

Development of Edutech Startup Learning Kit Industry Lab Integrated Cloud Learning in Learning Practicum SMK and Higher Education Based on Partnership Sharing System in Indonesia

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Abstract. The purpose of this business development is to optimize the position of state university of Malang as one of the existing education meccas in Indonesia, which can provide standardization and optimization of vocational education and higher education, so that the direct impact of this goal is the commercialization of business in the field of specialization, namely education management and becoming income-generating which exists as a supporter of the status of PTNBH State University of Malang. The urgency of this business development in the long term is to increase and develop the capabilities of prospective workers in order to compete according to the needs in the industrial world, and also the need to create a sustainable education environment that can be in accordance with the needs of the times. The stages of business development are Ideating, Concepting, Committing, Validating, Scaling, Establishing. The results of this study are in the form of a website that is integrated with office practicum material as a learning KIT and improving the quality of learning as a role to improve the competence of prospective workers.

Keywords: Edutech · Startup Learning Kit Industry Lab · Cloud Learning · Partnership Sharing System

1 Introduction

Learning in Indonesia at the upper middle to tertiary level adheres to a major system in accordance with the interests and abilities of students [1]. In Indonesia there are 29,413 higher education study programs and majors at SMK, with 21% in the field of education, statistics is also divided into 18% are sciences in engineering and 15% in the fields of social sciences, the rest are in the fields of health, economics, agriculture, mathematics, humanities, and arts [2]. Based on these data, more than 70% have their own specialization in science and carry out various practicums in their learning activities [3]. However, this is inversely proportional to the quality of practicum learning in Indonesia, based on existing data, the quality of practicums and laboratories in Indonesia is still quite lagging behind the development of its own industry [4], case examples in agricultural learning that still use traditional learning practicum [5], the field of business management that still uses case studies and learning that is not in accordance with the implementation practicum in Industry [6], the field of engineering in the Informatics curriculum that is not in accordance with the current needs of the industry [7]. If this problem is not addressed immediately, there will be a mismatch of educational output with future needs, which has a long-term impact on unemployment [8].

The impact of this is proven based on data from BPS, the unemployment rate of VOCATIONAL SCHOOLS is the highest reaching 11.13% [2]. Another data released by Willis Tower Watson, in Indonesia 8 out of 10 companies have difficulty finding university graduates who match their capabilities, this is because university graduates do not have the fit and suitable skills needed by the company [9]. The solution provided at the high school level is in the form of media development from academics [10] which still has many shortcomings, such as limited resources, and media that cannot develop *up to date* with the rapid development of the times and the absence of standardization of industrial development [11].

Based on this, researchers have carried out product development in the previous year through KBK research on the researcher's focus area on business and management learning, especially in the Office Management department. The results of the research were continued in the form of a business process of learning to user vocational schools and were successfully carried out at the SMK and Higher Education levels commercially which were already used by 300 users in East Java. Based on these problems, researchers see opportunities for developing the education and technology business in the field of learning practicum in SMK and Higher Education more broadly in various fields in collaboration with experts in their fields.

The purpose of this business development is to optimize the position of State University of Malang as one of the existing educational meccas in Indonesia, which can provide standardization and optimization of vocational education and higher education, so that the direct impact of this goal is the commercialization of business in the field of specialization, namely education management and becoming an existing income-generating as a support for the status of PTNBH State University of Malang. The urgency of this business development in the long term is the improvement and development of the capabilities of prospective workers [12] in order to compete according to the needs in the industrial world [13], and also the need to create a sustainable education environment that can suit the needs of the times [14].

2 Literature Review

2.1 Digital Practicum Development

The development of practicum and digital learning has been widely carried out in various researches and various fields of education. Research in the field of mathematics and natural sciences is carried out in the development of a digital practicum module based on the nature of science with the results of research on the application of basic chemistry practicum with excellent categories at the higher order thinking skills level [15]. The

development of digital practicum in the field of engineering and education is research on the development of digital modules of computer graphics practicum, with the results of the development of digital textbooks based on digital practicum in the theme of graphic techniques on digital imaging with the results of validation of expert assessments in the media [16]. Research on the development of digital practicum in the field of physics, one of which is the creation of a digital practicum of Free Fall motion with the results of research 86% of students agreed that learning is more interesting [17].

2.2 Industrial Learning in Schools

Research on school learning carried out and developed industry-based has been carried out a lot, preliminary research has been carried out on changes made by educational institutions in responding to the challenges of industry 4.0 with the results of research on the development of very high soft skills skills, global thinking, media and information literacy is very important and the development of STEM curricula and refers to ICT-based learning, big data, and entrepreneurship [21]. Industrial learning today is closely related to the technology developed, research on mobile learning teaching materials in technology learning in facing industrial challenges is carried out with technology-based learning outcomes that are able to improve student learning achievement in Indonesian subjects that are adapted to industrial practice [22].

Other industrial learning development research is the development of jobsheets based on industrial practices in the field of engineering with the results of research on the high validity of work practices carried out and the increase in value and media that have high effectiveness in accordance with the industrial world [23]. There are a lot of industrybased learning developments that have been carried out in various fields of education, but the focus of learning is only to improve technical skills from the use of learning media [24], not yet focusing on practicums that are directly related to industry that are needed in future learning development [25]. The current need is the development of learning media that can adapt to the needs of the industry in the field, not only changes in terms of technology in media but also in the fundamentals of existing learning.

2.3 Edutech Startup Development in the Field of Practicum

Educational business development focuses on 3 main things in the field of education, namely cognitive, affective, and psychomotor [26]. In practicum education based on the psychomotor abilities of users, there are many businesses that have been developed, such as the Institution owned by Sertifik asiku [27], which is an institution that provides paid training with the target of people who will carry out official professional certification programs from BNSP, from various fields ranging from engineering, social, to professional at an advanced level. Another institution in the development of personal skill-based education is the Skill Academy from Ruangguru [28] which is the business development of the parent Ruangguru, the Skill Academy focuses on developing skills in general and can be chosen by users in developing skills according to interests and abilities, this institution is trusted by the government in managing Pre-Employment Card training on an ongoing basis [29].

Other business developments that have been carried out are in institutions such as Hacktiv, Purwadhika, Dibimbing, and Dicoding, all of these institutions focus on developing soft-skills and hard-skills in the field of programming with industry-based curricula such as Google, Tokopedia, and Gojek [30]. The development of skills and skills by adjusting to the current industrial era 4.0 is certainly very good and indeed in accordance with the needs, but there are many obstacles in reaching the training, especially in the lower middle segment which cannot reach these costs. In addition, the existing skills are still in the focus of the scope of technology and some social skills.

2.4 Previous Research by Researchers

Researchers have conducted research on the development of digital practicum learning media, the author's research includes the development of cloud learning in office administration practicum learning during the pandemic to support industrial world output [31], and similar research on the development of cloud learning-based integrated components in smk practicum learning that are successfully applied and increase industrial-scale understanding in students [32], The results of this study were successfully commercialized by the development team in the Even Semester 2 school year in 2021–2022 in several schools and colleges with more than 300 users.

Another research that has been carried out is the development of a website-based practicum on business learning and management with the results of research on the management of digital business correspondence can improve learning outcomes and increase the effectiveness of the learning process [33]. Another previous research is to develop a digital model practicum in the supply management learning process, with the results of research digital practicum modules can improve learning outcomes and be able to help the learning process become more effective [34]. Based on previous research conducted by researchers, it shows the development needs and business opportunities that exist in the field of improving the quality of vocational and vocational education through increasing standardization in direct cooperation with educational institutions and the government.

3 Method

3.1 Business Implementation Methods

In the business development process carried out by developers using the startup development phases system [35], the stages of business development that will be used are in Fig. 1.

The startup development phases consist of 6 main stages, which will be explained as follows:

A. Ideating, at this stage the process of identifying market needs and identifying existing solutions and product market fit in the early stages is carried out to find process needs market analysts that can be used in the formulation of business ideas and at this stage is expected to produce an operational design seminar that will be used in business planning, this stage is carried out in the first month of program implementation [35].



Fig. 1. Startup development phases

- B. Concepting, at this stage the product will be updated in accordance with market conditions and the existing product will be developed and can produce an initial stage MVP product that will be carried out by a market fit product [35] and from these results a marketing strategy planning process will be carried out. The marketing strategy used consists of 3 large stages starting from explore consisting of segmenting, targeting, and positioning, with the second stage being engage by utilizing sales actions, marketing mix, and product and market differentiation [37]. In the third stage of the marketing strategy used, namely the execute stage where at this stage the optimization of brand, service, and process [38], this stage is carried out in the first month of program implementation [39].
- C. Committing, is the third stage in the development of business implementation, the formation of a professional team commitment will be carried out, and at this stage the product will be prepared to be able to scale up the product, this stage is expected to produce a marketing team, publication team, sustainable business partnerships, social media, and exhibitions in preparation for promotion and further market validation of the product [39]. At this stage, the development of the digital marketing team. In the formation of a digital-based marketing team, the team consists of several divisions such as content marketing managers, inbound marketing managers, search engine marketers, SEO Specialists, and social media managers [40]. It is hoped that the formation of this marketing team can help prepare for product scale up at various stages next.
- D. In the fourth stage, namely validating, this stage is a stage of business development that has increased, with production carried out on the scale of market demand, validation of final-stage market fit products, and early stage commercialization carried out, with the hope of producing massive production outputs, validation of final stage market fit products, product sales, and feasibility study documents can be produced and digital product certified standardized from product certification bodies international [41] can be carried out in the 3–6 months of program implementation.
- E. Scaling, at this stage is the stage after large-scale and fast business growth has been carried out, at this stage a small-scale market size marketing process is carried out, and product updates according to user inputs are carried out, at this stage further

production is carried out according to the market [42], marketing expansion, and product promotional videos will be carried out at this stage which will be carried out in months 6–8.

F. Establishing, at this stage the expansion of the market will be carried out and target the target of getting pre-seed funding investment to seed funding, at this stage an evaluation of business development with a business incubator [43] is carried out and article publication and final report are also carried out.

3.2 Data Collector Instruments

The data collection instrument is taken from an assessment questionnaire by material experts and media experts. Referring to the Likert Scale, there is a score range of 1-5 for assessment at the time of the validation stage.

- a. Score 5, if the learning medium is very appropriate, very appropriate, and very easy.
- b. Score 4, if the learning media is appropriate, appropriate, and easy.
- c. Score 3, if the learning media is not right, not suitable, and not easy.
- d. Score 2, if the learning media is inappropriate, inappropriate, and not easy.
- e. Score 1, if the learning media is very inappropriate, very inappropriate, and very not easy.

4 Results 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) increasing and developing the capabilities of prospective workers in order to compete with the needs of the industrial world and (2) creating a sustainable education environment that can suit the needs of the times.

4.1 Result

4.1.1 Integrated Office Practicum Website

Based on the development of integrated office practicum website carried out to solve problems in this study, the following is the appearance of the developed website.

A. Homepage

The homepage display of modern vocational learning development products can be accessed through the website that has been developed (Fig. 2).

B. Content Learning Menu

Learning content menu display that presents several areas, namely, accounting, development economics, and introduction to management. The field of learning presented in



Fig. 2. Homepage display



Fig. 3. Conten learning menu

the scope of business and management is in accordance with the upgraded SMK curriculum. The types of learning content in it such as digital books, learning videos, and e-assessments are in the form of case studies that can be completed to support learning outcomes (Fig. 3).

C. About the Product

Integrated learning description display along with the range of research subjects in various regions in Indonesia and the range of numbers regarding website visitors, expert teachers, and others (Fig. 4).



Fig. 4. About and reach product

No.	Indicators	Media Expert	Material Expert
		Total Score	Total Score
1.	Ease	19	-
2.	Serving	38	-
3.	Uses	-	24
4.	Presentation of Material	-	24
Sum (S x)		57	48
Percentage (($\Sigma x / \Sigma i \times 100\%$)		95%	96%
Information		Very Valid/ Very Worthy	Very Valid/ Very Worthy

 Table 1. Expert validation result recapitulation table

4.2 Expert Validation

The presentation of the table of validation results by material experts and media experts is presented in the form of a recapitulation Table 1.

Based on the validation results of media experts, the percentage of feasibility and validity of 95% is very feasible to be used in improving the quality of office management learning. Likewise, for the validation results from material experts of 96% it is very feasible.

4.3 Comparison of Similar Research Results and Research Follow-Up

The results of the research by [16] are known to be very helpful for students' understanding of practical material. Supported by the theory that the alignment of learning at the level of practice adjusted to the curriculum construct is the first focus of completing 'homework in the field of education. Curriculum Policy should elaborate learners' abilities on pedagogic dimensions, life skills, the ability to live together (*collaboration*), and critical and creative thinking. Promoting 'soft skills' and 'transverse skills', life skills, and skills that are not visibly related to a particular field of work and academia. However, it is of widespread benefit to many job situations such as critical and innovative thinking skills, interpersonal skills, globally-minded citizens, and existing media and information literacy.

In accordance with the objectives of this development research, that the environment of sustainable education in accordance with the times is preceded by curriculum improvement. The curriculum must refer to learning in information technology, the internet of things, big data and computerization, as well as entrepreneurship and internships. This needs to be a mandatory curriculum to produce skilled graduates in aspects of data literacy, technological literacy and human literacy [21].

Indicators of the capabilities or abilities of prospective workers are seen from various aspects, namely: 1) communication, 2) hard skills, 3) soft skills, and 4) leadership. These aspects are obtained from school education, especially if SMK then more aspects will be used for direct practice. Effective learning that can be used to achieve the goal of capability development is learning by using media that is integrated with industry needs according to the times.

The success of this research discovery is followed up in the next research process plan, namely the implementation process, system upgrade and marketing of massive dissemination of research products. In accordance with the limitations of this study which focuses on certain subjects in SMK.

5 Conclusion

Research on the development of the edutech startup learning kit industry lab can produce learning practicum website products that are integrated into integrated vocational learning based on the stages used starting from ideating, concepting, committing, validating, scaling, and establishing. With the results of media and material validation carried out, it is suitable for use on product targets, namely vocational schools and higher education.

The process of implementing commercialization activities in a small scope is carried out in the scaling stage, where at this stage a small-scale market size marketing process is carried out, and product updates are carried out according to user input, at this stage further production is carried out according to the market [42], marketing expansion, and video promotion product. The product promotional videos are published on mass media such as You-Tube and TikTok.

The content in the promotional video includes an introduction to product development to the distribution of several book products that have been marketed. This marketing has gone through several stages both aimed at the SMK and tertiary segments according to the field being developed. In accordance with the purpose of this research as supporting the status of PTNBH State University of Malang, it has generated income-generating from the research products that have been developed.

Suggestions for further research are to carry out marketing implementation on a larger scale stage that leads to investor funding. In addition, the focus of the topic areas developed for the product is also further expanded in several areas of vocational schools and higher education.

References

- 1. Ministry of National Education, "Law on the Education System National." Republic of Indonesia, 2003.
- 2. B. Center for Statistics, "Indonesian Vocational Education Data." Central Bureau of Statistics, 2021.
- 3. E. P. Disas, "Link and Match as a Policy of Vocational Education," JPP, vol. 18, no. 2, pp. 231–242, Sep. 2018, doi: https://doi.org/10.17509/jpp.v18i2.12965.
- H. Hill and T. K. Wie, "Indonesian universities in transition: catching up and opening up," Bulletin of Indonesian Economic Studies, vol. 48, no. 2, pp. 229–251, Aug. 2012, doi: https:// doi.org/10.1080/00074918.2012.694156.
- M. A. Baker, J. C. Bunch, and K. D. Kelsey, "An Instrumental Case Study of Effective Science Integration in a Traditional Agricultural Education Program," JAE, vol. 56, no. 1, pp. 221–236, Mar. 2015, doi: https://doi.org/10.5032/jae.2015.01221.
- E. Simangunsong, "FACTORS DETERMINING THE QUALITY MANAGEMENT OF HIGHER EDUCATION: A CASE STUDY AT A BUSINESS SCHOOL IN INDONESIA," CP, vol. 38, no. 2, pp. 215–227, Jun. 2019, doi: https://doi.org/10.21831/cp.v38i2.19685.
- 7. B. Wibawa and R. Situmorang, "USING PROBLEM-BASED LEARNING TO TEACH SOFTWARE MODELING IN INFORMATION TECHNOLOGY COLLEGES IN INDONE-SIA: A CONCEPT," p. 10, 2019.
- 8. M. Regan and B. Roantree, "Born under a bad sign: the consequences of completing education when unemployment is high," p. 13, 2021.
- 9. G. Saville, R. Sobradelo, and W. T. Watson, "The Willis Research Network: bridging the gap between science and practice," p. 1, 2018.
- N. M. Dwijayani, "Development of circle learning media to improve student learning outcomes," J. Phys.: Conf. Ser., vol. 1321, no. 2, p. 022099, Oct. 2019, doi: https://doi.org/10. 1088/1742-6596/1321/2/022099.
- E. M. Meyers, I. Erickson, and R. V. Small, "Digital literacy and informal learning environments: an introduction," Learning, Media and Technology, vol. 38, no. 4, pp. 355–367, Dec. 2013, doi: https://doi.org/10.1080/17439884.2013.783597.
- M. H. Muyia, C. S. Wekullo, and F. M. Nafukho, "Talent Development in Emerging Economies Through Learning and Development Capacity Building," Advances in Developing Human Resources, vol. 20, no. 4, pp. 498–516, Nov. 2018, doi: https://doi.org/10.1177/152342231 8803089.
- E. Pang, M. Wong, C. H. Leung, and J. Coombes, "Competencies for fresh graduates' success at work: Perspectives of employers," Industry and Higher Education, vol. 33, no. 1, pp. 55–65, Feb. 2019, doi: https://doi.org/10.1177/0950422218792333.
- A. Gough, "Working With/in/Against More-Than-Human Environmental Sustainability Education," On Education. Journal for Research and Debate, vol. 1, no. 2, Sep. 2018, doi: https:// doi.org/10.17899/on_ed.2018.2.3.

- N. M. Dinatha and M. Y. Kua, "DEVELOPMENT OF A NATURE OF SCIENCE (NOS)-BASED DIGITAL PRACTICUM MODULE TO IMPROVE HIGHER ORDER THINKING SKILLS (HOTS)," JET, vol. 3, no. 4, p. 293, Nov. 2019, doi: https://doi.org/10.23887/jet. v3i4.22500.
- 16. A. H. Rustaman, M. Iqbal, and W. Amelia, "Development of a Digital Module of Computer Graphics Practicum 1 in Electronic Publication (EPUB) Format to Improve Understanding of Graphic Engineering of Visual Communication Design Students (Topic: Digital Imaging)," Journal of Social Sciences and Education, vol. 3, no. 1, 2019.
- 17. Z. Azhar, "THE MAKING OF DIGITAL PRACTICUM TOOLS ON THE CONCEPT OF FREE FALLING MOTION AS A MEDIUM FOR LEARNING PHYSICS," p. 4, 2018.
- S. Sugianto, A. Fitriani, S. Anggraeni, and W. Setiawan, "Development of Blended Learning-Based Digital Microscopes to Improve Student Kinesthetic Physical Intelligence in Plant Anatomy Practicum," JIPS, vol. 1, no. 2, pp. 53– 58, Aug. 2020, doi: https://doi.org/10. 51673/jips.v1i2.320.
- R. Mulya and D. Atmarizon, "APPLICATION OF A VIRTUAL LABORATORY-BASED DIGITAL ELECTRONICS PRACTICUM MODEL IN HIGHER EDUCATION," 9th Applied Business and Engineering Conference, p. 9, 2021.
- 20. M. K. Siahaan, "Preparation of Digital Teaching Materials for Accounting Practicum of Manufacturing Companies," vol. 1, no. 1, p. 11, 2021.
- D. Lase, "Education in the Era of the Industrial Revolution 4.0," SUNDERMANN J. Ilm. Teol. Educators. Hum Science. and Kebud., vol. 12, no. 2, pp. 28–43, Nov. 2019, doi: https:// doi.org/10.36588/sundermann.v1i1.18.
- S. V. Susilo and T. F. Prasetyo, "ANDROID-BASED 2D MOBILE LEARNING TEACHING MATERIALS: A TECHNOLOGY-BASED LEARNING IN THE FACE OF THE INDUS-TRIAL REVOLUTION 4.0," NL, vol. 4, no. 2b, pp. 587–592, Jul. 2020, doi: https://doi.org/ 10.35568/naturalistic.v4i2b.767.
- 23. M. Sabri, "Industrial-Based Jobsheet Development in Industrial Electrical Installation Practice Courses," p. 4.
- 24. M. Ally, "Competency Profile of the Digital and Online Teacher in Future Education,"IRRODL, vol. 20, no. 2, Apr. 2019, doi: https://doi.org/10.19173/irrodl.v20i2.4206.
- V. D. Sekerin, L. M. Gaisina, N. V. Shutov, N. K. Abdrakhmanov, and N. E. Valitova, "Improving the Quality of Competence-Oriented Training of Personnel at Industrial Enterprises," QUALITY MANAGEMENT, vol. 19, no. 165, p. 6, 2018.
- T. Supartini, I. Th., H. Wijaya, and H. Helaluddin, "Development of Learning Methods through Songs and Movements to Improve Children's Cognitive and Psychomotor Aspects," EURO-PEAN J ED RES, vol. 9, no. 4, pp. 1615–1633, Oct. 2020, doi: https://doi.org/10.12973/eujer.9.4.1615.
- S. Khairani, D. P. Kesuma, A. Arisman, N. Artina, and K. Sugara, "Training On The Compliance Of Alumni Of Student Accounting STIE MDP Regarding Online Accurate Certification" vol. 1, no. 2, p. 10, 2022.
- F. D. Zhidane, "Effect Of Perception Of Benefits On Interest In Using Academy Skill By Ruangguru (Study Case Of Jakarta State University Students)," p. 9, 2020.
- 29. Y. Consuello, "Analysis Of The Effectiveness Of Prakerja Card In The Middle Of Pandemic Covid-19," vol. 4, no. 1, p. 8, 2020.
- 30. J. Aprilia, I. Yuni, and Fivanda, "The Application of Dynamic and Fun Concept in Purwadhika Startup and Coding School Interior Design:," presented at the The 2nd Tarumanagara International Conference on the Applications of Social Sciences and Humanities (TICASH 2020), Jakarta Barat, Indonesia, 2020. doi: https://doi.org/10.2991/assehr.k.201209.037.
- I. N. Suputra, A. Basuki, and A. Gunawan, "Design for Cloud Learning Platform Integrated Office Management to Support the Adjustment of the Industrial World During the Covid-19 Pandemic," Business and Management Research, vol. 193, p. 8, 2021.

- 32. I. N. Suputra, A. Gunawan, A. Basuki, and M. Churiyah, "Integrated Learning Components of Cloud System-Based Office Administration in Vocational High Schools," presented at the Proceedings of the 1st International Seminar on Teacher Training and Education, ISTED 2021, 17–18 July 2021, Purwokerto, Indonesia, Purwokerto, Indonesia, 2021. doi: https:// doi.org/10.4108/eai.17-7-2021.2312152.
- A. Basuki, M. Churiyah, B. A. Dharma, D. A. Sakdiyyah, and V. N. Machabbatulillah, "Website-Based Digital Correspondence Application Design for Office Administration Education Students," Business and Management Research, vol. 193, p. 9, 2021.
- 34. B. A. Dharma, A. W. Primandika, M. Churiyah, and M. Arief, "Development of Inquiry-Based Practicum Module on Supply Management Course to Strengthening Students Self Regulated:," presented at the The Fifth Padang International Conference On Economics Education, Economics, Business and Management, Accounting and Entrepreneurship (PICEEBA-5 2020), Padang, Indonesia, 2020. doi: https://doi.org/10.2991/aebmr.k.201126.040.
- 35. J. Bosch, H. Holmström Olsson, J. Björk, and J. Ljungblad, "The Early Stage Software Startup Development Model: A Framework for Operationalizing Lean Principles in Software Startups," in Lean Enterprise Software and Systems, vol. 167, B. Fitzgerald, K. Conboy, K. Power, R. Valerdi, L. Morgan, and K.-J. Stol, Eds. Berlin, Heidelberg: Springer Berlin Heidelberg, 2013, pp. 1–15. doi: https://doi.org/10.1007/978-3-642-44930-7_1.
- P. Kotler and D. H. Hooi, MarkPlus Inc: Winning the Future Marketing and Entrepreneurship in Harmony. WORLD SCIENTIFIC, 2021. doi: https://doi.org/10.1142/11862.
- P. Kotler, H. Kartajaya, and I. Setiawan, "Marketing 3.0: From Products to Customers to the Human Spirit," in Marketing Wisdom, K. Kompella, Ed. Singapore: Springer Singapore, 2019, pp. 139–156. doi: https://doi.org/10.1007/978-981-10-7724-1_10.
- P. Kotler, H. Kartajaya, H. D. Huan, and S. Liu, "Rethinking Marketing: Sustainable Marketing Enterprise in Asia," p. 40.
- F. Dobrigkeit, D. de Paula, and M. Uflacker, "InnoDev: A Software Development Methodology Integrating Design Thinking, Scrum and Lean Startup," in Design Thinking Research, C. Meinel and L. Leifer, Eds. Cham: Springer International Publishing, 2019, pp. 199–227. doi: https://doi.org/10.1007/978-3-319-97082-0_11.
- E. Tariq, M. Alshurideh, I. Akour, and S. Al-Hawary, "The effect of digital marketing capabilities on organizational ambidexterity of the information technology sector," https://doi.org/ 10.5267/j.ijdns, vol. 6, no. 2, pp. 401–408, 2022, doi: https://doi.org/10.5267/j.ijdns.2021. 12.014.
- A. Sree-Kumar, E. Planas, and R. Clarisó, "Validating Feature Models With Respect to Textual Product Line Specifications," in 15th International Working Conference on Variability Modelling of Software-Intensive Systems, Krems Austria, Feb. 2021, pp. 1– 10. doi: https:// doi.org/10.1145/3442391.3442407.
- R. K. Gupta, S. Jain, B. Singh, and S. K. Jha, "Key Factors in Scaling up Agile Team in Matrix Organization," in Proceedings of the 12th Innovations on Software Engineering Conference (formerly known as India Software Engineering Conference), Pune India, Feb. 2019, pp. 1–5. doi: https://doi.org/10.1145/3299771.3299793.
- P. A. Kapyrin, M. M. Shailieva, and E. A. Golubovskaya, "Establishing University Technoparks as Environment for Student Start-ups: Need Analysis," in 2021 5th International Conference on Education and E-Learning, Virtual Event Japan, Nov. 2021, pp. 209–216. doi: https://doi.org/10.1145/3502434.3502479.

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