

Innovation as A SME Recovery Strategy during The Covid-19 Pandemic in Yogyakarta

Abdul Ghofar¹, Mohammad Irhas Effendi¹, Muhamad Kundarto², Bunga Alfausta Amallia³, Trisna Adisti⁴

¹Department of Management, Universitas Pembangunan Nasional "Veteran" Yogyakarta, Indonesia

²Department of Agrotechnology, Universitas Pembangunan Nasional "Veteran" Yogyakarta, Indonesia

³Departement of Management, Universitas Gadjah Mada, Indonesia

⁴Department of Information System, Universitas Pembangunan Nasional "Veteran" Yogyakarta, Indonesia

Abstract

The COVID-19 widespread has hurt all economies around the world. In this context, it is hoped that many SMEs will implement a new normal strategy pattern that requires changes in business and management after the pandemic. This research aims to present a multidisciplinary methodological approach to guide SMEs in innovating products for new markets and utilizing limited resources with appropriate strategies. The results showed that. In Yogyakarta, Indonesia, the SME industrial sector prefers a differentiation strategy over cost advantage to drive SME performance. This sector has introduced the practice of using e-commerce which has initially been to reduce production costs to be unique innovations in the market with unique or different products and services offered by companies and improve the performance of SMEs.

Keywords: *Competitive Strategy, SME Performance, Innovation, Adoption of e-commerce*



This is an open access article under the CC–BY–NC license

INTRODUCTION

Effects of quarantine and various disruptions to non-essential activities due to the COVID-19 pandemic, the worldwide economy has taken a turn for the worse. This COVID-19 response strategy has impacted small and medium-sized enterprises in developing countries, which have vulnerable supply chains and limited resources in business-to-business/business-to-consumer relationships. Quarantine has also increased unemployment and business closures, making social inequality even more pronounced (Blustein et al., 2020; Nicola et al., 2020; O'Connor et al., 2020). In any event, for a stable economy, like the Assembled Realm, the isolated period is assessed to cause a decrease in their Gross domestic product by 3.0% (Nicola et al., 2020). In light of information from the Service of Labor, as of April 7, 2020, because of the Coronavirus pandemic, 39,977 organizations in the proper area decided to lay off and lay off their laborers. This influenced an aggregate of 1,010,579 laborers. Information from the Service of Cooperatives and Little and Medium Endeavors (Kemenkop UKM) reports that in April 2020, a sum of 56% of SMEs professed to have encountered a decrease in deals turnover because of the Coronavirus pandemic, another 22% experienced issues getting financing/credit, 15% had issues. In the dissemination of products, and the leftover 4% revealed challenges in acquiring crude materials. Of all SMEs recorded in this research, the composition of SMEs engaged in micro-industry occupies 87.4%. (Syamsudin, 2020).

Corresponding author

Abdul Ghofar, abdul.ghofar@upnyk.ac.id

DOI: <https://doi.org/10.31098/bmss.v1i3.328>

Research Synergy Foundation

In this context, it is hoped that many SMEs will adopt a new normal pattern that requires changes in business and management after the pandemic. Advancement was recognized as a critical part of business recovery in the continuous pandemic and post-Coronavirus period to alleviate this danger. This examination intends to introduce a multidisciplinary methodological way to guide SMEs in enhancing items for new business sectors and better utilizing restricted assets. This research will develop new products and appropriate strategies to face the current era of new normal. This research provides insight into the innovative use of digital resources as the main facilitator in creating networks and designing innovative products based on the new normal and social distancing.

LITERATURE REVIEW

Porter's Five Forces and the Blue Ocean Strategy

SMEs are rivals in ventures that produce substitute merchandise; since intense rivalry, it is important to distinguish procedures to change the market and lessen the number of contenders it's the Blue Sea System (Nah and Siau, 2020). This methodology centers around making new market space by catching new requests on the lookout (Kim and Mauborgne, 2015). According to Porter, three generic strategies can be used to measure a company's strategy using low-cost leadership, differentiation strategy, and focus strategy. This adds to the test for the endurance of SMEs on account of an emergency, and the Five Powers model can uphold industry appraisals to foster the most suitable procedure (Morales, 2021).

Low-cost Leadership Strategy

Minimal expense administration technique underlines making normalized items with the least expensive per unit, which is generally focused on buyers who are delicate to value changes. As far as client conduct, this kind of system is by the necessities of clients who fall into the class of conduct low-contribution, when shoppers don't or care a lot about brand contrasts, and tend not to require item differences (Porter, 1980). To have the option to complete a minimal expense technique, conceivable if it enjoys a few benefits in organization assets and organizations should handle costs firmly, and great control data (Umar, 1999).

Differentiation strategy

Differentiation strategy is included in the generic business strategy. In the organizational strategy that is owned to be unique or different from its competitors. Companies can differentiate themselves in several ways, such as making effective promotions, offering various innovative features, providing superior services, and so on (Li & Zhou, 2010). Differentiation strategy has the power as a source of sustainable competitive advantage; that is, it provides effects that are rare and expensive to imitate. Companies that use this strategy will offer products that have higher prices than competitors in order to be able to balance the company's unique features and service quality (Hilman, 2009; Porter, 1990). This scarcity will make the power of buyers weak against other products due to shortages or even no alternative products that are comparable to the company's products (Auzair & Sofiah, 2011).

Hypothesis Development

E-commerce Usage to Business Strategy

Business strategy is related to using e-commerce to increase sales by utilizing technology. The spread of high-speed internet within a country has led to an increase in buying and selling transactions through E-commerce which has created opportunities and challenges for businesses in both urban and

rural areas. With the existence of E-commerce, it can reduce existing weaknesses, such as reducing marketing costs caused by difficult-to-reach locations, facilitating communication and receiving information, as well as access to low-cost suppliers (Addo, 2012).

A definitive objective of utilizing online business is to develop further business execution (Zhu and Kraemer, 2005). Clayton and Criscuolo (2002) show that organizations that utilization web-based business is bound to rate their advancement as emphatically affecting firm execution than the individuals who don't utilize internet business. As one of the information technology applications, E-commerce enables SMEs to compete efficiently in domestic and international markets.

H1: E-commerce Usage affects SME performance

Business strategy (cost leadership & differentiation) and SME

Porter's (1980) business strategy framework, including cost leadership strategies and differentiation strategies, has been widely used in the strategic management literature. Many studies have shown that adopting a differentiation or cost leadership strategy can improve firm performance (Slater and Olson, 2006). The results of Spenser's (2009) research show that companies with differentiation strategies affect increasing organizational performance. Products that have a unique and different differentiation can be used as the hallmark of a company. Porter mentions that companies that emphasize cost leadership strategies create efficient scale facilities, reduce expenses, and minimize R&D, sales force, advertising, and overhead costs (Stonehouse and Snowdon, 2007). According to Amoako-Gyampah and Acquaaah (2008), cost leadership strategy has a significant relationship with firm performance.

H2: Differentiation strategy affects the performance of SMEs

H3: Cost leadership strategy affects the performance of SMEs

The conceptual model of this research is presented in Figure 1 below. The model shows the relationship between research variables: Adoption of e-commerce Cost leadership strategy, differentiation strategy, and SME performance.

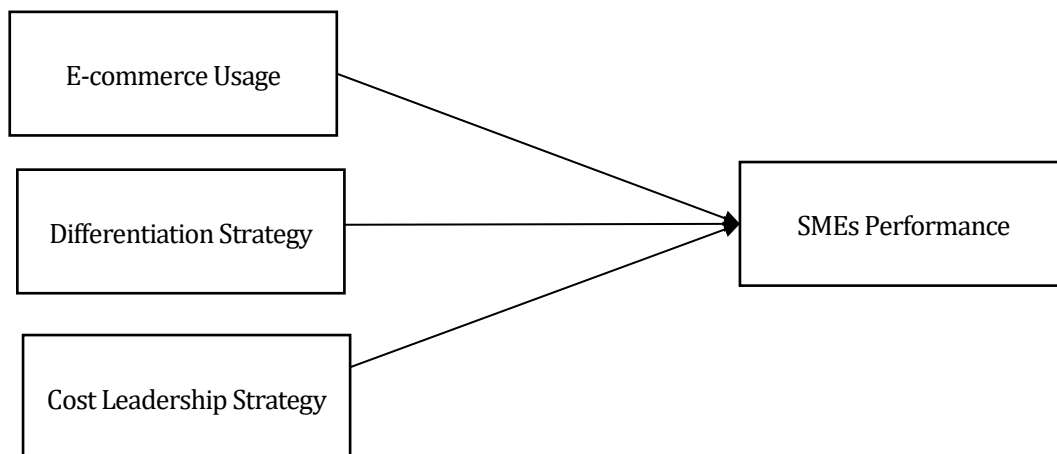


Figure 1. Research Model Research

RESEARCH METHOD

This type of research is quantitative causal research. The population in this study is all SMEs affected by Covid-19 without distinguishing the type of business owned by SMEs. The sampling technique uses

convenience sampling, and the sample is taken based on convenience due to the COVID-19 pandemic limiting the movement of researchers and SMEs in interacting with outside parties. The questionnaire was designed using a 5-point Likert-type scale. The questionnaires collected were 145. Hypothesis testing used Partial Least Square (PLS).

Measurement

The performance of SMEs is measured using four indicators in the research of Karabulut, AT (2015). The Measurement of Competitive Strategy adapted from Li and Li (2008), four items are used to operationalize the differentiation strategy, reflecting the extent to which the company differentiates itself from competitors in products and services. The other four items were adopted to measure the cost leadership strategy.

FINDING AND DISCUSSION

Descriptive Analysis

The study was conducted on 145 SMEs in Yogyakarta, Indonesia. There were 90 SMEs who filled out the questionnaire from the handicraft industry sector, the Agribusiness sector, and other businesses filled in the rest. On average, SMEs have a workforce below 5, there are 29 SMEs that have workers above 5, and as many as 9 SMEs do not yet have a workforce or are managed independently by the owner.

Validity and Reliability

Test Validity test is carried out by assessing Convergent Validity, discriminant validity, and AVE. The individual reflective measure is high if it correlates more than 0.70 with the measured variable (Ghozali, 2015). Discriminant Validity is the cross-loading factor value of 145 respondents. Based on the test results of 145 respondents below, it shows that the value of the cross-loading factor of each indicator on the variable is greater than the value of the cross-loading factor with other variables. This shows that this research test has had good discriminant validity so that it can be used for further research and analysis. The following is the AVE value in the test of 145 respondents, which is displayed by Table 1 as follows:

Table 1. Construct Reliability and Validity.

	Cronbach's Alpha	rho_A	Composite Reliability	AVE	Description
Cost Leadership Strategy	0,899	0,957	0,919	0,756	Valid and reliable
Differentiation Strategy	0,951	0,951	0,961	0,803	Valid and reliable
E-commere Usage	0,863	0,943	0,911	0,773	Valid and reliable
SMEs Performance	0,877	0,884	0,904	0,743	Valid and reliable

Source: Output data processed from Smart PLS 3.0, 2021

A reliability test is used to measure the level of accuracy of possible answers to several questions. The AVE value of each variable has a value > 0.5. This means that there is one invalid variable because < 0.5 is the SME Performance variable; however, the variable is valid to be used for further analytical research. Based on the reliability test results of 145 respondents shown in table 1, it is known that the

composite value reliability of each variable has a value > 0.6. This shows that each variable can be declared reliable to be used for further research and analysis.

Hypothesis Testing

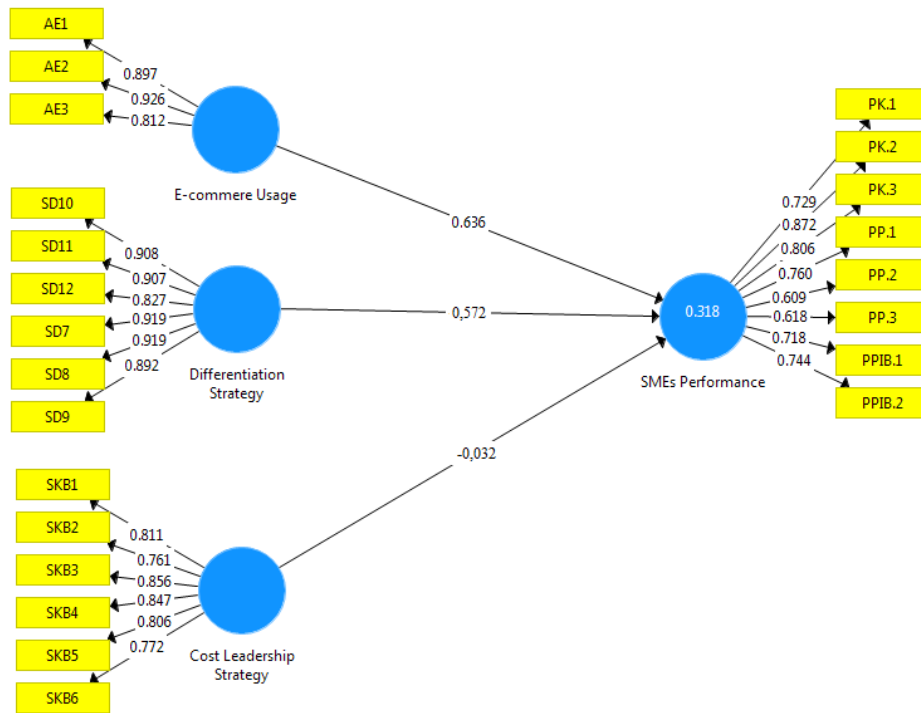


Figure 2. Algorithm Test Results

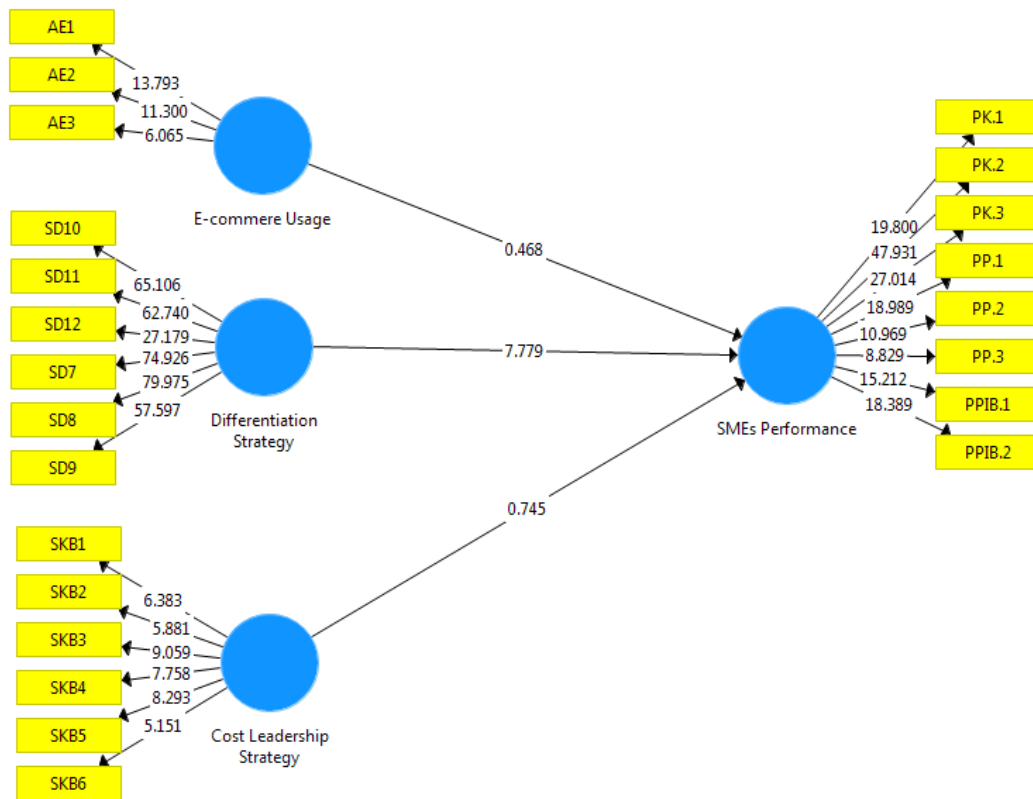


Figure 3. Bootstrapping Test Results

The research results can be analyzed using Smart PLS 3.0 using a bootstrapping process. The magnitude of the direct effect will be observed from the path coefficient values as shown in table 3, as follows:

Table 3. Total Effect

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ([O/STDEV])	P Values
Cost Leadership Strategy -> SMEs Performance	-0,032	0,083	0,745	0,457	-0,032
Differentiation Strategy -> SMEs Performance	0,572	0,568	0,073	7,779	0,000
E-commere Usage -> SMEs Performance	0,606	0,610	0,076	4,468	0,010

Source: Output data processed from Smart PLS 3.0, 2021

This study uses algorithm test results in Figure 2 and bootstrapping test results in Figure 3, which are summarized in the total effect in Table 3. Based on the total effect in Table 3, it shows that the use of E-commerce has a positive effect on the performance of SMEs and is significant because the T-statistic is equal to $4.745 > 1.96$ and $P\text{-value} = 0.027 < 0.05$, thus H1 is supported. The influence of the differentiation strategy has a direct effect on the performance of SMEs by 0.572 because based on the Path Coefficient table, the differentiation strategy has a positive and significant effect because the T-statistic is $7.779 > 1.96$ and the P-value is $0.000 < 0.05$, then H2 is supported. The influence of leadership strategy directly does not affect the performance of SMEs because based on the total effect table, and leadership strategy is not significant because T-statistic $0.457 < 1.96$ and $P\text{-value} = -0.032 < 0.05$ then H3 is not supported.

Discussion and Implications

The results of this study indicate that e-commerce usage affects the performance of SMEs. The spread of high-speed internet within a country has led to an increase in buying and selling transactions through E-commerce which has created opportunities and challenges for businesses in urban and rural areas. With the existence of E-commerce, it can reduce existing weaknesses, such as lowering marketing costs caused by difficult-to-reach locations, facilitating communication and receiving information, as well as access to low-cost suppliers (Addo, 2012). The existence of globalization in technology such as the internet and the World Wide Web has pushed E-commerce to become one of the most effective media or tools for buying and selling transactions and sharing information. E-commerce usage does not affect the financial perspective, customer perspective, internal business processes, learning, and growth carried out by SMEs. The results of this study indicate that the differentiation strategy affects the performance of SMEs. The uniqueness of SMEs to attract the interest of their potential consumers and product marketing can encourage the performance of SMEs. This is in line with research by Spenser (2009), which shows that companies with differentiation strategies affect organizational performance. SME products differentiated from competing products have uniqueness and differences that can serve as the hallmark of an SME. Separation is an impression of people and gatherings working in an organization. Contrasted with cutthroat contenders, the separation system gives higher productivity by making brand faithfulness and low-value affectability (Watchman, 1988). Because of an item or administration separation, clients are ready to follow through on greater expenses. Hence, this system diminishes value affectability, lessens provider power, makes a strong boundary to section, and decreases the danger of substitute items.

The results of this study indicate that the leadership strategy does not affect the performance of SMEs. This strategy emphasizes creating a standard product with the lowest unit cost that is usually aimed at consumers who are sensitive to price changes. This study is not in line with the research of Miller and Friesen (1986) and the analysis of Slater and Olson (2006), which show that adopting a cost leadership strategy can improve company performance. In the past, this strategy was needed, especially in the face of global competition. It is realized that globalization upheld by innovative advances has permitted new contenders to different nations and simultaneously permitted the entrance of fake items. Subsequently, items will, in general, be more commoditized because there is no uniqueness among these items, and thus, rivalry depends exclusively on value (Kim and Mauborgne, 2005). Be that as it may, since the 2008 monetary emergency, particularly for non-industrial nations, numerous worldwide organizations have moved their cutthroat system from a minimal expense procedure dependent on value contest to a separation methodology (Gehani, 2013). Furthermore, an emphasis on cost initiative techniques alone is not suitable to oblige the different requirements of clients (Parera and Poole, 1997).

CONCLUSION AND FUTURE RESEARCH

Today, the principal challenge for MSMEs is discovering approaches to acquire an upper hand over likely contenders. As per Doorman, this is conceivable by offering clients higher worth by utilizing lower costs or giving more critical advantages through item or administration separation that legitimizes greater costs. In Yogyakarta, Indonesia, the SME industrial sector prefers a differentiation strategy over cost advantage to drive SME performance. This area has presented utilizing online business to diminish creation expenses to be exceptional advancements in the market with novel or various items and administrations presented by organizations and further develop organization execution. Notwithstanding, in this review, there are a few constraints. This review was led on SMEs in Indonesia, and the discoveries may not be adaptable to a wide range of associations. Accordingly, it is suggested that further exploration be completed on various scale organizations in different nations to sum up, the discoveries. Another limitation of this survey is that questions related to E-commerce, cost leadership strategies, differentiation strategies, and company performance were answered by the same respondents, namely SME owners affected by the COVID-19 pandemic. In the future, survey questions may be filled out by different respondents to prevent bias of the same source.

REFERENCES

- Ali, I. and Alharbi, O. M. L. (2020) 'COVID-19: Disease, management, treatment, and social impact', *Science of The Total Environment*, 728, p. 138861. doi: 10.1016/j.scitotenv.2020.138861.
- Amoako-Gyampah, K. and Acquah, M. (2008) 'Manufacturing strategy, competitive strategy and firm performance: An empirical study in a developing economy environment', *International Journal of Production Economics*, 111(2), pp. 575–592. doi: 10.1016/j.ijpe.2007.02.030.
- Auzair, & Sofiah, M. (2011). "The effect of business strategy and external environment on management". *International Journal of Business and Social Science*, 2(13), 236–244.
- Brown, R., Rocha, A. and Cowling, M. (2020) 'Financing entrepreneurship in times of crisis: Exploring the impact of COVID-19 on the market for entrepreneurial finance in the United Kingdom', <https://doi.org/10.1177/0266242620937464>, 38(5), pp. 380–390. doi: 10.1177/0266242620937464.
- Caballero-Morales, S. O. (2021) 'Innovation as recovery strategy for SMEs in emerging economies during the COVID-19 pandemic', *Research in International Business and Finance*, 57, p. 101396. doi: 10.1016/j.ribaf.2021.101396.
- Clayton, T. and Criscuolo, C. (2002), "Electronic commerce and business change", in Clayton, T. and Criscuolo, C. (Eds), *National Statistics*, available at: www.statistics.gov.uk/cci/a_rtitle.asp?ID=139
- Dälken, F. (2014) *Are Porter's Five Competitive Forces still Applicable? A Critical Examination concerning the Relevance for Today's Business*. University of Twente. Available at: <http://purl.utwente.nl/essays/65339> (Accessed: August 19 2021).
- Ehie, I. and Muogboh, O. (2016) Analysis of manufacturing strategy in developing countries: A sample survey of Nigerian manufacturers', *Journal of Manufacturing Technology Management*, 27(2), pp. 234–260. doi: 10.1108/JMTM-07-2014-0094.
- Hernández-Espallardo, M. and Delgado-Ballester, E. (2009) 'Product innovation in small manufacturers, market orientation and the industry's five competitive forces: Empirical evidence from Spain', *European Journal of Innovation Management*, 12(4), pp. 470–491. doi: 10.1108/14601060910996927.
- Hilman, H. (2009). "Relationship of competitive , strategic flexibility and sourcing strategy on organizational performance". *Universiti Putra Malaysia*.

Li, J. J., & Zhou, K. Z. (2010). "How foreign firms achieve competitive advantage in the chinese emerging economy: managerial ties and market orientation". *Journal Business of Research*, 63(8), 856–862

Klok, F. A. et al. (2020) 'Confirmation of the high cumulative incidence of thrombotic complications in critically ill ICU patients with COVID-19: An updated analysis', *Thrombosis Research*, 191, pp. 148–150. doi: 10.1016/J.THROMRES.2020.04.041.

Kuckertz, A., Br€andle, L., Gaudig, A., Hinderer, S., Reyes, CAM, Prochotta, A., Steinbrink, KM, Berg, ESC (2020). "Startups in times of crisis–A rapid response to the COVID-19 pandemic." *Journal of Business Venturing Insights*. Volume 13, June 2020, e00169. <https://doi.org/10.1016/j.jbvi.2020.e00169>

Ma, L. et al. (2019) 'Quantifying weathering rind formation rates using in situ measurements of U-series isotopes with laser ablation and inductively coupled plasma-mass spectrometry', *Geochimica et Cosmochimica Acta*, 247, pp. 1–26. doi: 10.1016/J.GCA.2018.12.020.

Morales, CSO (2021). "Innovation as recovery strategy for SMEs in emerging economies during the COVID-19 pandemic." *Research in International Business and Finance*. Volume 57, October 2021, 101396. <https://doi.org/10.1016/j.ribaf.2021.101396>

Munro, R., Ramu, G., Zrymiak, D. (2015). "Six sigma and organizational goals. The Certified Six Sigma Green Belt Handbook. ASQ Quality Press, Milwaukee, Wisconsin, pp. 2–30.

Nah, F. F.-H. and Siau, K. (2020) 'COVID-19 Pandemic – Role of Technology in Transforming Business to the New Normal', *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 12427 LNCS, pp. 585–600. doi: 10.1007/978-3-030-60152-2_43.

Nicola, M., Nicola, C. I. and Duta, M. (2020) 'Sensorless Control of PMSM using FOC Strategy based on LADRC Speed Controller', *Proceedings of the 12th International Conference on Electronics, Computers and Artificial Intelligence, ECAI 2020*. doi: 10.1109/ECAI50035.2020.9223129.

Nicola, MC, Nicola, I., & Duță, M. (2020). "Sensorless Control of PMSM using FOC Strategy based on LADRC Speed Controller." *12th International Conference on Electronics, Computers and Artificial Intelligence (ECAI)*, Bucharest, Romani, pp.1-6, <http://doi: 10.1109/ECAI50035.2020.9223129>.

O'Connor, S. D. et al. (2020) 'Structured Reporting in Ultrasound', *Ultrasound Quarterly*, 36(1), pp. 1–5. doi: 10.1097/RUQ.0000000000000447.

Porter, ME (2008), *Competitive Strategy: Techniques for Analyzing Industries and Competitors*, Simon and Schuster.

Porter, ME (2008). The five competitive forces that shape strategy. *Harvard Business Review*. 86 (1), 78–93.

Randall, R. M. (2015) 'W. Chan Kim and Renée Mauborgne dispel blue ocean myths', *Strategy & Leadership*, 43(2), pp. 11–14. doi: 10.1108/SL-01-2015-0007.

Stonehouse, G. and Snowdon, B. (2016) 'Competitive Advantage Revisited: Michael Porter on Strategy and Competitiveness', <http://dx.doi.org/10.1177/1056492607306333>, 16(3), pp. 256–273. doi: 10.1177/1056492607306333.

Ucaktürk, A., Bekmezci, M. and Ucaktürk, T. (2011) 'Prevailing During the Periods of Economical Crisis and Recession through Business Model Innovation', *Procedia - Social and Behavioral Sciences*, 24, pp. 89–100. doi: 10.1016/J.SBSPRO.2011.09.095.

Zhu, K. and Kraemer, K. L. (2005) 'Post-adoption variations in usage and value of e-business by organizations: Cross-country evidence from the retail industry', *Information Systems Research*, 16(1), pp. 61–84. doi: 10.1287/ISRE.1050.0045.