ATESTASI: JURNAL ILMIAH AKUNTANSI
Vol 7, Issue 2, (2024), 1026 - 1042

The Effect of Business Process Reengineering (BPR) and Service Quality with Technology Utilization on Educational Institutional Performance through Stakeholder Satisfaction

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Received: May 27, 2024 **Revised:** June 30, 2024 **Accepted:** July 15, 2024

Abstract

This study aims to analyze the effect of Business Process Reengineering (BPR) and service quality with the use of technology on the performance of educational institutions at the National University, with stakeholder satisfaction as an intervening variable. The research methodology uses a quantitative approach with data collection through surveys to various stakeholders of the National University, including leaders, lecturers, education personnel, students, and parents, with a total sample of 200 people. The results showed that Business Process Reengineering (BPR) significantly improves educational institutions' performance, reflecting increased operational efficiency, reduced costs, and improved quality of educational services. In addition, the utilization of appropriate and integrated information technology in educational services also shows a significant influence on the performance of educational institutions, as seen in increased student and staff satisfaction and reduced operational time and costs. Implementing BPR also increases stakeholder satisfaction as more efficient processes and better services meet their expectations and needs. Similarly, service quality with effective utilization of information technology increases stakeholder satisfaction through faster service, easy access to information, and simpler administrative processes. This stakeholder satisfaction, in turn, affects the performance of educational institutions as satisfied stakeholders tend to provide more significant support, thus improving the institution's overall performance. Finally, stakeholder satisfaction mediates the relationship between BPR and service quality and technology utilization in educational institutions' performance, indicating that combining BPR and information technology significantly improves institutional performance through increased stakeholder satisfaction.

Keywords: Business Process Reengineering, Service Quality, Technology Utilization, Educational Institutional Performance, Stakeholder Satisfaction.

DOI : https://doi.org/10.57178/atestasi.v7i2.905
p-ISSN : 2621-1963
e-ISSN : 2621-1505

Introduction

The world of education today is faced with the demands of serving stakeholder needs. The demands of technology, quality, effectiveness and efficiency, often require institutions to make changes both evolutionarily and revolutionarily. As a result, various management concepts in the business world are now adopted and applied with various adjustments (Alexander, 2017). Followed by planning the design of the operational model in the form of an understandable core diagram which is then addressed in institutional architecture planning to get an overview of the development of information systems that can be used by institutions to achieve their strategic goals and in accordance with business needs. Integrated information systems aim to reduce gaps that occur in the system development process (Pushpakumara et al., 2020). To reduce this gap, a paradigm is needed in planning, designing, and managing information systems known as enterprise architecture. A concept used to make these revolutionary changes is reengineering, otherwise known as 're-engineering'. Bankruptcy due to the inability to compete and inaction to follow the progress of information technology that is so advanced and fast, encouraging businesses to re-engineer business processes (Housel et al., 1994). The business engineering process, which is very technology-intensive, certainly does not just stop at evaluating the physical stage in the form of machines and other equipment but covers the entire system. Re-engineering can also be derived from the world of education. Reengineering is a common policy taken by leaders to improve the performance of an institution (Caeldries et al, 1994).

Information Systems (IS)/Information Technology (IT) is an established field that offers significant technical advantages in facilitating conventional administrative procedures in higher education (Watchaton & Krairit, 2019). Traditional or manual administrative operations in higher education institutions (HEIs) result in sluggish workflows and inadequate management of document and file storage (I. O. Adam et al., 2017). Higher education institutions (HEIs) often use cutting-edge technology to enhance their competitive advantage, save operational costs, and improve overall performance efficiency (Lu et al., 2006). Although some staff members express concern about the possibility of system replacement, there is consensus among others that the use of information systems can improve staff performance and speed up administrative processes in higher education (I. O. Adam et al., 2017). Information systems have a significant impact on the growth of institutions in universities. They have the potential to mitigate costs, increase productivity, efficiency, and effectiveness, improve the quality of products and services, and optimize decision-making processes. The above phenomenon has resulted in a surge in the use of information systems to gain competitive advantage in higher education (Martins et al., 2019).

The ability of institutions to benefit from information systems is inherently related to the effectiveness of information systems in carrying out their functions (Liulliyah & Pribadi Subriadi, 2020). However, challenges associated with adapting to changes in business, such as unchanged workflow processes, unadjusted Institution structures, and the persistence of old cultural norms, provide significant barriers that are difficult to resolve (Chowthi-Williams et al., 2016). The implementation of electronic health record (EHR) systems introduces manual procedures that disrupt daily routines and present many hurdles, leading to aversion to change despite realizing its potential benefits (Heath & Porter, 2019). This phenomenon arises due to the introduction of information systems that may cause changes. The adoption of new

information and communication technologies (ICTs) by an Institution, along with associated modifications in users, business processes, and strategic objectives, is now considered a common situation. Indeed, the adoption of these changes by enterprises has become an increasingly integral component of the overall business landscape (Barrett & Stephens, 2017).

Much of the research conducted in higher education institutions (HEIs) relating to the implementation of information systems (IS) has focused on issues of staff reaction to change due to the introduction of new structures and systems. Institutions should examine the difficulties in improving project success in relation to post-implementation information systems (I. O. Adam et al., 2017). Watchaton & Krairit (2019) assert that the main obstacles faced by administrators in higher education are related to the effective implementation of information systems (IS) within their respective institutions. The process of implementing information systems in an institution can be characterized as the systematic identification and integration of new technological advances. There are three main factors that affect the effectiveness of information systems (IS) implementation. The first category includes technology-related issues, namely those related to system quality, information quality, and service quality. System quality refers to the level of user-friendliness and performance exhibited by a particular system. Information quality refers to the level of information that the system provides for user use. Service quality refers to the level of service provided by the Institution's departments, facilitated by the infrastructure framework. The second concern is with the affairs of the Institution, i.e. the mentoring and training provided by senior management to information technology users. A budget aligned with the requirements of implementing information systems can serve as a means of support from senior management. The final aspect relates to individual issues, including individual computer skills and individual experience with the system. Institutions must recruit individuals with expertise in information technology and experience in using systems to effectively implement information systems (Hasan Al-Mamary et al., 2014).

If a company lacks human resources, the institution must provide comprehensive training on information technology, as well as the application of information systems, to the existing workforce. The purpose of change management is to effectively address see and control the change process of individuals, teams, or institutions (Almanei et al., 2018). Change management includes a set of processes, tactics, methods, and instruments used to effectively organize and manage people to achieve the desired business results after change (Mogogole & Jokonya, 2018). Change management methods begin with ensuring that those involved in the change understand and accept the need for change to achieve a better state (Abatan & Maharaj, 2018). It is important for higher education institutions to provide comprehensive assistance in effectively managing change in the context of implementing information technology in the educational environment. In addition, the management level in higher education has the responsibility to ensure that all stakeholders involved in the change process are well informed about the changes required (Abatan & Maharaj, 2018).

Existing literature suggests that the use of change management techniques during the implementation of learning information systems in educational institutions has the potential to improve the overall effectiveness of the implementation process. A literature study to develop a conceptual model of effective learning management system implementation in non-scientific universities. This study presents a conceptual framework that includes several elements of critical success variables, which include students, teachers, systems, university support, and

change management (Alkarney & Albraithen, 2018). Literature study to identify key success factors (CSFs) for change management in IS projects. The critical success factors (CSFs) identified in this study include top management support, recognition of change, shared vision for change, managerial involvement, efficient communication, readiness of the Institution to handle change, employee training, employee participation, employee satisfaction, information dissemination and performance evaluation (Ziemba & Obłąk, 2015). In their study, Narciso & Allison, (2014) integrated Kotter and Prosci's change management model to provide a framework for overcoming user resistance in software process improvement projects. The study identified eight critical factors for successfully overcoming resistance: active executive support, open and effective communication regarding change, implementation of a structured change management approach, availability of resources, adequate funding specifically allocated to change management, employee involvement and support, and involvement and support from middle management. According to Abatan & Maharaj (2018), there is broad consensus among academics about the importance of change management.

Change management is a process that aims to ensure that all changes related to information technology systems are properly recorded, evaluated, authorized, and implemented. Changes to the system can be triggered by various things such as rules, policies, business process changes, system updates or due to system errors. In change management, there are several activities including creating, documenting, assessing and authorizing Change Requests (RFCs), coordinating and authorizing change implementation (development) & testing, coordinating change implementation, and reviewing & closing change records. Abatan & Maharaj (2018) suggest that managing changes that occur when information systems are implemented can affect the success of their implementation. On the other hand, Hasan Al-Mamary et al (2014), there are three main problems that affect the success of information system implementation, namely technological problems, institutional problems, and individual problems. It is important to manage change on these three issues. The scope of the current change management model only focuses on each issue. In managing changes that occur during the implementation of information systems, a change management model is needed that covers these three scopes to be able to assist in managing changes that occur at HEIs to improve implementation success. The change management model requires more detailed and structured processes and activities, so that it can help in managing information system changes. Inefficient management can lead to change implementation failure due to lack of planning, scarcity of resources, and inadequate actions or Institutions (Wadood et al., 2016). Therefore, the research aims to develop a change management model consisting of detailed processes and activities that cover technological, institutional, and individual changes in the implementation of information systems. The change management model produced in the research is expected to help facilitate universities in managing changes when implementing information systems by carrying out the processes and activities in the model, thereby increasing the success of information system implementation.

Literature Review

Business Process Reengineering

Business process reengineering (BPR) is an approach used to improve organizational performance (Fetais et al., 2022). Business process reengineering is process design, process

management, and process innovation. Reengineering involves revising the organization's processes. That is, designing core business processes rather than analyzing current business processes. BPR involves reconfiguring work to better serve customers. Reengineering forces organizations to challenge the way they run and redesign the organization based on desired outcomes, rather than by function or department. It also forces new ways of thinking (Attaran, 2004). The BPR approach thoroughly reshapes business practices to achieve better overall performance in terms of cost, service quality, speed, and proficiency. Therefore, modifications to improve business productivity are necessary in a fast-changing global environment characterized by intense competition and increasing technological advances. To achieve the best results, the management agenda should be adjusted and planned according to these changes.

Service Quality

According to Arianto (2018) Service Quality can be interpreted as focusing on meeting needs and requirements, as well as on timeliness to meet customer expectations. Service Quality applies to all types of services provided by the company when the client is in the company. According to Kotler and Keller (2016) quality is the completeness of the features of a product or service that can provide satisfaction to a need ". According to Cashmere (2017) Service Quality is defined as the actions or actions of a person or organization aimed at providing satisfaction to customers or employees. Meanwhile, according to Aria & Atik (2018) Service Quality is an important component that must be considered in providing excellent Service Quality. Quality of Service Quality is a central point for the company because it affects customer satisfaction and customer satisfaction will arise if the quality-of-Service Quality is provided properly.

Information System

According to Reynaldi et al., (2020), an information system is data that is collected, processed, and classified in such a way that it becomes an information system related entities contain and are tungagal with each other so that it will become a valuable information system for those who send it. According to O'Brian et al., (2018), an information system is a combination of every unit managed by people (humans), hardware, software, data communication networks and computers, and databases that change, collect, and disseminate information about the shape of the organization. According to Mc Leod (McLeod & Jones, 1986), information systems are systems that can collect information from all sources and use various media to display information. According to (McLeod & Jones, 1986), Information Systems are systems that can collect information from all sources and use various media to display information. According to (Septianingsih, 2017), the information system according to Henry Lucas is an activity of organized procedures, when executed it will provide information to support decision making and internal control.

Stakeholder Theory

Stakeholder theory says that an organization is not an entity that only operates for its own interests but must provide benefits to its stakeholders (Chariri & Ghozali 2007). Solomon (2007) states that stakeholder theory is an idea for the implementation of corporate social responsibility. Companies become active to carry out corporate social responsibility activities to satisfy the

interests of all stakeholders. This is done to improve the company's image so that the company continues to receive support from its stakeholders. One of the vital needs of stakeholders is information about the risks of the organization's condition. Risk information is conveyed by the organization through risk disclosure. If risk information can be understood by stakeholders through risk disclosure, it is expected that the information will satisfy stakeholder desires. Stakeholder satisfaction will have an impact on controlling economic resources to provide support for the company in achieving organizational goals. Based on stakeholder theory, organizations with a high level of risk will disclose justifications and explanations of what is happening in the company (Clifton & Amran 2009). The more information disclosed will be understood by stakeholders so that the risk will be reduced. This will have an impact on stakeholder satisfaction. So, it can be said that risk disclosure has an important effect on stakeholder satisfaction.

Organizational Performance

Organizational performance is mentioned as a work achievement and the process of organizing an organization in order to achieve certain goals (Nasution & Handoko, 2018). Organizational performance can also be measured using indicators of effectiveness, accountability, and responsiveness (Rambe & Tarigan, 2015). Meanwhile, Wargadinata (2017) measured organizational performance using quantitative methods, through indicators of accuracy, reliability, logical and informing (telling). The next study measured the performance of sub-district organizations using 6 indicators, namely, responsiveness, service quality, productivity, timeliness, cooperation and use of resources (Aditama & Widowati, 2017). Meanwhile, what is meant by organizational performance is a description of the level of achievement of the implementation of an organization's tasks in an effort to realize the goals, objectives, mission and vision of the organization. Then another definition of organizational performance put forward by Pasolong (2007) is the results of work achieved by an employee or group of employees in an organization, in accordance with their respective authorities and responsibilities to achieve the goals of the organization concerned legally, not against the law and in accordance with morals and ethics. Thus, it can be said that organizational performance is a description of the organization's work in achieving goals that will of course be influenced by the resources owned by the organization.

Research Methods

The research used a quantitative approach, and questionnaires were used as instruments in data collection. The research design is classified into descriptive research which is described into complex relationships between variables that have been found using structural equations, hierarchical linear modeling and regression. Model development in research is carried out by hypothesis testing, in the analysis stage calculations are carried out on a statistical analysis approach which is included in survey research. The object of this research takes place at the National University located in the Pasar Minggu area, South Jakarta, which in its operations still does not utilize technology in transactions to provide its services optimally, so that some transaction processes take a long time. The population in this study is public universities in Indonesia, totaling 122 institutions, which are filled (Kemenristekdikti, 2019). The sample

withdrawal technique in this study was nonprobability sampling with purposive sampling based on certain considerations from the researcher. In this study, the sample used was 200 samples consisting of stakeholders (leaders (including foundations), lecturers, education staff, students, parents). This type of data collection uses a questionnaire which is compiled based on indicators that researchers have obtained based on previous research, the research instrument is derived based on the variables that have been determined in the operational variables. The distribution of questionnaires was carried out in a closed manner to university leaders and managers / directors who led institutions in the field of information systems, the questions on the questionnaire contained questions related to the problem under study based on research indicators. Furthermore, the data collected will be analyzed with Partial Least Square (PLS) which is a powerful analysis method, in PLS the analysis is not based on many assumptions and distribution free (does not assume certain data, can be nominal, categorical, ordinal, interval and ratio.

Result and Discussion

Table 1. Validity Test Result

Variable	Item	Correlation Coefficient	Sig.	Info
Business Process Reengineering	X1.1	.870**	0,000	Valid
	X1.2	.832**	0,000	Valid
	X1.3	.807**	0,000	Valid
Service Quality with Technology Utilization	X2.1	.524**	0,003	Valid
	X2.2	.418*	0,021	Valid
	X2.3	.446*	0,013	Valid
	X2.4	.481**	0,007	Valid
	X2.5	.412*	0,024	Valid
	X2.6	.467**	0,009	Valid
	X2.7	.474**	0,008	Valid
	X2.8	.547**	0,002	Valid
	X2.9	.427*	0,019	Valid
	X2.10	.483**	0,007	Valid
	X2.11	.444*	0,014	Valid
	X2.12	.495**	0,005	Valid
	X2.13	.477**	0,008	Valid
	X2.14	.427*	0,019	Valid
	X2.15	.588**	0,001	Valid
	X2.16	.411*	0,024	Valid
	X2.17	.411*	0,024	Valid
	X2.18	.459*	0,011	Valid
Stakeholder Satisfaction	M.1	.752**	0,000	Valid
	M.2	.708**	0,000	Valid
	M.3	.752**	0,000	Valid
	M.4	.803**	0,000	Valid
Institutional Performance	Y.1	.512**	0,004	Valid
	Y.2	.440*	0,015	Valid
	Y.3	.479**	0,007	Valid
	Y.4	.584**	0,001	Valid
	Y.5	.564**	0,001	Valid
	Y.6	.477**	0,008	Valid
	Y.7	.508**	0,004	Valid

The validity test is measured by comparing the correlated item-total correlation value with the results of the r-table calculation (Ghozali, 2016). Then, the question item is said to be valid. Table 1 shows that all items of the four variables used as research instruments have a value of r count> r table (the value of r table is 0.361 at α = 0.05). This shows that all items of the four variables above are valid. Furthermore, the reliability test is carried out by looking at Cronbach's value. If the research instrument tested has a Cronbach's Alpha value of more than 0.6, the research instrument is said to be reliable. Based on the Reliability Statistics table above, Cronbach's Alpha value on the four variables is more than 0.6, so the four variables are reliable. Furthermore, the normality test results can be seen from the Normal P-P Plot image below. Remember that the normality assumption is that the residual (data) formed by the linear regression model is usually distributed where the data is spread close to the diagonal lines of the x and y axes.

Table 2. Reliability Test Result

Variabel	Cronbach's Alpha	No of Items	Keterangan
Business Process Reengineering	0,785	3	Reliable
Kualitas Layanan dengan Pemanfaatan Teknologi	0,788	18	Reliable
Kepuasan Stakeholder	0,747	4	Reliable
Institutional Performance	0,724	12	Reliable

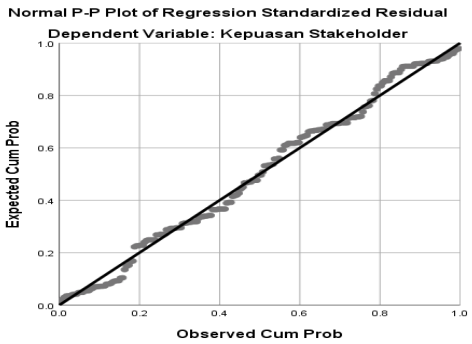

Figure 1. Normal P-P Plot Model 1

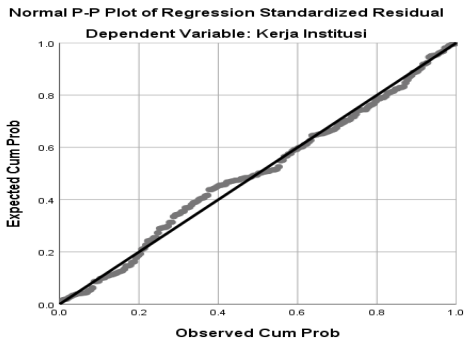

Figure 2. Normal P-P Plot Model

The distribution of points from the Normal P-P Plot image of model 1 and model 2 looks more comprehensive than the diagonal line but is enough to follow the diagonal line. Hence, the residual (data) is normally distributed. A histogram graph is also used for normality testing, where if the graph pattern forms a bell, the data can be said to be normally distributed.

Heteroscedasticity testing uses the Glejser test by looking at the Sig. A value between the independent variable and the absolute residual data, where if the Sig. If the value is more significant than 0.05, there are no heteroscedasticity symptoms.

Table 3. Heteroscedasticity Test Results

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	8.685	1.252		6.937	.000
	Business Process Reengineering	.170	.141	.154	1.210	.228
	Service Quality with Technology Utilization	-.020	.017	-.090	-1.120	.264
	Stakeholder Satisfaction	-.417	.136	-.434	-1.072	.285

a. Dependent Variable: ABSRES2

Table 3 shows that the Sig. The value of the independent variable is more than 0.05, which ranges from 0.228 to 0.285. Since the Sig. If the value is more significant than 0.05, it can be concluded that there is no heteroscedasticity.

Table 4. Determination Coefficient Test Results

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.854[a]	.729	.725	3.075	.729	175.852	3	196	.000

a. Predictors: (Constant), Stakeholder Satisfaction, Service Quality with Technology Utilization, Business Process Reengineering

b. Dependent Variable: Institutional Performance

Based on Table 4, the correlation value (R) is 0.854. This shows that there is a high correlation or relationship between the independent variables, namely Business Process Reengineering (X1), Service Quality with Technology Utilization (X2), and the intervening variable Stakeholder Satisfaction (M) on the dependent variable Institutional Performance (Y). In addition, the R-Square value of 0.729 is obtained, which indicates that the proportion of the influence of all independent variables (Business Process Reengineering (X1), Service Quality with Technology Utilization (X2), and Stakeholder Satisfaction (M)) on the dependent variable (Institutional Performance) is 72.9%. The rest (100% - 72.9% = 27.1%) is influenced by other variables not in this research or regression model.

The test results can be seen in the Coefficients table, as in the figure below. This table explains information about the regression equation and whether the independent variable has a partial influence on the dependent variable.

Table 5. Model 1 t-test results

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
1 (Constant)	1.217	.652		1.866	.064
Business Process Reengineering	.867	.041	.752	21.276	.000
Service Quality with Technology Utilization	.063	.008	.278	7.848	.000

a. Dependent Variable: Stakeholder Satisfaction

$$M = 1{,}217 + 0{,}867(X1) + 0{,}063\ (X2)$$

Sig value. Business Process Reengineering (0.000) <0.05 and the value of t count (21.276) > t table (1.972) with a regression coefficient of 0.867, then H0 is rejected and H1 is accepted. This means a positive (unidirectional) influence exists between business process reengineering and stakeholder satisfaction. This explains that the higher the value of Business Process Reengineering, the higher or higher the value of Stakeholder Satisfaction. Vice versa, if the value of Business Process Reengineering is lower, the value of Stakeholder Satisfaction will also be lower or decrease. Sig value. Service Quality with Technology Utilization (0.000) <0.05 and the t value (7.848) > t table (1.972) with a regression coefficient of 0.063, then H0 is rejected, and H1 is accepted. This means a positive (unidirectional) influence exists between Service Quality and Technology Utilization on Stakeholder Satisfaction. This explains that the higher the value of Service Quality with Technology Utilization, the higher or higher the Stakeholder Satisfaction value will be. Vice versa, if the value of Service Quality with Technology Utilization is lower, the value of Stakeholder Satisfaction will also be lower or decrease.

Table 6. Model 2 t-test results

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
1 (Constant)	5.497	2.122		2.590	.010
Business Process Reengineering	.832	.239	.249	3.482	.001
Service Quality with Technology Utilization	.094	.030	.144	3.189	.002
Stakeholder Satisfaction	1.606	.230	.554	6.987	.000

a. Dependent Variable: Institutional Performance

$$Y = 5{,}497 + 0{,}832(X1) + 0{,}094(X2) + 1{,}606\ (M)$$

Sig value. Business Process Reengineering (0.001) <0.05 and the value of t count (3.482) > t table (1.972) with a regression coefficient of 0.832, then H0 is rejected, and H1 is accepted. This means a positive (unidirectional) influence exists between business process reengineering and institutional performance. This explains that the higher the value of Business Process Reengineering, the higher or higher the value of Institutional Performance. Vice versa, if the value of Business Process Reengineering is lower, the value of Institutional Performance will also be lower or decrease—sig value. Service Quality with Technology Utilization (0.002) <0.05 and the t value (3.189) > t table (1.972) with a regression coefficient of 0.094, then H0 is

rejected, and H1 is accepted. This means a positive (unidirectional) influence exists between Service Quality and Technology Utilization on Institutional Performance. This explains that the higher the value of Service Quality with Technology Utilization, the higher or higher the Institutional Performance value will be. Vice versa, if the value of Service Quality with Technology Utilization is lower, the value of Institutional Performance will also be lower or decrease—sig value. Stakeholder Satisfaction (0.000) <0.05 and the t value (6.987) > t table (1.972) with a regression coefficient of 1.606, then H0 is rejected, and H1 is accepted. This means a positive (unidirectional) influence exists between Stakeholder Satisfaction and Institutional Performance. This explains that the higher the value of Stakeholder Satisfaction, the higher or higher the value of Institutional Performance. Vice versa, if the value of Stakeholder Satisfaction is lower, the value of Institutional Performance will also be lower or decrease.

Based on the regression output of both models 1 and 2, in the coefficients section, it is known that the value of each influence of the independent variables Business Process Reengineering (X1) and Service Quality with Technology Utilization (X2) on the mediating variable Stakeholder Satisfaction (M) as well as the influence of the independent variables Business Process Reengineering (X1) and Service Quality with Technology Utilization (X2) on the dependent variable Institutional Performance (Y) through the Stakeholder Satisfaction variable (M) can be seen in the Standardized Coefficients column. The influence of other factors outside of the study or symbolized by the letter "e," can be seen in the amount of R2 value, where the value of e1 in model 1 equation is 0.469 (e1 = √ ((1-0.780) =0.469). The value of e2 in the model 2 equation is found to be 0.520 (e2 = √ ((1-0.729))=0.520). Thus, the research structure model path diagram is obtained as follows:

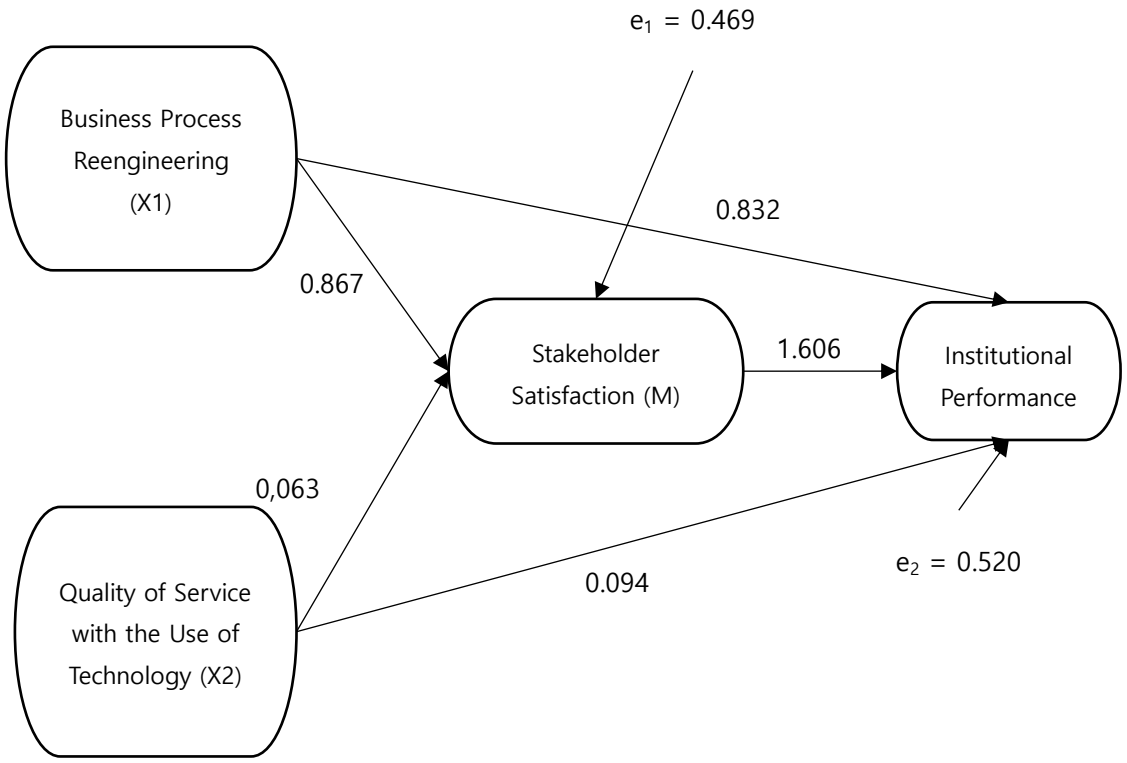

Figure 3. Research Path Diagram

Discussion

The Effect of Business Process Reengineering on the Performance of Educational Institutions.

The business process perspective emphasizes the relationship between business process improvement and organizational performance. This perspective argues that achieving the highest business process improvement and highest business performance will result in more excellent overall organizational performance (Khashman, 2019). According to Nadeem and Ahmad (2016; Khashman, 2019), the BPR team has the competencies, capabilities, and expertise to transform the overall administrative and business processes, and organizations with strong BPR support and information technology support are more valuable and have a positive relationship with customers. When business processes are redesigned and implemented effectively, they will improve organizational performance. Debela (2009; Khashman, 2019) show that a fundamentally redesigned process has a positive relationship between operations and organizational performance because it will increase business efficiency, productivity, and profitability due to implementing and completing the reengineering process. This is in line with the results of this study, where the value of Sig. Business Process Reengineering (0.001) < 0.05 and the value of t count (3.482) > t table (1.972). This means a positive influence (unidirectional) exists between Business Process Reengineering and Institutional Performance. This explains that the higher the value of Business Process Reengineering, the higher or higher the value of Institutional Performance. Vice versa, if the value of Business Process Reengineering is lower, the value of Institutional Performance will also be lower or decrease. This study's results align with the research conducted by Oktavio (2017), which found that BPR has a positive and significant effect on business process performance.

The Effect of Service Quality with Technology Utilization on Educational Institution Performance

The increasingly competitive nature of the business environment is caused by increasing globalization, global economic crisis, technological advances, competitors' actions and inactions, customers' wants and needs, political turmoil, and government regulations, which have affected the performance of many organizations. These developments make organizations look for ways to improve their performance amidst factors that create additional challenges. These challenges encourage organizations to look for ways that provide a competitive advantage (Weiss & Naylor, 2010; Ojo, 2021). In line with this, the results of this study show that the value of Sig. Service Quality with Technology Utilization (0.002) <0.05 and the t value (3.189) > t table (1.972). This means a positive influence (unidirectional) exists between Service Quality and Technology Utilization on Institutional Performance. This explains that the higher the value of Service Quality with Technology Utilization, the higher or higher the value of Institutional Performance. Vice versa, if the value of Service Quality with Technology Utilization is lower, the value of Institutional Performance will also be lower or decrease. The results of this study are also supported by the results of research conducted by Ojo (2021), which concluded that service quality predicts organizational performance.

Effect of Business Process Reengineering on Stakeholder Satisfaction

Process reengineering radically changes the work environment. Individual processes were combined to gain efficiency and productivity. Workers are allowed to make decisions on the spot to remove process bottlenecks and increase speed to market. Not only is this beneficial to overall business performance, but it can also increase employee satisfaction and loyalty. Employees can expand their skills and knowledge to other areas and make decisions that affect their performance (Akingbade, 2014). In the research results, it is known that Sig. Business Process Reengineering (0.000) <0.05 and the value of t count (21.276) > t table (1.972). This shows a positive influence (unidirectional) between Business Process Reengineering and Stakeholder Satisfaction, which means that the higher the value of Business Process Reengineering, the higher or higher the value of Stakeholder Satisfaction. Vice versa, if the value of Business Process Reengineering is lower, the value of Stakeholder Satisfaction will also be lower or decrease. In line with this, research by Wiyono et al. (2016) shows that BPR materializes stakeholder satisfaction (customers, employees, and suppliers).

Effect of Service Quality with Technology Utilization on Stakeholder Satisfaction

Each stakeholder has their own needs and desires from their service provider. Therefore, many service organizations realize that good service quality can increase customer satisfaction and customer loyalty (Shurair & Pokharel, 2019). Many organizations consider quality a strategic weapon to improve business performance and achieve operational efficiency (Shurair & Pokharel, 2019). This is evidenced by the results of this study that there is a positive (unidirectional) influence between Service Quality and Technology Utilization on Stakeholder Satisfaction. This explains that the higher the value of Service Quality with Technology Utilization, the higher or higher the Stakeholder Satisfaction value will be. Vice versa, if the value of Service Quality with Technology Utilization is lower, the value of Stakeholder Satisfaction will also be lower or decrease. This is supported by the results of research by Kundi et al. (2014), where there is a significant relationship between tangibility and assurance because the research sample population considers these two factors to be the most critical factors for improving service quality in the higher education system. Overall, the independent variables' significant and positive impact on customer satisfaction was found to be the dependent variable.

The Effect of Stakeholder Satisfaction on Educational Institution Performance

Stakeholder satisfaction is the level of group or individual satisfaction measured by comparing the results obtained with the objectives of a plan, which is also influenced by the point of view of each stakeholder. Stakeholder satisfaction plays a role in improving organizational performance. This is because every individual or group inside and outside the company is interested in its success, which can affect organizational performance. This study's results prove a positive (unidirectional) influence between stakeholder satisfaction and institutional performance with a Sig value. Stakeholder Satisfaction (0.000) <0.05 and the value of t count (6.987) > t table (1.972). This explains that the higher the Stakeholder Satisfaction value, the higher or higher the Institutional Performance value will be. Vice versa, if the value of Stakeholder Satisfaction is lower, the value of Institutional Performance will also be lower or decrease. The results of this study are supported by the results of research conducted by Triwijayanti and Rahmania (2019) that there is a relationship between stakeholder satisfaction

and the performance of D III Nursing Study Program graduates as evidenced by the p-value of 0.025, which has a sig value < 0.05.

The Effect of Business Process Reengineering and Service Quality with Technology Utilization on Educational Institution Performance through Stakeholder Satisfaction

The results showed that Stakeholder Satisfaction (M) was able to mediate the effect of Business Process Reengineering (X1) on Institutional Work (Y) and the effect of Service Quality with Technology Utilization (X2) on Institutional Work (Y). This indicates that the higher the stakeholder satisfaction, the higher the influence of Business Process Reengineering and Service Quality with Technology Utilization on Institutional Work. Puspita (2015) states that Stakeholders have different criteria for satisfaction with the company. Overemphasis on the needs of one group of stakeholders can give a negative assessment of the company's reputation. The literature shows that a good corporate reputation can affect organizational performance, and the opposite relationship also applies (Pires & Trez, 2018). Therefore, reengineering the business process is one of the options for improvement. It is said to be an option because it is expected that with these improvements, the quality of service that service users can receive will increase so that the satisfaction they receive increases.

Conclusion

The results of this study indicate that Business Process Reengineering (BPR) and Service Quality with Technology Utilization positively influence Educational Institution Performance and Stakeholder Satisfaction. Key findings include that improvements in business processes and technology-enabled service quality significantly improve organizational performance and stakeholder satisfaction. The analysis results showed strong significance values, with the t-count greater than the t-table, indicating a positive and significant relationship between the variables studied. The findings' practical implications are that educational institutions need to focus on business process improvement and the application of technology in services to improve performance and stakeholder satisfaction. Theoretically, this study supports the theory that efficiency and productivity resulting from business process improvements positively impact organizational performance. In addition, the findings confirm the importance of service quality in building positive relationships with stakeholders, which ultimately improves institutional performance. Future research should explore other factors affecting educational institution performance and stakeholder satisfaction, such as organizational culture and change management. In addition, the research can be expanded by using qualitative methods to gain deeper insights into stakeholders' perceptions of the reengineering process and service quality. Longitudinal research is also recommended to understand the long-term impact of BPR and technology implementation on educational institution performance.

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