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Abstract

A significant challenge in most start-up companies, such as Huddly, particularly in the support team is that performance metrics, and indicators are not fully defined, developed and implemented. The organization has an informal and unclear team performance management where performance assessment and measurements are not strategically set in place which is essential in creating customer value proposition. Therefore, there is an apparent difficulty in providing the visibility of goals and objectives set across the Huddly Support team.

In this master thesis, it highlights the technique used in building performance management framework. It specifies drivers of performance impact analysis and how performance management framework could be a recommended solution that will help to meet that performance challenges. The technique developed through a rigorous and stepwise development process collaborated with the start-up company, Huddly.

The analysis procedure was based on the conducted status review of the operational improvement potentials of pertinent issues around the relevance of the model. The technique started by setting the scene by defining objectives and strategy. With the correct approach to objectives and strategy, the organization can provide a more focused perspective on the overall customer support control systems. An extensive state-of-the-art literature review was also undertaken to structure a theoretical causal map extracted from different industrial perspectives. To illustrate the applicability of the proposed performance management framework, the researcher made use of the strategy map and identified key performance indicators (KPI) in the different perspectives.

The researcher developed a creative solution to performance management framework based on the most eminent model being the Balanced Scorecard approach. The researcher defined a template/scorecard for performance impact analysis. It aimed to review and analyze the conceptualizations of the four perspectives of the Balanced Scorecard model and key performance indicators (KPI). It highlights the importance of performance management through assessment and measurement to achieve successful organizational management procedures from planning to implementation. Through this research project, it confirms that there is indeed a need for performance scorecard for start-up companies such as Huddly where the understanding of the different perspectives of the performance scorecard model is critical.

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Sincerely yours,

Katherine Mara Alinea

1. Introduction

1.1. Background

The Information technology (IT) sector is a fast-paced growing industry driven by exciting changes and new opportunities most especially to start-up companies. As many start-up companies are founded, the support team in this high technology organizations are under exceptional pressure (DBKay and Associates, 2003). Today, customers have become more demanding due to some product complexities which requires assistance. The promise of making customer support in the organization is increasingly compelling as a new generation of technology today focused on resolving customer problems and aims to satisfy customer needs. A significant challenge and problems in most start-up companies are that performance metrics and indicators are not fully defined, developed and implemented as the framework for performance management is not strategically in-place. There is an apparent difficulty in providing the visibility of goals and objectives set across the organization. The research makes it more exciting and essential to study these challenges in this master thesis.

In many successful organizations, performance management has been increasingly adopted as a central business strategy. It is the process by which organizations define, monitor and use performance indicators and programs to communicate to the managers and supports decision-making on a regular basis (Poister, 2015). It is designed to identify the ways and procedures in achieving organizational goals through regular assessments and feedback which leads to the improvement (Huprich, 2008) of an individual or team performance. However, research shows that for start-up companies, the framework for managing team performance can be a huge challenge as performance metrics frequently changes over time or may not be set at all. New goals, objectives and responsibilities get added regularly and it becomes absolutely more demanding to manage performance. With a limited number of resources for start-up companies, underperforming teams may disrupt in attaining its goals or could even throw the entire company off the trail (Deshpande, 2013). In customer support, customer value proposition and providing the highest degree of customer satisfaction is an important element in defining organizational success. Many scholarly researchers concluded that finding the perfect key performance indicators between the company and the performance management framework is a challenge. Additionally, it is imperative for start-up companies to focus on implementing strategic performance management frameworks effectively and efficiently.

As a part of the effort to find performance drivers, the researcher makes use of goal-setting and performance metrics using the Balanced Scorecard approach to address the problems and limitations in different perspectives. The method was initially developed by (Kaplan and Norton, 1992), to initially address traditional financial measures when organizational management assessed corporate performance. The model integrates different rules, translating strategy into action by while incorporating financial and non-financial perspectives (Kaplan and Norton, 1996). The executive management and support organization need to understand the business value it will get with performance management concerning customer problem resolution. The scorecard demonstrates the key metrics and factors that influence performance in financial goals such as new revenue sources, customer profitability and reduced cost within the support organization and the other perspectives. According to (DBKay and Associates, 2003), the key drivers in delivering a successful performance management framework in the organizations are primarily processed on how problem resolution is accomplished. Having a good performance management framework provides guidance which means faster and more accurate case handling, more effective self-service web portals and better inputs and feedback for improvement.

There are many different key performance indicators (KPI) that are suited for measuring performance. These metrics are the foundation of how well the team is performing and deliver value to the company and its stakeholders. A good performance according to (Tonchia and Quagini, 2010), are gauged according to customer satisfaction levels, customer value proposition, brand loyalty and among others which with all these combines increases company turn-over. Higher company turn-over is a significant indicator of good corporate performance as it reflects the organizations' capability to do business (Tonchia and Quagini, 2010).

One of the highest agenda of today's many successful companies especially to start-ups around the globe is the performance improvement. Studies showed that these available approaches have been adapted and practiced since the 1970s as a process to measure teams' work effectivity and efficiency. While, in the 21st century, this approach has been taken into high consideration by many firms that will output the most engaging return on investment.

1.2. Scope

This study focuses on the improvement of team performance in the organization. The analysis of the lack of performance management pitfalls was processed based on the current performance management measures of the organization. The information derived from data collection focuses on the Huddly Support team. The research study reviews theories and methods where performance drivers were identified and associated with the knowledge in the industrial case. The performance management framework highlights strategy alignment between the performance impact analysis and the organization. With the correct approach to performance management, combined with theories and methods, the organization can improve the industry or team performance using the template/scorecard as a reference. The recommended creative solution will help to meet performance challenges.

1.3. Objectives

The principal objective of this master thesis is to develop a creative solution to performance management framework. Performance management is defined herein as strategic thinking towards the organizations' goals and objectives for better use of performance data to encourage improvement. The objective of the research study is to provide a comprehensive status review of the performance improvement potentials and industry practices concerning performance impact analysis and outline a performance management framework. Specifically, the research study has the following sub-objectives.

1. To provide a comprehensive review of the relevant literature on the performance management framework and analyze its implication and practical use in the new industrial age.
2. To review the current industrial case performance management practices and researches to the modeling of the framework.
3. To develop key performance indicators (KPI) and strategic objectives, causal modeling, and strategy mapping.
4. To outline a conceptual framework for the performance management using a template/scorecard based on the most eminent model being the Balanced Scorecard approach and conceptualizations of the four perspectives.

The result of the research study will be beneficial to the industrial case. Using the template/scorecard, it will provide an approach to performance improvement for organizational functions and the dynamics and opportunities it could benefit the company. It will also help in creating a seamless work process in managing performance.

1.4. Limitation

The research study is limited to the Balanced Scorecard approach with a rough evaluation based on the available data. Therefore, the accessibility to gain concrete and accurate data is limited. The research study conducted is based on an actual industrial case of the start-up company Huddly. Some information might be of a specific assumption, some are from the organization's perspective and made use of the state of the art literature review as the basis. The concept of the thesis is also limited to the organizational view from the four perspectives in the Balance Scorecard model, develop strategic objectives, casual map, strategy mapping, performance measures (KPI) and initiatives to the points of view respectively. Some aspects of the performance management are not included in this master thesis, and the case study does not cover all industrial areas and other performance management tools. The creative solution developed is limited to the Huddly Support team and may not apply to other organizations. With the utmost importance, the majority of the information comes from academic knowledge found in books, internet sources and from the customer support team at Huddly.

1.5. Methodology

The master thesis is based on actual industrial case analysis, and all data were collected and analyzed from that case. The methodology of this research study is tailored to the needs of performance management framework. The challenges in the current performance management framework were reviewed and analyzed. It started by identifying the current problem and why such performance management framework is considered vital for the Huddly Support team. By providing a practical approach and addressed the challenge, the researcher developed a creative solution to performance management framework. The procedures and techniques used are based on public materials, previous research papers, academic knowledge and the collected information from the company. The research study developed a template/scorecard primarily, its recommendation for implementation strategy and attempted to find recommendations for future research.

1.6. Structure of the Thesis

The structure of this master thesis is divided into the following chapters.

Chapter 1 completed the first objective with the general introduction to the topic area. It provides an overview of the industrial case involving the study. It includes learnings from the different literature, lessons learned, and knowledge from different organizations and industrial sectors were highlighted.

Chapter 2 the researcher studied and reviewed the different state of the art review where the possible factors and key metrics of performance management were identified and investigated through different literature: digitalization, organizational teams, team performance, performance management frameworks and performance indicators.

Chapter 3 is the actual industrial case analysis was learned, looking at a real performance practice. The case looked into describing the organization, company overview and evaluate the current performance approach for the Huddly Support and study for improving performance management process.

Chapter 4 started by introducing a step by step procedure in developing a scorecard as a creative solution to performance management. It conceptualized strategy alignment by setting goals and objectives and conceptualizing causal maps. It looked into the relationship of the different perspectives, how the strategy and continuity happen and the perspective on how planning can be done. It conceptualized key performance index (KPI) system and strategy mapping used to develop a performance management framework using the Balanced Scorecard approach. The creative solution is stretched from medium to long term.

Chapter 5 is the implementation stage. The identification of the different perspectives and the development of the performance scorecard model will necessitate a revision of the current organization performance management practices. It is processed through the implementation of the performance management approaches to ensure that performance drivers become embedded into the organization as developed.

Chapter 6 constitutes the summary of the research findings identified from the operational improvement potentials, some recommendations for future scorecard development were proposed, and challenges encountered during the thesis project were identified.

Chapter 7 presents the conclusion of the master thesis, its relevance, and importance.

2. State of the Art Literature Review

2.1. Digitalization

The new era of customer support has evolved over the years, and when it comes to providing as such, customers prefer the most straightforward method. In the article by (Klie, 2013), simplicity in customer service is critical, and most of the companies nowadays aim to improve customer experiences generally by reducing the amount of effort for the customers to find answers to their questions and perform their tasks. Providing customer support becomes more digitalized in the appeal of web self-service, which most customers select as their communication channel. From a recent technology review conducted by MIT in partnership with Dynatrace in 2016, expressed that today, smart companies now understand that both digital and business performances are the same. The use of the full access range to digitalization made organizations to maintain its competitive advantage in optimizing digital customer experience. As such, according to Massachusetts Institute of Technology, different performance management and analytics have been widely used as a performance measure through social reviews, web analytics, online revenue trends and related ones (MIT, 2016).

An excellent performing customer support is also capable of providing real-time service and instantly available 24/7 or 24/5 customer support ground over by traditional agent assistance and online customer self-service portals. It marks a significant shift in customer approach towards the technology. Moreover, according to (Klie, 2013), a recent study conducted by the Forrester Researcher found that 72% of consumers, regardless of age, prefer self-service to making phone calls or sending email in resolving support issues. This means that the technology has evolved and opened its doors to digitalization that changed the customer behavior of all generations. Many scholars and reviews revealed that most businesses now realized that the Internet of Things implements the success of digital endeavors. It starts with the favorable outcome of the digital experienced delivered to the customers. The researchers (Setia et al., 2013), also implied that there is an increased motivation for establishing the customer-centric organization as the recognition of customer's role in service creation and delivery are growing. With this, effective performance management is governed by scalability, service quality, efficiency and other system health metrics. A senior writer, CIO from IDG (Boulton, 2017), added that the key to measuring digital success transformation is through significant digital performance indicator (KPI), used as a quantitative value to assess the performance of digital

business initiative. In such organization, digital technologies play an essential role as added by (Setia et al., 2013)

2.1.1. Modern Industrial Change

In the 21st century, modern industrial trends have changed tremendously. Globalization has rapidly changed in today's society in many different aspects of people's lives, business strategies, economic implications, teams, and organizations. Since 1973, according to (Jensen, 1993), the technological, political, managerial and economic forces have been developing the worldwide economy in the form comparable to the changes that were experienced during the 19th century Industrial Revolution. These drivers are the essential fundamental components and forces that work their way through changing the worldwide competitive market. The leading restructuring of the American business society which started in the 1970s continued in 1990 driven by a mixture of factors including the transformation in environmental and management technology, international competition, open international trade participation and among many others. These changes are meaningful in scope and effect which brought about the Third Industrial Revolution. The scope and the measure of changes over the past two decades enable the period of modern industrial revolution (Jensen, 1993).

As we continuously adapt to these changes, performance management and trends arise within the organization. A vital performance driver such as key performance indicator (KPI) has been identified in the modern industrial age. The management techniques initiated by the Japanese such as the total quality management, just-in-time production, manufacturing flexibility have significantly increased organizations efficiency where the implementation has been successful all over the world (Jensen, 2010). The technique created value creation and enhanced if costs can be shortened and better benefits can be delivered to the consumers (Kreng and Huang, 2011). Additionally, if the organization can better understand the needs of the consumers, it can learn a great deal about how customer satisfaction can be delivered and improve consumer benefits in the modern industrial age. Effective performance management is the creation and maintaining excellent customer support by building a customer relationship promoted through social technology.

To be effective in dealing with these drivers' team management in an organization is important to the company's' success. In the organization, the top management is the one responsible for

the proper segmentation of decisions and delegation to team members of the task to be performed. Task are delegated to different teams while good performing team is essential to the company success. Today, there are many ways a company can do to help team members improve performance. One common way is through coaching. It is conducted to ensure the learning curve of every member of the organization as to where and how to improve one's performance making the business/organization grew together. Additionally, the increasing use of technology and its different trends is also another driver which has a practical impact on understanding how performance management factor has brought a significant breakthrough. (Jensen, 1993) added that to be successful, the organization must continue to broaden its thinking to new topics and to learn and develop performance management framework.

2.1.2. Technology Trends

As technology becomes increasingly smarter, the shift of different customer support staff from face to face contact to a progressive non- face to face contact with remote or virtual sensors have changed rapidly (While and Dewsbury, 2011). In this manner, the new technology enables new services where web self-portals become more accessible. Customer support will be able to conduct virtually over the internet and discuss problem resolution efficiently. The authors also added, that mobile applications such as mobile apps or portable devices will boost in popularity and extend beyond the mobile devices enabling the appropriate application to download to support customers. There have been many research projects developed to make support easier to customers. (Pavel and Arnošt, 2012) illustrated that these research project for the technology trends uses information and communication technology (ICT) support for the implementation, monitoring and evaluation of activities in a customer-oriented process. During the last years, customer support is now associated with information and communication technologies that are dynamically developed and have been widely used a lot in various business areas. (Chalupová and Motyčka, 2008) points out that the trend in technology is progressively changing, bringing a competitive advantage on the market, to infinite necessity determining existence or inexistence of particular enterprise among organizations able to compete. In customer support, the technology is likely will become easier to gather related information and performance monitoring that will guide and support decision-making. (While and Dewsbury, 2011) emphasized that the incorporation of information and communication technology (ICT) into the business pathways will bring about the changes in customer support work not only regarding

providing service and problem resolution but also in the context of support with greater demands and remote communication skills.

Customer value perception which organizations offer in the form of good and services must be managed as illustrated by (Pavel and Arnošt, 2012). Providing a high degree of customer support with the impact of technology requires significant efforts. With the new technology trend, the objective is to create customer relationship that are beneficial for the organization and for the customer. The new way of supporting customers such as self-supporting web portals, support centers, remote support and among other support channels creates image for potentials and the initiative in making contact and support customer needs. Supported by (Klie, 2013), there are various elements to consider to fully support customers through digital channels. One of the most common technology trend in customer support is the web self-service. The success of the web self-service portals depends on the quality and quantity of the available information and ease of access. Nowadays, online customers are extremely impatient and information greedy, so the materials available to customer through the self-service portals requires to be concise and direct, even the feedback to the queries are not. Digital channels have evolved over the years in providing customer support. This would include remote assistance, virtual support system such as chatbot and unique phone systems.

2.1.3. Remote Support

Remote support is the product of today's digitalization. Based on the technology advances in the information and communications industry (ICT), a new style of operations and services called remote support has been introduced to improve work efficiency. A CEO of Fluid IT Services, Wade Yeaman, explained that remote support involves staff from the IT support team who can access the customers' system remotely from any given location. This type of service is highly in demand these days where for most firms, the network is the most important and foremost the difficult part within the IT infrastructure as explained by (Ulmer et al., 2001). The network thus needs to be maintained by a manner of support services to expand return on investment. A higher return on investment means that the organizations' performance is more exceptional as before. Technical specialists convey these support services either within the company or remotely. Added by (Werth and Richard, 2010), that instead of demanding dedicated technical resources at every location, skilled labor could also be deployed to facilitate the remote technical support services method. Studies showed that remote support has its

advantage and disadvantage with regards to business issues and providing more effective customer support.

The following advantages as summarized by (Yeaman, 2014).

a. Support needs are acknowledged faster than on-site support resulting in a quicker resolution to the issue.

b. Support cost is cheaper because issues are addressed and resolved instantly, so therefore travel is not required.

c. Availability of advanced tools such as remote access, chat sessions, phone sessions, remote monitoring and management that does not involve human interaction.

d. Remote support allows involved parties to scale support that meets the needs of the business without geographical limitation.

e. Onsite service is no longer required as the majority of support services and needs can be done remotely.

f. Geographical restrictions do not limit the capability of the support personnel to handle and access the customer's computer at anytime from anywhere.

Some disadvantages are described below.

a. Some people lose the warm feeling when support service does not go onsite.

b. Sometimes people feel they are less relevant due to the absence of face-to-face contact and addressing their needs personally.

These two disadvantages are far away than the advantages remote support can offer. Studies show that 70-80% of all technical support can be performed remotely. It means that issues are resolved much faster and is cost-efficient. In fact, tech target journalist (Booth, 2003), reviewed that in significant business decision management, remote technology is productive. Companies can save travel cost and office spaces; team members can have constant and up-to-date information about company products and services. Reporting and collection of information are faster, making the business become more responsive and enable more revenue. Indeed, this is also supported by technibble blogger (Whitty, 2011), who also stressed that remote support is beneficial for the company to be considered. Remote support offers billable hours, profit, efficiency, access to resources, geographic location, and proactive system maintenance. A remote support service research conducted by (Du, 2013), also mentioned that making use of the information and communication technology (ICT) and learning from similar successful

systems, the remote support system can be expected to optimize the existing system continuously. Therefore, in general, remote support not only offers flexibility and lower costs but it can also improve performance making it faster and more effective.

2.2. Organizational Change

Based on the book of (Poole and Van de Ven, 2004) many scholars in various disciplines explained as to how and why organizational change and innovation happens. Change is at heart within such significant development in the organization as personal careers, teamwork, making of organization strategy and the growth and decline of the business. Substantial and fixed phenomena such as the personal traits, organizational structure, and economic establishments are considered in a different aspect concerning the processes that characterize them. The authors (Poole and Van de Ven, 2004) further pointed out that understanding organizational change is to understand the organization as it is experienced today. While to define organizational change is to articulate what composes the organization as they are and to suggest how we may structure and restructure them. Also explained by (Tidd et al., 2005) that organizations widely differ, however, we have learned that some factors affect the organization. These factors embraced the organizational structure, the competent roles by critical members, staff coaching, and development, where work is organized (teamwork, projects, and among others.) and the range to which team members are concerned in innovation. Organizational change is increasingly about teamwork, collaboration, and the artistic mixture of different disciplines and viewpoint. Analyses by (Weick and Quinn, 1999) show that organizational change suggests an increasing concern with the rhythm of change, understanding the standard ratio, rhythm or work or activity pattern. Supported by (Poole and Van de Ven, 2004) which change can take diverse forms; it can potentially be planned or unplanned, accumulative or radical, and periodic or unprecedented.

Additionally, the authors argued that two changes that characterize organizational change. First, is the episodic change which is an opposition to continuous change on the reference of implied metaphors of systematizing, analytic frameworks, optimal organizations, intervention theories, and function of change agents. Moreover, episodic change follows the series unfreeze-changeover-refreeze, while continuous change follows the series freeze-rebalance-unfreeze. To better understand these two organizational changes, Table 1 shows the comparison between the two.

Characteristic	Episodic Change	Continuous Change
Metaphor of organization	Organizations are inertia-prone, and change is infrequent, discontinuous, and intentional.	Organizations are emergent and self-organizing, and change is constant, evolving and cumulative.
Analytic framework	Change is an occasional interruption or divergence from equilibrium. It is externally driven. It is seen as failure of the organization to adapt to a changing environment. *Perspective*: Macro, distant, global *Emphasis*: Short-run adaptation *Key concepts*: Inertia, deep structure, interrelated parts, triggering, replacement and substitution, discontinuity, revolution.	Change is a pattern of endless modification in work process and social practice. It is driven by organizational instability and alert reactions to daily contingencies. Numerous small accommodations cumulate and multiply. *Perspective*: Micro, close, local *Emphasis*: Long-run adaptability *Key concepts*: Recurrent interactions, response, repertoires, emergent patterns, improvisation, translation, learning
Intervention theory	Intentional change: Unfreeze, change, refreeze. Change is inertial, linear, progressive, and requires outside intervention.	Redirection of existing tendencies. Change is cyclical, processual, without an end date, equilibrium-seeking, eternal.
Role of change agent	Prime mover who creates change by finding points of leverage in organization. Change agent changes meaning systems, schema and punctuation.	Sense maker who redirects and shapes change. Change agent recognizes, makes salient, and reframes current patterns. Change agent unblocks improvisation, translation and learning.

Table 1: Comparison of Episodic and Continuous Change (Weick and Quinn, 1999)

The review shown in Table 1 suggested that both changes begin with the failure to adjust and that change never starts because it never stops as explained by (Weick and Quinn, 1999). While some things appear not to change, other things do. Most organizations already have team members who are already or in the process of adjusting to the new environment. The authors implied that the challenge here is to achieve acceptance of continuous change all over the organization. Also, explained by (Poole and Van de Ven, 2004) that the trends in the method or sequence of changes can be noticed over time. These trends can be time accelerating or be decelerating, and they can change toward equilibrium, oscillation, disorder, or randomness in the organizations' entity behavior. Thus, (Poole and Van de Ven, 2004) concluded that the basic concept of the organizational changes contains three ideas: (1) dissimilarity, (2) at a different temporal period, (3) between states of an organizational unit or structure.

Furthermore, (Weick and Quinn, 1999) that the research work suggested that to understand organizational change, one must first understand organizational inertia, content, tenacity, and interdependencies. The organizational change study also implied that change is not an on-off episode nor is its unforeseen effects on the degree to which it is projected. Generally, the change in the organization may affect effectiveness in team performance.

2.2.1. Industry Trends

The 21st century in today's industrial trends changed the pavement on how the industry evolves and operates within the organization. It has rapidly increased and changed in many different aspects as were conceptualized by (Poole and Van de Ven, 2004) in his basic ideas as previously illustrated. In an organization, a fundamental aspect of successful management is driven by respect among team members, shared leadership, business strategies, economic implications and team performance. In his book, (Frankel, 2008) believes that management organization is designed to enhance facilitation and administer productive activities. The principal objective of today's industrial trends is the effective management of change. It means that the new industry trends embrace change regarding process technology, markets, leading and team collaboration. Many organizations, especially in the information and communication technology (ICT) industries, where constant changes are inevitable, must adapt to these industry trend changes. These transformations could improve facilitation where work is much easier to perform, and team members can perform effectively (Frankel, 2008). The new industry trend is also a measure of team performance which many researchers used lean thinking management.

In his book, (Womack and Jones, 1997) presented results of an extensive benchmarking study on the automobile sector. In the study, the results showed the Japanese plants in Japan were far advanced on all performance measures compared to other plants. The lean thinking is composed of five stages.
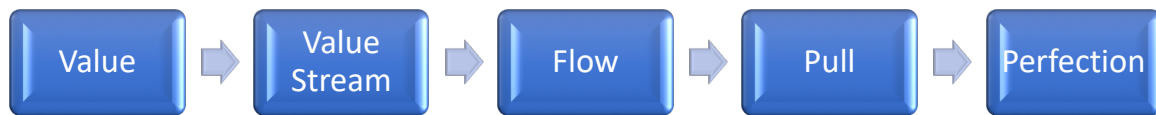
Figure 1: Lean Thinking Prescription of an Automobile Sector in Japan

Figure 1 is the five stages of lean thinking applied to the automobile sector in Japan in the study conducted by (Womack and Jones, 1997). First, is the need to specify the value defined by the customers concerning the product specifications, capabilities, and prices. Second, is the identity value stream which incorporates all the necessary actions to deliver the product to the customer. This stage shall identify the activities that create value as well as the ones that do not add value but are inevitable and those that do not add value and can be avoided. Creating a flow is the third stage. (Womack and Jones, 1997) argued that it is required a radical change from the traditional batch process. The expectation in such change is to reduce the development time of the product by a half, time to process an order by 75% and physical production by 90%. It opens the fourth stage by letting the customer pull the product as necessary. The final stage is the perfection. The five stages are undoubtedly good lean thinking which helps in performance management and at the same time results in excellent customer satisfaction.

The above study is also supported by (Katayama and Bennett, 1996) with the same concept from the authors of *The Machine that Changed the World* claim that the system of lean production is the remarkable way in the manufacturing industries and the new ear of change. The authors presented the essential elements of lean production which Toyota has best demonstrated such creation.

As shown in Figure 2, an essential feature is that fewer resources inputs are needed by the manufacturing systems which means less material, lesser parts, production operations are shorter, less non-productive period needed for setup, and many more. While there is a demand for higher performance output to achieve such as better quality, greater technical specification, greater product difference, and among others. Better performance output should result in higher customer satisfaction which will provide an opportunity for the lean company to achieve a higher market share compared to its competitors.

Lean management has been widely used in the new industry trends in different sectors including the information and communication technology (ICT). Meeting the demands of the society is vast as such industry competes for the cutting-edge and unique creation of innovative trends. Effective performance management must ensure greater team performance. According to (Rogers, 1986), today's competitive performance must have a good command of understanding of what computers can do as well its ability to function. Generally, the communication systems are widely embraced while its social effects and influences are being understood. These effects will contribute to the output of the team performance. In, the study conducted by (Fettweis and Zimmermann, 2008), it showed that the fundamental of today's knowledge-based society came from the information and communication technology (ICT) sector. They also added that innovations in this particular sector are becoming tremendously fast and the global use of ICT soared in the current years. Due to this rapid industry trends, the company's success is measured by how the involved members perform through grouping each member into a single entity called as teams. Each member works on a project which demands that all should perform as a team with one objective.

In a recent review by Harvard Business School, (Neeley, 2015) discussed that an enormous number of companies depend on the geographically dispersed workforce to achieve success in

today's global economy. However, this does not mean and guarantee that team performance is greater compared from the traditional one. The author added that teams are built to offer outstanding and practical expertise globally, linked with profound, local knowledge of the greatest promising markets. In fact, within the last decade, teamwork has to turn into a divine organizational change. Organizations have shifted to teamwork as a channel to improve effectiveness, competence, and productivity (Smith et al., 2010).

2.3. Teams

The most critical factor that drives value creation within the company are the different teams in the workplace. In any business, teams have become standard where each member works either on project-based or permanent assignments. In a recent study conducted by (Capsim, 2015), he stated that 90% of today's corporate leaders feel that the complexities of the problem demand teams to contribute practical solutions. Team collaboration can fuel creative-thinking and solve critical problems into positive and concrete business outcomes. To create a competitive team is to find the right skill set requirements to promote a good performing team. The increased skill requirements include both hard skill and soft skill that affects performance. It includes a better-educated workforce, focus development on performance improvement, a proliferation of integrated high-performance systems and strengthen human performance management according to (Bassi et al., 1997) which are the frameworks in assessing team performance. Performance management in the team is well-suited for supporting direct evidence of more complex skills of the team. It should be part of the learning process and not just a way to keep a good score but will also enable the team to show their capabilities. In any organization, the team's performance management is performed as a set of activities that requires to generate direct and indirect evidence of the knowledge, skills, and abilities of the team in a professional discipline (Pearson, 1996). Today, team performance is governed by the group of people who work together in the team classified as the virtual team or the traditional physically present team members. Moving forward, the different team classifications and its diversities in the workplace are studied.

2.3.1. Team Dynamics

Today, the fastest developing organizational unit is the single entity called a team. Team members bring unique knowledge overview, identify roles and responsibilities, problem-solving skills, break down barriers, focus on communication and most importantly pay attention

to goals and objectives. According to (Pearce and Conger, 2002), organizational researchers have taken an active interest focusing on teams. The teams' role of shared leadership and cognition to establish a profound understanding of team dynamics and team effectiveness. While (Pearce and Sims Jr, 2002) also added that shared leadership is found to be a more significant predictor of team dynamics and likely effectiveness.

Additionally, people who work in groups usually adapt to particular behaviors and role that plays a significant impact on team performance. Creating a good relationship between team members is essential. To make a competent team, team building is conducted to enhance social relationships that involve collaborative tasks. According to (Dyer, 2007), team building is a process used to diagnose team dynamics, organize plans and process to enhance team performance. Initially, team building was introduced in the 1940s and 1950s which grew out of "T-Group" of strange members that were gathered together to better understand individual's interpersonal behaviors as well as team dynamics. Such collaborative activity focused on improving efficiency, teamwork and team performance (Dyer, 2007).

Further asserted that in team building, different team diagnostic models could be used to analyze the problem within the team. Then arranged a specific goal and engaged in specific exercises designed to improve the team. After the team building activities, the team began to monitor its performance and involved in personnel management coaching to strengthen continued improvement. Based on (Homans, 2013), theory, when people share more activities together, the more diverse will be their interaction and the more robust will be their shared exercises and the sentiments. While, the more sentiments each member, have for one another, the more will be their shared exercises and interactions. It is a comprehensive theory based on activities, interactions while (Homans, 2013) is based on sentiments shown in Figure 3. With that, these three elements are explicitly related to each other. The team members activity interaction, as well as group share exercises and collaboration with one another, help accomplish group goals. We understand that in team dynamics the critical element is interaction because team members develop a prevailing sentiment for each other. For some reason, if any distraction is caused to any of the three elements, activities, interactions and sentiments, it is most likely agitating all the others.
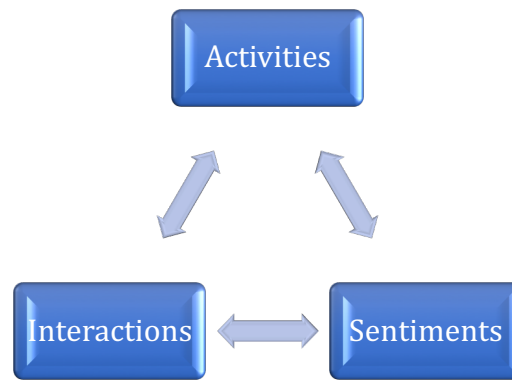
Figure 3: The Interdependence of Activities, Interactions and Sentiments (Homans, 2013)

2.3.2. Virtual Teams

Due to technology advancement, accessibility to different available resources and globalization has pointed out the development of teams spread across different countries and continents (Mullally and Stapleton, 2006). Since the late 1990's (Cramton and Webber, 2005), explained that virtual team as an organizational model has become more and more prominent. This type of team is now swiftly increasing where geographical location is no longer a hindrance to making a competent and good performing team. The virtual team is called as a geographically dispersed team, distributed or remote team. The most critical factor for proper coordination is to focus on communication. To collaborate towards goals and objectives in a virtual team, the team communicates digitally rather than an actual face-to-face. The abundance of communication technologies trends has been developed to mediate geographical collaboration: email, instant messaging, document sharing, video conferencing and many more (Hinds and Kiesler, 2002). Different communication technology is widely used such as video conferencing as the most effective way; so, therefore, team members can be anywhere in the world.

Meanwhile, the task assignments to remote team members are strategically essential and incredibly complex. Members rarely meet in person and administration of almost all interaction and decision making is conducted through communication technology. (Maznevski and Chudoba, 2000), emphasized that virtual teams be globally distributed groups of people with an organizational decree to create or implement decisions with international components and significance. Based on the study conducted by (Wong and Burton, 2000), they suggested that companies should contemplate situational demands, particularly in error and coordinate volume tolerance when crafting virtual teams.

According to (Jensen, 1993), overcapacity within the team is not only caused by the aspect of the changes in the environmental technology, but also by the changes in management technology and organizational practices. The tremendous improvements in the information technology sector and among others are changing the workplace in significant ways that affect the behavior in which people work and interact. Today, being in the same geographical location to work effectively together is far less valuable for people. Virtual organizations where people work together regardless of the location can be as effective in completing the task. Studies show that virtual teams increase efficiency and therefore further contribute to excess work capacity. Some experts argue, that if the virtual organization is correctly implemented with total quality management, just-in-time production and flexibility techniques can significantly make the team successful.

Today's industry trends have easier access to communication systems where managers build teams based on strengths and weakness rather than geography. (Jessica and Jeffrey, 1999), pointed out that the 21st century problems need a 21st century organization which team members do not need to be in the same workplace to be productive. The array of communication has changed to meet business demands. The authors added that virtual teams and network teams are the latest degrees of organizational evolution since the 19th century. The changing industry trends and advances in the technology no longer require the team to be housed in the same workplace. In fact, virtual teams are accepted as a smart way to systematize to a more flexible and cost-effective business operation where the basic principles are people and communication. For that matter, globalization of the marketplace alone makes virtual teams the essential operating units needed to obtain a competitive advantage in this ever and continuously changing business environment (Lurey and Raisinghani, 2001). As globalization fueled global virtual teams, cultural diversity is expected as this may contribute to task conflict and affect team performance.

A successful virtual team requires an appropriate interaction technology, and managerial challenges must be appropriately addressed. Table 2 shows the collaboration categories elaborated by (Chinowsky and Rojas, 2003) with spectrum category and interaction technology as a contributor in assessing team performance.

Spectrum Category	Interaction Technology	Description
	Phone/teleconferencing	Traditional, analog, oral communication
	Fax	Digital or analog text Communication
	Email	Digital text communication
Cooperation	Project Websites	Digital repository for project data and communications
	Discussion board	Electronic message centre for archiving text communication
	Work sharing	A synchronous data exchange and project solution process
Collaboration	Videoconferencing with data sharing	Synchronous discussion with ability to exchange project information
	Virtual teaming	Real-time data manipulation

Table 2: Spectrum of Electronic Interaction Technologies as Divided into Three Primary Collaboration Categories (Chinowsky and Rojas, 2003)

Additionally, (Wong and Burton, 2000) argues that virtual team is defined by these three characteristics.

Characteristics of Virtual Team

2.3.2.1. Team Composition

(Wong and Burton, 2000), asserted that this characteristic is defining role expectations and promote a team culture in a virtually designed team. Remote team members are mixes of different organizations, different functions and multi-cultural in the contemporary of today's organizational teams. To make the virtual team successful, the right players must be picked. Cultural differences and dimensions have the most significant effect on virtual teams. Reviews conducted by (Ferrazzi, 2013), revealed that the best composition of virtual team members is less than ten members. The ideal number is around four or five. Besides, the small core team is more likely to be successful, by making it limited while members provide input as needed as possible. While, the combination of different inputs from a wide range of expert individuals, could lead to a robust temptation. However, combining this all together could also mean too large to handle.

2.3.2.2. Team Context

It is defined by the increase in communication and availability among virtual team members according to (Wong and Burton, 2000). To produce a competitive team within the organization, proper communication is the key. The success of the virtual team is built with a constant contact among its members to make the project work a success. With this, different communication techniques are widely used. With today's technological advances, virtual team members make use of video conference tools, VOIP service, phone lines, instant messaging and among others. Therefore, it is less personal, and good comrade relationship is due to sizeable geographical dispersion, given the fact that team members do not personally meet at all or, chances are being improbable. Studies conducted by (Kanawattanachai and Yoo, 2007) over an 8-week period involving 38 virtual teams, showed that in an early phase of the project, the frequency and the capacity of the work-related communication among its team members plays a fundamental aspect in expertise location and where trust is built. (Suchan and Hayzak, 2001), presented arguments to emphasize the mindset towards communication which team leader establish the needed trust to effective team synergy. In general, communication is essential to perform the task effectively for virtual teams.

2.3.2.3. Team Structure

It is an implementation of parallel structure which every team member works for the same goals and objectives. Some recent studies called this character as a governance structure on which virtual teams has to withdraw from the traditional hierarchical method where only one leader takes command and control. To succeed, it is essential that team members share knowledge development and design collaborative understanding among team members (Leif, 2011). Additionally, organizing a clear line of accountability and consistent performance measures at the beginning is an essential driver to cross-functional virtual team leaders (Ferrazzi, 2013). An experiment was conducted by (Stewart and Barrick, 2000) to test hypothesis relevant to team structure found out that teams who primarily dedicated in the conceptual task, interdependence showed a union-shaped connection with team performance, whereas team self-leadership showed a positive, linear connection with performance. Overall, the result supports an ideal team structure and demonstrate how its task can control relationships between structural distinction and a team's performance.

2.3.3. Physical Teams

Another form of an organizational team is the traditional physical team. Unlike with virtual teams, face-to-face contact and personal connection are greater. Traditional teams are located in the same location with a fixed size, while members of this organization have interdependent competences. Over 200 years ago, work processes were divided into simple tasks that each team members performed at separate workstations. However, the revolutionary concept changed the way people work and organizational design for two centuries that started in 1970's and 1980's according to (Maxwell, 1997). Since team members are physically present, different methods on how to facilitate team effectiveness are introduced through training, coaching, and meetings. These methods help each team members to develop their repertoire of skills in handling problem-solving skills and decision-making ability (Maxwell, 1997). The mechanism of proximity in teams makes collaboration more manageable and focused in the way it helps interpersonal contact and awareness, and to assess the benefits of proximity. Moreover, it also showed that visibility and mobility affect the importance of collaborative work of initiating dialogue, building common ground and maintaining awareness of probable relevant changes in the collaborative and teamwork environment (Hinds and Kiesler, 2002). The brief identification of the characteristics of the traditional team is illustrated in Table 3 and the difference between traditional team and the virtual team.

Simple Structure	
Strength:	Fast; flexible; easy to maintain; clear accountability
Weakness:	Inappropriate as the organization expands; high risk in depending on only one person
Functional Structure	
Strength:	Economic concerning operation, minimal duplicates of people and equipment). Employees are grouped according to competence.
Weakness:	Managers could lose track of what is optimal for the organization in achieving functional goals; functional experts become insulated and have a limited understanding of what other units are achieving.
Divisional Structure	
Strength:	Results oriented; department managers are entirely responsible for products and services.
Weakness:	Activities are duplicated, and resources rise and decrease efficiency.

Table 3: Strengths and Weaknesses of Traditional Organizational and Design (Stephen Robbins and Mary Coulter, 2010)

	Traditional Teams	*Virtual Teams*
Composition	Static	Dynamic
	Organizational Boundaries	Integrated
Communication	Face-to-face	Communication technology
Structure	Command and control	Collective leadership
	Centralized decision authority	Decentralized decision authority

Table 4: Comparison between Physical Team and Virtual Team

2.3.4. Vertical Teams

Today, knowledge work at a greater extent is focus on the team-based environment. Without any doubt, tasks are becoming even more difficult having only one person to be the only expert to perform the job that needs to be done. Same is true especially in the engineering department where knowledge sharing is essential and to some other extensive collection of context in different aspects. We understand that in the traditional leadership, a leader is the one in-charge while the rest are followers. It is classified as vertical teams. The vertical team has a manager or leader responsible for giving directives, setting priorities and goals for the entire team. The team leader is known to be the ultimate commander for the team. (Samuel, 2010), emphasized that in this type of team, if one team member does not contribute to accomplishing their goals, it is the team leader's jurisdiction to interfere and resolve the performance issue. When changes happen due to team leader's priorities, involved team members must be informed. It is essential that team members be involved especially to new entrant companies. The success and performance of new venture companies are measured concerning growth in both revenue and employees. A recent study indicated that leadership is not only for one person, but team leaders and team members can share it. In fact, according to (Pearce, 2004), research proved that team leader dominates poor-performing teams while shared leadership or a more dispersed leadership results in high-performing teams. Although, this does not suggest that leadership as described is not needed.

On the contrary, a vertical team leader role is critical to the growing success of the different approaches of shared leadership to knowledge work. (Ensley et al., 2006), conducted and investigated a comparative influence study of vertical versus shared leadership to new venture teams of top management to start-up company performance. The study was conducted using two different samples comprised of 66 top management teams from fastest growing start-ups while 154 top management teams of randomly selected young venture companies. It was found

out that both vertical and shared leadership are significant predictors of new venture performance.

2.4. Performance

According to (Ark, 2013), performance assessment is an application of knowledge, skills and work practices that are significant and engaging. It is a form of measurement in which achievement can be and generally is determined through observation and professional judgment as described by (Stiggins, 1987). Additionally, the quality of performance assessments must be thoroughly planned and developed to coordinate to specific rules of assessment design. These assessments are an essential analysis of the effectiveness of good performing team which is essential to make the business grow and achieve its goals and objectives. The essential recipe for good a performance is characterized by effective communication and teamwork (Leonard et al., 2004). The complexity in the business organization, coupled with the inherent limitations of human performance, make it critically important that organizations should have standardized communication forms, and create an environment in which team members can express concerns. (Van Der Vegt and Bunderson, 2005), explained that in the multidisciplinary teams in the O&G industry, the authors examined expertise relationship differences with team learning and team performance under changing levels of collective team identification. In this experiment, it showed that teams with low collection identification, expertise differences were negatively relevant to team learning and performance; where high collection identification reflected positive relationship. (Van Der Vegt and Bunderson, 2005), concluded that supplement understanding of the process by which and the circumstances under which expertise differences may promote team performance.

Moreover, (Stiggins, 1987), evaluated that overall quality, organizational characteristic, content and other critical factors by employing consistent performance standards in the evaluation process in designing and development of performance assessments. The authors stressed out that when the key factors are used carefully, performance assessments can produce a reliable result. (Simons, 2000,), in his book, defined four essential aspects of systems for performance measurement and control.

- Convey information – data is the primary focus which supports good decision-making and managerial conduct

- Serve as regular routines and procedures – the information is documented in which recording, examining and distributing of information is established within the organization and is often based on fixed practices and at current times in the business cycle.

- Used by managers – organizations create an enormous amount of information and not all of which is precisely relevant to the daily work of managers. Customer satisfaction data and profit statement are the ones part of the managers' control system.

- To maintain or modify patterns in organizational exercise – relates to the efficiency and error-free processing of desirable exercise pattern.

These aspects are fundamental in measuring and controlling performance in all business organizations. We learned and understood that high-performance business institutions demand superior performance measurement and control systems that allow managers to perform their utmost potential within the organization (Simons, 2000,).

2.4.1. Performance Management

In the performance management and measurement book by (Poister, 2015), the author introduced a performance management framework shown Figure 4 in which organizes strategic thinking towards the organization's goals and supports decision-making towards better use of performance data to encourage improvement. The framework is a continuous cycle of the different critical organizational management process, in which all of the drivers with performance measurement interact with each other in significant ways. The continuous cycle shown in Figure 4 is based on the interaction among performance measurement and reporting, strategic planning and all other drivers as shown.
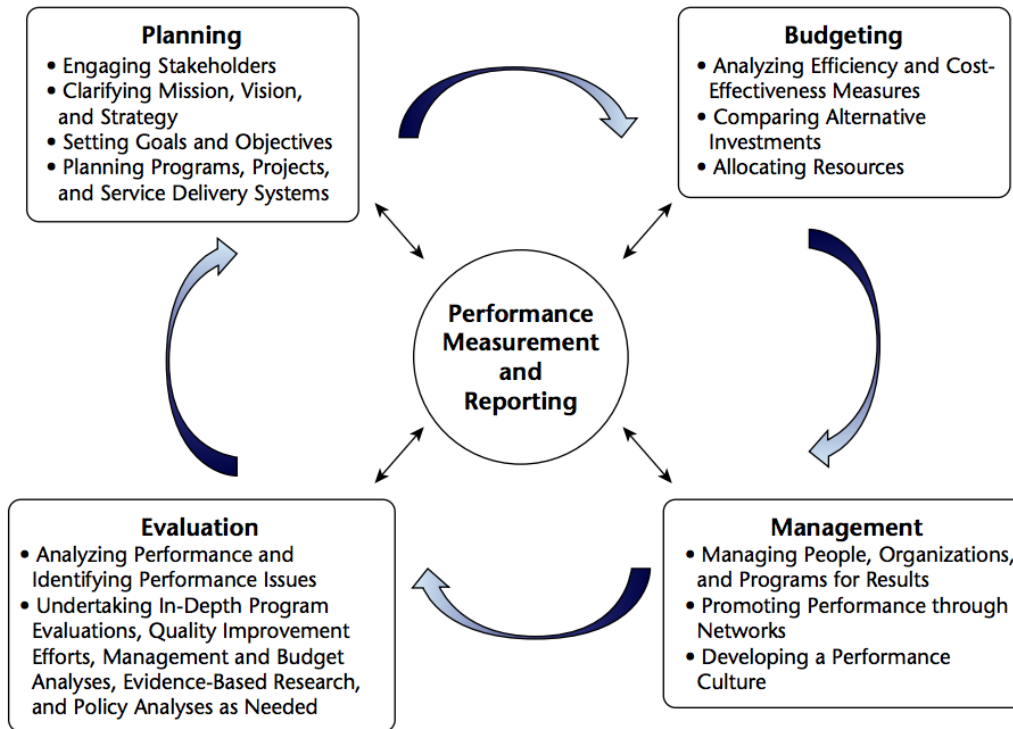
Figure 4: Performance Management Framework (Poister, 2015)

The essential feature of the performance management is the performance measurement and reporting (Poister, 2015), which is a unique feature that the author defines it as a performance-based managing approach. The continuity in the cycle is monitored at a regular interval using the critical set of measures and is reported to the decision-makers to conduct planning, budgeting, strategic management process and evaluation purposes from a performance perspective. The author added that the all other functions have an impact in the performance measurement process and this manner, the relationship between performance.

Performance management process are principally concerned with the interactions between the involved parties, yet they also present to what team members do about monitoring and enhancing their own performance, as well as performance measurement and recording the results of performance management plans and reviews (Armstrong and Baron, 2005). According to (Deshpande, 2013), in a small and start-up firms, managing team performance can be a considerable challenge. Setting a clear performance measures is difficult as employee's multi-hat. He added that frequent changes in metrics happens due to rapid growth. Whilst, new goals and responsibilities get added regularly. It makes it challenging to give team members individualized attention and keeping track of their job activities. That being said, performance management is definitely critical. In general, with limited resources for new entrants,

underperformer could heave the entire company while for substantial company's underperformer may disorganize the goals and objectives within their specific areas. From the government finance review (Mucha, 2009), performance management is a continuous efficient approach to improving results through evidence-based decision making, constant organizational learning and focus on performance accountability. Performance management uses proof from measurement to support organizational planning, funding and operations. Additionally, performance management, includes the coordinated set of actions an organization takes to implement objective information to management and making procedures in order to improve results. Further, the author implies that performance management signifies a critical distinction and active approach. On the other hand, it systematically uses measurement data to promote learning and improvement, and to build up the organization's focus on results. Performance management encompassed a cluster of practices designed to boost performance. To make performance management useful, overall assimilation of essential performance principles and practices into the organization is required. To realize this, (Mucha, 2009), identified the following benefits of performance management as follows:

1. Performance management is presented to the appropriate decision-makers to gather support, access authorization and secure resources.
2. In initiating performance management, the principal purposes and objectives are identified.
3. Defining performance management process.
4. Stakeholders must be assured of the facts and to communicate the plan in order acquire understanding and enlist support.
5. Reinforce organizational capacity through training, hiring or developing internal technical expertise; arranging performance management tools and supporting technologies; and collaborating in standard terminology.
6. Supervise the implementation process and make changes as necessary.

Performance management is not a mechanical method that can be set in the passage and routinely maintained. Experts of performance management have learned that accomplishing better results through the fundamentals and practices of performance management requires an asset in reinforcing sound technical approach, strong leadership, robust expertise and practices that continually strengthens the results-oriented approach.

Sequential Performance
Management Cycles

Capacity for
Learning and
Improvement and
Accountability

**Improved
Performance Results**
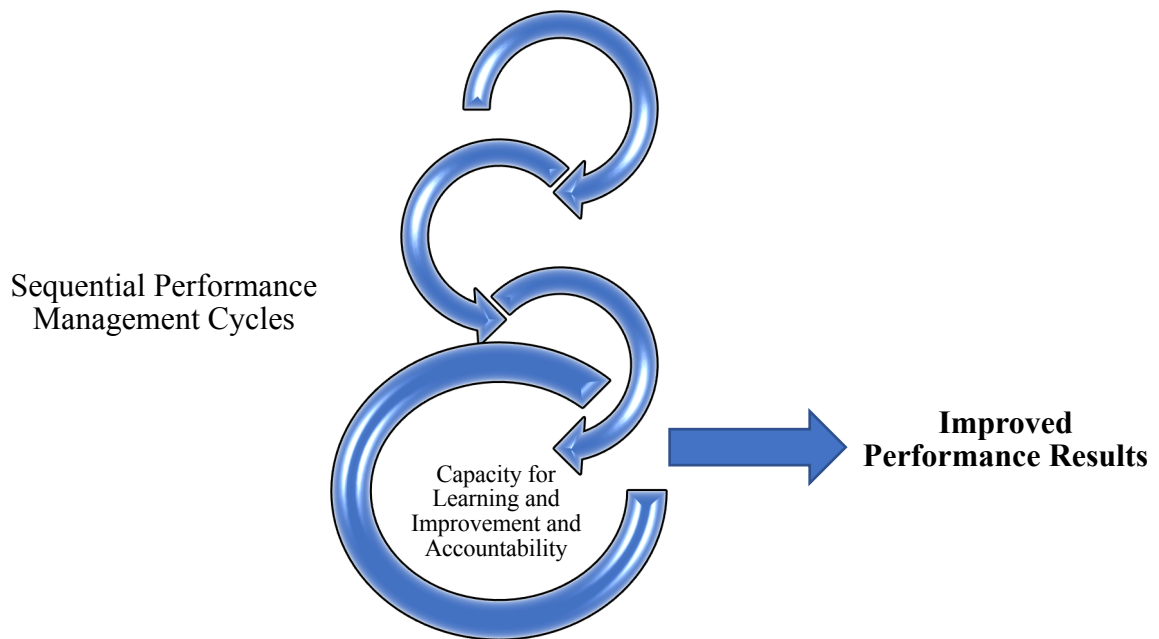
Figure 5: Benefits of Performance Management (Mucha, 2009)

As explained by (Mucha, 2009), Figure 5 shows the sequential performance management continuous cycles of planning, resource allocation, program execution, and evaluation (which provides data to support succeeding cycles), organizations continuously improve their capability to understand what works and what not, allowing them to improve results better. The author also added that investing in performance management has produced positive changes among the team members involved such as:

- The willingness to take another step of a more challenging task has increased.
- Greater confidence in the organizations scope to address and resolve problems.
- Better collaboration among groups, leading them to work and achieve organization results cooperatively.
- Pride and ownership in the organization's accomplishments have increased.
- Strong commitment to making a definite difference in the community served.

The continuous process of performance management was also supported by (Armstrong and Baron, 2005) in which he explained that performance management is not just a once a year event. It should be observed as an integral part of the continuing process of management which was based on a philosophy which highlights:

- the accomplishment of maintained improvements in performance

- the continuous growth and developments of competencies and capabilities
- that the organization is a "learning organization" as it continues developing and implementing the gained learnings from experience and the examination and determination of the factors that have resulted in high levels of performance

2.4.2. Performance Planning

(Armstrong and Baron, 2005), said that performance planning involves in setting the direction, analyzing performance agreements and personal development plans agreement. Mainly, it covers what has to be executed, how it executed and what is to be accomplished. The author specified that it is forward-looking that focus on the capabilities of what people have to do to achieve its utmost potential and unfolding them to explore what they are capable of. Performance planning helps people to become motivated by providing them the opportunity to perform and develop and being recognized. Most importantly, it is equally concerned with people development by helping them to learn and catering them with the support they want to perform well, now and in the future. Supported by the management business concept (MBASkool, 2008), explained that performance planning is a formal organizational process for reviewing, identifying and planning the organizational as well as the individual goals which team members can or would accomplish in the following assessment or review cycle. The performance and planning are both executed by the employer and the employee through a proper development plan.
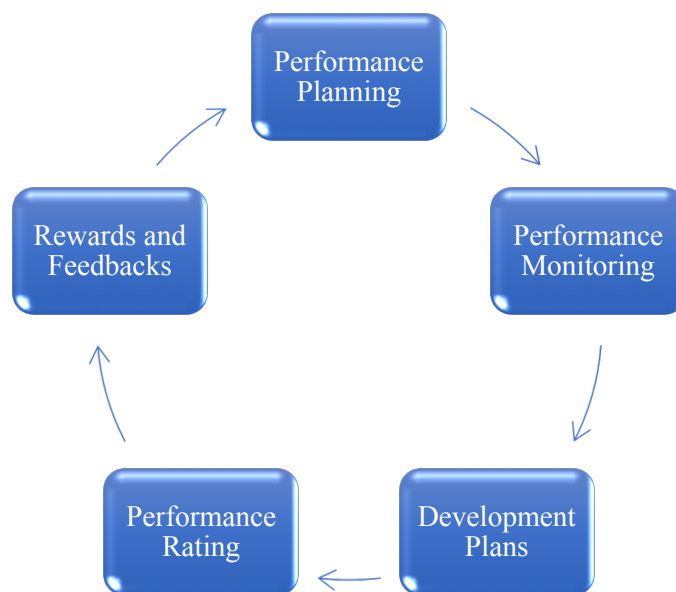

Figure 6: Performance Planning Process (MBASkool, 2008)

In this research study, our focus is based on team performance management with adequate planning which is decided by the people involved in the management, team members and the team supervisor working together. It includes the performance expectations and the development objectives to be achieved are determined together during the assessment period. During this period, the goals, objectives, and expectations are discussed. The Management Business School (MBASkool, 2008), expressed that this process helps to enhance the communication and review career development plan. The objective and the demand for performance planning is required to:

1. To agree on the team members job responsibilities
2. To eliminate any ambiguity of the goals and objectives that need to be accomplished
3. To recognize the skill sets required for performing the job
4. To create a suitable performance and career development plan for the team members

As previously mentioned by (Armstrong and Baron, 2005), the writers also identified and supported the above statements with the following:

- Setting the directions – is directed to the performance agreement which is the base of performance management cycle.
- The performance agreement – is materialize from performance reviews. The expectations are defined, the results to be accomplished and the skills, knowledge and required competence to achieve these results. It is imperative that these measures and required proof should be recognized and fully agreed upon now because they will be used accordingly by managers, team members and collectively by teams to monitor developments and demonstrate achievements.
- Personal development planning – the preparation and personal development plan agreement. It may involve formal training, but more importantly, it will integrate a broader set of development activities such as self-managed learning, coaching, project work and work growth and enhancement. These activities are conducted to improve the team members ability to perform and to allow them to take on ownership of more extensive responsibilities.

Performance planning plays a vital role in business organizations today. It must have varied and adaptive cultures which support innovation, customer orientation and entrust of that most

valuable resource – people according to (Younker, 2003). The success of the organization is the result of a good performing team. By all means, that if performance improvement plan is effectively unified, it will deliver as a motivational vision. Furthermore, the author emphasizes that the organization define "future state" through a process called integrated performance planning.

Current State	Performance Plan How we intend to get there	Future State
• Who we are now • What we are doing now		• What we want to be • What we want to be doing
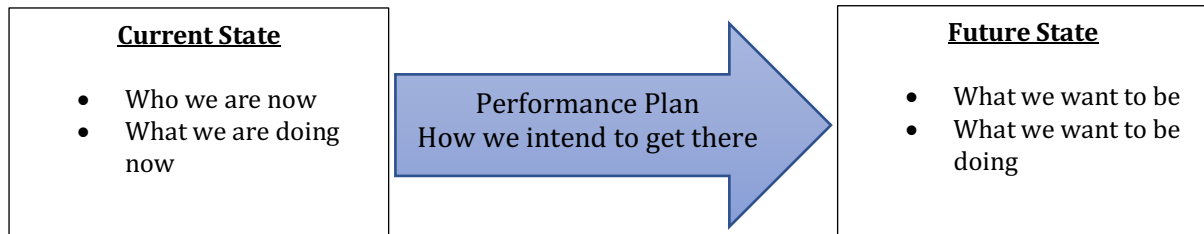
Figure 7: Integrated Performance Planning (Younker, 2003)

Figure 7 showed that visioning process is the key to an effective integrated performance planning. This tool provides the organization with a proper and systematic approach on how performance can be assessed. Teams' performance assessment enables members to show what they know and can do. The following are the benefits of performance assessment which is beneficial for the team and the organization based on research.

- Recognize that team members can articulate what they know and can do.
- Evaluate work progress as well team performance.
- Evaluate the team as a whole.
- Involve team members in the process of assessing their own development.
- Establish a framework and contribute meaningful planning and design for organizational development.
- Give team members a specific, direct collaboration to enhance professional skills.

This process has been practiced by many organizations nowadays. Many scholars have been investigating the effects of formal strategic planning process on small firm performance for over twenty years. (Schwenk and Shrader, 1993), have drawn analysis on how strategic planning process affects performance in the small firm. The results suggested the general relationship between formal planning and performance across studies is positive and meaningful. Generally, the authors concluded that strategic planning is a favorite activity for small firms.

2.5. Performance Framework

Designing a performance framework can be difficult. Different approaches by many organizations have been developed over the past decades. (Kaplan and Norton, 2004), elaborated that organizations today create sustainable value from leveraging intangible assets. These assets drive long-term value creation. Today's organization is facing more challenging yet competitive environments which many aspects of monitoring and management if performance must be in place towards excellent future outcomes. Many performance frameworks have been used in the different sector. This research study makes use of the of the Balanced Scorecard and strategy maps as the performance management framework which is explained in the succeeding sections.

2.5.1. The Balanced Scorecard (BSC)

The Balanced Scorecard has been widely used since it was introduced by (Kaplan and Norton, 1992) which has been a useful performance framework providing managers an implementation tool they need to guide to future competitive success. Manufacturing and service companies widely adopt the concept, different organizations and government entities since it was introduced in 1992 according to (Kaplan, 2001). The Balanced Scorecard is the new synthesis model for financial measures for an industrial age. It helps to guide and evaluate the progress of the information age companies by creating a future value through investment in customers, company suppliers, organization employees, business process, technology and innovation (Kaplan and Norton, 1996). Additionally, the Balanced Scorecard provides the framework of the objectives and measures view of the performance from four perspectives: financial, customer, internal business process and learning and growth. The conceptual foundation of the Balanced Scorecard according to (Kaplan, 2010), was based from company research project to study performance measure whose paramount role in value creation is played by its intangible assets according to Nolan Norton Institute, 1991.
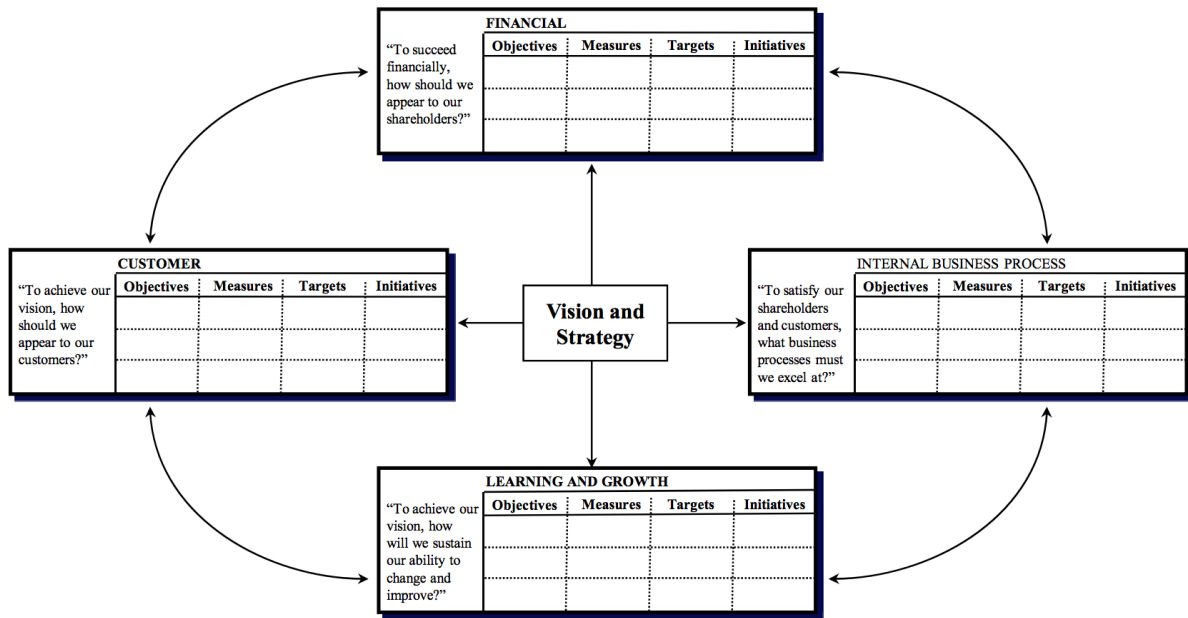
Figure 8: The Four Perspectives of the Balanced Scorecard (Kaplan and Norton, 2001a)

The Balanced Scorecard has developed over the years since it was introduced. Since it has been widely used, (Kaplan and Norton, 2004), believed that if an organization were to improve intangible asset management, they had to incorporate intangible asset measurement into their management systems. From a prominent British scientist, Lord Kelvin emphasized once said that if one cannot measure it, one cannot improve it (Kaplan, 2010). Figure 8 illustrates the translation of vision and strategy using the four perspectives of the Balanced Scorecard which generally maintain financial metrics as the absolute measure resulting in the company success. Apart from financial metrics, (Kaplan and Norton, 1992) also presented supplementary perspectives – customer, internal business process and learning and growth as the drivers for developing long-term shareholder value.

2.5.1.1. Financial Perspective

(Kaplan and Norton, 1996), the Balanced Scorecard approach is parallel and consistent with the following.

- Employee training investments are leading to service quality improvements.
- Better quality of service leads to higher customer satisfaction.
- Higher customer satisfaction generates increased customer loyalty.
- Increased customer loyalty leads to an increase in company revenues and margin.

2.5.1.2.   Customer Perspective

(Kaplan and Norton, 1992), summarized that the customer perspective creates value when combined with other intangible and tangible assets. While this intangible asset value is dependent on the organizational context and strategy, sometimes it also has value for themselves. In the example by (Kaplan, 2010), a goal-oriented sales strategy could need knowledge about the target customers, training for new sales employees, new databases, new systems of information, new organizational structure, and new motivation and compensation program. The Balanced Scorecard involves metric outcomes as well to determine when the long-term strategy turns out to be delivering expectations and the desired results.

2.5.1.3.   Learning and Growth

The learning and growth perspective according to (Kaplan and Norton, 1996), is a more generic name instead of naming it as an employee or people perspective. It means that this perspective is purely not a stakeholder approach. In the Balanced Scorecard, the employee objectives continuously reflect in the learning and growth perspective because it is necessary for the company and organizational strategy and not because it is labeled as a stakeholder itself.

2.5.1.4.   Internal Business Process

The internal business process perspective as part of the Balanced Scorecard according to (Kaplan and Norton, 2003) includes performance communities when such performance does contribute to the distinction in the business strategy. Many companies use the strategy map and the Balanced Scorecard to identify the strategy that attempts to create economic, environmental and social value simultaneously and to balance as well as manage the pressure among them (Kaplan, 2010). To summarize, the theory of the stakeholder was useful to present a deep company mission beyond a confined, short-term shareholder value-maximizing concept. It expanded the companies' awareness about how failure to integrate stakeholder preferences and expectation can threaten an enormous focus on short-term financial results. However, with the Balanced Scorecard, it combines the central interests of the stakeholder, within a consistent strategy and value-creation framework when outstanding performance with those stakeholders is crucial for the strategy success (Kaplan, 2010).

2.6. Strategy Maps
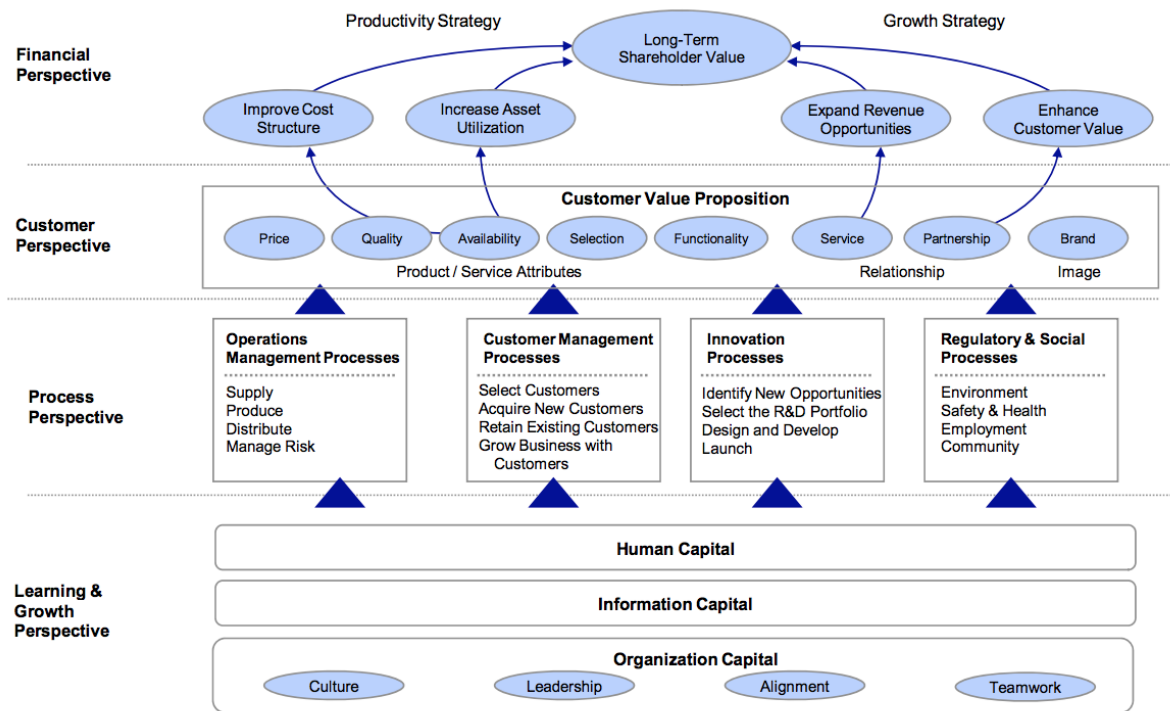
Figure 9: Linking Strategy Maps and Balanced Scorecard (Kaplan and Norton, 2004)

Figure 9 explains the link between the Balanced Scorecard as developed by (Kaplan and Norton, 2004) described the strategy map as the causal relationship between strategic objectives, a creative chain of the strategic objectives including.

- Better training for employees in quality management tools resulting to a reduced process cycle times and process error.
- The enhanced process leading to a shorter customer lead times.
- Better on-time delivery and lesser customer defect experienced.
- The improved customer experience quality leading to a higher number of customer satisfaction, retention, loyalty, repeat purchase which eventually drives higher revenues and company margins.

All the objectives in the strategy maps are linked to the cause and effect relationships. Starting with the company employees, continuing through business process and customers, and concludes a higher financial performance. In the several books by (Kaplan and Norton, 2004),

the concept of causal linkages among the objectives and measures of the Balanced Scorecard led to the development of a strategy maps as articulated by the authors. The Balanced Scorecard project initially developed by (Kaplan and Norton, 1992) build a strategy maps of strategic objectives only after the metrics are selected for each objective. Among many other researchers, companies nowadays are now more focused on how to make a good strategy using the Balanced Scorecard and strategy maps to perform well in the market and a solution to performance measurement problem (Kaplan and Norton, 2001a).

2.7. Performance Indicators and Frameworks

Key performance indicators are widely used as a quantifiable measure to evaluate the organization's success by meeting its performance goals and objectives. (Fitz-Gibbon, 1990), defined the key performance indicator as an item of data collected at regular interval to track the system performance. The author added that these indicators are imperfect measures, error-free or problem definition and analysis, but they are the critical indicator to the functioning of the system and keeping KPI is one aspect of quality control. In every project, the ultimate goal is the projects' success, and this statement means differently to different people (P.C. and P.L., 2004). Many researchers and writers take into consideration time, cost and quality as the most important criteria while others suggest that success in a particular project is something more complicated. Moreover, a set of key performance indicators (KPI) are measured both objectively and subjectively are established through a thorough literature review. According to (Parmenter, 2015), the organizations usually start to develop a set of key performance indicators (KPI) system without a solid groundwork pointed out in the implementation plan. In his book, the author introduced the foundation stones for implementing key performance indicators (KPI). The seven foundation stones should be laid out before an organization can successfully develop and make use of the key performance indicators (KPI) in the workplace.
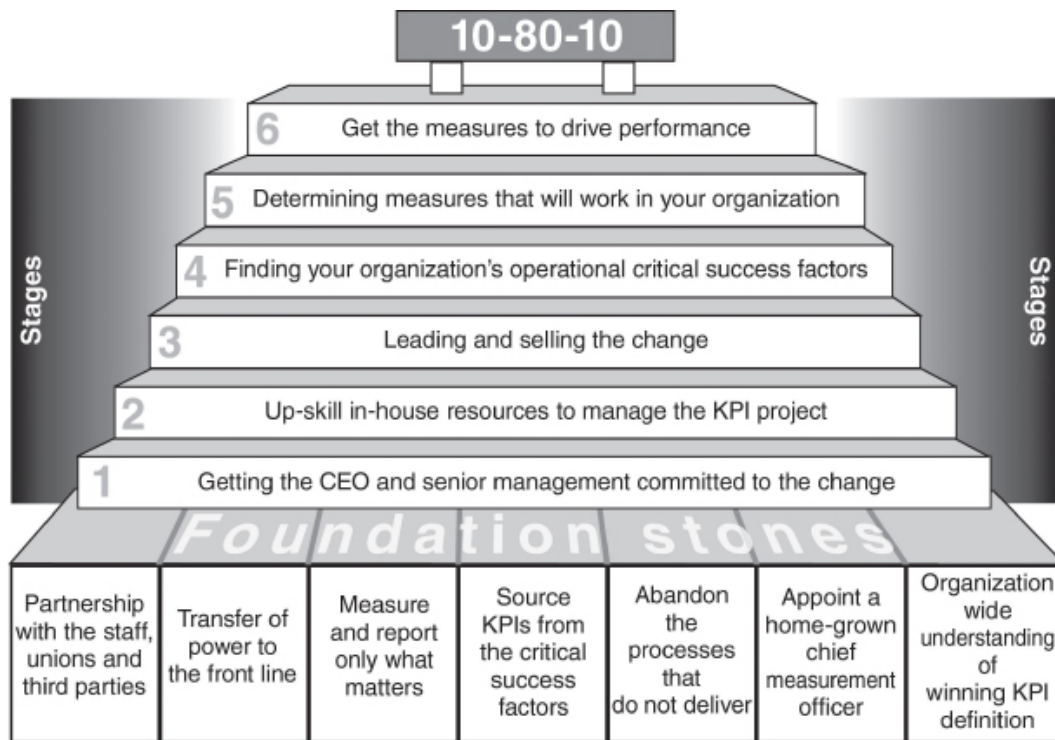
Figure 10: Foundation Stones for Implementing KPI (Parmenter, 2015)

The success or failure of the key performance indicator (KPI) that an organization may use is determined by the presence or absence of these seven foundation stones shown Figure 10 as explained by (Parmenter, 2015) below.

1. Establish a partnership with the people involved, e.g., staff, unions or third parties. Allowing the upper management to adopt and commit to changes.

2. Transfer of authority to the front line. Getting the in-house resources to manage the key performance indicators (KPI) project.

3. Measure, address and communicate only what matters for performance success by leading the change.

4. Source key performance indicators (KPI) from the organizations' operational critical success factors.

5. Disregard any processes that do not deliver and drive success.

6. Appoint an internal chief measurement officer who could review and analyze performance.

7. Organization-wide acceptance of the of the winning key performance indicators (KPIs) solution.

Several performance indicators and techniques are widely used today. Several performance measurement systems or frameworks has its supporters. As previously discussed in the state of the art review, this research study focused on the strategy maps as a set of objectives organized by the Balanced Scorecard perspective in driving performance measures. According to (Murby and Gould, 2005) a scorecard programmed is a requirement for the success. Indeed, any other performance measurement framework is an absolute and unequivocal commitment of the management at the most senior level. Although, commitment is secured and despite the considerable dispense of effort and resources, not all organizations have been entirely successful in developing and implementing the Balanced Scorecard approach.

3. Case Analysis

3.1. About the company

Huddly is a vision technology company that integrates Scandinavian-design hardware, software and artificial intelligence (AI) with machine learning and deep learning. It creates an innovative product to make a solution to collaboration experience better. Founded in Oslo, Norway in 2013 and has its main headquarter in Oslo, with offices in Palo Alto, Austin, London and India and has customer support center in the Philippines. It is a start-up company and passionate about creating new markets and value networks. Huddly turned its focus rapidly on high-technology customer support and applied its technology to some of the most highly respected technology company such as Google and Crestron. It invested a significant portion of its resources in research and development, science and engineering giving it a strong technology portfolio. It has a global team of investors and 27% prestigious research grants.

3.2. Huddly Overview

Today, Huddly developed and innovated an intelligent software-upgradable product that powers the world's smallest smart collaboration camera, the Huddly GO. Huddly offers products that focused on resolving the video collaboration problems. It aims to provide a better collaboration experience with a high-quality, easy setup, wide-field- of view, flexible and portable smart camera. Huddly offers a suite of product and provides knowledge-empowered customer support. These services explicitly focused on problem resolution and attaining to customer's product needs.

- Self-service web portals – it is the frequently asked questions page (FAQ) designed to allow customers to access information and perform step by step procedures without any interactions with a customer support representative.
- Huddly Support Center – designed to help a wide range of customer support services assisting customers in making a cost-effective and correct product use.

Along with these support solutions, Huddly sells an industry solution product for video conference applications including high-technology customer support. The support services are designed to help customers able to resolve issues, on a larger and more efficient scale.

3.3. Evaluating Huddly: Key Technology Requirements

Knowing the organization's score against the vital technology requirements as mentioned above is the current challenge. The self-service web portal offers quite comprehensive functionality, combined with automated guidance systems and search functionality that enables the site visitor to enter keywords without forcing them to scan the entire database. The knowledge-based platform is designed to explicitly integrate the traditional content knowledge base for delivering customer support. Moreover, the customer support center offers a wide range of support services to the limitless potential of the product.

3.4. Statement of the Problem

The operational improvement potentials have been identified by the researcher which includes the following but not limited to:

- Performance progress are not measured.
- The structured organizational strategy is less defined.
- Development plans and performance strategy solutions are not explicitly implemented within the customer support team.
- Lack of strategy in performance review and assessments.
- Inability to track customer satisfaction rate and call resolution rate.
- Templates/scorecard on different perspectives is not identified.

Currently, the organization has an informal and unclear team performance management where performance assessment and measurements are still not defined which are essential in customer value proposition in particular. Given the fact that it is a start-up company, it is not a surprise that such method is entirely unavailable. Performance management in every department is an essential factor. It will help each team to overview both performance and improvement potentials. The output of the performance management would serve as a building block for optimizing strategies and how the effort performed more efficiently and effectively. It would be an excellent framework for teams to work cooperatively and strategically.

3.5. Current Customer Support Strategy

Huddly Support includes support services from its self-service web portals and support center in which customer support is delivered via the web form, social media, email, and phone. It is

an integrated way, allowing customer experience to move quickly from one channel to another. Although the current support strategy has been active and less defined, it is, unfortunately, difficult to manage team performance as strategy mapping is unclear. The lack of performance template/scorecard for the customer support makes it difficult to determine how well the organization works towards value creation on different perspectives. The focused on providing excellent customer support is the organization's goals and objective. It includes a structured support strategy, which is left unmanaged concerning performance overview within the customer support team.

A concern about service quality to customers is always at its highest degree. In evaluating team performance, the criterion, metrics, key performance indicators (KPIs) is currently not in place. The organization must act to develop organizational performance management plans, establish performance goals that are objective and measurable, establish performance indicators in measuring outputs, service levels and among others. Performance management should be aligned with the goals of the team performance to the goals of the organization.

3.6. Organizational Structure

Huddly is a people company that uses its technology as an instrument to bring each employee together. An organization in which people work hand-in-hand for the same objective. As an entrepreneurial start-up, it has a flat organizational structure, and while it grows, it will lead to a much more expanded structure with different levels. Huddly is a combination of physical and virtual teams in different parts of the globe. The former is located in its headquarter in Oslo while the latter is based in US, UK, India, and the Philippines. Due to increasing global competition, every team member in each department are experts, well-experienced and highly skilled in their field. The organization's team members are fast, flexible and quickly adapts to change and responses. It is composed of a diverse team on a cross-cultural and multi-cultural organization.

3.7. Team Composition

(Kozlowski and Bell, 2001), argues that team events reflect the number and the type of people on the team. At Huddly, the team processes and results are strongly influenced by the combination of the member attributes, in which such effect can build more effective teams. For instance, a person who likes selling products and services has proper public relations

management and is most likely be part of the commercial team such as sales or marketing. Same with a technical person who likes attaining technical concerns and customer success is a perfect fit for the support department and so on. According to the research by (Moreland and Levine, 1992), there are three dimensions that makeup of team composition. At Huddly, as a start-up company, these dimensions are relevant. First, demography, size, personality, abilities, and skills are the different characteristics of a team that each team member can be studied from. Second, is the assessment within the group of the distributed characteristics. Sometimes, unique configurations are measured as well in addition to central tendency and variability measures. Lastly, is the different analytical view is considered. The team composition at Huddly is unique on its own. Table 5 below shows the different department of the company and how each department is labeled and described.

Department Codes	Number	Description
ENG	100	Engineering
GA	200	General Administration
MAR	300	Marketing
OPS	400	Operations
PRO	500	Product
SAL	600	Sales
SUP	700	Support

Table 5: Huddly Department List

3.7.1. Team Size

Department Codes	Headcount	Description
ENG	25	Engineering
GA	4	General Administration
MAR	3	Marketing
OPS	4	Operations
PRO	1	Product
SAL	4	Sales
SUP	5	Support

Table 6: Huddly Department Headcount

The total headcount of Huddly is currently 51 employees composed of 78% men and 22% women. Table 6 shows that the engineering department has the highest headcount consisting of the different engineering experts for software and hardware. The department is composed of

vertical teams. Each has a team manager and a team leader responsible for giving directives, setting priorities and goals for the team. As explained by (Samuel, 2010), that this type of team creates a vision and set success factors according to its primary goal. As a team, information sharing, coordination towards activities and supporting each team members and their functions is currently being practiced. In the paper by (Kozlowski and Bell, 2001), they pointed out that researchers (Katzenbach and Smith, 1993) implied that teams should have at least a dozen member while (Scharf,1989) recommended that seven members in a team are the best size. (Rogers et al., 2010), supported the recommendation that the perfect team size is seven. Their study emphasized that fewer team members decrease the number of decision nodes in a network which increases efficiency. It also means that smaller teams show to be more flexible in an informal structure which is a considerable advantageous concerning decision-making. The idea is also supported by the Ringelmann Effect commonly known as social loafing. Figure 11 illustrated that the study concluded that each group members tends to become increasingly less productive as the number of team members increases. It is due to the diffused responsibility that decreases motivation together with their commitment resulting in a decline in the average output.
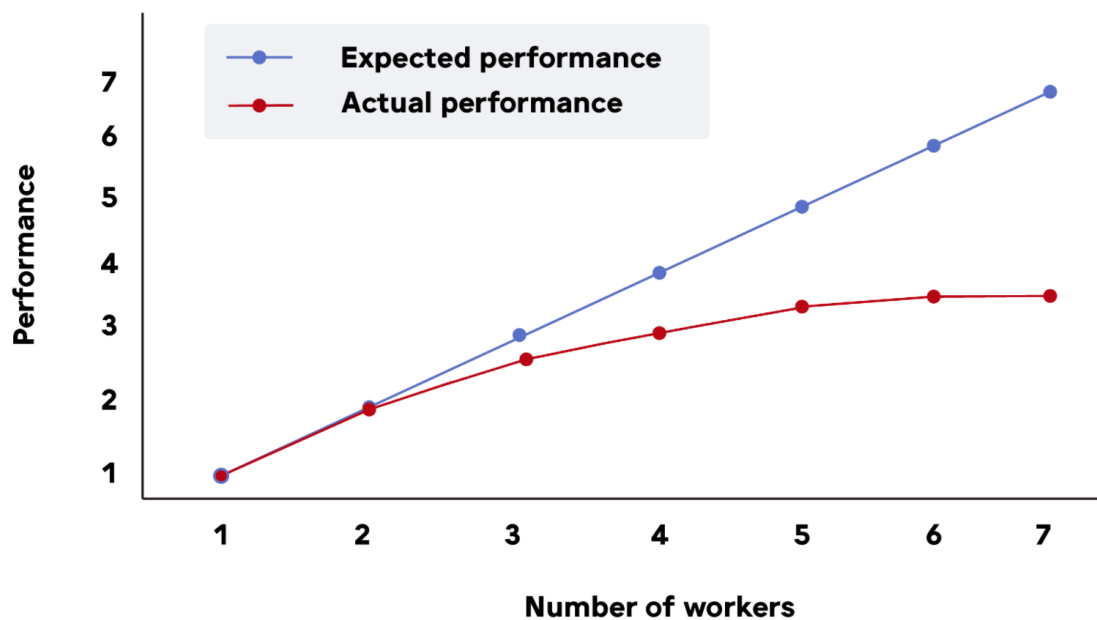
Figure 11. The Ringelmann Effect (Simplified by Hesketh 2018) – Huddly Content Strategist

(Hackman and Vidmar, 1970), conducted team size assessment in a more subjective approach by examining each team members own idea of the group size impact according to process and performance. In the study, the researchers assessed the effect of group size 2-7 with a series of various task. Each team members were asked a.) is the group too small or b.) too big for the task. Figure 12 indicated the common answers based on the two questions. It showed that the percentage of those who believe their team is too large and few in the 7- person group thought the opposite. Through this team assessment, it was discovered that the optimum team size is 4.6 members.

Optimum team size:4.6

Figure 12: Optimal Team Size (Hackman and Vidmar, 1970)

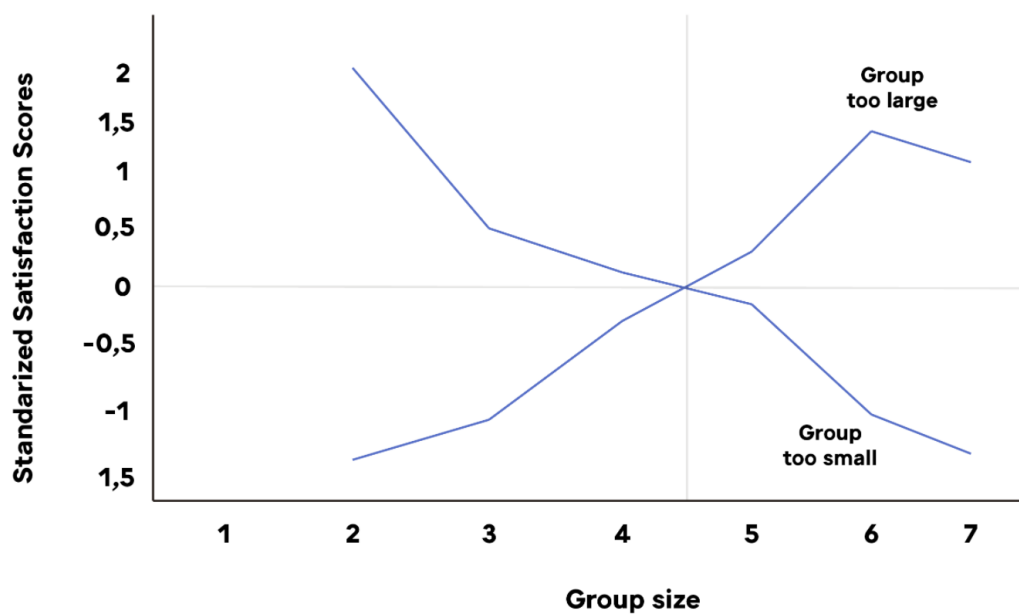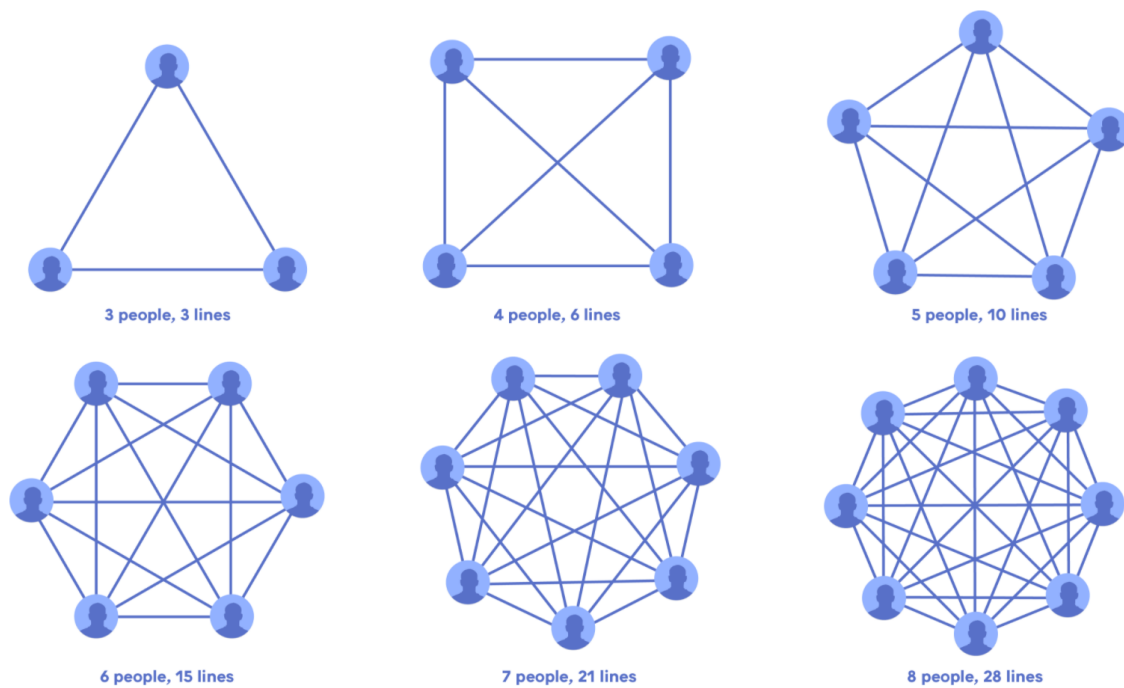*Figure 13: Pizza Algorithm (Simplified by Hesketh, 2018) – Huddly Content Strategist*

The pizza algorithm explains merely that with lesser team members, meaning fewer but consistent network connection is much more comfortable compared to involved larger team members as shown in Figure 13. Although some researchers specified numbers, it is difficult to evaluate because these might be from personal experience and not from practical experience. Each team size is conditional based on the task and work environment the team operates. For a larger team, for instance, there may be more accessible to different resources which may not only promote team performance on a more challenging task however it can also bring sloppiness if environmental conditions aggravate (Hill, 1982). In general, (Kozlowski and Bell, 2001), concluded that the desirable team size is complicated. Additionally, the nature of the task, internal and external demands are contingencies that affect the size of the team which needs to be determined by future studies. According to research, constant and natural conversations when teams are limited is very much likely, and they are become more productive and successful at what they do.

3.8. Demographic Diversity

Huddly is a diversified group of teams working in different locations and cultural backgrounds. The members' diversity concerning demographic backgrounds according to research, showed

that it could have a powerful effect both on group turnover and groups performance on a cognitive task such as developing plans or ideas, problem-solving or decision-making (Pelled, 1996). For a start-up company, it is essential to have a good understanding of how diversity could affect to these outcomes which may help managers improve effectivity within the workgroup. Majority of the researchers showed that diversity has a direct relationship between race, gender, and team performance. Although (Kozlowski and Bell, 2001) commented that it is difficult to conclude if team diversity is desirable. In their paper, they presented that researchers (Bantel, 1994) and (Gladstein, 1984) expressed that team diversity has a positive effect while (Haleblian and Finkelstein, 1993) stated negative; or even has nothing to do with team effectiveness (Campion et al., 1993). A theoretical model suggested by (Pelled, 1996), proposed that each demographic diversity can be classified into its level of visibility and job-relatedness. Diversity variables concerning the following as suggested by (Pelled, 1996).

- Age
- Gender
- Race
- Group and Organization tenure
- Education
- Functional background

The clarity in this context refers to the variables that are easily observed by Huddly team members. The job-relatedness as the magnitude to which diversity variables directly structure aspects and skills related to the cognitive task. The model suggested that visibility and job-relatedness have indirect influence regarding turnover and team performance. However, specifically, visibility and job-relatedness showed that it affects the levels of emotional and task conflict in the group. It causes levels in the influence of the number of group turnover and group performance. (Kozlowski and Bell, 2001), pointed out that diversity impact may depend on which team members are assessed. Some studies suggested that demographic diversity may have negative results, but diversity concerning skills and expertise may have a positive outcome, just as the same with any other companies.

3.9. Huddly Support Team

The primary focus of the research study is within the customer support team. The support team does not only function as customer support, but it also functions as internal support available for the Huddly employees for computer-related concerns. It is essential that within the support team, providing an excellent and high-quality technical support service to its customers should be at its highest degree. The support team assists and addresses technical concerns to specific problems towards Huddly product. The technical support offered is delivered through the web form, email, and phone calls where customers can send in service requests. According to (Gray and Durcikova, 2005) technical support uses knowledge repositories as a way of apprehending and reusing solutions to common technical problems. It is generally expected to enhance service quality, reduce cost and improve analyst learning. The researchers added that customer support team is focused on finding a resolution in solving customer issues and establishing a better understanding supported product. Effective performance management in the support team is a significant aspect in accomplishing better results through its fundamentals and practices. From the state of the art literature by (Mucha, 2009), performance management requires an asset in reinforcing sound technical approach, strong leadership, robust expertise and practices that continually strengthens the results-oriented approach.
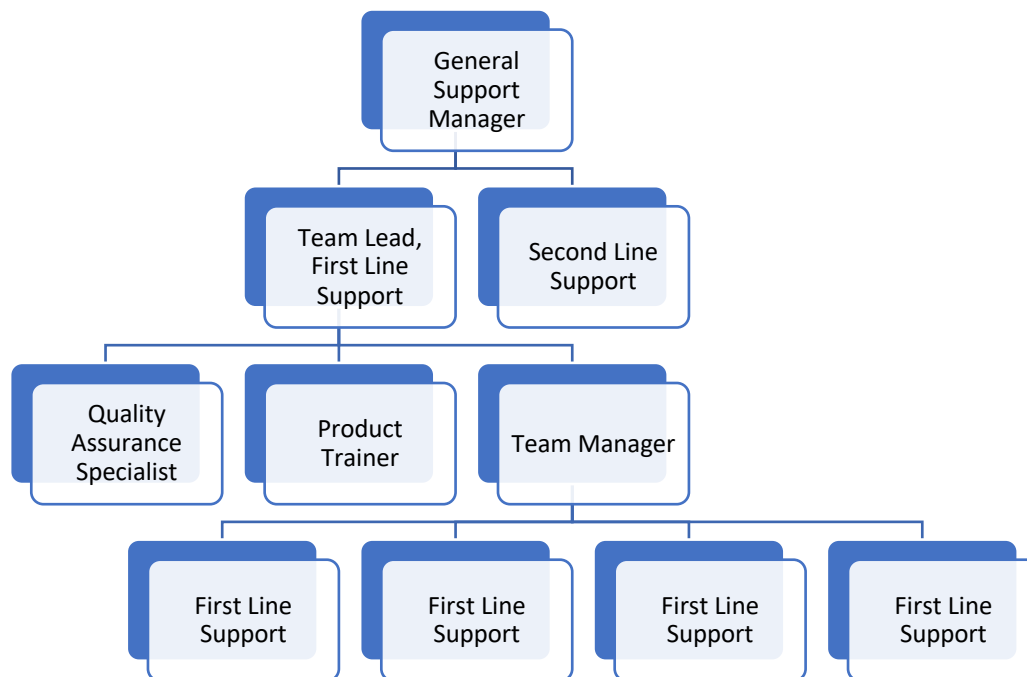

Figure 14: Organizational Structure of the Support Team

Figure 14 illustrates the organizational structure of the Huddly Support Team. A general support manager is the head of the overall activities of the internal and external customer support. The

general support manager is responsible for making sure that the team is performing well and able to deliver excellent customer satisfaction. Under the general support manager, are the first line team leader and second line support. The first line support team leader is responsible for managing the customer support center. It is by delivering and reinforcing policies, procedures, standard operating procedure, setting key performance indicators (KPI), creating and publishing of frequently asked questions (FAQ) in the self-service web portal. The role of the team manager is responsible for making sure that first line support adheres to schedules, supervise the internal process, overseeing the daily operations of the organization and guide the team members. The product trainer is responsible for delivering hands-on training and development programs to improve the team performance by providing knowledge transfer, refresher, and coaching programs. The quality specialist confirms and makes sure that all first line support consultants are delivering excellent customer support. The quality assurance specialist assures that the Huddly requirements are meet and well understood with clear documentation. The assurance of the quality resources is needed to ensure that customer satisfaction is a primary priority as a critical success factor. The first line support consultants are responsible for support related work, process incoming requests, identify the customer needs and provide resolution.

In today's organization, the modern customer- centered era is the support team which customer value is the most strategic weapon in engaging and retaining customers. A research study about a customer-based perspective from China by (Yonggui et al., 2004) stressed that delivering excellent customer value is a constant matter of concern in building and maintaining a competitive advantage by engaging customer-relationship. The researchers also added, however, many related studies are comparatively different, it has remained unclear what are the critical dimensions of customer value. The Huddly Support team focus on providing customer satisfaction by delivering the highest degree of first call resolutions, and meaningful self-service support web portal.

4. Development of the Performance Framework

4.1. Performance Management

The concept and development of performance management framework in teams organize strategic thinking toward the organizations' key performance goals and objectives. It supports to align decision-making towards greater benefit of performance information to encourage improvement (Poister, 2015). The Balanced Scorecard approach is the management framework used by the researcher. The development of the conceptual performance management framework is based on the strategic objectives, performance measurement, and key mitigation strategy. The conceptual framework focused on team-based performance stretched to five-year medium to long-term goal developed through a stepwise development process. If the performance framework is understood thoroughly and appropriately implemented, its potential contribution to the organization's success, nevertheless measured – is fundamental (Murby and Gould, 2005).

The Balanced Scorecard approach is conceptualized in more detailed in the next sections, turns the vision and the strategy into objectives and measures across the four perspectives (Kaplan and Norton, 2004). The scorecard as a performance management system includes the desired results, as well as the processes that will drive the desired results for future value creation.

4.2. Setting the scene

4.2.1. Objectives
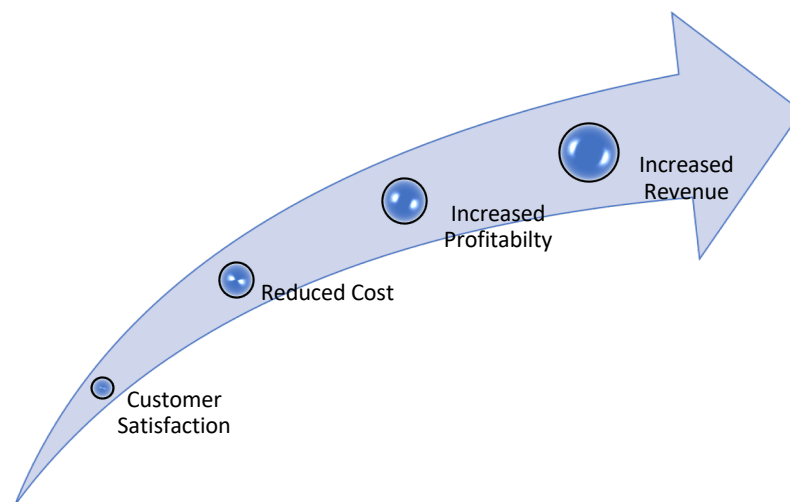
Figure 15: Conceptualized Strategic Objectives

Figure 15 is the objectives identified for the support team. In the customer support, it is primarily driven by customer satisfaction (Setia et al., 2013), improvement cost structure by cost reduction and asset utilization, increased profitability by increasing customer value and new revenue sources which are values from new product and customers. The strategic objectives are formulated and processed as the central element in the performance management framework, so as its unique feature which defines a team-based performance approach (Poister, 2015). It is also to identify what are the key objectives that are fundamental to the organization's long-term and overall future success, and how to go about evaluating the achievement according to (Otley, 1999), based from the strategic objectives set. Once the strategic objectives are set, customer support team and the manager agree on performance expectations. In customer support, the specific goals and objectives are set to ensure that every single customer is satisfied with the product and services that the company currently provides and in the future. Excellent customer support means that customer needs and demands are met in a timely and efficient manner.

Any systems in the organization require goals and objectives for performance assessment. In performance planning and budgeting, defining strategic objectives is the first step in developing a performance management framework wherein the outputs, products, and deliverables are clearly stated before the project starts. These objectives influence the choice of performance measures to be used which will serve as the criteria for performance evaluation. Objectives are sought to satisfy customers, company shareholders, employees, suppliers and among others. The organization determines the goals for each with stakeholder-related measures and targets in an attempt to meet all the needs (Murby and Gould, 2005). The objectives defined by the researcher is based on the organizational level of analysis, with the given assumptions that an organization that is performing well, is one that can attain the defined objectives successfully (Otley, 1999). In other terms, the one that is effective in implementing a key mitigation strategy.
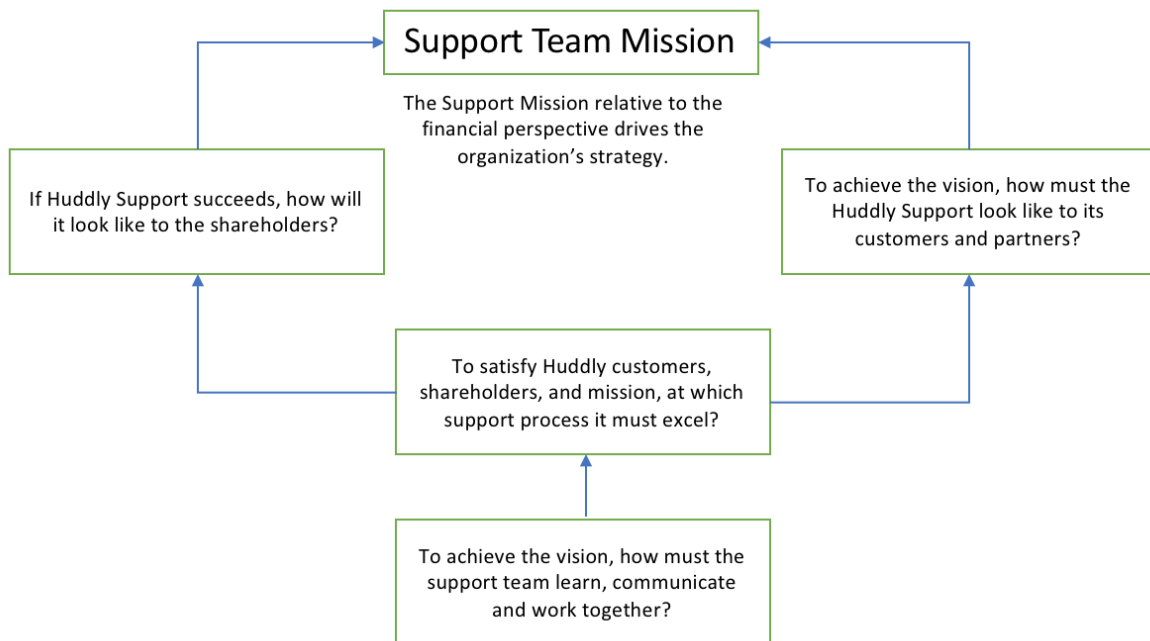
4.2.2. Strategy

Figure 16: Huddly Support Strategy Adapting the Balanced Scorecard Framework (Kaplan, 2001)

To understand the apparent connection, Figure 15 is the setting of the measurable objective while Figure 16 is the design for a plan of action to achieve the overall objective. The researcher conceptualized strategy to the support mission while organizing measures using the Balanced Scorecard approach as shown in Figure 16.

The strategy starts with how the support team can achieve the vision and do together in providing excellent customer satisfaction. In a performance-driven culture such as the support team, strategy becomes the everyday job of people involved. It is also essential that achieving the support strategy focus on value creation to its shareholder, customers, and partners. The relevant performance data available is used to learn, to validate or even challenge strategic assumptions, risk assessment and most importantly to facilitate in decision-making and to take necessary actions (Marr and Gray, 2012). Key mitigation strategy is speculated that with excellent communication and care, there will be an increase in referrals and revenues. The new strategy for support team would focus on reducing costs, value creation for the support given to its customers, and the extent of restoring financial viability. In any organization, the problems when measuring performance is not linked to strategy according to (Kaplan, 2001). In this development phase, the researcher also focused on what output and outcomes the support team

intends to achieve at a strategic level and not what programs and initiatives are being enforced. The strategy and performance measures are an opportunity to decide and agree on the following.

- What is the strategy that support team is going to do in order to meet the objectives? (results, projects, and deliverables)
- How is the support team going to execute it? (strategy and behavior)
- What competence is needed by the support to do the job? (knowledge and skills)
- What tools are needed to execute the strategy?

An organization such as Huddly, in particular, value employee participation which is an essential factor to measure progress in achieving milestones. According to (Porter, 1996), a strategy is not only what the organization is determined to do, but also what it decides not to do. Also, the researcher made use of the strategy mapping linked to the Balanced Scorecard to execute it as introduced by (Kaplan and Norton, 2004). The researcher came up with some approaches learned from (Porter, 1996) that can help the support team reconnect with the strategy. Amongst, many well-established companies, its core competence in the market is its uniqueness. As a new entrant in the industry, the organization can also answer the following questions which will help to build corporate strategy and establish a strategic partnership.

- Which product feature and support service are most distinctive?
- Which variety of customer support service is most profitable or can create value concerning to financial perspectives?
- Which of our customers are most satisfied?
- Which customers, channel partners, or purchase opportunity are most profitable?
- Which customer support activities in our value chain are the most different and effective?

4.3. Conceptualized Causal Map

4.3.1. Service Model

In this section, the researcher generated a model, which is an application of the performance management frameworks, recommendations, and ideas by the different authors from the previous sections. Providing support services should be fast, competent and reliable. With the correct approach to objectives, strategy, and measurement, the organization can provide a more

focused perspective on the overall customer support control systems and can achieve excellent customer support service at an acceptable rate. It is done by looking beyond the performance measurement to the performance management (Otley, 1999).
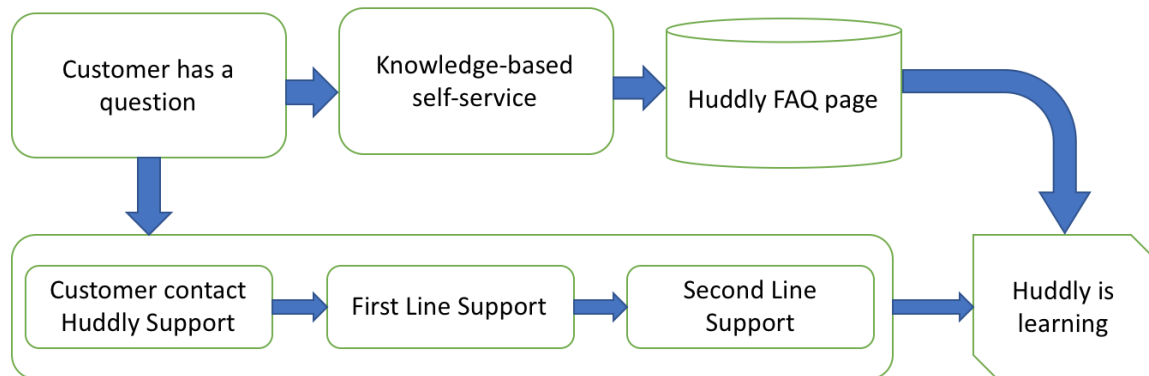
Figure 17: Support Service Model in Practical Perspective

The researcher developed a conceptualized casual service model based on the template of (Savkin, 2016), following the support strategy of the organization illustrated in Figure 17. The support service model is aligned with the overall support flow and has a significant impact on performance management. To begin with, the researcher conceptualized a general service model for the Huddly Support on how customer support service can be reached. In this model, the leading business challenge is analyzed and converted into a strategy map with its essential underlying performance indicators. The use of the key performance indicators (KPI) system is an essential measure in all organization. The researcher understood and investigated the support flow where inputs, outputs, action/result, and the bottlenecks were identified. The above service model is explained below.

1. The customer has a question about the product or the services; initially, customers used knowledge repositories to try to resolve the issue.
2. Nowadays, most customers try to find the answers themselves through the frequently asked questions (FAQ) pages. Therein lies the appeal of self-service web portals as their preferred communication channel as many customers became more self-service oriented today. According to (Klie, 2013), to make the self-service more useful, it can be integrated with an automated guidance system such as search functionality which takes them to specific responses without forcing site visitors to scan the entire database to find the answers that they need.

3. In the event the answers are cannot be found on the FAQ page, the customer can contact customer support via web form, email, social media or by phone. Otherwise, some customers contact customer support directly using their chosen communication channel. When a support ticket is created, the first line support accepts the queue and will try to resolve the issue.

4. If the issue continues after exhausting all the possible resolutions initiated by the first line support, the case will be transferred with more advanced troubleshooting procedures performed by second line support.

5. Once the issue has been resolved, the organization continues to learn on how to manage performance. The inputs and feedbacks from the customer on how the support service was performed will be assessed and will serve as a learning curve for improvement potentials leading to customer satisfaction. The effectiveness of the knowledge-based FAQ platform will also be measured based on how valuable the pages were to the customers.

4.3.2. Response Model

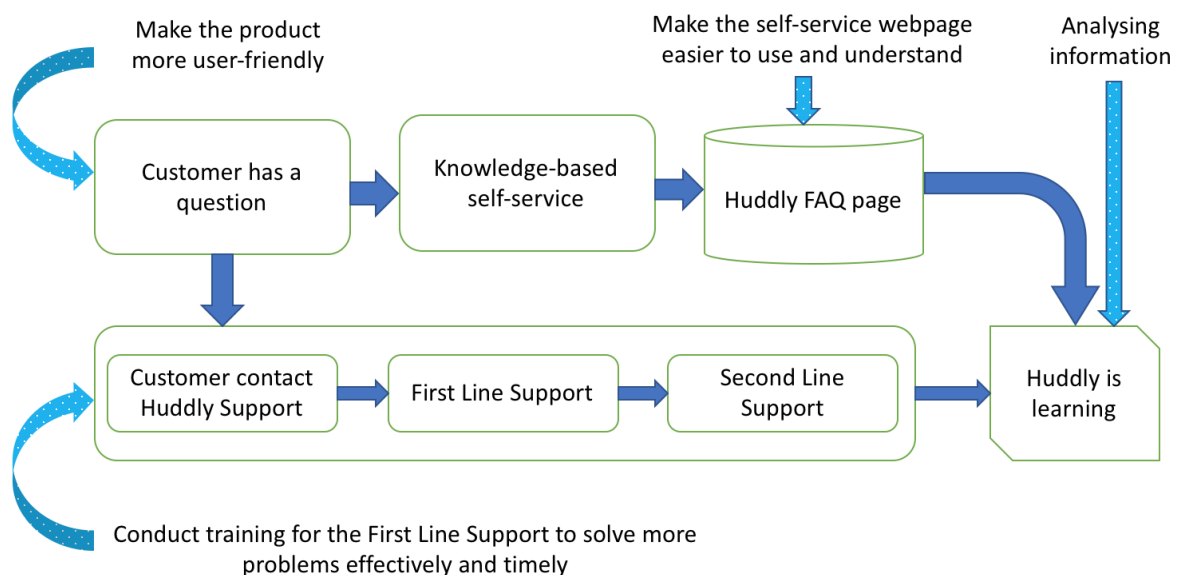*Figure 18: Support Service Model and Response Plan*

The relationship between the support service model in Figure 17 and the response model in Figure 18 is that the former is the support flow on how customer support is implemented and strategized. While the latter is the organizational steps to be taken to attain excellent performance. The goals and objectives reflect the cause-and-effect relationship between them

in the strategy map. The response model is directed to the management team on how performance management with the proper alignment with the organizational goals and proper metrics is developed. Additionally, the responses in Figure 18 is elaborated below.

- *Addressing Response 1: **Make the product more user-friendly**.*

A good customer support performance also means that the product is performing as expected and easy to use to consumers. The organization has one product, and that is a smart collaboration camera called Huddly GO. The critical benefit of a user-friendly product or service is a user-centered approach, and it is materialized once customers have used such product or services. Making the product user-friendly can broadly extend to other people and communities. User experience is about solving issues and helping people to attain their goals by the product usage. If it is attained effectively, customer calls can be minimized and respectively, customers would not have contacted first line support, at least not with product issue. This would increase customer value and promotes good product performance.

- *Addressing Response 2: **Make self-service webpage easier to use and understand**.*

It means that customers can resolve more issues by themselves and this would increase customer retention rate. Customers can find answers on their own in a self-service web portal and knowledge-based platform the frequently asked questions (FAQ) page.

- *Addressing Response 3: **Conduct training for the First Line Support to solve more problems effectively and timely.***

The primary objective of having customer support is to resolve the customer issue on a first call without having to escalate and transfer the case to second line support. First line support should have sufficient amount of knowledge in addressing customer issue and able to resolve it in a short time.

- *Addressing Response 4: **Analyzing information.***

It is to make sure that there are no information repositories between the customer support service and other business units. The performance analytics is a significant factor in conducting a performance review. In this response, the data gathered are analyzed and streamlined into which information is essential to simplify performance process and how to make performance management objective and measurable.

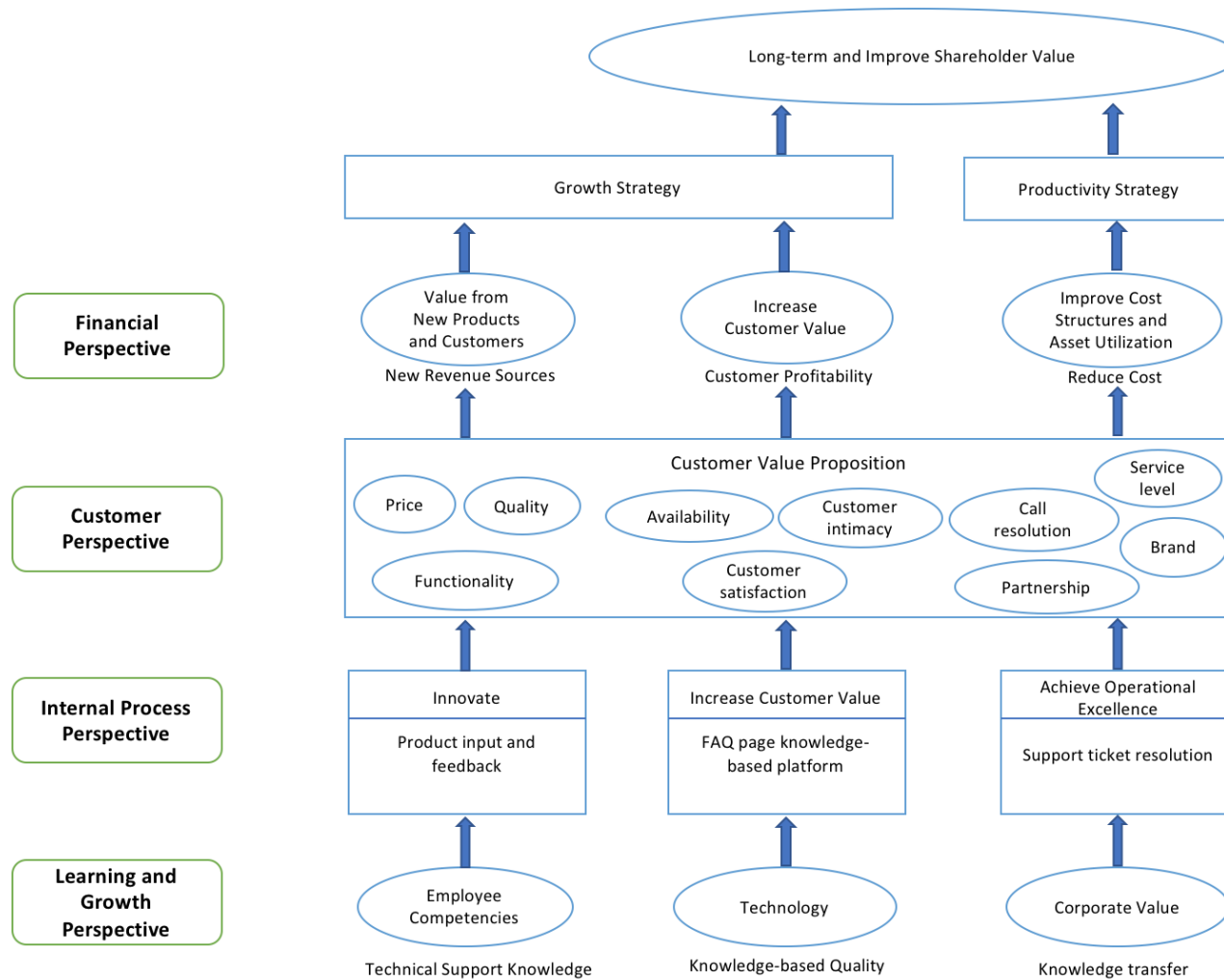## 4.4. Strategy Maps linked to Balanced Scorecard

Figure 19: Strategy Maps linked to Balanced Scorecard for Huddly Support

Figure 19 is the conceptualized strategy map based from (Kaplan and Norton, 2004), and the adaptation of the Balanced Scorecard from (Kaplan and Norton, 1992) where the organization's goals are all put together to reflect the possible cause and effect relationship between the four perspectives. The strategy map represents how the support department will create value for the organization. It shows increased customer value and the value delivered from new products and services to be the key drivers of long-term and improved shareholder value (Murby and Gould, 2005). Additionally, the performance goals and proper metrics are aligned with the organization's strategy. The Balanced Scorecard composed of four perspectives is now widely used today. Each perspective will be described according to the key performance index set by the Huddly Support team. Customer support identifies the strains placed on the organization by apparently conflicting outcomes such as reduced cost, customer profitability, and new revenue sources.

In fact, with improved and higher rate of ticket resolution, these outcomes need not be conflicting at all. With the use of the strategy maps, it highlights the business process that supports the critical advantage points for improving the team performance against the scorecard. The scorecard provides the Huddly Support an objective in each area: financial, customer, internal process and ability to perform. Since objectives are only significant if performance against them can be measured, the researcher added some metrics. The researcher made use of the balanced approach by (Kaplan and Norton, 1996) and added some concepts of objectives and metrics from DB Kay & Associates (DBKay and Associates, 2003).

4.4.1. Financial Perspectives

Financial Metrics	
Value from new products and customers	• New revenue sources • Corporate revenue • Support revenue
Increase customer value	• Customer profitability • Profit margin (corporate and support) • Total profit (corporate and support)
Improve cost structures and asset utilization	• Low service cost • Cost per support ticket • Self-service support ticket • First line resolution rate

Table 7: Huddly Support Financial Metrics

Table 7 is the financial metrics for the Huddly Support which the corporate and support side will benefit based on the objectives set. According to (Kaplan and Norton, 2004), the financial perspective is retained in the Balanced Scorecard since financial measures are necessary for outlining the readily measurable economic consequences of action already taken. The financial measures indicate whether the organization's strategy, implementation, and execution are contributing to the fundamental improvement. Thus, the revenue and reduced cost metrics are identified on which the organization has a cost-effective benefit.

4.4.2. Customer Perspective

Customer Metrics	
Price *Quality* *Functionality*	• Repeat purchase and frequency rate • Customer lifetime value • Product performance • Referrals
Customer satisfaction *Customer intimacy* *Availability*	• Self-service completion rate • User-friendly FAQ page • Customer satisfaction rate • Percent of satisfied and dissatisfied customers • Unsuccessful self-service rate • Call abandonment rate • Service level rate
Call resolution *Service level* *Partnership* *Brand*	• First call resolution rate • Service level • Repeat purchase • Referrals • Gross margin for product solution

Table 8: Huddly Support Customer Metrics

The metrics in Table 8 shows a more detailed metrics in comparison to the conceptualized strategy map in Figure 19. Customer perspective usually includes some core or generic measures of the successful outcomes from a well-formulated organizational strategy (Kaplan and Norton, 2004). The core outcomes include customer satisfaction, customer intimacy, service availability and market and account share. Customer perspective is the specific measure of the customer value proposition that the organization will deliver to the customers. It is essential that the metrics context is in line with the targeted market segments and with the support team. These metrics are standards for the team as the key performance indicator (KPI) are used for performance management system on how well the team performs in handling support cases. Therefore, customer perspective enables the organization to articulate the customer and the

market-based strategy that will deliver exceptional financial returns in the future (Kaplan and Norton, 2004).

4.4.3. Internal Process Perspective

Internal Process Metrics	
Innovate • *Product input and feedback*	• Opportunity • R&D portfolio • Design/develop • Launch new product
Increase customer value • *FAQ page resolution*	• Useful or not useful articles • Most useful articles • Rated by thumbs up or down • Number of views per category • Content delivery
Achieve operation excellence • *Support ticket resolution*	• Number of units returned • Bugs filed and submitted • Product feature request

Table 9: Huddly Support Internal Process Metrics

The internal business process perspective in Table 9, determines the critical internal process in which the organization must excel. (Kaplan and Norton, 2004) illustrated that this process enables the organization to, (1) establish the customer value proposition that will attract and retain customers in the targeted market, and (2) satisfy and improve shareholder expectations of superior financial returns. It focuses on the organization's internal process that will have the substantial impact on customer satisfaction and accomplishing the financial objectives. The Balanced Scorecard approach entirely identifies a new process that would be beneficial for the organization and must excel to meet customer and financial objectives. In Huddly Support, for instance, the team may realize that is must develop a process to foresee customer needs or to deliver new support services that target customer value (Kaplan and Norton, 2004). Additionally, the objectives of the internal process metrics highlight the processes, which some of which may not be performing at all, which are most critical for the support team's strategy to succeed. Today, performance management system targets the processes of delivering products and excellent service to customers.

4.4.4. Learning and Growth Perspective

Learning and Growth Metrics	
Employee Competence • *Technical support knowledge*	• First call resolution rate • Turnover rate • Support tickets handle rate • Average handling time
Technology • *Knowledge-based quality*	• Solution time (average days from the issue awareness to issue resolution) • Transparency (the solution percentage that are made available in the FAQ page) • Solution percentage that are acquired, added, removed and updated monthly)
Corporate Value • *Knowledge transfer*	• Proficiency time rate • Participation rate • Knowledge reuse rate • Captured collaboration for reuse

Table 10: Huddly Support Learning and Growth Metrics

The fourth perspective in the Balanced Scorecard as shown in Table 10 the learning and growth perspective identifies the foundation that the organization must structure to create long-term growth and productivity improvements (Kaplan and Norton, 2004). Due to global competition, performance management is a critical factor for the organization's success as it should continuously improve support service capabilities in delivering customer and shareholder value. As illustrated in Table 10, there are three principal sources for learning and growth which are people, the system (technology), and the organization procedures (corporate value). Although there might be gaps between these sources, the organization will have to invest in re-skilling employee competence, improving the current information technology, systems, and procedures to achieve a breakthrough team performance.

5. Recommendation for Implementation

5.1. Implementation

An implementation phase shall follow the concept and development of the performance management framework. Once the strategy, key performance indicators (KPI), critical success factors and management approaches are in place, the implementation is needed to make sure that these drivers become embedded into the organization's targeted team (Marr and Gray, 2012). Today, there are many performance management applications readily available and designed to facilitate data integration, performance analysis, and communication for the management team to extract real management overview from the team's performance data.
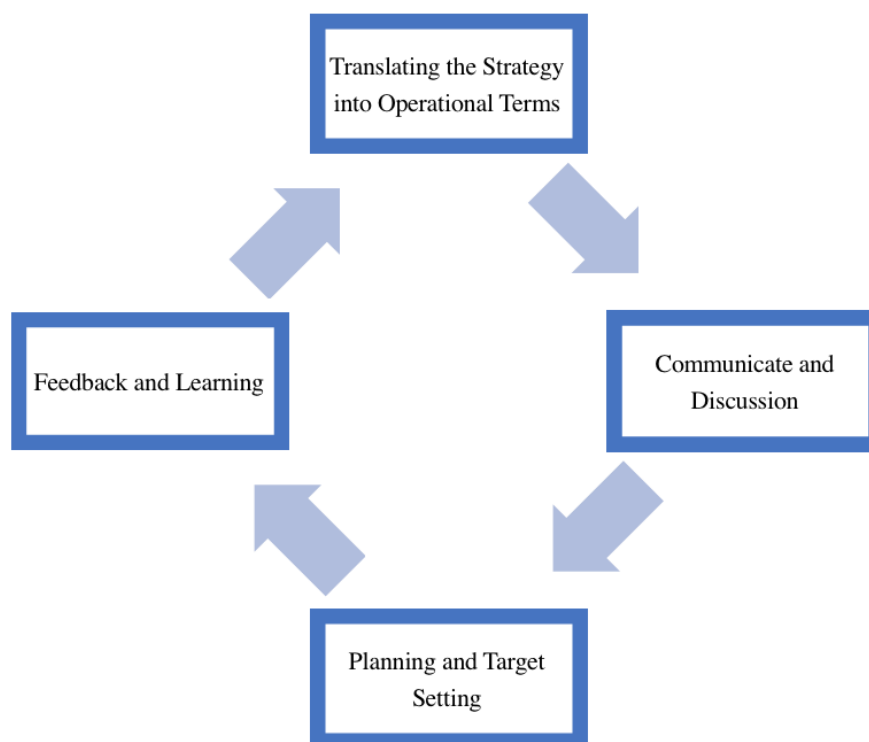
Figure 20: Implementation of Performance Framework for Huddly (Adapted from Liyanage, 2016)

Figure 20 shows the overall implementation procedure in the aspect of the Balanced Scorecard approach suitable for Huddly Support. The recommendation for implementation is illustrated on how the performance management can be processed. The framework is stretched up to 5-year medium to long-term goal depending on how the organization will going to adopt the proposed performance management strategy. A meaningful discussion amongst team members, led by the team leader or manager is significant to realize the conceptualized strategy. According to the Australian Capital Territory Public Service (ACTGovernment, 2016), it is

essential that everyone in the team know and understand what is expected of them, that each member has a sense of ownership and that team members commit to achieving what has been discussed and agreed to the team performance plan. The recommended implementation in this chapter is a strategy-focused based on the strong critical principles of (Kaplan and Norton, 2001a) to a successful strategic template/scorecard implementation.

5.2. Translating the Strategy into Operational Terms

If the organization's strategy is not fully understood by the people involved, thus such strategy cannot be performed. According to (Kaplan and Norton, 2001a), by using the strategy map framework, each measure of the Balanced Scorecard becomes embedded in a series of cause-and-effect rationale that characterizes how intangible assets revolutionized in becoming into tangible customer and financial outcomes. The balanced scorecard is not a formulation tool for strategy added by (Murby and Gould, 2005) who also addressed that the formulation of strategy may be viewed as an art, although its description through to the balanced scorecard is not. The themes for strategy and priorities must be embedded within documentation structures to facilitate a consistent message and set of priorities for the corporate strategy to filter each part of the organization. Before the strategy is translated into operational terms, the objectives must be clearly defined and communicated.

5.2.1. Align the organization to the strategy

The performance management for customer support must be aligned with the organizations' strategy followed by communication and coordination across functional lines. In a strategy-focused organization, formal reporting structures are replaced by strategic themes and priorities to make sure that constant strategy alignment, communication, and setting of priorities such as customer satisfaction to be used across diverse organizational units. In customer support, it focuses on satisfying the customer needs by developing and communicating many strategic themes (Murby and Gould, 2005).

5.3. Communication and Discussion

To translate the strategy, thus followed by communication and discussion. It is a process from the department level to the corporate head to facilitate refinement of the performance strategy and the performance management plans throughout the entire unit. In reality, this is often a procedure of negotiation and discussion until the objectives, and the priorities are agreed. It

includes, however the influence of value translation and the desired team behavior. The drivers used in the template/scorecard include performance measurements, incentives, information and technology, organizational culture and processes. It is an opportunity to decide and agree on the following according to (ACTGovernment, 2016).

- *Results and deliverables* – what is the customer support team going to do.
- *Strategy and behavior* – how is the team going to execute it.
- *Team competence (knowledge and skills)* - the skill set requirements for the team to do the job.

5.3.1. Focus is on dialogue

One of the essential parts of framework implementation is the discussion between the people involved. The focus should be based on taking the opportunity to have a significant and practical discussion. Most organizations make use of a documentation template to record the outcome of the performance discussion, keeping records of the critical points communicated and what has been agreed. There are benefits of a useful and meaningful performance management discussion. These benefits should lead to a joint agreement.

- What needs to be done and achieved – the main tasks and project deliverables.
- How will the work be executed – to develop a business process to use in performing the work.
- What competence is required – the skill sets and the knowledge that needs to be developed accomplish what was agreed in the performance management plan and how these will be address.
- Clear discussion on how and when the additional discussion about the performance will take place, i.e. team members and the manager will discuss work highlights, progress, pain points, learning curves and among others. The discussion will also discuss when it happens and agree on the certain period to review the plan formally.
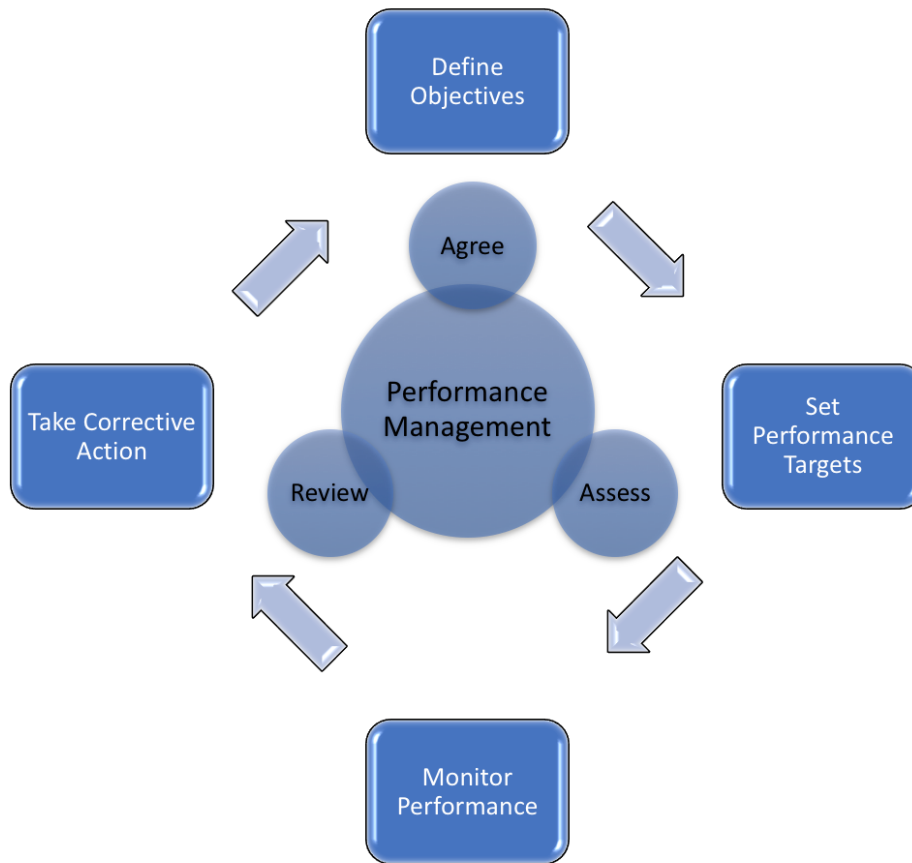
Figure 21: Huddly Support's Performance Management Cycle

The Balanced Scorecard used in the performance management cycle systematize the organizations strategic thinking towards performance goals and aim to support decision-making toward the more excellent use of performance data to stimulate information (Poister, 2015), as shown in Figure 21. It is an ongoing cycle of the essential organizational process, all of which communicate in a meaningful way. It illustrates the cycle from the previous chapter where strategy mapping with the balanced scorecard elements is developed. The objectives of the business process and the organizational effectiveness are the ones that support organizations greatest direct control. It must focus on the objectives, so the plan for performance management become successful. It is achieved by aligning the strategy map linked to the balanced scorecard on the business processes perspective in resolving problems. Figure 21 also shows an ongoing interplay cycle and provides a robust implementation foundation for aligning the strategy into action by agreement, assessment and review. Aligning the organizational strategy means that the defined objectives are now being realized. The action plans in accomplishing the objectives defined are widely diverse.

By implementing the Balanced Scorecard in the customer support, the performance management first, defines objectives to give an overview on what is to be achieved. Generally, each action plan starts with objectives and then followed by setting metrics to measure by establishing standards using meaningful performance metrics and monitor. This will enable the organization to gauge and evaluate the performance of a given result. Once the result is gathered, it is essential that corrective actions and any further action plans must be in place in an event the targets are not met and develop a meaningful strategy for improvement. According to (Murby and Gould, 2005), the activities must be linked and jointly re-enforced with the organizational strategy for the performance to exceed value. The notional concept is used to align the strategy into a set of actions and critical performance measures in an organizational performance management plan (Kaplan and Norton, 2001b).

5.4. Planning and Target Setting

The involvement of the employees is essential. The Balanced Scorecard in strategy-focused performance management that uses three distinct processes to coordinate employees to the strategy: communication and knowledge-based, developing personal and team objectives, and incentive and reward systems for encouragement according to (Kaplan and Norton, 2001b). To be entirely strategic and useful to communicate the Balanced Scorecard, it is imperative that all employees understand the strategy itself and administer contribution to the organization's objectives (Murby and Gould, 2005). In performance management context according to (Poister, 2015) it highlights managing, motivating and rewarding people, business units and agendas with an eye toward achieving desired outcomes. This performance management approach is more likely to highlight the development and maintaining the performance-oriented organizational cultures where suitable, develop performance orientations and approaches in producing the desired results.

5.4.1. Data Collection

The data collection approach suggests performance indicators regarding the productivity of the employee, customer support quality and organizational conditions which is regularly monitored. The framework of performance management exerts to collect data regarding performance level achieved using the performance measures and indicators set to reflect the effort of the performance management purposes. In other words, as stated by (Poister, 2015), that performance management is a measure that tracks inputs, activity level, outputs or results

which might use the measure of employee's efficiency, effectiveness, balance, cost-effectiveness, and customer satisfaction. (Murby and Gould, 2005), noted that the practice of the Balanced Scorecard could be a useful framework to reward employees in attaining the agreed performance target. Performance measurement intends to determine the set of key measures and performance indicators selected, data collection timing, the effectiveness of the strategy and methods of analysis used. Data collection in the performance management is the use of the strategic performance information which supports management decision-making and maximizes the critical goals of the organization. In general, a good performance management system depends on the collection of valid, reliable and timely performance data, the direction of that data to the management at the suitable times with suitable discretion to act as described by (Poister, 2015). Based on that data and information collected, it shall be used to make changes to improve performance using the tools at an organization's disposal.

5.5. Feedback and Learning

It is the process that integrates the management of tactics, and the management of strategy into a smooth and continual process. According to (Kaplan and Norton, 2001a), there are three essential themes in implementing the process: First, is to link strategy to the budgeting in which spending decisions are analyzed for strategic impact. Second, is to close the strategy loop with feedback systems which are an essential driver in performance management linked to the Balanced Scorecard. Lastly, is to test, learn and adapt to the performance strategy based on the input and feedback from the scorecard measure.
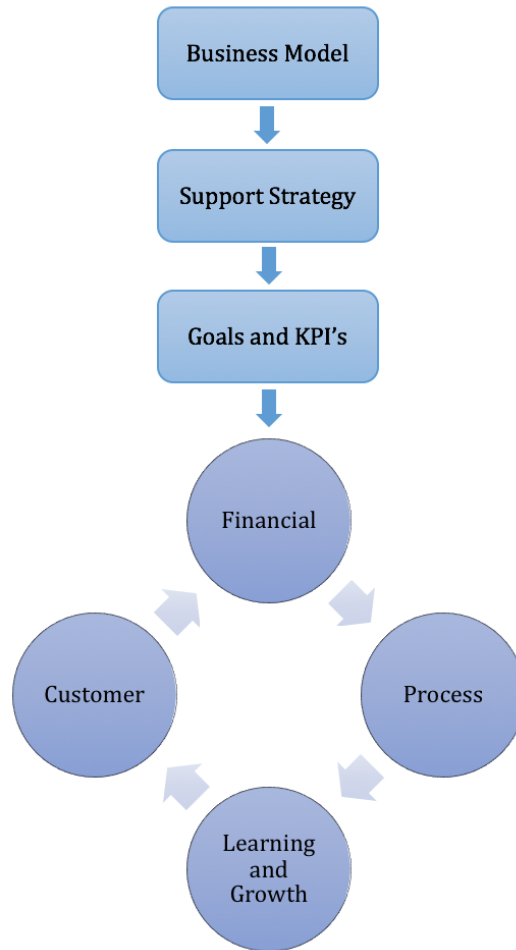
Figure 22: Continuous Loop Process of the Performance Management Framework

Figure 22 is a four-step formula adjusted from the three essential themes in implementing the performance management process by (Kaplan and Norton, 2001a). The recommended process will guide the customer support team to implement the performance management using the Balanced Scorecard initially introduced in the by Kaplan and Norton in the '90s. The loop process in Figure 22 is elaborated below.

Formula 1: The Business Model

It refers to the casual model and response plan conceptualized in a practical perspective as developed illustrated in Figure 17 and Figure 18 from the previous chapter. It is a series of steps as well as the support flow on how customer support can be useful in providing support to the customers. The business model aims to simplify how customer support is implemented and how it can be improved over time. Proper performance management also means improving the products more effectively. Although in any organizations, support teams focus on helping users

with the product issues, but then it would be much better if the issue never happened in the first place as expressed by (DBKay and Associates, 2003), if the products were more reliable, user-friendly and can be diagnosed faster and fixe when an issue arises. In the business model, support team organization are product specialist responsible for providing a structured product input and feedback to the development organization and the management. The need to understand the specific cause of the service profoundly affects team performance.

Formula 2: Support Strategy

It involves workshops and training of the customer support team to correctly addressed the needs of the customers and provided resolution effectively which drives good performance. In Figure 19, the researcher adopted the strategy map linked to the Balanced Scorecard that showed the strategy-focus in the different perspectives. According to (Murby and Gould, 2005), if the strategy is irrelevant due to the changing conditions of the market, a balanced scorecard approach, if implemented correctly, it should allow learning for the organization and grow. It means that the fundamental of performance management system is providing an appropriate data to help the management challenge or even improve the existing business model. Performance management strategy focuses directly on the effect and effective implementation of the strategy itself. As explained by (Kaplan and Norton, 2001a), performance management framework should focus on strategic issues and the value of teamwork and the strategic organizational learning to improve strategy management instead of operational tactics. (Murby and Gould, 2005) added that to be entirely useful in managing performance, the organization requires honest and open feedback, commitment to providing customer satisfaction and a supportive teamwork culture.

Formula 3: Goals and Key Performance Indicators (KPI's)

It is the collection of data sets - the performance goals, targets and key performance indicators. In this formula, the researcher proposed some indicators which the organization can use to measure the success or failure of the performance management in the execution of its strategy. Performance metrics does not mean to have 100% of the business objectives but rather finding meaningful indicators that are aligned with the strategy and focus on how performance is planned and how to assess or measure it. In any support organization, it is the ultimate goal to provide the highest degree of customer satisfaction, understand the customer needs and the provide service that is done right in the interest of the customer. The following are some of the

key performance indicators (KPI) of the customer support within the organization where team performance is based upon.

- First call resolution – is resolving the customer issue in a single call without having to escalate the case to second line support, transfer or return the initial call.
- Average handling time – is the average of time the customer support spends in handling a support case.
- Service Level – is the percentage calls that are answered within specified time.
- Turnover rate – is the number of cases that are escalated to second line support.

Thus, the balanced scorecard functions by monitoring and measuring the actions and the effect that they have and by permitting managers or team leaders to manage assets used to deliver value to stakeholders. (Murby and Gould, 2005) described that a practical, balanced scorecard design must accordingly reflect the input of these assets by producing an appropriate performance indicator.

Formula 4: The Balanced Scorecard

The Balance Scorecard in Figure 8 according to (Kaplan and Norton, 2001b), indicates the linkage of measurement to strategy illustrated in Figure 9. It was initially developed in the 90's by Kaplan and Norton for the private sectors to overcome financial deficiencies by introducing metrics as such listed in Table 7. The scorecard has been widely used in many industries of today in managing and measuring performance. It has been successful over the years among many organizations. Since its introduction, organizations been able to implement new strategies swiftly and effectively, leading to a sudden improvement in performance (Kaplan and Norton, 2001b) In the scorecard, the customer perspective measures the team performance by using measures listed in. Table 8. This perspective also measures the customer value proposition, on how the organization creates value for its customers. The metrics for the internal process perspectives in Table 9 measures operating performance such as cost, quality and cycle times of the processes that are critical in delivering value to customers and at the same time reduce operational expenses. While the organizational learning and growth in Table 10 arise from sources such as the people and systems that are essential in performance management.

5.6. Mobilize change through executive leadership

(Kaplan and Norton, 2001a), emphasized that the if top managers are not dynamic leaders of the performance management process, the change and improvements will not take place; therefore, the strategy will not be implemented, and the opportunity for performance breakthrough will be mislaid. The fundamental principle of this implementation phase is focused on mobilization and develop power. Top managers must organize a process to guide the transition of the new performance management model. Therefore, this will gradually over time, evolves into a new performance management system.

5.6.1. Critical Success Factors

The critical success factors are very valuable and have an essential role in the performance management. These are the variables that influence the most in the organization's future performance. Critical success factors are essential in defining key performance indicators (KPI) and metrics. The most common goals of performance management are to measure cost reduction while increasing efficiency, increase cost-effectiveness while maintaining a balance and deliver a high-quality product to the market that is met with the highest degree of customer satisfaction. By implementing the performance management framework, the organization must be reminded of the following critical success factors as defined by the CEO of Lawrimore Inc., Buck Lawrimore (Lawrimore, 2015).

- Focus on strategy (Leadership, Management and Planning)
- People (Employee, Staff training, Development)
- Operations (Work and Process)
- Customer relations and responsiveness
- Finances (Assets, Equipment and Facilities)

Additionally, it is essential that the success factors be aligned and calibrated to deliver superior customer value through a balanced set of measures covering all the perspectives of the scorecard. Critical success factors should be acceptable, fit to the organization's purpose, measurable and controllable. It should also be made transparent so that the team fully understands their responsibilities for creating value as elaborated in the previous section. The success factor must also stimulate innovation and collaboration within the entire organization which should be implemented in a reasonable time and at an acceptable cost. It is also important

to take corrective actions when something has changed or needs to be corrected or when something goes wrong. It is crucial that someone has to be accountable for its implementation and operation. The continuous performance improvement shall be implemented with enthusiastic participation. Lastly, success factors shall be aided by a management process for reviewing measures using an active computer information systems and programs and ensuring purposeful action is encouraged.

6. Discussion

6.1. Summary of the Findings

The research study started by conducting a performance status review of the support team and identified operational improvement potentials. The study found that performance review of the start-up companies in particular Huddly can be challenging to assess and measure. Team performance in the workplace should be evidence-based especially in a customer support department where performance quality can be robust to assess because it can easily slip into subjectivity. Thus, the need for performance management framework must be in place. In the study, it was found that Huddly, an IT vision company, particularly in the support department is indeed lack of performance management structure while the measure in delivering the highest degree of customer satisfaction and customer value proposition is not evident.

The research study advanced a theory of performance management strategy by highlighting customer support performance of the organization. The study examined the impact of performance analysis by identifying key performance metrics. The study confirms that developing a creative solution based on the Balanced Scorecard approach can be efficient and effective in assisting the organizational executives in making holistic and long-term management decisions. However, the template/scorecard puts undue emphasis on the shareholders' maximization, but rather on the other equally important stakeholders. The developed creative solution indicated that a strategy-focused concept is a significant determinant of its customer support capabilities. Thus, the creative solution can deliver an expected result when it is aligned with the organization's strategy. The template/scorecard is fraught with many several conceptualization assumptions that are found realistic in the modern environment in strategizing performance management. The examinations of the dynamics of customer support performance are also based from the theoretical contributions to the literature review of the modern support strategy.

6.2. Recommendations for Further Study

The development of the conceptualized Balanced Scorecard model for Huddly Support brings about new challenges and opportunities about the impact of performance management, on how best the organization can implement its corporate strategy to enhance the long-term sustainability. This section reviews the areas for a further research study which can pick up where the research project leaves off. For future study, there is a need for a more detailed

longitudinal research based on the four perspectives identified. The longitudinal studies should create the cause-and-effect relationship amongst the scorecard's four perspectives.

In the current research study, it is limited to establishing significant relationships between the four perspectives without any causality outcomes apart from focusing on customer satisfaction. Once the cause-and-effect relationship of the four perspectives is established, the future researchers will be able to assess the impact of the performance of one perspective on the others. It would include not only the performance of the customer support department but also the overall corporate performance. Through multiple reversion analysis models, managers of the targeted organization would be able to anticipate the outcome (effect) of one perspective as the other (cause) is manipulated. Therefore, the scorecard for performance impact can be analyzed effectively and efficiently. It would also be a subject of interest to in look into incentive and reward system to improve performance targets, motivate an employee to perform at their best and create a more valuable customer proposition and reaching for higher and more satisfied customers. The development of the predictive models for performance management would be ideal for other sectors and would also be helpful for academic practitioners.

6.3. Challenges Faced in the Project

The challenges faced in writing the master thesis project is the lack of information and data acquisition of the company profile and supporting data that would back-up the framework of the research study. Since the company is still a start-up in the marketplace, gathering industry information would take time to acquire as some information shall be requested and the time to get this information is uncertain. Therefore, there is a need for a constant follow up to get the company information. It is given that for start-ups companies getting meaningful analytics from their data may or may not be available to share, as the business model could suddenly change. As a researcher, there is a more profound need to understand and significant effort to get comprehensive knowledge that would help in conceptualizing the performance management strategy.

7. Conclusion

This master thesis aimed to define a template/scorecard for performance management that provides impact analysis for the Huddly Support organization. Initially gathered from performing a status review and identify operational improvement potentials. The researcher developed a specific scorecard and suitable Huddly Support technology development. Also an implementation strategy on how to create a seamless work process in managing performance for customer support. Performance management is a critical topic for any organization. To measure the organization's performance, it must first understand what drivers and critical metrics are essential in translating the strategy and the interrelationships between the core perspectives of the performance management framework. Thus, a framework for managing performance should not be regarded as a tool for assessing and measuring performance initiatives but rather an organizational strategic direction for future implementation. The research study has reviewed and analyzed the key metrics and drivers surrounding the management of performance using the Balance Scorecards approach. The scorecard was founded on some performance metrics that include the four perspectives, the goal of increasing shareholder value and a central focus on customer value proposition. Successful implementation of the scorecard model requires the proper translation of vision and strategy into action.

Through this research project, it confirms that there is indeed a need for performance scorecard for start-up companies such as Huddly where the understanding of the different perspectives of the performance scorecard model is critical. As developed from the research study, the perspectives for the organizations' scorecard model comprise the stakeholder and shareholder relationship, value creation through customer value proposition, corporate strategy and among others. The study leads to a better understanding of the critical performance strategy for customer support and is likely to open many new areas for future research study through corporate planning and performance measurement systems.

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