The Mediation of Campus Innovation On the Effects of E-Administration Towards Private University Students Satisfaction in Indonesia

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Abstract: The satisfaction of students towards private universities is paramount for the survival of the higher institute of education. Services provided by the universities largely determine the interests of students to join the institute. This study aims to find the effect of E-administration and campus innovation on student satisfaction in learning and the influence of campus innovation as a mediating variable on the relationship between E-administration and student satisfaction in private tertiary institutions in Indonesia. A total of 772 students comprise the population of this study, coming from five (5) Private Universities that have been accredited by Institutions in Sidoarjo Regency. This study utilises quantitative methods, where the incoming data is processed and analysed using WarpPLS. This study reveals that E-administration affects campus innovation. Besides, as a mediator, campus innovation weakens the influence of E-administration of private tertiary institutions.

Keywords: Campus Innovation, E-Administration, Student Satisfaction, Private College

1. Introduction

At present, the large number of universities in Indonesia that are approximately 4,500 is facing challenges and opportunities both in state and private higher institutes especially since foreign universities are aggressively promoting their presence in Indonesia (Amarulloh, 2016). Several factors that are considered as challenges of private tertiary institutions in facing competition include inadequate organisational development strategies (Sonedi, 2018), inadequate facilities and infrastructure towards the implementation of academic administrative services (Slamet, 2012), inefficient financial management systems, and low quality of administrative services (Amarulloh, 2016).

The administrative process in tertiary institutions is one of the factors of organizational activities (Herliana, 2014). The utilization of information and communication technology in the field of academic administrative services in higher education becomes a necessity, not just the prestige or lifestyle of modern higher

education management (Indrayani, 2011). The application of E-administration can create a culture of information technology (Amarulloh, 2016). Private colleges experiencing problems that are technical and non-technical in applying information technology (Murtadho & Wahid, 2016). The quality of academic services has a positive and significant effect on student satisfaction (Rinala, et al., 2013). However, Zimmer (2006) that the quality of education does not affect student satisfaction in learning.

Meanwhile, Calantone (2003) campus innovation is an iterative and ongoing process in building technology that is introduced to end-users through diffusion. Novelty is a reflection of campus innovation, and it becomes one of the educational programs that constantly strives to improve the quality of higher education, both organised by public and private universities. Innovation management will make the excellence of an educational organization ready to face global competition (Nurjanah, 2015), however it does not affect student satisfaction in learning. The quality of administrative services has no significant effect on student loyalty however, the findings of Sekaran and Kobu (2002) show different results, in that campus innovation affects student satisfaction.

The quality of education and administration of an institution positively influence student satisfaction in learning (Lola & Duque, 2009). The quality of administration influences the marketing strategy of universities positively and has an impact on the development of Higher Education (Zaksa, 2012). Besides, technology influences student satisfaction in learning (Arambewela & Hall, 2013). Satisfaction is the level of one's feelings after comparing the work that he performs compared with his expectations (Kloter& Keller, 2008). But the results of Mansori's research (2013) is that the factors of education quality significantly influence student satisfaction in learning. Jurkowitsch, et al. (2006) reveal that the quality of administration influences student satisfaction. Therefore, in determining the strategy, it is necessary to implement an integrated management system and dare to innovate and be responsive to sustainable change (Anwar, 2016).

Campus innovation is an effort to encourage sustainable change in education, basically as it relates to human life (Wibowo, 2007). Campus innovation has a formative relationship with the quality of education, quality of administration, physical quality of campus not apart from the influence of global order culture. Analysing the factors of E-administration and campus innovation on student satisfaction in learning is crucial because the dissatisfaction of students in studying at universities, the lack of services that are considered less than optimal causes campus innovation in private universities to not performed as expected. Research to determine the effect of E-administration on-campus innovation, E-administration and campus innovation on student satisfaction in learning is timely. Besides, the influence of campus innovation as a mediating variable on the effect of E-administration of a private college on student satisfaction learning is a contribution of this study.

2. Literature Review

2.1 Theoretical Basis

The euphoria of globalization, intense competition between human resources globally, has had far-reaching impacts on practical education in schools that are concerned with intellectual and technological mastery, thus neglecting the education of the nation's cultural character (Notoatmodjo, 2003). Serious attention and handling are needed so that the quality of education in Indonesia is getting better. Quality education is an education that can to develop positive potentials that are latent in students. The quality of the teaching and learning process is needed so that the teaching and learning process can take place effectively, and students get meaningful benefits that are supported by human resources, funds, and the availability of adequate infrastructure facilities, as well as product quality, namely the quality of graduates having a role in the world of work.

2.2 E-Administration

The administration is the whole process of implementation of the decisions that have been taken and the implementation is carried out by two or more people to achieve the goals that have been determined (Siagian, 1995). E-administration is the use of information technology and information systems by private colleges to improve the performance of universities concerning students, faculty, and other related parties. E-Administration in this research is the quality of administrative services for students and lecturers, to support academic activities both students and lecturers, with the main task of implementing higher education.

2.3 Campus Innovation

Innovation is a revitalised idea that is applied to initiate or improve a product or process and service (Robbins, 1996). In addition to the right strategy, the key to the success of a business lies in the form of certain activities, namely innovation activities. Innovation activity is an effort to create renewal that is directed towards the economic and social potential of the company. Authentic innovation arises from a deliberate, systematized, and focused search on seven areas. Campus innovation is any effort or breakthrough that a private tertiary institution develops in situations and conditions to achieve progress from the previous conditions. Campus innovation in research is to measure educational innovation during the teaching and learning process, innovations related to campus administration service activities, and other supporting facilities innovations that affect student satisfaction.

2.3 Student Satisfaction

Customer satisfaction is the level of valuation of a person after comparing the perceived performance compared with expectations (Kotler & Keller, 2008). Student satisfaction is a perception that arises from the student assessment process for college performance. If it exceeds expectations, students will be satisfied, but conversely, if

the performance services they obtain are below student expectations, students are not satisfied.

2.4 Conceptual Framework

This research design is structured as a conceptual framework that is used to explain the detailed relationship of E-Administration to Campus Innovation and Student Satisfaction.



Figure 1. Conceptual Framework

From Figure 1, the hypothesis can be explained as follows:

H1: E-Administration has an effect on student satisfaction

- H2: E-Administration influences Campus Innovation
- H3: Campus innovation influences student satisfaction
- H4: Campus innovation mediates the effect of E-administration on satisfaction

3. Methodology

3.1 Population and Sample

This type of research is quantitative research, where the incoming data and according to the research criteria are analysed by statistical techniques using SmartPLS. The population in this study were students who were still actively studying in the Bachelor or Diploma program and registered in the college database. The sampling method in this study is probability sampling, which is using a proportionate stratified random sampling technique in which sampling is based on certain criteria determined by the researcher. The sample criteria in this study are:

- Registered at a private tertiary institution that has been accredited

- Semester 5 undergraduate program and semester 3 for Diploma program students.

From the sample criteria in the study, there are 5 private universities in Sidoarjo Regency who are willing and proportionally the number of students who can be sampled is 772 people. To calculate the number of samples according to Nawawi,

$$n=\frac{N}{Nd^2+1}$$

Where:

n = number of samples N = total population (772 people) d = degree of error (5%)

So, n =
$$\frac{772}{(772 \times 0.05^2) + 1}$$
 = 263.4812 \approx 264

The data that is used in this study are analysed using PLS where the testing method uses the WarpPLS test tool. The data is analysed by using two models namely the outer model and the inner model. To test the hypothesis, the study utilises the probability value and t-statistic value, with p value with alpha of 5%.

 $Y = \beta_1 X_1 + \beta_2 X_2 + e$

Where: Y = Student satisfaction

X1 = E-administration

X2 = Campus innovation

4. Discussion

4.1 Model measurement

There are three criteria in using data analysis techniques with Smart PLS to assess the outer model, namely Convergent Validity, Discriminant Validity and Composite Reliability. Convergent Validity of the measurement model with reflexive indicators is assessed based on the correlation between the item score/component score estimated by the PLS software. The results of the model measurement test are shown in table 1.

Table 1: The Results Of the Measurement Model Test					
	E-Adm.	Cam. Innv.	Stud. Satisf.	Stud. Satisf.*E- Adm.	
R-squared		0.185			
Comp. reliability	0.771	0.832	0.727	0.745	
Cronbach's Alpha	0.551	0.696	0.518	0.659	
Average Variances Extracted	0.532	0.623	0.433	0.225	
Full Collinearity Vifs	1.217	1.478	1.442	1.060	
Q-squared		0.190			

Individual reflexive measures are said to be high if they correlate more than 0.70 with the measured construct. However, according to Ghozali (2006) for the initial stage of the development of a measurement scale the loading value of 0.5 to 0.6 is considered sufficient. From table 1, the Cronbach's Alpha value is between 0.5-0.6 which means that the results of this study are quite adequate.

4.2 Structural Model Testing

Structural evaluation (inner model) which includes model fit test, path coefficients, and R². In the model fit test, there are 3 test indices, namely the average pathcoefficient (APC), average R-squared (ARS) and average variance factor (AVIF) with the APC and ARS criteria accepted on the condition that p-value <0.05 and AVIF <5 (Sholihin and Ratmono, 2013).

<0,001 <0,001	
< 0.001	
<0,001	
≤ 5	
1.037, acceptable if ≤ 5	

Table 2: Structural Model Test Results

Source: Processed Data Researcher (2020)

Table 2 shows that the APC value is 0.257 and the p-value is < 0.001, the ARS value is 0.185 and the p-value is < 0.001, the AVIF value is 1.037. Based on the criteria, APC has met the criteria because it has a p-value of, 0.001 because the condition is that the p-value must be < 0.05. Meanwhile, the ARS value also meets the criteria because it has a p-value of 0.008 because the condition is a p-value <0.05. Furthermore, based on these data the AVIF value is 1.037. The AVIF value meets the criteria because the AVIF value that meets the requirements is a value <5. From these data it can be concluded that the inner model is acceptable and significant.

Table 3: WarpPLS Output Results

	Path Coefficients	p-value
E -Adm \rightarrow Stud. Satisf	0.041	<0.001
$E-Adm \rightarrow Cam. Innv$	0.388	<0.001
Cam. Innv \rightarrow Stud. Satisf	0.291	<0.001

Source: Processed Data Researcher (2020)

From table 3, it is known that E-administration has a significant effect on Student satisfaction, this is because the p-value that meets the significance criteria is <5%, which is <0.001 and E-administration has a positive effect on Student satisfaction which can be observed through the path. positive coefficients are 0.041. E-administration has a significant effect on Campus innovation, this is because the p-

value that meets the significance criteria is <5%, which is <0.001 and E-administration has a positive effect on Campus innovation which can be observed through path coefficients who are positive, namely 0.388. And Campus innovation has a significant effect on Student satisfaction, this is because the p-value that meets the significance criteria is <5%, which is <0.001 and Campus innovation has a positive effect on Student satisfaction which can be observed through path coefficients who are positive, namely 0.291.

4.3 Mediation Test

Table 1 shows that the R² value is below 0.19, indicating that campus innovation weakens the effect of E-administration on student satisfaction by 18.5%. And the value of Q² is 0.190 where the requirement for the predictive variable to be predicted is the value of Q² < 0, so campus innovation does not have the effect of E-administration prediction on student satisfaction in learning in college.

4.4 Hypothesis finding

Based on table 1, the Composite Reliability value generated by all constructs is very good, which is above > 0.70, indicating that all construct indicators are reliable or fulfill the reliability test. From the Fornell-Larcker criteria and cross loadings, the latent variable shares more variants with the underlying indicator than with other latent variables. This is interpreted statistically, then the value of AVE for each latent variable must be greater than the highest R-squared value with the value of the other latent variables, where the value of AVE is greater than the value of R² being 0.185. According to Chin (1988) with R² values below 0.19, they are categorised as weaker. The results of this study indicate that the independent variable on the dependent variable is weak at 18.5%. The VIF value based on the table above is below 3.3, this shows that the model is free from collinearity and standard method bias, while the Q-squared value is 0.190, where the Q2 value < 0 indicates no predictive relevance.

Based on test results with WarpPLS analysis the hypothesis of this study is determined as follows:

- Based on the analysis of the statistical test results, the p-value < 0.001 and the coefficient of 0.041 indicates that E-Administration has a positive effect on student satisfaction, so H1 is accepted.
- Based on the analysis of the statistical test results, the p-value < 0.001 and the coefficient of 0.388 indicates that E-Administration has a positive effect on Campus Innovation, so H2 is accepted.
- Based on the analysis of the statistical test results, the p-value < 0.001 and the coefficient of 0.291 shows that campus innovation has a positive effect on student satisfaction, so H3 is accepted.
- Based on the analysis of the results of the statistical test, the Q^2 value is 0.190, where the requirement for the predicted variable to be predicted is the value of $Q^2 < 0$, so campus innovation does not have the effect of E-administration prediction on student satisfaction in learning in college, so H4 is not accepted.

4.4.1 Effect of E-Administration on student satisfaction

The findings of the E-Administration test as indicated in the results of the static test p-value < 0.001 and coefficient 0.041, shows that there is an effect on student satisfaction. It can be implied that to improve the administrative services, private universities could implement E-administration or online administrative service systems by utilizing the information and communication technology platform. Ultimately, the effort to increase student satisfaction in studying at the higher institute of education could be achieved. The implementation of the E-administration system allows students to carry out administrative activities without the need to come to campus. This can make it easier for students who do not have enough time to come to campus to perform their administrative essentials such as payment, re-registration, lecture schedule, guidance with lecturers, and others.

The results of this study confirm that the use of improved E-administration in private universities will increase student satisfaction in the teaching and learning process. Academic services with E-administration assist the universities to better serve the students in many aspects including all parties that have connections or relationships with the administration. By using E-administration for academic services, it will facilitate all academics in the process of conducting teaching and learning, so that students as consumers of educational services are not burdened with campus bureaucracy. This study supports the research of Jurkowitshet. al. (2006), and Asgari et al. (2013) that the quality of administration directly affects student satisfaction. Through a computerised system, everyday work can be carried out easier by the administrator, the storage system using a database is more effective and efficient as a backup of the archive, especially in terms of making routine reports (Herliana, 2014).

4.4.2 Effects of E-Administration on Campus Innovation

This study reveals that E-Administration has a positive effect on Campus Innovation that is shown by the p-value < 0.001 and coefficient of 0.388. The increasing use of E-administration in private tertiary institutions will have an impact increasing campus innovation, where E-administration is one of the on implementations of utilizing information technology. In an era of increasing technology development, a private college must begin to look for solutions to the expansion of academic information systems to help and facilitate employees, and students in carrying out various lecture activities. The ideal academic information system that can reduce the time and cost of various activities is essential. Universities that improve academic services through E-administration will attract students as users of their education services. Services such as the process of filling out study plan forms that are routinely carried out by students each semester, payments, and other service activities can be undertaken much guicker and easier with the use of Eadministration. Therefore, enhancing E-administration will have an impact on improving campus innovation.

The results of this study support the research of Zaksa (2012) that the quality of administration positively influences marketing strategies that have an impact on the development of higher education. One common characteristic of organisational development is that it is a continuous and dynamic process and in the context of the process in private universities, the educational services should be optimised by employing the existing resources that have potential in accordance with the demands of the internal and external environment (Sonedi, 2018). There is an implication that private college institutions that use E-Administration will produce the quality of administration concerning accuracy and accountability.

4.4.3 Effect of Campus Innovation on student satisfaction

The results of the test show that campus innovation has a positive effect on student satisfaction that is indicated by the p-value < 0.001 and the coefficient of 0.291. In the era of increasing competition in education, private universities are expected to be able to create new and superior innovations in order to be competitive. Higher education that can improve campus innovation will be able to secure student satisfaction. Satisfied students reflect that the process of teaching and learning is good and students could end their education and become decent graduates. Universities that do not innovate will eventually be abandoned by students, and they will not be able to compete with other higher institutions.

Higher education is one of the forces that spur progress in all fields, one of which is through the emergence of innovations. With innovations in various fields of science and knowledge, changes will emerge and this can have a positive impact on the life of people. Universities that always provide space to improve innovation will also encourage students to be more creative. Learning does not only revolve around the discussion of theory, students can also actualize their creativity through innovations that they encounter.

The rapid development of science needs to be supported by technological advances, demanding changes in the way of educating and teaching patterns, including in tertiary institutions. To keep up with this rapid development, higher education institutions must be ready to change. Changes in the form of innovation are important in maintaining the actuality of higher education towards the situation and conditions around the world, both society, and science itself. Various innovations can be undertaken by universities, one of them involves learning activities. Learning activities that prioritize research and practice will help students, not only in understanding but to be able to analyse and create, so as to have a real impact on society.

The results indicate that innovation influences satisfaction and this is supported by Rahim (2005), and Brown and Mazzarol (2008). According to Nasution in Tse and Wilton (2004), the state of satisfaction or dissatisfaction of students is reflected by the students' response to the evaluation of perceived discrepancies between other work norms, and the actual performance. In this case, students normally feel satisfied with the results of graduate scholarships that they obtain, teaching and learning process carried out as desired, and moreover if the situations exceed their expectations. When associated with educational institutions, student satisfaction cannot be separated from the satisfaction of getting an education at a private university, until the quality of graduates obtained by students, can meet the needs of the job market, or provision of entrepreneurship.

The influence of campus innovation on student satisfaction needs serious attention from private tertiary institutions. Competition in educational organisations today is marked by the emergence of various new organisations and technological advances that accompany business competition. Management innovation is needed by every organisation to face changes and global competition. Management that is currently running is scientific-based management that is still temporary, so it requires innovation to achieve the company's competitive advantage. Innovation breakthroughs that can be achieved at Private Universities by creating new business models, developing new services, creating new customer interfaces, making administrative innovations. Besides, innovation is realized if it is supported by creativity, knowledge, competence, community needs (Nurjanah, 2015).

4.4.4 Mediating Campus Innovation on the Effect of E-Administration towards Student Satisfaction

From the statistical test results, the R² value below 0.19 shows that campus innovation weakens the effect of E-administration on student satisfaction by 18.5%, and Q2 value is 0.190 where the requirement for predicting variables to be predicted is O2 value < 0, then campus innovation does not have a predictive impact of Eadministration on student satisfaction in studying at the college. Campus innovation weakens the influence of E-administration on student satisfaction in learning at private tertiary institutions because not all of the institutions have yet to fully develop campus innovation by utilizing the latest technology and the latest findings in the context of the current 4.0 industrial revolution. Secondly, the development of campus innovation is the responsibility of all stakeholders including lecturers, researchers, and students hence, if students are less involved in developing campus innovations, the development does not have an impact on student satisfaction in studying at the private universities. Third, not all private university campus innovations are used to support student administration services. For instance, the teaching and learning process does not undergo a lot of changes, and some private universities merely use it as a means of promotion to attract students to enter the university.

Understanding the key drivers of change in service systems include changes in the global environment, the increasingly widespread use of information technology in multi-dimensional community activities, the development of community needs for the best service, critical and emotional reactions from customers, and the consequences of organizational vision. The application of E-administration can create a culture of information technology (Amarulloh, 2016). Competition among higher institutes of education is getting stiffer, therefore universities must continue to improve themselves to innovate to ensure that students are satisfied in the teaching and learning provided by the institute. One of the efforts is to improve the overall administration and services for students. Improved services for students are aimed at facilitating the teaching and learning activities and social life of students in the college environment. The campus life environment is expected to help universities produce students who are skillful and they acquire broad insights into their education. The institute of higher education is a service industry therefore, it is important for universities to maintain the behavior of citizens in the organization to ensure that they can provide the best service (Wibowo & Mochklas, 2020). Dissatisfaction can be overcome by managing innovation that grows and develops through research and development conducted by the universities (Nurjanah, 2015). In this way, private universities can establish research and community service policies as marketing strategies (Anwar, 2016).

5. Conclusion

Based on the results of the present research and discussion, conclusions can be drawn that E-Administration and campus innovation influence student satisfaction, E-Administration affects campus innovation, and campus innovation does not mediate the effect of E-administration on student satisfaction in learning private universities. As a suggestion, to increase student satisfaction and performance of private universities, the institution can form innovation teamsthat aims to improve the quality of education, administration, infrastructure, and overall campus innovation. With the increase in Campus Innovation, it is expected that public confidence in private tertiary institutions will increase. Besides, the implementation of E-administration should use the latest and best technological administration equipment in line with the current development. Ultimately, campus innovation should be built in synergy with the aim and vision of the universities to ensure that satisfaction of students is maintained at all times.

References

- Amarulloh. 2016. Pengembangan Tata Kelola Teknologi Informasi Berbasis E-Administrasi Di Perguruan Tinggi (Studi Kasus LPTK FKIP Universitas Lampung). *Indonesian Journal On Networking and Security*, 5(1):1-9
- Andilala & Marhalim. 2019. Aplikasi Tingkat Kepuasan Mahasiswa Terhadap Layanan Administrasi Fakultas Teknik Universitas Muhammadiyah Bengkulu. *Jurnal Pseudocode*, 6(2):172-180
- Anwar, S. 2016. Perubahan Strategi Pemasaran Perguruan Tinggi Swasta (Studi Kebijakan Di Universitas Prof Dr. Hazairin Bengkulu). *Jurnal Aplikasi Manajemen*, 14 (4):767-777
- Arambewela, R. & J. Hall. 2008. A Model of Student: International Postgraduate Students, from Asia, *Journal of European Advances in Consumer Research*, 8
- Asgari. M., & M. Borzooei. 2013. Evaluating the Learning Outcomes of International Students as Educational Tourists. *Journal of Business Studies*, 5(2).
- Bhakti, Y.B. & E. Y. Rahmawati. 2017. Indeks Kepuasan Mahasiswa Terhadap Pelayanan Program Studi Pendidikan Matematika. *Jurnal Formatif*, 7(3): 272-285
- Brown R., M. Mazzarol., & T.W. Mazzarol. 2009. The importance of institutional image to student satisfaction and loyalty within higher education. *Journal High Educ*. DOI 10.007/s10734-008-9183-8.

- Calantone, R.J. 2003, Innovation Is a Recurring And Ongoing Process Development Of Technology, Which Was Introduced To End Users, Through Diffusion, Journal of Business & Industrial Marketing, 18(1): 6-21
- Fatihudin, D., Jusni & M. Mochklas, 2018, How Measuring Financial Performance, International Journal of Civil Engineering and Technology (IJCIET), 9(6):553– 557
- Ghozali, I. 2006. *Structural Equation Modeling: Metode Alternatif Dengan Partial Least Square.* Badan Penerbit Universitas Diponegoro.
- Herliana, A. 2014. Analisa Dan Perancangan Sistem Informasi Administrasi Data Pribadi Dan Nilai Mahasiswa Di Perguruan Tinggi (Studi Kasus Universitas Kebangsaan Bandung). *Jurnal Informatika,* 1(2):82-92
- Indrajit. 2020. Analysis of Student Satisfaction Levels On Quality Of Service In Higher Education: Case Study Of Private University In North Minahasa. *Klabat Journal of Management,* 1(1):55-65
- Indrayani, E. 2011. Pengelolaan Sistem Informasi Akademik Perguruan Tinggi Berbasis Teknologi Informasi Dan Komunikasi (TIK). *Jurnal Penelitian Pendidikan*, 12(1):51-67
- Jurkowitsch S., C. Viglani & Kaufmann. 2006, A Student Satisfaction Model for Austrian Higher Education Providers Considering Aspects of Marketing Communications. Spesial Edition on Conumer Satisfaction, *Global Perspective Journal of Innovative Marketing*, 2(3)
- Kotler & Keller. 2008. *Manajemen Pemasaran di Indonesia: Analisis, Perencanaan, Implementsi dan Pengendalian*, Edisi 13, jilid 1, Penerbit Erlangga: Jakarta
- Mansori S., A. Vaz, & Ismail. 2013 Service Quality, Satisfaction and Student Loyalty in Malaysian Private Education, *Journal Asian Social Sciense*, 10(7)
- Marfuah, U., & R.A.M. Puteri. 2016. Pengukuran Tingkat Kepuasan Mahasiswa Terhadap Pelayanan Akademik Fakultas X Universitas XYZ. *Seminar Nasional Sains Dan Teknologi 2016, Fakultas Teknik Universitas Muhammadiyah Jakarta, 8 November 2016*
- Mochklas, M., D.S. Panggayudi & Soenarto. 2019. The Work Culture of South Korean Companies In Indonesia. *Humanities & Social Sciences Reviews*, 7(4): 603-608
- Murtadho, M.A., & Wahid, F. 2016. Permasalahan Implementasi Sistem Informasi Di Perguruan Tinggi Swasta. Register: *Jurnal Ilmiah Teknologi Sistem Informasi*, 2(1): 17-21
- Nasution, M. N. 2004. *Manajemen Jasa Terpadu*. Bogor: Ghalia Indonesia
- Nawawi, I.U. 2012. *Manajemen Pengetahuan (Knowladge Management). Teori dan Aplikasi Dalam mewujudkan Daya Saing Organisasi Bisnis dan Publik*. Bogor: Penerbit Ghalia Indonesia
- Notoatmodjo. 2003. Pendidikan dan Perilaku Kesehatan. PT. Rineka Cipta: Jakarta
- Nurjanah, S. 2015. Peranan Manajemen Inovasi Dalam Meningkatkan Kinerja Organisasi Pendidikan. *2rd Conference in Business, Accounting, And Mnagement. Sultan Agung Islamic University,* 1 May 2015
- Rinala, I.N., I.M. Yudana & I.N. Natajaya. 2013. Pengaruh Kualitas Pelayanan Akademik Terhadap Kepuasan Dan Loyalitas Mahasiswa Pada Sekolah Tinggi Pariwisata Nusa Dua Bali. *E-Journal Program Pascasarjana Universitas Pendidikan Ganesha*, 4(1):1-12
- Robbins, S.P. 1996. *Organizational Behavior, Conceps, Controversies and Applications*, Englewood Cliffs, N.J. Prentice -Hall.

- Sekaran G., & Kobu, 2002, Modelling and Analysis Business Process Engineering, *International Journal Production Res.*, 40(11):2521
- Sholihin, M. & Ratmono, D. 2013. *Analisis SEM-PLS dengan WrapPLS 3.0 Untuk Hubungan Nonlinear dalam Penelitian Sosial dan Bisnis*. Yogyakarta: Penerbit ANDI
- Siagian, S.P, 1995. Manajement Strategik, Penerbit Bumi Aksara: Jakarta
- Slamet. 2012. Pelayanan Administrasi Akademik Mahasiswa. *Jurnal Manajemen Pendidikan*, 7(2):125 133
- Sonedi. 2018. Strategi Pengembangan Manajemen Perguruan Tinggi Swasta. *Anterior Jurnal*, 17(2):69–78
- Tse O.K., & P.E. Wilton. 1988. Models of Consumer Satisfaction Formation: An Extention, *Journal of Marketing Research*, Vol. 25
- Wibowo, T.S. & M. Mochklas. 2020. Urgency Of Organizational Citizenship Behavior Towards Performance Of Nurses Of Type-C Hospitals In Surabaya. *International Journal of Scientific & Technology Research*, 9(2):4534-4538
- Wibowo. 2007. Manajemen Perubahan, PT. Raja Grafindo Persada: Jakarta
- Wiratama, M.J., N. Darsono & T.R.I. Putra. 2017. Pengaruh Teknologi Informasi Dan Modal Intelektual Terhadap Efektivitas Komunikasi Serta Implikasinya Pada Kinerja Karyawan PT. Kurnia Purnama Jaya. *Jurnal Manajemen Dan Inovasi*, 8(2):51-69
- Yusa, V, D & A.M. Aprianscy HS. 2019. Analisis Kepuasan Mahasiswa Terhadap Kualitas Pelayanan Pada Perpustakaan Perguruan Tinggi Swasta Di Bandar Lampung. Jurnal Manajemen dan Bisnis Sriwijaya, 17(3)
- Zaksa, K. 2012. Higher Sducation Marketing Abroad and In Latvia. *Economics and Management*, 17(4). DOI://dx.doi.org./105755/j01.em.17.4.3021.
- Zimmer, G. 2006. Relationship at School and Environmental Fit as Resources for Adulescent and Achievement, *Symposium Presented at the Biennial Meeting of The International Society for Behavioral Development, Melbourene, Victoria, Australia*