

DEVELOPMENT OF OFFICE MANAGEMENT SIMULATION LEARNING BASED ON INTEGRATED INDUSTRY CAMPUS INTEGRATED CURRICULUM

**ANDI BASUKI^{1*}, I NYOMAN SUPUTRA², MADZIATUL CHURIYAH³ and
ARI GUNAWAN⁴**

^{1, 2, 3, 4} Faculty of Economics and Business, Universitas Negeri Malang, Malang, Indonesia.

*Email: andi.basuki.fe@um.ac.id

Abstract

The rapid development of the industrial world in business management and management, including in terms of digitization and automation. This study aims to improve the quality of learning in office management in business operations and management, and to link learning in business organizations and office management to the industrial world directly in the recruitment stage based on an assessment of the application system integrated with the industrial world. The urgency of this research is to improve the quality of office management learning outcomes that can prevent organizations from delays in making decisions and responding to challenges in the industrial world in the future, so that vital sectors in the development of business and management organizations can be managed properly and support the progress of the industrial world and organization. The research method used in this follow-up study is the research and development method. The following are the stages of research that will be passed in the research and development method in this study, namely Concept, Requirements, Design, Modelling, Simulation, Implementation, and Experiment. The findings in the study there is an increase in the quality of office management learning outcomes seen from office management simulation learning system.

Keywords: Office Management Simulation, Integrated Curriculum, Independent Campus Industry.

INTRODUCTION

The rapid development of business organizations, of course, is greatly influenced by organizational development and also proper business management (Putra et al., 2021), one of the right business management lies in office management (Pfano & Beharry, 2016). The office organization consists of various business management and management ranging from administrative, data, finance, supplies, to human resources (Ayoko & Ashkanasy, 2020), which are parts of the company's vital sectors (Al Shamsi & Ameen, 2018). Manpower support in the field of office management comes from business and management majors in higher education, and vocational schools majoring in business and management, which are part of education in the social and humanities fields (Yolanda et al., 2018). The development of the industrial world in business management and management is growing rapidly in its management, including in terms of digitalization and automation in terms of its management (Ibrahim et al., 2021)

However, learning in the field of business and management is still unable to keep up with the development of digitalization and automation of business management (Suputra et al., 2021), as evidenced from survey data conducted by the author, that 73% of teachers in East Java stated that there were no learning media that matched industrial needs, and 86% stated that they needed learning media that were in accordance with the needs of the industrial world, this data

comes from the East Java office automation MGMP survey in year 2021 (Muis, 2019). This is due to the limited research and development at educational institutions in Indonesia which have not been able to accommodate changes in the development of the industrial world which must be adapted to the world of education.

If this is not addressed, it will cause long-term problems, namely producing graduates who are not in accordance with industry needs and unable to compete (Varga, 2020), this is evident from data from the Central Statistics Agency which states that SMK is the highest contributor to unemployment at 11.13% of total unemployment. open (Wijaya & Utami, 2021), where the field of SMK with the largest contributor to unemployment comes from the Social and Humanities sector, which is 36% of the data on the number of majors in SMK (Wijaya & Utami, 2021).

Based on these problems, researchers have conducted previous research on the topic of Competitive KBK in 2021 with the theme of developing cloud integrated learning in Office Administration learning, focusing on improving the quality of integrated office management practicum learning media in one platform (Suputra, 2021). This research is an ongoing research that will be submitted this year to continue roadmap that has been completed (Suputra et al., 2021), this year it will be continued with linking through industrial standardization and also the development of work integrated learning. This research is expected to continue because this research focuses on developing learning for prospective workers in sustainable office management and adapting to industry needs and being able to connect with industry.

The purpose of this study is to improve the quality of learning in office management in business operations and management, and to link learning in business organizations and office management to the industrial world directly in the recruitment stage based on an assessment of an integrated application system with the industrial world. The urgency of this research is to improve the quality of office management learning outcomes that can prevent organizations from delays in decision making (Younas et al., 2018) and answer the challenges of the industrial world in the future (Putu et al., 2019), so that vital sectors in the development of business organizations and management can be managed properly. and support the advancement of industry and organizations (Arif & Akram, 2018).

METHODS

The research method used in this follow-up study is the research and development method. This development method was chosen because of the advanced development carried out in an innovation to be sustainable (Budiyo, 2015), this method is very suitable to be used because it uses a multilevel method in the development of this research, because this research will also aim for long-term and massive implementation based on roadmap research existing ones [30]. The following are the stages of research that will be passed in the research and development method in this study:

A. Concept

At this stage the researcher will conduct a need analyst to prospective users and problems in the field in more detail, at this stage need analyst in-depth on the research subject so that the development of solutions carried out can be in accordance with the needs (Maulidina , 2018).

B. Requirements

At this stage the researcher will identify development needs, formulate solutions and advanced innovation ideas based on the results need analysts and comparisons with application evaluations in previous research. At this stage, it is expected to produce a minimum viable product that can be used as a reference for ideas for making products (Maulidina et al., 2018).

C. Design

At this stage the researcher will design the user product interface and adjust it to user needs, in terms of user interface and user experience, determining user flow and determining the flow of usage to the system in a system framework design using user diagrams (Wibowo &Pratiwi, 2018).

D. Modeling

At this stage, researchers and technology developers will carry out the realization of technology from the results of the development of the technology flow, the development of prototypes so that the performance targets of this research stage are ready to be tested and implemented in various scales.

E. Simulation

At this stage, usability testing of the product in various development scales and user trials are carried out without instructions and with instructions with various models of cases in use, so that the development results can be validated as a whole in various case conditions (Rafika, 2018).

F. Implementation

In this stage, researchers will conduct small-scale tests, field scales, up to the scale of several schools to obtain test results in various sizes, so that the validity of testing and processing and data analysis can be used for journal publications and scientific proceedings in accordance with the output targets. The validity of the device at various levels of users can be known and used as material for the final evaluation (Wibowo &Pratiwi, 2018).

G. Experiment

At this stage in the final stage of research development, it is called experiment because researchers will evaluate and revise the results of various previous tests, and researchers will publish, register advanced intellectual property rights from innovation updates and work on final reports and evaluation of research results (Rafika, 2018).

FINDINGS AND DISCUSSION

The following are findings and discussions that comprehensively cover the essence of the current study in response to two research problems, namely (1) improving the quality of office management learning and (2) meeting learning needs that are integrated with the campus curriculum with industry.

Findings

Office management simulation learning system

The office management system is work integrated learning with various features in it. The learning package in this system consists of several learning products offered, namely: 1) General administration, 2) Financial administration, 3) Archives, and 4) Correspondence. Learning in this LMS has been adapted to the independent curriculum and industry needs in its current development. The following are some of the appearances of the learning system consisting of the home, product, and feature menus.

i. Home View

This homepage display includes a description of the learning system, a description of the learning product offering, a description of the learning products offered, information on partnerships with industry, and a display of user testimonials.

a) Description of the learning system

A description of an important office management learning system is shown on the start or home page to confirm to the user what the system is referring to. The following is a description of the office management learning system developed in this study.



In this modern office management learning system, it is adapted to the needs of the industrial world, where in this system there are all office management learning that can be easily accessed, there is ease of use and integrated file sharing.

b) Description of learning product offerings

The development of this product continued on the offer for subscribed users. This subscription plan contains a more complete learning package than just as a regular user. Here's what the subscription product offer looks like.



The next display is a complete product offer by subscribing. The conveniences offered include speed and security, flexibility and suitability to the industrial world, and collaboration with independent campuses and industries.

c) Description of the learning products offered

On the next home page, various explanations are explained about the product details of each sub-module. The following is a description of the learning products offered.



The learning products offered are general administration, financial administration, archives and correspondence. Each product has a brief description. Users are expected to be able to read quickly so that they can easily choose what products are needed.

d) Information on partnerships with industry

The development of this product has been carried out in collaboration with various industries. In accordance with the purpose of developing this product, which is to adjust the learning needs of vocational students to industrial developments. So on the home page display, several industries that cooperate are also shown.



This learning system has been used by various industries and is trusted by various institutions to manage office education in a modern way. Some educational institutions that collaborate with this system, one of which is the vocational school educational institution SMK which has a choice of majors in automation and office governance.

e) User testimonials

This research development product has been used by several users from related circles such as lecturers and teachers who teach in the field of office management. The following is a look at the testimonials of users who have tried this office management learning product.



The display of user testimonials is on this menu page, there are many users who have trusted the use of the learning product system. In it, there are brief reviews from several users regarding the results obtained after trying this product. These customer testimonials reinforce the continued development of office management learning products.

ii. Product Content

Office management learning content is available in the menu and there are several options, namely Correspondence, Archives, Finance and General Administration.

The display of this product includes snippets of learning products, choices of learning products, learning materials, learning curricula, and leader boards.

a) Display of learning products

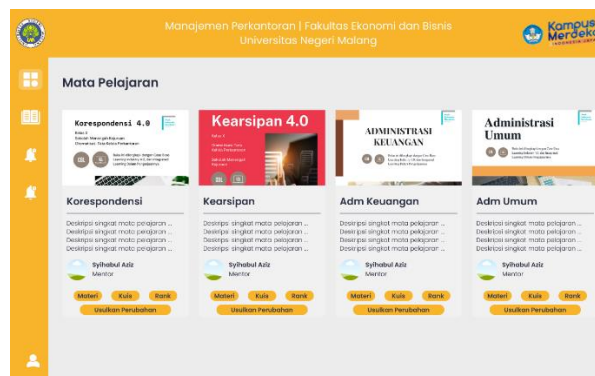
On the product menu, a snippet is displayed for the user. The following is a snippet of office management learning products.



In the product display, there are learning packages offered along with product descriptions and benefits that users will get if they subscribe to the selected product.

b) Learning product recovery

A wide variety of office management learning products are displayed as a whole. The total learning products that can be selected are 4 products with learning details in them. The following is a display of the choice of office management learning products.



The complete learning package consists of such as archival book 4.0, learning videos, quizzes, case studies, and there are rankings. In addition, users can propose changes if there are obstacles during the study session.

c) Learning materials

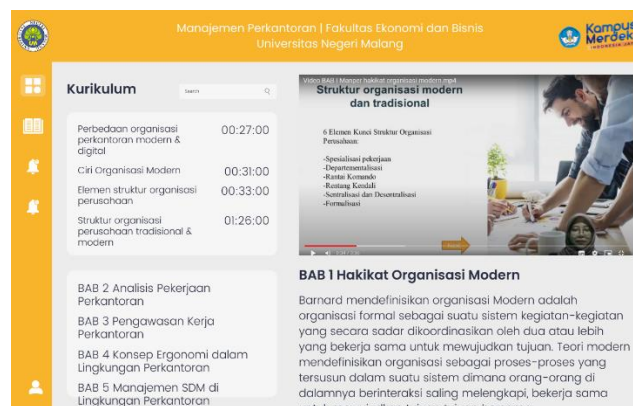
After choosing one of the various learning products displayed, users will be presented with a display of one learning product along with its sub-modules. The following is a view of the selected sub learning's.



The display of learning materials in it there are several learning chapters that can be clicked and become learning material options. For example, in the office management sub-learning there are 5 learning chapters, then the 5 chapters will appear along with a description of the learning.

d) Klearning uriculum

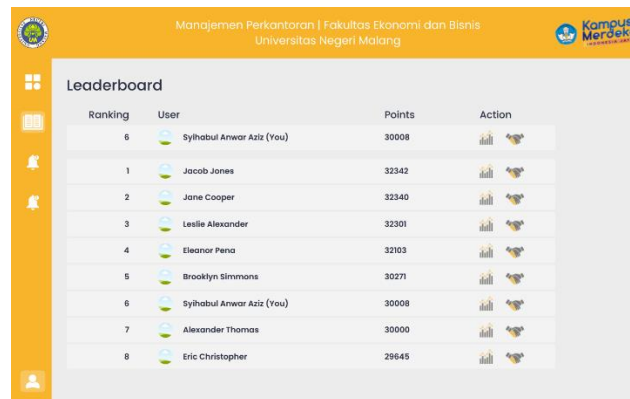
This learning curriculum is on the menu after the user selects one of the chapters in the office management learning product. The following is a curriculum view in one chapter of office management learning.



The learning curriculum features several learning chapters that must be completed or studied. Each chapter consists of learning materials and videos that can be accessed immediately. If the user chooses to conduct a learning session in chapter 1, the material will appear along with the learning video that can be accessed directly. In addition, there are details of the time or duration of learning in each learning sub-chapter, so that users can access directly according to their learning goals at that time.

e) Leaderboard

The next menu is a leader board that can be accessed by users after completing one learning session along with the quiz provided. On this page, students are placed in a certain order of ranking in the office management learning system according to the results of the quiz scores completed.



| Ranking | User | Points | Action |
|---------|--------------------------|--------|--------|
| 6 | Syhabul Anwar Aziz (You) | 30008 | |
| 1 | Jacob Jones | 32342 | |
| 2 | Jane Cooper | 32340 | |
| 3 | Leslie Alexander | 32301 | |
| 4 | Eleonor Pena | 32103 | |
| 5 | Brooklyn Simmons | 30271 | |
| 6 | Syhabul Anwar Aziz (You) | 30008 | |
| 7 | Alexander Thomas | 30000 | |
| 8 | Eric Christopher | 29645 | |

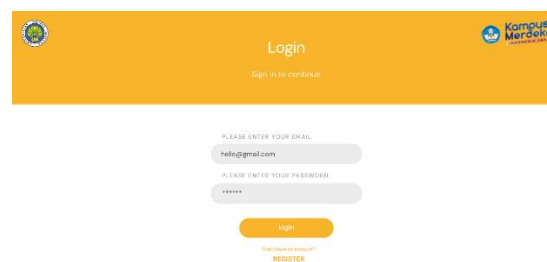
The ranking of students who use this learning system will be displayed in the leaderboard menu. The rankings are sorted by the value of users who have completed quizzes and learning sessions.

iii. User accounts

There is a login and register page in this system as usual. The register page is intended only for potential users who have not registered at all on the system. After the user registers for an account, they can immediately log in to the account on the system login page.

a) Login

This login page can be accessed by users who have registered an account or subscribed. The following is what the login page of the office management learning system looks like.



Login
Sign in to continue

PLEASE ENTER YOUR EMAIL
hello@gmail.com

PLEASE ENTER YOUR PASSWORD

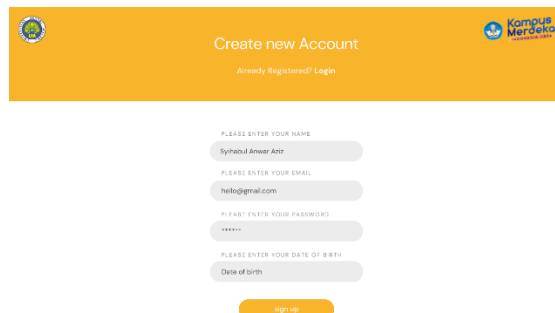
Login

Don't have an account?
REGISTER

On this login page, users can enter the email and password that have been registered on the register page. If not, then the user will be redirected to the register page.

b) Register

The page for registering for potential users can be done on the register page. The following is a list page view on the office management learning system.



On this register page, users are asked to enter data in the form of user names, emails, passwords, and dates of birth. After the registration is successfully carried out, users can log in and enjoy learning sessions in the system.

Discussion

The development of this office management learning system is then validated by media experts and material experts. The following are some tables outlining the validation results from experts.

Expert validation

The first validation is carried out by media experts, where the indicators assessed consist of indicators of ease of use and presentation of the media. The following is a table of media expert validation results.

The indicators carried out in the validation of media experts consist of indicators of ease of use and presentation of media. Meanwhile, the indicators of material expert validation assessment are seen in terms of the usefulness and presentation of the material. The scoring based on this indicator follows the calculation of the Likert scale. This Likert scale consists of 5 scoring scores namely: a score of 5 for excellent grades, 4 for good grades, 3 for sufficient grades, 2 for less grades and 1 for very less grades. The following is a table of validation results by media experts.

Table 1: Media expert validation results

| No | Indicators | Statement | Score | | | | |
|----|------------|---|-------|---|---|---|---|
| | | | 5 | 4 | 3 | 2 | 1 |
| 1 | Ease | a. Ease of menu access | ✓ | | | | |
| | | b. Ease of entering data | ✓ | | | | |
| | | c. Ease of editing data | | ✓ | | | |
| | | d. Ease of operation | ✓ | | | | |
| 2 | Serving | a. Suitability of writing | ✓ | | | | |
| | | b. Color and typeface suitability | ✓ | | | | |
| | | c. Suitability of the image | | ✓ | | | |
| | | d. Accuracy of menu arrangement | ✓ | | | | |
| | | e. Linkages between menus | ✓ | | | | |
| | | f. Suitability of icon function | ✓ | | | | |
| | | g. Clarity of the flow of the use of learning media | | ✓ | | | |
| | | h. Menu completeness | ✓ | | | | |

Based on the validation results of the media expert, a score was obtained for the ease of use indicator of 19. Based on the Likert scale, the scores obtained in this media expert validation are excellent and ready to be tested.

The subject of the material expert trial is a validator with the ability and expertise in the field of office management. The following is a table of expert validation results of office management learning system materials.

Table 2: Material expert validation results

| No | Indicators | Statement | Score | | | | |
|----|------------------------------|--|-------|---|---|---|---|
| | | | 5 | 4 | 3 | 2 | 1 |
| 1 | Uses | a) Compliance with graduate learning outcomes standards | ✓ | | | | |
| | | b) Learning activities using media can improve the competence of students | ✓ | | | | |
| | | c) The use of learning media can provide opportunities for students to practice indepently | ✓ | | | | |
| | | d) Learning media can support learning activities | ✓ | | | | |
| | | e) Learning media is easily accessible | | ✓ | | | |
| 2 | Presentation of the material | a) Comformity of the material with learning objectives | ✓ | | | | |
| | | b) Conformity of contents with menus and needs | | ✓ | | | |
| | | c) Compatibility of learning media with material | ✓ | | | | |
| | | d) The language used in the learning media is appropriate | ✓ | | | | |
| | | e) The language used in learning media is easy to understand | ✓ | | | | |

The second validation is carried out by material experts using assessment indicators in terms of usefulness and presentation of the material. Based on the results of the validation of the material expert, it can be seen that the score obtained is 24 in terms of usefulness and in terms of presenting the material. It can be concluded that the material or content contained in the learning system is reported to be very worthy / good to be tested.

The validation results of the material experts and media experts were then recapitulated to determine the percentage of feasibility or quality of the office management learning system. The following is a table of recapitulation of the validation results of media experts and material experts.

Table 3: recapitulation of expert validation results

| No | Indicator | Media Expert | Material Expert |
|---|--------------------------|----------------------------------|----------------------------------|
| | | Total Score | Total Score |
| 1. | Convenience | 19 | - |
| 2. | Presentation | 38 | - |
| 3. | Uses | - | 24 |
| 4. | Presentation of Material | - | 24 |
| Total (Σx) | | 57 | 48 |
| Percentage ($(\Sigma x / \Sigma i \times 100\%)$) | | 95% | 96% |
| Description | | Very Valid/ Very Eligible | Very Valid/ Very Eligible |

Based on the results of expert validation and the results of hypothesis testing that have been carried out, it can be seen that the development of an office management simulation learning

system can improve the quality of office management simulation learning that is integrated with the curriculum and industry needs.

Learning that is integrated with a curriculum that is in line with industry needs is very much needed to improve the quality of learning. This is also supported by the statement [36] which explains that practicum teaching materials in SMK are very limited, especially if they are requested with integrated basic competencies that are in accordance with the work requirements in the office. In the office sector, the implementation of tasks uses the full competence of office employees. As with correspondence duties, the competencies that must be possessed and mastered by office employees are filing competence, computer operation competence, and general administration competence.

While the results of previous studies (Wardani, 2021) are known to improve the quality of learning by using the system. The increase in learning is high because it can optimize various types of intelligence possessed by learning participants, including spatial intelligence, logic, and language, kinetic, even to certain limits in optimizing emotional intelligence. Using the system can provide a phenomenal change in the learning process because it can create a comfortable and fun learning process. The findings in the study there is an increase in the quality of office management learning outcomes seen from the value on the expert validation test.

Business operations and management depend on the quality of human resources in the office management process. An organization in which there is always a decision making either structured (structured decision), half-structured (semi-structured decision), or unstructured (unstructured decision). Decision making will not be hampered if the knowledge and skills possessed by human resources in the organization are of high quality. Quality improvement can be proven by the application of the use of learning media in the form of an integrated system with the campus curriculum and industrial needs.

The success of this research finding is then followed up on the plan for the next research process, namely the dissemination of research products to reach users in several target schools. In accordance with the limitations of this study which focuses on certain subjects in SMK.

CONCLUSIONS AND RECOMMENDATIONS

Research on the development of office management simulation learning integrated with the campus curriculum and according to industry needs can improve the quality of learning so as to minimize errors in decision making in organizations. The research is then followed up on further research plans in a wider subject.

REFERENCES

- Abd, M. (2019). Education science paradigm in Indonesia and possible development. *International Journal of Management and Administrative Sciences (IJMAS)*, 6(4), 34-42.
- Adri, M., Hanesman, H., Sriwahyuni, T., & Almasri, A. (2019). Digital Marketing sebagai Metoda Alternatif Wirausaha Bagi Mahasiswa di Universitas Negeri Padang. *Jurnal Teknologi Informasi dan Pendidikan*, 12(2), 68-76.
- Arif, S., & Akram, A. (2018). Transformational leadership and organizational performance: the mediating role of organizational innovation. *SEISENSE Journal of Management*, 1(3), 59-75.
- Ayoko, O. B., & Ashkanasy, N. M. (2020). The physical environment of office work: Future open plan offices. *Australian Journal of Management*, 45(3), 488-506.
- Dewi, S. (2017) "Open Unemployment: The Case in Indonesia" *Journal of Management Partners*, 9(1).
- Eden, C., & Ackermann, F. (2018). Theory into practice, practice to theory: Action research in method development. *European Journal of Operational Research*, 271(3), 1145-1155.
- Hermanto, F. Y., Sutirman, S., Hidayati, B., & Sholikah, M. A. (2019). The need of practical teaching in vocational high school of Automation and Office Management Program. *Jurnal Pendidikan Vokasi*, 9(3), 238-248.
- Ibrahim, S., Abas, N., Hashim, N., & Shawalludin, S. (2021). The infusion speech skeleton application (Apps) concept as a teaching medium for office management & technology (OMT) students. *Advances in Business Research International Journal (ABRIJ)*, 7(2), 61-73.
- Islamiyah, S. D., & Puspasari, D. (2021). Development of OMV Android Applications as Learning Media on Materials for Using Office Technology Class X OTKP 3 at SMK Ketintang Surabaya," *Journal of Office Administration Education*, 9(2).
- Kuswantoro, A., & Ashari, T. N. (2018). Development of Electronic Archive Applications (E Archives) for Learning Office Administration Department. *Lentera Pustaka: Journal of Library, Information and Archives Studies*, 4(1), p. 17.
- Lisnawati, R., & Adman, A. (2019). Pelaksanaan Program Praktek Kerja Industri Dalam Penguasaan Kompetensi Keahlian Administrasi Perkantoran. *Jurnal Pendidikan Manajemen Perkantoran (JPManper)*, 4(2), 264-274.
- Maulidina, M. A., Susilaningsih, S., & Abidin, Z. (2018). Pengembangan Game Based Learning Berbasis Pendekatan Saintifik Pada Siswa Kelas Iv Sekolah Dasar. *JINOTEP (Jurnal Inovasi Dan Teknologi Pembelajaran): Kajian Dan Riset Dalam Teknologi Pembelajaran*, 4(2), 113-118.
- Nafsi, L. L., & Trisnawati, N. (2022). Effectiveness of Using Google Classroom as a Learning Media for Computer Application Courses for Office Administration Education Students, 4(1).
- Nugroho, O. F., Permanasari, A., & Firman, H. (2019). The movement of stem education in Indonesia: Science teachers' perspectives. *Jurnal Pendidikan IPA Indonesia*, 8(3), 417-425.
- Pardjono, P., Sugiyono, S., & Budiyo, A. (2015). Developing a model of competency and expertise certification tests for vocational high school students. *REiD (Research and Evaluation in Education)*, 1(2), 129-145.
- Pfano, M., & Beharry, A. (2016). The effect of modern office technology on management performance: Durban Westville. *Problems and Perspectives in Management*, 14(2), 376-384.

- Prasetyo, B. (2020). Teaching Factory Management in the Industrial Era 4.0 in Indonesia," 12(7).
- Purnama, S. Y., & Wulandari, S.S. (2021). Development of the Office Administration Module on Public Relations and Protocol Administration Class XI APK at SMK Muhammadiyah 1 Lamongan. *Journal of Office Administration Education*, 9(2).
- Putra, D. G., Rahayu, R., & Putri, A. (2021). The influence of Enterprise Resource Planning (ERP) implementation system on company performance mediated by organizational capabilities. *Journal of Accounting and Investment*, 22(2), 221-241.
- Rokhmawati, I. A., & Nugraha, J. (2021). Analysis of the Use Of the Typing Master Application in Students of Office Administration Education at the State University of Surabaya Using TAM. *Jurnal TAM (Technology Acceptance Model)*, 12(2), 90-102.
- Shamsi, R. S. H. A., Ameen, A. A., Isaac, O., Al-Shibami, A. H., & Khalifa, G. S. (2018). The impact of innovation and smart government on happiness: Proposing conceptual framework. *International Journal of Management and Human Science (IJMHS)*, 2(2), 10-26.
- Suputra, I. N., Basuki, A., & Gunawan, A. (2021, November). Design for Cloud Learning Platform Integrated Office Management to Support the Adjustment of the Industrial World During the Covid-19 Pandemic. In *BISTIC Business Innovation Sustainability and Technology International Conference (BISTIC 2021)* (pp. 225-232). Atlantis Press.
- Suputra, I. N., Gunawan, A., Basuki, A., & Churiyah, M. (2021, October). Integrated Learning Components of Cloud System-Based Office Administration in Vocational High Schools. In *ISTED 2021: Proceedings of the 1st International Seminar on Teacher Training and Education, ISTED 2021, 17-18 July 2021, Purwokerto, Indonesia* (p. 169). European Alliance for Innovation.
- Susila, G. P. A. J., Suarmanayasa, I. N., & Parma, P. G. (2019, December). The Effect of Training and Work Motivation on Employee Performance. In *International Conference on Education, Social Sciences and Humanities* (pp. 83-85). RedWhite Press.
- Varga, J. (2020). The Labour Market Situation of Young Graduates, Overqualification and the Value of Higher Education Degrees.
- Wibowo, E., & Pratiwi, D. D. (2018). Pengembangan bahan ajar menggunakan aplikasi kvisoft flipbook maker materi himpunan. *Desimal: Jurnal Matematika*, 1(2), 147-156.
- Wijaya, M. O., & Utami, E. D. (2021, November). Determinan Pengangguran Lulusan SMK di Indonesia Tahun 2020. In *Seminar Nasional Official Statistics* (Vol. 2021, No. 1, pp. 801-810).
- Yasni, E. (2018). Efforts and Creativity of Educators in Creating Innovation Models and Learning Media in the Era of the Industrial Revolution 4.0," *Proceedings of the National Seminar on Office Administration Education (SNPAP)*, p. 7.
- Yolanda, I., Ngadiso, N., & Sumardi, S. (2018). Writing Material for Office Administration Study Program in Vocational High School: Students'need Analysis. *Journal of English Education*, 3(2), 89-99.
- Younas, W., Farooq, M., Khalil-Ur-Rehman, F., & Zreen, A. (2018). The impact of training and development on employee performance. *IOSR Journal of Business and Management (IOSR-JBM)*, 20(7), 20-23.