

-RESEARCH ARTICLE-

THE ROLE OF PERFORMANCE AND NEW SERVICES DEVELOPMENT ON SUSTAINABLE COMPETITIVE ADVANTAGE IN INDONESIAN PRIVATE UNIVERSITIES

Suwarno*

Faculty Economic and Business,
University Bengkulu, Indonesia

*Correspondent Author

Email: suwarnobengkuluu@gmail.com

<https://orcid.org/0000-0002-9385-8326>

Kamaludin

Faculty Economic and Business,
University Bengkulu, Indonesia

E-mail: kamaludin@unib.ac.id

<https://orcid.org/0000-0002-0737-3251>

Slamet Widodo

Faculty Economic and Business,
University Bengkulu, Indonesia

E-mail: swidodo@unib.ac.id

<https://orcid.org/0000-0002-7277-1811>

Rina Suthia Hayu

Faculty Economic and Business,
University Bengkulu, Indonesia

E-mail: rinahayu5515@gmail.com

<https://orcid.org/0000-0001-6771-3177>

Citation (APA): Suwarno., Kamaludin., Widodo, S., Hayu, R. S. (2021) The Role of Performance and New Services Development on Sustainable Competitive Advantage in Indonesian Private Universities. *International Journal of eBusiness and eGovernment Studies*, 13(1), 117-141. doi:10.34111/ijepeg.202113106

–Abstract–

The purpose of this study is to determine the effect of performance on the development of new services in private universities in Indonesia. Secondly, the influence of performance on sustainable competitive advantages in private universities in Indonesia. Thirdly, the influence of new services development on sustainable competitive advantages in private universities in Indonesia. Fourthly, whether new services development mediates the effect of performance on sustainable competitive advantages in private universities in Indonesia. The sample population for this study are individual respondents or students who are active in the 10 best private universities in Indonesia according to the results of the July 2020 edition of Webometrics. Using purposive sampling technique, 400 students were selected as sample of the study. The collected data is then analysed by adopting the Structural Equation Modelling (SEM) approach using LISREL software. The findings of the study indicate that performance has a significant effect on new services development and sustainable competitive advantages in Indonesian private universities. Similarly, the new services development is found to have a significant effect on sustainable competitive advantages. Finally, the study also finds a significant indirect effect of performance on sustainable competitive advantages through new services development in private universities in Indonesia.

Keywords: new services development; performance; marketing innovation, private universities.

JEL Classification: M31

1. INTRODUCTION

Competitive advantage is a dynamic process that is not only seen as the end result, this is because competitive advantage is a result of the diverse range of activities carried out by companies in designing, producing, marketing, delivering and supporting their products. This means that the company's competitiveness is rooted in the company's ability to continue grow and develop by using internal resources, including support from company leaders, financial strength, internal motivation to develop strengths, and innovations that are continuously created and offer a competitive edge in market (Andriyanto et al., 2019).

Sound strategic planning carried out by an individual company can help create a competitive advantage for that company. Good strategic planning is an important factor to consider for companies operating in a given market climate. Excellence can be achieved if the company is able to explore the company's strengths that are not owned by competitors (Fred R. David, 2015). A persistent strategy makes it necessary to facilitate scientific verification of the credibility of a particular strategy. The core concept

of strategic management is strategy itself, and as noted in earlier studies, strategic decisions affect the way organizations will respond to their environment and any changes therein (Walsh et al., 2017).

Business-level strategy pays attention to how each company's business will be conducted. It is important to maintain a competitive advantage for each business unit. At this level, emphasis is placed on integrating the company in functional activities to achieve the desired competitive competencies (Fred R. David, 2015). Another important success factor is the complexity of the new service. New service complexity refers to how complex the service processes, systems and technologies being used are. Incremental and radical innovation can result in highly complex or simple service innovations. Some of the market-related success factors when introducing new services are competitiveness, market attractiveness, and suitability of customer needs. Competitiveness refers to how strongly the new service competes with similar services offered by other service providers (Mahdi et al., 2019). This implies that radical service innovations are more influenced by competitive conditions as firms put their time and effort into developing new radical service innovations only to be able to easily compete with other firms developing similar services soon after (Bustinza et al., 2019).

Another success factor is the attractiveness of the market and the suitability of customer needs. It refers to the potential for the service to generate demand in a market or market size. Appropriate customer requirements refer to the ability of the service to solve specific customer problems and needs (Porral et al., 2017). The fact that incremental service innovation uses existing services and resources also implies the possibility of offering new services to existing customer markets, which easily demonstrates the value of new service offerings. Correspondingly, incremental service innovation can easily continue successfully as long as customers know the value they are getting as it is not easy for customers to switch service providers due to the costs and potential delays in obtaining them (Bustinza et al., 2019). Process-related success factors refer to a well-defined service or product development process. Companies that achieve great success in introducing new goods or services use well-defined development processes with gates between each step of the process to ensure new innovations meet the success factors of the company and the market. The above success factors in terms of developing new services or products are taken into consideration when doing this research. It does so by taking the perspective of success factors into consideration when setting the criteria for screening ideas and actually screening ideas for new service concepts (Jones et al., 2018).

Competition in various fields has become a necessity, including competition between universities which is felt to be increasingly widespread. Universities and various departments (study programs) within each year compete to find the best and brightest

students. On the other hand, higher education has undergone an unprecedented fundamental change (Hallström, 2020). Universities are forced to seek multiple sources of income and form partnerships with private companies, as competition increasingly resembles the characteristics of an open market. The World Bank has criticized Indonesia's education budget allocation which is allocated more for teachers than students. Moreover, this condition has not been matched by any improvement in the quality of education in Indonesia (Budiharso et al., 2020).

In 2012, the Ministry of State Secretariat of the Republic of Indonesia mandated universities in Indonesia to implement the Higher Education Quality Assurance System. Article 51 paragraph 2 of the Law clearly states that the Government of the Republic of Indonesia implements a higher education quality assurance system to obtain quality education. In this case, there are at least two quality assurance systems that must be implemented by a higher education institution (university), namely: 1) an internal quality assurance system developed by universities and an external quality assurance system carried out through accreditation (Article 53); 2) The same law in Article 55 paragraph 1, stipulates that the government requires that universities and their study programs must be accredited according to the criteria based on the National Higher Education Standards (SNPT). Based on the Regulation of the Minister of Education and Culture of the Republic of Indonesia Year 2014 concerning SNPT, it is said that the existence and sustainability of higher education institutions in Indonesia is largely determined by how capable the institution is in meeting the various standards above. This is because the government's view is that only higher education institutions that can meet these standards are considered appropriate to carry out their activities in providing various academic services for their stakeholders. Historically, public universities have had a better institutional image than private universities. According to the Regulation of the Minister of Education and Culture of the Republic of Indonesia in 1989, the difference between state universities and private universities lies only in who owns and finances them (Lubis et al., 2020).

In particular, this is a challenge for private higher education institutions, considering that these types of institutions must be relatively independent in providing the various resources needed to ensure that good and adequate academic services are available. Markedly different from state universities which are run by the government, various private universities often experience many difficulties in carrying out their activities, such as recruiting prospective new students, recruiting academic staff (lecturers and other educational staff), providing research funds and community service, providing facilities and infrastructure, adequate learning infrastructure, and so on (Budiharso et al., 2020). Therefore, private higher education institutions need to have a set of management

systems that can ensure their performance is in line with the various requirements of applicable higher education standards.

Currently, the pattern of new services development is not only applied in the business world, but can also be applied in the world of education, such as higher education levels, especially Private Higher Education (PTS). Based on the guidelines issues by the Ministry of National Education of the Republic of Indonesia in 2003, it is clear that universities have the autonomy to manage their own institutions as centers for implementing higher education, scientific research, and community service; paragraph (3) states that universities can obtain sources of funds from the community whose management is carried out based on the principle of accountability public (Silalahi et al., 2018). The implementation of PTS is carried out through a social service agency or foundation that has received recognition from the government. This opportunity is used properly by the community so that private universities are mushrooming everywhere. The problem is, along with the freedom of State Universities (PTN) to open various departments and study programs, the existence of PTS is increasingly threatened and a few PTS have run out of business because they are unable to compete for students.

Through new services development, private universities are required to be able to create an innovation (Bustinza et al., 2019). Innovations that can be done by private universities, such as strengthening Information Technology (IT), or by developing applications that can be accessed by students, for example in terms of filling out KRS, checking KHS, Lecture Schedules, Guidance Schedules, Academic Calendars et cetera that can be accessed by students via their cellphones. The concept of new services development at PTS is carried out still referring to the strategic theme which is in the process of implementing the university's vision, namely high competitiveness. That way, it is expected that PTS will carry out a technology and innovation as well as be able to show organizational performance (performance). This study intends to examine the new services development model which is applied to the 10 best private universities (the number of students is 253,232 people) and in Indonesia the webometrics version. Based on statistics by the Ministry of Research, Technology and Higher Education, in terms of accreditation data for study programs and higher education (APS and APT), there is an increase in APS and APT (both accredited A and accredited C), but there is a decrease in APS for APS type accredited C; this percentage increase may be interesting to explore and study further.

According to Lounsbury et al. (2019), innovation is an almost obligatory survival strategy where technology and innovation are known as important factors in increasing profits, position, and performance for companies in facing market dynamics. By innovating, organizations react to dynamic market changes and to create or maintain competitiveness. Organizations that succeed in creating competitive advantage are

organizations that are able to create innovation and creativity through an effective and planned innovation process (Mahdi et al., 2019). One study conducted by Jones et al. (2018) states that having a competitive advantage means having one or several conditions, including efficiency superiority, quality superiority, innovation superiority and customer response superiority. This competitive advantage must be conveyed to consumers very communicatively, so that there will be no misunderstanding in the future (post-purchase). Misperception of the process of delivering competitive advantage can lead to potential threats to the existence of the company or business itself. Jones et al. (2018) suggests that to achieve this level of superiority (efficiency, quality, innovation, and consumer response), an organization/business must develop appropriate and distinctive competences. Distinctive competences are an outcome of the process of resources and capabilities.

Technology and innovation have been recognized as important factors in enhancing profits, positioning, and performance for companies in the face of complex market dynamics. By innovating, organizations react to dynamic market changes and to create or maintain competitiveness. Therefore, PTS needed new ways or strategies of creating and producing new products or making improvements (tangible or intangible) by increasing the creative abilities of PTS employees or members of the organization. Leaders play an active role in realizing focus, creating a conducive environment, and stimulating the creativity of their employees. In an organization, innovation begins with intelligent individuals who have a "sense" to find new needs who then create or improvise into new methods, processes and resources to meet these new needs (Popa et al., 2017). At this time, the stakeholders (i.e. students, users and alumni) of PTS are the millennial generation who need PTS to be creative in carrying out the teaching and learning process. PTS are currently competing and are required to make innovations to maintain and gain stakeholders (students, users, and alumni). In addition to this phenomenon, in this study, the researcher makes a notable contribution, namely the development of a model of the influence of marketing stimuli factors (technology and innovation) on the selection of PTS which can be used as the basis for making decisions on PTS marketing strategies.

2. LITERATURE REVIEW

2.1 Sustainable Competitive Advantages (SCA)

Sustainable competitive advantage shows the efforts made by a company/organization in the long term that helps it to maintain a competitive advantage position in an industry. In discussing the Sustainable Competitive Advantage, an explanation of Competitive Advantage is needed which means the advantages achieved through strategies to increase the use value (or utility) of an item or service to consumers. It can also be

interpreted as something that competitors do not have, doing something better than other companies or being able to do something that other companies cannot do (Walsh et al., 2017). Competitive Advantage has a close relationship with Strategic Management, i.e. with how the company gains and maintains the advantages it has. Competitive advantage is an advantage over competitors that is obtained by offering consumers greater value than competitors offer, as well as through a distinction as to what one company has and other companies do not (Fred R. David, 2015).

Enterprises' fundamental competitiveness provides them with a long-term competitive advantage. According to Mahdi et al. (2019), there are two types of factors that determine an enterprise's sustainable competitive advantage: one is the difference and imitation of ability and knowledge, and the other is the irreplaceability of resources, ability, and knowledge. Sustainable competitive advantage is characterized by two traits that are necessary. One is "dynamic," which means that long-term competitive advantage is not static and unchangeable, and there is no advantage that can be replaced over time if it is sustained. No matter what type of market organization structure is in place, competitive advantage is only transient and conditional in character. "Continuity" is the second concept. The accumulation of relative competitive advantage over a lengthy period of time can result in the formation of absolute competitive advantage. Absorptive capacity theory investigates into how companies can acquire and maintain their sustainable competitive advantage from the perspective of learning ability. It focuses on the company's external resources without being in conflict with resource-based theories, and represents a branch of management theory (Kong et al., 2021).

2.2 New Services Development (NSD)

New service development is a relatively new area of research when compared to new product development. There are particular challenges in managing the development of new services. The need for a well-structured service development model is a requisite factor for a successful service launch. However, several studies (Gumanti et al., 2017) show that the majority of service companies do not have or use informal processes to develop service products. The processes of service development and product development clearly have similarities but with different relative importance of each (sub)activity (Gumanti et al., 2017). Innovation and service quality ranks third in importance for service companies. Bustinza et al. (2019) state that many organizations use new product development models for the development of new services and thus the possible points of failure as services have inherent differences with products must be considered during the design stage. (Gumanti et al., 2017) puts it another way by stating that as services differ from goods in a number of important ways, this distinction presents specific challenges for service developers.

It bears to note that the range of services available is too diverse, however, for a meaningful analysis of the entire service sector, according to service scholars: without a clear understanding of the differences and similarities between service types, it is difficult to apply knowledge gained from one service type to another (Bustinza et al., 2019; Li et al., 2019). The research reveals that different types of services confront different marketing and management issues. In spite of findings suggesting that certain NSD practices may be specific to particular types of services, and that service characteristics are important determinants for managing NSD projects, differences between types of services have received relatively little attention in NSD research to date (Kong et al., 2021).

2.3 Performance (PER)

Performance is a basic concept that is general in nature. This concept is usually understood implicitly as it is difficult to express it explicitly. Performance related to certain concepts gave birth to a special approach or measurement (Thompson et al., 2017). The performance of an institution is something that is produced by a company in a certain period with reference to the standards set. Company performance should be a measurable result and describe the empirical condition of companies of various agreed sizes. To find out the performance achieved, a performance assessment is carried out. The above explains that there are two types of performance appraisal activities, namely, financial, and non-financial. This measurement is designed to assess how tasks or activities are being performed and the results achieved. There is also a performance assessment designed to uncover if there is a stagnation of improvements to be made. Assessment of the performance of central activities is divided into three main dimensions, namely: (1) Efficiency, (2) Quality, and (3) Time. Good et al. (2020), which says there are five dimensions of higher education measurement, namely: (1) Curriculum design (2). Pedagogic design (3). Quality of implementation (4). Graduate condition (outcome) and (5). Availability of resources.

2.4 Theoretical Framework

There is a range of theoretical perspectives about sustainable competitive advantage of firms which fall, by and large, into the following segments. First, the Industrial Organization View (IOV), which seeks to gain a competitive edge by aligning within the competitive industrial structure (Jacobsen, 2015). Second, the Resource Based View (RBV), which seeks to identify the basis of performance through the existing infrastructure and key competencies of an organization (Collins, 2021). Finally, the Dynamic Capability View (DCV), which can be defined as the potential to unify, structure, and redevelopment competencies, are all perspectives that can be used to explain how a company achieves success (Lütjen et al., 2019). Currently, companies face

greater issues in sustaining competitive advantage; perhaps, a firm that has attained technological management is at threat of failure for maintaining its market share caused by the failure to invest in new technologies, the inefficiency of business firms, or inefficient allocation of resources. Furthermore, because of the propensity of resources to become locked in the environment, it is difficult to convert resources into a relevant capability in response to rapid changes in the environment, as has been demonstrated (K. Lee et al., 2019).

In recent years, an increasing number of studies have focused on DCV because "it can better explain the competitive edges and business performance of companies through dynamic processes" that ensure creation, consolidation, integration, building, and reconfiguration of internal and external competences in order to respond to rapidly changing environments (K. Lee et al., 2019). Therefore, based on DCV and empirical studies, the author develops a research framework consisting of four hypotheses as shown in Figure 1 below. The research framework created is expected to be able to answer the problem formulation and outline the research objectives, as well as realize the benefits that have been previously disclosed.

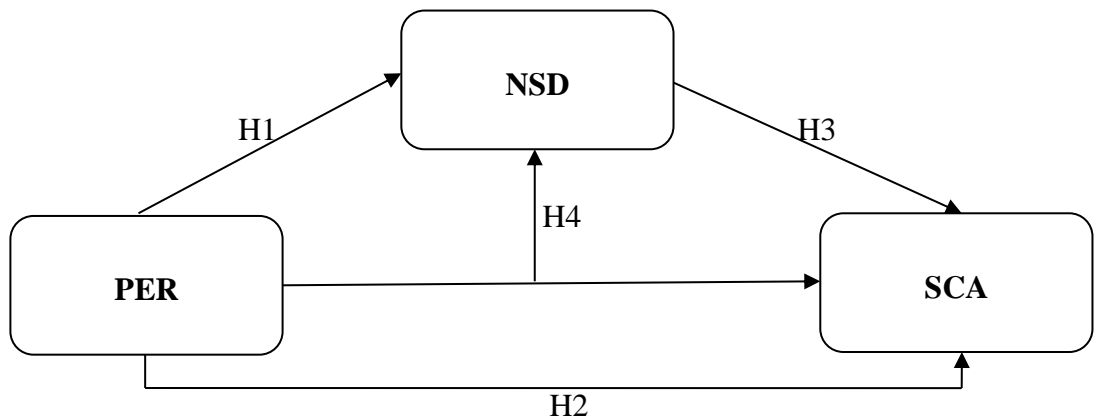


Figure 1. Research Framework

2.5 Hypothesis Development

Performance based on customer orientation and maintaining the dignity of the organization's culture in order to be able to facilitate understanding of stakeholders will enable the creation of sustainable customer value (Sampaio et al., 2019). This enables organizations to identify potential new customers along with opportunities to create value for customers by emphasizing an understanding of the short-term strengths and weaknesses as well as long-term capabilities of the products offered (Domi et al., 2020;

Sampaio et al., 2019). Organizations that adopt a competitor orientation develop in-depth assessments of targeted and potential competitors and use the resulting knowledge to match or exceed competitors' strengths (Mahmoud et al., 2017). Organizations with a strong customer orientation pursue competitive advantage by placing the highest priority on the creation and maintenance of customer value (Mahmoud et al., 2017). Market intelligence is an important element of strategic orientation. The firm's continued ability to compete is due, in large measure, to the uniqueness of corporate intelligence (Kengatharan, 2019; Turner et al., 2021; Woschke et al., 2017). Customer orientation is a culture in which customer needs and values are communicated formally within the organization between departments and managers and informally among all employees of the organization. Communication exchange supports the development of organizational capabilities (Houngbo et al., 2017). The result is a culmination in the performance of an organization that must be well positioned to anticipate changing needs and develop new products and services. In particular, previous researchers have argued that new service innovations can result from organizational performance capabilities that focus on good-for-customer thinking (Hock-Doepgen et al., 2021). Based on that, the researcher develops the following hypothesis:

H₁: There is a significant influence between performance on new services development at private universities in Indonesia

Innovation capability has been shown to have a positive impact on the performance of companies focused on service development (Le et al., 2019; Yenyurt et al., 2019). One way in which service innovation can benefit organizations is by breathing new life into existing products. This can be done by offering new services related to the organization's existing products. The value-added nature of service innovation can enable companies to enter new markets and reach new customers (Hallström, 2020). The development of entirely new services can also enable organizations to reach new market segments. Studies such as (Monteiro et al., 2019; Woschke et al., 2017) have noted that internal resources such as machinery, equipment, and software are key to developing an innovation strategy. Another study argues that information from stakeholders (Resnick et al., 2016) such as customers, employees, competitors, advertisers, retailers and wholesalers is important because these supply chains actually have relevant information for product design and packaging innovation (Asad et al., 2018). Service organizations, SMEs, and manufacturers that are able to change and/or modify existing products into unique product designs and packages achieve competitive advantage (Kanu, 2020; Sudarmiatin et al., 2016; Takahashi et al., 2017). Service organizations that use a new service development process that is open to market influence will develop better new products, although, the real difficulty lies in the new service development process that must be sensitive to external changes, and incorporate consumer reactions and criticism.

Most new service ventures are successful, it is a total concept that is critical to success. Based on that, the researcher postulates the following hypothesis:

H₂: There is a significant influence between performance on sustainable competitive advantages at private universities in Indonesia.

[Andriyanto et al. \(2019\)](#) defines sustainable competitive advantages (SCA) as the implementation by companies of value creation strategies that are not simultaneously implemented by current or potential competitors and where these other companies cannot duplicate the benefits of this strategy. [Andriyanto et al. \(2019\)](#) also stipulates that only resources that are valuable, rare, and difficult to imitate and replace will help guarantee SCA firms to ensure good economic achievement. It follows from this definition that SCA has two basic characteristics: (1) the company's superior market position compared to its competitors; and (2) economic materialization ([Bustinza et al., 2019](#); [Jain et al., 2017](#); [Migdadi, 2021](#); [Ullah et al., 2019](#)). [Porrall et al. \(2017\)](#) argue that organizational memory gives them the ability to sense events and trends in their market ahead of their competitors so that they can more accurately anticipate responses to retain or attract new customers or improve channel relationships. This argument suggests that organizational memory supports innovation in marketing practices. For example, a firm's prior knowledge of its clients and markets can lead to early identification of changing consumer preferences and facilitate the introduction of new marketing tools to differentiate the firm's products from those of its competitors. Based on that, the researcher proposes the following hypothesis:

H₃: There is a significant influence between new services development on sustainable competitive advantages in private universities in Indonesia

Knowledge stored in organizational memory about the best processes and systems for work organizations can facilitate the implementation of innovations in product distribution. In this sense, ([Migdadi, 2021](#)) suggests that learning about consumer needs and supplier behavior supports innovative intensity. This result is particularly relevant because the concept of innovative intensity includes marketing innovation. Considering the above mentioned concepts under the new services approach, organizational memory is a valuable input for marketing innovation. Organizations can opportunistically respond to environmental dynamics based on their capacity to deal with such events. ([Anning-Dorson, 2017](#)) asserts that environmental dynamics will increase the frequency of strategic issues and that the company's ability to act on strategic issues will determine the likelihood of responding opportunistically to environmental changes. Since environmental predictions are doubtful, companies must have certain behavioral tendencies that engage them to continuously gain knowledge in the market and act accordingly to maintain the beneficial effects of the innovation strategy. [Akpan et al.](#)

(2020) explain that innovation does not require genius, but does require system-wide dedication to pursuing unique opportunities and this system-wide dedication has always been inspired by the development of service organizations. (Dondofema et al., 2019) argues that service development is at the core of innovation development and thus significantly influences innovation implementation. In particular, the development of services that promote the creative capacity of employees, tolerate risk, and support the implementation of innovations are important organizational factors that increase the knowledge base of the company, helping it achieve better product innovation output (Benevene et al., 2017).

Performance measures with financial and non-financial performance are borne out of the argument made by Glavan et al. (2017) that quantitative financial performance measures should be matched with qualitative non-financial measures to obtain accurate business performance. With non-financial performance, this study argues that when organizations increase product innovation, it is expected to improve service quality, customer satisfaction, customer loyalty and employee satisfaction as has been found by other service studies (Le et al., 2019; Lučić, 2020). In terms of financial performance, this study argues that product innovation has the capacity to increase profitability, sales turnover, market share, return on investment and cash flow (Świtała et al., 2018) and (Wu et al., 2021). Based on that, the researcher proposes the following hypothesis:

H₄: New services development can mediate the effect of performance on sustainable competitive advantages in private universities in Indonesia.

3. RESEARCH METHODS

3.1 Research Design

This study uses a survey approach with a questionnaire as the main data collection instrument. This study aims to test the hypotheses (hypotheses testing) which explain the cause-and-effect relationship (causality) between variables. The method used in this study is explanatory, namely by explaining the symptoms that arise in the object of research. The explanatory research method is one of the methods used in this type of verification explanation research that can potentially verify the relationship between the variables being studied (Bell et al., 2018).

3.2 Population and Sample

The population in this study includes individual respondents or students who are active and enrolled in the 10 best private universities in Indonesia. The 10 best private universities in Indonesia according to the results of the July 2020 edition of Webometrics are as follows: Telkom University (Tel-U), Yogyakarta Muhammadiyah University

(UMY), Bina Nusantara University (Ubinus), Narotama University (Unnar) Surabaya, MercuBuana University (UMB), Gunadarma University (UG), Indonesian Islamic University (UII), Dian Nuswantoro University (Udinus), Muhammadiyah University of Malang (UMM) and Parahyangan Catholic University (Unpar). The critical value used for sampling in this study was 5% (0.05) so that the same used was 400 students: 10 PTS = 40 students per PTS. Respondents who were determined as samples in this study used the purposive sampling method, namely the determination of respondents who would be sampled based on certain criteria (Tonapa et al., 2015). The criteria for determining the sample are students who are active in the third, fifth and seventh semesters of 2020 who are in this research population and understand several factors that are considered to be able to influence and know the process of New Services Development, Performance and Marketing Innovation. In this study, researchers distributed online questionnaires using Google forms and distributed them through several social media channels since January 10, 2021. These questionnaires were filled out by as many as 508 respondents spread across all regions of Indonesia. As for the details of the respondents, from a total of 508 questionnaires that have been filled out by respondents, 400 respondents were selected to be used as research samples and 108 were not used as research samples.

3.3 Instrumentation

The construct of NSD was measured by adapting 40 items (Matear et al., 2004). The 10 items scale was used to measure the construct of performance (Tortorella et al., 2021). Similarly, following previous studies, the construct of sustainable competitive advantages was measured by a 20 items scale (Ge et al., 2018; S. Lee et al., 2021). All the items were measured on five-point likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The reliability and validity of all the scales have been measured and established (See section 4.1).

3.4 Data Analysis Technique

Descriptive statistical analysis displays research data in the form of mean scores. Inferential analysis is performed using SEM (Structural Equation Modeling) analysis technique. In this study, researchers used the SEM Lisrel 8.7 application. The reason the researcher uses the SEM model is because it is in line with the quote from (Ping, 2017), namely this research is included in social research because it uses measurements to describe constructs to help evaluate the reliability and validity of a measuring instrument that involves a model of 2 (two) variables and a structure of the relationship between the variables under study as well as for the development of concepts or theories.

Table 1. Construct Validity and Reliability Test for Measurement Model

Latent Variable	Item	Loading Factor	CR	AVE	Latent Variable	Item	Loading Factor	CR	AVE
PER	X11	0,71	0,93	0,57		Z6	0,63		
	X12	0,7				Z7	0,69		
	X13	0,8				Z8	0,76		
	X14	0,71				Z9	0,84		
	X15	0,73				Z10	0,77		
	X16	0,8				Z11	0,79		
	X17	0,75				Z12	0,75		
	X18	0,82				Z13	0,89		
	X19	0,77				Z14	0,86		
	X110	0,74				Z15	0,82		
SCA	Y1	0,75	0,99	0,87		Z16	0,85		
	Y2	0,78				Z17	0,85		
	Y3	0,79				Z18	0,78		
	Y4	0,83				Z19	0,84		
	Y5	0,76				Z20	0,81		
	Y6	0,8				Z21	0,83		
	Y7	0,84				Z22	0,84		
	Y8	0,78				Z23	0,82		
	Y9	0,8				Z24	0,86		
	Y10	0,74				Z25	0,89		
	Y11	0,66				Z26	0,85		
	Y12	0,79				Z27	0,86		
	Y13	0,74				Z28	0,82		
	Y14	0,79				Z29	0,71		
	Y15	0,68				Z30	0,81		
	Y16	0,85				Z31	0,81		
	Y17	0,83				Z32	0,87		
	Y18	0,76				Z33	0,89		
	Y19	0,65				Z34	0,82		
	Y20	0,77				Z35	0,83		
NSD	Z1	0,84	1	0,96		Z36	0,87		
	Z2	0,75				Z37	0,89		
	Z3	0,76				Z38	0,84		
	Z4	0,74				Z39	0,86		
	Z5	0,78				Z40	0,87		

Source: processed data, 2021

4. RESULTS

4.1 Validity and Reliability

To test the validity using the provisions of the Standardized loading factor (λ) value, which is in accordance with the opinion (Hair et al., 2019) that the accepted loading factor value is greater than 0.5 or equal to 0.7. If the loading factor value is below 0.5, it should be excluded as it does not establish the reliability of the construct, while a value above 0.5 is declared valid and reliable. Table 1 presents the values of factor loadings, CR and AVE. The value of Standardized loading factor (λ) used in this study is above 0.5 which establishes the reliability of the constructs. Furthermore, to find out the convergent validity of variables used, it is necessary to perform the Composite Reliability (CR) and Average Variance Extracted (AVE) tests (Riadi, 2018). According to (Hair et al., 2019) the acceptable CR value is 0.6 and ideally 0.7 while the cut-off value of AVE is 0.5.

Based on the above results presented in Table 1, which show the factor loadings and CR and AVE values, it can be asserted that measurement model establishes the validity and reliability for the constructs of PER, NSD and SCA as all the values pass the minimum acceptable criteria of each test (Riadi, 2018).

4.2 Model fit test (Goodness of Fit)

To find out whether the model used is fit or not, it is necessary to go through a study of the various GOF model criteria. (Beckett et al., 2017; Hair et al., 2019; Haryono, 2017; Hayakawa, 2019; Latan, 2017; Sharif et al., 2018) mention using 4-5 of the GOF criteria considered sufficient to assess the feasibility of a model, provided that each of the GOF criteria, namely absolute fit indices, incremental fit indices, and parsimony fit indices is represented. In this study, the model fit test or overall model fit is used through Structural Equation Modeling (SEM) with the Lisrel 8.7 program. In determining the GOF model, several criteria are used so that it can be used as a guideline related to the size of the probability value, RMSEA, NFI, NNFI, PNFI, CFI, IFI, RFI and ECVI (Mueller et al., 2019).

Based on the results of the analysis presented in Table 2, it is found that the GOF estimation results are generally in the Fit category, so overall it can be concluded that the fit model means that the sample covariance matrix is relatively the same as the estimated covariance matrix.

Table 2. Model Fit Test (Goodness of Fit)

Indicators	Cut-off Value	Values	Result
X^2 – Chi-square (df =3563, p = 0,01)	<3784,20	10369.56	<i>Poor Fit</i>
Sign. Probability	≥ 0.05	0,00	<i>Poor Fit</i>
CFI	≥ 0.90	0.98	<i>Good Fit</i>
TLI/NNFI	≥ 0.90	0.98	<i>Good Fit</i>
NFI	≥ 0.90	0.97	<i>Good Fit</i>
IFI	≥ 0.90	0.98	<i>Good Fit</i>
RFI	≥ 0.90	0.97	<i>Good Fit</i>
RMSEA	≤ 0.08	0.078	<i>Good Fit</i>

Source: processed data, 2021

4.3 Regression and Correlation Test

To test the significance of the coefficient of influence between variables, using the two-tailed test Z value at α 0.05, the Z score of 1.96 is obtained which is designated as a critical value for significance testing. Based on Table 3, the coefficient of direct influence of performance on new services development is 0.84 and the t value is 10.40. Because the t value is $10.40 > 1.96$, it can be concluded that the coefficient of direct influence of performance on New Services Development is significant, with the coefficient of determination R² of 0.71, so it can be stated that there is a significant influence between performances on new services development at Private Universities in Indonesia can be accepted.

Table 3. Direct and Indirect Effects of Each Relationship

No	Relationship	Direct Influence	Indirect Influence Through		Total Influence	t value	t table	Information
			NSD	SCA				
1	PER - NSD	0,84			0,84	10,40	1,96	Significant
2	PER - SCA	1,34		-0,57	0,77	15,32	1,96	Significant
3	NSD - SCA	0,90			0,90	16,46	1,96	Significant

Source: Data processed by researchers, 2021

Furthermore, the coefficient of direct influence of performance on sustainable competitive advantages is 1.34 and the t value is 15.32. Because the t value is $15.32 > 1.96$, it can be concluded that the coefficient of direct influence of Performance on sustainable competitive advantages is significant and the coefficient of determination R² is 0.70, so it can be stated that there is a significant influence between performance on

sustainable competitive advantages in Private Universities in Indonesia are acceptable. Then the coefficient of direct influence of new services development on sustainable competitive advantages is 0.90 and the t value is 16.46. Because the t-count value is $16.46 > 1.96$, it can be concluded that the coefficient of direct influence of new services development on sustainable competitive advantages is significant and the coefficient of determination R^2 is 0.82, so it can be stated that there is a significant influence between new services development on sustainable competitive advantages at private universities in Indonesia are acceptable.

To determine whether there is a mediating effect on the latent variable, the direct, indirect and total effects are tested. Influence analysis intends to see how strong the influence of a variable with other variables is, either directly or indirectly. [Table 3](#) shows the magnitude of the total effect of each variable with other variables. Testing the mediating effect of the New Services Development variable on the influence of Performance on Sustainable Competitive Advantages can be seen from the magnitude of the indirect effect of Performance on Sustainable Competitive Advantages through New Services Development of -0.57 and the t value of 15.32. Statistically it can be said that the t-value (15.32) is greater than ttable (1.96) and is significant, so that New Services Development becomes the perfect mediating variable for the relationship between Performance and Sustainable Competitive Advantages at Private Universities in Indonesia to be accepted.

5. DISCUSSION

The results of the direct influence in [Table 3](#) show that there is a positive relationship ($R^2 = 0.71$) between performance and new services development at private universities in Indonesia, therefore, the first hypothesis can be accepted. This means that the development of entirely new services can also allow companies to reach new market segments. According to researchers, public services can be used in company services, which so far have only been private services. This is in accordance with the theory ([Mohr et al., 2021](#)) that states that there are similarities between public services and private services in private universities and companies, namely they both carry out management functions in general.

The second hypothesis predicts a positive relationship ($R^2 = 0.70$) between performance and sustainable competitive advantages at private universities in Indonesia, and on the basis of the results, the second hypothesis can be accepted. This is in accordance with previous results ([Howell III, 2020](#)) and research findings ([Rezvani et al., 2020](#)) which state that organizations possess the ability to sense events and trends in the market ahead of competitors so that they can more accurately anticipate responses with a view to maintaining sustainability and improving organizational relationships. This argument

shows that organizations support performance in sustainability. To maintain the sustainability of this implementation, organizational leaders ask stakeholders to manage performance as capital to create value for the organization as outlined in the management process itself.

Furthermore, the results of this study state that there is a positive relationship ($R^2 = 0.82$) between new services development and sustainable competitive advantages in private universities in Indonesia so that the third hypothesis can also be accepted. This finding is in line with previous research results (Li et al., 2019; Lučić, 2020; Świtła et al., 2018) which state that when organizations increase product innovation, it is expected to improve service quality, customer satisfaction, customer loyalty and employee satisfaction. This has been claimed in other service studies wherein product innovation is demonstrated to have the capacity to increase profitability, sales turnover, market share, return on investment and cash flow.

Finally, Table 3 shows that new services development can mediate the effect of performance on sustainable competitive advantages at private universities in Indonesia therefore, the fourth hypothesis can be accepted. These results confirm the findings of previous research conducted by (S. Lee et al., 2021) which state that the process for developing new, better products entails a systematic process of developing new services that are sensitive to external changes, incorporating consumer reactions and responding to criticism. This means that the performance of PTS has been proven to contribute to sustainability and creation of new services.

6. CONCLUSION

The present research is conducted in the context of the top ten private universities in Indonesia with the aim of assessing the factors that may enhance the sustainable competitive advantage of universities. Based on the results of research analysis and discussion in the previous section, it can be concluded that all the hypotheses of the study have been accepted. Specifically, performance has a significant effect on new service development and sustainable competitive advantages. Similarly, new service development has a significant direct effect on sustainable competitive advantages and a mediating effect between the relationship of performance and sustainable competitive advantages in Indonesian private universities.

7. RESEARCH IMPLICATIONS

The present study contributes to the existing body of literature and DCV in several ways. It explains that the ability to maintain a sustained competitive advantage is defined not only by the firm's performance, but also by the existence of core competencies and the

efficiency with which these competencies may be applied to new service developments in private universities. For example, when operating in a rapidly changing environment, the ability to sense and develop new services for existing and potential students, along with the ability to transform that capability into student satisfaction, are critical sources of competitive advantage that can be used to respond to shifts in students' demands. These are the most important sources of competitive advantage that can be created and maintained. The findings of this study confirm that performance and new service developments are both beneficial for universities engaged in the development of innovative services for their students. While universities' performance and new service developments have distinct characteristics, they are integrated rather than acting separately. Moreover, new service developments are affected by performance, resulting in a comprehensive competitive advantage. One of the most significant aspects of this study is that it goes one step further than previous studies that are primarily concerned with explaining individual relationships in order to develop and verify a research model under DCV.

8. LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

Although the current study provides valuable insights, it has several limitations. The present study is based on the cross-sectional design that may be affected by several biases. Therefore, aspirant researchers are directed to perform longitudinal studies to draw causal inferences. Second, this study only focuses on the ten best private universities in Indonesia. It is suggested that future research focus on the larger population and other research settings to increase the scope and level of generalizability of the research outcomes. Finally, in order to meet the objectives of the study, the present research uses a purposive sampling technique for selection of respondents that may limit the generalizability of the study. Hence, further studies should be carried out on the current research framework by applying probability sampling techniques to increase its generalizability.

REFERENCES

- Akpan, I. J., Soopramanien, D., & Kwak, D.-H. (2020). Cutting-edge technologies for small business and innovation in the era of COVID-19 global health pandemic. *Journal of Small Business & Entrepreneurship*, 1-11. doi:<https://doi.org/10.1080/08276331.2020.1799294>
- Andriyanto, I., Arifin, J., & Ayuningtyas, A. A. (2019). Antecedent Factors of Competitive Advantage and its Impact on Performance. 2019. doi:<http://dx.doi.org/10.4108/eai.8-10-2018.2288714>

- Anning-Dorson, T. (2017). Innovation development in service firms: a three-model perspective. *International Journal of Services and Operations Management*, 28(1), 64-80. doi:<https://doi.org/10.1504/IJSOM.2017.085905>
- Asad, M., Rizwan, A., Shah, M., & Munir, A. (2018). Impact of innovation practices on sustainable performance of SMEs. *Herald National Academy of Managerial Staff of Culture and Arts*, 3, 537-546.
- Beckett, C., Eriksson, L., Johansson, E., & Wikström, C. (2017). Multivariate data analysis (MVDA). *Pharmaceutical quality by design: A practical approach*, 201-225.
- Bell, E., Bryman, A., & Harley, B. (2018). *Business research methods*: Oxford university press.
- Benevene, P., Kong, E., Barbieri, B., Lucchesi, M., & Cortini, M. (2017). Representation of intellectual capital's components amongst Italian social enterprises. *Journal of Intellectual Capital*, 18(3), 564-587. doi:<https://doi.org/10.1108/JIC-12-2016-0127>
- Budiharso, T., & Tarman, B. (2020). Improving quality education through better working conditions of academic institutes. *Journal of Ethnic and Cultural Studies*, 7(1), 99-115. doi:<http://dx.doi.org/10.29333/ejecs/306>
- Bustinza, O. F., Gomes, E., Vendrell-Herrero, F., & Baines, T. (2019). Product–service innovation and performance: the role of collaborative partnerships and R&D intensity. *R&D Management*, 49(1), 33-45. doi:<https://doi.org/10.1111/radm.12269>
- Collins, C. J. (2021). Expanding the resource based view model of strategic human resource management. *The International Journal of Human Resource Management*, 32(2), 331-358. doi:<https://doi.org/10.1080/09585192.2019.1711442>
- Domi, S., Capelleras, J.-L., & Musabelliu, B. (2020). Customer orientation and SME performance in Albania: A case study of the mediating role of innovativeness and innovation behavior. *Journal of Vacation Marketing*, 26(1), 130-146. doi:<https://doi.org/10.1177%2F1356766719867374>
- Dondofema, R. A., & Grobbelaar, S. S. S. (2019). *Conceptualising innovation platforms through innovation ecosystems perspective*. Paper presented at the 2019 IEEE international conference on engineering, technology and innovation (ICE/ITMC): IEEE doi:<https://doi.org/10.1109/ICE.2019.8792668>
- Fred R. David, F. R. D. (2015). *Strategic Management_Concepts and Cases, Global Edition (2014)*.
- Ge, B., Yang, Y., Jiang, D., Gao, Y., Du, X., & Zhou, T. (2018). An Empirical Study on Green Innovation Strategy and Sustainable Competitive Advantages: Path and Boundary. *Sustainability*, 10(10), 3631. Retrieved from <https://www.mdpi.com/2071-1050/10/10/3631>

- Glavan, L. M., & Vukšić, V. B. (2017). Examining the impact of business process orientation on organizational performance: the case of Croatia. *Croatian Operational Research Review*, 137-165.
- Gumanti, T. A., Lestari, A. R., & Manan, S. S. A. (2017). Underpricing and number of risk factors of initial public offerings in Indonesia. *Business: Theory and Practice*, 18, 178.
- Hair, J. F., Ringle, C. M., Gudergan, S. P., Fischer, A., Nitzl, C., & Menictas, C. (2019). Partial least squares structural equation modeling-based discrete choice modeling: an illustration in modeling retailer choice. *Business Research*, 12(1), 115-142. doi:<https://doi.org/10.1007/s40685-018-0072-4>
- Hallström, J. (2020). Embodying the past, designing the future: technological determinism reconsidered in technology education. *International Journal of Technology and Design Education*, 1-15. doi:<https://doi.org/10.1007/s10798-020-09600-2>
- Haryono, S. (2017). Metode SEM untuk Penelitian Manajemen AMOS Lisrel PLS. *Jakarta: Luxima Metro Media*.
- Hayakawa, K. (2019). Corrected goodness-of-fit test in covariance structure analysis. *Psychological methods*, 24(3), 371. doi:<https://psycnet.apa.org/doi/10.1037/met0000180>
- Hock-Doepgen, M., Clauss, T., Kraus, S., & Cheng, C.-F. (2021). Knowledge management capabilities and organizational risk-taking for business model innovation in SMEs. *Journal of Business Research*, 130, 683-697. doi:<https://doi.org/10.1016/j.jbusres.2019.12.001>
- Houngbo, P. T., Coleman, H., Zweekhorst, M., De Cock Buning, T., Medenou, D., & Bunders, J. (2017). A model for good governance of healthcare technology management in the public sector: learning from evidence-informed policy development and implementation in Benin. *PLOS ONE*, 12(1), 1-22. doi:<https://doi.org/10.1371/journal.pone.0168842>
- Howell III, C. (2020). *Implementing the Six Sigma Breakthrough Management Strategy to Reduce Bowed Pipe Defects in the Oil and Gas Industry, a Black Belt's Approach*. Youngstown State University,
- Jacobsen, L. R. (2015). On Robinson, Robertson, and the Industrial Organization View. *History of Political Economy*, 47(1), 41-89. doi:<https://doi.org/10.1215/00182702-2847315>
- Jain, R., Aagja, J., & Bagdare, S. (2017). Customer experience – a review and research agenda. *Journal of Service Theory and Practice*, 27(3), 642-662. doi:<https://doi.org/10.1108/JSTP-03-2015-0064>
- Jones, T. M., Harrison, J. S., & Felps, W. (2018). How applying instrumental stakeholder theory can provide sustainable competitive advantage. *Academy of Management Review*, 43(3), 371-391. doi:<https://doi.org/10.5465/amr.2016.0111>

- Kanu, A. (2020). THE REWARDS AND CHALLENGES OF ENTREPRENEURIAL MARKETING IN SMES. *Marketing*, 3(4), 19-36.
- Kengatharan, N. (2019). A knowledge-based theory of the firm. *International Journal of Manpower*, 40(6), 1056-1074. doi:<https://doi.org/10.1108/IJM-03-2018-0096>
- Kong, Y., & Suntrayuth, S. (2021). The Causal Model of Absorptive Capacity, Strategic Flexibility and Innovation Performance on Sustainable Competitive Advantage: An Internationalization Perspective. *Thammasat Review*, 24(1), 214-246.
- Latan, H., & Noonan, R. (2017). Partial Least Squares Path Modeling Basic Concepts, Methodological Issues and Applications. *Partial Least Squares Path Modeling: Basic Concepts, Methodological Issues and Applications*. Springer US. doi:<http://doi.org/10.1007/978-3-319-64069-3>
- Le, P. B., & Lei, H. (2019). Determinants of innovation capability: the roles of transformational leadership, knowledge sharing and perceived organizational support. *Journal of Knowledge Management*, 23(3), 527-547. doi:<https://doi.org/10.1108/JKM-09-2018-0568>
- Lee, K., & Yoo, J. (2019). How does open innovation lead competitive advantage? A dynamic capability view perspective. *PLOS ONE*, 14(11), e0223405. doi:<https://doi.org/10.1371/journal.pone.0223405>
- Lee, S., & Yoo, J. (2021). Determinants of a Firm's Sustainable Competitive Advantages: Focused on Korean Small Enterprises. *Sustainability*, 13(1), 346. doi:<https://doi.org/10.3390/su13010346>
- Li, Y., Yang, H. H., & MacLeod, J. (2019). Preferences toward the constructivist smart classroom learning environment: examining pre-service teachers' connectedness. *Interactive Learning Environments*, 27(3), 349-362. doi:<https://doi.org/10.1080/10494820.2018.1474232>
- Lounsbury, M., Cornelissen, J., Granqvist, N., & Grodal, S. (2019). Culture, innovation and entrepreneurship. *Innovation*, 21(1), 1-12. doi:<https://doi.org/10.1080/14479338.2018.1537716>
- Lubis, R., Dewi, R., Sihotang, D. O., & Siburian, P. (2020). *Urgency of Internal Quality Guarantee System to Improve Higher Education Quality*. Paper presented at the The 5th Annual International Seminar on Transformative Education and Educational Leadership (AISTEEL 2020): Atlantis Press.
- Lučić, A. (2020). Measuring Sustainable Marketing Orientation—Scale Development Process. *Sustainability*, 12(5), 1734. doi:<https://doi.org/10.3390/su12051734>
- Lütjen, H., Schultz, C., Tietze, F., & Urmetzer, F. (2019). Managing ecosystems for service innovation: A dynamic capability view. *Journal of Business Research*, 104, 506-519. doi:<https://doi.org/10.1016/j.jbusres.2019.06.001>
- Mahdi, O. R., Nassar, I. A., & Almsafir, M. K. (2019). Knowledge management processes and sustainable competitive advantage: An empirical examination in

- private universities. *Journal of Business Research*, 94, 320-334. doi:<https://doi.org/10.1016/j.jbusres.2018.02.013>
- Mahmoud, M. A., Blankson, C., & Hinson, R. E. (2017). Market orientation and corporate social responsibility: towards an integrated conceptual framework. *International Journal of Corporate Social Responsibility*, 2(1), 9. doi:<https://doi.org/10.1186/s40991-017-0020-1>
- Matear, S., Gray, B. J., & Garrett, T. (2004). Market orientation, brand investment, new service development, market position and performance for service organisations. *International Journal of Service Industry Management*, 15(3), 284-301. doi:<https://doi.org/10.1108/09564230410540944>
- Migdadi, M. M. (2021). Organizational learning capability, innovation and organizational performance. *European Journal of Innovation Management*, 24(1), 151-172. doi:<https://doi.org/10.1108/EJIM-11-2018-0246>
- Mohr, V., Kleinherenbrink, A., & Varis, P. (2021). “You Can’t Ignore a Number This Big”: Gender, Risk, and Responsibility in Online Advocacy for Women’s Brain Health. *Qualitative Health Research*, 31(4), 677-690. doi:<https://doi.org/10.1177%2F1049732320981893>
- Monteiro, P., Correia, A., & Braga, V. (2019). Factors for Marketing Innovation in Portuguese Firms CIS 2014. *Mathematical and Computational Applications*, 24(4), 99. doi:<https://doi.org/10.3390/mca24040099>
- Mueller, R. O., & Hancock, G. R. (2019). *Structural equation modeling*: Routledge/Taylor & Francis Group.
- Ping, R. A. (2017). EQS and LISREL examples using survey data. In *Interaction and nonlinear effects in structural equation modeling* (pp. 63-100): Routledge, 63-100.
- Popa, S., Soto-Acosta, P., & Martinez-Conesa, I. (2017). Antecedents, moderators, and outcomes of innovation climate and open innovation: An empirical study in SMEs. *Technological Forecasting and Social Change*, 118, 134-142. doi:<https://doi.org/10.1016/j.techfore.2017.02.014>
- Porrall, C. C., & Stanton, J. L. (2017). *Principles of marketing*: ESIC Editorial.
- Resnick, S. M., Cheng, R., Simpson, M., & Lourenço, F. (2016). Marketing in SMEs: a “4Ps” self-branding model. *International Journal of Entrepreneurial Behavior & Research*, 22(1), 155-174. doi:<https://doi.org/10.1108/IJEBR-07-2014-0139>
- Rezvani, E., & Rojas, C. (2020). Spatial price competition in the Manhattan hotel market: The role of location, quality, and online reputation. *Managerial and Decision Economics*, 41(1), 49-63. doi:<https://doi.org/10.1002/mde.3092>
- Riadi, E. (2018). Statistik SEM structural equation modeling dengan Lisrel. *Yogyakarta: CV Andi Offset*.
- Sampaio, C. A. F., Hernández-Mogollón, J. M., & Rodrigues, R. G. (2019). Assessing the relationship between market orientation and business performance in the

- hotel industry – the mediating role of service quality. *Journal of Knowledge Management*, 23(4), 644-663. doi:<https://doi.org/10.1108/JKM-08-2017-0363>
- Sharif, S. P., Mostafiz, I., & Guptan, V. (2018). A systematic review of structural equation modelling in nursing research. *Nurse Researcher*, 26(2), 28-31. doi:<https://doi.org/10.7748/nr.2018.e1577>
- Silalahi, R., & Yuwono, U. (2018). The Sustainability of Pancasila in Indonesian Education System. *Research in Social Sciences and Technology*, 3(2), 58-78.
- Sudarmiatin, M., & Suharto, S. (2016). Sustainable competitive advantage on SMEs: bringing local product toward global market. *Journal of Business and Management*, 18(7), 46-53. doi:<http://doi.org/10.9790/487X-1807034653>
- Świtafa, M., Niestrój, K., & Hanus, P. (2018). Examining how logistics service providers' adaptability impacts logistics outsourcing performance, customers' satisfaction and loyalty. *LogForum*, 14(4). doi:<http://dx.doi.org/10.17270/J.LOG.2018.298>
- Takahashi, A. R. W., Bulgacov, S., Semprebón, E., & Giacomini, M. M. (2017). Dynamic capabilities, marketing capability and organizational performance. *BBR. Brazilian Business Review*, 14, 466-478. doi:<https://doi.org/10.15728/bbr.2017.14.5.1>
- Thompson, J. D., Zald, M. N., & Scott, W. R. (2017). *Organizations in action: Social science bases of administrative theory*: Routledge.
- Tonapa, Y. N., Rondonuwu, D. M., & Tungka, A. E. (2015). Kajian konservasi bangunan kuno dan kawasan bersejarah di pusat Kota Lama Manado. *Spasial*, 2(3), 121-130.
- Tortorella, G., Narayanamurthy, G., Godinho Filho, M., Portioli Staudacher, A., & Mac Cawley, A. F. (2021). Pandemic's effect on the relationship between lean implementation and service performance. *Journal of Service Theory and Practice*, 31(2), 203-224. doi:<https://doi.org/10.1108/JSTP-07-2020-0182>
- Turner, K. L., Monti, A., & Annosi, M. C. (2021). Disentangling the effects of organizational controls on innovation. *European Management Journal*, 39(1), 57-69. doi:<https://doi.org/10.1016/j.emj.2020.09.004>
- Ullah, I., Jan, A. U., Fayaz, M., Ali, A., & Shah, A. U. (2019). A Cross-Sectional Analysis of Food Demand in Khyber Pakhtunkhwa, Pakistan. *Sarhad Journal of Agriculture*, 35(2), 378-385.
- Walsh, P. R., & Dodds, R. (2017). Measuring the Choice of Environmental Sustainability Strategies in Creating a Competitive Advantage. *Business Strategy and the Environment*, 26(5), 672-687. doi:<https://doi.org/10.1002/bse.1949>
- Woschke, T., Haase, H., & Kratzer, J. (2017). Resource scarcity in SMEs: effects on incremental and radical innovations. *Management Research Review*, 40(2), 195-217. doi:<https://doi.org/10.1108/MRR-10-2015-0239>

- Wu, B., Liang, H., & Chan, S. (2021). Political Connections, Industry Entry Choice and Performance Volatility: Evidence from China. *Emerging Markets Finance and Trade*, 1-10. doi:<https://doi.org/10.1080/1540496X.2021.1904878>
- Yeniyurt, S., Wu, F., Kim, D., & Cavusgil, S. T. (2019). Information technology resources, innovativeness, and supply chain capabilities as drivers of business performance: A retrospective and future research directions. *Industrial Marketing Management*, 79, 46-52. doi:<https://doi.org/10.1016/j.indmarman.2019.03.008>