KPIs on Customers & Marketing

6.3.1 Quality of customer service

Through discussion with the case company's CEO, it was determined that the quality of customer service should be followed with the help of traditional feedback collection, but additional attention should be directed towards possible customer complaints. Regular feedback summaries are used for quality control and the customer complaint indicator would reveal the more serious deviations on the service level.

i. **Customer satisfaction rate**

To assess performance and determine areas of development in the quality of customer service, it is suggested that the case company should continuously follow customer satisfaction by collecting feedback. To assess the overall performance the company should consider collecting feedback after each stage of the customer process. This would reveal process discrepancies better than only collecting feedback after the entire process. This could also disclose possible reasons why a customer has chosen to not complete the treatment process or at least after which stage the decision to drop out has been made. Furthermore, the feedback should be targeted and customized to customer groups. However, the case company should determine the intervals of collecting feedback carefully so that it does not cause unnecessary trouble to the customer.

The case company has recently adopted the use of a feedback service, which summarizes the feedback collected from the customer. After a visit, customers receive an email asking for feedback and feedback is given through a link containing a couple of questions. The contents of the questionnaire can be altered to an extent depending on the information needed. Since there is a viable tool in use, the company should consider conducting targeted feedback campaigns for specified customer groups instead of generic feedback collection even if it is more complex and time consuming. This will enable the company to direct development efforts to the specified customer group should any discontentment be discovered to better meet customer expectations (Marr, 2012).

The overall score in previous feedback collections has been 4,5-4,9 out of 5 depending on the clinic. Hence, a score of 4,5 out of 5 should be set as the minimum KPI target for each clinic. To ensure adequate number of received feedback, the suggested measuring interval is quarter of a year with feedback collected continuously from consecutive customers of different service segments. The achieved KPI should be compared against the result of the previous quarter and the overall score of previous 12 months.

ii. Customer complaints

In the case company the customer complaints form a separate type of feedback, which are typically sent directly to a member of the staff. The receiver varies: the complaints are sent sporadically to, for instance, accounts receivable, doctor in charge of the customer's treatment, or to a staff member participating in the treatment process. Complaints derive from individual customer experiences and are relatively rare considering the number of customers treated at the clinics each month. Regardless, unhappy customers pose a real threat to the company's reputation should they disclose their opinion to other potential customers or other members of the public (Marr, 2012).

Historically viewed, the complaints to the case company can be roughly divided into two groups: 1) complaints due to unsuccessful treatment result and/or disagreement over invoicing, and 2) complaints due to actual mistake during the treatment. The latter is a far more uncommon since in the rare occasion of a mistake, the matter is in majority of cases detected and dealt on the company's own initiative. Sometimes with international customers the complaints can derive from cultural differences. Hence, most complaints are not scientifically backed, but derive from subjective experience and disappointment in the treatment result.

Thus far, the case company has not maintained an official record on the number of complaints or other related details. It is therefore suggested for such a record to be established for each clinic where each complaint is recorded. Sufficient and adequately categorized details, such as age of customer, treatment received, and the doctor / team in charge as well as how and when the complaint has been replied should be included – the last being an important factor in alleviating the possible negative feelings of the customer (Marr, 2012). Complaints arisen in the connection to customer satisfaction survey should be included in the record. With such a record the management is able to pinpoint possible issues in the quality of customer service, such as complaints accumulating in a specific customer group or to a specific unit.

The complaints should be monitored quarterly. A specific maximum target cannot be detailed at this stage since no record has been maintained. The case company should establish a regular level of complaints per unit within the first 0,5-1 year and future results should then be compared to this average level. The number of customer complaints per quarter of a year should not be compared between clinics since the customer demographics differ from clinic to clinic and this may influence the number of complaints received.

6.3.2 Measures to indicate marketing effectiveness

Platforms such as Google Adwords and search engine optimization, Facebook, and other social media have proven to be agile and adaptable for the case company's marketing needs. Through employing mainly digital marketing the case company has access to automatically generated KPIs with which the chosen method's ability to attract potential customers can be evaluated. An outsourced agency is currently used to implement chosen strategies and success rates are regularly reviewed in meetings with the management. It is suggested that these monthly meetings will be used as platform to evaluate the chosen indicators and subsequent improvements are promptly implemented should there be indication to do so. In order to act effectively, the suggested indicators should be communicated to the agency for appropriate recognition and follow-up.

i. **Cost per lead**

For the case company the objective of marketing is to convince potential customers to visit the company's website and eventually become a customer. Promotion is done via search engine optimization, Facebook, Instagram, and Adform campaigns, and occasionally with bus and metro campaigns, and other channels, such as podcast collaborations. To determine how cost effective the chosen channels and campaigns are, the case company should measure cost per lead i.e., the expense of attracting a customer through the digital channels in use, which is calculated by dividing the invested money with the generated leads (Marr, 2012). The indicator should be followed monthly based on active campaigns. Cost per lead has been a part of the agency's monthly reporting package, but it has not been categorically recorded and monitored over a longer time period.

The target for the KPI should be established separately for each targeted customer segment. Periodically or after a specific campaign the cost per lead should be measured per used channel to determine the effectiveness of each channel and concentrate efforts accordingly. Additionally, one channel might result in a more effective cost per lead in one segment whereas another channel might work better for another segment.

ii. Conversion rate

While cost per lead indicates how effectively chosen marketing channels attract customers per invested money, conversion rate indicates the rate at which leads become actual customers (Marr, 2012). In the case company this would denote, for instance, someone who visits the case company's website and schedules a first appointment or a possible oocyte donor who fills out a medical history form on the website. The financial importance of the conversion rate lies at being able to predict future revenues (Marr, 2012). This KPI together with cost per lead indicates marketing effectiveness and assists the management in making informed decisions regarding the marketing strategy. Hence, measuring interval as well as other details should follow those of cost per lead.

What is difficult to evaluate at the moment is the conversion rate at which potential customers who have scheduled a first visit appointment continue the process to treatment. This should be developed to establish the bigger picture on how the marketing strategy and the customer process support one another.

6.4 KPIs to measure the human resource management (HRM) and employee perspective

The case company is a multi-professional, knowledge intensive organization relying heavily on the motivation and expertise of its staff. Due to the relatively restricted market of fertility treatments in Finland, there is a limited number of professionals available. Finding talents has proven difficult at times and educating new recruits is time consuming and costly making it extremely important to maintain the personnel. To implement its strategy the case company must also be able to verify that its current personnel is productive and that the composition of it is optimal. Employees constitute a major proportion of the total expenses of the case company and the biggest individual expense group, which is why it is important to understand the value they add to the organization's profitability (Marr, 2012).

The HRM perspective is thus two-fold, on one side being the wellbeing and commitment of the staff, and productivity and profitability of it on the other side. In an organization like the case company, these two also seem to feed each other: the better motivated the staff is the better the company is doing, and the better the company is doing the more it can invest in the well-being of its staff. Hence, this category of KPIs is divided to two sections, personnel productivity and profitability, and personnel development and wellbeing as summarized in Figure 24.

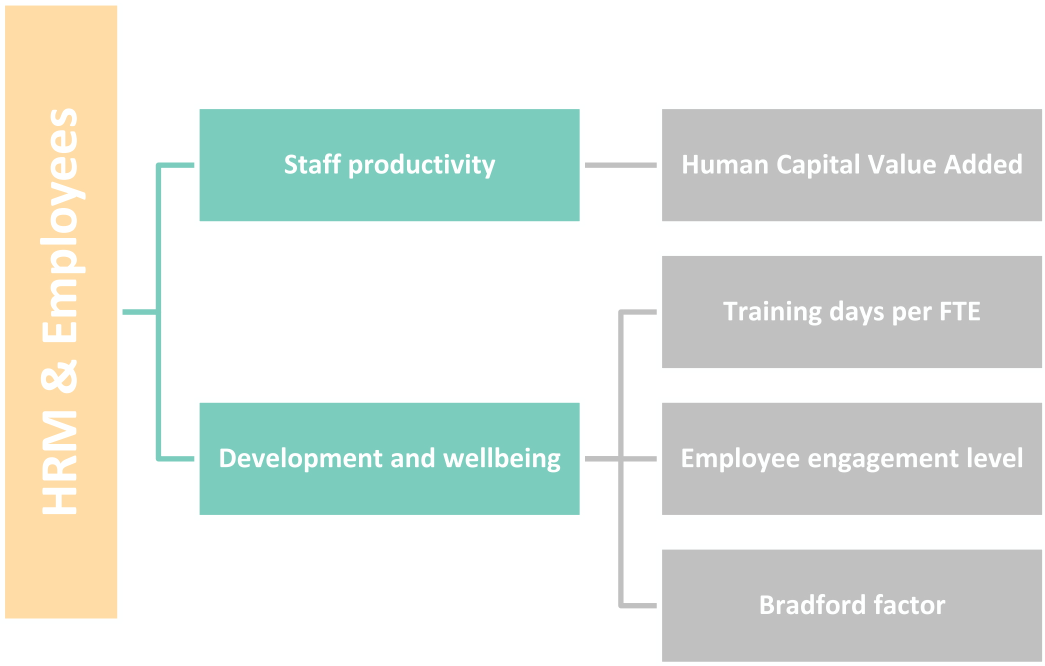

Figure 24. KPIs on HRM & Employees

6.4.1 Staff productivity: Human Capital Value Added

One aspect of productivity was introduced in the chapter on operational KPIs where the focus was on processes and their functionality. Here, staff productivity is grounded on the revenues of the case company and the suggested KPI is Human Capital Value Added (HCVA), which assesses the value employees add to the organization’s profitability. As with other suggested KPIs that are calculated per personnel, here, too, the full-time equivalent (FTE) is used. The KPI is generated with adjusted profit which is revenues less non-employee-related expenses as shown in Figure 25. (Marr, 2012.)

$$\text{HCVA} = \text{Revenue} - \frac{(\text{Total costs} - \text{Employee costs})}{\text{FTE}}$$

Figure 25. HCVA formula (Marr, 2012)

For the case company the formula should be amended with other employee-related costs, such as vocational health expenses, benefits, and outsourced workforce. The HCVA is recommended to be measured quarterly to minimize monthly variations. Comparison to previous quarter as well as comparison between fiscal years is advised. HCVA is comparable between units since it considers all personnel expenses and revenue is based on equal service prices. Comparison between units should therefore be made to evaluate variation of productivity. Numerical target should be an increasing HCVA (Marr, 2012). The management can also simulate the effect of and validate the decisions on personnel recruitment with the HCVA.

6.4.2 Personnel development and wellbeing

The case company, a service-oriented organization, has observed that the professional development of the staff has enhanced the organization and provided competitive advantage. Through training and education, new methods and processes have been developed, which have helped the organization stay in the front line in the market. The importance of education and training possibilities and especially the management's interest in the subject motivates the staff and promotes pursuing common interest. When an organization is committed in development and supports learning it has better possibilities in maintaining its key personnel. (Alahuhta, 2015, 143.)

The importance of development is emphasized in situations of change when working policies and the environment change: the organization is left behind and loses its competitiveness if it lacks the readiness and willingness to develop. The importance of an individual to an organization's operative ability and productivity improves along the know-how. (Kupias, Peltola & Pirinen, 2014.)

i. Training days per FTE

The case company maintains a training log where the personnel record all trainings it has participated in. Some form of training planning has also been conducted to ensure equal opportunities for all staff members. It is suggested, however, that this already quite comprehensive system should be amended with a KPI to measure the amount of training days per FTE per clinic to verify adequate number of training days and equal allocation among the three clinics.

The KPI should be measured by six-month intervals at most or yearly and compared against previous year level as well as the planned training schedule to validate its implementation. The KPI is a tool for the management to ensure a sufficient level of development to further overall organizational development, productivity, and eventually profitability.

ii. Employee engagement level

An organization is not able to fulfill its mission and vision without committed staff to implement the strategy. Committed employees are the ones putting in their full effort for the benefit of realizing the organizations targets and contribute to the bottom line. However, measuring engagement does not equal to measuring employee satisfaction since a satisfied employee does not denote an engaged employee. (Marr, 2012.)

At present, the case company has no structured employee survey processes or policies in use. Developmental discussions are conducted annually where the employee’s perspective on current issues is mapped with immediate supervisor. Dissatisfactions generally emerge to discussion in these occasions. The discussions are, however, organized face-to-face and. If there is any lack of trust between the parties, difficult issues might be left unsaid – the quality of the discussion depends on the relationship between the parties.

Anonymously conducted surveys would thus provide more reliable outcomes. Should the case company adopt such a survey, it is suggested that the survey would be first conducted twice a year to establish current position for future comparison and annually after this has been reached. Units should be compared to reveal differences and to be able to tackle the underlying issues. Previous year result should be held as the bare minimum target. Pinpointing a more accurate target cannot be done at present stage due to lack of reference of previous results.

iii. The Bradford factor

To complement the Employee engagement level KPI, it is suggested that the case company should also follow the number of sick leave days. Lack of engagement has been shown to cause absenteeism, which has a negative effect on productivity and profitability due to additional costs occurred. (Marr, 2012.) There are several aspects that should be considered including, for instance, the effect employees with longer term sick leaves have. A high number of sick leave days and other related absences might not be a cause for concern if the absences are well founded with long-term sick leaves on doctor's certificate.

Due to these issues, the company is advised to adopt the Bradford factor, which considers the number of days absent as well as the frequency and duration of the absence. In other words, do the absences span over several days at a time or are they shorter occasions. Absences occurring frequently and lasting one day at a time yield a higher result since according to research these are most harmful absences for the business's operations. The Bradford factor is calculated by multiplying the total number of sick leave days with the squared number of episodes. (Marr, 2012.) Due to its nature the Bradford factor should be applied to each employee separately. Monitoring the factor per employee at, for instance, half year intervals would enable the management to interfere should the factor indicate reason when assessed against other related conditions. (Marr, 2012.)

6.5 Implementation and review

The implementation of the suggested set of KPIs is suggested to begin at the management level and the sequence is advised to be completed in the following order:

1. The set of KPIs are reviewed by each unit's management team. The suggested KPIs are presented in the management team meetings to reach consensus whether all or part of the KPIs are included.
2. Once consensus has been reached, the responsibilities are shared. Decisions on who will be responsible for monitoring and recording the KPIs at the suggested intervals and who will take responsibility of the implementation process on the operative level are made.
3. Afterwards, the management team members with the support of the CEO and administrative staff will introduce the entire concept to the personnel in personnel meetings.
4. Meanwhile the administrative staff will examine the possibility to employ the metrics section of the IMS. Should it be applicable, necessary training and other measures will be taken.
5. First review of the KPIs would be included in the management review after steps 1-4 have been completed. The target is set at management review in Autumn 2021.
6. Monitoring depends on the measuring interval. KPIs measured quarterly will be monitored in the management team meetings. All KPIs will be monitored in the management review. Other operative teams are included in the monitoring process, if considered applicable.
7. Target setting will be conducted yearly unless the situation requires a faster revision.

The set of KPIs suggested were chosen with the case company's current status in mind. The applicability of the KPIs should be reconsidered three years after implementation or sooner if the status suddenly develops or if there is a substantial change in strategy. Concurrently, available methods should be reviewed.

There might be indication to update the method, if the company experiences significant growth through, for instance, M&As. Consequently, the implementation must be reviewed and repeated partly or completely.

6.6 Suggestions for development

As has been discussed, the case company has adequate resources to introduce and implement a structured system for KPIs. However, there are a couple of key issues where further development would help to broaden the scope of the KPIs as well as facilitate implementation and monitoring.

6.6.1 Employee surveys

Firstly, as mentioned with Employee Engagement KPI, the case company lacks systematic human resource management in measuring personnel engagement in a congruent manner. Indicators such as personnel turnover and personnel wellbeing to the extent of measuring, for instance, the Bradford factor can be determined from available resources, but underlying issues which lead to dissatisfaction stay hidden. This aspect should be developed since disengaged personnel is less productive.

The case company relies significantly on its staff. No one is irreplaceable, but the absence of even one staff member can cause disturbance to operations. Short term absences can be managed, but resignations or longer-term absences can have a negative effect on the company’s daily functions and consequently on the bottom line with remaining staff having to adapt to the situation. Hence, staff engagement and wellbeing are of essence. The case company deploys vocational healthcare actively and relies on their expertise with, for instance, long term sick leave management. However, vocational health policies usually deal with apparent problems.

What should also be considered is that the organization is small with approximately 50 employees in the Finnish clinics combined. Collecting feedback with an internal system from such a small number might risk the anonymity of the answers consequently risking the reliability of the answers, too. Therefore, it is advisable for the case company to investigate and invest in an anonymous system of an outside source for measuring the wellbeing of the staff with at least, or including, Employee Engagement KPI.

6.6.2 Monitoring platform

Secondly, the case company is advised to consider implementing the monitoring platform for indicators available in the Integrated Management System. This would be feasible since it would not require significant investments and the system is already widely used in the company to document processes, manuals, and other operative documents. The IMS would provide a platform to combine information from currently used resources to an easily monitorable entity as seen in Figure 26 (Arter IMS Software).

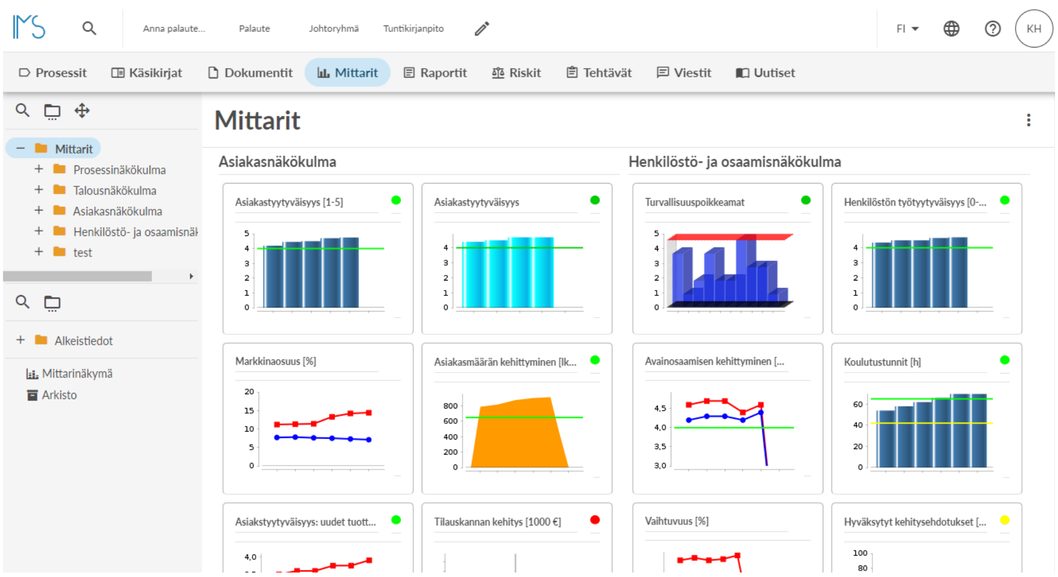

Figure 26. Arter IMS Indicators (Arter IMS Software)

6.6.3 Customer conversion rate after first visit

What should also be considered is finding or developing a system for following and measuring the conversion rate of customers after first visits to measure whether the first visit leads to a longer customer relationship. Conversion rate KPI measures the effectiveness of the company's marketing strategy but measuring the rate at which actual customer relationships are established would provide valuable understanding on the quality of customer service and the efficiency of the process. Measuring at unit and even physician or team level would reveal possible issues for the management to improve.

6.6.4 Process development and re-engineering

The case company has invested a significant amount of time and effort in process descriptions. Almost all operative and managerial functions have been stripped down to illustrate and articulate the sequencing and the components required. One HR/administrative process example can be seen in Figure 27.

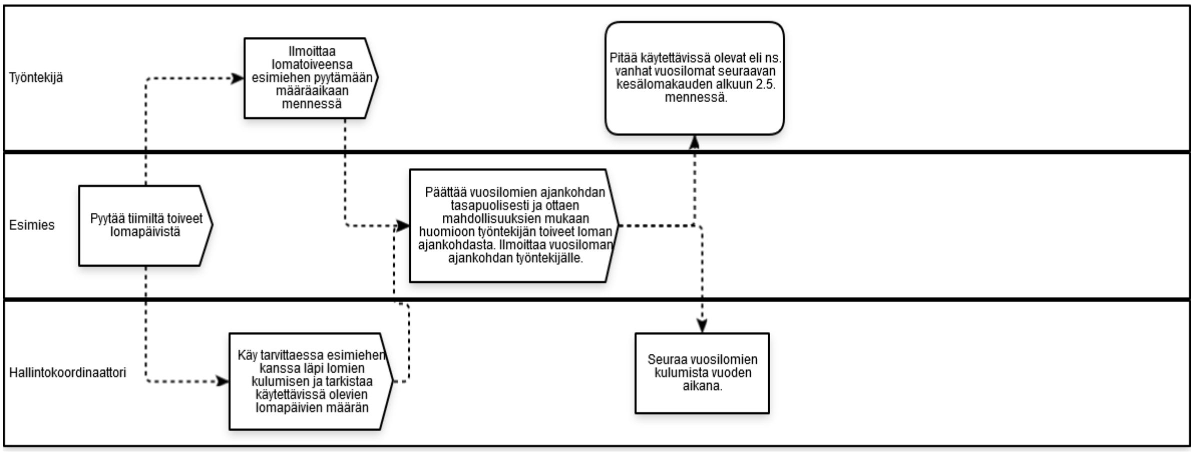

Figure 27. Annual holiday process in the case company

The starting point for process management has been quality and consistency, which are a high priority from the perspective of the organization, the employees as well as the customers. However, based on discussion with the case company's CEO, the processes lack managerial viewpoint. More specifically, the units have differing processes in regard to the customer interface as well as division of responsibilities which results in, for instance, deviations in statistics between units. Consequently, the statistics are not directly comparable between units. Thus, the customer processes as well as some other operative processes for laboratory and clinical procedures are advised to be reviewed from the leadership perspective to promote cohesion and unity.

6.6.5 Implementing Objectives and Key Results

During the development project a conscious choice of implementing traditional structure of KPIs was made. However, the method of Objectives and Key Results raised some thought. In the case company the method could be evaluated for use on the employee level and through yearly developmental discussions. For instance, an Objective for an individual employee could be learning a new procedure and related Key Result could be being able to do the procedure single handedly within the next 4 months. Should the construction of OKRs prove to be functional on the employee level, it could be considered as the system for tracking the performance of the organization, too.

7 CONCLUSIONS

Having a strategy that guides an organization towards the future is important, but it is at least equally important to evaluate how the goals set by the strategy are being achieved. This translates into measuring the performance of the organization in light of the strategic goals. Respectively, KPIs are worth nothing if the company lacks direction and strategy, which provide the foundation for both what should be measured and where the targets of the metrics should be set. With the case company of this thesis, the foundation was established as metrics for process efficiency, service quality, efficient use of resources, and productivity all contributing to profitability.

A carefully constructed and managed set of meaningful metrics enable the organization to assess whether the organization is on the correct path or not and take corrective action if not. This promotes quality and alignment throughout the organization both horizontally and vertically. Methods, such as the Balanced Scorecard, have been developed to facilitate the process. The methods provide a framework for the process and are viable when carefully carried out while considering the strategy every step of the way.

At best the chosen method validates the sustainable and efficient use of resources and assets of the organization to generate a productive and profitable organization able to realize its strategic goals and add value to employees and shareholders. Thus, whatever the method, the organization must constantly ask the question of how a specific metric validates and expedites attaining the strategy and desired goals. Achievable goals inspire the personnel resulting in productivity and engaged staff, and, consequently, profitability. With a system in place and advocated all through the organization, the efforts are directed to the same direction resulting in a cohesive organization.

Through participant observation and discussions with the case company management it was determined that the company has been successful in constructing its strategy as well as making progress in realizing it. However, as the case company has been growing significantly, an increasing need for a structured system with which to measure and validate successful strategy implementation appeared. The case company has followed some, mainly financial and scientific metrics, but a well-founded multi-faceted system was missing. With the suggested framework and KPIs the case company can implement a policy, which can be further developed as the company becomes accustomed to continuous measuring and evaluation.

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APPENDICES

Appendix 1. List of KPIs

Group / Indicator	Why it is needed	What is measured	Scope	Timeline	Reference	Quantitative target	Level of organization
OPERATIONAL KPIs							
Pipeline efficiency							
Queue time to first visits	To assess resource sufficiency and process efficiency	The waiting time to first visit	All customer groups	Monthly (turn of the month)	Previous month and average in previous year	Constant of decreasing	Unit w/ comparison between units
Process efficiency and reliability							
Nr of first visits	To assess process efficiency	The number of first visits by full time doctor per unit	All customer groups	Quarterly	Previous quarter and the average of previous 12 months	Constant of increasing	Per FTE doctor per unit w/ comparison between units
Oocyte pick-ups (OPU) and embryo tranfers (ET)	To assess productivity	The amount of each treatment performed by 1 full time doctor	All customer groups	Quarterly	Previous quarter and corresponding quarter in previous year	Constant of increasing	Per FTE doctor and per unit w/ comparison between units
Deviations	To assess quality and performance	The deviations detected in the lab/clinic	Laboratories	Monthly	Previous month and the average of previous 12 months	Targets set by the case company	Unit w/ comparison between units
Financial							
Growth and profitability							
Sales growth	To assess growth	The development of sales	All clinics	Monthly, year to date	Comparable period of previous year	On or above budget	Unit, area of business, company
Gross profit margin after salaries	To follow production efficiency and profitability including the development of cost structure of variable costs and salaries	The development of gross profit after salaries (i.e. variable costs, outsrouced services and salaries) in proportion to sales	All clinics	Monthly, year to date	Comparable period of previous year	% of sales on or above budget	Unit w/ comparison between units, selected areas of business, company level
EBITDA	To follow operational profitability	Profitability without the effect of depreciation, taxes or interest expenses of loans	All clinics	Monthly, year to date	Comparable period of previous year	% of sales on or above budget	Unit w/ comparison between units, company level
Return on investment (ROI)	Profitability, added value for employees and shareholders	The profit generation ability in terms of invested equity	Organization	Quarterly	Previous quarter and year end	Equal to or more than previous quarter	Company
Cash flow and liquidity							
Working capital ratio	To assess the cash position and liquidity	Whether the available current funds are sufficient to cover current liabilities (current assets by current liabilities)	Organization	Quarterly	Previous quarter	>1.2	Company
Sales turnover time	To assess efficiency of cash management	To measure how quickly sales invoices are paid	All clinics	Quarterly	Previous quarter	< 18 calendar days	Unit /w comparison between units
Customers & marketing							
Quality of customer service							
Customer satisfaction rate	To assess performance and determine areas of development in the quality of customer service	To collect and measure feedback from customers related to received service	All customer groups and service segments	Quarterly	Previous quarter and overall score of previous 12 months	Overall score of 4,5-5	Unit /comparison between units, overall company rate
Customer complaints	To assess performance and determine areas of development in quality and customer service	The amount and nature of complaints made by customers	All customer groups	Quarterly	Previous quarter and average in previous year	Target level to be established within the first	Unit
Quality of customer service							
Cost per lead	To assess the efficiency of marketing activities	The expense of attracting customers through digital marketing channels	All customer groups and digital marketing channels/active campaigns	Monthly	As applicable (i.e. same customer group in previous month or previous comparable campaign)	To be specified by the case company	Overall company rate
Conversion rate	To assess the efficiency of marketing activities	The rate at which potential customers visiting e.g. the company website become actual customers.	All customer groups and digital marketing channels/active campaigns	Monthly	As applicable (i.e. same customer group in previous month or previous comparable campaign)	To be specified by the case company	Overall company rate
HRM & employees							
Staff productivity							
Human Capital Value Added (HCVA)	To assess productivity and profitability	To assess the value employees add to the organization's profitability	All clinics	Quarterly	Previous quarter, yearly comparison to previous year total	Increasing rate	Unit w/ comparison between units, company
Personnel development and wellbeing							
Training days / FTE	To assess level of learning and personnel development	The number of days spent in training / full time equivalent	All clinics and employees	Semi annually-annually	Previous year (half a year)	Constant or increasing, equal	Unit w/ comparison between units, company
Employee engagement level	To evaluate commitment, productivity and profitability	The level at which the employees are committed to the company and its success	All clinics and professional groups	Semi annually-annually	Previous year (half a year)	Constant or improving	Unit w/ comparison between units, company
The Bradford factor	To evaluate commitment, productivity and profitability	The number of days absent as well as the frequency and duration of the absence	All employees	Semi annually	Previous half a year	Constant or decreasing	Unit w/ comparison between units, company