Q4 - IJSTR.pdf

by

Submission date: 29-Sep-2022 03:24PM (UTC+0700)
Submission ID: 1911967023
File name: Q4 - IJSTR.pdf (483.44K)
Word count: 4687
Character count: 26129

E-Marketing Of New Student Admissions Through A Service Oriented Architecture Approach

Muhamad Muslih

Abstract: Acceptance of new students in higher education is an important aspect that must be managed well and planned. Therefore, generally, universities form a division to carry out the process. In addition to receiving new students, this division also conducts marketing strategies to be able to attract students to be able to continue their studies at the college. At present, the marketing strategy is dominated by the concept of information technology, which has not yet been applied to new student admissions to universities in Indonesia. Therefore, this paper aims to design e-marketing for the acceptance of new students in universities through a Service Oriented Architecture (SOA) approach. The SOA approach to e-marketing will be measured by the level of agility and reusability of the designed application services. College of technology Nusa Putra became the object of implementing e-marketing in 2017. The results show that the application of e-marketing strategies through the concept of information technology with the SOA approach designed to increase effectiveness and efficiency in receiving new college students College of Technology Nusa Putra.

Index Terms: admissions, architecture, cloud computing, College of Technology Nusa Putra, E-marketing, Indonesia, SOA.

1 Introduction

New Student Admission in higher education is an important aspect that must be managed well and planned and estimated. Many methods can be used to estimate such as artificial intelligence [1], ANN for optimization [2-4], SOA for websites [5-7], Fuzzy for integrated systems [8], linier regression [9], etc. It will provide convenience to all the academic community in carrying out it. The development of information technology today unconsciously brings considerable changes to all aspects of people's lives, especially in higher education. Information technology aspects become an essential role in helping operationalize all college activities, one of which is the acceptance of new students. At present, the business of accepting new students at the Nusa Putra College of Technology is still not integrated online. It creates difficulties for the users of the college. The user is a high school who has collaborated with Nusa Putra College of Technology to communicate during the registration of new students. The problem faced is the difficulty to participate in the selection of scholarship programs or to register which is held by Nusa Putra College of Technology. This activity requires students to be able to attach several requirements, such as subject grades, self-identity, etc. It is a problem because the distance between the school and Nusa Putra College of Technology is often very far away. However, if implemented manually, it requires a large amount of money and a long time. Nusa Putra College of Technology is one of the higher education institutions in Sukabumi Regency, West Java, Indonesia. At present, New Student admissions at Nusa Putra College of Technology are still semi-automatic. It causes the admission of new students data processing process to be prolonged.

- *Muhamad Muslih is currently senior lecturer in Department of Information System, Nusa Putra University, Indonesia,*
- *E-mail: Muhamad.muslih@nusaputra.ac.id*

The problem is that often the location of high school that follows this process is far demographically from Nusa Putra College of Technology. Therefore, the development of an information system for Nusa Putra College of Technology to overcome these problems is essential to develop. Information systems are not only used for machinery technology, as is done by some researchers [10, 11] but can also be applied in fields such as medicine [12, 13], education [14], economics [15] and business [16]. The development of information systems is carried out through a Service Oriented Architecture (SOA) approach. The development of information systems must also be supported by security aspects, efficient and effective in presenting data and information. The Service Oriented Architecture (SOA) method with the Web Service concept was chosen to facilitate the process of sending admission of new students Registration requirements documents and scholarship programs from the school to Nusa Putra College of Technology.

2 Theoretical Analysis

E-marketing is a Web-based, and internet-based marketing technique used to achieve goals and support modern marketing concepts. Researcher [17] with a website, companies can market their products or services quickly to be known by the public about a more detailed explanation of products or services. Which can help customers to get the desired information? Therefore, with e-marketing, both companies and customers can get to know each other and communicate with each other quickly and real-time to increase profits for both parties. Service Oriented Architecture or known by the abbreviation SOA, is an information system architecture that packs several parts of the application architecture as a service [18]. Also, SOA can be translated as an arrangement of architectural rules that are arranged based on several elements where each element can be interconnected with different architectural designs and styles. SOA, in general, is built based on several characteristics (1) Based on services that are ready to be integrated, (2) Having standards, (3) Available on various platforms, (4) Providing services that can easily enrich the service's functions, and (5) Arranged and prepared in an apparent contract structure that can detail features offered at the same time and have assurance that the

service can be replicated [19]. SOA enables integration between business processes and information technology infrastructure by carrying out the analysis and design phases of the determination of services that are derived from the business processes of an organization. Service is an encapsulation of logical units carried out in one or a series of operations in a business process. With the determination of services based on business processes, the information technology architecture formed can further support collaboration in terms of business and information technology.

3 State of the Art

State of the art about some of the results of research related to e-marketing and SOA is presented in Table 1.

Table 1. *Previous research related to e-marketing research*

No	Thema	Method	Result
1	E-marketing design for architectural consulting services companies [17]	Explain about the application of e-marketing as a strategy to enlarge market size.	Application of web-based e-marketing on new systems that can expand the spread of information and can enlarge the market size
2	Planning for upcoming application portfolios based on the College Business Strategy [20]	Qualitative descriptive information systems and information technology development strategies (Ward & Peppard)	The results of this study are strategic portfolio applications in the future at a university.
3	Data warehouse model with service oriented architecture to support executive information systems [21]	Explain about optimizing SOA in the data warehouse	Building a data warehouse with SOA architecture in universities for executive information systems that are the basis for decision making.

4. Research Methodology

E-marketing SOA method using the web service concept is a system for registering prospective students and the media to submit documents that have been digitally converted. This system is expected to be able to facilitate senior secondary schools to attend the new student registration process and scholarship selection process held by the Nusa Putra Technology College. This study was applied directly to the E-marketing System for new student admissions at the Nusa Putra College of Technology web service. The level of satisfaction from implementing this system is done by surveying system users by distributing questionnaires. The users of this system are all high schools who will enter their students to the Nusa Putra Technology College, which is represented by counseling teachers as many as 52 people. The schematic of this research is presented in Figure 1.

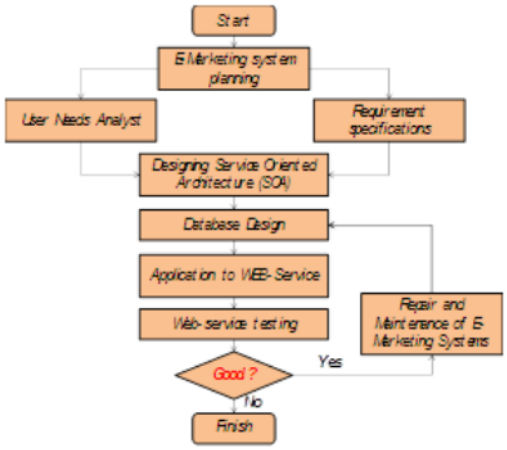

Fig. 1 *Research flow chart*

4.1 Business Process Analysis

The business process in the E-marketing System at the Nusa Putra College of Technology is presented in Figure 1. Each high school that is a partner of the Nusa Putra Technology College will record and collect the files of students who will register, represented by the counseling teacher. After that, the document was submitted to the Nusa Putra Technology College for verification. If there are shortcomings, staff from the Nusa Putra Technology College will provide more information about their weaknesses. However, if it is complete, the team from the Nusa Putra Technology College will do printing and cards to take the student selection exam at the Nusa Putra Technology College.

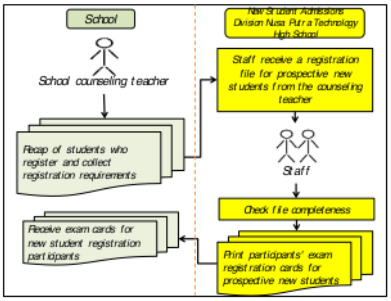

Fig. 2. *Business Chart A manual process on the marketing System for new student admissions at the Nusa Putra Technology College*

All web content is designed in bahasa to adjust at this time the user of the Nusa Putra Technology School is from Indonesia.

5. Results and Discussion

5.1 System Model Analysis

In carrying out the analysis process, the system must provide information or describe what the system must do in meeting the user's information needs. This system analysis will then answer all the questions what the system will do, then who uses the system and when the order will be used. This system analysis activity is carried out using the approach of combining

object-oriented analysis with the use of relational database analysis for the system to be designed which means focusing on the system functionality that is running and defining each entity from the business process in the student acceptance E-marketing development system new at Nusa Putra Technology College. The system model for marketing development for new student admissions at Nusa Putra Technology College is currently presented in Figure 3.

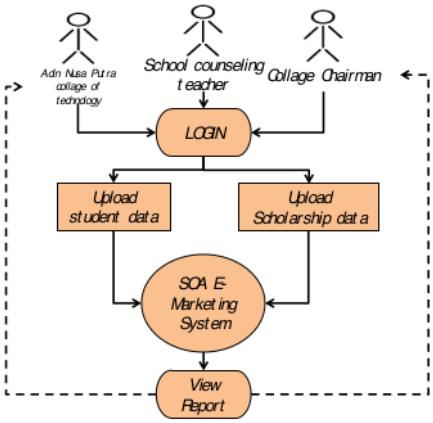

Fig. 3. *System Model on E-marketing Development for new student admissions at Nusa Putra Technology College*

5.2 SWOT Analysis

Results of the SWOT Analysis on the new student admissions system at Nusa Putra Technology College reported in Table 2.

TABLE 2. *SWOT ANALYSIS OF CURRENT MARKETING SYSTEMS*

	Strengths (S)	**Weakness(W)**
	Availability of competent human resources in the field of information technology Availability of information technology infrastructure There are already divisions that handle the field of new student admissions Already have your server	Limited human resources that handle the new student admission system Limited time for new student admissions officers to file registration documents The absence of a mature system for the management of new student admissions systems as well as evaluation of the programs being carried out
Opportunity Creating a marketing system and online filing system will be a competitive advantage for the Nusa Putra Technology College	**Strategy** Integrating the E-marketing system for new student admissions online with a new student admission system already exists so that this can help improve the performance of the new student admission unit.	**WO Strategy** Providing understanding to all employees regarding the importance of filing a new student admission system in college

5.3. Business Process Improvement as a result of SWOT Analysis

From the business chart of this process, business functions are obtained from the marketing System for new student admissions at the Nusa Putra College of Technology and the data involved (Figure 4). The results of this identification are a source of candidate service identification, which is the central concept in a service-oriented architecture. Existing services must be autonomous and loosely coupled as a guarantee that the application provided is agile and reusable. An entity-centric approach does the process of analyzing candidate services in the marketing System for new student admissions. The associated entities are derived from the flow of the marketing system process for new student admissions. Then, the identification of the use-cases of each object and the data involved in each activity is carried out. This mapping produces the candidate service as presented in Table 3.

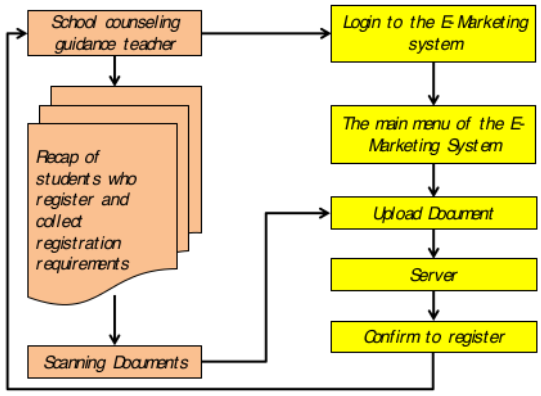

Fig. 4. *Flow of Business Process Improvement in marketing Systems for new student admissions*

The service candidates generated in the mapping are functional services or termed business service layers. Next, an analysis of services is an encapsulation of the business service called the orchestration service layer. This layer is the top layer that will interface with the external system. Finally, the candidate service analysis is in the form of a system supporting application and client activity support when using the new student e-marketing System application. This service is an application service layer.

TABLE 3. *MAPPING SERVICE CANDIDATES*

Business process	**Service candidate**
Submission of New Student Registration Files	1. Service management of transaction submission transactions for prospective student registration files in each study program 2. Service management information on the number of applicants in each study program 3. Sending or School data management service 4. User Authorization Service
Submission of registration documents for scholarship programs	1. Service for managing scholarship file submission transactions 2. Service manages information on the number of applicants on scholarship programs 3. Sending or School data management service

5.4 System Testing

Functional Testing

The response from the application when filling out the New Student Candidate registration form, the results are in accordance with the needs of users of the E-marketing System for the admission of new students at the Nusa Putra Technology College. All web content is designed in Indonesian to adjust at this time the user of the Nusa Putra Technology School is from Indonesia. Applications can also be accessed via a smartphone, with results in accordance with functional requirements and meeting the standards of user requirements of the E-marketing system for new student admissions, as

shown in Figure 5 until 7.

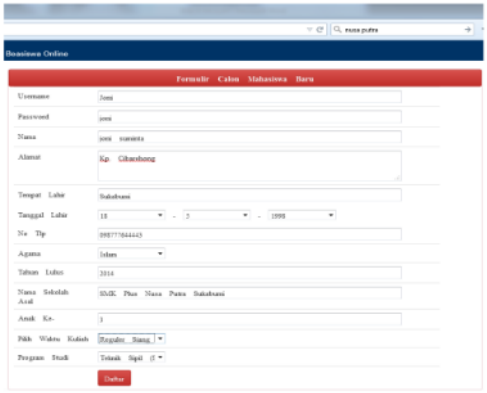

Fig. 5. WEB screenshot new student registration

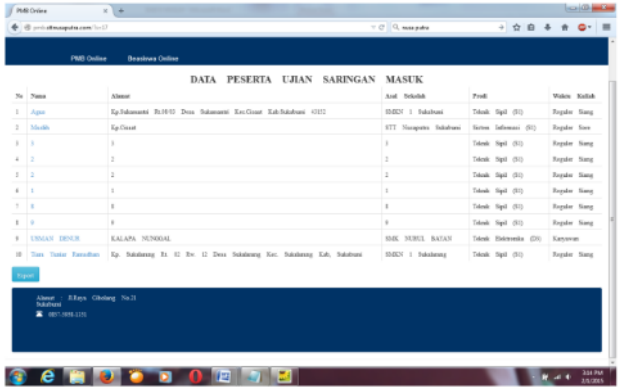

Fig. 6. Screenshot of on-line report recapitulation results

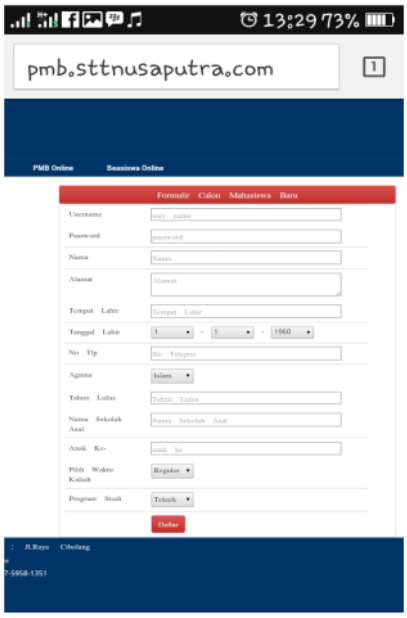

Fig. 7. Web response screenshots using a smartphone

Stress Testing

From the results of the stress testing, the application is quite maximal in responding to the user even though it is accessed by a Smartphone (Table 4). In detail, see in Figure 8.

TABLE 4. STRESS TESTING

Description	Input	Results
Running applications on low hardware specifications	Login to the System as a School User Operator	Accessing Applications by using a Smartphone can be done easily, even if only a simple display, but functionally the information obtained can be fulfilled

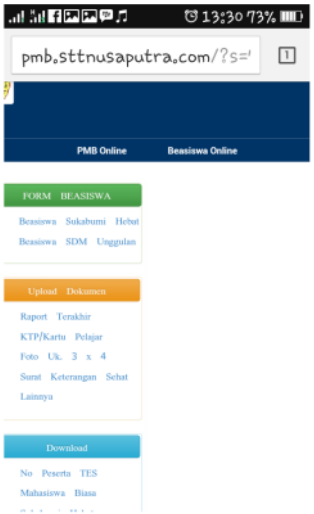

Fig. 8. An e-marketing system response screenshot on a Smartphone on the Document Upload Menu Page

Usability Testing

This test is also called testing for user familiarity. There are several indicators that will be tested, namely: Understandibility, Learnability, Operability, Attractivenes. Usability testing is done by distributing the questioner questionnaire to the user as the system user, which is processed with the SPSS 15 application, with a frequency test performed, and the results are shown in Figure 9.

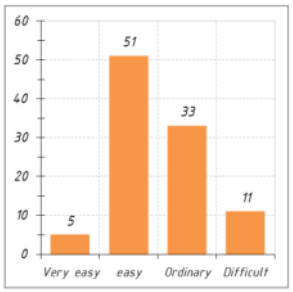

Fig. 9. Recapitulation of Usability Test Results to users

User Acceptance

For user acceptance test testing, an application demo was held in front of the teacher for counseling and as a partner and system user at a routine meeting held by the Nusa Putra College of Technology. The results obtained by the e-

marketing system application are new student admissions according to user needs.

5.5 System Evaluation

Based on the results of the development of the e-marketing system the acceptance of new students with the SOA architecture using the web service concept. The following is a list of users of the e-marketing system for new student admissions who are also respondents who will assess from outside users how the impact of the development of SOA architecture by using a web service on the e-marketing system for new student admissions. Data from respondents were then processed using the SPSS 15 application by conducting a frequency test, with the results as in Figure 10.

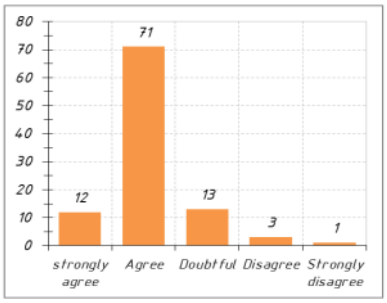

Fig. 10. *User recapitulation regarding e-marketing system new student admissions with SOA architecture*

From the recapitulation of respondents' answers highest answer 71% of respondents answered agree, 13% of respondents answered doubtfully, and 12% of respondents answered strongly agree, 3% of respondents answered disagree and 1% of respondents answered strongly disagree. Most of the respondents answered agree that 83% of respondents answered agree (71% of respondents agreed with 12% of respondents strongly agree) that the development of SOA architecture using access to web services applied to the e-marketing system for new student admissions had a very good impact on the acceptance marketing system new student at the Nusa Putra Technology College. After testing the questionnaire for the application of the SOA architecture, a questionnaire was tested for the e-marketing system for new student admissions at the Nusa Putra Technology College. Figure 11 below is a recapitulation of the user.

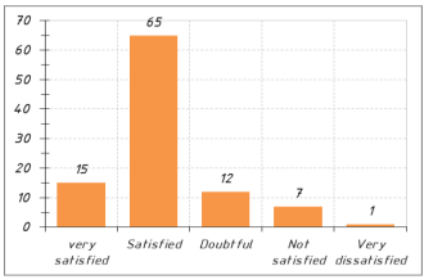

Fig. 11. *User recapitulation regarding the implementation of the e-marketing system for new student admissions*

From the recapitulation of respondents' answers to the highest answers 65% of respondents answered Satisfied and 15% of respondents answered very satisfied, in total overall respondents answered satisfied by 80% of (65% of respondents answered satisfied added with 15% of respondents answered very satisfied) that the e-marketing system acceptance new students applied to the acceptance of new students Nusa Putra College of Technology is quite good. It was drawn from respondents who answered 69% were satisfied with the service of e-marketing System for new student admissions in managing the marketing system for new student admissions.

Correlation Test

The results of the user's answer as a user, then correlation analysis is done to find out how much the impact of the SOA architecture is on the access of the web service that is applied to the e-marketing System for new student admissions. It can be seen from the results of the correlation analysis using Spearmans rho [2] in Table 5.

TABLE 5. *CORRELATION ANALYSIS RESULTS*

			Model_SOA	E-marketing System
Sperman'rho	Model_SOA	Correlation Coeficient	1.000	.651(**)
		Sig. (2-tailed)	.	.000
		N	52	52
	E-maerketing system	Correlation Coeficient	.651(**)	1.000
		Sig. (2-tailed)	.000	.
		N	52	52

*** Correlation is significant at the 0.001 level (1-tailed)*

Based on the results of the analysis with the Spearman's Rho test as in the table above, it can be seen that the correlation value between the SOA architectural model with access to the web service (Variable X) is implemented in the e-marketing system for new student admissions at Nusa Putra College of Technology (Variable Y) amounting to r = 0.651. This value is between the values of 0.51 - 0.75, which means it has a strong enough role, the nature of the relationship is positive which means that if the application of the SOA architecture model with web services implemented in the e-marketing system for new student admissions at Nusa Putra College of Technology is getting better it will have a good impact on the marketing system for new student admissions in the new student admission division of the Nusa Putra Technology College. The contribution of variable X to Y can be seen based on the coefficient of determination (Kd) using Equations 1.

$$Kd = r^2 \times 100\% \quad (1)$$
$$Kd = (0.651)2 \times 100\%$$
$$Kd = 42{,}38\%$$

The coefficient of determination (Kd) shows the magnitude of the contribution of the variable (X), namely the SOA architecture model using a web service that is implemented in the e-marketing system for new student admissions in the new student admission division (Y) of 42.38% while the remaining 57.62% is influenced by other variables outside the SOA architecture variable with web services.

Hypothesis testing

Determination of the hypothesis will be carried out using a significance level of 0.05 (a = 5%). This level of significance was chosen because it was considered to be quite stringent to

represent in testing the two variables. To test hypotheses taken from the T-test in Table 6.

TABLE 6. *RESULTS OF COEFFICIENTS TESTING HYPOTHESES*

Model		Unstandardized coeficients		Standardized coeficients	t	Sig
		B	STD. Error	Beta	B	STD. Error
1	Constant	2.032	.317			
	Model_SOA	.463	.081	.631		.

A Dependent Variabel: e-marketing system

This coefficient table is obtained from the results of processing questionnaires distributed to system users in terms of schools that are partners of the Nusa Putra Technology College, based on table IV-41 significance numbers 0,000 <0,05 because t-count> t-table is 5,748> 2,008 then Ho rejected and Ha accepted. This means that the creation of an e-marketing new student admissions system with the SOA method using a web service can provide convenience to the marketing system in the new student admission division and can improve services to Partners. This means that the e-marketing system for new student admissions with the SOA Method using Web Service provides a pretty good influence on the marketing system at the Nusa Putra College of Technology.

5.6 Research Implications

This research is very useful because it is directly used and applied to the division of new student admissions at the Nusa Putra Technology College and the response from users is quite good because the use of the e-marketing system for new student admissions can be implemented more effectively and more efficiently towards the new student admissions marketing system so that expected to increase the number of students entering the Nusa Putra Technology College. It can also improve performance for all employees at the Nusa Putra Technology College. The results of the analysis can also be used as a material to improve the process of developing the new admissions marketing system and is used as a reference for consideration in adopting a larger system. In general, the system functions well and in accordance with the functional tasks of each user involved in the e-marketing system of new student admissions and predictions of the amount of data that will be stored by the user will increase because it is more effective and efficient coupled with internet access connections with networks that are not stable. Thus there needs to be some improvements, including upgrading bandwidth from ISPs and improving the quality of servers at the Nusa Putra Technology College. To simplify the process of uploading documents using internet access as well as a more attractive display enhancement in the application of the e-marketing system for new student admissions at the Nusa Putra Technology College and equipped with instructions for use.

CONCLUSION

This research has succeeded in making the new student e-marketing development system with the Service Oriented Architecture (SOA) using web service access as a form of implementation of the business process new student admission system at the Nusa Putra Technology College. E-marketing system application with SOA architecture using web service access makes the level of user satisfaction increase with the percentage of 80% of respondents expressing satisfaction. Correlation analysis states that the SOA architecture model with web service is implemented in the marketing system for new student admissions at the Nusa Putra Technology College with a correlation value of 0.651. This value is in the range 0.51-0.75. Contributions given from the correlation value based on the determination coefficient of 42.38%. The rest are influenced by other variables. The research paper from this paper is developing an e-marketing application system with functional additions to applications such as managing user authority, and users of school operators are given a separate page to provide comments as feedback from information provided by the system.

References

[1] M. Muslih, Somantri, D. Supardi, E. Multipi, Y. M. Nyaman, A. Rismawan, et al., "Developing smart workspace based iot with artificial intelligence using telegram chatbot," in Proceedings - 2018 4th International Conference on Computing, Engineering, and Design, ICCED 2018, 2019, pp. 230-234.

[2] S. Honamore, K. Dev, and R. Honmore, "Reliability Prediction of Web Services Using HMM and ANN Models," Procedia Computer Science, vol. 93, pp. 41-47, 2016/01/01/ 2016.

[3] H. Familiana, I. Maulana, A. Karyadi, I. S. Cebro, and A. Sitorus, "Characterization of aluminum surface using image processing methods and artificial neural network methods," in 3rd International Conference on Computing, Engineering, and Design, ICCED 2017, 2018, pp. 1-6.

[4] P. Morgado, E. Gomes, and N. Costa, "Competing visions? Simulating alternative coastal futures using a GIS-ANN web application," Ocean & Coastal Management, vol. 101, pp. 79-88, 2014/11/01/ 2014.

[5] Z. M. Aljazzaf, M. A. M. Capretz, and M. Perry, "Trust-based Service-Oriented Architecture," Journal of King Saud University - Computer and Information Sciences, vol. 28, pp. 470-480, 2016/10/01/ 2016.

[6] G. Katsikogiannis, D. Kallergis, Z. Garofalaki, S. Mitropoulos, and C. Douligeris, "A policy-aware Service Oriented Architecture for secure machine-to-machine communications," Ad Hoc Networks, vol. 80, pp. 70-80, 2018/11/01/ 2018.

[7] M. W. L. Moreira, J. J. P. C. Rodrigues, A. K. Sangaiah, J. Al-Muhtadi, and V. Korotaev, "Semantic interoperability and pattern classification for a service-oriented architecture in pregnancy care," Future Generation Computer Systems, vol. 89, pp. 137-147, 2018/12/01/ 2018.

[8] G. Castellano, A. M. Fanelli, and M. A. Torsello, "NEWER: A system for NEuro-fuzzy WEb Recommendation," Applied Soft Computing, vol. 11, pp. 793-806, 2011/01/01/ 2011.

[9] M. Muslih, N. D. Arianti, A. Husen, D. Gustian, S. Pahmi, Ayunis, et al., "Marketing strategy with linier regression to the interest of new students," in 3rd International Conference on Computing, Engineering, and Design, ICCED 2017, 2018, pp. 1-5.

[10] G. Zhang, Z. Li, W.-Z. Wu, X. Liu, and N. Xie, "Information structures and uncertainty measures in a fully fuzzy information system," International Journal of Approximate Reasoning, vol. 101, pp. 119-149, 2018/10/01/ 2018.

[11] A. Sitorus, A. Fauzi, G. Ramadhan, Rahman, Kuswandi, A. R. Hasan, et al., "Conceptual design of harvesters knife for Chinese spinach (ipomoea reptans Poir.): CAD approach," in Proceedings - 2018 4th International Conference on Computing, Engineering, and Design, ICCED 2018, 2019, pp. 7-12.

[12] A. Safari and Y. Safari, "The availability of health information system for decision-making with evidence-based medicine approach-a case study: Kermanshah, Iran," Data in Brief, vol. 19, pp. 890-895, 2018/08/01/ 2018.
[13] A. Abdellaoui, Y. I. Khamlichi, and H. Chaoui, "A Robust Authentication Scheme for Telecare Medicine Information System," Procedia Computer Science, vol. 98, pp. 584-589, 2016/01/01/ 2016.
[14] J. Martins, F. Branco, R. Gonçalves, M. Au-Yong-Oliveira, T. Oliveira, M. Naranjo-Zolotov, et al., "Assessing the success behind the use of education management information systems in higher education," Telematics and Informatics, vol. 38, pp. 182-193, 2019/05/01/ 2019.
[15] C. M. Kellett, S. R. Weller, T. Faulwasser, L. Grüne, and W. Semmler, "Feedback, dynamics, and optimal control in climate economics," Annual Reviews in Control, 2019/05/16/ 2019.
[16] A. S. Aydiner, E. Tatoglu, E. Bayraktar, and S. Zaim, "Information system capabilities and firm performance: Opening the black box through decision-making performance and business-process performance," International Journal of Information Management, vol. 47, pp. 168-182, 2019/08/01/ 2019.
[17] I. Inayati, "Aplikasi E-marketing Produk Customized Design Conveyor Menggunakan Metode Object Oriented (Studi Kasus: CV. HERRY&CO)," E-Jurnal SPIRIT PRO PATRIA, vol. 1, 2015.
[18] M. P. Papazoglou, "Service-oriented computing: Concepts, characteristics and directions," in Proceedings of the Fourth International Conference on Web Information Systems Engineering, 2003. WISE 2003., 2003, pp. 3-12.
[19] L. G. Meredith and S. Bjorg, "Contracts and types," Communications of the ACM, vol. 46, pp. 41-47, 2003.
[20] J. M. Bryson and W. D. Roering, "Applying private-sector strategic planning in the public sector," Journal of the American Planning Association, vol. 53, pp. 9-22, 1987.
[21] H. Demirkan and D. Delen, "Leveraging the capabilities of service-oriented decision support systems: Putting analytics and big data in cloud," Decision Support Systems, vol. 55, pp. 412-421, 2013.

Q4 - IJSTR.pdf

ORIGINALITY REPORT

15%	6%	12%	9%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Submitted to Universitas Muhammadiyah Makassar Student Paper	4%
2	Muhamad Muslih, Deuis Nurjanah, Fuji Siti Fauziah, Susanti, M. Anton Permana, Carti Irawan, Jelita Asian. "Implementation of Impact Zachman Framework on Internship Architecture Data Management", 2020 6th International Conference on Computing Engineering and Design (ICCED), 2020 Publication	3%
3	Submitted to Universitas Siswa Bangsa Internasional Student Paper	3%
4	journal.pnm.ac.id Internet Source	1%
5	Yeni Kustiyahningsih, Husni, Ismy Qorry Aini. "Integration of FAHP and COPRAS Method for New Student Admission Decision Making", 2020 Third International Conference on	1%

	Vocational Education and Electrical Engineering (ICVEE), 2020 Publication	
6	Ema Utami. "Design Concept Integration Tax Payment System with Implementing Financial Technology", International Journal of Information Engineering and Electronic Business, 2018 Publication	1 %
7	core.ac.uk Internet Source	<1 %
8	Naghmeh Niknejad, Waidah Ismail, Imran Ghani, Behzad Nazari, Mahadi Bahari, Ab Razak Bin Che Hussin. "Understanding Service-Oriented Architecture (SOA): A systematic literature review and directions for further investigation", Information Systems, 2020 Publication	<1 %
9	www.atlantis-press.com Internet Source	<1 %
10	papers.academic-conferences.org Internet Source	<1 %
11	www.cros-portal.eu Internet Source	<1 %
12	www.crossref.org Internet Source	<1 %

13 Samsu Samsu. "Leadership’s Policy in Pandemic School Era: New Student Admission, Zonation System, and Digital Problem", JMiE (Journal of Management in Education), 2021 <1%
Publication

Exclude quotes	Off	Exclude matches	Off
Exclude bibliography	On		

Q4 - IJSTR.pdf

GRADEMARK REPORT

FINAL GRADE

/0

GENERAL COMMENTS

Instructor

PAGE 1

PAGE 2

PAGE 3

PAGE 4

PAGE 5

PAGE 6

PAGE 7