

Balanced Scorecard Perspectives and Institutional Performance of Private Tertiary Institutions

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Abstract

Business managers around the globe have tested the effectiveness of the Balanced Scorecard (BSC) model since its inception in the early 90s in their bid to enhance business performance to achieve financial sustainability and transform developments in their economies. Other sectors of world economies have tried to emulate the BSC concept to achieve institutional goals for financial freedom. Research on the investigation of the replicability of the BSC model and its effectiveness in addressing the continued financial sustainability challenges of educational institutions, especially the private ones, is scarce. This study aimed to increase awareness of the influence of BSC application in addressing financial performance challenges besetting the private educational sector

Index terms— balanced scorecard, financial performance, learning and growth, internal business processes, customers.

1 Introduction

overning Councils and Boards of Trustees of private educational institutions meet either annually, bi-annually, or quinquennium, to strategically plan on how their institutions will progress into the future in today's competitive environment as they strive to restructure and reform their institutions to provide quality education in training fruitful members of society.

The visions and strategies for quality service provision, growth, and sustainability are communicated to the workforce through management, the drivers of the strategic planning process. Management is expected to devise tactics to achieve the long-term objectives of stakeholders as expectations are relayed down to the operational managers and the workforce for implementation (The Institute of Chartered Accountants, Ghana [ICAG], 2015).

Fiduciary duties of managers require that outcomes of tactics adopted for achieving short to medium-term and long term objectives of institutions are reviewed, based on the financial and non-financial matrix, and made known to governing bodies for assessment of management's stewardship and longterm institutional survival ??Malgwi & Dahiru, 2014). Such strategic evaluative processes seemed absent in educational institutions, especially the private ones. This phenomenon places limitations in assessing institutions' financial and non-financial performance, which partly accounts for the continued reverberation of financial sustainability challenges of private educational institutions (Mugo & Ngahu, 2015; Addo, 2018; Afful, 2019; Ferdinand, 2020; Molele & Tefu, 2020).

Strategic performance assessment by management to reduce financial sustainability challenges is one of the critical areas in institutional operations. In recent times, the urge to improve performance measurement of not-for-profit institutions has increased for several reasons, among which management decision-making and the institution's going concern and external credibility are the most important (Vu, 2018).

Educational institutions in the private sector form part of the most dynamic and fast-growing ventures in world economies because they have made significant impacts on the world's socio-economic development over the years. They make considerable contributions to the provision of quality educational services to the population ??Kharusi & Murthy, 2017; Yanka, 2017). It is, therefore, imperative that researchers investigate and recommend all possible intervention mechanisms for the long-term survival of private sector educational institutions.

Various studies have looked at the review and adoption of the balanced scorecard framework in higher educational institutions (Aljardali et al., 2012; Al-Hosaini & Sofian, 2015; Bissessar, 2017; Aboajela & Amar, 2017; Gündüzalp & Arabac?, 2017; Vu, 2018; Camilleri, 2021). However, none of the studies considered the replicability of the balanced scorecard framework and its influence on the financial performance of private tertiary institutions.

The study sought to address this research gap by ascertaining the extent of the balanced scorecard model application in performance measurement and its relationship with financial performance in private tertiary institutions. The results of the study focused on a national and international audience of educational institutions, especially the private ones, who seek innovative means of facing new challenges in order to improve the quality of education while sustaining their institutions for long-term survival.

The crust of this study was to help address the financial sustainability challenges of private educational institutions by increasing awareness of the relationship which exists between the balanced scorecard perspectives and financial performance. Consequently, this study sought to address the following questions:

1. What is the extent of balanced scorecard model replicability in private tertiary institutions? 2. Is there a significant relationship between balanced scorecard perspectives and the financial performance of private tertiary institutions?

The null hypothesis of this study is: 1. There is no significant relationship between balanced scorecard perspectives and the financial performance of private tertiary institutions.

Given the ever-expanding technical, regulatory, and competitive climate, Gupta and Sharma (2017) alluded that managers are supposed to achieve financial as well as non-financial goals in their bid to satisfy multiple stakeholders and stay financially sustainable. The researchers further asserted that, as a result of the tangible and intangible expectations of stakeholders, current performance measurement had been the balanced scorecard approach developed by Kaplan and Norton in 1991.

Robert S. Kaplan and David Norton's work appeared in their seminal article published in the Harvard Business Review. Chapter two of their conceptual framework book: 'A Conceptual Framework of Balanced Scorecard Approach' asserted that the evolution of the balanced scorecard idea began with the conviction that managers ought to measure more than financial results to stay sustainable, and proposed a matrix with four types of measures: financial, internal processes, learning and growth, and customer (Kaplan & Norton, 2010).

According to the authors, the balanced scorecard model expects institutional managers to view performance measurement as a set of a cause-and-effect relationship between the four balanced scorecard perspectives, as shown in Figure 1. The model is also seen as a strategic planning and management system that takes into account non-financial aspects of institutional performance, such as customer satisfaction and business processes, to create a picture of how the company is likely to perform going forward (Gupta & Sharma, 2017). asserted that the strategic ties between the balanced scorecard perspectives enable managers to use 'if-then sensitivity analysis to assess their approach to institutional management. The aim is to provide continuous progress in each of the three non-financial perspectives, which are tracked to determine if they eventually translate into sustainable financial results. Accordingly, the balanced scorecard perspectives tell institutions the knowledge, skills, and systems that employees will need (Learning & Growth) to innovate and build the right strategic capabilities and efficient processes (Internal Business Process), which deliver specific value to customers and eventually lead to positive financial performance for sustainability.

2 Note

Figure 1 pictures that the learning and growth outcomes (lowest level in the hierarchy) lead to improved internal business processes and procedures (second level), which in turn improves the value proposition offered to customers (third level) and finally culminate into financial performance, considered to be the highest level, for sustainability. The balanced scorecard transforms the mission and strategy of an institution into a full set of performance evaluative actions (Farokhi et al., 2018) because the model enables an institution to recognize its benefits, as well as its shortcomings, and thus strengthen its operations (Dudic et al., 2020).

3 II. Learning and Growth Perspective

The learning and growth perspective seeks to build institutional capacity by improving knowledge, skills, and technology. Theories of learning and growth hold that learning and growth within an institution drive the success of institutional processes and customer satisfaction that leads to financial stability (Oracle & Affiliates, 2013). In this perspective, Kaplan and Norton asserted that institutions measure their ability to provide the employee capacity and skills, along with the technology and institutional climate, necessary to support institutional strategy. Strategic efforts to increase the skills and knowledge of employees enable institutions to make higher investments, which are required to achieve the desired strategic skill coverage ratio to attract and retain competent employees who enhance institutional internal and external branding.

The learning and growth perspective deals with the building up of a mechanism to fill gaps in knowledge, processes, information system, and institutional culture and to be continually innovative (Gupta & Sharma, 2017). According to the authors, these attributes are expected to, all things being equal, lead to smooth running of an organization because the perspective works at the ability of employees and quality of information. The learning

and growth perspective identifies sets of skills and processes that drive educational institutions to continuously improve their critical internal processes (Vu, 2018).

The learning and growth perspective places emphasis on the investment in employees who are responsible for critical internal processes to achieve organizational set targets because if institutions take care of their employees, employees will, in turn, take care of customers (Al-Hosaini & Sofian, 2015; Bissessar, 2017). The learning and growth perspective is argued to facilitate the performance of the other three perspectives (Camilleri, 2021).

Mair (2016) placed the learning and growth perspective into human capital, information capital, and organizational capital. Sarkin (2016) added that these categorizations deal with employee capabilities (core competencies and skills), information systems capabilities and strategy awareness, involvement, and motivation, which form the bottom foundation of institutional strategy and show how intangible assets determine the performance of the critical internal processes for financial performance.

4 III.

5 Internal Business Processes Perspective

This perspective seeks to improve process efficiency for operational excellence and lower cycle time. Internal business processes revolve around the efficiency and effectiveness of an institution's operations (Gupta & Sharma, 2017). The internal business processes perspective encompasses key business processes that institutions have to perform well in order to deliver customer value and satisfaction to enhance brand loyalty (Patidar, 2013). According to Kaplan and Norton, a key process described in the balanced scorecard model is innovation, which enables institutions to continuously develop new products and services to penetrate the competitive environment (Dudic et al., 2020).

Efficient internal business processes enhance academic branding and urge-up enrollment because it strengthens strategy that broadens marketing's application in the education sector by identifying institutional unique competitive advantages that differentiate one institution from another and builds relationships with current and prospective stakeholders in the long term (Manea & Purcaru, 2017; Bissessar, 2017; Aboajela & Amar, 2017; Camilleri, 2021). This assertion implies that increased brand awareness and customer loyalty as a result of efficient service provision increase brand association and demand for products and services with a resultant growth in revenue for financial performance.

Gordon et al. (2016) believed that brand association stems from brand image composed of sets of memories regarding the brand in customers' minds. Mondkar (2017) added that brand image is the total impression formed in customers' minds from the features of an institutional behavior and processes. Vazifehdoust and Negahdari (2018) considered brand association as the strength of a customers' positive outlook towards a brand in terms of emotional bond and long-term attachment, which are unearthed through efficient and innovative processes for customer satisfaction.

IV.

6 Customer Perspective

The customer perspective seeks to improve customer acquisition and retention. Customer services are based on identifying and satisfying customer needs and exceeding customer expectations, and measure value propositions that an institutional strategy has identified for targeted customer groups because customer focus and satisfaction form integral parts in the key objectives of any institution (Gupta & Sharma, 2017; Camilleri, 2021).

The customer perspective involves how institutions need to consider customers in order to succeed and achieve institutional mission. A critical consideration of customers begins with employee empowerment through learning and growth for an efficient internal business process (Al-Hosaini & Sofian, 2015; Bissessar, 2017).

V.

7 Financial Perspective

The financial perspective seeks to lower cost and increase revenue, a measure of financial performance for sustainability. The theory of financial perspective acts as a focal point or culmination of all the objectives and measures in the other perspectives (Gupta & Sharma, 2017). The financial perspective reflects the degree of success of the other balanced scorecard perspectives in achieving institutional strategic objectives, placing it at the highest level in the hierarchy of balanced scorecard perspectives because decisions made under the other perspectives will ultimately culminate in financial results. This is usually actualized through the provisions of institutions' mission and vision statements and their transformation into financial performance (Aboajela & Amar, 2017). The cause and effect trend can be seen through the financial index, irrespective of whether they are: tangible or intangible.

Financial performance measures an institution's financial health over a period of time as a result of management initiatives used to generate revenue to

8 Global Journal of Management and Business Research

Volume XXI Issue IX Version I Year 2021 () A achieve and fulfill their fiduciary duties (Naz et al., 2016). Profitability, revenue, and capital, and financial resource utilization are all indicators of an institution's financial performance (Matar & Eneizan, 2018). According to Mugambi (2016), the financial health of an institution illustrates whether it will be able to perform its duties and meet the needs of its stakeholders over time, calculated by the measurement of revenue surplus over expenditure, the availability of cash to cater for expenses and the comparison of institutional assets and liabilities.

Financial performance is a measure of what an institution has accomplished over a period of time which shows favorable conditions obtained from useful data about fund flow, usage, effectiveness, and performance (Dragusin et al., 2016; Batchimeg, 2017). The study measures financial performance using institutional selfsufficiency, which considered liquidity, financial leverage, and debt service coverage of private tertiary institutions.

Liquidity looks at the extent to which liabilities being matured in the next year can be repaid from quick assets. It can be measured by calculating the ratio between current assets to current liabilities (Cernostana, 2017; ??harusi & Murthy, 2017). Financial leverage considers the extent to which an institution utilizes its borrowed funds. It is measured by the ratio of total debt to equity. Institutions that are more leveraged are likely to face negative results as there is the risk of default in case the institution is unable to meet its obligations (ICAG, 2015).

The debt service coverage ratio, which divides an institution's earnings before interest and taxes by interest expenses, indicates an institution's ability to generate enough cash to pay its interest expenses on outstanding debts (Wijewaradana & Munasinghe, 2015). One of the pillars of financial sustainability, according to Leon (2001), is effective management with strategic planning that measures the total financial performance of an institution, which determines the sturdy state of institutions' financial success.

Institutions' ability to create and earn operating revenue to meet the cost of current operations as well as future commitments without impairments in future activities to enhance survival and growth as a result of the ability to evaluate financial and non-financial performance promotes institutional survival (Esampally & Joshi, 2016; Beg, 2016; Wachira, 2018).

9 VI. Replication of Balanced Scorecard in Private Tertiary Institutions

Readings on the balanced scorecard model from previous studies show that there are scanty existing literature in exploring its applicability in operations of private tertiary institutions. The BSC model has widely been adopted and replicated in the corporate business world for improved performance, and thousands of other enterprises were projected to use the model by 2017 (Kaplan & Norton, 2010). Other notfor-profit organizations have also replicated the model to enhance performance through efficient provision of services ??Bisbe & Barrubés, 2016).

Private educational institutions' service provision may not be motivated solely for profitability but are expected to, at least, break even and continue in business for the good of their owners and society (Oketch et al., 2010). As a result, private tertiary institutions have adopted educational strategies that broaden marketing applications by identifying unique competitive advantages that differentiate one institution from another as a result of enrollment crisis and build relationships with current and prospective stakeholders in the long term (Manea & Purcaru, 2017).

According to Rohn (as cited in Aljardali et al., 2012), the vision and mission of these institutions focus mainly on stakeholder satisfaction through the provision of clear structures for continuous quality improvement, the establishment of a culture of academic quality, evaluation of efficient use of resources for academic programs, documentation of contribution of activities towards the institutional mission, promotion of academic excellence, and determination of priorities on future planning and survival, among others.

Provision of quality services to students is a key ingredient in attracting and retaining students, for decreasing trends in enrollment are equivalent to operating deficits, especially at tuition-dependent educational institutions (Pavlov & Katsamakos, 2019). The provision of quality services leads to excellence in business education as it deals with customers' perceptions about the supremacy of an institution's services as compared to others within similar categories or close substitutes. Educational institution's failure to satisfy students as a result of process inefficiencies impact negatively on students' recruitment, retention, and ultimately, the financial performance of private tertiary institutions (Narteh, 2018).

Sudirman (2012) demonstrated how the balanced scorecard could well be implemented in Hasanuddin University of Indonesia. The author placed organizational structure, policy, systems and procedures, staff performance, infrastructure, and facilities under the learning and growth perspective, whiles academic atmosphere, good governance, social responsibility, learning process, and research came under internal business processes. The study further placed learning quality, learning accessibility, and mutual benefit under customer perspective, whiles funding from grants, government, and society was placed under the financial perspective. The study concluded that the proposed BSC approach would help Hasanuddin University to translate its vision, mission, and strategies into series of measurement indicators for enhanced financial performance for sustainability.

In a study that sought to replicate the balanced scorecard in Trinidadian higher education, Bissessar (2017) placed measures such as student satisfaction survey, a culture of care, number and rate of staff publications, a culture of students as life-long learners, and mentor for new staff under customer perspective whiles value creation,

meeting established standards, global networking, and sharing were placed under the internal business processes perspective. Under the learning and growth perspective, the study placed staff satisfaction, budget spent on teacher professional development, most improved worker, and creation of professional communities/collaboration. Cost efficiency and productivity and beneficial use of tangible and intangible resources were, however, placed under the financial perspective. The study concluded that the adoption of the balanced scorecard model is expected to increase revenues and surpluses that can be ploughed into Trinidadian higher education institutions for further growth and development.

Aljardali et al. (2012) looked at the adoption of the balanced scorecard in Lebanese public higher education institutions and proposed a model for the creation of a framework for performance measurement. In measuring customer perspective, the study placed students' satisfaction survey, alumni evaluation, alumni satisfaction survey, and the number of alumni in public service. Meeting service standards, numbers of new services introduced, number of internships available, and number of departments in specialized areas were placed under the internal business processes perspective. Measurements under learning and growth included the number of faculty presentations, percentage of budget spent on staff development, number of courses incorporating new technologies, and number of curriculum reviews. Tuition fee comparison, year-end budget variance, and budget allocation to instruction were some of the measures that were placed under the financial perspective. The study called on Deans in Lebanese higher education institutions to begin the process of implementing a balanced scorecard to achieve performance for sustained operations.

Al-Hosaini and Sofian (2015) reviewed relevant perspectives of the balanced scorecard in the context of higher educational institutions. The study revealed that applicability of the balanced scorecard in higher educational institutions is possible and that the balanced scorecard perspectives are relevant for higher educational institutions. The study concluded that the model could be used to monitor educational institutions performance and enable them to adjust to emerging challenges that come as a result of implementing key strategies for long-term sustainability.

In a study that looked at applicability of balanced scorecard system in primary schools according to opinions of education inspectors, managers, and teachers at Elaz?? Province-Turkey, Gündüzalp and Arabac?, (2017) sampled opinions of 110 managers, 340 teachers, and 20 inspectors and found that participants generally approve the implementation of the balanced scorecard in educational institutions because BSC improves school performance and development.

Aboajela and Amar (2017) used a quantitative approach to gather data from public universities and explored the acceptance, importance, and usefulness of the balanced scorecard as one of the performance measurement techniques in Libyan higher education. Results indicated that decision-makers in Libyan higher education institutions, moderately, use the balanced scorecard to evaluate institutional performance which was considered highly useful in enhancing the sustenance of their institutions.

Camilleri (2021) investigated the adoption of the balanced scorecard in the performance measurement appraisal system of higher education service providers within the Southern European countries. Purposive sampling was used to identify respondents who were academic members working in Southern European high education institutions with more than 10,000 students from 82 countries. The study found that performance reviews, based on the balanced scorecard, will help higher educational institutions' leaders to identify institutional value-creating activities. The study concluded that higher education institutions' leaders could utilize the BSC model as a reasonable performance measurement tool to evaluate institutional improvements in financial results, among other positive outcomes, for survival.

Al-mawali et al. (2010) studied balanced scorecard usage and financial performance of branches in the Jordanian banking industry and found that there is a positive relationship between balanced scorecard perspectives and financial performance.

Olasunkanmi and Asaolu (2019) studied balanced scorecard and private universities' performance in South-Western, Nigeria, using three private universities in a descriptive survey design with 300 structured questionnaires and interviews. The study revealed that the balanced scorecard is suitable and that private universities have the capacity to implement the system for performance evaluation.

Based on the ongoing discussion, Figure 2 represents the conceptual framework of the proposed replication of the balanced scorecard model in the operations of private tertiary institutions. This study adopted the resource-based theory, which suggests that financial and non-financial resources constitute valuable and unique properties that are key to the success of an institution (Andrews et al., 2015). The

10 Global Journal of Management and Business Research

Volume XXI Issue IX Version I Year 2021 () A resource-based theory is relevant to this study given that it aids in understanding educational institutions' unique internal characteristics to generate, manage and control institutional resources to provide unique services to society and survive.

11 Methodology a) Research Design

The study employed a descriptive correlational design and parametric inferential statistics to examine the relationship between balanced scorecard perspectives and financial performance.

12 b) Population and Sampling Technique

The study was conducted among 45 private tertiary institutions from four regions in Ghana. This sample was randomly selected from a population of 77 to answer a self-constructed questionnaire.

13 e) Ethical Consideration

Ethical considerations were observed during the data collection exercise. Participants were assured that the survey would not collect identifying information, which makes them and their data anonymous and confidential.

14 VIII.

15 Results and Discussion

The study aimed to assess the extent of balanced scorecard application in the operations of private tertiary institutions and the relationship between balanced scorecard perspectives and financial performance. The results are presented in this section.

16 The extent of balanced scorecard application

The study ascertained from the respondents the extent of balanced scorecard application in the operations of private tertiary institutions. The findings, in terms of means and standard deviations, are as shown in Table 1. Respondents disagreed that managers of private tertiary institutions review performance based on balanced scorecard perspectives ($M=2$, $SD=0.63$), which was verbally interpreted as poor.

The results indicated that private tertiary institutions apply, to a small extent, the principles of the balanced scorecard in the review of institutional performances. Though institutions have quality assurance departments ($M=4$, $SD=0.77$), which was verbally interpreted as very good, surveys that measure customer perspectives were not carried out ($M=2$, $SD=0.52$). Respondents disagreed that customer request response time ($M=2$, $SD=0.69$) and peer reviews were carried out ($M=2$, $SD=0.51$), which were verbally interpreted as poor. Respondents further disagreed that their institutions allocate resources based on activity levels and carry out alumni tracer studies ($M=2$, $SD=0.59$) and ($M=2$, $SD=0.58$), respectively. These were verbally interpreted as poor. In terms of financial performance, the study assessed the financial health of private educational institutions. Liquidity ratio, Debt-to-Equity ratio, and debt servicing coverage ratio were calculated using five-year average financial statements extracts from respondents. Results of the calculated figures showed average percentage liquidity, debt-to-equity, and debt service coverage of 49, 75, and 34, respectively. These results indicated that private tertiary institutions could meet less than half of their current obligations, have three units of debt for every unit of equity, and had only enough cash to cover 34 percent of annual debts payment, respectively. Liquidity and debt service coverage ratio results were lower than average percentage figures of 60 and 100, respectively. The financial leverage result was higher than recommended average percentage of 75 (Cernostatna, 2017;Lattz, 2017).

The relationship between balanced scorecard perspectives and financial performance was investigated using the Pearson Correlation Coefficient. The findings are as shown in Table 2. Results showed a statistically moderate, significant positive relationship between the variables, $r = 0.412$, $n = 45$, $p = 0.005$. The results imply that the better the review of performance based on balanced scorecard perspectives, the better the financial performance. .005 N 45

The study, therefore, rejects the null hypothesis that there is no significant relationship between balanced scorecard perspectives and financial performance. Results support Al-mawali et al. (2010) study, which found a positive relationship between balanced scorecard perspectives and institutional financial performance.

The core of this study was to examine the replicability and the influence of the balanced scorecard perspectives on the financial performance of private tertiary institutions. The data collected and analyzed revealed that private tertiary institutions do not review operational performance based on balance scorecard perspectives. Financial performance measures were below recommended averages. The study, however, found a moderate, positive significant relationship between balanced scorecard perspectives and financial performance.

Favorable financial performance for sustainability is vital to all businesses including, private tertiary institutions. The study, therefore, recommends the replicability of the balanced scorecard model in private tertiary institutions' performance review processes. The causal relationships among the perspectives encourage feedback loops which guide strategic planning processes for continuous operations

The study again recommends training and getting management commitment of private tertiary institutions' managers and employees. A clear understanding of concepts and meanings are rudimentary requirements in the successful implementation of any new concept. Training leaders and employees on the applicability of the balanced scorecard perspectives in day-to-day operations will help to avoid resistance to change, lack of commitment, and fear of accountability by departmental heads.

A clear strategic map should also be developed and performance indicators clearly identified in addition to the causal relationship between strategic objectives. The linkages among the perspectives aid in strategic analyses because employees better trained in quality customer care reduce process cycle time and service defects

The study further recommends a constant review process. The effectiveness and real benefit of the balanced scorecard's replicability are achieved through an efficient review process. The review process will help in fine-tuning the key performance indicators and identify corrective actions and new initiatives.

This study adds to the existing scholarly works on the implementation of the balanced scorecard in the educational sector. Adoption of the balanced scorecard within this sector is becoming more and more important because educational institutions, for that matter, private tertiary institutions, need to identify and replicate the balanced scorecard perspectives in their performance review processes to reap the benefit of the model as evident in the corporate business setting to remain financially sustainable. This study faced a limitation in data gathering, which was gathered during the corona virus pandemic. Participants in online data gathering may not contribute valid data, especially in stressful life events (Al-Salom, 2017) such as the Covid-19 pandemic. This data-gathering procedure might affect the validity of the facts and figures provided by the respondents. Future qualitative research is required to identify the challenges of replicating the balanced scorecard in private tertiary institutions.

17 Global Journal of Management and Business Research

Volume XXI Issue IX Version I Year 2021 () A ¹

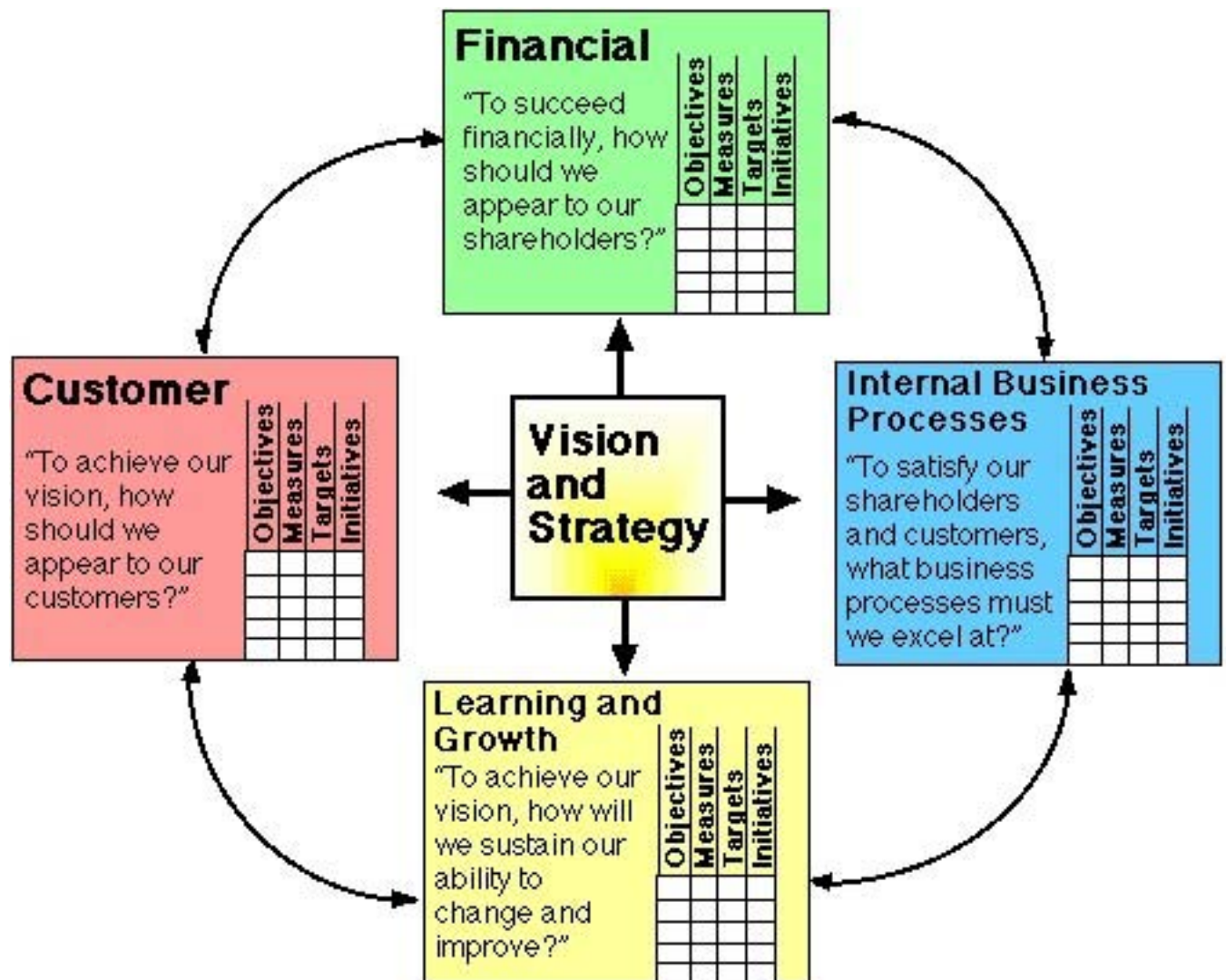


Figure 1:

1 ←

Figure 2: Figure 1 :

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Mean	Std. Dev.	Response Scale	Verbal Interpretation
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Figure 3: Table 1 :

2

Financial Performance

Figure 4: Table 2 :

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