The Effect of Strategy Performance Management Methods on Employee Wellbeing: A Case Study Analyzing the Effects of Balanced Scorecard

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Abstract

The study investigates the effect of the Balanced Scorecard, one of the performance measurement systems, on employee well-being (EWB) in organizations. As a result of the literature research, it is seen that employee welfare is examined in 3 different areas: Job Satisfaction, Organizational Commitment, and Job Engagement. One of the most important factors for the success of an organization is the happy employees who contribute tremendously to the improvement of the organization's performance. Both qualitative and quantitative measurement methods were used for this study. The surveys that have used for this study included 27334 employees in the state of Michigan and the surveys data were analyzed by Statistical Package for Social Sciences (SPSS) 28. The study revealed that the BSC strategies implemented in the State of Michigan improved organizational performance in the four perspectives of financial, customer, internal process, and learning & growth. The statistical results of employee satisfaction surveys show that BSC increases job satisfaction by 68.30% (R-squared: 0.683), work engagement by 71.00% (R-squared: 0.710), and organizational commitment by 21.30% (R-squared: 0.213). With the BSC strategy and learning-growth perspective that has been in effect for 20 years, employee satisfaction has been increased, organizational commitment and job engagement have been prioritized in the State of Michigan. The result of this study will help leaders and HR departments measure and increase employee well-being with performance measurement tools.

1. Introduction

1.1 Background of the Study and Problem Statement

Employee happiness and productivity have been the subject of research since Aristoteles. The studies in the 1940s are the foundation of the 1980s theories of performance management and employee happiness (Morrow, 2011). Employee well-being is critical to the development of organizations in a competitive business environment (Wright, 2000), (Wright, 2007). Workplace happiness is mostly different from general happiness; hence the concept of employee well-being (EWB) should be considered differently. Although researchers have defined EWB in different terms, in the end, EWB links to happiness and positive psychology. Psychological well-being (PWB) and subjective well-being (SWB) are often used to describe the general well-being of employees (Seligman, 2004), (Christakis & Fowler, 2008), (Hulin, 2003), (Meyer & Allen, 1991) (Lucas & Diener, 2002), (Lutterbie & Pryce-Jones, 2013). Many theoretical studies examine the factors that affect (e.g., salary, leaders, organizational culture, career development, etc) employee well-being and employee performance.

Organizational performance indicators have been shaped in the form of profitability, productivity, marketing effectiveness, customer satisfaction, and employee motivation. In today's economic conditions, researchers have determined that the most widely used performance management method is Balanced Scorecard (BSC), (Taticchi, Tonelli, & Cagnazzo, 2010) and it has been confirmed by empirical studies that BSC increases the performance of organizations. The relationship between employee happiness, employee productivity, and organizational performance has been repeatedly investigated in the literature (Lucas & Diener, 2002), (Lutterbie & Pryce-Jones, 2013) (Meyer & Allen, 1991) and it has been found that there is a positive relationship between these components. The number of studies investigating the relationship between strategic performance management tools and employee well-being is limited in the literature.

This study will contribute to the lack of empirical research in the literature by investigating the relationship between strategic performance management tools and employee satisfaction.

This study will be a light for organization leaders and HRM to take actions that increase employee happiness by drawing a clearer picture for the development of performance management tools and employee productivity.

1.2 Objectives of the Study

The study explores all the factors affecting employee well-being (EWB) in organizations. The contribution of Balanced Scorecard, one of the most common and popular strategic performance management tools of the last 30 years, to organizations in overall will be tested with both literature research and experimental methods.

1.3 Conceptual Framework

1.4 Significance of the Study

This study fills the lack of empirical study in the literature by investigating the relationship between performance management method and employee happiness.

The study confirms that organizational performance is achieved through performance management methods and employee happiness. The study is aimed at making this necessary information available to leaders, HRM, academics and researchers.

1.5 Limitation and Scope of the Study

This study is based on the results of annual employee satisfaction surveys organized by PwC published by the institution. The data were analyzed with the survey responses of 100 employees representing 27344 employees.

2. Literature Review

The foundations of the Human Resources (HRM) management system were laid in the 19th century after the Industrial Revolution. In the early 20th century, Human Resources management, influenced by Frederick Winslow Taylor's book "The Principle of Scientific Management", attracted the attention of researchers and organizations as a new specific field. HRM is an effective strategic approach for organizations to gain a competitive advantage which is designed to maximize employee performance while achieving the organization's strategic goals. (Obedgiu, 2017). The research that forms the basis of organizational psychology, organizational behaviour and organizational theory, employee happiness, and employee productivity have been conducted by many psychologists such as Elton Mayo, Abraham Maslow, David McClelland, Frederick Herzberg. Herzberg's "the motivator-hygiene theory" is the most widely known theory on job satisfaction. (O'Sullivan, 2014). Psychologists and researchers have stated factors that can affect employee happiness as subjective well-being, psychological well-being, happiness, positive psychology, workplace happiness, organizational culture. (Ryff, 1995). In this section, employee happiness and the definition of factors that may affect employee happiness will be determined step by step through the literature.

2.1 HAPPINESS

2.1.1 Well-being

Scientists use the word well-being synonymously with happiness. Happiness is used in the sciences for the psychological meaning of emotional state. Well-being characterized by happiness, and prosperity is a general feeling of satisfaction. Since happiness is the result of a combination of socio-demographic, cultural, economic, religious, philosophical, and psychological variables, it has been studied by philosophy, psychology, religion, and economics areas. In psychology, happiness is defined joy, and overall satisfaction in life or contentment (Seligman, 2002), (Ryan & Deci, 2001), (Diener, 2000) (Andrews & Withey, 1976). (Veenhoven, 1996) defined happiness as life satisfaction. Lyubomirsky stated that happiness is determined by the factors of 50% genetic and personality traits, 10% influenced by the environment and, 40% influenced by purposeful activities and practices (Lyubomirsky, 2008).

2.1.1.1 Positive Psychology

In the 1950s, the foundations of positive psychology were laid with the humanist psychology movement. Positive psychology has stated that happiness traditionally consists of two types of well-being: Subjective well-being (PWB), and psychological well-being (PWB). Positive psychology has a significant effect on the organizational psychology (Rich, 2017). Martin Seligman` PERMA well-being theory consists of positive emotions, engagement, relationships, meaning and purpose, and accomplishments. (Seligman & Csikszentmihalyi, 2000).

2.1.1.1.1 Subjective Well-being

Well-being is the subject of positive psychology and is used synonymously with happiness. SWB is expressed as a combination of positive affect, negative affect, and life satisfaction. SWB has affected by many factors such as climate, religion, marital status, health, personality traits, genetic predisposition, financial, environmental, spiritual, income status, etc. (Diener, 1984). Seligman stated that people with high WB levels have fewer negative emotions. (Seligman, Rashid, & Parks, 2006)

2.1.1.1.2 Psychological Well-being

PWB is defined as a person's level of psychological happiness and health, including life satisfaction and feelings of achievement. It encompasses perceptions of physical health (illness, vitality, ability to perform activities of daily living), self-esteem, self-efficacy, relationships with others, and life satisfaction. Ryff (1995) identified six factors of PWB as self-determination, environmental supremacy, self-improvement, relationship management, self-esteem, and meaningful life.

2.1.1.2 Positive Organizational Psychology

Positive Organizational Behavior, pioneered by Fred Luthans (2002) and Thomas Wright (2003), is a contribution to literature as positive organizational perspective. Positive psychology can be defined as positive psychology in business life, positive working environment and positive organizational culture, positive perspective. (Culbertson & Fullagar, 2010). Positive organizational psychology has focused on employee satisfaction and productivity. The results of the studies showed that satisfied employees are more productive and show more organizational commitment. (Luthans, 2002b).

2.1.2 Employee Well-being

Employee well-being has attracted the attention of all organizations since 1930. Frederic Herzberg (1959) developed the motivator-hygiene theory, which is still used in many studies. Herzberg theory examines the factors effecting the well-being of employees in two categories as hygiene factors and motivators factors. The motivator factors are achievement, development, recognition, responsibility and career opportunities, a meaningful job, etc (Warr, 1987) uses a comprehensive concept of well-being and takes the whole condition of a person as a starting point. (Danna & Griffin, 1999) agree with this and include factors such as life satisfaction and luck in their definition. (Veenhoven, 1984) describes subjective well-being as experiences and feelings of life satisfaction and job satisfaction. A more specific and work-related definition of well-being (Grant, Christianson, & Price, 2007), (Smith & Clay, 2010) is the overall quality of an employee satisfaction at workplace. According to Fisher (2010), many happiness constructs related to employee well-being focus the experience of positive emotions at work. Workplace-related hedonic and eudaimonic happiness constructs include learning and personal growth, and self-actualization. (Fisher, 2010). Employee satisfaction is affected by subjective well-being, psychological well-being, and workplace well-being. (Luthans & Youssef, 2004), (Ryan & Deci, 2001). Fisher' employee well-being concept has been stated in Fig. 1 that has been divided in three filed as job satisfaction, organizational commitment, and work engagement/vitality. (Fisher, 2014)

2.1.2.1 Job Satisfaction

Psychological Well-Being (PWB) has an important role in determining job satisfaction. Academic research since 2000 has shown that there is a significant and positive relationship between PWB and job satisfaction ($r = 0.35, p < .01$). (Locke, 1976) defines job satisfaction as the level of fulfillment of the physical, mental, and social needs of the employees. Factors affecting job satisfaction are defined as wage, working conditions, promotion, performance appraisal, fair approach, job security, relations with managers and other employees. (Hulin, 2003).

2.1.2.2 Vitality / Work Engagement

Positive organizational behavior (POB)'s focus area extends to the study area of positive psychology and positive health. Luthans (2002a; 2002b) stated the focus of positive organizational behavior as building human strengths in the workplace rather than correcting weaknesses. POB has encouraged researchers to highlight situations that are positive psychological forces that can be validated, measurable in organizations to improve job performance such as respect, hope, trust, and resilience. Both positive psychology and positive organizational behavior therefore encompass research on positive emotions and health. Motivation, focus, and commitment are hallmarks of healthy work and healthy workplaces (Kim, Kolb, & Kim, 2013).

2.1.2.3 Organizational Commitment

The organizational commitment can be based on different psychological foundations, it has been argued by Meyer & Allen (1991) that testing organizational commitment should also have a multidimensional nature. In the Allen and Meyer model, there are three elements called "emotional", "continuity" and "normative" commitment. Researcher classified organizational commitment under three headings as identification, internalization (common goals & values), compatibility (promotions, awards, recognition, prestige).

2.1.3 Organizational Well-being

The concept of organizational well-being is related to improving the psychological health of employees, developing their potential, and increasing the overall competitiveness of companies, and employee behaviours, emotions, and well-being are the most important factors in organizational well-being. (West & Woods, 2019), (Sheridan, 1992). It has been widely emphasized in the literature that there are two components of happiness, hedonism (focus on happiness) and eudaimonism. Diener, Ryan & Deci (2001) associated SWB with hedonism, (Ryff & Singer, 2006) associated the PWB with eudaimonism. (Zheng, Zhu, Zhao, & Zhang, 2015) determined the measurable components of organizational happiness (WWB) as employee well-being (EWB), subjective well-being (SWB), psychological well-being (PWB), and EWB has significant positive correlations with job satisfaction, organizational commitment, and job performance. (Wright & Huang, 2012) stated that there is a positive correlation between job satisfaction and well-being, and that

job satisfaction includes many variables including positive affect, negative affect, and emotional exhaustion. Employee well-being shows a positive relationship with motivation, employee engagement, job satisfaction, etc., which are critical to the success of organizations (Krishantha, 2018), (Britt & Jex, 2008). (Page & Vella-Brodrick, 2013) defines a component of organizational happiness/workplace happiness (WWB) as SWB, EWB, AWB (affective well-being), and PWB, and according to their study result, there is a significant positive correlation between EWB and WWB and productivity. The culture, climate, and strategies in happy organizations provide a strong link between organizational profitability and employee well-being, creating a conducive environment for happy employees and organizational effectiveness (Di Fabio, 2017). "Organizational happiness and employee well-being are more affected by communication in the workplace, professional attitude, management processes, economic condition, and commitment, respectively". (Tosten, Avci, & Sahin, 2017), (Bhatti & Qureshi, 2007)

1.2 BSC -PERFORMANCE MANAGEMENT SYSTEM

Performance is defined as the qualitative or quantitative equivalent of the success level of the actions taken to reach the predetermined goals and targets (Davis & Doley, 2008), (Lucianetti, Battista, & Koufteros, 2019). **Performance management** is a process that gathers data of the organization, compare, and provides light for a strategy to achieve organizational targets (Taticchi, Tonelli, & Cagnazzo, 2010). The need for more comprehensive performance measurement systems has emerged with the increased awareness of non-financial measures that cannot be accurately reflected in short-term accounting criteria. (Lucianetti, Battista, & Koufteros, 2019), (Hasan & Chyi, 2017). SWOT analysis, Balanced Scorecard, PEST analysis, Total Quality Management are some of the performance management systems that help measure corporate performance to achieve goals and strategies. **Balanced Scorecard** is a system that is relatively more focused on employee productivity and satisfaction and has become the most popular performance management tool recently. (Afonina & Chalupský, 2012)

2.1.1 Balanced Scorecard

As a result of the inadequacy of traditional accounting systems in measuring the performance of the organization and planning the future, more modern and comprehensive measurement tools emerged in the 1980s. The most widely known of these, BSC, was developed by Kaplan & Norton in the 1990s. BSC (financial, customer, internal business process and learning & growth perspectives) aims to reach maximum profit and turnover by prioritizing customer satisfaction, technology, product and service quality, employee training, development, and happiness (Kaplan & Norton, 1992).

BSC complements traditional financial measures by measuring performance through three perspectives, financial, customer, internal process, thus uncovering new value drivers for long-term financial and competitive performance while maintaining its relevance to short-term performance with the financial dimension. The learning and growth perspective refers to the infrastructure that the business must create for development, focusing more on employee talents and skills, technology, and corporate climate. (Kaplan & Norton, 2004)

Financial Perspective

There are two main levers for financial strategies, namely revenue growth and productivity (Kaplan & Norton, 1996). Financial perspective indicators include high Return on Sales (ROS), increase in profit, high employee, and customer/citizen satisfaction, Return on Equity (ROE), Return on Assets (ROA), investment, short product delivery time, employee training, etc. (Kefe, 2019)

Customer Perspective

This perspective is the customer value proposition that defines an organization's unique blend of product improvement, customer satisfaction, and corporate brand. This operational excellence can be made possible by customer-citizen closeness and product leadership through quality, adding new customers, retaining existing customers, high customer satisfaction. (Kefe, 2019), (Kaplan & Norton, 1996)

Internal Business Perspective

This can do by developing new products-services, finding new markets, reducing the cost of internal processes, improving quality-cycle time-capacity utilization management (Kaplan & Norton, 1996)

Learning and Growth Perspective (LGP)

The foundation of the LGP is defining the competencies and skills, IT-tech, and organizational culture needed to support an organization's strategy. This perspective supports an organization to align HR and IT with its strategy. It encourages and motivates employees by focusing on employee capabilities in LGP, thus realizing the vision and mission of the organization (Kefe, (2019), Kaplan & Norton, (1996)). The growth and development approach promotes well-being and employee motivation at work and encourages open communication and dialogue between employer and employee. This perspective demonstrates the importance of acceptance and recognition from others in the workplace, feedback, and validation of work in maintaining employee motivation, and enables the retention and development of competent people. (Puhakka, Nokelainen, & Pylvas, 2021)

2.1.2 Strength of Balance scorecard

(Davis & Albright, 2003) and (Malina & Selto, 2001) stated a significantly positive relationship between BSC and performance improvement. BSC improves performance, leading to increased productivity and profitability (Bourne, Kennerley, & Franco, 2005). Madsen and Stenheim (2015) and (Quesado, Guzmán, & Rodrigues, 2017) noted that BSC influences the culture of an organization and (Malina & Selto, 2001). BSC improves the

productivity of tangible and intangible assets by its stated strategy. In addition, the satisfaction of customers, employees, and shareholders increases. BSC demonstrates how mobilizing human capital and improving knowledge resources improves the ability of modern organizations to create value.

2.1.3 The Balanced Scorecard in the Public Sector

Public reforms based on the management of resources of public institutions and strategic planning to increase these resources began in the 1990s. Therefore, it is very important to use transparent and accountable systems (Deryl & Tuivaiti, 2012), (Nurcahyo, Wibowo, & Putra, 2015). Norton and Kaplan's BSC has been modified for the public sector, as the public sector is not for profit. The mission of the public sector is to increase resources, increase the quality of service provided to citizens and ensure citizen satisfaction (Deryl & Tuivaiti, 2012). As a result of the researcher stated that BSC's four perspectives (citizen-stakeholder, business process, learning-growth, and finance) improved MoFA's performance and had better human resource management.

2.1.4 Building A Balanced Scorecard Strategy for Employee Organizational Happiness

BSC strategy sets up by steps (Kaplan & Norton, 1996), (Niven, 2006) of organizational assessment, strategy creating, development and mapping, KPIs and performance measures, budgeting, performance management information system (MIS), automation, and cascading and evaluation.

Financial Security refers to achieving financial stability, career development/growth, and job security. In the other words helps to ensure that employees feel capable to handle their financial situation and behaviors without the weight of financial stress. In the literature, income and benefits have generally been discussed in the field of life satisfaction with SWB and it has been stated that there is a significant correlation between general life satisfaction and income (Stevenson & Wolfers, 2013). The financial perspective of BSC increases the income of the organization and indirectly provides economic benefits to the partners, employees, and other beneficiaries. (Malgwi & Dahiru, 2014)

Intellectual & Occupational Perspective refers to expanding employee knowledge and acquiring new skills to enhance employee capabilities. BSC's learning and growth perspectives focus on employee development and the ability to create more value for the organization. This perspective deals with employee motivation, employee empowerment, employee retention, and skill development (Pourmoradi, Niknafs, & Abdollahian, 2016). Satisfied customers increase financial contribution and build a solid brand, thus increasing the satisfaction of all beneficiaries. It supports organizational commitment for employees (Malgwi & Dahiru, 2014). Learning and Growth perspective contributes to the education of the employee, to develop skills to make his job easier, to create a life-work balance for the employee, to provide the necessary support for career development, to create positive management and organizational culture for the organization (Malgwi & Dahiru, 2014).

Social and Environmental refers to finding support in the workplace, both at the individual and collective level. These are the state of personal and professional relationships, including personal and community involvement, and the ability for genuine, authentic, and mutually affirming interactions with others. While BSC provides open communication for a clear and clear understanding of the organization's strategy, it also provides the necessary technological infrastructure and trained human resources. BSC helps to create a positive organizational culture through a learning and growth perspective and with positive leadership. (Malgwi & Dahiru, 2014).

Physical & Emotional Perspective refers to encouraging employees to make healthy lifestyle choices that give them the energy to thrive in work and life. **Emotional refers** to being emotionally balanced and mastering emotions. This perspective refers to ensuring the employee has the freedom, opportunities, and resource needed to maintain bodily health (desires, stressors, change, threats, etc.) and psychological ability to cope with information emotions. The LGP contributes to the training of the employee, to develop skills that will facilitate their work, to create a life-work balance for the employee, to provide the necessary support for career development, and to be proud of doing his job. And it creates positive management and organizational culture with a learning and growth perspective to communicate openly with all employee levels. BSC provides all the necessary functions for employees to get rid of the stress of how to do the job (Malgwi & Dahiru, 2014), the worry of not knowing what is expected of me, the stress of financial and job security, the stress of not being able to communicate with my manager, and the worry that my performance is not being measured fairly.

Employee well-being leads to the overall improvement of organizational performance. The contribution of improving employee well-being in the organization is defined as higher productivity, employee retention, collaborative company culture, supporting the mental and physical health of employees, reducing absenteeism, higher job satisfaction, and job pride through participation.

3. Research Design And Methodology

3.1 Survey Methodology and Sampling

The sample of the study consists of 100 employees of State of Michigan (SoM) representing 27334 employees of SoM. In March 2020, 27334 employees responded to the questionnaire sent to all active SoM employees (46,941). The survey includes questions to assess employees' level of satisfaction, including leadership, diversity, employee wellness, ethics, the strategy, and respectful workplace and employees also had an opportunity to provide additional open-ended comments. Survey questions has been prepared based on a 5-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree). The agreement score is stated as 4 or 5 (agree or strongly agree).

3.4 Pilot Study

3.4.1 Reliabilities of Dimensions

Cronbach's α (alpha) is a measure of the reliability of psychometric tests or questionnaires. The value of alpha is an estimate for the lower bound of the reliability of the test in question. To estimate the reliability of a test, at least two test runs are required. Based on one test run, alpha can be calculated to obtain an estimate of the lower bound. Cronbach's α alpha depends on the number of items or questions in the test, the mean covariance between the items and the spread of the sum score. (Bryman & Bell, 2003; Cronbach, 1951). An alpha with a value between 0.80 and 0.95 means that the data are reliable (Bonett & Wright, 2014).

Table 1
Reliability Statistics Score

Reliability Statistics					
Statement	N of Respondent	N of Items	Mean	Std. Deviation	Cronbach's Alpha
JS	100 (of 27334)	19	3.8584	8.617	0.923
WE	100 (of 27334)	25	3.7108	12.334	0.857
OC	100 (of 27334)	6	3.9267	2.808	0.804
BSC	100 (of 27334)	22	3.7986	9.259	0.885
Job Satisfaction (JS), Work Engagement (WE), Organizational Commitment (OC) and Balanced Scorecard (BSC) surveys.					

In the Table 1: the reliability of BSC has been calculated as high and reliable with a Cronbach's alpha score of 0.885 (Mean = 3.80). The reliability of JS has been calculated as high and reliable with a Cronbach's alpha score of 0.923 (Mean = 3.86), the reliability of OC has been calculated as high and reliable with a Cronbach's alpha score of 0.804 (Mean = 3.93) and the reliability of WE have been calculated as high and reliable with a Cronbach's alpha score of 0.857 (Mean = 3.71).

3.4.2 Method of Data Analysis

BSC surveys, job satisfaction survey, organizational commitment survey, work engagement survey data were analysed by SPSS 28. The linear regression has analysed the effect of one or more independent variables on a dependent variable. T-Test has compared means between two groups, ANOVA, Pearson Chi-Square, and Kruskal-Wallis -test compared means between more than two groups. Cronbach's Alpha has provided an answer to the question to what extent a set of survey questions collectively measure a certain construct which known as reliability testing.

4. Data Collection And Analysis

4.1 Demographics of Survey Respondents

Participants were classified according to gender, age, tenure, title, and education level.

Table 2 Demographic Characteristics

Characteristics		Respondents	Frequency	Percent
Gender	Female	14,760	54	54%
	Male	11,754	43	43%
	Other	820	3	3%
Age	55 and over	5,535	20	20%
	45-54	7,941	29	29%
	35-44	7,380	27	27%
	25-34	5,603	21	21%
	Under 25	875	3	3%
Education	High School	4,920	18	18%
	Associate's Degree	4,373	16	16%
	Bachelor's Degree	12,574	46	46%
	Master's Degree	4,811	18	18%
	Ph.D. Degree	656	2	2%
Tenure with Organization	0-3 Years	5,193	19	19%
	3-10 years	8,474	31	31%
	10-20 years	6,834	25	25%
	10-30 years	5,193	19	19%
	30 years/more	1,640	6	6%
Employment -Position	Executives	1,203	4	4%
	Manager & Supervisor	4,100	15	15%
	Other	22,031	81	81%

The female participating was in the majority with 54.00%. Most of the respondents are aged 35 and over. Most of the respondents are university graduates. Among the participants, non-manager employees constitute the majority with 80.60%. And 50.00% of the participating in the research have been working for 1–10 years, while the other 50.00% have been working over 10 years.

4.2 BSC strategy in Organization.

The alignment of employees with BSC was tested by BSC a questionnaire; customer, internal process, and learning and growth perspectives has been measured by 22 questions of Linkert scale.

Table 3
The Result of BSC Survey

Response	N- Frequency	Percent	Cumulative Percent
Agree + Strongly Agree	67	67%	67%
Neutral	19	19%	86%
Strongly Disagree + Disagree	14	14%	100%
TOTAL	100	100%	

The survey (See; Appendix, Table 3) results indicate that 19% of the employees avoided answering the questions, 67% are familiar with the organization's strategy and mission, and 19% had not adapted to the strategy.

4.4 The impact of BSC on Performance of the Organization

The effect of the balanced scorecard on organizational performance was analysed using two different methods: first, the traditional method (financial analysis); second, the multiple regression model (by SPSS 28).

4.4.1 Multiple Linear Regression (MLR)

Cronbach's alpha of the BSC was scored with a 22-point scale.

Table 1
shows that the reliability of BSC` survey is high with score of $\sigma = 0.885$.

Table-1 Reliability Statistics						
	N of Respondent	N of Items	Mean	Std Deviation	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items
Balanced Scorecard	100	22	3.799	9.259	0.885	0.882

The results of the ANNOVA analysis content are as follows:

- The financial perspective was tested using the ROA, ROE, and ROR
- The customer perspective was tested using customer satisfaction and complaints.
- The internal process perspective was tested using the return purchasing/ delivery cycle.
- The learning and growth perspective was tested with trained employees, employee engagement investment, and employee satisfaction. The results of the ANNOVA analysis content are as follows:

Table 4
Impact of BSC on SoM` Performance

ANNOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2,223,550	12	185,296	1,856,449	.000 ^b
	Residual	0.798	8	0.100		
	Total	2,224,349	20			
<i>The ANOVA model results show that the model was developed following the general assumptions with F = 1.856.449, P = 0.000, and < 0.05.</i>						

Model Summary									
R	R-Squared	Adjusted R-Squared	Std Error	Statistics					D.Watson
				R-Squared	F	df1	df2	Sig.	
.842 ^a	0.883	0.851	0.31593	0.883	1,856	12	8	0	1,894

R-squared = 0.883, meaning that the BSC has an 88.30% impact on the SoM performance.

The normalized P = P regression graph shows that the BSC increases the organizational performance.

4.4.2 Financial Analysis

The result of the financial analysis is given in Fig. 5.

Table 5 presenting the financial performance of SoM over 20 years. It shows that ROA increased by 308.00%, ROE by 521.00%, NPM by 300% and RM by 15% in 20 years. It is observed that the quality of service has increased, and importance is given to personnel training and development, while citizen satisfaction has increased to 75%, and complaints have decreased to 7%.

4.5 Does BSC have an impact on employee well-being?

(Meyer, et. 1991) defined the components of employee happiness as Job Satisfaction, Job Engagement, and employee commitment at organization. This study first measured the correlation coefficient between these 3 variables. Table 6 below shows a significant relationship between JS, OC, WE.

Table 6
Correlation Coefficient of JS, OC, and WE

N = 100		JS	OC	WE
JS	Pearson Correlation		0.368**	0.742**
	Sig. (2-tailed)		< .001	< .001
OC	Pearson Correlation	0.368**		0.506**
	Sig. (2-tailed)	< .001		< .001
WE	Pearson Correlation	0.742**	0.506**	
	Sig. (2-tailed)	< .001	< .001	
**Corr. is significant at the 0.01 level (2-tailed).				

According to Table 6: There is a significant positive relationship between JS and WE ($r = .742$, $p < .001$). There is a moderately positive relationship between JS and OC ($r = 0.368$, $p < .001$). There is a significant and positive relationship between WE and OC (0.506 , $p < .001$).

Table 7
Descriptive Statistics of Scale Scores for Surveys

Descriptive Statistics of Scale Scores				
N = 100	Number of questions	Statistical Mean	Std. Deviation	Cronbach's Alpha
JS	19	3.8584	8.617	0.923
WE	25	3.7108	12.334	0.857
OC	6	3.9267	2.808	0.804

Table 7 shows high reliability of JS ($\alpha=.923$), WE ($\alpha=.857$) and OC q ($\alpha=.804$) questionnaires.

- **JS:** Measurable components of job satisfaction are salary, job security, career development, work-life balance, motivation, recognition, and relationships. (Fisher, 2010; Meyer, 1991). JS questionnaire based on 19-item Likert scale was created in this direction. Table 8 (See appendix)- According to the JS survey and Table 7; There is a significant positive relationship ($M = 3.86$) between JS and salary, job security, career development, work-life balance, motivation, recognition, and relationships. This indicates that majority of the employees are positively engaged and satisfied with their jobs.
- **WE:** Motivation of employee is examined in 3 different ways: cognitive, emotional, and physical participation (May, Gilson, & Harter, 2004). With this sense: the vitality of the employees at the workplace was measured by creating a 25-item Likert Scale questionnaire, based on autonomy, vitality, mood and regular feedback, work-life. Tables 7 and 9 show that most of the employees ($M = 3.71$) have positive feelings and are satisfied with their work, their relationships with others at work and their workplace conditions.
- **OC:** Factors affecting organizational commitment are defined as workload, control, rewards, belonging, justice, and communication. In this study, organizational commitment was measured with a 6-item Likert scale questionnaire. Tables 7 and table-10 (Appendix) show that employees are positively committed to the organization with $M = 3.92$ points.

4.5.4 Does BSC have an impact on Employee well-being?

To measure the effect of BSC on employee well-being, a correlation test was first performed between the two variables. The significance level was determined as 0.05.

The results of the test (Fig. 6) showed that Balanced Scorecard and JS ($R = 0.827$), OC ($R = 0.462$) and WE ($R = 0.843$) are significantly positively correlated ($p = 0.01 < 0.05$). The moderate correlation indicated that BSC has a positive effect on increasing well-being of employees.

The scatter plot (Fig. 7) indicated that there is positive correlation between BSC and EWB with increasing straight-line pattern.

Table 8
Impact of BSC on Employee Well-being

Impact of BSC on Employee Well Being												
Variables			Model Summary				ANNOVA					
		Dependent Variable	R	R Square	Adjusted R Square	Std. The error of the Estimate		Sum of Squares	df	Mean Square	F	Sig. (p)
BSC` EFFECT ON EWB	Balanced Scorecard	Job Satisfaction	0.827	0.683	0.680	0.25660	Regression	13.911	1	13.911	211.279	(p < .001)
							Residual	6.453	98	0.066		
							Total	20.364	99			
	Balanced Scorecard	Employee Engagement	0.843	0.710	0.708	0.26680	Regression	17.120	1	17.120	240.505	(p < .001)
							Residual	6.976	98	0.071		
							Total	24.096	99			
	Balanced Scorecard	Organizational Commitment	0.462	0.213	0.205	0.41728	Regression	4.620	1	4.620	26.534	(p < .001)
							Residual	17.064	98	0.174		
							Total	21.684	99			

The impact of the BSC on EWB indicated in the Table 8 as result of the linear regression model with R-squared value. BSC has a positive impact on followings:

- The effect on job satisfaction as 68.30% (R = 0.683).
- The effect on work engagement as 71.00% (R = 0.710)
- The effect on organizational commitment as 21.30% (R = 0.213).

5. Conclusion

5.1 Discussion

The aim of this paper is to examine the impact of BSC on EWB. The literature research showed that organizations need to use performance management and strategy tools to operate in evolving competitive environments. The performance management system consists of performance development, planning, and management stages. Kaplan & Norton (1992,1996) introduced BSC as a strategic guide that includes these three stages and improves performance from 4 perspectives. (Hasan & Chyi, 2017). According to literature search result there is a positive correlation between setting goals and employee productivity at the planning and performance monitoring stages and there is a positive correlation between happy employee and productivity (Johnason, 2009). There are limited studies in the literature on how strategic management tools affect employee emotions and well-being. (Gerrish, 2014) The improving organizational success with happy employee is become a crucial topic for HRM. Satisfied employees take any action 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 significant relationship between strategic performance management methods and employee happiness in organizations. (Kalliath, O'Driscoll, Gillespie, & Bluedorn, 2000). Financial performance can be used as a tool to measure behavioral performance. In this study, financial, customer, innovation and employee well-being of organization have been measured and tested and the result of BSC` effect on EWB presented. The results show that employees aligned with the BSC strategy, and BSC affect EWB positively with increasing their well-being. And it shows positive correlated BSC and EWB is a successful business strategy

5.2. Recommendation

The relationship between organizational performance and employee welfare, which is extremely important for HRM, has been frequently discussed in the literature. However, there are limited studies on how the tools that measure the performance of employees and the organization affect employee happiness, and whether such methods are suitable for improving employee productivity based on their well-being. Further research should focus on making sense of the relationships between business strategies and employee psychology, and how they influence each other. As supported by the literature review, being able to identify the situation and problems faced by the employee and to offer management suggestions to the leaders will support the self-confidence of the employee and affect the performance positively.

5.3 Limitations and Future Research

Although it has been proven by both this study and the research in the literature that BSC improves performance in the public sector, it should be considered that public institutions are not profit-oriented. Therefore, the performance criteria and priorities of public institutions are different. The importance of performance for both employees and managers are not as prioritized as in the private sector. It is prominent that BSC, which is found in the literature and created in the public sector, gives importance to citizen satisfaction, the financial perspective of BSC is hardly discussed here. Considering the volume of public revenue and funds, more studies are needed on how this volume should be developed and how this can be achieved with happy employees. Future studies need to create a specially balanced scorecard for the public sector and emphasize employee well-being in this balanced scorecard.

Declarations

The authors declare that they have no conflicts of interest.

This article does not contain any studies involving animals performed by any of the authors.

This article does not contain any studies involving human participants performed by any of the authors.

Informed consent was obtained from all individual participants involved in the study.

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Supplementary

Appendix is not available with this version.

Figures

Figure 1

Employee Well-being Concept

Figure 2

Balanced Scorecard Perspectives

Figure 3

HR Strategy -Employee Well-being through BSC

Figure 4

Normalized P = P Regression Graph

Figure 5

The result of Financial Analysis

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

Figure 6

Pearson Correlation of BSC & Employee Well-being

Figure 7

A Scatter Plot -The relationship between EWB and BSC