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## The impact of entrepreneurship, learning organization, organizational flexibility, and customer orientation on service quality: a study among IBII Jakarta lecturers

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### ABSTRACT

As higher education institutions strive to deliver excellence, it is imperative to identify the key factors that can drive improvements in service quality and empower institutions to meet the evolving needs of students and stakeholders. The objective of this research is to obtain information concerning the effect of entrepreneurship, organizational flexibility, learning organization and customer orientation on the service quality of higher education. This study was conducted in The Indonesian Institute of Business and Informatics (IBII) by using survey method with path analysis applied in testing hypothesis. The number of 60 founded lectures as a sample is selected by simple random sampling. The research findings are as follows: entrepreneurship has a direct impact on organizational learning, customer orientation, and the quality of higher education services. Organizational flexibility also directly influences these three aspects. However, there is no direct impact of organizational learning on customer orientation. Customer orientation has a direct impact on the quality of higher education services. The result of this research could imply that in developing and empowering the service quality of higher education, entrepreneurship, organizational flexibility, learning organization and customer orientation should be taken into account.



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## Introduction

In a university environment, it is often the case that staff, teachers or lecturers do not know about the institution and its development. As a result, their performance is not optimal or just sober (Hewett et al., 2017). While the close external environment such as foundation management is the spearhead of policy making that can provide management guidelines and directions, the Ministry of National Education provides policies or standards on service quality, funder also have hope for the sustainability of the superiority of their human resources and the target market (Harrison & John, 2013). While the external environment, such as community groups, market centers, industry, the impact of the social, economic and political environment also influences the strengths and opportunities they have (Henriques & Sadorsky, 1996; Rizal et al., 2017).

Students and their parents as paying for education services are external customers who will receive services in the classroom, laboratory, library, field work practice, and academic administration services for higher education. The low quality of service centers as above, causes people to punish institutions that lack

competitiveness, are not creative and innovative, quality is just a mere slogan for not being able to fulfill and realize the provision of customer satisfaction (Laroche et al., 2004; Munteanu et al., 2010; Ullah, 2012). These weaknesses must be analyzed and addressed for continuous improvement. The education service sector is a basic need that has undergone many fundamental changes in the era of globalization and industry. This requires mental education managers and their constituents to be more creative and proactive with managerial skills such as entrepreneurship that is always customer-oriented (Bilal et al., 2021; Kim et al., 2009). It emphasizes democratic learning, emotional health, and relationship growth, to a far greater degree than the traditional learning environment (Loveless, 2020).

Higher education as an agent of change means that organizations that take inputs from the environment turn them into products or services and return them as outputs to the environment again (Bowen, 2018). Furthermore, it is said that the environment that has an indirect influence such as technology, economics, societal, political which affects the organizational climate to operate becomes a potential factor to change into an environment that has a direct influence. Thus, the higher education environment demands institutions that are very flexible and able to adapt as better learning organizations in order to improve the quality of competitive higher education services as a development locomotive to achieve the nation's ideals (Syam et al., 2018).

Higher education through the Long-Term Higher Education Development Framework (KPPT-JP) has developed a higher education system paradigm that is based on 5 (five) pillars, namely: (1) the results and performance of higher education must refer to sustainable quality, (2) sustainable quality is based on the creativity and personal productivity of the academic community which can be stimulated through an autonomous management pattern, (3) higher education autonomy must be in line with the accountability of higher education performance and results, (4) the right of the community to obtain reliable information and valid regarding the implementation, performance and results of higher education institutions which are actualized through the accreditation process by BAN, and (5) the main managerial action that underlies the decision-making and planning of higher education is the self-evaluation process. Prior to that time on April 1, 2003, the Director General of Higher Education has set a vision for higher education in Indonesia 2010 known as the Higher Educational Long-Term Strategy (HELTS) 2003-2010 with 3 (three) pillars, namely quality, accessibility of opportunity and autonomy. Therefore, the empowerment of universities is expected to further improve the quality of services in the form of sustainable development programs in order to achieve efficiency and effectiveness of education in the future.

Efforts to produce superior quality higher education products and services are not only the responsibility of the government and institutional leaders but more dominantly include all employees and academic staff (human resources) in higher education institutions (Glavič, 2020). The life of superior human beings who are coveted needs to be directed at the creation of a civil society with one of the participatory characteristics (Tjandra, 2006), such as: the ability to develop a network of cooperation (network) and the ability to develop cooperation (teamwork). Operationally, what is meant by the development of participatory excellence is the empowerment of students, with the task of the campus not only learning and teaching something, but also providing opportunities for students to be able to explore and find out for themselves the truth and noble values contained in the repertoire of knowledge and culture of Indonesia and the world.

The focus of future higher education development is to increase aspects of human capital, which is the implementation of Article 53 of Law Number 20 of 2003 concerning the National Education System and Government Regulations (PP) Numbers 60 and 61 of 1999 concerning Higher Education as a form of educational legal entity (BHMN status), the national higher education system must be able to guarantee fair educational opportunities, improve academic quality and increase the efficiency and independence of higher education management to face challenges in accordance with the demands of changing life.

With the aim of carrying out the above task, the Indonesian Institute of Business and Informatics (IBII) was established in 1987 under the name of the Indonesian Business Institute Foundation, with STIE IBII status in 1993, which is well-known for its accounting program. After the issuance of the Decree of the Minister of National Education No. 34/D/0/2005 dated March 23, 2005, STIE IBII changed to the Indonesian Institute of Business and Informatics (IBII). Currently, IBII organizes bachelor's degree programs, postgraduate programs for masters and doctoral degrees and accounting profession education (PPAK).

The management of infrastructure, equipment and supplies should ideally be carried out starting from procurement, maintenance and repair to its development. This is based on the fact that educational institutions such as IBII and foundations are the ones who best know the needs of customers in terms of adequacy, suitability and up-to-date, especially facilities that are very closely related to the teaching and learning process. Meanwhile, financial management, especially the allocation/use of finance, should be managed in a

managerial manner and also given the freedom to carry out activities that generate additional income, so that financial resources are not solely dependent on foundations and the government.

In other words, the management of a conducive academic climate, especially at IBII, is a prerequisite for the implementation of an effective learning process. A safe and orderly environment, good service, optimism and high expectations for education customers can be fulfilled. In this era of globalization, the managers of educational institutions with their vision are able to improve procedures through efforts to improve the Integrated Quality Management (TQM) system, hopefully it can be better in the future (Burhanudin et al., 2018; Suriyati et al., 2023). This is where it is demanded to develop the entrepreneurial attitude of universities or higher education in managing a customer-oriented academic education system through strategic planning (Renstra) that can accommodate all stakeholder interests (Manatos et al., 2018).

Customers are not defined as people who buy products or receive services, but all parties with an interest in these tasks. So it could be that customers are superiors, even subordinates themselves (internal customers), such as employees, lecturers and consultants in higher education (Taylor & Hill, 1992). This understanding tries to explain that entrepreneurship is no longer merely an entrepreneurial ability, but rather on the sides of the human mentality, which always acts "serving" (McMullen & Dimov, 2013). The entrepreneurial spirit and spirit must be possessed by all parties in the organization, from the lowest level to the leadership level. An entrepreneurial spirit is indispensable in today's fast-paced changing environment.

Research in the field of management at IBII tertiary institutions in the turbulent environment of the science industry is still lacking, the strategy process requires a conceptualization and understanding as well as clear rules, which are more in-depth regarding interactions and interrelationships between customer orientation and entrepreneurial orientation that is realized of these two orientations in higher education organizations will affect the performance of these innovative practical and academic activities. The challenge of creating a combination of culture and climate that maximizes sustainable learning organizational opportunities is how efficiency and effectiveness create higher value for customers in this new competitive landscape, as the ability to learn quickly may be the only source of competitive advantage (Stephens et al., 2008). The descriptions mentioned above indicate that IBII has a very heavy responsibility to achieve higher competitiveness in a turbulent external environment. Customers demand institutions that are highly flexible and adaptable. IBII lecturers are required to provide high quality education and teaching services, which provide the best results. In reforming its environment, IBII has not really introspected itself in the perception of the external environment, whether it is good enough, competitive enough, or whether the mission can be achieved, whether there is a sense of belonging from the lecturers and students. IBII's excessive customer orientation or focus strategy has also not ruled out the possibility of creating customer bias. External customers (students) who are too pampered are always obeyed so that there is a tendency for external customers to be less appreciative of lecturers and employees, even in providing feedback to lecturers is often not objective (Moore & Kuol, 2005). Problems like this need to be considered and evaluated by the Indonesian Institute of Business and Informatics (IBII) what is wrong with their lecturers.

To realize IBII's ideals as a leading university (center of excellence) in Indonesia, it is necessary to make revolutionary changes, decentralizing authority to lecturers, shortening the hierarchy, focusing on quality, getting closer to consumers (the public) in an effort to remain competitive in the global market. and to become more flexible, more innovative, and more entrepreneurial in managing education with a conducive climate and better environment. The study certainly examines the factors that affect the quality of service which empirically will certainly help a lot in solving educational problems and the quality of educational services. The logical consequence of service quality requires excellence such as entrepreneurship, customer orientation, organizational flexibility, and learning organization (Gephart et al., 1996; Seth et al., 2005). These factors can determine success in achieving service quality in solving higher education problems at IBII in particular and other universities in general (Seth et al., 2005).

The gap in this study is that there is currently a lack of in-depth understanding of how the interactions between entrepreneurship, learning organization, organizational flexibility, and customer orientation specifically impact service quality among lecturers at IBII Jakarta. Therefore, this research is necessary to provide a more comprehensive insight into these dynamics, which will assist higher education institutions and practitioners in enhancing their educational services to meet the evolving demands of students and the changing market. This study aims to determine whether or not there is an influence between entrepreneurship, learning organization, organizational flexibility and customer orientation on the quality of higher education services at the Indonesian Institute of Business and Informatics, either directly or indirectly.

## Method

The method used in this research is survey and causal method, where data collection is done by distributing questionnaires to IBII permanent lecturers. This research was conducted at the Indonesian Institute of Business and Informatics (IBII) within 7 months, starting from May to November 2006. Prior to data collection, research stages were carried out such as preparing a theoretical framework and seminars on theoretical studies, instrument testing, validation, and refinement instrument. The last three months were used for data collection and data analysis, writing the results of research seminars in preparation for closed exams. the target population in this study were permanent lecturers at the Indonesian Institute of Business and Informatics (IBII). While the target population is affordable and as a sample frame is the permanent lecturers of the IBII foundation, totaling 90 people. The sample is set at 60 people, the sampling technique is done by simple random sampling from 90 people spread across the four study programs from each study program, the same number of respondents is taken based on the random number table because the target population is homogeneous.

This research uses five instruments, including: 1) service quality, 2) entrepreneurship, 3) Organizational Flexibility, 4) learning organization, and 5) Customer orientation. Firstly, service quality is service dimensions that can be proven by comparing expectations and reality felt by service recipients. These dimensions are indicated by: physical evidence (tangibles) dimensions, reliability dimensions, responsiveness dimensions, the dimension of guarantee and certainty (assurance), and the dimension of empathy (emphaty). The results of the instrument reliability analysis show an alpha coefficient of 0.979. Second, customer orientation is building close relationships with customers which is indicated by: providing information, providing the best offers and providing problem solving. The results of the reliability analysis of the customer orientation instrument show an alpha coefficient of 0.9117; Third, organizational flexibility is indicated by strategic, time and operational management flexibility with indicators (1) strategic flexibility; (2) time flexibility; and (3) operational flexibility. The results of the reliability analysis of the organizational flexibility instrument show an alpha coefficient of 0.892, which means the instrument is very reliable. Fourth, entrepreneurship is an advantage that an individual has to take advantage of existing opportunities because he has the desire to make changes for the better. The results of the reliability analysis of the entrepreneurship instrument show an alpha coefficient of 0.878, which means the instrument is very reliable. Fifth, service quality is service dimensions that can be proven by comparing expectations and reality felt by service recipients. These dimensions are indicated by: physical evidence (tangibles) dimension, reliability dimension, responsiveness dimension (responsiveness) , dimensions of guarantee and certainty (assurance), and dimensions of empathy (emphaty). The results of the reliability analysis of the entrepreneurship instrument show an alpha coefficient of 0.911, which means the instrument is very reliable.

In accordance with the problems and research objectives to be achieved, this study uses path analysis techniques with the help of the LISREL 8.45 Software program with the aim of testing the suitability of the model, the direct and indirect effects of each variable, analyzing the structural relationships between research variables and their effects.

## Results and Discussions

### Learning Organization (X3) on Entrepreneurship (X1)

It is known that the regression equation  $X3 = 54.111 + 0.528 X1$ . From the calculation results obtained  $F_{count} = 18,576$ , while at the level of significance = 0.05 and dk (1 : 58) obtained  $F_{table} = 3.9$ . Because  $F_{count} > F_{table}$ , the regression is very significant. The calculation results obtained that the value of  $t_{count} = 4.31$  while the value of  $t_{table} = 2.66$ . Because  $t_{count} > t_{table}$ , it can be concluded that the correlation is significant.

### Learning Organization (X3) on Organizational Flexibility (X2)

Based on the regression equation  $X3 = 63.00 + 0.66 X2$ . From the calculation results obtained  $F_{count} = 10.190$ , while at the real level = 0.05 and dk (1: 58) obtained  $F_{table} = 3.9$ . Because  $F_{count} > F_{table}$ , the regression is very significant. The calculation results obtained that the value of  $t_{count} = 3.19$  while the value of  $t_{table} = 2.66$ . Because  $t_{count} > t_{table}$ , it can be concluded that the correlation is significant.

### Customer Orientation (X4) on Entrepreneurship (X1)

Regression equation  $X4 = 41.025 + 0.263 X1$ . From the calculation results obtained  $F_{count} = 8.149$ , while at the level of significance = 0.05 and dk (1 : 58) obtained  $F_{table} = 3.9$ . Because  $F_{count} > F_{table}$ , the regression is very significant. The calculation results obtained that the value of  $t_{count} = 2.85$  while the value of  $t_{table} = 2.66$ . Because  $t_{count} > t_{table}$ , it can be concluded that the correlation is significant.

**Customer Orientation (X4) on Organizational Flexibility (X2)**

Calculation of the regression equation  $X4 = 28.249 + 0.644 X2$ . From the calculation results obtained  $F_{count} = 23,127$ , while at the level of significance = 0.05 and dk (1 : 58) obtained  $F_{table} = 3.9$ . Because  $F_{count} > F_{table}$ , the regression is very significant. The calculation results obtained that the value of  $t_{count} = 4.80$  while the value of  $t_{table} = 2.66$ . Because  $t_{count} > t_{table}$ , it can be concluded that the correlation is significant.

**Customer Orientation (X4) on Learning Organizations (X3)**

Based on the regression equation  $X4 = 18.208 + 0.457 X3$ . From the calculation results obtained  $F_{count} = 43,170$ , while at the real level = 0.05 and dk (1 : 58) obtained  $F_{table} = 3.9$ . Because  $F_{count} > F_{table}$ , the regression is very significant. The calculation results obtained that the value of  $t_{count} = 6.57$  while the value of  $t_{table} = 2.66$ . Because  $t_{count} > t_{table}$ , it can be concluded that the correlation is significant.

**Quality of Higher Education Services (X5) on Entrepreneurship (X1)**

The results of the regression equation  $X4 = 53.234 + 0.440 X3$ . From the calculation results obtained  $F_{count} = 14,864$ , while at the real level = 0.05 and dk (1 : 58) obtained  $F_{table} = 3.9$ . Because  $F_{count} > F_{table}$ , the regression is very significant. The calculation results obtained that the value of  $t_{count} = 3.85$  while the value of  $t_{table} = 2.66$ . Because  $t_{count} > t_{table}$ , it can be concluded that the correlation is significant.

**Quality of Higher Education Services (X5) on Organizational Flexibility (X2)**

Based on the regression equation  $X5 = 21.346 + 1.268 X2$ . From the calculation results obtained  $F_{count} = 109,525$  while at the real level = 0.05 and dk (1 : 58) obtained  $F_{table} = 3.9$ . Because  $F_{count} > F_{table}$ , the regression is very significant. Correlation coefficient  $r_{52} = 0.80$ . The calculation results obtained that the value of  $t_{count} = 10.46$  while the value of  $t_{table} = 2.66$ . Because  $t_{count} > t_{table}$ , it can be concluded that the correlation is significant.

**Quality of Higher Education Services (X5) on Organizational Flexibility (X3)**

Based on the regression equation  $X5 = 22,790 + 0,48 X3$ . Dari hasil perhitungan Based on the regression equation  $X5 = 22.790 + 0.48 X3$ . From the calculation results obtained  $F_{count} = 22,790$  while at the real level = 0.05 and dk (1 : 58) obtained  $F_{table} = 3.9$ . Because  $F_{count} > F_{table}$ , the regression is very significant. The calculation results obtained that the value of  $t_{count} = 4.77$  while the value of  $t_{table} = 2.66$ . Because  $t_{count} > t_{table}$ , it can be concluded that the correlation is significant.

**Quality of Higher Education Services (X5) on Customer Orientation (X4)**

Based on the regression equation  $X5 = 45.556 + 0.718 X4$ . From the calculation results obtained  $F_{count} = 25.412$ , while at the level of significance = 0.05 and dk (1 : 58) obtained  $F_{table} = 3.9$ . Because  $F_{count} > F_{table}$ , the regression is very significant. Correlation coefficient  $r_{54} = 0.55$ . The calculation results obtained that the value of  $t_{count} = 5.04$  while the value of  $t_{table} = 2.66$ . Because  $t_{count} > t_{table}$ , it can be concluded that the correlation is significant.

**Model Analysis**

After the data obtained from the field has been processed and has gone through the various tests required above, the next step in testing the causality model is to conduct path analysis using the Listrel 8.45 Software Program. Based on the theoretically formed causal model, a path analysis diagram will be obtained and the coefficient values for each path will be calculated. The value that needs to be known for the next calculation is the value of the correlation coefficient which is presented in the form of a matrix as follows:

**Tabel 1.** Simple Correlation Coefficient Matrix Between Variables

	X <sub>1</sub>	X <sub>2</sub>	X <sub>3</sub>	X <sub>4</sub>	X <sub>5</sub>
X <sub>1</sub>	1.00				
X <sub>2</sub>	0.51**	1.00			
X <sub>3</sub>	0.49**	0.38**	1.00		
X <sub>4</sub>	0.35**	0.53**	0.65**	1.00	
X <sub>5</sub>	0.45**	0.80**	0.53**	0.55**	1.00

From this path diagram, nine path coefficients are obtained, namely  $p_{21}'$   $p_{31}'$   $p_{32}'$   $p_{41}'$   $p_{42}'$   $p_{43}'$   $p_{51}'$   $p_{52}'$   $p_{54}$  with ten correlation coefficients namely  $r_{12}'$   $r_{13}'$   $r_{14}'$   $r_{15}'$   $r_{23}'$   $r_{24}'$   $r_{25}'$   $r_{34}'$   $r_{35}'$   $r_{45}'$ . Based on the results of the calculation of the correlation coefficient in table 4.10 above and using matrix multiplication according to the path analysis work steps, the coefficient values for each path are calculated and tested for significance using the t test statistic. If the path being tested shows the path coefficient value is insignificant (not significant), then the path will be removed/deleted and the structural relationship model between variables is modified, and the path coefficient value is recalculated.

In addition, measurements of the accuracy of the proposed model or the results of the model suitability test were also carried out, with the test results as presented in Table 1. It is clear that the path model formed has met the model suitability requirements, because all the calculated suitability test indicators have met the limits. Cut-off value to be declared as a suitable model. Thus, the results of this test further confirm that the path model is suitable for explaining the quality of higher education services.

**Table 2.** Path Analysis Model Suitability Test Results (*Goodness of Fit Indices*)

Path t.	Path t count t table	t <sub>hitung</sub>	t <sub>table</sub> $\alpha=0,05$	t <sub>table</sub> $\alpha=0,01$	Description
p <sub>31</sub>	0,73**	8,66	1,97	2,61	The path is very significant
p <sub>32</sub>	0,18*	2,19	1,97	2,61	Significant path
p <sub>41</sub>	0,59**	3,34	1,97	2,61	The path is very significant
p <sub>42</sub>	0,37**	3,05	1,97	2,61	The path is very significant
p <sub>43</sub>	- 0,28 <sup>ts</sup>	- 1,52	1,97	2,61	Insignificant path, (Path Removed)
p <sub>51</sub>	0,57**	3,28	1,97	2,61	The path is very significant
p <sub>52</sub>	0,12*	2,06	1,97	2,61	Significant path
p <sub>53</sub>	0,37**	3,28	1,97	2,61	The path is very significant
p <sub>54</sub>	0,57**	4,47	1,97	2,61	The path is very significant

Source: Appendix 8: Listrel Estimates, Goodness of Fit Statistics. (C:\lisrel854\_student\Data Client\DATA IKHSAN2.LS8 DATE: 2/14/2007), p. 261.

Note: The cut-off value is the limit to state whether the model meets the criteria of conformity or not (Hair, et al, 2006: 745).

After obtaining the results of model testing, both partially and simultaneously, where a decision is obtained that the model is said to be very suitable to explain the endogenous variables being analyzed, the following is the complete path model form as shown in Figure 2. In this figure, the coefficients are shown track.

#### Structural Model Path Coefficient Calculation

The calculation of the path coefficient value of the structural model is carried out based on the correlation coefficient value in table 2 as described previously. Table 4 above shows that there are 8 path coefficients indicated to be significant at the 5% level, because they have t-count > t-table at = 0.05. The path coefficients in question are the path coefficients between entrepreneurship and learning organizations (P31), and organizational flexibility with learning organizations (P32), customer orientation and entrepreneurship (P41), path coefficients between customer orientation and organizational flexibility (P42), quality of higher education services with entrepreneurship (P51), the path coefficient between the quality of higher education services and organizational flexibility (P52) and the path coefficient between the quality of higher education services and learning organizations (P53), and the path coefficient between the quality of higher education services and customer orientation (P54).

#### Modified Structural Model Path Coefficient Calculation

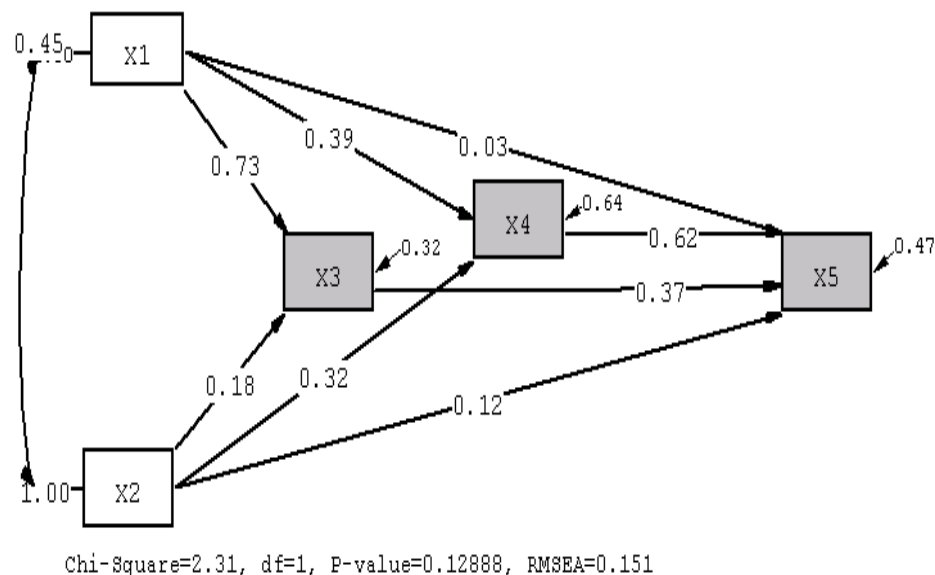
As previously explained, paths with insignificant (insignificant) path coefficient values were removed from the proposed model or the structural model was modified. After that, the calculation of the path coefficient value is carried out again with the new model and tested the significance of each existing path. The larger and dominant path coefficient is the influence of the entrepreneurial variable on learning organizations (P31) with a path coefficient value of 0.73, and customer orientation towards the quality of higher education services (P54) with a path coefficient value of 0.62 and learning organizations on the quality of higher education services (P53) with a path coefficient value of 0.37. Thus it can be concluded that the most influential/dominant path is the path of entrepreneurship influencing customer orientation and subsequently influencing the quality of higher education services and the entrepreneurial path influencing learning orientation and in turn learning organization on the quality of higher education.

Therefore, the presented analysis results demonstrate the significance of the dominant causal influence pattern, thereby allowing for the generalization of this pattern to the broader population. Consequently, it can be inferred that the proposed model accurately reflects the causal relationships within the population. Furthermore, the successful construction of the path model and its adherence to testing standards validate its suitability for explaining the quality of higher education services, particularly in relation to the variables of entrepreneurship, organizational flexibility, learning organization, and customer orientation.

**Table 3.** Results of calculation and testing of Path Coefficient  
Modified Structural Model

Track	Coefficient Track	t <sub>hitung</sub>	t <sub>table</sub> ( $\alpha=0,05$ )	t <sub>table</sub> ( $\alpha=0,01$ )
p <sub>31</sub>	0,73**	8,66	1,97	2,61
p <sub>32</sub>	0,18*	2,19	1,97	2,61
p <sub>41</sub>	0,38**	3,26	1,97	2,61
p <sub>42</sub>	0,32**	2,68	1,97	2,61
p <sub>51</sub>	0,03*	1,97	1,97	2,61
p <sub>52</sub>	0,12*	1,98	1,97	2,61
p <sub>53</sub>	0,37**	2,28	1,97	2,61
p <sub>54</sub>	0,62**	6,13	1,97	2,61

The modified form of the structural model of the path and the results of the complete path analysis calculation are described in Figure 1 below.

**Figure 1.** Structural Path Diagram Model 2 (after Modification)

Additionally, in the next phase, let us further clarify some of the key findings that have emerged from this analysis. In more detail, this research discusses five findings, namely; first, the results of testing the model hypothesis in this study indicate that the entrepreneurial variable has a positive and very significant influence on the customer orientation variable and learning organization. in line with Liu et al. (2002) research higher levels of change in organizational outcomes result from a stronger customer orientation, corporate entrepreneurship, or learning orientation. Entrepreneurial variables are formed by indicators of having the courage to take risks, have creativity, have the ability to communicate, think rationally and have strong will. While the customer orientation variable is formed by indicators of providing information, best offers, problem solving and learning organization formed by indicators of mental models, personal mastery, systematic thinking, building a shared vision and learning in teams (Erişken Sertdemir, 2007; Garcia-Morales et al., 2007; Kools & Stoll, 2016; Ng, 2004). Thus it is proven that the higher the level of entrepreneurship, the higher the customer orientation (Nasution et al., 2011). In addition, innovation plays mediating role in the association between entrepreneurial capability and the performance of sustainable organizations (Somwethee et al., 2023).

Second, the variable of customer orientation and learning organization has a positive and very significant influence on the variable of higher education service quality. This customer orientation variable is formed by indicators of providing information, best offers, problem solving and learning organization formed by indicators of mental models, personal mastery, systematic thinking, building a shared vision and learning in teams (Erişken Sertdemir, 2007; Ng, 2004). While the variable quality of higher education services is formed by indicators of physical evidence, reliability, responsiveness, assurance and empathy. Thus, the better the

customer orientation, the higher the level of quality of higher education services (Ghorbani et al., 2012). So it can be concluded that the variables of customer orientation and customer orientation which have a positive and significant influence on the variable quality of higher education services at IBII are empirically proven.

Third, this study shows that the organizational flexibility variable is formed by indicators of strategic flexibility, time flexibility, and operational flexibility. While the customer orientation variable is formed by the indicators of providing information, best offers, and solving problems. Thus, the more flexible the organization, the higher the customer orientation. Supported by Ma et al. (2021) research using a sample of 156 business-to-customer companies located in China, we find that interaction orientation is positively related to organizational performance through its impact on the company's HR flexibility. Additionally, the relationship between interaction orientation and HR flexibility is stronger when organizational culture encourages collective action (i.e. organizational collectivism). We also discuss the theoretical implications of this research.

Fourth, this study shows that organizational flexibility variables are formed by indicators of strategic flexibility, time flexibility, and operational flexibility. While the variable quality of higher education services is formed by indicators of physical evidence, reliability, responsiveness and assurance and certainty. Thus, the higher the organizational flexibility, the higher the quality of higher education services owned by the institution. The ability to identify changes in the external environment and rapidly draw on resources to launch new business initiatives in reaction to those changes is what is meant by "strategic flexibility" (Dehghan-Dehnavi & Nadafi, 2011). The term "strategic flexibility" was coined by Eryesil et al. (2015) to describe a company's ability to pursue its goals while also adapting to new circumstances. Adaptability is a company's ability to meet the varied challenges presented by today's fast-paced business environments. Strategic flexibility refers to an organization's propensity to adjust its course in reaction to new information, competitive pressures, and other factors in its external environment (Zahra et al., 2008).

Fifth, learning organizations do not have a direct effect on customer orientation empirically proven, it turns out that IBII focuses more on internal customer orientation to improve the quality of its institutions with the hope that always being customer-oriented will certainly make an organization that always learns holistically. Therefore, empirically it turns out that learning organizations are built through customer orientation (Alerasoul et al., 2022) which is supported by an entrepreneurial spirit and spirit

The results of this study bring several managerial implications or policies that are expected to be able to contribute to management practice, especially in the quality of higher education services, especially at the Indonesian Institute of Business and Informatics (IBII), functioning as an integrated multidimensional construct in the management of higher education. For practitioners, the positive influence of entrepreneurship, organizational flexibility, customer orientation, and organizational learning on the quality of higher education services means that they need to emphasize the four constructs. The results of this study as mentioned above have implications, that in the implementation of higher education to achieve high service quality, they are simultaneously (simultaneously) interrelated, influencing each other between various aspects so as to create entrepreneurial attitudes, flexible organizations, learning organizations, and customer orientation is an important element that needs to be considered and improved.

Improving the quality of higher education due to demands for accountability, accessibility, autonomy, transparency and democratization to the community is expected to apply entrepreneurship to higher education, through organizational flexibility that is always learning and always customer-oriented in order to realize quality graduates. Same study Yosephine & Ghina (2017) evaluated the entrepreneurship education program by identifying the learning process (including the definition and objectives of EE, the course contents, the teaching methods, and community outreach activities) and measuring the program's impacts (using entrepreneurial competencies), it is hoped that it increase economic growth by improving the function of universities in producing entrepreneurial graduates. The implications of this research include (1) theoretical implications, (2) research implications, and (3) managerial policy implications.

## Conclusions

Based on the results of data analysis and statistical calculations in this study, the main findings are as follows: entrepreneurship, organizational flexibility, customer orientation, and learning organization have a direct impact on the quality of higher education services. The two most dominant factors influencing service quality are customer orientation and learning organization, which are influenced by entrepreneurship and organizational flexibility. This study's findings suggest several managerial policies that could improve higher education service quality, particularly at the Indonesian Institute of Business and Informatics (IBII), as an integrated multidimensional construct in higher education management. Entrepreneurship, organizational



flexibility, customer orientation, and organizational learning improve higher education services, thus practitioners should prioritize these. The results of this study suggest that in order to implement higher education to achieve high service quality, they must be simultaneously interrelated and influence each other to create entrepreneurial attitudes, flexible organizations, learning organizations, and customer orientation.

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