# **RELEVANCE:**

# Journal of Management and Business

ISSN (online) : 2615-8590 ISSN (print) : 2615-6385

# Enhancing Product Innovation Through Digital Value Resonance: Technology Readiness

#### Luthfy Purnanta

Department of Business, Academic Faculty, STEKOM University, Indonesia <u>luthfypurnanta@stekom.ac.id</u>

#### **Agustinus Budi Santoso**

Department of Business, Academic Faculty, STEKOM University, Indonesia agustinus.bs@stekom.ac.id

#### **Roymon Panjaitan**

Department of Business, Academic Faculty, STEKOM University, Indonesia <u>roymon@stekom.ac.id</u>

#### Edwin Zusrony

Department of Business, Academic Faculty, STEKOM University, Indonesia <u>edwin.zusrony@stekom.ac.id</u>

#### Abstract

This study intends to investigate technology readiness and the proficient to strive digitally for various offerings across digital value resonance, primarily for small medium enterprises. Questionnaires and interviews were used to gather data from 204 small and medium-sized businesses. SEM-PLS approaches are used to evaluate the impact of information with a trajectory moderated by digital value resonance on product innovation. The findings demonstrated that the digital value resonance managed to avoid the link between technological preparedness and product innovation enhancement. The advantages of this study are in the synthesizing of proposed digital value resonance variables from the results of resource-based view theory propositions, which aids in connecting previous researcher gaps and adds to a new concept that can configure digital value at the level of competition and increase MSME innovation products.

Keywords: Product innovation; Digital Value Resonance; Technology Readiness

## Introduction

The dynamics reflect business behavior toward transnational technical inventions of diffusion of innovation. Traditional business paradigms are already under pressure from computer media. As a

RELEVANCE: Journal of Management and Bussines • Vol.5 • No.1 • Page. 078-098 • 2022

result, firms must innovate by breaking through or fuelling competitive digital skills. According to Nugroho et al., (2017), digital customers' preferences for ease of use, accessibility, and capital, which influence willingness to embrace information technology, were also propelled for technology readiness in small and medium firms. Infrastructure is being constructed in both developed and emerging nations, focusing on stutter-stepping, which comprises the utilization of e-commerce for retail and wholesale transactions (Alam et al., 2011; Carcary et al., 2014; Ifinedo, 2011; Kurnia, 2015). An incredibly powerful argument over the technology's suitability for adoption might be utilized to expand the firm's current customers, explore the new business field, and improve operations (Astuti & Nasution, 2014; Walker et al., 2016).

According to Barney et al., (2001) and Grant, (1991) resource theory, knowledge is several of the capital assets that allows firms to explore prospects for assessment design or circumvent potential consequences. According to Oliveira & Martins, (2010) and Schwab, (2009). Similarly, Mahoney, (1995) points to Penrose's (1959) corporate resource learning theory to highlight two components of management heterogeneity: resource interconnectivity and mental models.

Resource theory is refined as technology advances into a comprehensive plan that leads to an online competitive evolution strategy that demands actual commerce activities to meet client requirement while focusing on enduring industry stability (Evans, 2001; Ilieva et al., 2002; Weber & Polo, 2010). According to Bharadwaj et al., (2013) and Nguyen et al., (2015), the digital dominance pillar includes digital business strategy and value development. They suggest that acts of internet technology have a significant impact on product brand innovation.

The influence of sequentially determining product innovation maneuvers dominates MSME actors' current economic movement.

Some points of view represent a constellation of mission-critical technology readiness gains. According to Chang & Chen, (2021); Lokuge et al., (2019; Okundaye et al., (2019), even before businesses have a high level of technological readiness for rewards, digital innovation changes the simple intent of traditional systems toward great chance. It exerts a significant effect on transaction ease. According to Halpern et al., (2021), structural adaptability can be used to fast-track the speed of invention. The number of product improvements will increase as each company's technological readiness develops. However, there are differences in logical and practical points of view on the relevance of technology competence that argues otherwise. Technology Readiness has little impact on customer attitudes towards self-service technologies and adoption behaviors and self-service technologies. Innovation has little effect on attitudes towards internet use (Liljander et al., 2006).

Similarly, Mohorčich & Reese, (2019) contend that when sellers are under pressure from importers in the supply chain, consumer activism motivates manufacturers' technology readiness. Another variance in the significance of technology readiness is the consequence of demographic shift and planning for retirement age, which causes replies to technology education to drop (Larwood et al., 1997). According to Ahn & Yoon, (2020), the poverty trap or middle-income business economy.

Product innovation, according to Malhotra & Hunt, (2018), is a criterion for MSMEs to apprise their competences in order to adapt to the current business climate. However, as far as the author knows, there is no research that contributes to delivering a fresh conceptual model with digital value resonance. Reverberate in the trade digital value resonance is not a symptom or result of technology readiness and digital competitiveness, but it can be strengthened when a company has both. As an outcome, the fair of this analysis is to enhance the function of digital value resonance by

way of a linear association function for improving creative products. This report attempts to address the role of emulating MSMEs' digital value in order to adapt to technological preparedness and compete digitally in the light of mounting crescendos and high-level product innovation for professional continuousness.

#### **Review of Literature**

## Technology Readiness, Digital Value Resonance, Product Innovation

According to Oliveira & Martins, (2010), the technical readiness element is a critical enabler for e-commerce adoption. Liljander et al., (2006) technological readiness has a minor impact on a person's or customer's attitude toward technology acceptance and rating. Liljander et al., (2006) the trend into digital value resonance will confront hurdles. People's eagerness to embrace and employ new technology is referred to as technology adoption to attain personal and professional goals, as evidenced by the four personality traits of confidence, proactiveness, awkwardness, and instability (Parasuraman, 2000).

Advancements in technology, such as technology-based corporations that can improve production efficiency and effectiveness, assist the capability to boost innovative products (Garcia & Calantone, 2002). Enhanced product innovation in unique acculturation products requires technology-based products (Sugiyarti et al., 2018). Linked algorithms provide precise engineering and fabrication upgrades, resulting in increased supply efficiency (Kessler & Chakrabarti, 1996).

Researchers have previously indicated the direct association between digital skillset and innovative products. Small and medium firms employ media, especially the internet, as a supply of packaging and process innovation, per the (Kristiansen et al., 2005), explained that media, including the internet, are used as a source of design and product innovation by small and medium enterprises (SMEs). Sugiyarti et al., (2018) also stated that boosting product

innovation requires innovation technology-based products. Companies are expected and triggered to innovate in mirroring the values of digital products according to the needs of the industrial era 4.0, and technology is the catalyst for this. According to Cabanero-Johnson & Berge, (2009), the rise of the digital native generation should be reason enough for product/service providers to make gradual changes that are always directed toward digital technology.

Thus according to Garcia & Calantone, (2002), digital technology capabilities are required for product innovation and technological readiness. Emerging technologies must be stimulated in needed to design novel products. Where media, such as the internet, is acknowledged as a driver of commercial quality and technology, Kristiansen et al., (2005) opinion is also highly relevant. Because many features of technology and product creation still entail the engagement of many parties, the significance reflects the digital value of enhancing the interplay between smart technology and product creation.

- H1: Technology readiness influence on digital value resonance.
- H2: Digital value resonance influence on product innovation.
- H3: Technology readiness influence on product innovation.
- H4: Technology readiness influence on product innovation through digital value resonance

### **Research Method**

This analysis points to find contradictions in the correlation among technology readiness and product innovation, deliberating digital value resonance as an intermediary. Questionnaires and interviews are often used to gather information from 204 small and medium business sectors. From April to June 2022, questionnaires will be delivered to MSMEs in Central Java for three months. Empirical mediation contributions from digital value resonance are investigated using SEM-PLS line analysis. Conceptual Model

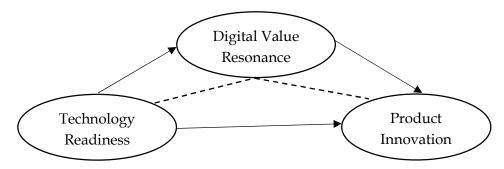


Figure 1. Research Model

## Population dan Samples

Through digital value resonance, this study explains the relevance of industrial competence. The participants in this study comprise people who work in e-commerce, manufacturing, culinary services, or other organizations that sell things online and have some demographic data (Table 1). For sampling, we adopt the convenience strategy. Defendants were given closed checklists and interviewed to assess their perceptions of the digital value they utilize to produce new products. For three months, from April to June 2022, questionnaires will be fully online to establishments and MSMEs on the island of Java. Two hundred four participants were identified for statistical analysis during this period.

No. Category		Characteristics	Total	%	
1.	Sex	Male	82	40,1 %	
		Female	122	59,8 %	
2.	Age	< 10 years	37	18,1 %	
		> 10-20 years	48	23,5 %	
		> 20-30 years	102	0,5 %	
		> 30-40 years	12	5,1 %	
		> 40 years	5	5,8 %	
3.	Education	Senior High School	32	15,6%	
				0.7	

Table 1. Demographic Information of the Respondents

No.	Category	Characteristics	Total	%
		Bachelor Degree	128	62,7%
		Master Degree	27	22,1%
		Doctoral Degree	17	13,2%
4.	The duration of	< 5 years	48	23,5%
	business	> 5-8 years	75	36,7%
		> 8-12 years	23	11,2%
		> 12 years	58	28,4%
5.	Omzet / month	< Rp 5 Million	79	38,7%
		> Rp 5 Million – Rp 10 Million	39	19,11%
		> Rp 10 Million – Rp 100 Million	46	22,5%
		> Rp 100 Million – Rp 200 Million	37	18,1%
		> Rp 200 Million	3	1,4%
6.	Type of Business	Online Business	127	62,2%
	used	Manufacture	5	2,4%
		Culinary	35	17,1%
		Others	37	18,1%

Source: Data Collected from questionnaire (2022)

# Variable Measurement

Variable measurement items are adapted from earlier literature with alterations to reflect specific research goals. All variables are measured using a five Likert continuum that ranges from Strongly Disagree to Strongly Agreeable. Table 2 represents the research variables and task related indicators.

Table 2.	Operational	Variables
----------	-------------	-----------

Variable	Questic	on Dimension/Indicator	References
Technology readiness	4 items	<ul><li> Optimisme</li><li> Innovation</li><li> Discomfort</li><li> Insecurity</li></ul>	(Parasuraman & Colby, 2015), (Rojas-Méndez et al., 2017), (Sani et al., 2020)

Variable	Questio	n Dimension/Indicator	References
Digital value resonance	4 Items	<ul> <li>Ability to design technology based systems</li> <li>Technology-based marketing configuration skills</li> <li>Predicting prospects for technology-based ideas in a timely manner</li> <li>Distinctiveness of sales points</li> </ul>	(Adam et al., 2014), (O'Cass and Sok, 2013), (Sullaida et al., 2018), (Zhou et al., 2005)
Product innovati on	3 items	<ul> <li>Impulse for quality and innovation Product evaluation from costumers and suppliers</li> <li>Customer and supplier feedback on the product</li> <li>Ecological adaptation</li> </ul>	Merchant, H. 2020), (Jaeger et al., 2017), (Ramkumar,

# Data Analysis

The SEM-PLS (Partial Least Square) structural equationtechnique model was used to test the research model with Smart-PLS 3.0 software. The method used in this study uses quantitative methods. Small sample sizes and sophisticated models can benefit from SEM-PLS techniques. SEM techniques can also study the effect of mediation simultaneously (Tabachnick & Fidell, 2017). SEM-PLS model testing is split into two parts: measurement model (outer model) and structural model testing (inner model).

## Measurement Model (Outer Model)

The validity and reliability of the construct are evaluated via measurement model testing. Convergent and discriminant rationality are dual types of cogency tests. When determining the correlation between two sizes of the same conception, convergence validity is applied. The loading factor value is used to determine the

reflective construct's convergent validity and the Average Variance Extracted (AVE) value, which is the sum of squared standardized factors calculated by the total of capacity objects. A loading factor of 0.7 is needed for convergence validity, and the AVE value must be higher than 0.5 (J. F Hair, 2014). The discriminant's validity is done by comparing the AVE values of mutually builds with the straight of the association amongst the binary concepts beneath the review. A statistic of discriminant validity is how opposite one construct is from another. Each construct's AVE value must be less than the coefficient value across constructs in a model's original number, according to Fornell & Larcker, (1981).

When the same indications are measured twice or more on occasion using the same instrument, consistency exams are used to check the constancy of the effects. Cronbach's alpha seems to be more than 0.7, which is still acceptable, and consistency analysis load guidelines gather composite reliability criteria (J. F Hair, 2014). *Structural Model* 

The structural model can predict causality correlations between latent variables in this paper. The R-Square (R2) rate and the predictive relevance model are the parameters for use in model tests (Q2). The higher the R2 number, the better the research model, whereas Q2 displays the model's level of output and the predictable constraints that are well gaged obtained after data. The route coefficient value shows the degree of relevance in hypothesis testing (inner model). In hypothesis testing with alpha 5%, the loadcarrying imperative of the pathway constant importance suggested by the t-statistical value must be greater than 1.96 for the doublesided postulate (Joe F. Hair et al., 2011).

# **Results and Discussion**

Results

Convergent Validity

For variable reliability testing, Cronbach's alpha coefficient was employed to examine the reliability of each core variable in the measurement model. Cronbach's alpha coefficients spanned from 0.809 to 0.823, more significant than 0.7 (Bagozzi & Yi, 1988; Fornell & Larcker, 1981). In addition, as reported in Table 3, all-composite reliability index values ranged from 0.874 to 0.884, higher than 0.7, confirming construct dependability. Finally, Cronbach's alpha and the composite reliability attained for all variables are deemed consistent and adequate to infer that those variables are error-free.

Construct	Indicator	STD.	Cronbach	Status	
Construct		Loading	Alpha	Status	
Technology Readiness (X)	X.2	0.786	0.809	Valid	
AVE = 0.635	X.4	0.775		Valid	
CR = 0.874	X.5	0.828		Valid	
	X.6	0.799		Valid	
Product Innovation (Y)	Y.1	0.740	0.823	Valid	
AVE = 0.655	Y.2	0.798		Valid	
CR = 0.884	Y.5	0.844		Valid	
	Y.6	0.851		Valid	
Digital Value Resonance (Z)	Z.1	0.788	0.811	Valid	
AVE = 0.640	Z.2	0.870		Valid	
CR = 0.876	Z.3	0.810		Valid	
	Z.4	0.725		Valid	
R-square (R²) – Product Innovation	0.594				
R-squared (R²) – Digital Value Resonance	0.531				
Adjusted R Product Innovation	0.590				
Adjusted R Square Digital Value Resonance	0.529				

Table 3. Convergent validity, Crossbanch's alpha and AVE

Source: Data Processed PLS (2022)

The value of Composite Reliability (CR) bigger than 0.7 is measured by construct reliability index (CRI) 0.70, according to test results in Table 3. (J. F. Hair et al., 2010). Until the data could well be

interpreted as reliable, the findings are technologically readiness (X) 0.874, product innovation (Y) 0.884, and digital value resonance (Z) 0.876. Technology readiness (0.635), product innovation (0.655), and The aggregate estimate of extracted variance (AVE) produced digital value resonance (0.640). The instrument's validity has been accepted even though all AVE criteria are above the cut-off value of 0.50.

The R square digital value resonance influence of 53.1 percent is shown in Table 3. That is, technological readiness can explain digital value resonance. The remaining 45.5 percentage was explained by unverified variables. Technology readiness and digital value resonance have a 59.0 percent R square influence on product innovation (Y), with the remaining 41% accounted by other variables not investigated.

Convergent Validity

Variable	TR(X)	PI (Y)	DVR (Z)
Technlogy Readiness (X)	0.797		
Product Innovation (Y)	0.694	0.810	
Digital Value Resonance (Z)	0.729	0.735	0.800

Table 2 Discriminant Validit

Source: Data Processed PLS (2022)

Description: TR = Technology Readiness, PI = Product Innovation, DVR = Digital Value Resonance

Based on the table above, the MSME technology readiness variable (0.797) has a higher correlation than product innovation variable (0.694) and DVR (0.729), as well as the PI variable (0.810) which is higher than technology readiness (0.694) and digital value resonance (0.735). The variable digital value resonance (0.800) has a higher correlation than product innovation variable (0.735) and

digital value resonance (0.729). As a result, the model can be assumed to have acceptable discriminant validity *Hphotesis Testing* 

Hypothesis	Direct & Indirect Effect	Original Sample	Standard Deviation	T-Value	P - Values
H1	$TR(X) \rightarrow DVR(Z)$	0.729	0.047	15.487	0.000
H2	$\mathrm{DVR}(Z){\rightarrow}\mathrm{PI}(Y)$	0.488	0.082	5.972	0.000
H3	$\mathrm{TR}(\mathrm{X}){\boldsymbol{\rightarrow}}\mathrm{PI}(\mathrm{Y})$	0.338	0.069	4.930	0.000
H4 (Me)	TR (X)→DVR (Z)→PI (Y)	0.356	0.064	5.525	0.000

Table 4. 1	Hypothesis	Testing
------------	------------	---------

Source: Data Processed PLS (2022)

Description: TR = Technology Readiness, PI = Product Innovation, DVR = Digital Value Resonance

As a mediators between technology readiness and product innovation, the digital value resonance capability variable was chosen. This is complete to plug a exploration break on the impacts of product innovation on technological readiness. The mediation role of digital value resonance as a new function notion must be studied in this research. The effect of technology readiness on brands edged up (= 0.338 to = 0.356) and significantly (t = 5,525) with a probability value less than 0.01. From table 4, the results of the first hypothesis above showed be had a positive effect on DVR, the second hypothesis of DVR had a up impact on PI, the third postulation of TR had a encouraging power on PI. The fourth postulate evidences that DVR contributes to enhancing TR in PI.

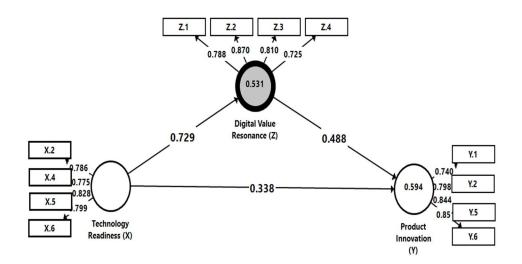


Figure 2. Full Structural Model

### Discussion

Through digital value resonance, this study investigates the technology readiness of product innovation. To make up the gap in the effects of technological readiness on inconsistent product innovation, the notion of digital value resonance capability was chosen. This study will help business practitioners properly enhance gives the result so that digital value resonance would contribute to product innovation.

As per this study, technology competence has a valuable link with digital value resonance. This research backs up the findings of Liljander et al., (2006), who found that technology readiness has a negligible impact on technology adoption. Clausing & Holmes, (2010), Demirci & Ersoy, (2008) and Westjohn et al., (2009) revealed that technological readiness leads to business owners quickly integrating and leveraging strategies to enable choices and increase product performance. MSMEs consider that digital business transformation techniques can be future business potential, which

drives them to boost the resonance of digital value. This survey also suggests that, through digital value resonance, technological preparedness has an indirect influence on building software. Digital transformation, market growth, exact product design, and accessibility of selling products through digital technology can all make MSMEs be more ready to accept and using technology, as well as urge them to produce stuff. This study indicates that digital value factors affect MSMEs' readiness to embrace technology.

Conversely, Cabanero-Johnson & Berge, (2009); Garcia & Calantone, (2002); Sugiyarti et al., (2018) found that digital value resonance, such like native digital generation practices, has a favorable effect on adoption and deployment of techniques in the field of new goods. As a conclusion, the digital value or benefits of technology must be emphasized in allow for MSMEs to innovate on products to be marketed.

Second, they discovered that digital value resonance significantly affects product innovation. By providing products and services formed with significant changes, consumers will have a more diverse experience, contributing to enhanced performance and industry (Prahalad & Ramaswamy, 2003). Different outcomes in MSMEs with digital competing capabilities influence digital value resonance powerfully and positively. Knowledge, talents, and attitudes to understand the context of new technologies, as well as other teamwork with people in the use of technology, are required in companies with high digital concepts. MSMEs must undoubtedly accomplish so by addressing the competing digital capabilities approach's technological, cognitive, and social aspects, as well as resonate with digital value.

Third, our research found a link between scientific readiness and product creativity. MSME businesses with existing technology, dynamic, and innovative capabilities will be anxious to devise effective goods. This study's findings echo those of Zhou & Li,

(2010), Bughin & Van Zeebroeck, (2017), and Khin & Ho, (2019). They recognized that combining digital technology with professional digital talent necessitates digital competing capabilities. Digital competitive capabilities, according to this assessment, can be classified as dynamic capabilities, which are defined as an organization's or MSME's ability to build luxury services.

Fourth, the findings in this study can provide a realistic answer. These findings revealed that competitive digital capability could increase MSMEs' co-innovation capacity by resonating with digital values. As a result, our conclusion illustrates how MSMEs used the natural digital value resonance to maximize product innovation. The majority of the participants in this inquiry were internet business owners with annual revenues ranging from IDR 10 M to IDR 100 M. It means that by integrating technological and the resonance of digital value, few genuine industries can compete digitally in boosting innovation.

### Conclusion

Finally, urgency of this study is on the elements that influence MSMEs' competitive technology readiness to increase creative goods. The influence of technological readiness and digital competitive competence has a considerable beneficial effect on implementing changes to promote innovation, according to statistical testing. One of most important aspect of this study is reproducing digital value at the level of technological preparedness and, of course, competitive competence. These findings show that the most prominent factors in echoing the values found in digital technology are crucial in dealing with the dynamics of innovation proliferation and are practically targeted to customer service needs. The greater the digital resonance importance, the higher the perceived level of technical readiness. This study was able to

illustrate how digital consumer habits can improve the ability to respond to technological availability and compete in absorbing digital values in new products. The findings of this study can be used by digital technology service providers. As a result, enhancing the resonance of digital values will have an impact on increasing the agility of new product developments. As a result, digital value resonance can boost the value of digital technology for enterprises and clients..

There are certain limits to current research. First, the sample size is tiny (less than 204 respondents), and respondents' attention is still drawn to Java Island. Second, respondents' characteristics are still favored by tech-savvy millennials, implying that their comprehension of technology aspects is superior than their parents'. In context of these limitations, more extensive distribution of the study's findings is required. According to the report, future research should look into the impact of virtual reality technology in assisting businesses in dealing with international companies, as well as the effects of moderators. The majority of respondents were aware of technology, but they were unable to establish a competitive technology medium to fulfill their company needs. In addition, future research should look into the role of variable information technology dexterity, as determined by market sensing and brand management competencies, in optimizing MSMEs' business efficiency.

# References

- Ahn, S. J., & Yoon, H. Y. (2020). 'Green chasm' in clean-tech for air pollution: Patent evidence of a long innovation cycle and a technological level gap. *Journal of Cleaner Production*, 272. https://doi.org/10.1016/j.jclepro.2020.122726
- Alam, S. S., Ali, M. Y., & Jani, M. F. M. (2011). An empirical study of factors affecting electronic commerce adoption among SMEs in Malaysia. *Journal of Business Economics and Management*, 12(2),

<sup>93</sup> 

375-399. https://doi.org/10.3846/16111699.2011.576749

- Astuti, N. C., & Nasution, R. A. (2014). Technology readiness and Ecommerce adoption among entrepreneurs of SMEs in Bandung city, Indonesia. *Gadjah Mada International Journal of Business*, 16(1), 69–88. https://doi.org/10.22146/gamaijb.5468
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74–94. https://doi.org/10.1007/BF02723327
- Barney, J., Wright, M., & Ketchen, D. J. (2001). The resource-based view of the firm: Ten years after 1991. In *Journal of Management* (Vol. 27, Issue 6, pp. 625–641). https://doi.org/10.1016/S0149-2063(01)00114-3
- Bharadwaj, A., El Sawy, O. A., Pavlou, P. A., & Venkatraman, N. (2013). Digital business strategy: Toward a next generation of insights. *MIS Quarterly: Management Information Systems*, 37(2), 471–482. https://doi.org/10.25300/MISQ/2013/37:2.3
- Bughin, J., & Van Zeebroeck, N. (2017). The best response to digital disruption. *MIT Sloan Management Review*, 58(4), 80–86. https://doi.org/10.7551/mitpress/11859.003.0010
- Cabanero-Johnson, P. S., & Berge, Z. (2009). Digital natives: Back to the future of microworlds in a corporate learning organization. *Learning Organization*, 16(4), 290–297. https://doi.org/10.1108/09696470910960383
- Carcary, M., Doherty, E., & Conway, G. (2014). The Adoption of Cloud Computing by Irish SMEs – an Exploratory Study. *Electronic Journal of Information Systems Evaluation*.
- Chang, Y. W., & Chen, J. (2021). What motivates customers to shop in smart shops? The impacts of smart technology and technology readiness. *Journal of Retailing and Consumer Services*, 58. https://doi.org/10.1016/j.jretconser.2020.102325
- Clausing, D., & Holmes, M. (2010). Technology readiness. *Research Technology Management*, 53(4), 52–59. https://doi.org/10.1080/08956308.2010.11657640
- Demirci, A., & Ersoy, N. (2008). Technology readiness for innovative high-tech products: how consumers perceive and adopt new technologies. *The Business Review*, 11(1), 1–9. http://isletme.anadolu.edu.tr/media/articles/demirci\_ersoy

01.pdf

- Evans, C. (2001). An E-strategy for online E-business. *Information Systems Management*, 18(4), 8–21. https://doi.org/10.1201/1078/43198.18.4.20010901/31461.2
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39. https://doi.org/10.2307/3151312
- Garcia, R., & Calantone, R. (2002). A critical look at technological innovation typology and innovativeness terminology: A literature review. *Journal of Product Innovation Management*, 19(2), 110–132. https://doi.org/10.1016/S0737-6782(01)00132-1
- Grant, R. M. (1991). The Resource-Based Theory of Competitive Advantage: Implications for Strategy Formulation. *California Management Review*, 33(3), 114–135. https://doi.org/10.2307/41166664
- Hair, J. F. (2014). *Multivariat Data Analysis 7th Edition* (7th ed.). USA: Pearson Education Limited.
- Hair, Joe F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139–152. https://doi.org/10.2753/MTP1069-6679190202
- Halpern, N., Mwesiumo, D., Suau-Sanchez, P., Budd, T., & Bråthen,
  S. (2021). Ready for digital transformation? The effect of organisational readiness, innovation, airport size and ownership on digital change at airports. *Journal of Air Transport Management*, 90.

https://doi.org/10.1016/j.jairtraman.2020.101949

- Ifinedo, P. (2011). Internet/e-business technologies acceptance in Canada's SMEs: An exploratory investigation. *Internet Research*, 21(3), 255–281. https://doi.org/10.1108/1066224111139309
- Ilieva, J., Baron, S., & Healey, N. M. (2002). Online Surveys in Marketing Research. *International Journal of Market Research*, 44(3), 1–14. https://doi.org/10.1177/147078530204400303
- Kessler, E. H., & Chakrabarti, A. K. (1996). Innovation speed: A conceptual model of context, antecedents, and outcomes. *Academy of Management Review*, 21(4), 1143–1191.

https://doi.org/10.5465/AMR.1996.9704071866

- Khin, S., & Ho, T. C. F. (2019). Digital technology, digital capability and organizational performance: A mediating role of digital innovation. *International Journal of Innovation Science*, 11(2), 177– 195. https://doi.org/10.1108/IJIS-08-2018-0083
- Kristiansen, S., Kimeme, J., Mbwambo, A., & Wahid, F. (2005). Information flows and adaptation in Tanzanian cottage industries. *Entrepreneurship and Regional Development*, 17(5), 365–388. https://doi.org/10.1080/08985620500275547
- Kurnia, L. K. (2015). Transparansi, Partisipasi dan Akuntabilitas dalam Kemitraan Pengelolaan Kawasan Ekowisata Mangrove Wonorejo Surabaya antara Pemerintah, Sektor Swasta dan Masyarakat Sipil. Kebijakan Dan Manajemen Publik, 3(2), 1–10.
- Larwood, L., Ruben, K., Popoff, C., & Judson, D. H. (1997). Aging, retirement, and interest in technological retraining: Predicting personal investment and withdrawal. *Journal of High Technology Management* Research, 8(2), 277–300. https://doi.org/10.1016/S1047-8310(97)90007-9
- Liljander, V., Gillberg, F., Gummerus, J., & van Riel, A. (2006). Technology readiness and the evaluation and adoption of self-service technologies. *Journal of Retailing and Consumer Services*, 13(3), 177–191.

https://doi.org/10.1016/j.jretconser.2005.08.004

- Lokuge, S., Sedera, D., Grover, V., & Dongming, X. (2019). Organizational readiness for digital innovation: Development and empirical calibration of a construct. *Information and Management*, 56(3), 445-461. https://doi.org/10.1016/j.im.2018.09.001
- Mahoney, J. T. (1995). The management of resources and the resource of management. *Journal of Business Research*. https://doi.org/10.1016/0148-2963(94)00060-R
- Malhotra, N., & Hunt, S. D. (2018). The Resource-Advantage Theory of Competition. In *Review of Marketing Research*. https://doi.org/10.4324/9781315088747-4
- Mohorčich, J., & Reese, J. (2019). Cell-cultured meat: Lessons from GMO adoption and resistance. *Appetite*, 143. https://doi.org/10.1016/j.appet.2019.104408

Nguyen, B., Yu, X., Melewar, T. C., & Chen, J. (2015). Brand innovation and social media: Knowledge acquisition from social media, market orientation, and the moderating role of social media strategic capability. *Industrial Marketing Management*.

https://doi.org/10.1016/j.indmarman.2015.04.017

- Nugroho, M. A., Susilo, A. Z., Fajar, M. A., & Rahmawati, D. (2017). Exploratory Study of SMEs Technology Adoption Readiness Factors. *Procedia Computer Science*, 124, 329–336. https://doi.org/10.1016/j.procs.2017.12.162
- Okundaye, K., Fan, S. K., & Dwyer, R. J. (2019). Impact of information and communication technology in Nigerian small-to medium-sized enterprises. *Journal of Economics, Finance and Administrative Science*, 24(47), 29–46. https://doi.org/10.1108/JEFAS-08-2018-0086
- Oliveira, T., & Martins, M. F. (2010). Understanding e-business adoption across industries in European countries. *Industrial Management and Data Systems*, 110(9), 1337–1354. https://doi.org/10.1108/02635571011087428
- Parasuraman, A. (2000). Technology Readiness Index (Tri): A Multiple-Item Scale to Measure Readiness to Embrace New Technologies. *Journal of Service Research*, 2(4), 307–320. https://doi.org/10.1177/109467050024001
- Parasuraman, A., & Colby, C. L. (2015). An Updated and Streamlined Technology Readiness Index: TRI 2.0. Journal of Service Research, 18(1), 59–74. https://doi.org/10.1177/1094670514539730
- Penrose, R. (1959). The apparent shape of a relativistically moving sphere. *Mathematical Proceedings of the Cambridge Philosophical Society*, 55(1), 137–139. https://doi.org/10.1017/S0305004100033776
- Prahalad, C. K., & Ramaswamy, V. (2003). The new frontier of experience innovation. *MIT Sloan Management Review*, 44(4), 12–18.
- Rojas-Méndez, J. I., Parasuraman, A., & Papadopoulos, N. (2017). Demographics, attitudes, and technology readiness: A crosscultural analysis and model validation. *Marketing Intelligence*

*and Planning*, 35(1), 18–39. https://doi.org/10.1108/MIP-08-2015-0163

- Sani, A., Subiyakto, A., & Khawa, T. (2020). Integration of the Technology Readiness and Adoption Models for Assessing IT Use among SMEs in Indonesia. 3107–3113. https://doi.org/10.5220/0009948131073113
- Schwab, K. (2009). The global competitiveness report 2009-2010.
- Sharma, A., & Jasrotia, V. (2016). Managing Customers Brand Experience for Creating Brand Resonance in Smartphones. *International Journal on Customer Relations*, 4(1). https://doi.org/10.21863/ijcr/2016.4.1.014
- Sugiyarti, G., Ferdinand, A. T., & Nurchayati, T. (2018). Acculturative products uniqueness antecedence for successful marketing performance. *DLSU Business and Economics Review*, 28(1), 86–96.
- Tabachnick, B. G., & Fidell, L. S. (2017). Using Multivariate Statistics ليس المستحدم كمرجع In *Journal of Applied Psychology* (Vol. 87, Issue 4). Pearson.

https://www.vlebooks.com/Vleweb/Product/Index/437320 ?page=0

- Walker, J. H., Saffu, K., & Mazurek, M. (2016). An Empirical Study of Factors Influencing E-Commerce Adoption/Non-Adoption in Slovakian SMEs. *Journal of Internet Commerce*, 15(3), 189–213. https://doi.org/10.1080/15332861.2016.1191049
- Weber, W., & Polo, E. F. (2010). Evolution of Generic Competitive Strategies and the Importance of. *Revista de Gestão USP*.
- Westjohn, S. A., Arnold, M. J., Magnusson, P., Zdravkovic, S., & Zhou, J. X. (2009). Technology readiness and usage: a globalidentity perspective. *Journal of the Academy of Marketing Science*, 37(3), 250–265.
- Zhou, K. Z., & Li, C. B. (2010). How strategic orientations influence the building of dynamic capability in emerging economies. *Journal of Business Research*, 63(3), 224–231. https://doi.org/10.1016/j.jbusres.2009.03.003