ASSESS THE ROLE OF MARKETING INTELLIGENCE AND NETWORK CAPABILITIES IN PRODUCT INNOVATION





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ABSTRACT

This study aims to analyze and discuss the effect of network capability and marketing intelligence on product innovation through marketing misx. The population in this study were SMEs in West Bandung district. Researchers used 211 samples. The data collection technique used a questionnaire. Data were analyzed using path analysis. In the test results, the variable path analysis measure is the variable network capability and marketing intelligence that has an effect on product innovation through the marketing mix. This research emphasizes to SMEs the importance of network influence and market-related understanding in providing innovative products. The limitation in this study is that the sample obtained in Bandung Regency is 211. Further research can be carried out in different cities with more samples from this study.

1. INTRODUCTION

One of the economic activities that is currently developing and becoming a trend is Small and Medium Enterprises (SME's). Its development has an impact on the economy of a developing country, especially Indonesia. Their characteristics vary greatly depending on the business sector in which they operate and the market they serve (Aftab et al. 2021a). Previous research has explained that the role of SME's has a positive impact on economic development in certain areas (Hadi 2023). In the midst of the current COVID-19 pandemic, the impact is very felt for SMEs on business continuity. Competition has sprung up considering that many organizations

have laid off their employees for restructuring, so that workers who previously worked for certain agencies finally decided to do business on their own (Andonov, Dimitrov, and Totev 2021; Srimulyani et al. 2023).

However, it is not easy for someone who starts to build a business without good management skills and understanding. Management skills in the context of small and medium enterprises (SMEs) require adopting a more formal approach in managing business continuity (Lee 2023). However, these skills cannot be realized properly considering that there are business network variables which are one of the factors that can help in business activities. This is as stated by Johan, Hurriyati, and Dirgantara (2022) that business networks can have a significant impact on business performance. A product demand, information related to product trends and competitors will be difficult to obtain when a business does not have a network. On the other hand, in producing a competitive advantage, the intelligence of SMEs owners in obtaining market information is crucial for the products that will be offered to consumers (Johan, 2019). This can help business people stay innovative in providing products or services (Farida and Setiawan 2022).

The success of providing products to consumers is determined by the intelligence of the SMEs themselves in obtaining market information, which in turn leads to the product mix to create innovative products (Aftab et al. 2021b). Therefore, considering this fact, every business actor, especially SMEs, needs the right strategy to meet the needs and desires of consumers. Bandung City is one of the cities that has become a reference for tourists, especially in the fashion industry sector. One of them is Plaza Parahyangan, where the place consists of five floors and has 350 clothing distros (Bandung's statistical agency quoted from infobdg.com). datta When the outbreak of this pandemic occurred, almost all distributions located in that place felt the impact in terms of sales revenue. Data obtained from 5 SMEs shows a decline in income in the last three years:

Table 1. Income of SMEs in the Apparel sector

years	Average Sales Turnover	Percentage of Decrease
2019	1.920.000.000/month	-
2020	1.250.000.000/month	30%
2021	710.000/month	57%

Source: Results of interviews with SME's players in West Bandung Regency

From the table above informs that there is a significant decrease in income in 2020, sales turnover has experienced a fairly high management of SMEs in the fashion sector. The data above was obtained from 5 samples of SMEs in Bandung and obtained through interviews with SMEs players. This shows that SMEs need to redesign their strategies so that they can remain competitive, especially during the current Covid-19 pandemic. On the other hand, the infrastructure support provided by the government does not necessarily have a positive impact on the success of SMEs themselves (quoted from infobdg.com). Abrahamsen, Halinen, and Naudé (2023) shows that most SMEs can use their business networks to obtain resources in order to improve their business performance. However, how the network contributes

to the context of SMEs, especially in Bandung, is still lacking, and the owner's ability to obtain market information is still limited. This research is proposed to fill the gaps that occur. Given this, the researcher tries to examine how the implementation of Network Capability and Marketing Intelligence on the ability of Small and Medium Enterprises (SMEs) Innovation in Bandung City with the Marketing Mix as an intervening variable. This paper is structured as follows: Section 1 provides an introduction to this research, Section 2 provides a library study and hypothesis development, Section 3 shows the research design and methods, Section 4 discusses and results from hypothesis testing, section 5 provides conclusions and further research.

2. LITERATURE REVIEW and HYPOTHESIS

2.1. Literature Review

Network Capability, marketing intelligence and product innovation

The first and foremost choice that someone should think about in building a business is to make the organization what products will be produced; after that, he decides where to put in selling the product (Farida and Nuryakin 2021). The choice of location by combining the network and the type of access that a particular location in the network offers can contribute to the business itself (Farida and Nuryakin 2021). Thus, the network represents an activity in business development for an organization, as this can build, handle, and take advantage of opportunities through business relationships (Farida and Nuryakin 2021). According to Johan et al (2022) the network is correlated with the ability to identify in innovating products that will be offered to consumers (Nuseir 2022). According to Li et al (2023) Network is defined as an organization's ability to obtain information in order to improve business performance. Brekke (2015) states that the choice of location by combining the network and the types of access offered can contribute to the business itself. In research Forkmann et al. (2018) states that the ability of organizations to build networks can lead to product innovation in providing offers to consumers. In addition to network capability that can have an influence on product innovation, network capability can also build a company's ability to carry out marketing miz activities. This is as stated by Noviyanti and Suryani (2020) that the company's ability to build a network can have an influence on product provision.

H1:There is an influence of Network capability on product innovation

H2: There is an influence of network capability on the marketing mix

Marketing intelligence, marketing mix and product innovation

The marketing concept states that organizations will be successful if they consistently meet the needs of their customers better than their competitors (Kapoor, Balaji, and Jiang 2021). Often organizations spend a lot of resources in an effort to

better understand the needs of their customers and the nature of the markets they serve. Given this reliance on external information, it is not surprising that the marketing function has played a major role over the years in shaping organizational processes for providing decision support information to decision makers. Marketing research began in the 1930s followed by marketing intelligence (MI) (Machadi and Davim 2022) and marketing mix (MM) (McDowell, 2009). Marketing intelligence is a strategy that can be carried out by all organizations to obtain information by collecting data and analyzing the market in determining current trends. The search for information obtained is then processed to produce a strategic decision for the company. Lies (2022) states that organizations that are able to implement intelligence as a strategy can make a big contribution to business performance, especially in providing innovative products. To produce good information regarding product variants, product quality, product prices, distribution, promotion and competitors, intelligence marketing is a tool that managers can use in making decisions (Sheen, 2017). Information searches carried out by organizations are then specifically collected to be used as a means in the marketing process, namely a set of products, prices, promotions, and distribution with the aim of making marketing decisions (Zachary, et al, 2017).

H3: There is an effect of marketing intelligence on product innovation H4: There is an effect of marketing intelligence on the marketing mix

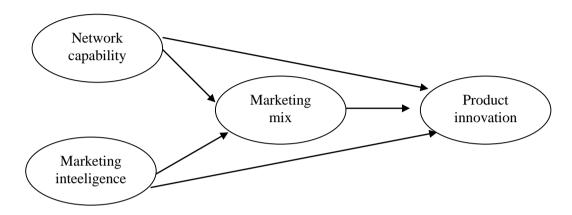
Marketing Mix

According to Wu (2018) the marketing mix has an important role in influencing consumers to be able to buy a product being offered. Marketing smell elements consist of all the variables that the company can control in order to satisfy all its customers. According to Pomering (2018) the marketing mix can work well if it is combined with the owner's ability to build his business network. Zeithaml and Bitner (2018) say that the marketing mix is elements of a company organization that can be controlled by companies in communicating with consumers. According to Kotler (2019) the marketing mix is a good marketing tool, namely a set of products, prices, promotions, and distribution combined to produce the desired response in the target market. In the marketing odor there is a marketing tool known as the 4P, namely; product (product), price (price), promotion (promotion), and place (place or distribution channel).

Noviyanti and Suryani's research (2020) suggests that the company's ability to carry out marketing mix activities is influenced by the network that is built. The consumer's decision to make a purchase is a result that has been formulated by the company for a product that is adapted to innovative product trends. Product innovation allows a company to redefine its current product market and / or develop new products to capture emerging market opportunities. Thus, product innovation is the main driver of corporate survival and sustainable competitive advantage, especially in business conditions characterized by technological discontinuity, changing market preferences, globalization and increasingly intense market

competition (Zhou, Gao, & Zhao, 2017). Vinit's research (2017) states that the company's ability to manage the marketing mix can create innovative products and have competitiveness against its surrounding competitors.

H5: Marketing mix has an effect on product innovation



3. METHODS

In this study, researchers used a descriptive verification approach. This means explaining and describing phenomena based on the data collected, as well as testing or proving theories or research that has been done previously (Cooper and Willim, 1997). In this case, the population obtained as many as 220 SMEs in the clothing sector, and a sample of 211 samples obtained using the Slovin formula. Data analysis in this study, researchers used path analysis using the multivariate structural equation model (SEM) technique assisted by smart PLS. The data collection methods used in this study were observation, interviews and questionnaires. A questionnaire is said to be valid if the questions on the questionnaire are able to reveal something to be measured. Significance test is done by comparing the value (r) count with (r) table. The technique used to measure each variable is a Likert scale which has five alternative answers: 1. Strongly disagree (SD) to 5. Strongly agree (SA).

4. RESULTS

Results This section is to analyze data derived from data that has been described from the previous data which is a description of the data, the data is analyzed from the assumptions used for a particular statistic by conducting hypothesis testing to draw conclusions. PLS is an alternative approach that shifts from a Covariance-based SEM approach to a variant-based approach. Covariance-based SEM generally tests quality or theory while PLS is more of a predictive model. The structural model testing in PLS was carried out with the Smart PLS ver 3 for

windows software. The following is structural model in the form of problem formulation:

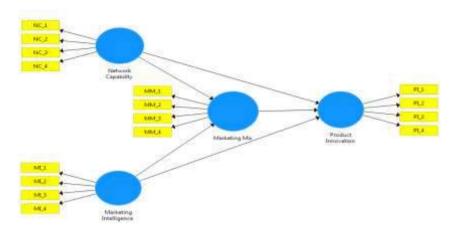


Figure 1. PLS Structural Model

There are two group stages to analyze SEM - PLS, namely analysis of the measurement model (outer model) and analysis of the structural model (inner model). Analysis of the Measurement Model (Outer Model). This analysis aims to evaluate the construct variables being studied, namely the validity (accuracy) and reliability (reliability) of a variable.

Convergent validity is the extent to which a measure is positively correlated with alternative measures of the same construct. The conclusion criterion for convergent validity is whether it is valid or not seen from the Outer loading value. In best practice, each indicator is expected to have an outer loading value greater than 0.7 if the outer loadding value> 0.4 to <0.7 can also be considered, especially in new / exploratory research. However, if the outer loading value is less than 0.4, the indicator must be removed from the variable and re-tested the convergent validity before proceeding to the discriminant validity test (Hair, et al., 2014), the results of outer loading can be seen in the table below.

Table 2. Outer loading

	Network Capability	Marketing Intelegence	Marketing Mix	Product Innovation
NC_1	0.668			
NC_2	0.575			
NC_3	0.942			
NC_4	0.809			
MI_1		0.821		
MI_2		0.913		
MI_3		0.757		
MI_4		0.651		
MM_1			0.880	
MM_2			0.902	
MM_3			0.787	
MM_4			0.579	
PI_1				0.879

PI_2		0.905
PI_3		0.785
PI_4		0.676

Source: Processed by SmartPLS3 Researchers (2021)

Of the four variables, namely Network Capability, Marketing Intelligence, Marketing Mix and Product Innovation, it has an outer loading> 0.4 so the indicator is valid

Discriminant validity

This test aims to determine whether an indicator of a construction variable is valid or not. In the Smart PLS website, the best recent measurement is to see the Heterotrait-Monotrait Ratio (HTMT) value. If the HTMT value is <0.90, then a construct has good discriminant validity (Juliandi, 2018).

Table 3. Discriminant Validity

	Network Capability	Marketing Intelligence	Marketing Mix	Product Innovation
Network Capability (X1)	0.538			
Marketing Intelegence (X2)	0.225	0.581		
Marketing Mix (Z)	0.454	0.691	0.631	
Product Innovation (Y)	0.245	0.469	0.522	0.558

From table 3 above, it can be seen that HTMT for Network Capability, Marketing Intelligence, Marketing Mix and Product Innovation variables has a HTMT value <0.90 so that all variables are valid seen from the rest of the discriminant validity. Internal consistency is a form of reliability used to assess the consistency of results. These cross-items on the same test determine whether the items measure a similar construct in their scores. The criterion for drawing conclusions on a construction variable is said to be reliable if the composite reliability value is> 0.60 (Hair, 2014).

Tabel 4. Composite Reliability

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Network Capability (X1) Marketing Intelegence (X2)	0.818 0.772	0.681 0.806	0.777 0.834	0.507 0.570
Marketing Mix (Z) Product Innovation (Y)	0.642 0.642	0.825 0.826	0.791 0.792	0.552 0.552

Source: Processed by SmartPLS3 Researchers (2021)

From the table above, it can be concluded that. The Network Capability variable (X1) is reliable because the composite reliability value is 0.777 > 0.60. The Marketing Intelligence variable (X2) is reliable because the Composite reliability value is 0.834 > 0.60. The Marketing Mix (Z) variable is reliable because the Composite reliability value is 0.791 > 0.60. Variable Product Innovation (Y) is reliable because the value of Composite reliability is 0.792 > 0.60.

Structural Model Analysis

Structural model analysis aims to analyze the research hypothesis. There are at least two parts that need to be analyzed in this model, namely: the coefficient of determination and hypothesis testing. R-square is a measure of the proportion of variants that are affected (endogenous) which can be explained by the variables that influence it (exogenous). This is useful for predicting whether the model is good / bad (Juliandi, 2018). The r-square result for endogenous latent variables of 0.75 identifies that the model is substantial (good), 0.50 identifies that the model is moderate (moderate) and 0.25 identifies that the model is weak (bad).

Table 5. R Square

	Table 3. K Square					
	Original	Sample Mean	Standart	T Statistik	P Value	
	Sampel (0)	(M)	Deviation			
Marketing Mix	0.571	0.644	0.090	6.341	0.000	
Product Innovation	0.296	0.456	0.110	2.697	0.010	

The following is the conclusion of the R-square test results. The first model knows that the effect of X1 and X2 on Z with an R-square value of 0.571 identifies that the variation in the Z value can be explained by the variation of X1 and X2 of 57.10%. In the second model, it is known that the effect of X1, X2 and Z on Y with an R-square value of 0.296 identifies that the variation in the Y value can be explained by the variation of X1, X2 and Z of 29.60%.

F-square is a measure used to assess the reative impact of an influencing (exogenous) variable on the affected (endogenous) variable. The conclusion criterion is that if the f2 value is 0.02, then there is a small (weak) effect of the exogenous variable on endogenous, the f2 value is 0.15, then there is a moderate effect of the exogenous variable on the endogenous, the f2 value is 0.35 then there is large effect of exogenous variables on endogenous (Juliandi, 2018).

Table 6. f-square

	Original Sampel (0)	Sample Mean (M)	Standart Deviation	T Statistik	P Value
X1 – Y	0.001	0.135	0.242	0.005	0.996

X2 – Y	0.033	0.090	0.122	0.273	0.785
Z - Y	0.079	0.136	0.155	0.508	0.612

Source: Processed by SmartPLS3 Researchers (2021)

- 1. Testing variable XI to Y is 0.001 and P-Values 0.996> 0.05 (not significant). This means that the variable XI has a weak influence on Y, and the weak influence is not significant.
- 2. The effect of variable X2 on Y is 0.033 and P-values 0.785> 0.05 (not significant). This means that the variable X2 has a weak influence on Y, and the weak influence is not significant.
- 3. Testing of variable Z against Y is 0.079 and P-values 0.612> 0.05 (not significant). This means that the variable Z has a weak influence on Y, and the weak influence is not significant.

Hypothesis testing

Direct effect analysis is useful for testing the hypothesis of the direct effect of an influencing variable (exogenous) on the affected variable (endogenous). If the path coefficient value is positive, the effect of a variable on is unidirectional, if the value of an exogenous variable increases, the value of the endogenous variable also increases. Conversely, if the path coefficient value is negative, the effect of a variable on is in the opposite direction, if an exogenous variable increases then the value of the endogenous variable decreases (Juliandi, 2018). If the p-value <0.05, the effect of exogenous variables on endogenous variables is significant, and if the probability value> 0.05 means that the effect of exogenous variables on endogenous variables is insignificant (Juliandi, 2018).

Table 7. Path Coefficient

	Original Sampel (0)	Sample Mean (M)	Standart Deviation	T Statistik	P Value
X1 – Z	0.315	0.318	0.150	2.097	0.056
X1 - Y	0.033	0.160	0.270	0.124	0.902
X2 - Z	0.620	0.630	0.107	5.782	0.000
X2 - Y	0.213	0.219	0.265	0.804	0.438
Z - Y	0.359	0.308	0.288	1.247	0.191

Conclusion of direct hypothesis testing. The direct effect of network capability on the marketing mix has a path coefficient of 0.315 (positive). This shows a prediction that if the value of the network capability variable increases, the marketing mix value will also increase. This influence has a probability value (p - value) of 0.056> 0.05, so that HO is accepted, meaning that the effect of network capability on the marketing mix is insignificant. The direct effect of network capability on Product Innovation has a path coefficient of 0.033 (positive). This shows the prediction that if the value of the network capability variable increases, the value of product innovation will also increase. This influence has a probability value (p - value) of 0.902> 0.05, so that HO is accepted, meaning that the network capability of product innovation is insignificant. The direct effect of marketing intelligence on

the marketing mix has a path coefficient of 0.620 (positive). This shows a prediction that if the value of marketing intelligence increases, the value of the marketing mix will also increase. This influence has a probability value (p - value) of 0.00 < 0.05, so that HO is rejected, meaning that marketing intelligence on the marketing mix is significant.

The direct effect of marketing intelligence on product innovation has a path coefficient of 0.213 (positive). This shows the prediction that if the value of the marketing intelligence variable increases, then product innovation will also increase. This influence has a probability value (p - values) of 0.438> 0.05, so that HO is accepted, meaning that marketing intelligence on product innovation is not significant. The direct effect of marketing mix on product innovation has a path coefficient of 0.359 (positive). This shows the prediction that if the value of the marketing mix variable increases, the value of product innovation will also increase. This influence has a probability value (p - values) of 0.191> 0.05 so that HO is accepted, which means that the marketing mix for product innovation is insignificant.

5. DISCUSSION

Product innovation is the main driver for organizational survival as well as sustainable competitive advantage, especially in business conditions characterized by high competition, technological developments, and changing market preferences. The network built by an SME is a driving force for the development of product innovation. SMEs that are unable to build a network automatically will be left behind by their competitors. Therefore, the need for a network is needed to increase the strength of competition that leads to product innovation. The SMEs in the city of Bandung, have so far implemented a network strategy, especially in providing products or services to consumers. Network capabilities is an organization's ability to develop and launch products. This capability allows the organization to keep abreast of developments about what kind of products consumers need and want. The better the network owned by the company, the more it can increase consumer buying interest, thereby increasing marketing performance. These results are consistent with research () which states that with a network that is built, organizations can provide a better marketing mix.

Marketing intelligence is a tool that can be used by all organizations to obtain information by collecting data and analyzing the market in determining current trends. The ability of SMEs, especially in the city of Bandung, in understanding the market is one of the important things. For this reason, it is necessary for SMEs to understand intelligent marketing in developing product innovation, which consists of the ability to understand markets, products, competitors and customers. Intelligence in understanding the market situation is very important for the sustainability of the organization itself. This is as stated by Othman (2020) that organizations that can apply marketing intelligence can contribute to business performance. Market Intelligence or is the ability of an organization to absorb daily relevant information related to business operations, collected and analyzed

specifically for the purpose of being accurate and confident in making decisions to determine market opportunities, market penetration strategies, market development and metrics.

Market intelligence is required when entering foreign markets. Thus it can be interpreted that market intelligence is a key step in making an export strategy (financialbisnis.com, 2013). Based on the research results, it can be concluded that network capability can affect the marketing mix which can affect the provision of innovative products. This result is corroborated by research Liu et al. (2010) and () that in order to excel in competition, especially SMEs must have a strategy that is the key to success. One thing that can be done is to build a good network and understanding of the market in which the organization operates. Organizational capabilities in the marketing mix must be based on information about the business environment that supports decision-makers in the process of developing their marketing strategy leading to the creation of innovative and competitive products from both design and features. The role of marketing intelligence has an influence on the marketing mix, this is as stated by () that the SMEs owner's ability to understand information leads to the provision of a marketing mix so as to produce innovative products.

6. CONCLUSION and LIMITATION

Network capability has a positive and significant effect on the marketing mix. This is in accordance with the distribution of questionnaires that have been distributed that the ability of SMEs in implementing the marketing mix can be influenced by the business networks that the SMEs own. Network capability has a positive effect on product innovation. This is in accordance with the distribution of questionnaires stating that business networks can provide information on product trend development. The marketing mix has a positive effect on product innovation. This is in accordance with the distribution of questionnaires that were distributed, that the marketing mix, especially products, can develop product innovation itself.

Intelligent marketing has a positive effect on the marketing mix. This is consistent with the distribution of questionnaires which state that market-related understanding can affect the marketing mix undertaken by SMEs. Intelligent marketing has an effect on product innovation. This is in accordance with the distribution of questionnaires which state that the product development carried out is based on an understanding of the market. Network capability and marketing intelligence have an effect on product innovation through the marketing mix. This is in accordance with the questionnaire distribution that in order to create innovative products, SMEs must have a good network and market understanding as well as a good marketing mix.

REFERENCES

Abrahamsen, Morten H., Aino Halinen, and Peter Naudé. 2023. "The Role of Visioning in Business Network Strategizing." *Journal of Business Research* 154. doi:

- 10.1016/j.jbusres.2022.113334.
- Aftab, Muhammad, Abdul Aziz Bin Abdullah, Asad Ur Rehman, Haseeb Sarwar, Muhammad Bilal Majid, Ayesha Nawal, Scholar University Sultan Zainul Abidin, Kuala Terengganu, and University Sultan Zainul Abidin. 2021a. "Modeling Entrepreneurial Marketing, Social Media Marketing, Product Innovation and SME's Performance." *Psychology and Education* 58(5).
- Aftab, Muhammad, Abdul Aziz Bin Abdullah, Asad Ur Rehman, Haseeb Sarwar, Muhammad Bilal Majid, Ayesha Nawal, Scholar University Sultan Zainul Abidin, Kuala Terengganu, and University Sultan Zainul Abidin. 2021b. "Modeling Entrepreneurial Marketing, Social Media Marketing, Product Innovation and SME's Performance." *Psychology and Education* 58(5):1615–29.
- Andonov, Aleksandar, Georgi P. Dimitrov, and Vasil Totev. 2021. "Impact of E-Commerce on Business Performance." *TEM Journal* 10(4). doi: 10.18421/TEM104-09.
- Farida, Ida, and Doddy Setiawan. 2022. "Business Strategies and Competitive Advantage: The Role of Performance and Innovation." *Journal of Open Innovation: Technology, Market, and Complexity* 8(3). doi: 10.3390/joitmc8030163.
- Farida, Naili, and Nuryakin. 2021. "Network Capability, Relational Capability and Indonesian Manufacturing SME Performance: An Empirical Analysis of the Mediating Role of Product Innovation." *Engineering Management in Production and Services* 13(1). doi: 10.2478/emj-2021-0003.
- Hadi, Prasetyo. 2023. "Effect of Product Innovation on SME's Performance: The Moderating Role of Organizational Learning and Market Orientation." *International Journal of Business Ecosystem & Strategy* (2687-2293) 5(2):47–54.
- Johan, Ahmad Johan, Ratih Hurriyati, and Puspo Dewi Dirgantara. 2022. "Context of Knowledge and Network Capabilities: A Framework for Achieving Innovation Strategies for SMEs in Bandung City." *Journal of Management and Business* 21(2):161. doi: 10.24123/jmb.v21i2.584.
- Kapoor, Payal S., M. S. Balaji, and Yangyang Jiang. 2021. "Effectiveness of Sustainability Communication on Social Media: Role of Message Appeal and Message Source." *International Journal of Contemporary Hospitality Management* 33(3):949–72. doi: 10.1108/IJCHM-09-2020-0974.
- Lee, Chia Chi. 2023. "Enhancement of Overall Business Performance and Business Performance by Industry Sector of Accounting Firms: Decisions on the Allocation of Human Resource Attributes." *Asia Pacific Management Review* 28(4). doi: 10.1016/j.apmrv.2023.01.004.
- Li, Ying, Li Cui, Lin Wu, Paul Benjamin Lowry, Ajay Kumar, and Kim Hua Tan. 2023. "Digitalization and Network Capability as Enablers of Business Model Innovation and Sustainability Performance: The Moderating Effect of Environmental Dynamism." *Journal of Information Technology* 0(2):1–29. doi: 10.1177/02683962231219513.
- Lies, Jan. 2022. "Marketing Intelligence: Boom or Bust of Service Marketing?" *International Journal of Interactive Multimedia and Artificial Intelligence* 7(7). doi: 10.9781/ijimai.2022.10.001.
- Liu, Hefu, Weiling Ke, Kwok Kee Wei, Jibao Gu, and Huaping Chen. 2010. "The Role of Institutional Pressures and Organizational Culture in the Firm's Intention to Adopt Internet-Enabled Supply Chain Management Systems." *Journal of Operations Management* 28(5):372–84. doi: 10.1016/j.jom.2009.11.010.
- Machadi, Carolina, and J. Paulo Davim. 2022. GREEN PRODUCTION ENGINGEERING AND MANAGEMENT. Elsevier Ltd.
- Nuseir, M. 2022. "The Effect of Digital Marketing Capabilities on Business Performance Enhancement: Mediating the Role of Customer Relationship Management (CRM)."

- International Journal of Data and Network Science 6(2):295–304. doi: 10.5267/j.ijdns.2022.1.008.
- Othman, B. A. 2020. "The Effects on Customer Satisfaction and Customer Loyalty by Integrating Marketing Communication and after Sale Service into the Traditional Marketing Mix Model of Umrah Travel Services in Malaysia." *Journal of Islamic Marketing* 12(2):363–88. doi: 10.1108/JIMA-09-2019-0198.
- Pomering, A. 2018. "Building Sustainability into Services Marketing: Expanding Decision-Making from a Mix to a Matrix." *Sustainability (Switzerland)* 10(9). doi: 10.3390/su10092992.
- Srimulyani, Veronika Agustini, Yustinus Budi Hermanto, Sri Rustiyaningsih, and Laurensius Anang Setiyo Waloyo. 2023. "Internal Factors of Entrepreneurial and Business Performance of Small and Medium Enterprises (SMEs) in East Java, Indonesia." *Heliyon* 9(11). doi: 10.1016/j.heliyon.2023.e21637.
- Wu, Y. 2018. "Marketing Mix, Customer Value, and Customer Loyalty in Social Commerce: A Stimulus-Organism-Response Perspective." *Internet Research* 28(1):74–104. doi: 10.1108/IntR-08-2016-0250.