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## Balanced Scorecard: The Key to Employee Well-Being the Impact of Balanced Scorecard on Employee Well-Being: The Case of State of Michigan-USA

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### **Abstract:**

*While the organizations have started to use methods consisting of financial and non-financial measures to track progress when they realized that traditional strategic management and performance measurement methods based only on financial data were not sufficient to plan the future and to be strong in competitive environments. The balanced scorecard is one of these methods that has been widely adopted and is the most popular performance method by researchers which uses a "four perspective which is financial, customer, internal process perspective and learning growth perspectives.*

*The main function of the learning and growth perspective is to drive the major sources of human capital, informational capital, and organizational capital in the organizations. One of the most important factors of organizational success is happy employees who make a tremendous contribution to increasing organizational performance, proven by many researchers.*

*The objective of this study was to research the impact of the Balanced Scorecard on employees' well-being, its theoretical frameworks and concepts, and empirical research. The survey of the study involved 27334 employees working in the State of Michigan and has been analysed by 28 of Statistical Package for Social Sciences (SPSS). The study demonstrated BSC strategies were implemented in the organization have improved organizational performance in the four financial perspectives, customer, internal process, and learning & growth perspectives. With the BSC strategy, which has been followed for 20 years, and the learning and growth perspective, the organization increases the satisfaction of its employees, while organizational commitment and job engagement come to the fore. Statistical results from employee satisfaction surveys showed that BSC increased job satisfaction by 68.30% (R square: 0.683), job engagement by 71.00% (R square: 0.710), and organizational commitment by 21.30% (R square: 0.213).*

**Keywords:** *Balanced scorecard, job satisfaction, organizational commitment, job engagement, employee well-being*

## **1. Introduction**

### *1.1. Background of the Study*

In the late 1980s and early 1990s, dissatisfaction with traditional performance measurement systems provided the basis for 'balanced' and 'multidimensional' performance measurements. Organizations have used methods consisting of financial and non-financial measures to pursue progress recently (Epstein & Manzoni, 1997). The balanced card was created by Art Schneider man in 1987 at Analog Devices, a mid-sized semi-conductor company; the Analog Devices Balanced Scorecard was similar to what is now known as a "First Generation" Balanced Scorecard. In those years, organizations use various techniques such as total quality management (TQM), SWOT analysis, just-in-time (JIT), production and distribution system, business process reengineering, etc. to improve performance and increase profitability (Kaplan & Norton, 1996). In the 1990s Robert Kaplan and David Norton developed balancing financial, internal processes, customer, learning, and growth perspectives (Kaplan & Norton, 1996). A balanced scorecard solves the implementation strategy issue by providing an efficient and effective performance measurement system.

Focusing on the financial perspective, the customer perspective, and the internal processes perspective, the three BSC perspectives point to a huge gap between the capabilities of people, processes, and systems on the one hand, and the actions required to achieve goals on the other. (Jelenic, 2011) To overcome this problem, organizations have begun to train

staff, increase employee satisfaction, improve information and technology systems, harmonize procedures, through 4th perspective-learning and growth perspective of BSC.

It is a measure that affects employee productivity, skill and morale increase, innovation, improvement of internal processes, and customer satisfaction. The State of Michigan also established a balanced performance measurement system in 2000 by using BSC to increase the performance of the institution. The state of Michigan consists of 46,941 employees with a diverse professional mix at headquarters. The BSC has been integrated into budgeting, resource allocation, target setting, reporting, and feedback on performance into ongoing management processes since 2000. This study investigated the organization's 20-year performance improvement and BSC effects on employee well-being.

### *1.2. Statement of the Problem*

The effects of BSC on the performance of organizations have been the subject of research since the early 1990s. According to many researchers, BSC improves the performance of organizations with the necessary training and IT systems, and when applied properly. Researchers have studied BSC's impacts in the both public and private sectors, and despite many criticisms of the difficulties of implementation in the early stages, it has been proven to increase organizations' performance. The learning and growth perspective, the fourth perspective of the Balanced Scorecard, focuses entirely on innovations, technologies, and employee motivation, satisfaction, and training.

Empirical research on the impact of BSC's on employee well-being is limited. The focus of the correlational study is to examine the relationship between happiness found in the workplace, strategic management tools, and employees' well-being with leads to organizational success. This study is to explore the effect of Balanced Scorecard on employee well-being and to determine if there is a quasi-experimental provable relationship between these two variables, and the direction and the intensity of this relationship. Also, this research aims to remove the lack of empirical research in this area. The proposed relationship between BSC and employee well-being may inform current and future organizational leaders and HR on new methods of employee management, leadership development, and strategic planning.

### *1.3. Research Questions*

Considering the above-mentioned problem, the following basic research questions are designed to offer possible solutions.

- What impact does BSC have on Michigan State performance?
- How has the implementation of the BSC impacted employee well-being?

### *1.4. Objectives of the Study*

The overall aim of the study is to evaluate the application of the Balanced Scorecard concerning employee well-being in the State of Michigan. The specific aims of the study are:

- Examination of how BSC affect the overall performance of the State of Michigan
- Exploration of the relationship between BSC and employee well-being.
- Examination of how employee well-being is affected by BSC.

### *1.5. Significance of the Study*

This study is significant in indicating the overall gaps and advantages identified in implementing the Balanced Scorecard to the State of Michigan, emphasizing employee well-being appraisals as a whole so that it would act upon the issues. The proposed relationship between BSC and employee well-being may inform current and future organizational leaders on new methods of employee management, leadership development, and strategic planning. The study also applies to a variety of academics and researchers as it will be received through the State of Michigan as a source of information on the impact of the Balanced Scorecard on employee well-being in the public sector. Also, as this is the first time the State of Michigan has studied this topic, this research will serve as a starting point for other researchers who want to expand the study further considering the scope it covers. Therefore, future scholars will find the material important in their studies as they will have a source for literature reviews.

### *1.6. Scope of the Study*

Conceptually, the study focused on issues such as the business strategic plan, employee well-being, organizational culture, and challenges.

### *1.7. Limitation of the Study*

One of the major limitations the researcher observed is accessing a series of journals that have been issued on the subject matter for free. And, gathering 20 years of historical financial statement data and employee survey data was a huge challenge which in turn may affect the successful completion of this research.

### *1.8. Structure of the Study*

This thesis is organized into five chapters. The first chapter focuses on introductory issues related to the basic concepts of the subject matter and organization-specific issues, while the second chapter vests much on the review of related literature that strengthens the essence of the research based on past experiences and assumptions. The general methodology used is described in chapter three in detail so that readers understand the process the piece passed through. Chapter four analyses the data collected through different instruments and presents it in various ways so that readers get

convinced. Finally, chapter five concludes this study by summarizing the study, listing major findings, and forwarding some recommendations.

### 1.9. Definition of Terms

In the context of this study, definitions of the following key terms are provided.

- *Performance* is the qualitative or quantitative expression of the level of achievement of actions taken by individuals, organizations, and systems to achieve the pre-determined goals and objectives. (Davis & Doley, 2008). *Performance Management* is a management process, which collects information about the current and future conditions of the organization, compares them, and initiates new and necessary activities that will ensure the continuous development of performance to lead the organization to the desired objectives.(Erdogan, 2013).
- *Performance measurement* is a process of reviewing progress towards achieving pre-defined goals and objectives. *Strategic management* is the process of setting goals, procedures, and objectives to make a company or organization more competitive.
- *The Balanced Scorecard* is a strategic management performance metric that helps organizations through four perspectives (financial perspective-customer perspective-internal processes perspective-learning growth perspective) identify and improve internal operations to help their external outcomes.
- Happiness is defined as the result of issues that give life satisfaction to people in all aspects such as coping with the difficulties encountered in life, self-realization.
- The well-being concept is mental and physical health, consisting of three main components: *psychological well-being*, *subjective well-being*, and *workplace-related well-being (Employee Well-being)*. *Subjective well-being* includes pleasant emotional experiences. *Psychological well-being* examines perceived development in the face of the existential challenges of life such as, pursuing meaningful goals, growing and developing as a person, and establishing quality bonds with others. *Employee Well-being* can be defined as employee happiness, employee engagement, employee experience, employee satisfaction. The components of workplace happiness/employee well-being can be defined as job satisfaction, organizational commitment, work engagement, features of the working environment, job stress, fewer negative feelings, and so on.

## 2. Literature Review

This chapter also discusses theories related to balanced perspectives and formulates the relationship between employee well-being and BSC in a conceptual framework. Strategic management, performance management/measurement, and finally successful BSC implementations on organizations were investigated by examining the studies of the leading academic theorists such as (Crosby, 1980), (Juran, 1980) and (Deming, 1986), (Kaplan, R.; Norton, D.P., 2004) of the current literature. Employee well-being and happiness: happiness at work have been examined by studies of leading researchers such as (Fisher, 2010), (Meyer & Allen, 1991), (Seligman & Csikszentmihalyi, 2000), (Seligman M. P., 2002), two main gaps in the academic literature are identified. The first gap is the lack of available literature around employee impact specifically around employee engagement, morale, and satisfaction that are affected by strategic performance measurement methods. The second gap is the lack of available literature using results.

### 2.1. Strategic Management (SM)

The strategic management discipline originated in the 1950s and 1960s. Among the numerous early contributors, the most influential were Peter Drucker, Philip Selznick, Alfred Chandler, Igor Ansoff, (Camporesi, 1989), and Bruce Henderson (Ghemawat, 2002). According to (Ansoff & Mcdonnell, 1990), strategic management constitutes a systematic approach to the management of changes, comprising: positioning the organization through strategy and planning, the real-time strategic response through the management of problems, and the systematic management of resistance during strategy implementation. (Fred R. David, 2011) and (Porth, 2002), defined strategic management as the art and science of formulating, implementing, and evaluating cross-functional decisions that enable an organization to achieve its objectives.

### 2.2. Performance Management (PM)

Performance Management (PM) has been defined as focusing on the performance of an organization, a department, an employee, or existing processes to manage specific tasks. (Harris, Brewster, & Sparrow, 2003). There are two important objectives for performance evaluation. The first of these objectives is to have information about business performance.

### 2.3. The Performance Measurement (PM)

The performance measurement (PM) is a balanced and dynamic system that enables the support of decision-making processes by gathering, elaborating, and analyzing information (Neely, Adams, & Kennerley, 2002). The main role of performance measurement is to assess the current position of the organization and also to help managers create and implement a better strategy. (Cristian & Avasilcai, 2014).The best-known performance measurement tool is the Balanced Scorecard, which is based on four distinct perspectives (financial, customer, internal process, and learning and growth). (Bourne, 2001), (Murby & Gould, 2005).

## 2.4. Happiness

Happiness is defined as pleasure, life satisfaction, positive emotions, meaningful life, or satisfaction. Since the 1960s, happiness research has been conducted in a wide variety of scientific disciplines, including gerontology, social psychology, clinical and medical research, and happiness economics. (Veenhoven R. &, 1996) defined happiness as life satisfaction According to Aristotle, the word eudaimonia is the word of happiness. (Seligman, 2002), (Ryan & Deci, 2001), (Diener, 2000)(Waterman, 1993),(Ryff, 1989) later, with the eudaimonia essence, it has gained more attribution with the term 'well-being' (Seligman, 2011); Ryan & Deci, 2001; (Ryff & Keyes, 1995); (Andrews & Withey, 1976)According to (Seligman && Csikszentmihalyi, 2000), the rise of positive psychology has led to the legitimized attention for happiness.

### 2.4.1. Factors That Lead to Happiness in General

According to (Layard, 2005), happy people are cheerful and active ones. Lyubomirsky (Lyubomirsky, Dickerhoof, Boehm, & Sheldon, 2011) has defined happiness as a good feeling, meaningful and value of life in a person with joy, satisfaction, or positive well-being experience. According to them, happiness is determined based on;

- 50% genetic and personality traits
- It could be affected by 10% environmentally, and
- By 40% affected by purposeful activities and practices.

### 2.4.2. Theories on Happiness

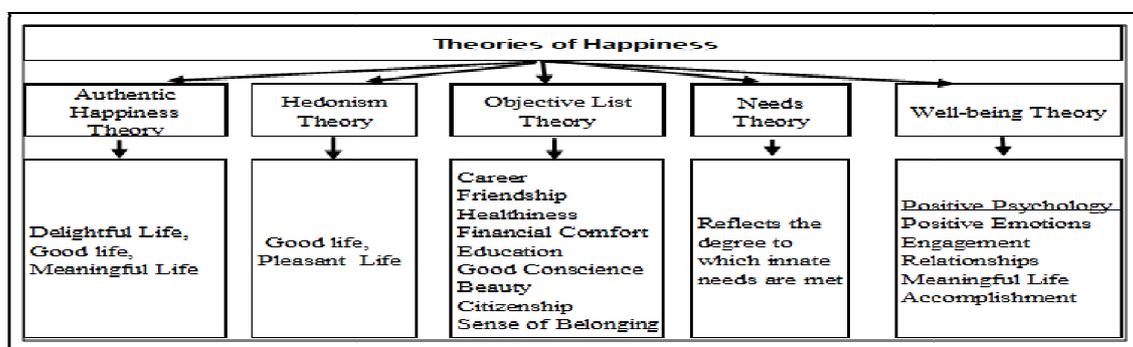


Figure 1: Theories of Happiness

*Authentic Happiness:* The theory of authentic happiness states that there are three different types of happiness: Delightful Life, Good Life, and Meaningful Life. (Heathwood, 2006). *Hedonism theory:* From the perspective of hedonism theory, delightful life is about happiness and this theory defines a good life as a pleasant life. *Desire Theory:* The extent to which a person's life is a good one depends on the degree to which his or her desires are fulfilled or satisfied. (Heathwood, 2006). *Objective List Theory:* Happiness in terms of this theory; career success, friendship, relief from disease and pain, financial comfort, education, knowledge, a good conscience, beauty, belonging to citizenship may include elements such as a sense of belonging. *Needs Theory:* In this perspective, happiness reflects the degree to which innate needs are met.

### 2.4.3 Positive Psychology and Well-Being Theory

Positive psychology roots its development in the Humanistic Psychology movement originated in the 1950s, which emphasizes Abraham Maslow's drive for 'self-actualization', and Carl Roger's concept of a fully functioning person. Maslow was the first psychologist who used the term positive psychology. The first identification of positive psychology was subjective experiences, such as satisfaction, happiness, well-being, optimism, and flow. According to (Ryff & Keyes, 1995) psychological well-being has six factors which include having positive relations with others, autonomy, self-acceptance, purpose in life, personal growth, and environmental mastery. Martin Seligman is a strong researcher within the scientific community of his theories of positive psychology and well-being. According to Seligman, a person who can be considered as flourishing has the presence of all the five elements of PERMA (Seligman, M., 2011) which are positive emotions, Engagement through which a person experiences flow, Positive relationships, meaning which refers to a person finding a purpose in life, Accomplishment is an aspect of PERMA most often pursued for one's own sake.

### 2.4.4. Employee Well-Being & Happiness at work

Over the years, Employee well-being has been defined as the level of satisfaction of individuals regarding their work and work life. Individual factors such as personal characteristics, level of perception, psychological factors that can cause stress, and emotional intelligence all affect well-being in the work environment. (Christakis, Fowler, & S.D, 2009). Subjective Well-Being also has been defined as happiness and life satisfaction by researchers. According to Diener "Subjective well-being refers to all of the various types of evaluations, both positive and negative, that people make of their lives. (Diener, 1997). According to Cynthia Fisher (2010), there are three levels of happiness in business life. The first is seen as temporary happiness at work (short-term emotional state), the second is happiness at the individual level (job satisfaction, commitment, and emotional state) and the third is happiness at the unit level.

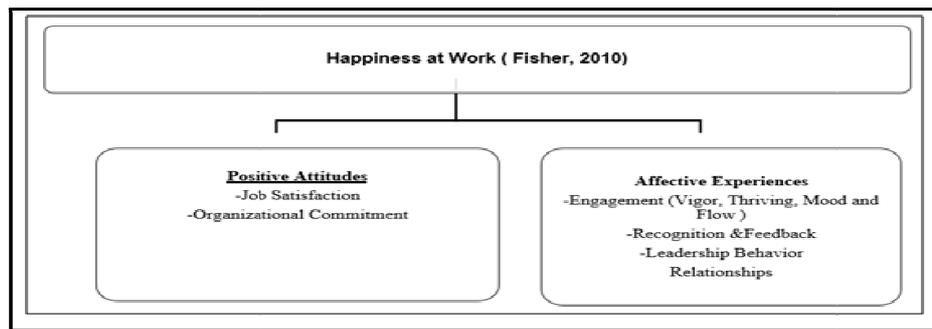


Figure 2: Employee Well-being (Happiness at Work)

#### 2.4.4.1. Job Satisfaction

Psychological Well-being (PWB) in the workplace that took researcher attention in recent years plays an important role in determining job satisfaction, that has focused on the effects of PWB on job satisfaction as well as job performance (Baptiste, 2008). Studies published in 2000 showed a significant correlation between PWB and job satisfaction ( $r = .35, p < .01$ ) (Wright, Cropanzano, & Bonett, 2007). (Locke, 1976) defines job satisfaction as "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (p. 1304). Job satisfaction can be measured in cognitive (evaluative), affective (or emotional), and behavioral components (Hulin & Judge, 2003).

- Measurement: The main job satisfaction scales are: The Job Satisfaction Survey (JSS), The Job Descriptive Index (JDI), and The Minnesota Satisfaction Questionnaire (MSQ). (Spector, 1997). According to (Jurgensen, 1978) the measurable components of Job Satisfaction are.
- Salary & benefits,
- Employee Competency,
- Intrinsic Motivation,
- Learning & Career Development,
- Reward,
- Job security.

#### 2.4.4.2. Work Engagement

(Kahn, 1990) defined work engagement as "harnessing of organization member's selves to their work roles: in engagement, people employ and express themselves physically, cognitively, emotionally and mentally during role performances". According to (May, Gilson, & Harter, 2004). Work motivation has three aspects: cognitive, emotional, and physical involvement. Any effort to maximize organizational effectiveness requires a higher level of business engagement among members of an organization. Engagement is 'positive affect associated with the job and the work setting connoting or explicitly indicating feelings of persistence, vigor, energy, dedication, absorption, enthusiasm, alertness, and pride. Organizations need energetic and dedicated employees, people who are interested in their work. These organizations expect their employees to be proactive, initiative, and responsible for personal development. (Schaufeli, Salanova, González-Romá, & Bakker, 2002).

##### 2.4.4.2.1. Measurement

The three aspects of work engagement (vigor, dedication, and absorption) are assessed by the (UWES) Utrecht Work Engagement Scale (Schaufeli, Salanova, González-Romá, & Bakker, 2002). The work motivation model includes 5 elements of individual motivators: money, membership of a team, mastery, and mission. (Salanova, Agut, & Perió, 2005) found a positive relationship between organizational resources, engagement, and performance among employees working in Spanish restaurants and hotels by UWES. According to (Bakker, 2009) the measurable components of work engagement are:

- Job autonomy (workplace condition)
- Work-life balance
- Vitality
- Mood & Flow
- Regular feedback, and appreciation

##### 2.4.4.3 Organizational Commitment

In organizational behavior and organizational psychology, organizational commitment is an individual's psychological loyalty to the organization. According to Fisher (2010) organizational commitment consists of 3 parts: emotional commitment, continuation commitment, and normative commitment. Emotional commitment is employees with a strong emotional commitment are happy to continue work in that organization. Continuation commitment is employee awareness about the costs of leaving the organization. It is kind of mandatory continuing. Normative commitment is the employee feels the philosophy of continuing work. Employees with a high normative commitment are focused on staying in the organization.

#### 2.4.4.3.1. Measurement

The factors such as role stress, empowerment, job insecurity and employability, and distribution of leadership are connected to a worker's sense of organizational commitment. (Dressler, 1999). The Organizational Commitment Questionnaire (OCQ) helps measure employees' organizational commitment. It is a 15-item scale developed by (Mowday, Steers, & Porter, 1979) and uses a 5-point Likert type response format, with 3 factors that can describe this commitment: willingness to exert effort, desire to maintain membership in the organization, and acceptance of organizational values. According to (Mowday, Steers, & Porter, 1979) the measurable components of work engagement are;

- Leadership Style
- Relationship with co-workers and management
- Alignment-Teamwork
- Positive Organizational Culture

#### 2.4.5 Empirical Studies Regarding Employee Well-Being and Organizational Performance

There are a variety of theoretical studies that examine individual performance because of employee well-being. One important rationale behind this interest is that happy workers tend to be more productive than other workers (Lucas & Diener, 2002). (Pryce-Jones, 2013) Study shows that employees who are happiest at work are considered to be the most efficient and display the highest levels of performance that a happy worker is a high-performing one. (Nielsen, Nielsen, Ogbonnaya, & Käsälä, 2017), (Bockerman & Ilmakunnas, 2012), (Forth & McNabb, 2008), (Patterson, Warr, & West, 2004), (Claypool, 2017), (Krekel, Ward, & De Neve, 2019) (Hoang Ho & K., 2019) studies showed higher wellbeing at work is positively correlated with more profitability and organization performance. The result of organizational commitment ( $\alpha = 0.77$ ), job satisfaction ( $\alpha = 0.87$ ), and work engagement ( $\alpha = 0.83$ ) showed that employee well-being has a significant and positive correlation with firm performance ( $b = .05, p < .001$ ). The positive correlation between happiness and engagement shows that happy employees are more likely to be engaged, a state that would improve productivity and hence ensure the organization would continue to develop. Ultimately, higher wellbeing at work is positively correlated with more business-unit level profitability.

#### 2.5. Balanced Scorecard

The balanced scorecard (BSC) is a used technique for strategic management and achieving long-term objectives within organizations. The concept of the Balanced Scorecard (BSC) was developed in the early 1990s as a new approach to performance measurement due to problems of short-termism and past orientation in management. According to a study by (Taticchi, Tonelli, & Cagnazzo, 2010) BSC is adopted by 30-80% of the firms around the world. The BSC measures an organization's performance from four perspectives: the financial, customer, internal business process, and learning and growth perspectives (Kaplan & Norton, 1992).

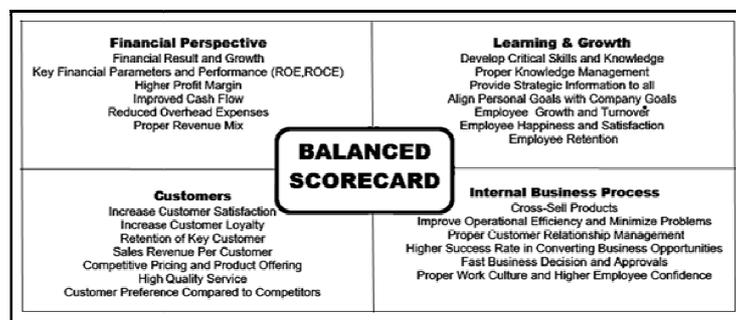


Figure 3: Balanced Scorecard  
Source: (Kaplan & Norton, 2001)

- Literature about the relationship with organizations' performance: (Davis & Albright, 2004); (Hoque & James, 2000) surveyed 66 Australian manufacturing firms (66/188 = 35.1% response rate) and found support for the hypothesis that larger organizations tend to make more use of the balanced scorecard, suggesting that greater BSC usage is associated with improved performance. Their results indicate a significant positive relationship between the usage of typical BSC measures and superior performance.
- Literature about the effectiveness as a device for strategic communication and management control: (Malina & Selto, 2001) investigated the effectiveness of the BSC in communicating strategic objectives and serving as a management control device. They indicated an indirect relationship between the BSC's management control function and the improved performance on BSC measures, stating that the managers in their study perceived that improved performance on the BSC would lead to improved efficiency and profitability.
- Literature about criticism: (Epstein & Manzoni, 1997); (Kasurinen, 2002); (Norreklit, 2000).
- (Thananchayana & Gooneratne, 2018) Study result noted that the BSC is a key tool to measure departmental, individual and organizational performance.

While Malina and Selto (2001) suggested that the BSC is an effective tool for communicating strategy, the survey study by Hoque and James (2000) revealed that organizational performance improves with the use of the BSC.

Researchers have noted that a positive relationship exists between size and BSC usage (Hoque & James, 2000). (Madsen & Stenheim, 2015) noted that the interpretation and use of the BSC vary across scholars and practitioners, and, due to the interpretive and practice variations, different organizations have implemented it for different purposes, such as to improve performance, to improve strategic management, to assist managers in focusing on strategy, structure, and vision, and to understand and guide strategy implementation. (Figge, Hahn, Schaltegger, & Wagner, 2002) the study stated the metrics selected for the scorecard are a tool for leaders to use to communicate the results and performance factors that will enable their organization to achieve its mission and strategic goals in the interests of the employees and internal-external partners. (Kairu, Wafula, Okaka, Odera, & E.K, 2013): The four perspectives of the BSC are the most important drivers for success. Their study result stated that employees' skills and performance developed, internal business processes, customer satisfaction, and market share and as well as firm's profitability increased. (Simbolon, 2018) explores the implementation of the BSC framework as a performance management system (PMS) in the public sector. The results of the growth curve modelling show that BSC implementation in all twelve organizations had a positive association with the four perspectives. The employees' roles are positively correlated with organizational commitment. According to (Marwa, 2019); The fourth generation of BSC starts with a model of learning about the strategy as it is implemented. It links the four scorecard perspectives (1<sup>st</sup> generation BSCs), Strategy Mapping (2<sup>nd</sup> generation BSCs), Destinations Statements (3<sup>rd</sup> generation BSCs) to the current and future share value of the company (4<sup>th</sup> Generation BSCs). A study of (Jelenic, 2011) proved that the Balanced Scorecard -Learning and Growth perspective boosted employee well-being.

### 2.5.1. The Four Perspectives

The objectives measure organizational performance from four perspectives: financial, customer, internal business process, and learning and growth. (Kaplan, R.; Norton, D.P., 2004).

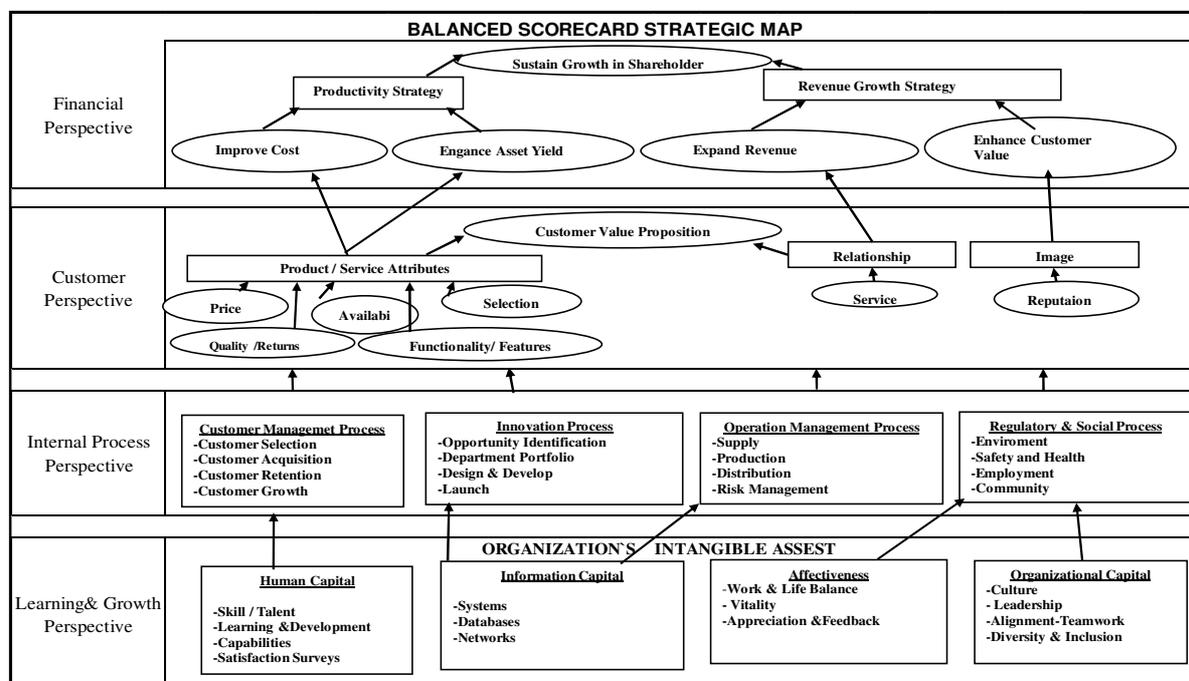


Figure 4: BSC Strategic Map

#### 2.5.1.1. Financial Perspective

The financial perspective shows the long-term objectives of an organization to provide value for the improvement of profitability and other financial objectives. (Kaplan, R.; Norton, D., 1996) identified three phases that determine one business strategy such as fast growth, support, and financial results.

#### 2.5.1.2. Customer Perspective

This perspective takes into account the capacity of a business to secure qualitative goods and services for its clients, the effectiveness of offering those services, and addresses the concerns of customers to develop ongoing support (Flamholtz, 2003).

#### 2.5.1.3. Internal Business Process Perspective

A productive organization should work like a modified all-around machine. Several factors could be used as internal measures within the organization, including the number of imperfections delivered, personal machine time, exchange productivity and the number of finished items per representative per day, or more refined measures, for example, the percentage of aircraft on the ground, or the assurance that air cylinders are supplied for underwater activity. (Kaplan, R.; Norton, D., 1996)

#### 2.5.1.4. Learning and Growth Perspective

(Kaplan, R.; Norton, D., 2000) identified three sources of a business for learning and growth: people, informational system, and organizational processes. Kaplan and Norton emphasize that "learning" is more than "training" that involves facilitated communication between employees at all levels and sharing organizational knowledge. The qualified employees, ideas, culture, and concepts of knowledge have become the main elements that are important for the development, operation, and improvement of overall organizations' performance. Satisfied employees can increase productivity, accountability, and quality, and customer service. Also, the organization's goal is to keep employees satisfied as long as possible within the company. The loyal and satisfied employees care about the organizational values and improve business processes. (Kaplan, R.; Norton, D., 1996)

#### 2.5.1.5. Building a Balanced Scorecard Strategy

Implementing a balanced scorecard strategy consists of nine steps, of which the first six are the build or development phases and the three are implementation steps (Rohm, Wilsey, Perry, & Montgomery, 2013).

Steps:

- *Organizational Assessment* is primarily starts with an assessment of the organization's mission and vision, challenges, enabling situations, and values.
- *Strategy building or development* is the phase of determining the goals of the organization, determining the customer base and the values to be created, especially naming the strategic themes. (Kaplan & Norton, 1996)
- *Strategic objectives* are for strategic planning and management. It has to be made clear from the outset and with no ambiguity whatsoever; a strategic objective is a continuous improvement activity. (Niven, 2006)
- *Strategy mapping* allows organizations to describe and communicate their strategies. Strategy maps also serve as an appropriate basis for the development of financial and non-financial BSC measures that can be used to monitor strategy execution and performance. (Niven, 2006)
- *Performance measures and targets*: A balanced Scorecard needs performance targets and KPIs (key performance indicators) to fully tell the realization of strategic objectives. (Kaplan & Norton, 1996).
- *Strategic initiatives and budget* define action steps, processes, projects, and plans that will bring goals to life. An organization's strategic initiatives require the necessary budget to be carried out appropriately.
- *Performance management information system (MIS) and Automation*: The implementation process begins with the distribution of software that can produce the right performance information at the right time. Automation helps transform enterprise data into knowledge and information and helps communicate performance information. (Kaplan, R.; Norton, D.P., 2004)
- *Cascading*: is refers to the process of developing a Balanced Scorecard at every level of an organization. It translates high-level strategy into lower-level objectives and measures, creates alignment around the organization's shared vision, and down to individuals, develops business processes scorecards. (Niven, 2006)
- *Evaluation*: is a review of organizational progress toward its strategic goals as per the balanced scorecard to determine where efficiency and effectiveness can be improved with System Performance and Strategic Performance. (Kaplan, R.; Norton, D.P., 2004)

#### 2.5.1.6. Empirical Study of the Impact of BSC on Employee Well-being

In the study of (Opiyo, 2010) the employee's feelings about the jobs to a large extent were: the relationships have with other people at work, the actual job itself, the degree of feeling that 'motivated' by job. (Narayanamma, 2017) the study showed there is a positive correlation between a BSC and job satisfaction. (Lemma A. , 2018) study showed, the implementation of BSC at least has helped the Bureau in establishing a planning and measurement system that drew a tangible experience among the general staff.

#### 2.5.1.7. BSC Strategy Regarding Employee Well-being Implemented in the State of Michigan

##### 2.5.1.7.1. Introduction

The state of Michigan was admitted to the Union as the 26th state in 1837. The Executive Branch consists of 17 main departments. With a population of 10.2 million, the government's main source of income taxes, as well as interest income from the funds it manages. It operates to solve the problems of Michiganians across the state to improve affordable healthcare, education, and skills training, respect working families, clean Michigan's drinking water and repair roads.

The State of Michigan began using the BSC in 2000 by establishing a body that can manage the development and implementation of the BSC. Whether the performance of the State of Michigan, which has been using BSC for more than 20 years, is affected by BSC will be examined by analyzing the 20-year financial data obtained.

##### 2.5.1.7.2. Employee Well-being through Learning and Growth Perspective

For performance to be evaluated on a measurable performance basis, the contribution of employees to the success of an organization should be measured. There are many tools developed by practitioners and academics to measure employee performance. BSC is a tool used by management to keep records of activity and personnel actions, control and monitor results or other action results. Human resource (HR), information resource, and organization resource are three main aspects in learning and growth perspective to gain long term performance. HR influences the gaining of organization goal through employee capability increasing information system, motivation, empowerment, and balance. From the

learning and growth perspective of BSC, there are three main measurements, namely: retention of employees, employee satisfaction, and employee productivity (Kaplan & Norton, 2000).

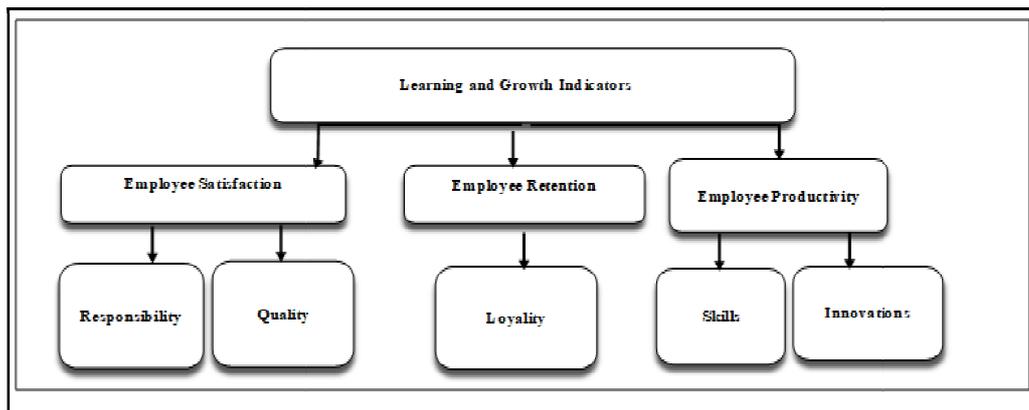


Figure 5: Learning and Growth Perspective Indicators  
Source: Kaplan & Norton, 2000

BSC's learning and growth perspective define the core competencies and skills, technology, and organizational culture required to support the strategy. The intangible assets required for the implementation of the BSC strategy are defined in 3 categories as human capital, information capital, and organizational capital. Employee productivity is a measure that affects skill and morale increase, innovation, improvement of internal processes, and customer satisfaction. The link between BSC and Employee well-being has been identified with below figure 6 through Learning and Growth Perspective.

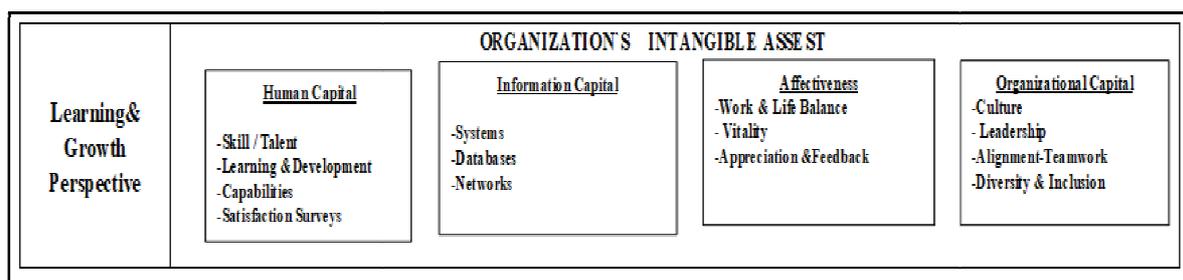


Figure 6: The Link between BSC and Employee Well-Being

### 3. Research Methodology

Scientific research is the neutral, systematic, planned, and multiple-step process that uses previously discovered facts to advance knowledge that does not exist in the literature. It can be classified as observational or experimental concerning data collection techniques, descriptive or analytical concerning causality, and prospective, retrospective, or cross-sectional concerning time. (Çaparlar CÖ & A., 2106).

3.1. Conceptual Framework

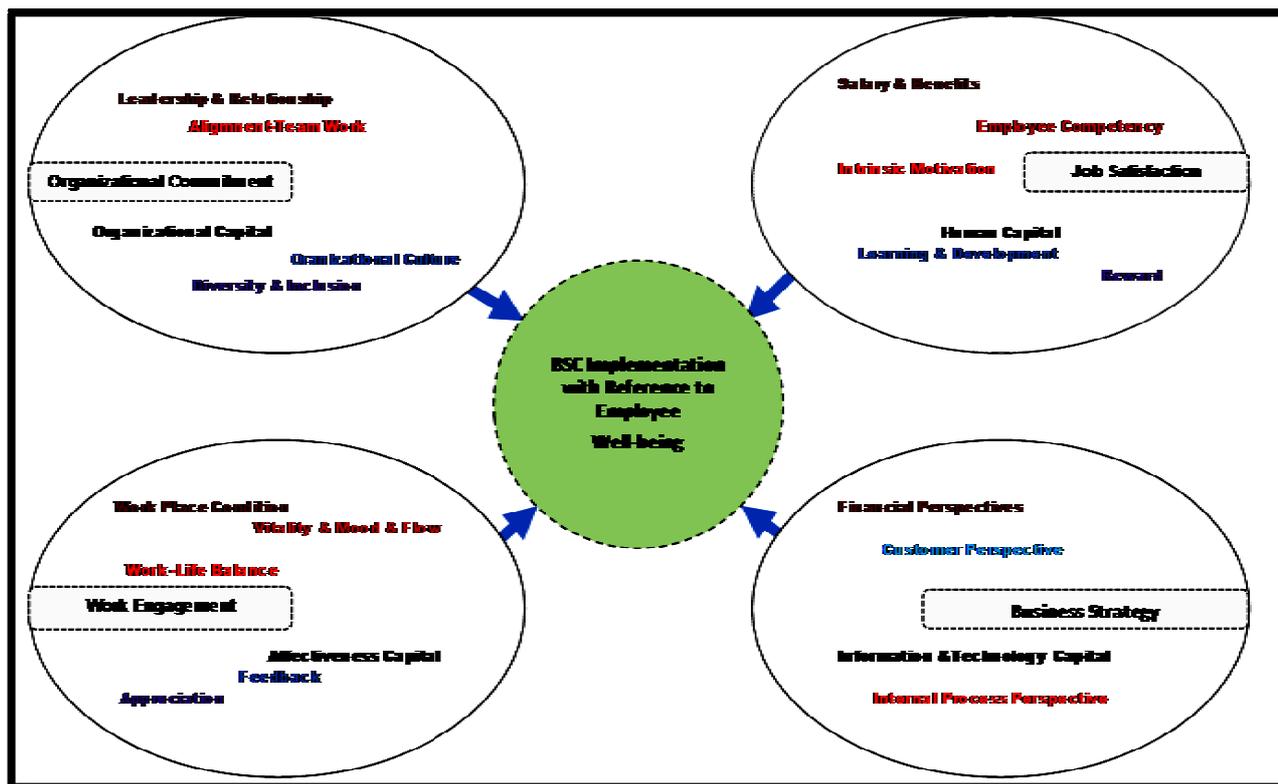


Figure 7: Conceptual Framework of Employee Well-Being through BSC Implementation  
Source: Researcher's Construction

3.2. Research Design and Approach

This study is characterized by describing the overall BSC implementation process, the benefits of BSC for SoM has gained and the effect of BSC on employee well-being.

IMPACT of BALANCED SCORECARD on EMPLOYEE WELL-BEING				
Research Questions		Research Objective		
1- What is and what constitutes a Balanced Scorecard (BSC)?		1-Explore the connections-contribution between organizational performance and BSC implementation.		
2-Does BSC affect organizational performance?		2-Explore the link between BSC and its effect on employee well-being		
3-What constitutes employee measures of well-being?		3- Establish a constructed measure for employee measures of Job Satisfaction, Job engagement, and organizational Commitment.		
4-Is there a relationship between a BSC and employee well-being?		4) Establish a constructed measure of employee well-being through BSC.		
5-What is the impact of a BSC on employee well-being?				
INTRODUCTION				
Literature, Methodology, Methods and Employee well-being				
Employee Measures of Happiness Defined	Balanced Scorecard Defined	Employee Well-Being Structure Through BSC	Research Method	Analysis Methodology
Methods		Data Analysis		Analysis and Findings
Survey Questions	KPIs statement based on Perspective of BSC and data gathering	<ul style="list-style-type: none"> <li>Research Question details</li> <li>Focus Group</li> <li>Data Preparation</li> <li>Response Rate, Reliability Analysis</li> <li>Descriptive Analysis, Frequency Analysis</li> <li>Statistical Methods</li> </ul>		<ul style="list-style-type: none"> <li>KPIs performance Analysis</li> <li>Relationship Analysis</li> <li>Impact Analysis</li> <li>Differences in BSC</li> <li>Differences in Employee Well-being</li> </ul>
Audience Samples				
Validity and Reliability				
CONCLUSIONS, DISCUSSION, and RECOMMENDATION				

Figure 8: Theoretical Structure of Study

### 3.2.1. Research Questions and Hypotheses

Does RQ 1-Does BSC affect organization performance?

– H1: BSC has a significant impact on the performance of the organization.

RQ 2 -What is the impact of a BSC on employee well-being?

– H2: BSC has an impact on employee well-being.

### *3.3. Ethical Considerations*

Primary data is collected through structured questionnaires. It is up to the researcher to maintain the confidentiality of the answers after they have freely fulfilled their responsibilities as promised. For this reason, the research is obliged to respect the confidentiality of all information obtained from the surveys, for this purpose all responses are anonymous. In addition, all referenced books, journals, and organization-specific documents are duly accepted.

### *3.4. Population, Sample Size, and Sampling Procedure*

The universe of the research consists of 27334 employees working at the State of Michigan. A simple random sampling technique was used in the study. Accordingly, 100 employees representing 27334 employees were randomly selected from the sample. In formulas.

$N$  = Number of individuals in the universe (27334: Number of Employees of the State of Michigan 2020)

$n$  = number of individuals to be sampled (96)

$p$  = Frequency of the event to be examined ( $p=0.5$ )

$q$  = Frequency of absence of the event to be examined ( $q=1-p=0.5$ )

$z$  = Theoretical value (1.96) found in the t table at a certain degree of freedom and detected error level

$d$  = It is represented as the desired  $\pm$  deviation according to the incidence of the event (sensitivity=0.10).

$n = (N \cdot z^2 \cdot p \cdot q) / (N \cdot d^2 + z^2 \cdot p \cdot q)$

$n = (27,334 \cdot (1.96)^2 \cdot (0.5) \cdot (0.5)) / (27334 \cdot (0.10)^2 + (1.96)^2 \cdot (0.5) \cdot (0.5)) = 96$

### 3.4.1 Sources of Data

Primary and secondary data sources were used to address the research questions and to meet the main objectives of the research.

- -Primary Data Collection Methods: Self-administered questionnaires, consisting of statements to be graded from 1 to 5 using the Likert Scale, were distributed to 100 subordinates selected according to the sample selection technique.
- -Secondary Data Collection Techniques: Various published materials were used to gather information from secondary data sources. Official documents such as strategic and annual plans, BSC development and implementation documents, periodic reports, performance evaluation reports and checklists, guidelines and performance evaluation reports, bulletins, publications, and websites were also consulted as input for the introduction of secondary data.

### 3.4.2. Survey Methodology

One questionnaire has been deployed via the web to 46,941 State of Michigan employees from March 2, 2020, to March 23, 2020, and only 27.334 have been respondents. Survey items are on a 5-point Likert scale (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree)

- Agree score is the percentage of responses that are a 4 or 5 (Agree or Strongly Agree),
- The higher the reported Agree on the score, the more favourable the result,
- All survey responses are anonymous and a minimum of 10 respondents is required for each group to be reported separately,
- 63 core items were included along with one positive work elements question, one barrier to productivity question, and 9 open-ended questions,
- Survey questionnaire included standard demographic questions and questions measuring Job Satisfaction, Organizational Commitment, Work Engagement, Positive Management, and Balanced Scorecard.

### 3.4.3. Pilot Testing

#### 3.4.3.1. Reliability Test

Reliability is the degree of consistency and dependability of variables used as a measuring instrument. Cronbach Alpha was used to test the internal reliability of multiple items. All the indicators should be related to each other for a multiple-item measure in which each answer to each question is aggregated to form an overall score (Bryman & Bell, 2003). Researchers calculate the Cronbach Alpha value of the variables used to test the reliability of the collected data. An Alpha with a value between 0.80 and 0.95 means the data are reliable. (Wells & Wollack, 2003).

	N	Mean	% Percent	Std. Deviation	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Job Satisfaction	100.000	3.858	73.63	8.617	0.882	0.879	19
Work Engagement	100.000	3.711	66.35	12.334	0.851	0.848	25
Organizational Commitment	100.000	4.093	78.67	7.885	0.922	0.919	6
Balanced Scorecard	100.000	3.799	75.09	9.259	0.856	0.853	22

Table 1: Reliability Statistics and Descriptive Statistics of Scale Scores

- The average Job Satisfaction Score is  $73.63 \pm 8.62$ . Cronbach's Alpha score is 0.882. Accordingly, the reliability of the Job Satisfaction Scale is high.
- The average Employee Engagement score is  $66.35 \pm 12.33$ . Cronbach's Alpha score is 0.851. Accordingly, the reliability of the Employee Engagement Scale is high.
- The average Organizational Commitment score is  $78.67 \pm 7.88$ . Cronbach's Alpha score is 0.922. Accordingly, the reliability of the Organizational Commitment Scale is high.
- The average Balanced Scorecard score is  $75.09 \pm 9.26$ . Cronbach's Alpha score is 0.856. Accordingly, the reliability of the Balanced Scorecard Scale is high.

### 3.4.3.2. Validity Test

Bryman and Bell (2003) suggest several ways of ensuring validity, including face validity; concurrent validity, predictive validity, construct validity, and convergent validity. In the case of SoM, the researcher consulted various literature for factors that should be included in this assessment to ensure the relevance of the items and discussed it with several groups that familiar with the subject. As a result, it has been concluded that the measurement tool meets the necessary qualifications and the measurement consists of the main variables.

### 3.5. Method of Data Analysis

In data analysis, the Job Satisfaction Survey, Organizational Commitment Survey, Work Engagement Survey, and BSC Survey were examined. Data analysis was done with SPSS 28.0 statistical program. The correlation coefficient was calculated to determine the severity and direction of the relationship between the scores obtained from the scales. "t-test", (Comparison of two-group variables), "Kruskal-Wallis H test" (comparison of variables with 3 or more groups), and parametric tests were used for normality assumptions and non-parametric tests were used for non-normality assumptions.

## 4. Data Analysis and Findings

### 4.1. Demographic Characteristics of the Respondents

Demographically, the respondents were characterized based on their gender, age, tenure, position, and level of education.

Characteristics		Respondents	Frequency	Percent
Gender	Female	14,760.36	54	54%
	Male	11,753.62	43	43%
	Other	820.02	3	3%
Age	55 and Over	5,535.14	20	20%
	45-54	7,940.53	29	29%
	35-44	7,380.18	27	27%
	25-34	5,603.47	21	21%
	Under 25	874.69	3	3%
Education	High School	4,920.12	18	18%
	Associate's Degree	4,373.44	16	16%
	Bachelor's Degree	12,573.64	46	46%
	Master's Degree	4,810.78	18	18%
	Ph.D Degree	656.02	2	2%
Tenure	0-3 Years	5,193.46	19	19%
	3-10 years	8,473.54	31	31%
	10-20 years	6,833.50	25	25%
	10-30 years	5,193.46	19	19%
	30 years/more	1,640.04	6	6%
Employment -Position	Executives	1,202.70	4	4%
	Manager & Supervisor	4,100.10	15	15%
	Other	22,031.20	81	81%

Table 2: Demographic Characteristics

- The distribution of the employees participating in the research is 54% female, 43% male, and 3% other. Accordingly, the number of female employees participating in the research is in the majority.

- Age distribution of the employees participating in the research: 24% are under 35 years old, 27% are between 35-44 years old, 29% are between 45-54 years old and 20% are over 55 years old. According to this, the majority of the participants in the study are 35 years and older.
- Education distribution of the employees participating in the research: 18% are high school graduates, 16% are associate degrees and 66% are university graduates. Accordingly, university graduates are in the majority among the respondents.
- The positions of the employees participating in the research are 19.4% are managers/supervisors/leaders and 80.60% are non-management employees. According to this, non-managerial employees are in the majority among the participants in the research. 50% of the employees participating in the research have been working for 1-10 years and the other 50% for more than 10 years.

#### 4.2. Analysis and Findings

It is hypothesized that the implementation of the Balanced Scorecard has an impact on organization performance and employee attitudes. SoM has been implementing the BSC strategy for the last 20 years. According to the results of the BSC survey, how BSC is perceived by the employees was analysed. The impact of BSC on organizational performance has been analysed with the financial data of the last 20 years.

##### 4.2.1. Business Strategy

As mentioned in the section, this research is a case study that was conducted in the State of Michigan which is a large public organization in the USA that has been using the BSC for more than twenty years. Whether the BSC business strategy implemented in the State of Michigan affects the performance of the organization, in other words, whether it achieves its goals and objectives has been analysed with the following research question and hypothesis test.

The purpose of the Balanced scorecard's Customer perspective, Internal process perspective, and learning growth perspectives is primarily to ensure that all units and employees understand the organization's goals and strategy. Then, it offers better quality products and services by improving information and technology management and operational processes to ensure maximum customer satisfaction. These three perspectives enable the organization to achieve its financial goal. State of Michigan's financial performance (financial perspective) for the last twenty years has been tested with financial analysis and Multicollinearity Regression Analysis. To understand whether all units of the organization have adopted the BSC strategy, it has been tested with the BSC questionnaire prepared according to the Linkert scale consisting of 22 questions. The survey questions tested the customer perspective, the internal process perspective, and the learning and growth perspective.

	Related Perspectives	Balanced Scorecard Questionnaire	1 Strongly Disagree %	2 Disagree %	3 Neutral %	4 Agree %	5 Strongly Agree %	Total Agree%
1	Customer Perspective	My work group constantly looks for better ways to serve our customers	4	4	19	33	40	73%
2	Customer Perspective	My work group consistently delivers a high level of customer service	2	4	14	39	41	80%
3	Internal Process Perspective	I am aware of process improvement initiatives taking place in my department.	7	14	7	35	37	72%
4	Internal Process Perspective	I have the materials/tools/equipment I need to do my job well.	7	8	16	29	40	69%
5	Internal Process Perspective	My department is serious about change.	5	11	5	38	41	79%
6	Learning Growth Perspective	At work, I am free of obstacles that prevent me from accomplishing the goals of my position.	9	13	10	38	30	68%
7	Learning Growth Perspective	The State of Michigan's benefit plans (i.e., health insurance, vacation, bonus etc.) meet my needs.	5	4	12	39	40	79%
8	Learning Growth Perspective	I am paid fairly for the work I do.	9	10	9	37	35	72%
9	Learning Growth Perspective	Department leadership gives employees a clear picture of the direction my department is headed.	9	9	2	43	37	80%
10	Learning Growth Perspective	Department leadership is creating a culture of continuous improvement as an on-going effort to improve services and processes.	11	8	7	33	41	74%
11	Learning Growth Perspective	I think my job performance is evaluated fairly.	4	6	14	38	38	76%
12	Learning Growth Perspective	I am generally able to balance my job and personal/family life	4	6	11	46	33	79%
13	Learning Growth Perspective	My job makes good use of my skills and abilities.	8	6	5	41	40	81%
14	Learning Growth Perspective	I understand how my performance on the job is evaluated.	5	5	14	36	40	76%
15	Learning Growth Perspective	My career goals can be met at the State of Michigan.	4	10	20	31	35	66%
16	Learning Growth Perspective	I believe I have the opportunity for growth in my current job	11	18	4	27	40	67%
17	Learning Growth Perspective	I receive the training I need to do a quality job.	8	6	7	38	41	79%
18	Strategy Alignment	The State of Michigan's efforts to ensure and improve a culture of inclusion are continuous and visible.	6	7	18	32	37	69%
19	Strategy Alignment	I have a clear understanding of my department's strategic objectives.	6	10	11	32	41	73%
20	Strategy Alignment	I understand what is expected of me in order for my department to achieve its strategic objectives.	4	3	4	40	49	89%
21	Strategy Alignment	I have a clear idea of my job responsibilities.	2	3	8	43	44	87%
22	Strategy Alignment	I get the information I need to be productive in my job.	7	8	21	34	30	64%
		BSC Average	6.23	7.86	10.82	36.45	38.64	75%

Table 3: Balanced Scorecard Questionnaire

The result of the survey showed that 75% of the organization acted with its strategy. Multicollinearity in Regression Analysis has been used to measure the financial performance of the organization. The performance of the organization is analysed for each perspective of BSC as follows and the results have been explained.

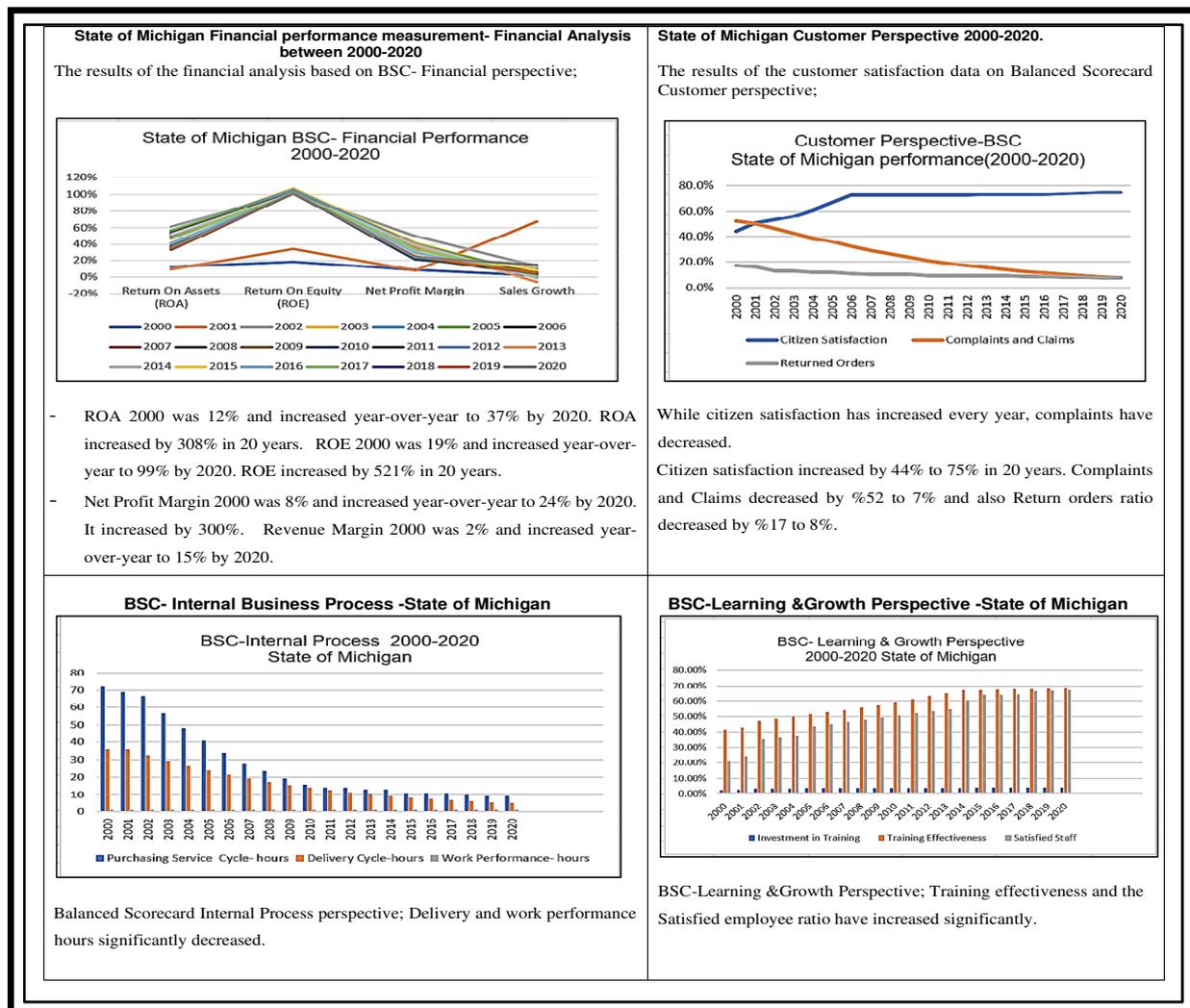


Figure 9: Analysis of 20 Years of Performance Evolution of State of Michigan

As a result of figure 10, with the BSC Strategy:

- **Financial Perspective:** The financial performance of the State of Michigan in the last 20 years: Revenue increased by 71.34%, EBITDA by 90.45%, and net income margin by 90.28%.
- **Customer Perspective:** While citizen satisfaction has increased every year, complaints have decreased. Citizen satisfaction increased by 44% to 75% in 20 years. Complaints and Claims decreased by %52 to 7% and also Return orders ratio decreased by %17 to 8%.
- **Internal Business Process Perspective:** Delivery and work performance hours significantly decreased. Process costs also decreased.
- **Learning & Growth Perspective:** Training effectiveness and the satisfied employee ratio have increased significantly.

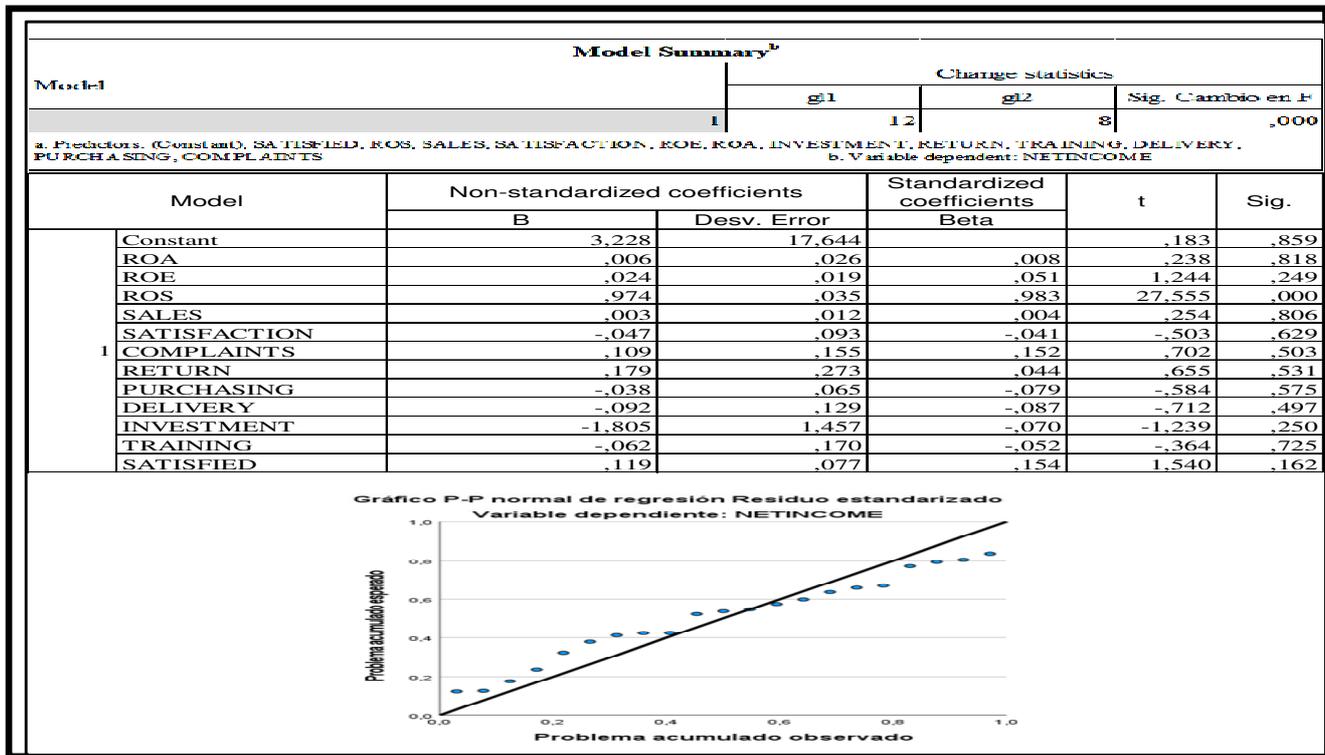


Figure10: Multicollinearity Regression Analysis for 2000-2020 Financial Data of State of Michigan

According to the results of the multicollinearity regression analysis: changes in ROS, SALES, SATISFACTION, ROE, ROA, INVESTMENT, RETURN, TRAINING, DELIVERY, PURCHASING, COMPLAINTS have been stated in table 11 showed that in the Model Sig(p) for all dimensions is higher p <.001 and there are significant correlations between dimensions which demonstrate the BSC has a positive and significant impact on organizational performance.

Does RQ 1-Does BSC affect organization performance?

- H1: The result of findings showed BSC has a significant impact on the performance of the organization with increasing.

4.2.2. Employee Well-being through BSC Strategy

Employee well-being is also known as organizational happiness is measured in 3 different lines, these are, job satisfaction, work engagement, and organizational commitment (Fisher, 2010). In the light of this information, the correlation coefficient between the 3 components of employee well-being was measured statistically and is shown in Figure 13 below that there is a significant correlation between three components of employee well-being which are Job Satisfaction Organizational Commitment, and Work Engagement.

	Job Satisfaction	Organizational Commitment	Work Engagement
Job Satisfaction		.368**	.742**
	Pearson Correlation		
	Sig. (2-tailed)	<.001	<.001
	N	100	100
Organizational Commitment	.368**		.506**
	Pearson Correlation		
	Sig. (2-tailed)	<.001	<.001
	N	100	100
Work Engagement	.742**	.506**	
	Pearson Correlation		
	Sig. (2-tailed)	<.001	<.001
	N	100	100

\*\*Correlation is significant at the 0.01 level (2-tailed).

Descriptive Statistics of Scale Scores							
	N	Mean	% Percent	Std. Deviation	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Job Satisfaction	100.000	3.858	73.63	8.617	0.882	0.879	19
Work Engagement	100.000	3.711	66.35	12.334	0.851	0.848	25
Organizational Commitment	100.000	4.093	78.67	7.885	0.922	0.919	6

Table 4: Correlation Coefficient of Job Satisfaction, Organizational Commitment and Work Engagement

- The correlation between Job Satisfaction, Work Engagement ( $r=0.742, p<.001$ ) is statistically significant and highly positive. The relationship between job satisfaction and organizational commitment is moderately positive. [ $r =0.368, p<.001$ ].
- The correlation between Organizational Commitment, work engagement ( $r=0.506, p<.001$ ) is statistically significant and positive. The relationship between Job Satisfaction is moderately positive. ( $0.368, p<.001$ ).
- The correlation between Work Engagement, Job Satisfaction ( $0.742, p<.001$ ) is statistically significant and highly positive. The relationship between work engagement and organizational commitment is positive. ( $0.506, p<.001$ ).

4.2.2.1. Job Satisfaction

According to (Jurgensen, 1978; Fisher, 2010) the measurable components of Job Satisfaction are; salary & benefits, rewards, employee competency, intrinsic motivation, learning & career development, and job security. Based on these components, The job satisfaction of SoM employees was measured by preparing a 19-item questionnaire on the Likert scale.

Scale		1	2	3	4	5	
Statements- Job Satisfaction		Strongly Disagree %	Disagree %	Neutral %	Agree %	Strongly Agree %	Total Agree %
1	I believe that my participation in this survey is anonymous.	8	10	28	26	28	54%
2	I feel energized by the work I do.	9	7	22	31	31	62%
3	I have a clear idea of my job responsibilities.	2	3	8	43	44	87%
4	I am encouraged to come up with new and better ways of doing things.	5	11	18	28	38	66%
5	My job makes good use of my skills and abilities.	8	6	5	41	40	81%
6	My job gives me a feeling of personal accomplishment.	2	11	17	32	38	70%
7	I have the materials/tools/equipment I need to do my job well.	7	8	16	29	40	69%
8	I understand how the work I do makes a difference in the lives of the people of the State of Michigan	2	2	10	37	49	86%
9	I believe I have the opportunity for growth in my current job	11	18	4	27	40	67%
10	I receive the training I need to do a quality job.	8	6	7	38	41	79%
11	My career goals can be met at the State of Michigan.	4	10	20	31	35	66%
12	The State of Michigan's benefit plans (i.e., health insurance, vacation, etc.) meet my needs.	5	4	12	39	40	79%
13	I am paid fairly for the work I do.	9	10	9	37	35	72%
14	I understand how my performance on the job is evaluated.	5	5	14	36	40	76%
15	I think my job performance is evaluated fairly.	4	6	14	38	38	76%
16	I am empowered to make decisions that help me get my job done effectively.	3	9	15	37	36	73%
17	I am generally able to balance my job and personal/family life	4	6	11	46	33	79%
18	At work, I am free of obstacles that prevent me from accomplishing the goals of my position.	9	13	10	38	30	68%
19	I understand what is expected of me in order for my department to achieve its strategic objectives.	4	3	4	40	49	89%
<b>Job Satisfaction Average</b>							<b>74%</b>

Descriptive Statistics of Scale Scores				
	N	Mean	% Percent	Std. Deviation
Job Satisfaction	100.000	3.86	73.63	8.6
Work Engagement	100.000	3.71	66.35	12.3
Organizational Commitment	100.000	4.09	78.67	7.9
Work Place Happiness (Employee Well-being)	100.000	3.80	72.88	8.6

Table 5: Job Satisfaction Questionnaire

According to figure 1 -job satisfaction survey and Descriptive Statistics of Scale Scores: Under the BSC strategy implemented.

- There is significant positive satisfaction of employees in salary & benefits, rewards, employee competency, intrinsic motivation, learning & career development, and job security with 73.63%(Mean=3.86). The mean value was a 3.89 score for 'agree' which indicated the employees were positively engaged in their workplace happiness through job satisfaction.

4.2.2.2. Work Engagement

According to (May, Gilson, & Harter, 2004), work motivation has three aspects: cognitive, emotional, and physical involvement. These are measured by job autonomy (workplace situation), vitality, mood and flow, regular feedback, work-life balance, and appreciation (Bakker, 2009). In the case of SoM, job engagement was measured by preparing a 25-item questionnaire on the Likert scale shown in figure 16.

	Statements-Work Engagement	Strongly Disagree %	Disagree %	Neutral %	Agree %	Strongly Agree %	Total Agree %
1	The people I work with cooperate well together to get the job done.	4	4	12	35	45	80%
2	Within my department, there is effective teamwork between my work group and other work groups.	5	7	17	41	30	71%
3	My work group constantly looks for better ways to serve our customers	4	4	19	33	40	73%
4	My work group consistently delivers a high level of customer service	2	4	14	39	41	80%
5	My co-workers are treated with dignity and respect by their colleagues.	5	4	15	46	30	76%
6	I am treated with dignity and respect by my colleagues.	4	3	12	45	36	81%
7	My department leadership communicates openly, honestly and in a timely manner with employees.	11	13	19	37	20	57%
8	My department keeps employees informed about matters affecting us.	13	8	9	32	38	70%
9	When changes occur, leadership does a good job explaining the reason behind them (the "why" and not just the "what").	15	15	14	24	32	56%
10	I get the information I need to be productive in my job.	7	8	21	34	30	64%
11	Department leadership gives employees a clear picture of the direction my department is headed.	9	9	2	43	37	80%
12	Sufficient effort is made to get the opinions of people who work here.	13	13	20	25	29	54%
13	The State of Michigan has an inclusive work environment where individual differences are respected.	8	9	23	31	29	60%
14	I believe that employee diversity is important to our success.	3	2	13	44	38	82%
15	I provide my opinions without fear of retaliation or retribution.	13	13	19	35	20	55%
16	My work group has a climate in which diverse perspectives are encouraged and valued.	9	9	17	30	35	65%
17	Employees at the State of Michigan are able to contribute to their fullest potential (without regard to...).	7	5	17	36	35	71%
18	The State of Michigan's efforts to ensure and improve a culture of inclusion are continuous and visible	6	7	18	32	37	69%
19	I feel energized by the work I do.	9	7	22	31	31	62%
20	I am generally able to balance my job and personal/family life	4	6	11	46	33	79%
21	I am treated with dignity and respect by my supervisor.	3	5	10	45	37	82%
22	I have seen meaningful action taken in my department as a result of employee engagement surveys	12	16	13	23	36	59%
23	Department leadership is creating a culture of continuous improvement as an on-going effort to improve services and processes.	11	8	7	33	41	74%
24	Top management communicates openly, honestly, and in a timely manner with employees.	13	12	20	25	30	55%
25	My supervisor gives me regular feedback that helps me improve my performance	5	10	15	41	29	70%
	<b>Engagement -Average</b>						<b>66%</b>

Descriptive Statistics of Scale Scores				
	N	Mean	% Percent	Std. Deviation
Work Engagement	100.000	3.71	66.35	12.3
Work Place Happiness(Employee Well-being)	100.000	3.89	72.88	9.6

Table 6: Work Engagement Questionnaire

According to figure 16, there is positive satisfaction in job autonomy (workplace situation), vitality, mood and flow, regular feedback, work-life balance, and appreciation with 66.35% (Mean =3.71). The mean value was a 3.71 score for 'agree' which indicated the employees were positively engaged in their workplace happiness through job engagement.

4.2.2.3. Organizational Commitment

According to (Mowday, Steers, & Porter, 1979) the measurable components of work engagement are leadership, relationship with co-workers and management, alignment-teamwork, positive organizational culture. Based on these components, The Organizational Commitment of SoM employees was measured by preparing a 6-item questionnaire on the Likert scale.

	Statements- Organizational Commitment	Strongly Disagree %	Disagree %	Neutral %	Agree %	Strongly Agree %	Total Agree %
1	I would recommend the State of Michigan to friends and family as a great place to work.	5	5	17	34	39	73%
2	I intend to stay with the State of Michigan for at least another 12 months	2	2	8	44	44	88%
3	My colleagues go beyond what is expected for the success of the State of Michigan.	5	5	20	35	35	70%
4	I am proud to work for the State of Michigan.	2	2	15	41	40	81%
5	My colleagues are passionate about providing exceptional customer service.	4	4	21	31	40	71%
6	I understand how my job contributes to the mission of the State of Michigan.	1	2	8	45	44	89%
	<b>Commitment Average</b>						79%

	N	Mean	% Percent	Std. Deviation
Organizational Commitment	100.000	4.09	78.67	7.9
Work Place Happiness(Employee Well-being)	100.000	3.89	72.88	9.6

Table 7: Organizational Commitment Questionnaire

According to figure 17: mean value was 4.09 score for ‘agree’ which indicated the employees were positively engaged in their workplace happiness through organizational commitment.

4.2.2.4. Impact of a BSC on Employee well-being

RQ 2 -What is the impact of a BSC on employee well-being? =

– H2: BSC has an impact on employee well-being.

Pearson’s correlation test was conducted to determine the relationship between employee well-being (Job satisfaction, Organizational Commitment, Work Engagement) and BSC that leads to organizational success. A level of significance of 0.05 was used in the correlation test.

		Job Satisfaction	Organizational Commitment	Work Engagement
Balanced Scorecard	Pearson Correlation	.827**	.462**	.843**
	Sig. (2-tailed)	<.001	<.001	<.001
	N	100	100	100

Table 8: Pearson Correlation Coefficient of Employee Well-Being and BSC

The results of the test (figure 18) showed BSC and employee well-being that leads to organizational success was significantly positively correlated to (p = 0.01, r = 0.827, r=.462 and r=.843). This was because the p-value was less than the level of significance of 0.05. The positive correlation suggested that the employee well-being in the workplace would increase by BSC strategy. The strength of the correlation is moderate.

4.2.2.4.1. The effect of BSC on Employee Well-being was determined by linear regression model and R Square calculations

IMPACT OF BSC ON EMPLOYEE WELL-BEING	Variables		Model Summary				ANOVA (Employee well-being BSC Impact)				
	Variables-Predictors (Constant)	Dependent Variable	R	R Square	Adjusted R Square	Std. Error of the Estimate		Sum of Squares	df	Mean Square	F
Balanced Scorecard	Job Satisfaction	0.827	0.683	0.680	0.23660	Regression	13.91	1	13.9	211.279	(p<.001)
						Residual	6.45	98	0.1		
						Total	20.36	99			
Balanced Scorecard	Work Engagement	0.843	0.710	0.708	0.26680	Regression	17.12	1	17.1	240.505	(p<.001)
						Residual	6.98	98	0.1		
						Total	24.10	99			
Balanced Scorecard	Organizational Commitment	0.462	0.213	0.20*	0.41728	Regression	1.62	1	1.6	26.534	(p<.001)
						Residual	17.06	98	0.2		
						Total	21.68	99			

Table 9: Impact of BSC on Employee Well-being

In table 19, it is seen that the effect of BSC on well-being and positive management is stated by the R Square value. As a result of the linear regression model:

- BSC has a positive effect of 68.30% (R Squared=0.683) on Job satisfaction.
- BSC has a positive effect of 71.00% (R Squared=0.710) on Employee Engagement.
- BSC has a positive effect of 21.30% (R Squared=0.213) on Organizational Commitment.

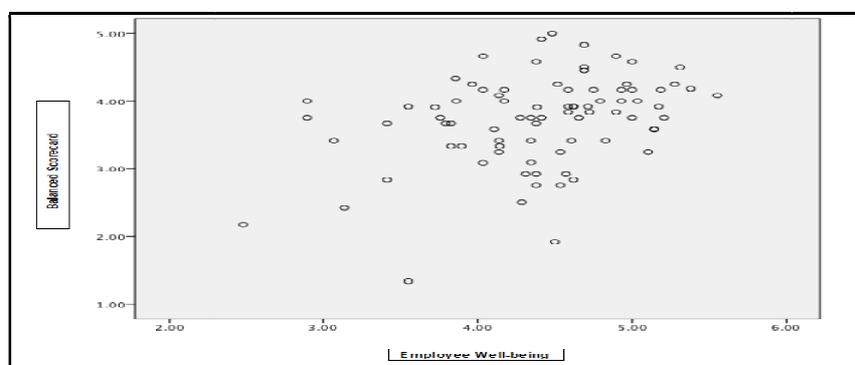


Figure 11: Scatterplot for the Relationship between BSC and Employee Well-Being

A scatterplot, Figure 11, was created to show the relationship and linearity between BSC and Employee Well-being in the workplace. The figure demonstrates an association between BSC and employee well-being in the workplace employees, and an increasing straight-line pattern indicates that there is a positive correlation between BSC and Employee Well-being.

5. Discussion and Recommendation

One of the steps in the process of improving organizational results includes employee well-being. The happy employees will take all measures to ensure the success of the organization. (Shimazu, Schaufeli, Miyanaka, & Iwata, 2010). An organization must prioritize employee well-being to ensure organizational commitment. (Robertson & Cooper, 2011) There is a strong relationship between employees perceived organizational practices related to their work organization and employee well-being ( Kalliath, O’Driscoll, Gillespie, & Bluedorn, 2000). Measures of financial performance and measures of behavioural performance (e.g., satisfaction, commitment) may have different purposes but are ultimately interrelated. Financial performance can be used as a tool for behavioural performance measures. In the State of Michigan case, several measures of performance were tested by financial performance, customer satisfaction, innovation, and employee satisfaction, etc. The results of the study are presented to determine the relationship between the Balanced Scorecard, which leads to corporate success, and employee well-being. Descriptive statistics and other analysis results show that employees were in line with the BSC strategy and this strategy improves employee well-being, and also showed that employees were satisfied in their workplace and were positively engaged. The Pearson correlation test results showed a positive correlation between the Balanced Scorecard and employee well-being. According to the linear regression test, BSC has a significant impact on employee well-being. This positive correlation found between the Balanced Scorecard and employee well-being is a component of successful business strategy.

6. Summary of the Literature

Since the 1950s, researchers have conducted many studies on psychological well-being. Martin Seligman is one of the leading researchers in the scientific community on positive psychology and theories of well-being. According to Seligman (2011), while hereditary and characteristic features are related to subjective well-being, good and bad experiences acquired over time are also related to psychological well-being. Employee well-being is also referred to as workplace happiness in the literature. Happiness, subjective well-being, psychological well-being is discussed as components and influencers of well-being. Happiness-related studies by the time also focused on employee happiness

studies. In the literature, many researchers have investigated employee happiness and its components. Fisher (2010) examined employee happiness under three different headings, namely job satisfaction, participation, and organizational commitment.

The literature shows that employee well-being is a vital element in the success of the organization and also shows that employee well-being comes before other factors that affect organizational success. Therefore, organizational leaders must consider employee well-being and develop mechanisms to ensure organizational commitment. Based on this study, it will be much easier to improve employee well-being through BSC strategies as leaders have a clear overall picture of employee expectations.

Since 1956, researchers and organizations have realized that various performance measurement systems are needed to keep up with the developing competitive conjunctures, and many measurement methods have been developed. BSC was developed by Kaplan & Norton in the early 1990s as a method of measuring performance in four different aspects, its use has become widespread over time and has become popular as one of the most successful methods of recent times. One of these four perspectives, the learning and growth perspective, focuses on HR and employee happiness. Numerous studies have proven that BSC improves the performance of organizations. However, there are very limited studies on how BSC affects employee behaviour and happiness. This shows that this area is deficient in the literature. Employee commitment, happiness, and productivity are known as the important topics of Human Resource Management (HRM). Employee well-being is a multi-dimensional concept, whose roots are in psychology and organizational behaviour research. Employee well-being is strongly affected by performance measurement systems and business strategy level issues. HRM studies about performance measurement refer to financial achievement, productivity, effectiveness, employee behaviour, customer satisfaction, etc. (Guest, 1997)

## 7. Recommendation

Considering the organization performance and employee well-being link in the field of HRM, there are limited studies of HR practices that would result in higher performance and higher employee well-being at the same line. Further research should be directed to performance link and employee job satisfaction, work engagement, and employee well-being to understand the relationships between organization business strategy and employees' reactions.

This study makes an important contribution to the existing literature on the link between BSC and employee well-being. Establishing a positive relationship between these two aspects increases employee happiness and enables an organization to reach maximum efficiency. Studies examining the relationship between strategic management systems and employee happiness have been limited, and this study confirms that organizational success is achieved with both strategic performance measurement tools and employee well-being. With this new knowledge, leaders can take new measures through the BSC that will increase employee happiness and ultimately improve corporate success prospects.

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