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Going Digital for SMES: Adapting Business Model and Seizing Opportunities to Achieve Sustainable Business Performance

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Abstract

The world is undergoing exponential technological advancement, resulting in a digital transformation of business models. Small- and medium-sized businesses must be ready to digitalize holistically as today's customers communicate via digital channels, consume a variety of digital products and services, and demand fast, dependable services tailored to their needs. Therefore, SMEs must examine these trends and transform the business model with new innovative products and services that leverage digital technology for communication, promotion, marketing, and delivery to digitally savvy clients. Over the years, many government organizations have convinced SMEs to use computers to modernize. The low level of process improvement shows that SMEs are struggling to digitize their businesses. Malaysian SMEs are optimistic about how digital technology can transform their business model, but digital adoption among SMEs remains low. Adopting a new business model allows SMEs to quickly adapt to unstable environments. However, little research has been done on how SMEs can improve efficiency and productivity by integrating technology into their business goals and activities, which are essential survival challenges for most SMEs. The purpose of this study is to examine how digital business transformation in business models can help SMEs achieve long-term business performance with agility. According to published data, Malaysia's largest economic contributor is the service industry, so this study focuses on SMEs in that sector. The research and proposed conceptual model will fill knowledge gaps in academia and guide policymakers in developing forward-thinking policies to support digitalization in SMEs.

Keywords: Digitalization, Business Model Transformation, Digital Technology, SME, Business Transformation.

Introduction

Small and medium-sized enterprises (SMEs) contribute to the economy in five distinct ways: employment creation; rapid adaptation with its agility function; supporting entrepreneurship; differentiating goods through boutique production; and functioning as a sub-industry within large corporations (Erdin & Ozkaya, 2020). SMEs, which account for 98.5% of enterprises in Malaysia, contribute over five million in employment and over RM500 million

to the country's gross domestic product (GDP). According to the Department of Statistics Malaysia (DOSM), SMEs contributed 38.2% of GDP in 2020, or RM512.8 billion in nominal terms, and employed 7.25 million out of a total workforce of about 48.2% in 2020.

As the contribution of SMEs grows, so does their significance for future economic development. In many nations, the economic shock caused by the pandemic has already affected economic operations, such as the closure of retail locations and the interruption of product supply networks (Fabeil et al., 2020). Businesses and supply networks are shifting and closing in practically every industry. This condition has caused not just physical social separation but also economic separation, putting the global economy at risk. In such a dire situation, technology is the only option to stabilize the economy (Xiang et al., 2021).

SMEs in the modern world are more sophisticated than larger enterprises and more vulnerable to external economic shocks (Auwal et al., 2020). SMEs face obstacles in a complicated and competitive business world while maintaining a sustainable firm, especially when operating in a modern context (Donthu & Gustafsson, 2020). SMEs have a key role in rejuvenating, changing, and rebalancing the economy after the economic crisis. SMEs should create a resilient and adaptable business model to meet future economic shocks and maintain business performance.

Literature Review

Small and Medium Enterprises Digitalization Readiness

SMEs in Malaysia are typically receptive to adopting digital technology for the benefit of their business, but they have yet to make use of digitalization enablers to enhance business operations. This is because SMEs' limited resources prevent them from adopting digitalization (SME Corp & Huawei, 2018). SMEs employ back-end business procedures infrequently. Similarly, limited usage of social media and e-commerce revealed that SMEs have reached a high level of computerization but are struggling to cross the digitalization chasm, which might considerably increase business and productivity advantages (SME Corp & Huawei, 2018). Specifically for the service industry, social media and e-commerce were only utilized to reach out to customers, not to enable an end-to-end digital transaction process. According to the 2019 SME Survey conducted by SME Corp. in Malaysia, 35.3% of respondents engage in online business, a slight decline from 37.9% in the third quarter of 2018.

In 2018, according to the white paper "Accelerating Malaysian Digital SMEs: Escaping the Computerisation Trap," only 71 percent of these companies use social communication and marketing media. This is because the majority of small and medium-sized businesses believe a digital transaction process is unnecessary and prefer traditional selling channels to expand their businesses. Digital business transformation is a continuous organizational process that entails progressive and disruptive changes enabled by digital technologies to automate business processes (Barann et al., 2019; Lombardi, 2019) and make the current logistical and administrative business that builds daily operations more efficient and increase the organization's competitiveness (Lu, 2017). Regardless of its technological profile, its execution requires the ability to adapt the business model to new technologies and drive technological progress in the socio-technical environment (Frank et al., 2019; Kamble et al., 2018; Lu, 2017; Muller et al., 2018). With Internet digital platforms, many industries are migrating to a digital era in which equipment, gadgets, and goods may be networked to adapt and be flexible in response to market shifts (Wei et al., 2017). Digital adoption will help reduce the productivity gap between small and large businesses by enhancing capacity and capability for better innovation and competitiveness (Jun & Thye, 2017). As a result of digitalization,

small and medium-sized enterprises can increase their market share by utilizing the opportunities presented by numerous online platforms (Prasanna et al., 2019).

The top three obstacles to the digitization of small and medium-sized enterprises are a lack of capital, a shortage of skilled staff, and a lack of technological resources (Alcalde-Heras et al., 2019; Giotopoulos et al., 2017; SME Corp & Huawei, 2018). This was also the case in Malaysia, where roughly half of the SMEs surveyed mentioned funding as their largest obstacle, and 60% stated they were unaware of their choices. In addition, numerous SMEs view digital transformation to be too expensive (Yapp, 2020). According to Malaysia's 2018 digital economy report, the country's strong development in connectivity has not yet resulted in an increase in web presence for businesses in the majority of economic sectors. Nonetheless, the services sector has outperformed the rest of the economy since 2015, with over 30 percent of enterprises using the internet and large growth in online presence compared to internet access. Consequently, wholesale and retail enterprises have a moderate level of digital adoption, indicating that SMEs have implemented a modest level of technology to be functionally ready for digital business transformation (Jun & Thye, 2017). Retailers have dealt with these developments for years, but most have made only minimal changes rather than recognizing them as an opportunity to rethink their business model entirely (Laizet et al., 2021). To confront the unprecedented challenges that lie ahead, traditional retailers have no choice but to modify their business models.

Challenges of Digital Adoption among SMEs in Malaysia

Many SMEs view digital transformation as nothing more than the establishment of a front-end digital platform (such as a website or a Facebook page) through which they can communicate with their customers; this does not contribute anything of value to the organization. SMEs need to re-engineer and modernize their businesses to achieve true digitalization. This can be accomplished by evaluating and making certain that their business strategies, business models, processes, and infrastructures are aligned with and fully integrated into their digital transformation.

The majority of SMEs in Malaysia have access to some form of computing technology and the internet. These SMEs may make use of a smartphone or a personal computer of some kind, such as a desktop or a laptop. The use of computing devices and connectivity to the internet should be extended to SMEs' business processes to get an accurate picture of whether or not SMEs are utilizing ICT to transform their organizations. The majority of the time, SMEs find themselves in a situation in which they are only able to use these tools for personal reasons, such as social media and the consumption of digital information. For SMEs to derive the full benefits of information and communications technology (ICT), they must begin utilizing such tools to drive more businesses through e-commerce as well as drive more productivity through the use of software that improves their business processes.

Another piece of evidence indicating that SMEs are computerized but not digitalized is the fact that the majority of them execute isolated activities on separate computers and do not convert their business processes using digital technologies. There is still a significant amount of human interaction and manual procedures that occur in between. These processes are not truly productive, and they do not enable SMEs to collect data that can be utilized for analysis. To unlock the next level of efficiency and unleash development through new business models, products, and services, SMEs need to break out of the "computerization"

trap" they've fallen into and alter their operations through digitalization. As a result, SMEs require assistance to break free from the confines of computerization and bridge the divide into digitalization.

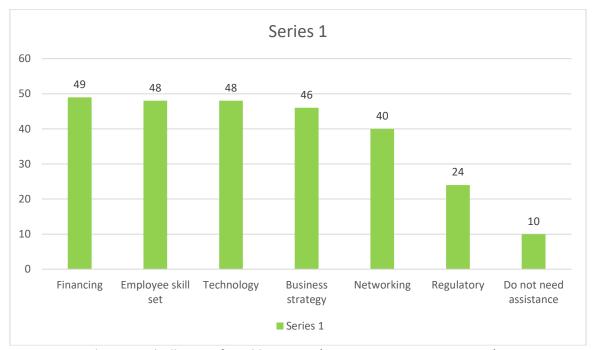


Figure 1. Digitalization Challenges faced by SMEs (SME Corp & Huawei, 2018)

The biggest issue SMEs in Malaysia have that stops them from going digital is financing or money. About half of the SMEs identified this as their main challenge, and these SMEs claimed they were unaware of the available financing choices. Many SMEs also believe that digitalization is costly. The SMEs must be made aware of the financial possibilities available to them to support their digitalization and the fact that cloud computing has made business improvement software, data storage, and analytics more accessible and inexpensive.

A key element in enabling digital transformation is skilled digital talent. In terms of having the proper skill set, the digitalization of SMEs presents numerous hurdles to many nations. A significant difficulty for 48% of SMEs was a lack of the appropriate staff skill set. To digitally transform SMEs, management, operations, sales, and marketing processes must be rethought and redesigned based on what digitalization can provide. This goes beyond simply putting in place a computer system to perform a solitary function.

One of the SMEs' top three challenges, cited as a major challenge by 46% of them, is having the appropriate business strategy. As was already mentioned, several SMEs are unclear about how social media marketing and e-commerce could help their business. Many of these SMEs are also unaware of the potential benefits of digitalization for their businesses. SMEs must adopt a digital mindset to use digital technologies to transform their business model and business operations especially require assistance in transforming their business model by using digital tools like IoT, data analytics, and cloud-based software as a service.

Among 90% of SMEs have access to the internet, yet more than half of them complain that the connectivity is too slow and expensive. SMEs are less likely to utilize digital technologies like cloud computing to improve their businesses because of the slow adoption

rate and expensive cost. Access to affordable technology and high-quality broadband will be essential for SMEs to make the transition from computerization to digitalization.

Lastly, over one-third of SMEs have stated that they require assistance with meeting regulatory obligations such as regulatory compliance relating to business, process guidance for their operations, and meeting licensing and permit regulations. Many of these requirements can be facilitated by digital technologies.

Sustainable Business Performance

In today's post-modern era of business, where there is a great deal of competition, having a performance that is both consistent and long-lasting is necessary for achieving success. SMEs in Malaysia face a multitude of societal and technical challenges in their pursuit of sustainable business performance (Haseeb et al., 2019). An organization's profitability may be maintained over an extended period of social and environmental objectives that are effectively included in the process of strategic business planning (Turcsanyi & Sisaye, 2013). Sustainable business performance can be defined as the process of obtaining and maintaining economic, environmental, and social performance within a specific context (Das & Rangarajan, 2020; Hadi & Baskaran, 2021; Sajan et al., 2017). It also refers to an organization's ability to maintain satisfaction among its employees and customers over an extended period, especially in addition to its financial performance (Kantabutra, 2014). In addition to this, it implies living up to the expectations of stakeholders, which include minimizing any negative social or environmental impact that their business operations may have, as well as developing the capabilities necessary to have a positive influence on both society and the environment (Vo, 2011).

According to Delrue et al (2012), the evaluation of organizational cost reduction, promotion of market shares, return on assets, and increase in revenue and profits with the economic goals of performance is the definition of sustainable economic performance. In the meantime, economic success is evaluated through the prism of an effect that lowers costs while concurrently increasing production levels (Grolleau et al., 2013). Improved sustainability performance can lead to greater economic performance, and with a high level of social sustainability, organizations can outperform their competitors over time (Ghosh, 2013; Jha & Rangarajan, 2020) These findings were published in the journal Sustainability and Business Strategy. Additionally, increased environmental performance might be the result of enhanced performance in the area of sustainability (Eccles et al., 2014). According to Sajan et al (2017), increasing economic and environmental sustainability has social implications, both directly and indirectly. These effects might be positive or negative.

Digital Business Transformation

Digital transformation refers to the changes that digital technology may bring to an organization's business model, such as new products, organizational structures, or process automation. These transformations may manifest as the rearrangement of entire corporate structures (Clohessy et al., 2017; Hess et al., 2016). The digitization of an organization's offerings and services that replace or improve their physical counterparts. Moreover, data-driven insights lead to tactical and strategic business operations, as well as the development of digital business models that enable new methods of value capture (Horlach et al., 2017). Digital transformation has become a popular topic among organizations as they attempt to

make it a top priority, especially when it comes to resolving sustainability challenges and creating immense prospects for product and service delivery (Mihardjo et al., 2019). According to Mihardjo et al (2019), businesses must continually strive to reinvent their business models and integrate them with digital technology to remain competitive and profitable in a dynamic market environment. Customer experience, organizational flexibility, and operational efficiency are the primary drivers of digital transformation (Mahraz et al., 2019; Morakanyane et al., 2017; Rajiani et al., 2018).

Businesses are going through major changes that will result in digitalized business operations (Ukko et al., 2019). As linked goods, services, and operations remodel organizations, businesses confront major hurdles as a result of digital transformation (Li et al., 2018), necessitating innovative change acceptance techniques (Kallinikos et al., 2013; Yoo et al., 2012). Competitive advantages in digitalization are mostly centered on strategy, culture, and people development rather than technology challenges (Li et al., 2018). Digital transformations include central transformations that incorporate organizational capabilities, operational routines, procedures, and strategies (Cha et al., 2015; Cui & Pan, 2015). The core components of a digital business strategy are capabilities, which are described as "the competency of a bundle of connected routines inside businesses for executing particular operations" (Ngo & O'Cass, 2013) in the context of a business model. According to Schmarzo (2017), the purpose of the digital transformation era is to "improve efficiency, increase customer value, manage risk, and identify new opportunities" by "applying digital capabilities to processes, products, and assets."

Business Model Transformation

In connection with a reform of business models, accelerated digitization can stimulate economic growth while enhancing organizational competitiveness (Yanovska et al., 2019). Digital technology must be integrated into corporate operations and business models must be reevaluated and reinvented for businesses to remain competitive (Reis et al., 2018). Digital technologies are influencing not only the management of companies but also the traditional business models of several industries. Therefore, businesses must decide whether to digitally change their present operations to take advantage of new technologies, or whether to endure interruptions to their organizational processes and traditional business models (Nwankpa & Roumani, 2016).

Business model transformation (BMT) or innovation refers to alterations in an organization's justification for producing, delivering, and collecting value (Osterwalder & Pigneur, 2014). The word "business model" refers to how organizations generate revenue through their operations (Victor et al., 2014; Zott et al., 2011). Value creation and value capture are the two most important facets of a business model that must be modified (Belyaeva et al., 2020). Value capture refers to an organization's ability to "capture" such value as retained profit, whereas value creation refers to the whole additional benefit provided in the transformation of raw input to final output (Chesbrough et al., 2018). Both value generation and value capture are essential to an organization's success and must be connected and modified (Foss & Saebi, 2018; Ritter & Lettl, 2018).

It is the process of transforming into a digital business where digital technologies are used to modify a business model and give new revenue and value-producing opportunities

(SME Corp & Huawei, 2018). Integrating digital technology into business models has shown to be a benefit to productivity and long-term sustainability (SME Corp, 2021). As a result, SMEs must transition from computerization to digitalization, as this will enable them to gather data throughout their value chain, which will assist product or service innovation as well as the creation of new business models (SME Corp & Huawei, 2018).

Proposed Conceptual Framework

This research proposes a conceptual framework (refer to Figure 2) for determining the sustainable business performance associated with digital business transformation and business model transformation, based on the literature reviewed previously.



Figure 2. Conceptual framework

Conclusion

The digital transformation of a business may go even further and profoundly change its operations, products, and processes, which may, in some cases, lead to the development of entirely new business models (Chanias et al., 2019; Vial, 2019). Digital technology is widely regarded as an important enabler of business model transformation across a broad range of industry sectors (Li, 2020a). One definition of the digital business model is "a statement of an organization's desire to create and capture value by integrating new technology environments into business strategy" (Liu et al., 2012). In addition, digitalization may be regarded as either a brand-new business model or the reshaping of an existing business model through the application of digital capabilities (Mahraz et al., 2019; Rothmann & Koch, 2014). Additionally, the implementation of digital capabilities to enable business model transformation is another component of a digital transformation project, and it affects the entire business, including operational processes, resources, as well as internal and external users (Mahraz et al., 2019). During this interim period, a large number of traditional businesses are beginning the process of digital transformation, which will lead them to adopt more digitalized business models and integrate new technology into every aspect of their operations (Fletcher & Griffiths, 2020).

One of the strategies that have been implemented to react to disruptive environmental changes has been the transformation of the business model, which has been made possible by digital technology. Specifically, the literature has established the existence of technologies that support organizations in recognizing new business strategies and opportunities (Priyono et al., 2020; Richter, 2020). To ensure their continued viability in the long term, businesses

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that are consistently subjected to pressure from external sources need to reimagine their operational models with the help of digital technology (Li, 2020b). According to Foss and Saebi (2017), the innovation of a business model has the potential to generate new commercial opportunities, capture new value, and improve an organization's performance.

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References

- Alcalde-Heras, H., Iturrioz-Landart, C., & Aragon-Amonarriz, C. (2019). SME ambidexterity during economic recessions: the role of managerial external capabilities. *Management Decision*, *57*(1), 21–40. https://doi.org/10.1108/MD-03-2016-0170
- Barann, B., Hermann, A., Cordes, A.-K., Chasin, F., & Becker, J. (2019). Supporting Digital Transformation in Small and Medium-sized Enterprises: A Procedure Model Involving Publicly Funded Support Units. *Proceedings of the 52nd Hawaii International Conference on System Sciences*, 6(2), 4977–4986. https://doi.org/10.24251/hicss.2019.598
- Belyaeva, Z., Rudawska, E. D., & Lopatkova, Y. (2020). Sustainable business model in food and beverage industry a case of Western and Central and Eastern European countries. *British Food Journal*, 122(5), 1573–1592. https://doi.org/10.1108/BFJ-08-2019-0660
- Cha, K. J., Hwang, T., & Gregor, S. (2015). An integrative model of IT-enabled organizational transformation. *Management Decision*, *53*(8), 1755–1770. https://doi.org/10.1108/MD-09-2014-0550
- Chanias, S., Myers, M. D., & Hess, T. (2019). Digital transformation strategy making in predigital organizations: The case of a financial services provider. *The Journal of Strategic Information Systems*, 28(1), 17–33. https://doi.org/10.1016/j.jsis.2018.11.003
- Chesbrough, H., Lettl, C., & Ritter, T. (2018). Value Creation and Value Capture in Open Innovation. *Journal of Product Innovation Management*, *35*(6), 930–938. https://doi.org/10.1111/jpim.12471
- Clohessy, T., Acton, T., & Morgan, L. (2017). The Impact of Cloud-Based Digital Transformation on ICT Service Providers' Strategies. *Digital Transformation From Connecting Things to Transforming Our Lives*, 28(2), 111–125. https://doi.org/10.18690/978-961-286-043-1.9
- Cui, M., & Pan, S. L. (2015). Developing focal capabilities for e-commerce adoption: A resource orchestration perspective. *Information & Management*, 52(2), 200–209. https://doi.org/10.1016/j.im.2014.08.006
- Das, M., & Rangarajan, K. (2020). Impact of policy initiatives and collaborative synergy on sustainability and business growth of Indian SMEs. *Indian Growth and Development Review*, *13*(3), 607–627. https://doi.org/10.1108/IGDR-09-2019-0095
- Delrue, F., Setier, P.-A., Sahut, C., Cournac, L., Roubaud, A., Peltier, G., & Froment, A.-K. (2012). An economic, sustainability, and energetic model of biodiesel production from microalgae. *Bioresource Technology*, 111, 191–200. https://doi.org/10.1016/j.biortech.2012.02.020

- Donthu, N., & Gustafsson, A. (2020). Effects of COVID-19 on business and research. *Journal of Business Research*, 117(June), 284–289. https://doi.org/10.1016/j.jbusres.2020.06.008
- Eccles, R. G., Ioannou, I., & Serafeim, G. (2014). The Impact of Corporate Sustainability on Organizational Processes and Performance. *Management Science*, 60(11), 2835–2857. https://doi.org/10.1287/mnsc.2014.1984
- Erdin, C., & Ozkaya, G. (2020). Contribution of small and medium enterprises to economic development and quality of life in Turkey. *Heliyon*, *6*(2), e03215. https://doi.org/10.1016/j.heliyon.2020.e03215
- Fabeil, N. F., Pazim, K. H., & Langgat, J. (2020). The Impact of Covid-19 Pandemic Crisis on Micro-Enterprises: Entrepreneurs' Perspective on Business Continuity and Recovery Strategy. *Journal of Economics and Business*, 3(2). https://doi.org/10.31014/aior.1992.03.02.241
- Fletcher, G., & Griffiths, M. (2020). Digital transformation during a lockdown. *International Journal of Information Management*, *55*(June), 102185. https://doi.org/10.1016/j.ijinfomgt.2020.102185
- Foss, N. J., & Saebi, T. (2018). Business models and business model innovation: Between wicked and paradigmatic problems. *Long Range Planning*, *51*(1), 9–21. https://doi.org/10.1016/j.lrp.2017.07.006
- Frank, A. G., Mendes, G. H. S., Ayala, N. F., & Ghezzi, A. (2019). Servitization and Industry 4.0 convergence in the digital transformation of product firms: A business model innovation perspective. *Technological Forecasting and Social Change*, *141*(July 2018), 341–351. https://doi.org/10.1016/j.techfore.2019.01.014
- Ghosh, A. (2013). Corporate sustainability and corporate financial performance: the Indian context.
- Giotopoulos, I., Kontolaimou, A., Korra, E., & Tsakanikas, A. (2017). What drives ICT adoption by SMEs? Evidence from a large-scale survey in Greece. *Journal of Business Research*, 81(August), 60–69. https://doi.org/10.1016/j.jbusres.2017.08.007
- Grolleau, G., Mzoughi, N., & Pekovic, S. (2013). Is Business Performance Related to the Adoption of Quality and Environmental-Related Standards? *Environmental and Resource Economics*, *54*(4), 525–548. https://doi.org/10.1007/s10640-012-9604-0
- Hadi, S., & Baskaran, S. (2021). Examining sustainable business performance determinants in Malaysia upstream petroleum industry. *Journal of Cleaner Production*, 294, 126231. https://doi.org/10.1016/j.jclepro.2021.126231
- Haseeb, M., Hussain, H. I., Kot, S., Androniceanu, A., & Jermsittiparsert, K. (2019). Role of social and technological challenges in achieving a sustainable competitive advantage and sustainable business performance. *Sustainability (Switzerland)*, *11*(14). https://doi.org/10.3390/su11143811
- Hess, T., Benlian, A., Matt, C., & Wiesböck, F. (2016). How German Media Companies Defined Their Digital Transformation Strategies. *MIS Quarterly Executive*, 15(2), 103–119.
- Horlach, B., Drews, P., Schirmer, I., & Boehmann, T. (2017). Increasing the Agility of IT Delivery: Five Types of Bimodal IT Organization. *Proceedings of the Annual Hawaii International Conference on System Sciences*, 2017-Janua(January), 5420–5429. https://doi.org/10.24251/HICSS.2017.656
- Jha, M. K., & Rangarajan, K. (2020). Analysis of corporate sustainability performance and corporate financial performance causal linkage in the Indian context. *Asian Journal of Sustainability and Social Responsibility*, *5*(1), 10. https://doi.org/10.1186/s41180-020-00038-z

- Jun, G. K., & Thye, L. S. (2017). Information and Communications Technology (ICT) and Digital Adoption: E-Readiness of Malaysian SMEs. http://acccimserc.com/images/researchpdf/Final-Report-on-SMEs-Readiness-in-Digital-Technology---19-Oct-20171.pdf
- Kallinikos, J., Aaltonen, A., & Marton, A. (2013). The Ambivalent Ontology of Digital Artifacts. MIS Quarterly, 37(2), 357–370. https://doi.org/10.25300/MISQ/2013/37.2.02
- Kamble, S. S., Gunasekaran, A., Gawankar, S. A., Moeuf, A., Lamouri, S., Pellerin, R., Eburdy, R., Moeuf, A., Lamouri, S., Pellerin, R., Eburdy, R., Industry, S. T., Pellerin, R., & Tunison, B. R. (2018). Industry 4 . 0 and the SME: a technology-focused review of the empirical literature To cite this version: HAL Id: hal-01836173. *Process Safety and Environmental Protection*, 12(4), 408–425. https://doi.org/10.1016/j.psep.2018.05.009
- Kantabutra, S. (2014). Sustainable leadership at Thai president foods. *International Journal of Business*, 19(2), 152–172.
- Laizet, V. F., Lobis, M., Simon, P., & Speich, R. (2021). *Crafting a fit-for-future retail operating model*. https://www.mckinsey.de/industries/retail/our-insights/crafting-a-fit-for-future-retail-operating-model
- Li, F. (2020a). The digital transformation of business models in the creative industries: A holistic framework and emerging trends. *Technovation*, 92–93(January), 1–10. https://doi.org/10.1016/j.technovation.2017.12.004
- Li, F. (2020b). Leading digital transformation: three emerging approaches for managing the transition. *International Journal of Operations & Production Management*, 40(6), 809–817. https://doi.org/10.1108/IJOPM-04-2020-0202
- Li, L., Su, F., Zhang, W., & Mao, J.-Y. (2018). Digital transformation by SME entrepreneurs: A capability perspective. *Information Systems Journal*, 28(6), 1129–1157. https://doi.org/10.1111/isj.12153
- Liu, D., Li, S., & Yang, T. (2012). Competitive Business Model in Audio-book Industry: A Case of China. *Journal of Software*, 7(1), 33–40. https://doi.org/10.4304/jsw.7.1.33-40
- Lombardi, R. (2019). Knowledge transfer and organizational performance and business process: past, present, and future researches. *Business Process Management Journal*, 25(1), 2–9. https://doi.org/10.1108/BPMJ-02-2019-368
- Lu, Y. (2017). Industry 4.0: A survey on technologies, applications, and open research issues. *Journal of Industrial Information Integration*, 6, 1–10. https://doi.org/10.1016/j.jii.2017.04.005
- Mahraz, M. I., Benabbou, L., & Berrado, A. (2019). A systematic literature review of digital transformation. *Proceedings of the International Conference on Industrial Engineering and Operations Management, October 2015*, 917–931.
- Mihardjo, L. W. W., Sasmoko, S., & Rukmana, R. A. N. (2019). CUSTOMER EXPERIENCE AND ORGANIZATIONAL AGILITY DRIVEN BUSINESS MODEL INNOVATION TO SHAPE SUSTAINABLE DEVELOPMENT. *Polish Journal of Management Studies*, *20*(1), 293–304. https://doi.org/10.17512/pjms.2019.20.1.26
- Morakanyane, R., Grace, A., & O'Reilly, P. (2017). Conceptualizing digital transformation in business organizations: A systematic review of literature. *30th Bled EConference: Digital Transformation From Connecting Things to Transforming Our Lives, BLED 2017, December*, 427–444. https://doi.org/10.18690/978-961-286-043-1.30
- Auwal, M. A., Mohamed, Z., Shamsudin, N. M., Sharifuddin, J., & Ali, F. (2020). External pressure influence on entrepreneurship performance of SMEs: a case study of Malaysian herbal industry. *Journal of Small Business & Entrepreneurship*, 32(2), 149–171.

- https://doi.org/10.1080/08276331.2018.1509504
- Müller, J. M., Buliga, O., & Voigt, K.-I. (2018). Fortune favors the prepared: How SMEs approach business model innovations in Industry 4.0. *Technological Forecasting and Social Change*, 132(January), 2–17. https://doi.org/10.1016/j.techfore.2017.12.019
- Nwankpa, J. K., & Roumani, Y. (2016). IT capability and digital transformation: A firm performance perspective. *2016 International Conference on Information Systems, ICIS 2016*, 1–16.
- Osterwalder, A., & Pigneur, Y. (2014). Book Review: Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers. *The International Journal of Entrepreneurship and Innovation*, *15*(2), 137–138. https://doi.org/10.5367/ijei.2014.0149
- Prasanna, R., Jayasundara, J., Gamage, N. S. K., Ekanayake, E., Rajapakshe, P., & Abeyrathne, G. (2019). Sustainability of SMEs in the Competition: A Systemic Review on Technological Challenges and SME Performance. *Journal of Open Innovation: Technology, Market, and Complexity*, *5*(4), 100. https://doi.org/10.3390/joitmc5040100
- Priyono, A., Moin, A., & Putri, V. N. A. O. (2020). Identifying Digital Transformation Paths in the Business Model of SMEs during the COVID-19 Pandemic. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(4), 104. https://doi.org/10.3390/joitmc6040104
- Rajiani, I., Bacik, R., Fedorko, R., Rigelsky, M., & Szczepanska-Woszczyna, K. (2018). The alternative model for quality evaluation of health care facilities based on outputs of management processes. *Polish Journal of Management Studies*, *17*(1), 194–208. https://doi.org/10.17512/pjms.2018.17.1.16
- Reis, J., Amorim, M., Melao, N., & Matos, P. (2018). Digital Transformation: A Literature Review and Guidelines for Future Research. In Á. Rocha, H. Adeli, L. P. Reis, & S. Costanzo (Eds.), 10th European Conference on Information Systems Management. Academic Conferences and publishing limited (Vol. 745, Issue March, pp. 411–421). Springer International Publishing. https://doi.org/10.1007/978-3-319-77703-0_41
- Richter, A. (2020). Locked-down digital work. *International Journal of Information Management*, 55(May), 102157. https://doi.org/10.1016/j.ijinfomgt.2020.102157
- Ritter, T., & Lettl, C. (2018). The wider implications of business-model research. *Long Range Planning*, *51*(1), 1–8. https://doi.org/10.1016/j.lrp.2017.07.005
- Rothmann, W., & Koch, J. (2014). Creativity in strategic lock-ins: The newspaper industry and the digital revolution. *Technological Forecasting and Social Change*, *83*(1), 66–83. https://doi.org/10.1016/j.techfore.2013.03.005
- SME Corp, & Huawei. (2018). *Accelerating Malaysian Digital SMEs*. https://www.huawei.com/minisite/accelerating-malaysia-digital-smes/index.html
- Turcsanyi, J., & Sisaye, S. (2013). Corporate social responsibility and its link to financial performance. *World Journal of Science, Technology and Sustainable Development*, 10(1), 4–18. https://doi.org/10.1108/20425941311313065
- Ukko, J., Nasiri, M., Saunila, M., & Rantala, T. (2019). Sustainability strategy as a moderator in the relationship between digital business strategy and financial performance. *Journal of Cleaner Production*, 236(July), 117626. https://doi.org/10.1016/j.jclepro.2019.117626
- Vial, G. (2019). Understanding digital transformation: A review and a research agenda. *Journal of Strategic Information Systems*, 28(2), 118–144. https://doi.org/10.1016/j.jsis.2019.01.003
- Victor, D., Ghazwan, H., Kang, L., Wei, S., & Paul Benjamin, L. (2014). How Does Information Technology Capability Enable Digital Transformation? Considering the Mediating Roles

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Vol. 13, No. 2, 2023, E-ISSN: 2222-6990 © 2023 HRMARS

- of Agility. December.
- Vo, L. C. (2011). Corporate social responsibility and SMEs: A literature review and agenda for future research. *Problems and Perspectives in Management*, *9*(4), 89–97.
- Wei, Z., Song, X., & Wang, D. (2017). Manufacturing flexibility, business model design, and firm performance. *International Journal of Production Economics*, 193, 87–97. https://doi.org/10.1016/j.ijpe.2017.07.004
- Xiang, S., Rasool, S., Hang, Y., Javid, K., Javed, T., & Artene, A. E. (2021). The Effect of COVID-19 Pandemic on Service Sector Sustainability and Growth. *Frontiers in Psychology*, 12(May), 1–10. https://doi.org/10.3389/fpsyg.2021.633597
- Yanovska, V., Levchenko, O., Tvoronovych, V., & Bozhok, A. (2019). Digital Transformation of the Ukrainian Economy: Digitization and Transformation of Business Models. *SHS Web of Conferences*, *67*, 05003. https://doi.org/10.1051/shsconf/20196705003
- Yapp, E. (2020). *Malaysia's digital transformation efforts progress*. Computer Weekly. https://www.computerweekly.com/feature/Malaysias-digital-transformation-efforts-progress-amid-challenges
- Yoo, Y., Boland, R. J., Lyytinen, K., & Majchrzak, A. (2012). Organizing for Innovation in the Digitized World. *Organization Science*, *23*(5), 1398–1408. https://doi.org/10.1287/orsc.1120.0771
- Zott, C., Amit, R., & Massa, L. (2011). The Business Model: Recent Developments and Future Research. In *Journal of Management* (Issue 37 (4), pp. 1019–1024). https://doi.org/10.1007/978-3-319-51550-2_3