

# The Influence of E-Learning Quality and Institutional Image on Student Loyalty with Satisfaction as Mediation on the Use of E-Learning at Universitas Negeri Padang

Febri Wiza Rosta<sup>1\*</sup>, Vidyarini Dwita<sup>2</sup>

<sup>1,2</sup> Universitas Negeri Padang, Padang, Indonesia

\*Corresponding author. Email: [Febriwiza0@gmail.com](mailto:Febriwiza0@gmail.com)

## ABSTRACT

This study analyzes the impact of e-learning quality, institutional image, student loyalty, and satisfaction as mediation of e-learning in Padang state universities. The population of this research is the students of Padang State University. The number of research samples is 406 respondents. The analytical tool in this study uses SEM PLS. The results showed that the influence of e-learning quality with loyalty could not be influential. In contrast, the influence of institutional image on loyalty is acceptable. The results of this study prove that: (1) E-learning Quality has no significant effect on student loyalty, (2) Institutional Image has a positive and significant effect on student loyalty, (3) E-learning quality has a positive and significant effect on satisfaction, (4) Institutional image on satisfaction has a positive and significant effect, (5) Student loyalty on satisfaction has a positive and significant effect, (6) E-learning quality on student loyalty mediated by satisfaction has a positive and significant effect, (7) Institutional image on student loyalty mediated by satisfaction has a positive and significant effect.

**Keywords:** *E-Learning Quality, Institutional Image, student loyalty and satisfaction.*

## 1. INTRODUCTION

Higher Education will emphasize its quality so that the community can form its own opinion of the university's image. As educational service providers, universities are responsible for ensuring the service quality offered to students as students. In today's business and non-business organizations, service quality is essential in both service and manufacturing. To increase the satisfaction and loyalty of its students, the college must pay attention to its students' needs and wants and correct the shortcomings. The improvement can be made by running academic service programs and learning methods either face-to-face or electronic-based (e-learning). One of the Universities in West Sumatra that implements e-learning is The State University of Padang (UNP).

On every occasion, UNP always strives to provide satisfactory service, especially on the e-learning2 website, to make the facilities better following the chilled by the visitors. To know users can accept the

extent of the website and the quality of the e-learning2 services of Universitas Negeri Padang (UNP), it is necessary to hold an assessment to measure the website and the quality of services available is acceptable to users /users well. These measurements serve to increase the loyalty and satisfaction of students.

Students at The State University of Padang (UNP) use E-learning that can be accessed in the E-learning2.unp.ac.id. In its operation, there are still complaints related to e-learning2 in each student rather than the use of E-learning before.

The information obtained from the dissemination of the initial questionnaire to 30 UNP students mentioned that it makes them more complicated when students are in a weak area of the internet signal, E-learning is often used when at the same time with other students and there is no notification for new assignments, and they are still confused by how to use it especially in making group discussions. However, the complaints about the use of E-learning did not discourage them from studying

at UNP and even gave references about studying at UNP to other parties and the advantages obtained by UNP such as campus accreditation that got A. They also told how proud they were to study on the UNP campus which is the best campus in Indonesia with adequate facilities, quality lecturers and providing satisfaction in service.

According to Wen et al [1], According to Wen et al, (2016), service quality is an evaluation of the performance of a website when a customer encounters a problem, or a service failure occurs. Universities must also be able to overcome various errors in the services provided in order to improve service quality. When universities can improve the quality of services provided, students will get a positive impression of the image of the institute. This will affect the value of perceived service quality (perceived value), and will affect student satisfaction and loyalty (loyalty).

A college's ability to change student loyalty is crucial. According to Nguyen & LaBlanc [2], institutional image is a critical factor in defining student loyalty. This is in line with Ali, Zhou, Hussain, Nair, & Ragavan [3], which found that institutional reputation affects student loyalty. In addition, the study results of Ehigie's other research mentioned that the institutional image has a positive effect on creating student satisfaction, so that it can have an impact on student loyalty. Kotler [4], explained that building an institutional image is essential for the continuity of an organization in the future.

Creating loyalty is an important thing that needs to be done by the college because in the process of teaching and learning, it takes satisfaction. Loyalty is influenced by the satisfaction that students receive for the services provided by the website and services (Anderson and Srinivasan, 2003). In other words, if student satisfaction with the website and service quality is high, then their loyalty will be high as well.

The university's attention to student satisfaction is getting bigger; many universities set their orientation on student satisfaction. To know the satisfaction of students is to see their level of satisfaction when using e-learning websites. The existence of information about student satisfaction certainly adds input. It can improve higher education to be better in terms of the quality of services and e-learning websites.

Researchers are interested in researching the title "The Influence of E-learning Quality and Institutional Image On Student Loyalty With

Satisfaction As Mediation On The Use of E-learning at Padang State University" based on the above explanation.

## **1.1. Literature Review**

### *1.1.1. Loyalty*

Styles According to Tjiptono [5], loyalty is formed because customers feel satisfaction in consuming goods or services. Meanwhile, Ali Hasan [6] stated that customer loyalty is a customer who purchases goods or services repeatedly, but customers who are committed and have a positive attitude towards the product or service, for example, by giving recommendations to others to buy.

According to Lovelock [7] loyalty describes the customer's desire to continue to subscribe in the long term, make purchases and use goods or services repeatedly and recommend the company's products to friends and colleagues.

Griffin [7], says that loyalty is indicated by the conditions of the time and requires less than twice the. According to [8][8][8][8][8][8] Kotler [8], loyalty is a firmly held commitment to repurchase or resubscribe certain products or services in the future despite the influence of situations and marketing efforts that could potentially lead to a behavioral shift.

### *1.1.2. E-Learning Quality*

E-learning stands for electronic learning. If reviewed from the wording, then e-learning can be interpreted as learning using electronic media. This is as stated by Munir [9], that e-learning means learning using media or electronic device assistance services. In addition, Collis & De Boer [10], also provides a simple definition of e-learning; e-learning uses information technology and computers to create a learning experience.

Created e-learning to address limitations between educators and students in terms of time, space, conditions, and circumstances, according to Darmawan [12]. Educators and students do not have to be in one dimension of space and time when using e-learning.

Kumar defines E-learning [12], as any teaching and learning that uses electronic circuits (LAN, WAN, or internet) to convey learning, interaction, or guidance material. Some people might think of e-learning as a type of distance education that connects to a network.

**1.1.3. Institutional Image**

Building an institutional image is necessary for an organization's future continuity, according to the theory of institutional image of the organization proposed Kotler [13]. According to Alma [14], and the institutional image is characterized as an impression formed based on one's knowledge and experience of a subject.

According to Huang [15] satisfaction can be defined as a customer's assessment of a service. Institutional images can be created in the processing of data that does not account for the probability of institutional images on items arising from the receipt of data at any time. The institute's reputation as a powerful generator of customer loyalty is confirmed by Boon & Rashid [16]

Image can be interpreted as an image of what consumers think about an institute. The image of the institute is the whole thought that consumers have about the institute.

**1.1.4. Satisfaction**

According to Kotler and Susanto [17] satisfaction is defined as a person's level of emotion when comparing his current performance or results to his desired outcomes. It is also supported by kotler, Satisfaction is a person's feeling, either moderate or disappointed, that appears after the person feels and compares the product performance obtained with the expected product performance.

According to Leon & Kanuk Leslie, [18], customer satisfaction is an individual's perception or service concerning his or her expectations. According to Kotler dan Armstrong [19], student satisfaction is "a standard where the expected output of the product is in line with the buyer's expectations." If a product's performance falls far short of customer expectations, The purchaser is dissatisfied. The buyer is satisfied if the result meets his or her needs. The buyer is pleased if the production meets or exceeds expectations.

Student satisfaction is described as a person's feelings of pleasure or dissatisfaction due to comparing the performance of a well-thought-out product to the expected performance Zeithaml [20].

**1.2. Conceptual Framework and Hypotheses**

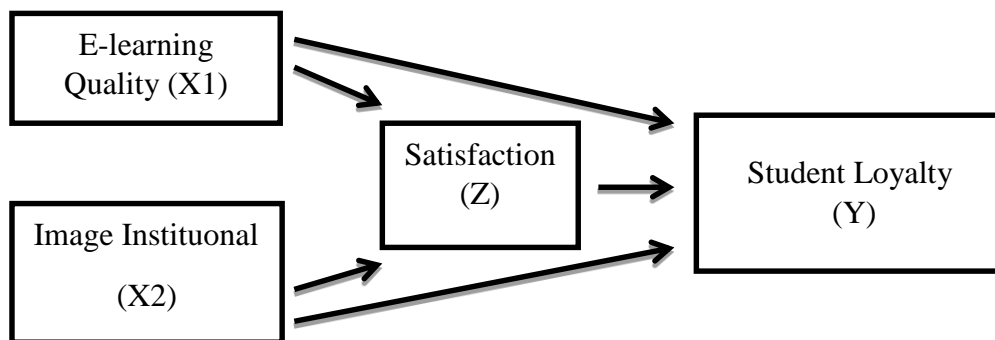
**1.2.1. Conceptual Framework**

Does e-learning service quality affect e-learning student satisfaction and loyalty? Was the title of a study conducted by Long Pham [21]. Vietnam as proof. In the background of Vietnam, Developing Countries, this study looked at the relationship between e-learning service quality, overall e-learning service quality, e-learning student satisfaction, and e-learning student loyalty. Exploration factor analysis, affirmative factor analysis, and structural equation modeling were used to analyze the survey data collected from 1232 students using SPSS 25 and SmartPLS 3.0.

In addition, in a study conducted by Poh Ju Peng and Ainon Jauhariah Abu Samah [22] entitled Measuring Students Satisfaction For Quality Education In A E-Learning University. This research aims to find out if the undergraduate students of Tun Abdul Razak University (UNITAR) are currently satisfied with the quality of education provided by the university. In addition, it also strives to know which factors are unitary education services that contribute the most to the level of student satisfaction because universities organize education through a combination of web-based materials, online tutorials, and conventional face-to-face classes.

Consumer satisfaction has a positive and vital impact on customer loyalty, according to the findings of Kuntara and Kumadja [23] study. Variable customer satisfaction has a positive and important impact on customer loyalty, according to research conducted by Rachmawati and Fauzi [24].

The research model is used to ease the direction in the research. The thought framework schemes of this study are as follows:



**Figure 1. Conceptual Model**

**1.2.2. Hypothesis**

The following hypotheses can be formulated in this review, based on the context of problems, theories, and previous studies on e-learning quality, institutional image, student loyalty, and satisfaction:

The problem formulation informs the study's hypothesis:

- H1: E-learning quality affects student loyalty to the use of E-learning in UNP.
- H2: Institutional effects image on student loyalty to the use of E-learning in UNP.
- H3: E-learning quality affects student satisfaction in the use of E-learning in UNP.
- H4: Institutional Image affects student satisfaction on the use of E-learning in UNP.
- H5: Student satisfaction affects loyalty to the use of E-learning in UNP.
- H6: The effect of satisfaction as mediator on the effect of E-learning quality on student loyalty on the use of E-learning UNP

H7: The influence of satisfaction as a mediator on the effect of Institutional Image on student loyalty on the use of E-learning at UNP.

**2. METHOD**

This research takes a quantitative approach to answer or test a hypothesis that has been determined based on specific samples and populations. This research data is presented in the form of numbers, and the data analysis is statistical. This quantitative study is based on survey research, which employs questionnaires as a research tool. This study aims to test how far e-learning quality and image institutional influence on student loyalty with satisfaction as mediation. The data used in this study is primary data from respondents. The population in this study is UNP Students (Padang State University), with a sample of 406 students with sample criteria, namely students enrolled in the semester January-June 2021.

**3. RESULTS AND DISCUSSION**

**3.1 Results**

Research using SEM approach. The analytical tool used in analyzing SEM modeling and hypothesis testing using PLS with Smart PLS version 3.

**Outer Model**

**Table 1. Results of test reliability and validity analysis**

	<b>Cronbach's Alpha</b>	<b>rho_A</b>	<b>Composite Reliability</b>	<b>Average Variance Extracted (AVE)</b>
E-learning Quality	0.969	0.972	0.972	0.553
Instituonal Image	0.932	0.936	0.942	0.598
Kepuasan	0.951	0.951	0.958	0.720
Loyalitas	0.901	0.903	0.922	0.627

Sources: Primary Data Processed, 2021

Based on the table above, it can be seen that the cronbach's alpha, composite reliability, and AVE meet the criteria meaning that all statement items are

valid and reliable. The rule of thumb used in this study is a hypothesis that has a positive beta coefficient with a significance level of p-value 0.05 (5%).

**Table 2. Hypothesis Test Results**

<b>Hypothesis</b>	<b>Original Sample (O)</b>	<b>Sample Mean (M)</b>	<b>Standard Deviation (STDEV)</b>	<b>T Statistik ((O/STDEV))</b>	<b>P-Value</b>
E-learning Quality → Loyalty	0.009	0.006	0.058	0.157	0.876
Instituonal Image → Loyalty	0.480	0.482	0.054	8.820	0.000
E-learning Quality → Satisfaction	0.598	0.594	0.060	10.004	0.000
Instituonal Image →	0.301	0.305	0.062	4.867	0.000

Satisfaction					
Satisfaction → Loyalty	0.377	0.378	0.064	5.862	0.000
E-learning Quality → Satisfaction → Loyalty	0.225	0.225	0.046	4.914	0.000
Institutional Image → Satisfaction → Loyalty	0.114	0.115	0.029	3.850	0.000

*Sources: Primary Data Processed, 2021*

The first hypothesis test resulted in a positive value and a P value of 0.05 of 0.876 for the first hypothesis test. This study indicates that the standard of e-learning does not affect UNP students' loyalty.

The results of the second hypothesis test received are shown with a positive value and a value of P-value <0.05, which is 0.000. the results of this study show that Institutional Image significantly affects the loyalty of UNP students.

The third hypothesis test received is indicated by a positive value and a P-Values value 0.000. Of <0.05, This means that e-learning quality affects satisfaction.

The fourth hypothesis, which studies the relationship between institutional image and satisfaction, has a positive value and a P-Value of 0.05, indicating 0.000. This means that a good institutional image is sufficient.

The findings of the fifth hypothesis test are presented with a positive value and a P value of 0.05, which equals 0.000. This revealed that student satisfaction affects their loyalty to the UNP.

The sixth hypothesis test yielded a positive result, with a p-value of 0.05 equaling 0.000. These studies revealed that increased loyalty had a positive and essential effect on satisfaction mediated e-learning efficiency. As a result, the hypothesis has been accepted.

The seventh hypothesis test yielded a positive result, with a p-value of 0.05 totaling 0.000. These findings revealed that increased loyalty had a significant positive effect on satisfaction mediated e-learning quality. As a result, the hypothesis has been accepted.

### **3.2. Discussion**

#### *3.2.1. The Influence of E-Learning on Student Loyalty*

According to the research findings, the quality of E-Learning has no direct impact on student loyalty. This is attributable to the fact that the significance value

exceeds the prescribed influence on the rest. So, in terms of learning information, lecturers or administrators of e-learning or e-learning services provided, E-Learning quality is not one factor that can affect student loyalty.

This is in accordance with kusuma [25] research, which can be said that consumers do not always significantly increase loyalty to PT KAI in terms of purchasing train tickets online at the station.

#### *3.2.2. The influence of Institutional Image on loyalty*

The results showed there was a significant and positive influence of Institutional Image on loyalty. This means an increase in The Institutional Image will increase loyalty. A similar study was also conducted & by Helgesen [26] The results of this study indicate that the image of the university directly encourages student loyalty.

#### *3.2.3. The Effect of E-learning Quality on Satisfaction*

The study's findings reported that E-learning quality has a significant and positive influence on satisfaction. Measuring Students Satisfaction For Quality Education In An E-Learning University, a survey done by peng & samah [22], backs this up. The aim of this research is to see if current university Tun Abdul Razak are satisfied with the quality of education provided by the university.

#### *3.2.4. The influence of the image of the college on student satisfaction*

According to the findings of the report, the college's reputation has a positive impact on UNP students' satisfaction. As a result, one of the factors that can satisfy students is the college's picture, which includes morality, management, efficiency, and services offered to students and other customers.

This study is also the same as research by Mujahidin et al [27] the results show that the image of universities has a positive influence on student satisfaction. So the image of the university is one of the factors that can

satisfy students both in terms of morality, management, performance and services provided by universities to students and other customers.

### 3.2.5. The Effect of Satisfaction On Loyalty

The findings revealed that satisfaction has a significant and positive impact on loyalty. This means that higher levels of satisfaction can lead to higher levels of loyalty. The findings support Sugandi's (2003) research, which claims that consumer satisfaction has the most significant impact on customer loyalty.

### 3.2.6. The Effect of Satisfaction as a Mediating on the Influence of E-learning Quality on Student Loyalty

The results showed a significant and positive influence of satisfaction as a Mediating on the Influence of E-learning Quality on UNP Student Loyalty. This is supported by Waheed [28], in which the results of this study contributed to the successful framework of the deLone & McLean information system simplified for the study of content quality. It also provides new insights into the use of ASM sites through a focus on the role of perceived quality knowledge in shaping satisfaction, learning, and loyalty.

Institutional image on loyalty mediated by satisfaction has a positive and significant effect.

This is in accordance with research conducted by Helgesen & Nettet [26] This study examines two models to explore the relationship between service quality, facilities, student satisfaction, university image, and study program image, with student loyalty as the main dependent variable.

## 4. CONCLUSIONS

After conducting this research, we can conclude that: (1) The hypothesis of the influence of e-learning quality on loyalty is rejected. (2) The Hypothesized the influence of institutional image with good loyalty. (3) The hypothesis of the effect of e-learning quality on satisfaction is acceptable. (4) The hypothesized the influence of institutional image with acceptable satisfaction. (5) The hypothesis of satisfaction with loyalty is acceptable. (6) The hypothesis of satisfaction as a mediating on the influence of e-learning quality on student loyalty to e-learning in UNP is acceptable. (7) The hypothesis of satisfaction as a mediating on the influence of institutional image on student loyalty to E-learning in UNP is acceptable.

## 5. SUGGESTION

Based on the results of the study and the conclusions above, the researchers' suggestions are: (1) We recommend that e-learning2 used in UNP be developed following the needs of the current learning process and follow the development of technology. (2) Capacity in using e-learning2 is enlarged so that when simultaneously using e-learning2 is not lelet. (3) Utilization of e-learning2 can be maximized its use by activating features that students and lecturers much need. (4) To create loyal students need to create satisfaction to students one of the factors that can make students satisfied is the image of universities, competent lecturers, and facilities in lectures. Therefore universities must create a positive image to add a good impression and increase satisfaction to students. (5) For further research, it is recommended to add other variables such as trust, learning, etc. So that it can obtain better findings in explaining student behavior (student loyalty) and valuable for the development of science, especially target management.

## REFERENCES

- [1] W. H. Lee and C. C. Cheng, "Less is more: A new insight for measuring service quality of green hotels," *Int. J. Hosp. Manag.*, vol. 68, pp. 32–40, 2018, doi: 10.1016/j.ijhm.2017.09.005.
- [2] Nguyen & LaBlanc, "Image and reputation of higher education institutions in students' retention decisions," *Int. J. Educ. Manag.*, vol. 15, no. 6, pp. 303–311, 2001, doi: 10.1108/EUM0000000005909.
- [3] F. Ali, Y. Zhou, K. Hussain, P. Kumar, N. Neethiahnanthan, and A. Ragavan, "Does higher education service quality effect student satisfaction, image and loyalty? A study of international students in Malaysian public universities," *Qual. Assur. Educ.*, vol. 14, no. 3, pp. 251–267, 2006.
- [4] P. Kotler and K. L. Keller, "Marketing Management MARKETING MANAGEMENT Marketing Management," *Mark. Manag.*, p. 833, 2016.
- [5] Tjiptono, "Kepuasan Pelanggan. PT. Erlangga, Indonesia," *PT. Erlangga, Indonesia*, 2015. .
- [6] H. A. Al-Zu'bi and A. M. K. Ahmad, "E-banking Functionality and Outcomes of Customer Satisfaction: An Empirical Investigation," *Int. J. Mark. Stud.*, vol. 3, no. 1, pp. 50–65, 2011.
- [7] Griffin, "Customer loyalty," *Airl. Bus.*, vol. 29, no. 1, p. 31, 2013, doi: 10.3139/9783446467620.013.

- [8] P. Kotler, "Kotler P. Marketing management/Philip Kotler, Kevin Lane Keller. Pearson Educ Int. 2012," *Pearson Educ. Int.*, 2012.
- [9] Munir, *Pembelajaran Jarak Jauh berbasis Teknologi Informasi dan Komunikasi (TIK)*. 2009.
- [10] 2004 Collis & De Boer, "Teachers as Learners : Embedded Tools for Implementing a CMS," *TechTrends*, 2004.
- [11] I. Darmawan and I. Sukartha, "Pengaruh Penerapan Corporate Governance, Leverage, Roa, Dan Ukuran Perusahaan Pada Penghindaran Pajak," *E-Jurnal Akunt.*, vol. 9, no. 1, pp. 143–161, 2014.
- [12] Kumar, "Dalam pengajaran dan pembelajaran di sekolah-sekolah malaysia," *Elearning*, vol. 3, p. 13, 2002, [Online]. Available: [http://www.tutor.com.my/tutor/pix/2001/0716/DuniaPendidikan/Kertas\\_Kerja/kk\\_01.PDF](http://www.tutor.com.my/tutor/pix/2001/0716/DuniaPendidikan/Kertas_Kerja/kk_01.PDF).
- [13] lupiyoudi, "LAYANAN DAN PENGARUHNIA TERHADAP LOYALITAS NASABAH BANK SYARIAH MANDIRI KOTA PALOPO," *J. Inst. Shariah Financ.*, 2006, doi: 10.24256/joins.v3i1.1441.
- [14] L. O. Sugianto and U. Farida, "Pengaruh Institutional Image Terhadap Students Loyalty Melalui Word of Mouth Di Unissula Semarang," *J. Manaj. dan Pemasar. Jasa*, vol. 9, no. 2, p. 323, 2018, doi: 10.25105/jmpj.v9i2.2094.
- [15] P. Barusman and A. Rama, "Student Satisfaction as a Mediating Variable between Reputation , Image and Student Loyalty," vol. 1, pp. 414–436, 2015.
- [16] S. B. Lim, Y. C. Kong, M. F. A. Rashid, and J. A. Malek, "A framework of challenges facing the safe city programme in Kuala Lumpur," *Plan. Malaysia*, vol. 18, no. 4, pp. 47–61, 2020, doi: 10.21837/pm.v18i14.817.
- [17] Kotler and Susanto (2000), "Prinsip-Prinsip Pemasaran," *To Βημα Του Ασκληπιου*, vol. 9, no. 1, pp. 76–99, 2010.
- [18] Leon and Kanuk Leslie, "Perilaku Konsumen, Jakarta: PT," *Indeks Prestice Hall*, 2007.
- [19] A. 2001. P. pemasaran Kotler, "DAFTAR PUSTAKA Kotler, Amstrong. 2001.," vol. 1, no. 3, pp. 2010–2011, 2012.
- [20] Zeithaml (2014), "Jumlah Pageviews E-Commerce Online Travel Agency," vol. 5, no. 1, pp. 83–99, 2020.
- [21] L. Pham, Y. B. Limbu, T. K. Bui, H. T. Nguyen, and H. T. Pham, "Does e-learning service quality influence e-learning student satisfaction and loyalty? Evidence from Vietnam," *Int. J. Educ. Technol. High. Educ.*, vol. 16, no. 1, 2019, doi: 10.1186/s41239-019-0136-3.
- [22] P. Peng and a. Samah, "Measuring students' satisfaction for quality education in a e-learning university.," *UNITAR E-Journal*, vol. 2, no. 1, pp. 11–21, 2006.
- [23] K. Pukthuanthong and R. Roll, "Global market integration: An alternative measure and its application," *J. financ. econ.*, vol. 94, no. 2, pp. 214–232, 2009, doi: 10.1016/j.jfineco.2008.12.004.
- [24] R. Rahmawati, "Pengaruh kepuasan terhadap loyalitas pelanggan (Sebuah kajian terhadap bisnis makanan)," *Teknobuga*, vol. 1, no. 1, pp. 66–79, 2014, [Online]. Available: <https://journal.unnes.ac.id/nju/index.php/teknobuga/article/view/6404>.
- [25] E. C. Kusuma, "Pengaruh Nilai Yang Diterima Pelanggan Dan Kualitas Pelayanan Terhadap Loyalitas Pelanggan : Kepuasan Pelanggan Sebagai Mediator Dan Gender Sebagai Moderator," *J. Bisnis dan Manaj.*, vol. 5, no. 1, pp. 42–50, 2018, doi: 10.26905/jbm.v5i1.2315.
- [26] Ø. Helgesen and E. Nettet, "Images, Satisfaction and Antecedents: Drivers of Student Loyalty? A Case Study of a Norwegian University College," *Corp. Reput. Rev.*, vol. 10, no. 1, pp. 38–59, 2007, doi: 10.1057/palgrave.crr.1550037.
- [27] A. . Mujahidin, F. . Zuhriah, and I. . Khoirianingrum, "Pengaruh Citra Perguruan Tinggi dan Kompetensi Dosen terhadap Loyalitas Mahasiswa melalui Kepuasan Mahasiswa Pada Perguruan Tinggi Swasta (Studi pada IKIP PGRI Bojonegoro)," *Al Tijarah*, vol. 4, no. 2, p. 49, 2018, doi: 10.21111/tijarah.v4i2.2828.
- [28] M. Waheed, J. E. Klobas, and N. U. Ain, "Unveiling knowledge quality, researcher satisfaction, learning, and loyalty: A model of academic social media success," *Inf. Technol. People*, vol. 34, no. 1, pp. 204–227, 2020, doi: 10.1108/ITP-07-2018-0345.