Knowledge management practices, employee work engagement and balanced scorecard: Basis for organizational performance framework International Journal of Research Studies in Management

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### Abstract

The purpose of this paper is to elevate understanding and present a holistic approach regarding connection of knowledge management practices, employee work engagement and Balanced Scorecard of one Government Organization in the Philippines. This study provided additional literature and responded to existing knowledge and respondents' gap regarding stated variables. Moreover, this study used descriptive methods research design and utilized convenience sampling method participated by 303 employees. In interpreting data, the statistical tools employed are frequency percentage, ranking, weighted mean, and Multiple Correlations—Pearson R. Initially this research presents that among knowledge management practices, sharing, application and storage was highly determined followed by creation and acquisition in accord with their ranking. Nevertheless, employees are highest in terms of emotional and physical work engagement and high in cognitive work engagement. Further, results revealed that knowledge management practices, employee work engagement and Balanced Scorecard Perspectives are highly significant and related. Likewise, results confirmed that knowledge management practices together with employee work engagement has positive impact to Balanced Scorecard Perspectives supported by the organization outstanding performance in terms of internal business process and learning and growth perspective while it showed very satisfactory performance in terms of customer and financial perspectives. Finally, the result of this research demonstrated the linkage of variables and proposed an organization performance framework to provide a map to sustain, strategize, develop, and improve both organizations and employee's knowledge and work engagement leading to successful organizational performance.

*Keywords:* knowledge management practices, employee work engagement, balanced scorecard perspectives

# Knowledge management practices, employee work engagement and balanced scorecard: Basis for organizational performance framework

#### 1. Introduction

Organizations and business around the world gradually recognize the importance of knowledge and its management in the context of providing a sustainable business environment. Nowadays, knowledge is seen as a foundation of strong competitive advantage. It has become an ingredient of modern business today along with speedy technological advancement, engagement of its people to do the task and strategy implementation measured by organization output or performance. Therefore, there's an increasing call to have knowledge management to fuel the employee engagement and organization to grow with its management effectively and efficiently in its operations.

Knowledge management makes it possible for people, teams, organizations, to work together to create, share, and use knowledge to reach their strategic and operational goals. Knowledge management helps to make operations more efficient and effective and also changes the quality of competition (through innovation) by creating a learning organization (North & Kumta, 2018). In the context of Abbas and Sagsan (2019), valued knowledge creation as the process of coming up with new ideas and philosophies and keep improving the quality of its products and services by interacting with other people. Bolisani and Bratianu (2018), viewed knowledge storing with the purpose of limiting loss which was design for organizational database and memory. While knowledge sharing is valued for employees who are certain at offering experience and expertise. This will add to knowledge application importance for people to perform job more relevant to the organizational operation intention.

Abbas and Sagsan (2019), showed connection between knowledge management and work engagement, especially in the aspect of learning organization. This is attributed to employee active participation in organizational issues, analyzing the problems, looking at different perspectives but also finding the most appropriate alternative, remedial or direct solution to the problem. In the study of Schaufeli and De Witte (2017), believed that employee work engagement can be defined as the positive pole of burnout. The cognitive work engagement is based on the idea of effectiveness, emotional work engagement based on the idea of emotional labor at work, and physical work engagement based on the idea of bodily participation in any kind of situation (Kuok & Taormina, 2017).

Giving the importance of achieving organizational goals, this study will further include organizational performance based on the Balanced Scorecard (BSC) perspective. Gawankar et al. (2015), stated that their idea of balance means they need to use different measurements and points of view that work together to give a full picture of the organization. This present study focused on how different perspectives are used in real organizations, such as customer (customer satisfaction), financial (financial performance), internal process (effectiveness of business in operation), and learning and growth perspectives (essential foundation of success of any knowledge-based organization).

The study of Fiscal (2019), reported an empirical data about knowledge management in the research articles published in the Philippines is relatively lower compared to other countries. Mann and Harter (2016) presented the work engagement survey by Gallup that concludes that worldwide, 13% of employees working in an organization was engaged that requires immediate attention. There are several studies conducted focusing on Balanced Scorecard in European and American countries, but still results still vary through various methodologies (Syadan et al., 2018). The data suggested a clear research gap to the variables needing scholars' attention.

Globally, problems in knowledge management in different organizations were started to be discussed and saw it influence business. Commonly the employee cannot find the existing information when needed in process (North & Kumta, 2018). Continuous poor knowledge management practices can result in a decrease in the level of employees work engagement (Cesario & Chambel, 2017). The linkage and connectivity of problems led to affect the performance of one organization seen in balanced scorecards that influence employee and leaders in decision making based on evidence-based facts (Gawankar et al., 2015).

In the Philippines, organizations are facing a challenge in knowledge management to support the intention to innovate and remain competitive (Quimba et al. 2017; Brillantes & Perante- Catalina 2018). Problems in knowledge management can cause organization new ideas, solutions, and opportunity to innovate to disappear (Bencsik et al., 2016). Furthermore, Naser et al. (2016), discussed that organizations must fix their knowledge gaps to reap the benefits of knowledge and become ready for future challenges and can perform an outstanding performance. Meanwhile, Abun et al. (2020), stated the problem of work engagement is caused by work environment or unfair treatment which caused the employees to less likely focus on their tasks, disengage at work, or leave the organization. In any management, employee work engagement has always been a concern because it affects the productivity and performance of the organization, measured by Balanced Scorecard (Syahdan et al., 2018).

The above problems contribute to the knowledge management practices of the organization being studied. To be more specific, in knowledge management practices employees are expected to be equipped with specific and easily understandable information they can share and apply through the business process at any time. This affects their capacity to be fully engaged cognitively, emotionally, and physically, that spills over to the expected performance.

The researcher as one of the knowledge workers first-hand observed his work engagement when there's a challenge in implementing knowledge management. Because of this, researchers ignited the drive through conducting this study to elevate understanding of how the variables influence each other while gaining a sense of advantage in securing personal growth and career advancement. On a higher value, the researcher wanted to provide and suggest innovative ways of improving management system and suggest a strategic action plan to the encountered problems which affects organizational performance. This will support as evidence-based generation for development of organization policies or strategies aligned to the mission and vision of the corporation. The utility value of this study wanted to provide insights not only in public sector but also in private who was interested in this area of study.

Objectives of the study - This study intended to find out the knowledge management practices and employee work engagement in the government health insurance corporation in the Philippines and their impact to its balanced scorecard. Specifically, the study aimed to determine the knowledge management practices in terms of creation or acquisition, storage, knowledge sharing, and knowledge application; described the employee's work engagement in terms of cognitive, emotional, and physical engagement; assessed the impact on the balanced scorecard in view of customer perspective, financial, internal process and learning and growth perspectives; tested the significant relationship between knowledge management practices, employee work engagement and balanced scorecard; and proposed an organizational performance framework based on the results of the study.

#### 2. Methods

**Research Design** - The research design employed in this research will be mainly descriptive in nature, wherein the researcher gathers quantifiable information from respondents. The descriptive method is an appropriate tool to be used by scientists and scholars who want to identify the common processes of a population and their practices (Habon et al., 2019). The researcher aimed to collect data from respondents by delivering survey questionnaires. This type of descriptive study proved beneficial in effectively obtaining data from the respondents.

Participants of the Study - The researcher collected the data from the Regional Office 4B (Oriental Mindoro, Occidental Mindoro, Marinduque, Palawan) including areas in Batangas whose employees were also directly reporting to its office. This includes offices in Batangas City, Lipa City, Tanauan City, and Lemery. The researcher considered collecting the data from the organization's total employed population (325) from July 2022. The researcher gathered a total of 303 participants (93.23% retrieval rate) who submitted their responses from the scheduled data collection date.

The profile of the respondents is collected to properly present the characteristics of the respondents. The table shows the profile according to age, sex, highest educational attainment, department or office, number of years in service, and employment status. From the total respondent's age profile, (173) belongs to age group 34-54, this was followed by 18-33 age group (117). The remaining belongs to 55-65 years old with the count of 13. Most of the participants belong to the age group of 34-54. On the other hand, the table shows most of the respondents are females (179) over the males (124). Most of the respondents are bachelor's graduates (229), this was followed by those who finished their master's degree (44). There's also a large portion of respondents who are undergraduates (23) while others have their doctorate (7). On the same table, respondents are designated to different department, namely Field Operation Department (125), Health Care Delivery Management Division (104), Management Service Division (48) and Office of the regional Vice President (26). Meanwhile it is worth adding that most of the employees are new having 1-5 years of service (113), this was followed by 16 years above in service gathering 74 respondents. While others have 6-10 years of experience (69). The remaining belong to 11-15 years in service (47) respondents. Most of the respondent's employment status are casual (165) over regular (91) and job order (47).

Instruments - The questionnaire was submitted to experts for validation and approval in relation to the present study. After the approval the researcher conducted a dry- run procedure in one of its regional offices. There are 21 respondents randomly selected and submitted to statistician for reliability statistics with the Cronbach's Alpha value of .80 above. Based on the table of reliability statistics, the remarks suggested that questionnaires are considered good and excellent. This ensures that the instrument items were consistent and reliable before they were distributed to the participants.

**TABLE 1**Reliability Statistics

Indicators	Cronbach's Alpha	Number of Items	Remarks
Knowledge Creation and Acquisition	.874	7	Good
Knowledge Storage	.920	9	Excellent
Knowledge Sharing	.906	7	Excellent
Knowledge Application	.931	8	Excellent
Cognitive Work Engagement	.840	6	Good
Emotional Work Engagement	.902	6	Excellent
Physical Work Engagement	.830	6	Good
Customer Perspectives	.881	5	Good
Financial Perspectives	.905	5	Excellent
Internal Business Process Perspectives	.922	5	Excellent
Learning and Growth Perspectives	.978	5	Excellent

At the same time, a survey-based methodology was employed through questionnaires to elicit the views of Government Health Insurance Corporation employees towards knowledge management practices, work

engagement and its impact on Balanced Scorecard. The researcher provided a hard copy and link in Google form for the questionnaire to give options for respondents. The first part of the questionnaire asks for the demographic profile in benefits of identifying the participants of the study such as age, sex, educational attainment, department or office, number of years in service, and employment status. The second part of the questionnaire was adapted and modified from the paper by Abualoush et al. (2018), and the study of (Ode & Ayavoo, 2020). It consisted of a total of 31 items, specifically about knowledge creation and acquisition (7 items), knowledge storage (9 items), knowledge sharing (7items) and knowledge application (8 items). The next section was adapted from the study of Kuok and Taormina (2017), which used the instrument New Work Engagement Scale, which includes cognitive (6 items), emotional (6 items), and physical work engagement (6 items) for a total of 18 items. The construct was modified to provide a clearer concept which is suited for the study of Government Health Insurance Corporation in the Philippines. As relevant to the objective, the researcher adds a self-structured construct about measuring the Balanced Scorecard under the customer perspectives (5 items), financial (5 items), internal process (5 items) and learning and growth perspectives (5 items). The respondent used a 4-point Likert scale in answering the second, third and fourth part of the questionnaire, with the scale ranging from 1-4, where 1 was the lowest and 4 was the highest rating, with the following interpretation.

Data Gathering Procedure - Upon the approval of the title, the researcher pursued first the authorization of the head of the organization and other approving authorities to conduct dry-run and the actual data gathering. As approved, the researcher distributed the questionnaire via Google form and hard copies, assuring respondents that their personalities would be kept anonymous and that the data they provided would be kept confidential and used only for academic and professional publication or presentation. The researcher allowed respondents enough time to fill out the questionnaire without sacrificing the deadline of this paper. When the questionnaires were retrieved and handled statistically, the researcher used them to interpret and analyze the data. All entries were double checked to ensure the accuracy and reliability of the results.

Data Analysis - The desired documents and figures were tallied, encoded, and analyzed using various statistical measures. Frequency percentage, ranking, weighted mean, and verbal interpretation were used in interpreting the knowledge management practices, employee work engagement, and balance scorecard perspective in the organization. In addition, Multiple Correlations- Pearson R was used to test and measure the strength and direction of the linear relationships of knowledge management practices and employee work engagement to balance scorecard. At the university, all data were run through the SPSS package as necessary.

*Ethical Considerations* - In compliance with the Code of Ethics, the researcher safeguarded that all information acquired from respondents were given freely and voluntarily by providing a short notice attached to each questionnaire. Thus, the researchers ensured that respondents were treated with respect and their integrity valued to elicit an effective answer. Besides, the research was done in accordance with the Data Privacy Act of 2012, which stated that it will protect and safeguard personal information from respondents.

## 3. Results and Discussions

 Table 2

 Summary Table of Knowledge Management Practices

Knowledge Management Practices	WM	Std Dev	Rank	Interpretation
A. Knowledge Creation and Acquisition	3.4517	0.46626	4	Agree
B. Knowledge Storage	3.5119	0.45464	3	Strongly Agree
C. Knowledge Sharing	3.5370	0.45246	1	Strongly Agree
D. Knowledge Application	3.5231	0.47417	2	Strongly Agree
OVERALL MEAN	3.5059	0.43306		Strongly Agree

It can be observed from the summary table 2 on knowledge management practices that the respondents accumulated a composite mean of 3.5059 and with an "strongly agree" verbal interpretation. With this composite

mean, knowledge sharing topped the list with a weighted mean of 3.5370, followed by knowledge application with a weighted mean of 3.5231, then knowledge storage with a weighted mean of 3.5119. Finally, knowledge creation and acquisition received the lowest mean score 3.4517 and the only variable to get a verbal interpretation of agree.

This could imply that the employees acknowledge the very good knowledge management practices of the organization they work for. It was assumed that knowledge sharing tops the knowledge practices due to the collaborative and helpful characteristics of employee. This may also mean that employees share updated and correct information because gives a sense of self-fulfillment and satisfaction. Meanwhile, knowledge application and storage were also being practiced heavily. Employees applied the information in decision making activities to finish tasks and generate output that helps to achieve individual or organizational goals. This may also mean that employees are applying knowledge to increase the value of the organization through success. Therefore, knowledge application may be related to how employees become competitive at their work and achieve its goal. Lastly, knowledge storage is valued by employees as it may help them, specifically in retrieving data used in decision making. Sharing knowledge can increase a worker's autonomy, skill use, and sense of fulfillment. Active sharing of correct knowledge enhances both work and personal satisfaction. Employees are working together in a variety of collaborations to solve problems or to communicate and participate in common work duties, allowing for intense interaction, idea sharing, and application of knowledge from members (Tan, 2016; Ahmad & Karim, 2019). While the study by Fadel (2022), emphasized the importance of knowledge application as it was needed in making decisions in all the corners of an organizational operations, like social, technological, and operational aspects to achieve excellence in expected performance. Meanwhile, the practice of individual and organizational knowledge storing helps the employees to secure the easy retrieval of data stored in some codified structures also affects success of organization by preventing knowledge loss happened during retirement or transfer of work location (Bolisani & Bratianu, 2018).

However, knowledge creation and acquisition gained the lowest ranking despite being positively remarkable. The reason for this may be linked to the insufficient policy or guidelines on how creation and acquisition can be utilized by employees. As observed, pre and post-test training was provided, but the organization lacks the ability to consistently monitor if information or knowledge was truly acquired. Also, there might be a lack of programs like rewards and recognition for encouraging employees to participate in knowledge creation activities. In addition, it can be gleaned that if employees continuously feel that they lack the ability to create knowledge to satisfy the demand of the client it may affect the innovative aspects of the organization. Therefore, it can contribute to business sustainability and adaptability of organizations moving towards success. The organization needs to capture employee's knowledge and experiences, trial, and error practices, to create new knowledge and content. The created new knowledge can replace the old ones by capturing, sharing and application as cycle ensues (Abubakar et al., 2019). On the other hand, knowledge creation enhances creativity, cooperation, and constant learning. If the organization lacks this aspect, it hampers the attempt for innovation (Alshanty et al., 2019). When new knowledge is understood as any change or advancement in understanding, technology, product or process, knowledge creation becomes an integral part of innovation. The link between creating new knowledge and coming up with new ideas is emphasized, with a focus on being able to change, adapt, and try new things across boundaries (Nisula et al., 2022). Lastly, the reward system of organization lets employees feel incentivized to work better and associated to knowledge creation and acquisition while promoting innovation (Papa et al., 2020).

Table 3 presents the summary of employees' work engagement with an overall mean of 3.4452 (agree). Emotional work engagement topped the ranking with a weighted mean of 3.5281. This was followed by physical work engagement as second in ranking with a weighted mean of 3.5198. First and second ranking got a verbal interpretation of strongly agree. On the other hand, cognitive work engagement ranked third and last among indicators or employee work engagement with a scored mean of 3.2877 acquired a verbal interpretation of agree.

**Table 3**Summary Table of Employee Work Engagement

Employee Work Engagement	WM	Std Dev	Rank	Interpretation
A. Cognitive Work Engagement	3.2877	0.50533	3	Agree
B. Emotional Work Engagement	3.5281	0.45899	1	Strongly Agree
C. Physical Work Engagement	3.5198	0.46962	2	Strongly Agree
OVERALL MEAN	3.4452	0.43090		Agree

The result could mean that employees of the government organization are positively engaged in their work. As assumed, the organization has a good reputation since employees are passionate as public servants, their emotional attachment to work like job satisfaction was caused by the positive working environment in workplace. In addition, the organization provided awards and recognition to employees with outstanding individual performances. On the other hand, it can be assumed that employees are performing well because they work hard physically at work. As observed, the employee's physical contribution was supported by managers that ensured the availability of work resources equivalent to existing job demands. Lastly, the result may indicate that employees are not fully cognitively engaged in their work. This is assumed to be common in an organization with experts' employees. As observed, expert employees show a characteristic of not fully cognitively engaging in their work because they can properly handle their time and provide expected output. Employees' job satisfaction has the potential to influence how we behave and emotionally engage at work. Job satisfaction affects employee job performance, organizational citizenship behavior and work withdrawal, amongst others (Extremera et al., 2018). Meanwhile, the study of Lee et al. (2019), emphasized the importance of leaders and their leadership style in everyday output of employees or physical engagement. They suggested that leaders should provide job resources as an antecedent in employee development and work engagement to reduce job demands. On the other hand, the study of Baethge et al. (2018), discussed time pressure as a variable that affects the increase in employees' work engagement. On the other hand, employees with longer or permanent exposure to time pressure will result in decreased work engagement.

**Table 4**Summary Table of Balanced Scorecard Perspectives

Balanced Scorecard Perspectives	WM	Std Dev	Rank	Interpretation
Customer Perspectives	3.4964	0.46288	3	Agree
Financial Perspective	3.4739	0.48917	4	Agree
Internal Business Process Perspectives	3.5340	0.48759	2	Strongly Agree
Learning and Growth Perspectives	3.5861	0.47862	1	Strongly Agree
OVERALL MEAN	3.5226	0.43607		Strongly Agree

The table 4 presents the summary of Balanced Scorecard Perspectives with an overall mean of 3.5226 with a verbal interpretation of strongly agree. Learning and growth top the ranking with a weighted mean of 3.5861. This was immediately followed by the internal business process perspectives with 3.5340. Both have a verbal interpretation of strongly agree. However, despite being interpreted as agree, customer perspective and financial perspectives have the lowest ranking as third and fourth. The result could imply that the organization is performing well. This may be due to the managers and employees who are constantly part of the training and programs provided by the government organization. As a result, employees become competitive, educated, and

since organization allows adjustment to plan to attain specific objectives. However, it was assumed that if complaints were addressed on time customers would be satisfied. Lastly, employees may feel that the budget was allocated properly if it was invested in systems that enhance the daily operations. Balance Scorecard Perspectives provides an outlook to how the organization performs. It helps developers and planners to improve by identifying target areas that need measurements and adjustment to successfully execute fitted strategies. Learning and growth can describe how the people, technology and organizational climate supports business

strategy and affects indicators in internal process, customer, and financial perspectives (Narayanamma & Lalitha, 2016).

 Table 5

 Relationship Between Knowledge Management Practices, Employee Work Engagement and Balanced Scorecard

Indicator (X)	Indicator (Y)	r value	p-value	Interpretation
Knowledge Management Practices	Employee Work Engagement			
	A. Cognitive Work Engagement	.599**	0.000	Highly Significant
	B. Emotional Work Engagement	.664**	0.000	Highly Significant
	C. Physical Work Engagement	.661**	0.000	Highly Significant
	OVERALL MEAN	.710**	0.000	Highly Significant
	Balanced Scorecard Perspectives			
A. Knowledge Creation and Acquisition	Customer Perspectives	.694**	0.000	Highly Significant
	Financial Perspective	.664**	0.000	Highly Significant
	Internal Business Process Perspectives	.736**	0.000	Highly Significant
	Learning and Growth Perspectives	.730**	0.000	Highly Significant
	OVERALL MEAN	.777**	0.000	Highly Significant

Knowledge acquisition and creation is found to be highly correlated to employee work engagement with overall mean Pearson-r value of .710 and balanced scorecard perspectives with overall mean Pearson – r value of .777 and all the sub-variables under both variables (p-values <0.05). First, results may imply that knowledge creation and acquisition practices highly affect employees' work engagement. The result may be due to leaders that support employees that are the key persons in acquiring and creating knowledge thus affecting how they perform and engage in work cognitively, emotionally, and physically. Based on experience and observation of the researcher, when employees become knowledgeable, they become engaged at work by contributing to doing the task innovatively in organization. The study by Imran et al., (2020) emphasized organizational support of leaders to employees creates a positive environment that energized employees in gaining knowledge and refined their skills by providing new solutions and applying enhance skills to carry out tasks. Meanwhile, according to Kianto et al., (2016), knowledge acquisition boosts workers' engagement on the job by providing them with information that helps them do their jobs better and faster. They add, knowledge creation procedures encourage employees to take part in the process of making plans and designs, tapping into their own unique creativity. Secondly, the table also shows that respondents practice of knowledge creation and acquisition was highly significant to Balance Scorecard Perspective. It can be assumed that it is necessary for any organization to continuously create knowledge and acquire knowledge to meet desired outcomes.

 Table 6

 Relationship Between Knowledge Management Practices, Employee Work Engagement and Balanced Scorecard

Indicator (X)	Indicator (Y)	r value	p-value	Interpretation
	Employee Work Engagement			
	A. Cognitive Work Engagement	.562**	0.000	Highly Significant
	B. Emotional Work Engagement	.647**	0.000	Highly Significant
	C. Physical Work Engagement	.629**	0.000	Highly Significant
	OVERALL MEAN	.678**	0.000	Highly Significant
B. Knowledge Storage	Balanced Scorecard Perspectives			
	Customer Perspectives	.696**	0.000	Highly Significant
	Financial Perspective	.682**	0.000	Highly Significant
	Internal Business Process Perspectives	.766**	0.000	Highly Significant
	Learning and Growth Perspectives	.730**	0.000	Highly Significant
	OVERALL MEAN	.790**	0.000	Highly Significant

Knowledge storage was found to be highly correlated to employee work engagement with overall mean Pearson-r value of .678 and balanced scorecard perspectives overall mean Pearson-r value of .790 and all the sub-variables under both variables (p-values <0.05). This may imply that employees of the organizations value and appreciate the practice of storing knowledge to how they engaged cognitively, emotionally, and physically at work. The value of storing knowledge affects employee work engagement by ensuring that the right knowledge can be stored, retrieved, and utilized when needed. Based on observation and experience of the researcher, one way to maintain the knowledge is to keep its employee engaged at work and ensure employee does not leave the organization. At the same time, the organization is finding ways for employee's individual knowledge to be converted to organizational knowledge for future references. The study of Shamin et al., (2019), discussed the relationship of knowledge storage practices to employee work engagement. According to them, if knowledge was stored accordingly, knowledge cannot be lost and retrieved easily.

**Table 7**Relationship Between Knowledge Management Practices, Employee Work Engagement and Balanced Scorecard

Indicator (X)	Indicator (Y)	r value	p-value	Interpretation
	Employee Work Engagement			
	A. Cognitive Work Engagement	.604**	0.000	Highly Significant
	B. Emotional Work Engagement	.641**	0.000	Highly Significant
	C. Physical Work Engagement	.666**	0.000	Highly Significant
	OVERALL MEAN	.706**	0.000	Highly Significant
C. Knowledge Sharing	Balanced Scorecard Perspectives			
	Customer Perspectives	.688**	0.000	Highly Significant
	Financial Perspective	.658**	0.000	Highly Significant
	Internal Business Process Perspectives	.753**	0.000	Highly Significant
	Learning and Growth Perspectives	.710**	0.000	Highly Significant
	OVERALL MEAN	.772**	0.000	Highly Significant

Knowledge Sharing is found to be highly correlated to employee work engagement with overall mean Pearson -r value of .706 and balanced scorecard perspectives overall mean Pearson -r value of .772 and all the sub-variables under both variables (p-values <0.05). The result may imply that knowledge sharing practices highly affect the cognitive, emotional, and physical work engagement of employees. This is because employees felt additional value for themselves after they shared vital information with their colleagues and makes them an organizational asset. As a result, those employees who are knowledgeable become more competitive, responsible, and work engaged to finish their organizational task. As observed, employees' groups themselves doing collaboration or brainstorming to share inputs specifically in solving issues and concerns. knowledge sharing creates a harmonious culture of employee work engagement and helps organizations in gaining and retaining competitive advantage (Hussain et al., 2016). The practice can create employees to become knowledgeable, and an asset helping the organization to do and perform better. Knowledge sharing is basically the giving of information, knowledge, skills to the person you trust and helps employees to collaborate by working together to solve problems, come up new ideas or understand and follow existing policies and procedures (Juan et al., 2018). On the other hand, employees of government organizations may feel that knowledge sharing practices also affect the organizational performance in terms of customer satisfaction, financial, internal processes and learning and growth perspectives. As observed, knowledge sharing helps the organization in addressing concerns by sharing fitted strategies to enhance early achievement of goals. In the study of Ferber Pineyrua, et al., (2021), mentioned that knowledge management practices require a cyclical process that include organizational strategies which were driven by emphasizing the practice of knowledge sharing to addressed organizational concerns and meet organizational goals.

 Table 8

 Relationship Between Knowledge Management Practices, Employee Work Engagement and Balanced Scorecard

Indicator (X)	Indicator (Y)	r value	p-value	Interpretation
	Employee Work Engagement			
	A. Cognitive Work Engagement	.601**	0.000	Highly Significant
	B. Emotional Work Engagement	.679**	0.000	Highly Significant
	C. Physical Work Engagement	.699**	0.000	Highly Significant
	OVERALL MEAN	.730**	0.000	Highly Significant
D. Knowledge Application	Balanced Scorecard Perspectives			
	Customer Perspectives	.731**	0.000	Highly Significant
	Financial Perspective	.725**	0.000	Highly Significant
	Internal Business Process Perspectives	.817**	0.000	Highly Significant
	Learning and Growth Perspectives	.798**	0.000	Highly Significant
	OVERALL MEAN	.844**	0.000	Highly Significant

Knowledge Application is found to be highly correlated to employee work engagement with overall mean Pearson-r value of .730 and balanced scorecard perspectives with overall mean Pearson-r value of .844 and all the sub-variables under both variables (p-values <0.05). The result may imply that government employees are knowledgeable and know exactly how to do their tasks. It was assumed that when employees are knowledgeable, it influences and pushes their interest and engagement to work cognitively, physically, and emotionally. As observed, employees become productive when they are allowed to apply appropriate knowledge as it was applicable or needed by the situation and events. According to Kim and Park (2017), managers' support to employees increases willingness of and engagement and fuels employees to willingly apply their knowledge to work.

Meanwhile, the study of Bayona et al., (2020), organizations should match the employees' interest to their specific task. This will create an environment where knowledge workers apply their knowledge and be engaged at work. Even if the employees are knowledgeable if they find their work environment did not match their interest, there is a big probability that knowledge workers did not apply knowledge, tend to disengagement at work, and they leave the organization. Meanwhile, managers support employees in application of knowledge increase willingness and engagement of employees to work. On the other hand, the result could also imply that knowledge application practices affect balance scorecard perspectives in terms customer satisfaction, financial, internal process and learning and growth perspectives. This is because employees are allowed to decide and utilize their individual knowledge to support the goals of the organization.

 Table 9

 Relationship Between Knowledge Management Practices, Employee Work Engagement and Balanced Scorecard Overall Mean

Indicator (X)	Indicator (Y)	r value	p-value	Interpretation
	Employee Work Engagement			
	A. Cognitive Work Engagement	.631**	0.000	Highly Significant
	B. Emotional Work Engagement	.702**	0.000	Highly Significant
	C. Physical Work Engagement	.708**	0.000	Highly Significant
77 1 1 M	OVERALL MEAN	.753**	0.000	Highly Significant
Knowledge Management	Balanced Scorecard Perspectives			
Practices	Customer Perspectives	.749**	0.000	Highly Significant
	Financial Perspective	.728**	0.000	Highly Significant
	Internal Business Process Perspectives	.819**	0.000	Highly Significant
	Learning and Growth Perspectives	.792**	0.000	Highly Significant
	OVERALL MEAN	.849**	0.000	Highly Significant

Knowledge management practices and its sub variables is found to be highly correlated to Employee Work Engagement sub variables with overall mean Pearson-r value of .753 and Balanced scorecard Perspectives and all the sub-variables with overall mean Pearson-r value of .849 under both variables (p-values <0.05). First, the result may imply that organizational knowledge management practices motivate employees to be fully engaged to their work. The knowledge management practices improve the employee's ability, equipped with right information, and enhance skills that they utilize as they function individually or by group in the organization. Employees can fully practice the organizational knowledge practices through the work engagement of employees. Thus, it creates room that it supports each other to work in favor of the organization achieving its goals and move towards success. Meanwhile, according to Hanaysha (2016), knowledge management practices enhance employee's engagement and commitment to work and produce positive work outcomes through enhancing employees' competitiveness and ability to handle issues. On the other hand, the result could also imply that organization knowledge management practices can greatly affect the high-level performance of the organization. It can be assumed that this was the result of proper management of knowledge by the assistance of leaders that helps the organization to strategize, be competitive and innovative.

 Table 10

 Relationship Between Employee Work Engagement and Balanced Scorecard

Indicator (X)	Indicator (Y)	r value	p-value	Interpretation
Employee Work Engagement	Balanced Scorecard Perspectives			
	Customer Perspectives	.608**	0.000	Highly Significant
A. Cognitive Work Engagement	Financial Perspective	.619**	0.000	Highly Significant
	Internal Business Process Perspectives	.600**	0.000	Highly Significant
	Learning and Growth Perspectives	.612**	0.000	Highly Significant
	OVERALL MEAN	.671**	0.000	Highly Significant

Cognitive work engagement is found to be highly correlated to balanced scorecard perspectives with overall mean Pearson -r value of .671 and all the sub-variables (p-values <0.05). The result could imply that employees who are cognitively engaged and can give a high level of focus to work may create favorable outcome to the organization performance and increase the opportunity to meet the desired goal. As observed, an increase in job resources to meet the job demands positively affects cognitive engagement of employees. The organization is sustaining employee focus towards work through orientation and training provided by managers and create a positive outlook in handling job demands. The study of Bakker et al. (2016), emphasized social resources like social support and supervisory coaching to create a cognitively engaged employee at work. Thus, job demands should be balance to organizational resources to promote employee cognitive engagement and improving mastery and expertise leading to organizational success on set performance. Meanwhile, Carter et al., (2018) promoted the impact of training for enhancement of employee's ability and skills through cognitive engagement and completing tasks to satisfy themselves.

 Table 11

 Relationship Between Employee Work Engagement and Balanced Scorecard

Indicator (X)	Indicator (Y)	r value	p-value	Interpretation
	Balanced Scorecard Perspectives			
	Customer Perspectives	.671**	0.000	Highly Significant
B. Emotional Work Engagement	Financial Perspective	.677**	0.000	Highly Significant
	Internal Business Process	.677**	0.000	Highly Significant
	Perspectives			
	Learning and Growth Perspectives	.685**	0.000	Highly Significant
	OVERALL MEAN	.745**	0.000	Highly Significant

Emotional work engagement is found to be highly correlated to balanced scorecard perspectives with an

overall mean Pearson -r value of .745 and all the sub-variables (p-values <0.05). The result could imply that the organization has a positive working environment. As observed, employees with support of managers to their job allow employees to be more committed, comfortable, feel happy, less absenteeism and turn over and motivated to work every day. Therefore, it may be assumed that the organization is financially healthy as it does not need to reinvest in knowledge gap from employee's absenteeism and turnover. It may also affect employees' chance to learn and grow more as they are open to innovation while delivering utmost service to customers. Yongxing et al. (2017), emphasized the personal and situational factors that relate employee emotional engagement to organization performance. It creates a positive environment that results to employees as happiness, joy, contentment, and enthusiasm to work.

 Table 12

 Relationship Between Employee Work Engagement and Balanced Scorecard

Indicator (X)	Indicator (Y)	r value	p-value	Interpretation
	Balanced Scorecard Perspectives			
	Customer Perspectives	.681**	0.000	Highly Significant
C. Physical Work	Financial Perspective	.692**	0.000	Highly Significant
Engagement	Internal Business Process Perspectives	.696**	0.000	Highly Significant
	Learning and Growth Perspectives	.702**	0.000	Highly Significant
	OVERALL MEAN	.762**	0.000	Highly Significant

Physical work engagement is found to be highly correlated to balanced scorecard perspectives with overall mean Pearson -r value of .762 and all the sub-variables (p-values <0.05). The result could imply that employees are physically present at work and ready to serve. It was assumed that individually each employee has a motivational factor to attend work and physically perform better. As observed, most of them want a better career in the future and shows that financially they are a good investment for the organization. They utilized internal process by delivering service at required time. The physical output serves as parameter if they learned in training. Lastly, they show physical engagement through output performance and customer satisfaction. According to Byrne et al., (2016), physical work engagement is the presence of one body to work. Meanwhile, the study of Kooij et al., (2017), emphasized that physical engagement of employees at work depends on their personal preferences, motives, and goals. Employees that wanted to pursue their career should show great physical engagement, output, and a high level of performance.

 Table 13

 Relationship Between Employee Work Engagement and Balanced Scorecard Over All Mean

Indicator (X)	Indicator (Y)	r value	p-value	Interpretation
Work Engagement	Balanced Scorecard Perspectives			
	Customer Perspectives	.724**	0	Highly Significant
	Financial Perspective	.734**	0	Highly Significant
	Internal Business Process Perspectives	.728**	0	Highly Significant
	Learning and Growth Perspectives	.737**	0	Highly Significant
	OVERALL MEAN	.804**	0	Highly Significant

Employee work engagement is found to be highly correlated to balanced scorecard perspectives with overall mean Pearson -r value of .804 and all the sub-variables (p-values <0.05). The result could imply that employee work engagement positively influences the performance of the organization. It can be assumed that the organization provides proper resources and needs of employees to satisfy them and be productive at work. Based on the observation of the researcher, the organization provides support to the operation by valuing its employee through training and suitable working environment. This was assumed to satisfy employee's needs, and the actual task that make employees be engaged cognitively, emotionally, and physically at work. The result can also be the foundation that employee with positive work engagement will acquire positive performance. On the other

hand, if employees become dis-engaged at work, they become dis-interested, dis- satisfied or even not report at work, thus damaging the operation of the organization. According to Yongxing et al., (2017), organizational performance is the quantifiable metric for effectiveness of one's action or employee engagement at work. It provided vivid relationships to measure customer, financial, internal business processes and learning and growth perspectives. The result can be the foundation on how organization to control, manage, analyze, correct, or prevent problems (Smith, 2017).

The proposed organizational performance framework was originated from tables with correlations and consisted of three main variables: Knowledge Management Practices, Employee Work Engagement, and Balance Scorecard Perspectives which were linked together and expected to work best when combined. This framework represents exceptional organizational performance that can be attained with the integration of knowledge and its practices and individual performance through employee engagement. The practical implication of this framework provided a map to sustain, strategize, develop, and improve both organizations and employee's knowledge and engagement that will lead to successful organizational performance. The framework purports to show that an organization should not only focus on achieving organizational goals but allow improving the knowledge practices of its employee and influence their engagement. Further, the framework also presented the linkage of both the sub-variables of knowledge management practices and employee work engagement and Balance Scorecard Perspectives. Specifically, knowledge management practices of creation and acquisition, storing, sharing and application which highly support the cognitive, emotional, and physical engagement of employees of the organization. Meanwhile, both the sub- variables of knowledge management practices and employee work engagement influence the achievement of the Balance Scorecard Perspectives of customer, financial, internal process and learning and growth of the organization. Primarily, variables are expected to create a positive result and importance to employees like awareness, self-development, competitiveness; secondly, for organizations innovation and goal achievement. Finally, the framework may assist in building a specific road map to address specific gap in knowledge practices and work engagement to best possible result in benefits employee and organization.

## 4. Conclusion and Recommendation

Organization knowledge management practices were determined by employees who strongly agreed in knowledge sharing, application, and storage practices and agreed only on knowledge creation and acquisition practices. Employees of the government organization strongly agreed that they were highest in terms of emotional and physical engagement at work; likewise, agreed that they are high in terms of cognitive engagement. There is significant relationship among knowledge management practices, dimensions of employee work engagement and Balance Scorecard Perspectives. The knowledge management practices, and employee work engagement have significant impact on Balance Scorecard Perspectives as determined by employees that strongly agreed on learning and growth and internal business process perspective and employees that agreed on customer and financial perspectives. An organizational performance framework was proposed in relation to knowledge management practices and employee work engagement.

The government organization knowledge creation and acquisition may improve and emphasize rewards and recognition as a tool for employees to actively participate in bringing innovative ideas. The government organization may consider validating the cognitive engagement of its employees on how they mentally separate work from personal life. The government organization may suggest focusing on satisfying its customer by addressing customer complaints in timely manner. Also, the organization may consider purchasing only appropriate Information Technology and infrastructure in allocating funds. The organization may continuously assess, monitor, evaluate and consider all its policies and guidelines integrated to knowledge management practices and employee work engagement as highly significant and related to organizational performance under the Balanced Scorecard Perspectives. The proposed Organizational Performance Framework that was developed may be used as a background in generation or enhancement of policies and strategies. Also, it may be considered by other researchers to test for its applicability. Future researchers may conduct similar studies on the variables

mentioned and may consider adding innovation as one of the main variables.

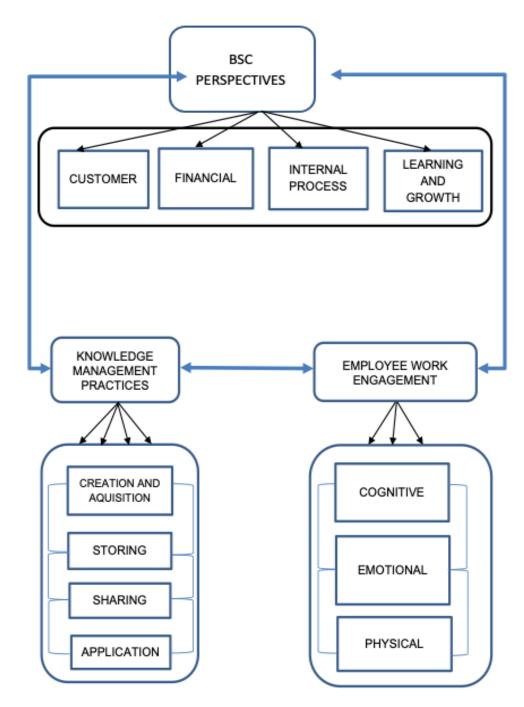


Figure 1. Proposed Organizational Performance Framework

## 5. References

Abbas, J., &Sağsan, M. (2019). Impact of knowledge management practices on green innovation and corporate sustainable development: A structural analysis. *Journal of cleaner production*, 229, 611-620.

Abualoush, S., Masa'deh, R. E., Bataineh, K., & Alrowwad, A. (2018). The role of knowledge management process and intellectual capital as intermediary variables between knowledge management infrastructure and organization performance. *Interdisciplinary Journal of Information, Knowledge, and Management*, 13, 279-309.

- Abubakar, A. M., Elrehail, H., Alatailat, M. A., & Elçi, A. (2019). Knowledge management, decision-making style and organizational performance. *Journal of Innovation & Knowledge*, 4(2), 104-114.
- Abun, D., Ranay, F. B., Magallanes, T., Encarnacion, M. J., & Alkalde, F. (2020). Employee Treatment and Work Engagement: The Philippines Context. *Proteus Journal*, 11(10).
- Ahmad, F., & Karim, M. (2019). Impacts of knowledge sharing: a review and directions for future research. *Journal of Workplace Learning*.
- Alshanty, A., Emeagwali, O., Ibrahim, B., & Alrwashdeh, M. (2019). The effect of market-sensing capability on knowledge creation process and innovation Evidence from SMEs in Jordan. *Management Science Letters*, 9(5), 727-736.
- Baethge, A., Vahle-Hinz, T., Schulte-Braucks, J., & van Dick, R. (2018). A matter of time? Challenging and hindering effects of time pressure on work engagement. *Work & Stress*, 32(3), 228-247.
- Bakker, A. B., Rodríguez-Muñoz, A., & Sanz Vergel, A. I. (2016). Modelling job crafting behaviours: Implications for work engagement. *Human relations*, 69(1), 169-189.
- Bencsik, A., Machová, R., & Tóth, Z. (2016). Cheap and clever–symbiosis of frugal innovation and knowledge management. *Problems and Perspectives in Management*, 14(1), 85-93
- Bolisani, E., & Bratianu, C. (2018). The emergence of knowledge management. In *Emergent knowledge* strategies (pp. 23-47). Springer, Cham.
- Brillantes, A., & Perante-Calina, L. (2018). Leadership and public sector reform in the Philippines. In *Leadership and Public Sector Reform in Asia*. Emerald Publishing Limited
- Byrne, Z. S., Peters, J. M., & Weston, J. W. (2016). The struggle with employee engagement: Measures and construct clarification using five samples. *Journal of Applied Psychology*, *101*(9), 1201.
- Carter, W. R., Nesbit, P. L., Badham, R. J., Parker, S. K., & Sung, L. K. (2018). The effects of employee engagement and self-efficacy on job performance: a longitudinal field study. *The international journal of human resource management*, 29(17), 2483-2502.
- Extremera, N., Mérida-López, S., Sánchez-Álvarez, N., & Quintana-Orts, C. (2018). How does emotional intelligence make one feel better at work? The mediational role of work engagement. *International journal of environmental research and public health*, 15(9), 1909.
- Fadel, R. (2022). The Moderating Role of Training in the Relationship between Knowledge Management and Innovation (Doctoral dissertation, Lebanese American University).
- Ferber Pineyrua, D. G., Redondo, A., Pascual, J. A., & Gento, Á. M. (2021). Knowledge management and sustainable balanced scorecard: Practical application to a service sme. *Sustainability*, *13*(13), 7118. Knowledge management and sustainable balanced scorecard: Practical application to a service sme. *Sustainability*, *13*(13), 7118.
- Fiscal, R. R. (2019). Knowledge management of state universities in the Philippines. *Asia Pacific Journal of Multidisciplinary Research*, 7(1), 33-41.
- Gawankar, S., Kamble, S. S., & Raut, R. (2015). Performance measurement using balance score card and its applications: A review. *Journal of supply chain management systems*, 4(3), 6-21.
- Habon, M. E., Enriquez, C. D. M., Dinglasan, A. P. L., Habon, R. A. C., Punzalan, P. M. G., & Pulhin, J. C. B. (2019). Impact of Training and Development Program to Employees Performance and Productivity
- Hanaysha, J. (2016). Testing the effects of employee engagement, work environment, and organizational learning on organizational commitment. *Procedia-Social and Behavioral Sciences*, 229, 289-297.
- Hussain, K., Konar, R., & Ali, F. (2016). Measuring service innovation performance through team culture and knowledge sharing behaviour in hotel services: a PLS approach. *Procedia-Social and Behavioral Sciences*, 224, 35-43.
- Imran, M. Y., Elahi, N. S., Abid, G., Ashfaq, F., & Ilyas, S. (2020). Impact of perceived organizational support on work engagement: Mediating mechanism of thriving and flourishing. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(3), 82
- Juan, S. H., Ting, I. W. K., Kweh, Q. L., & Yao, L. (2018). How does knowledge sharing affect employee engagement? *Institutions and Economies*, 10(4).
- Kianto, A., Vanhala, M., & Heilmann, P. (2016). The impact of knowledge management on job

- satisfaction. Journal of knowledge management.
- Kim, W., & Park, J. (2017). Examining structural relationships between work engagement, organizational procedural justice, knowledge sharing, and innovative work behavior for sustainable organizations. Sustainability, 9(2).
- Kuok, A. C., & Taormina, R. J. (2017). Work engagement: Evolution of the concept and a new inventory. Psychological Thought, 10(2), 262-287.
- Lee, M. C. C., Idris, M. A., & Tuckey, M. (2019). Supervisory coaching and performance feedback as mediators of the relationships between leadership styles, work engagement, and turnover intention. Human Resource Development International, 22(3), 257-282.
- Narayanamma, P. L., & Lalitha, K. (2016). Balanced Scorecard-The Learning & Growth Perspective. Aweshkar Research Journal, 21(2).
- Naser, S. S. A., Al Shobaki, M. J., & Amuna, Y. M. A. (2016). Knowledge Management Maturity in Universities and its Impact on Performance Excellence" Comparative study". Journal of Scientific and Engineering
- Nisula, A. M., Blomqvist, K., Bergman, J. P., & Yrjölä, S. (2022). Organizing for knowledge creation in a strategic interorganizational innovation project. International Journal of Project Management.
- North, K., &Kumta, G. (2018). Knowledge management: Value creation through organizational learning. Springer Define
- Ode, E., & Ayavoo, R. (2020). The mediating role of knowledge application in the relationship between knowledge management practices and firm innovation. Journal of Innovation & Knowledge, 5(3), 210-218.
- Papa, A., Dezi, L., Gregori, G. L., Mueller, J., & Miglietta, N. (2020). Improving innovation performance through knowledge acquisition: the moderating role of employee retention and human resource management practices. Journal of Knowledge Management, 24(3), 589-605.
- Schaufeli, W., & De Witte, H. (2017). Work Engagement: Real or Redundant? Burnout Research, 5, 1-2.
- Smith, M., & Bititci, U. S. (2017). Interplay between performance measurement and management, employee engagement and performance. International Journal of Operations & Production Management.
- Syahdan, S. A., Munawaroh, R. S., & Akbar, M. (2018). Balance Scorecard Implementation in Public Sector Organization, A Problem? International Journal of Accounting, Finance, and Economics, 1(1), 1-6.
- Yang, K., &Banamah, A. (2014). Quota sampling as an alternative to probability sampling? An experimental study. Sociological Research Online, 19(1), 56-66.
- Yongxing, G., Hongfei, D., Baoguo, X., & Lei, M. (2017). Work engagement and job performance: the moderating role of perceived organizational support. Anales de Psicología/Annals of Psychology, 33(3), 708-713.