Antecedent of Competitive Advantage (Case Study: Politeknik Mandiri Bina Prestasi Medan)

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Abstract. Learning organization, e-HRM, service quality, and competitive advantage are the variables in this study. This study made use of explanatory research. Using students as subjects, a private university conducted the study at the Mandiri Bina Prestasi Polytechnic in Medan. Gay and Diehl (1992) said that 10 percent of the population is the required minimum sample size for descriptive research. Because there were 551 students in the population, the total sample size was 55. The information was collected through the use of a questionnaire, and it was examined using both inferential and descriptive statistical methods, specifically multiple linear regression. According to Hypothesis (1): learning organizational features, e-HRM, and service quality all have an impact on competitive advantage simultaneously. Hypothesis (3): The characteristics of e-HRM have a significant influence on competitive advantage. According to theory, the features of service quality have a significant impact on competitive advantage: Hypothesis (4). The findings demonstrated that all of the proposed hypotheses were accepted.

Keywords: Learning organization; e-HRM; Service quality; Competitive advantage

1. Introduction

Higher education institutions must be more than just a vehicle for the educational process; they must also be learning organizations. In other words, a learning organization is one that consistently improves its ability to adapt and evolve. Organizational learning can be used to create universities that have learning dynamics, the ability to alter organizations, empower people, use knowledge management, and use technology.

Individuals and organizations must learn and be adaptable to the advancement of science and technology. Many things must be planned so that the organization can adjust to changes and retain continuity in order to remain competitive and survive. Technology is a tool that can help and ease access to learning information exchange. e-HRM, for example, can cut organizational expenditures, improve service quality, and raise productivity, all of which are organizational competitive advantages.

2. Literature Review

2.1 Learning Organization

A learning organization is a process of organizational behavior that is always growing and changing in order to meet organizational goals (Marsicks and Watkins, 2015). Meanwhile, A learning organization, according to Garvin (2019), is one that has the capacity to produce, carry out, interpret, and impart knowledge to other people and organizations with the aim of altering actors and enabling them to describe new and distinctive information.

2.2. Learning Organization Dimension

As "The Fifth Discipline," Peter Senge (1994) proposed five disciplines of organizational learning to develop the potential capabilities of individuals in companies.

1) System assessment

System thinking is a theoretical framework, body of information, and collection of tools that help us perceive the broad picture and decide how to make changes to it.

 Control over oneself. Control over oneself is the practice of consistently sharpening and refining our perspective, concentrating our efforts, developing patience, and seeing reality objectively.

 Images in the mind Strongly held assumptions, generalizations, or even concepts or representations, known as mental models, influence how we see and behave in the world.

4) A typical vision

The capacity to maintain an unified vision of the future we wish to create is the one leadership principle that has propelled organizations for thousands of years. Without firmly embraced goals, values, and missions, it would be difficult to imagine any company that has managed to sustain some level of brilliance.

5) Learning as a group.

The foundation of team learning is "dialogue," or the team members' capacity to set aside preconceptions and participate in genuine "thinking together." A component of the dialogue discipline is discovering team engagement practices that prevent learning. Team learning is essential because in contemporary organizations, teams—not individuals—constitute the fundamental learning unit.

2.3. Learning Organizations Characteristic

Numerous variables influence the appropriate learning framework. Phillips, (2003) defines strategic thinking and vision as well as will, leadership, communication, learning and growth, creativity and decision-making, change management, management of intellectual capital and information, measurement and assessment, and incentives and recognition. They have also identified two crucial characteristics of learning, one of which is climate and the other being culture. According to Jamali and Sidany (2008), the following five characteristics are the strategic building blocks of a learning organization:

- Clearness of vision and mission. Each organization and unit must have a clear mission or goal. Employees must grasp this and how their job helps to achieve it. Furthermore, the company must strengthen its employees' dedication to the cause for which it was created.
- 2) Leadership dedication and empowerment. Leaders must be dedicated to company objectives, particularly learning objectives. Leaders must assist in the identification of performance gaps and then support the pursuit of information that narrows and closes the gap. Almost all authors emphasize the importance of leadership in promoting a learning environment, citing actions such as requesting feedback, being open to criticism, acknowledging mistakes, and allowing their staff to make decisions and take chances (Garvin, 1993).
- 3) Testing and rewards. Organizational challenges create chances for experimentation. This experimental approach requires the support of organizational structures and processes. The freedom to try out new work methods and processes should be welcomed and promoted (Senge, 1990; Garvin, 1993).

- Knowledge transfer that is efficient. Communication must be concise, quick, and targeted. Within the organization, information on organizational challenges and possibilities must be transferred across functional and structural barriers.
- 5) Collaborative efforts and group problem-solving. Individuals in today's complicated world must work together to achieve organizational goals. Organizational architecture and processes must stimulate employee teamwork and group problem solving while reducing reliance on top management. Teams must also be capable of collaborating across diverse functions. Working in teams allows organizational members to share expertise and gain a better understanding of other people in the organization, their requirements, and how they work, while also facilitating knowledge transfer (Senge, 1990; Garvin, 1993).

2.4. Electronic Human Resource Management (e-HRM)

In addition, at least two (individual and/or collective) actors executing HR tasks simultaneously can be supported and networked via e-HRM, according to Strohmeier and Kabst (2014). Similar to this, Ruel et al. (2007) define e-HRM as a technique for implementing HRM strategies, practices, and processes in businesses through the intentional and focused use of online technology-based channels.

System automation has the advantage of increasing productivity, reducing resources lost as a result of rejects or errors, improving consistency, quality, and customer happiness, and maximizing profit (Kaur, 2013). E-HRM technologies, as anticipated, assist in the reformation and simplification of a number of HR processes, including job analysis, recruitment, selection, training, remuneration, and HR planning (Stone and Dulebohn, 2013). Electronic human resource management (e-HRM) has become a significant factor in the generation of HRM value as a result (Ruel and Kaap, 2012).

2.5. Objectives of e-HRM Application

As a result, the goals of implementing e-HRM may be summed into four categories: efficiency improvement, administrative process improvement, customer service improvement, and strategic human resource roles enhancement (Sahar Khiz, 2011). Functions of E-HRM (Swaroop, 2012 and Zafar, 2012):

- E-selection: The great majority of businesses use internet job search engines to make hiring decisions. The new selection method keeps assessments online while evaluating candidates' knowledge, behavior, and attitude. By utilizing sophisticated IT to conduct all tests online, the firm will successfully hire qualified candidates while also lowering costs.
- 2) E-learning refers to any educational, training, or training program that develops, manages, and disseminates knowledge using electronic devices, apps, and processes. The use of the internet, computers, virtual classrooms, and online collaboration are all examples of elearning tools and techniques. The delivery of material across the Internet, intranet/extranet (LAN/WAN), audio- and videotape, satellite transmission, interactive TV, CD-Rom, and other channels are all covered. The training manual is at hand right now.
- 3) E-learning: The majority of businesses are beginning to see online learning as a more effective approach to deliver training inside the company, making it accessible "anytime," "anywhere," and reducing direct and indirect costs (instructors, printed materials, training facilities) (travel time, lodging and travel expenses, workforce downtimes).
- 4) According to Hirschman, (2011), e-learning can offer a solution for training in underserved or rural areas as well as learning that is customized to the needs of the individual learner. However, it can also obstruct learning because of hardware limitations, learner isolation, and

technology anxiety.

- 5) E-performance management system: e-HRM can instruct managers on how to conduct performance reviews, as well as the precise standards and benchmarks to be used for particular roles and responsibilities, as well as examples and models of successful evaluations.
- 6) Every business, regardless of size, must plan its compensation. Managers use the process of compensation planning to ensure that pay increases are distributed fairly across the company while remaining within budgetary constraints.
- Accessible at all times and from anywhere: As a web-based HR service system, e-HRM enables you to use the program from any location with IT and an internet connection at any time.
- 8) Get rid of most HR paperwork: As environmental awareness rises, many firms are looking for methods to "go green." By deploying an e-HRM, we may save money and time by eliminating virtually all paperwork associated with HR tasks.
- 9) E-leave: it helps to reduce costs by identifying the workforce ahead of time and examining prior data records of employee absence, etc.

2.6. The Role of E-HRM

Ma and Ye (2015), claim that e-HRM technology provides a doorway through which managers, employees, and HR specialists can access, extract, or apply information that is crucial in addressing the organization's most important resources. Heikkila and Smale (2013), assert that computerized strategic human resource (e-HRM) systems are changing the role of human resources by making it simpler for staff members, executives, and other third - party partners to fulfill transaction processing tasks (HR). Organizational innovation is one of the main causes of managers' headaches, which is why e-HRM strategies including e-recruitment, e-selection, e-training, e-performance appraisal, and e-compensations have a significant impact within businesses to assist HR professionals.

2.7. Outcomes of E-HRM

- 1) High commitment indicates that the workforce is driven, understanding, and willing to communicate with management about changes to the workplace and how such changes may affect the internal structure. This suggests that HR need to be able to drive change.
- 2) High competence: When referring to employees' capacities to pick up new responsibilities and positions as needed, high competence is meant.
- 3) Cost-effectiveness includes accepting costs associated with employee opposition, such as those resulting from strikes, as well as competitive salary levels and staff turnover rates.
- 4) Higher levels of congruence are related to internal planning, compensation structures, and the workforce's "input, throughput, and output," all of which need to be designed to be advantageous to all parties concerned (Soltani and Mirnanejad, 2012).

2.8. Service Quality

A crucial trend is the increase in consumer expectations for organizations to offer higher-quality services (Chen *et al.*, 2019; Osakwe, 2019). To stand out from the competition and get a competitive edge, a firm must provide quality services (Mahmoud et al., 2019). Most statements in the discourse on service quality come from the SERVQUAL model, which Parasuraman et al. created in 1985. According to Parasuraman et al. (1985) "service quality" is "the implementation of remarkable or extraordinary business proportional to consumer

expectation".

Kotler and Armstrong (2007) defined service quality as the ability of a service provider to retain customers. In these other words, they consider client retention to be the best indicator of a solid service. According to Saghier, and Nathan (2013), service quality is a key idea in the service sector and is crucial for financial institutions that struggle to set their goods apart from that of their clients.

Five factors known as the service quality "RATER" are what define the concept of service quality in connection to customer satisfaction, according to Parasuraman (2001):

- 1) Response: a willingness to help customers and provide prompt service.
- 2) The ability of a company and its employees to foster consumer trust and confidence is referred to as assurance. This ability is exhibited through an employee's knowledge, demeanor, and the firm as a whole.
- 3) Tangible: the outward form that buildings, furnishings, gadgets, and communication tools take.
- 4) Empathy: When banks or service providers treat customers with consideration and individual attention.
- 5) Reliability: The capacity to deliver the requested service precisely and consistently.

2.8. Competitive Advantage

Kotler and Armstrong ($\overline{2012}$), claim that a competitiveness is an advantage over rivals achieved by offering a lower value or by offering greater benefits in exchange for a higher price. In a competitive market, every company wants to surpass its rivals. Hao Ma (2004) combines the four C's of global strategic advantage into the elements of competitive advantage:

- 1) To compete in the global market, a firm must excel in creativity and innovation. The ability of a business to provide facilities for employees to innovate, efficiently, and continuously learn leads to innovation (Hamel and Prahalad, 1989; Williamson, 1991; Senge, 1990).
- 2) Competition is a type of reaction to competition that becomes the organization's competitive advantage, which might be in the form of a strong market position or a superior distribution network.
- 3) The creation and implementation of cooperative agreements with other competitors within the organizational environment is referred to as cooperation. Typically, cooperation aims to get access to clients, supplement partners' resources and talents, learn and gather organizational and technical knowledge, and reap the benefits of economies of scale (Kontraktor and Lorange, 1988; Hamel *et al.*, 1989).
- 4) Co-option tries to strategically match the values of the strategies formulated with the goals of the other party, possibly providing a competitive advantage through opening new doors of opportunity, removing obstacles from without, or neutralizing threats. To influence the organization's battle with competitors, this is typically done through such a third party. It may also occur between rivals who work together covertly to handle clients, or between contenders and a third rival, In (Porter, 1980).

Competitive advantage can be gained if the organization uses and develops organizational resources in an efficient, effective, and innovative manner, resulting in better human resources. Intellectual resources, according to the Resource-Based View (RBV) philosophy, are vital resources that firms must own since they play a critical role in building competitive advantage (Barney, 1991). The RBV approach emphasizes that in order to acquire and then retain a competitive advantage, it is more vital for the organization's internal resources to be maximally empowered than external variables (Sukma, 2018).

The research hypotheses consist of:

- H1: It is hypothesized that e-HRM (X2), service quality (X3), and learning organization aspects (X1) have a substantial impact on competitive advantage (Y).
- H2: A strong impact of the learning organization component (X1) on competitive advantage (Y) is hypothesized.
- H3: The e-HRM factor (X2) is thought to have a substantial impact on competitive advantage (Y).
- H4: A strong impact of the service quality factor (X3) on competitive advantage is hypothesized (Y).

3. Research Methods

A quantitative method of explanatory research is used in this work. A population sample was selected for this study, and the data was gathered via a questionnaire. 551 members of the Mandiri Bina Prestasi Medan Polytechnic class of 2018–2020 make up the research population. A homogeneous population can benefit from a random sample strategy, claims Sugiyono (2018) . The act of picking samples at random from a population without taking into account its strata is known as random sampling. Gay and Diehl (1992) determined that a descriptive study requires a minimum sample size of 10% of the population. 55 pupils made up the study's sample as a consequence. To gather data, the questionnaire distribution approach was used. This step is linked to the creation of theoretical hypotheses that lay the groundwork for linking latent variables with one another and with both their indicators and other latent variables. The research, which is also used to test the hypothesis, contains descriptions of the research variables. A good instrument must meet the two requirements of validity and reliability. It is vital to test the validity and reliability.

4. Research Result

A validity test can be carried out using the correlation value between the information on each question and the overall score. By comparing an item's product-moment correlation index (r-count) to its critical or probability value, it is possible to determine whether it is real. This formula will calculate the product-moment correlation value; if the correlation coefficient value has a significance level of 0.05 (= 5 percent) or r-count > r-table (95 percent confidence level, = 0.05), then the research instrument's question item is valid.

The dependability test that is used is Alpha Cronbach's Alpha. Alpha of at least 0.6 is what Arikunto (2012) refers to as dependability. It was determined whether independent factors, such as organizational learning variables (X1), e-HRM variables (X2), and service quality variables (X3), simultaneously and partially influenced the dependent variable, competitive advantage (Y). For the multiple linear regression analysis in this investigation, SPSS was employed.

The value of the multiple correlation coefficients (R) in the test results is 0.726. This demonstrates the strength of the association between organizational learning variables (X1), e-HRM variables (X2), and service quality variables (X3) and competitive advantage variables (Y). Meanwhile, the Adjusted R Square value of 0.511 or 51.1 percent indicates that the organizational learning variable (X1), e-HRM variable (X2), and service quality variable (X2), and service quality variable (X3) utilized in this regression equation all contribute 0.511 or 51.1 percent to the competitive advantage variables (Y). Other variables not included in this study contribute 48.9 percent of the total.

Each independent variable that influences the dependent variable of competitive advantage is discussed:

1) Learning organizational (X1)

With a regression value of 0.063, the t-test results demonstrate that organizational learning (X1) seems to have a considerable impact on the 95 percent confidence interval and a negligible impact on competitive advantage (Y). It is conceivable to draw the conclusion that organizational learning will enhance competitive advantage. In other words, when organizational learning strength develops, the competitive advantage grows, and vice versa as organizational learning strong declines.

2) E-HRM (X2)

The results of the t-test show that the e-HRM (X2), with a linear extrapolation coefficient value of 0.054, significantly affects the 95 percent confidence interval and only marginally affects competitive advantage (Y). This suggests that e-HRM strengthens competitive advantage. Or, to rephrase it in another way, the content of the e-HRM has a negative impact on the competitive edge.

3) Service quality (X3)

With a regression coefficient value of 0.034, the t-test findings demonstrate that service quality (X3) has a significant impact on the 95 percent confidence level and a less significant impact on competitive advantage (Y). This shows that service quality has a favorable impact on competitive advantage. In other words, the competitive advantage increases as service quality increases whereas decreasing service quality results in a decrease in the competitive advantage.

Hypothesis 1: According to the F-test, organizational learning (X1), e-HRM (X2), and service quality (X3) all simultaneously affect competitive advantage (Y). H0 is disregarded since the predicted F-value is 31,641 greater than the F-table of 2.72, or sig. of 0.000 is less than 0.05. In light of this, it may be claimed that organizational learning (X1), e-HRM (X2), and service quality (X3) all significantly impact competitive advantage at the same time (Y).

Hypothesis 2: Organizational learning components (X1) significantly impact competitive advantage was evaluated using the t-test (Y). The estimated t-value is 4.761, greater than the t-1.99 table's or sig 0.000, but less than 0.05, indicating that H0 is not accepted. The organizational learning variable (X1) therefore has a barely detectable impact on competitive advantage (Y).

E-HRM factors (X2) had a considerable impact on competitive advantage, according to Hypothesis 3, which was evaluated using the t-test (Y). The calculated t-value, which is greater than the t-table value of 1.99 or sig. value of 0.021, which is less than 0.05, shows that H0 is not supported. The e-HRM variable (X2) therefore has a moderately significant impact on competitive advantage, it can be said (Y).

In order to evaluate Hypothesis 4: Service quality characteristics (X3) significantly affect competitive advantage, the t-test was performed (Y). According to the calculated t-value, which is more than the standardized coefficient of 1.99 and much less that 0.05, or sig. value 0.026, H0 is not accepted. Because of this, the impact of the quality of service characteristic (X3) on competitiveness is only marginally significant (Y).

5. Conclusion

Service quality (X3), e-HRM (X2), and organizational learning (X1) all have a big impact on the competitive advantage (Y). The estimated f-value is greater than the 0.05 in the f-value table, being 3.641 > 2.72 with a confidence of 0.000. The significance value or H0 is rejected if learning organization (X1) has had a t-count stronger than just the t-table, which itself is 4.761 > 1.99 and a potential of 0.000 < 0.05, indicating that learning organization (X1) has a

significant impact on competition (Y), assuming the other explanatory variables are constant.

The significance value or H0 is rejected, indicating that the e-HRM component (X2) has a significant impact on the competition advantage variable when the remaining independent variables are maintained constant and the actual impact of the e-HRM attribute (X2) upon that competitive advantage component (Y) has a t-count significantly larger than the t-table, specifically 2.346 > 1.99 and a potential of 0.021 < 0.05. (Y).

If the impact of the e-HRM parameter (X2) on competitiveness (Y) seems to have a tcount significantly larger than t-table, particularly regarding 2.346 > 1.99 and a probability of 0.021 0.05, the significance test or H0 is rejected, indicating that the e-HRM variable (X2) has a significant impact on the competitive advantage variable (Y) when another explanatory variables are constant.

If the impact of the quality service variable (X3) on overall satisfaction (Y) has a tcount significantly larger than the t-table, particularly regarding 2.268 > 1.99 and a potential of 0.026 0.05, the significance test or H0 is rejected, indicating that the provider variable quality (X3) has an important influence of the competitive favorable position variable (Y) if the remaining independent variables are constant.

To run a learning organization, Mandiri Bina Prestasi Polytechnic needs expert management. In practice, making learning organizations work ideally requires the willingness and commitment of all parties involved in higher education management. Furthermore, it is expected to create a website for each work unit that is integrated into an organization portal in order to boost the institution's performance. The most common issue encountered in the installation of e-HRM is the time it takes to load various programs. This heavy load can be alleviated by boosting the server capacity used for the institution's e-HRM. HR management must also work with IT to ensure the stability of the relationship. In order to increase stakeholder happiness, Mandiri Bina Prestasi Polytechnic should implement standard operational services that are integrated and documented in each major/department, as well as conduct periodic and continual satisfaction measurements.

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