

THE EFFECT OF THE COVID-19 PROCESS ON THE DIGITALIZATION OF SMES: TURKEY-MALAYSIA COMPARISON

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ABSTRACT

The aim of this study is to comparatively reveal the effects of the Covid-19 pandemic on the digitalization processes of Small and Medium-Sized Enterprises (SME) in Turkey and Malaysia, which are emerging economies. Although there are various studies that reveal the effects of the pandemic on the digitalization of SMEs in both countries, this study differs from other studies by comparing the SME digitalization data before and after the pandemic. The study was carried out with official and unofficial data on the digitalization activities of SMEs operating in Turkey and Malaysia. The obtained data were analyzed and interpreted with content analysis. As a result, SMEs in both countries think that it is necessary to focus on digitalization, and it can be said that they believe that various strategies and plans should be developed, including the elimination of their problems in this regard.

Keywords: Covid-19, Digitalization, SME. Malaysia, Turkey

INTRODUCTION

SMEs are of critical importance for national economies in the way of production, employment and exports. The situation is the same for developed, developing or underdeveloped countries. Therefore, countries make separate legal arrangements for SMEs and provide them with economic and bureaucratic support. SMEs are generally defined as businesses with 0-249 employees, disregarding minor definition differences. However, definitions of micro, small and medium-sized enterprises may differ in terms of number of employees and turnover according to countries. For example, while micro enterprises in Turkey are defined as enterprises with 0-9 employees, in Malaysia micro enterprises are considered as enterprises with less than 5 employees.

When SMEs are considered individually, it can be evaluated that their contribution to the economy is low. However, when their effects on the economy are evaluated collectively, it can be said that they have a very significant area of influence (Aykaç et al., 2009: 212). According to the 2019 small and medium-sized enterprises statistics published by the Turkish Statistical Institute (TUIK), SMEs account for 99.8% of the total number of enterprises, 72% of employment, 49.4% of annual turnover and constitutes 42.7% of the production value (TUIK, 2020). These figures are significant in terms of revealing the importance of SMEs in the Turkish economy. In Malaysia, SMEs have an important place in the country's economy. In Malaysia, the ratio of SMEs in total enterprises is 99%, their contribution to GDP is 38.2%, their contribution to employment is 48% and their share in total exports is 13.5% (Department of Statistic Malaysia, 2020).

SMEs are supported by incentives based on their importance for the national economy, and various policies are developed to solve the problems they experience. However, the Covid-19 pandemic, which emerged at the beginning of 2020 and impacted the whole world, deepened the problems experienced by SMEs and added the problem of digitalization to their current problems. Because the consumer behavior's tendency to buy online has transformed digitalization from being optional to a mandatory situation (TheStar, 2021). On the other hand, the majority of SMEs in Turkey and Malaysia were adversely affected by the epidemic. However, the majority of SMEs in Turkey and Malaysia were adversely impacted by the pandemic. Aside from the companies that took a break from their activities, some businesses faced closure in this process.

In this study, the digitalization reactions of SMEs in Turkey and Malaysia during/after the Covid-19 outbreak were tried to be put forward comparatively. Within the scope of the study, data belonging to two countries were collected and analyzed with content analysis.

ITS IMPORTANCE FOR SMES AND COUNTRY ECONOMIES

It is difficult to make a standard definition for SMEs. Because the understanding of the duties of the institutions and organizations that make the definition or the economic conditions of the countries are effective in defining these enterprises (Çelik et al., 2013: 110).

While there are different institutions and organizations that provide support to SMEs in Turkey, there is the Small and Medium Enterprises Development and Support Administration (KOSGEB) whose main field of activity is to support SMEs. This institution provides various supports to SMEs such as entrepreneurship support, R&D and technology support, business development and growth support, laboratory support and consultancy support (KOSGEB 10/28/2021). Apart from KOSGEB, institutions and organizations such as commercial banks (traditional and participation banks), development agencies, professional associations, ministry of agriculture and İŞKUR provide support.

In Malaysia, the supports offered to SMEs are generally provided by the institution called SME Corporation Malaysia. A part from this institution, commercial banks, development finance institutions (DFI), microfinance institutions, private government institutions and the central bank also provide various supports. SME Corporation Malaysia provides support such as access to finance, human capital, market access, innovation and technological infrastructure support in general terms (SME Corp Malaysia 2022).

When the definition of SME is examined in terms of both countries, the official definition has been made with the Regulation on the Definition, Qualifications and Classification of Small and Medium-Sized Enterprises in force in Turkey. This definition includes mostly economic concepts such as number of employees, sales revenue or balance sheet. In Malaysia, the definition of SME is made in terms of annual sales revenue and number of employees in the SME definition made by SME Corporation Malaysia.

Table 1: Official SME Definitions by Turkey and Malaysia

Country/Description Source	Number of Employees	Annual Turnover Amount	Business Size
TURKEY / Regulation on Definition, Qualifications and Classification of Small and Medium-Sized Enterprises	0-9	3 Million TL	Micro
	10-49	24 Million TL	Small
	50-249	125 Million TL	Middle
MALAYSIA / SME Corporation Malaysia	<5	<300 Thousand RM	Micro
	5-75	300 Thousand-15 Million RM	Small/Manufacturing Sector
	5-30	300 Thousand-15 Million RM	Small/Service Sector and Other
	75-200	15-200 Million RM	Medium/Production Sector
	30-75	3-20 Million RM	Medium/Service Sector and Other

As it can be seen in Table 1, while the definition of SME in Turkey is made without sector distinction, in Malaysia, unlike Turkey, the SME definition is differentiated by sector, and the production sector is evaluated as a separate group, the service sector and other sectors as a separate group, and the definitions are made accordingly.

PROBLEMS OF SMES IN TURKEY AND MALAYSIA

When the literature on the problems faced by SMEs in Turkey and Malaysia is examined, it can be said that there are country-specific problems other than common problems such as access to finance, collateral problems and high transaction costs. The literature on the problems faced by SMEs in both countries is summarized below.

Table 2: Problems Encountered by SMEs in Turkey

Problem	Source
Access to finance	Kaya (2007), Aykaç et al. (2009), Celik et al. (2013), Bilen and Solmaz (2014), Zengin and Network (2016), Myrzabekov et al. (2018)
Mortgage and surety issues	Muftuoglu (1989), Kaya (2007)
Lack of qualified personnel	Bilen and Solmaz (2014), Myrzabekov et al. (2018)
Insufficient equity capital, inability to raise funds from the capital market, financial management problems	Rich and Network (2016)
High interest rates	Rock (2007)
Institutionalization	Moon and Talaslı (2007), Bilen and Solmaz (2014)
Production	Ay and Talaslı (2007), Sahin and Ozudogru (2019)
Marketing	Myrzabekov et al. (2018), Sahin and Ozudogru (2019)
Branding	Red (2019)
Currency risk	Moon and Chip (2007)
Sales fluctuations, legislation, competition problems, employee relations, financial losses	Atay (2012)
Administration	Myrzabekov et al. (2018), Red (2019)

Source: The table was created by the authors.

Financing and collateral problems are at the forefront of the problems faced by SMEs in Turkey. Apart from these, the lack of marketing, institutionalization, production, management and qualified personnel can be considered as outstanding problems.

Table 3: Problems of SMEs in Malaysia

Problem	Source
Lack of collateral	Aris (2006), Meza (2012), Muridan and Ibrahim (2018)
Legal status/form of business	Aris (2006), Mesa (2012)
Higher transaction costs	Aris (2006), Meza (2012), Kachkar, Fares and Noordin (2016)
Insufficient documentation, non-availability of financial statements	Aris (2006), Meza (2012), Muridan and Ibrahim (2018)
Longer time taken for approval, rigorous screening procedures	Shamshubaridah and Berma (2009), Kachkar, Fares and Noordin (2016)
Insufficient income	Grave (2012)

According to Table 3, which summarizes the problems experienced by SMEs in Malaysia, it is understood that the problems are concentrated on problems such as lack of collateral, legal situation, high transaction costs, insufficient documents and incomplete financial statements, length of approval periods required for establishment of the business, detailed procedures and insufficient income.

It is possible to add the problem of digitalization to the problems that SMEs experience in Turkey and Malaysia and summarized in the tables above. It can be said that especially the Covid-19 outbreak has made this problem more evident. The existence of businesses that have closed and suspended their activities, and the initiatives of businesses trying to reduce the effects of the pandemic with e-commerce, as will be explained below, can support this situation. However, the problem of digitalization needs to be clarified scientifically with various researches.

LITERATURE SUMMARY

It can be said that digitalization was generally positively affected by the Covid-19 pandemic and increased faster than expected with the effect of the pandemic (Tahiroğlu and Bozkurt, 2021, p.153). In this section, studies on the effects of the said change on SMEs in Turkey and Malaysia, which have different economic characteristics, are summarized.

Reflections of the pandemic on SMEs operating in Turkey vary. In the months of total closures, there have been businesses that have completely stopped their activities, let alone finding solutions with digitalization. According to a study conducted by TUSIAD, 35% of micro enterprises and 24% of small enterprises stopped their activities during the pandemic. According to a study conducted by the Turkish Industrialists' and Businessmen's Association in 2020, some of the SMEs are trying to find solutions to the problems produced by the pandemic through digitalization or e-commerce initiatives. According to a study conducted by Gezici et al. (2021) on the effects of the pandemic on digitalization in food retailing in Istanbul, Turkey's largest city, it is seen that the focus is on reducing the negative effects of the pandemic period with digitalization in large enterprises. However, it has been concluded that local food

retailers, which can be considered as SMEs, do not focus on digitalization in this process. It has been evaluated that the reason for this situation is insufficient capital.

Akaydın (2021) determined that SMEs consider digital or e-commerce measures to be less important than measures such as providing new debt or restructuring old debts, reducing fixed expenses and delaying investments, among the measures to be taken to reduce the effects of the pandemic. Can (2021), in his study examining the effects of the pandemic process on businesses in Turkey, concluded that although there is no distinction in terms of business size, the pandemic makes digitalization efforts mandatory and offers new opportunities. Nakiboğlu and Işık (2021), on the other hand, in their study examining the predictions of SME owners that the transition to the digital economy will occur rapidly with the pandemic, concluded that this prediction is at a high level among SMEs.

It is possible to say that SMEs were adversely affected during the Covid-19 outbreak in Malaysia. According to Tong and Gong (2020), although digitalization offers opportunities to reduce the problems experienced by SMEs in extraordinary situations such as pandemics in Malaysia, SMEs are at risk of falling behind in the digitalization process for various reasons. In order to reduce these risks, both SMEs and the government need to take various measures. In this regard, the results of a webinar held with SMEs during the pandemic are remarkable. Accordingly, it has been evaluated that SMEs should develop new business models to solve the problems caused by the pandemic Covid-19 outbreak and focus on new technologies to increase efficiency. It was also emphasized that the government should improve the legislation and procedures to facilitate the adoption of digitalization by SMEs (Yi, 2020). In a study by Islam et al. (2021), in which he investigated the factors that will enable SMEs to survive in times of crisis such as the pandemic, access to finance was revealed as an important element in adopting digitalization, as well as leadership, seizing opportunities and efficient negotiation. Again, the research conducted by Ratnasingam et al. (2020) on 748 SMEs in Malaysia shows that SMEs accept the importance of technology during the pandemic and think that adopting industry 4.0 will be effective in reducing future uncertainties. According to Tajudin et al. (2021), in order to solve the problems caused by the Covid-19 pandemic for SMEs, the state and non-governmental organizations should provide support to these enterprises.

The studies conducted for Turkey and Malaysia on the impact of the Covid-19 outbreak on the digitalization of SMEs are summarized in Table 4.

Table 4: Literature Summary

Country of Study	Source	Conclusion
Turkey	TUSIAD (2020)	Some of the SMEs tried to solve the negative effects of the pandemic with digitalization.
Turkey	Gezici et al. (2021)	Unlike large enterprises, SMEs could not focus on digitalization due to insufficient capital during the pandemic.
Turkey	Akaydın (2021)	Digital or e-commerce measures are less important than new borrowing, fixed costs, reduction and postponement measures.
Turkey	Can (2021)	The pandemic has made digitalization efforts mandatory and has created new opportunities.
Turkey	Nakiboğlu and the Light (2021)	The prediction that the pandemic will accelerate the transition to the digital economy in SMEs is positive.
Turkey	Tahiroğlu and Bozkurt (2021)	Covid-19 has positively affected digitalization and accelerated the digitalization process.

Malaysia	Tong & Gong (2020)	Digitization has increased efficiency. In addition, SMEs face the risk of falling behind in the digitalization process for various reasons.
Malaysia	Yi (2020)	Due to the pandemic, SMEs need to develop new business models and focus on new technologies to increase efficiency.
Malaysia	Ratnasingam et al. (2020)	SMEs recognize the importance of technology during the pandemic and think that adopting industry 4.0 will be effective in reducing future uncertainties.
Malaysia	Islam et al. (2021)	Digitization is an essential element in the survival of SMEs.
Malaysia	Tajudin et al. (2021)	In order to solve the problems caused by the Covid-19 pandemic, the state and non-governmental organizations should provide support to these businesses.

When Table 4 is examined, the studies carried out in Turkey and Malaysia aimed to determine the attitudes of SMEs towards digitalization and the issues to be focused on due to the Covid-19 pandemic. In this study, unlike the existing studies, a comparison of the digitalization of SMEs in both countries was made and the result was interpreted with content analysis.

SMES IN TURKEY AND THEIR DIGITAL ACTIVITIES IN THE COVID-19 PROCESS

As stated above, SMEs in Turkey are of great importance in terms of their contribution to the economy. This situation is also reflected in the data. As a matter of fact, the share of SMEs in total enterprises in Turkey is 99.8%, their contribution to employment is 72.4% and their contribution to annual turnover is 50.4% (TUIK, 2019). In other words, almost all of the enterprises in Turkey are composed of SMEs. It is seen that SMEs provide most of the employment.

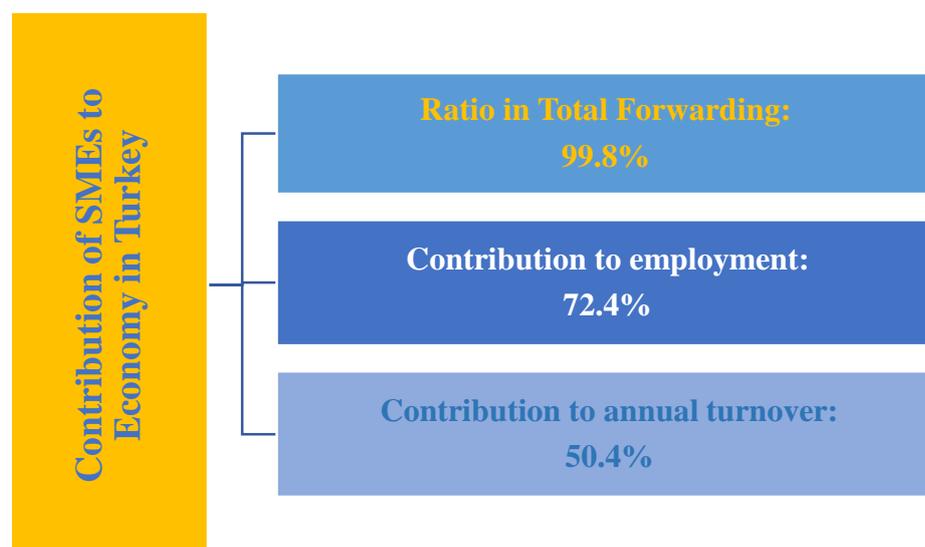


Figure 1: Contribution of SMEs to Turkish Economy

Digitization data of SMEs in Turkey is published by TUIK over the years. These data are summarized below.

Table 5: Internet Access Rates of SMEs in Turkey (%)

Years	Number of Employees	
	10-49	50-249
2019	94.1	98.7
2020	94.2	97.8
2021	94.7	98

Table 4 shows that almost all of the SMEs in Turkey have internet access. It is observed that there is a small increase due to the pandemic. In addition, it is seen that SMEs with 50-249 employees have slightly higher internet access rates than businesses with 10-49 employees.

Table 6: Website Rates of SMEs in Turkey (%)

Years	Number of Employees	
	10-49	50-249
2019	63.9	78.2
2020	49.2	74.1
2021	45.1	67.6

When the website ownership rates are examined, it is seen that there is a decrease compared to the pre-pandemic. This decrease is higher in SMEs with 10-49 employees. As a matter of fact, while 63.9% of enterprises with 10-49 employees had a website in 2019, this rate decreased to 49.2% in 2020 and to 45.1% in 2021. Although the reasons for this decline in website ownership need to be investigated, taking orders from social media accounts or various shopping applications instead of the website may be effective in this. In addition, it can be evaluated that the decrease in sales during the pandemic period may be effective in this.

Table 7: Online Order/Reservation Rates of SMEs in Turkey

Year	Number of Employees	%
2019	10-49	15.5
	50-249	14.2
2020	10-49	11.8
	50-249	11.2
2021	10-49	15.1
	50-249	13.7

SMEs According to Table 6, which summarizes the online order rates, the online order/reservation rates of SMEs decreased compared to the previous year in 2020, when the effects of the pandemic were intense. While the rate for SMEs with 10-49 employees was 11.8% during the pandemic (2020), it was 11.2% for SMEs with 50-249 employees. However, in 2021, the rates increased in both employee number groups and approached the rates in 2019.

Table 8: Rates of SMEs Receiving Orders over Computer Networks in Turkey

Year	Number of Employees	%
2019	10-49	10.5
	50-249	12.9
2020	10-49	9.2
	50-249	10.5
2021	10-49	no data
	50-249	

When the order rates received by SMEs over computer networks are examined, the rates in 2020 covering the initial periods of the pandemic decreased compared to 2019. This may be due to the low level of e-commerce activities of SMEs. In addition, this ratio is higher in SMEs with 50-249 employees compared to SMEs with 10-49 employees.

In addition to the data published by the official statistical institution above, the digitalization processes of SMEs during the pandemic period were examined with some researches. For example ; The research report titled Digitalization and the Impact of Pandemic on Businesses, published by TÜRKONFED in April 2021, is one of them. According to the report prepared with the data obtained from 1000 SMEs through face-to-face interviews, telephone interviews and online surveys, 18.6% of service enterprises are e-commerce investments, 21.5% are website investments and 15% are in the next three years. ,9 of them plan to invest in social media accounts. In industrial enterprises, these rates were 26.1%, 21.3% and 18.9%, respectively. Again, according to the research, the reasons for making digitalization investments since 2017 are 60.9% of SMEs to meet new customer demand, 57.50% of them are worried about the increasing importance of digitalization in the Covid-19 process and 52.20% of them are worried about falling behind in the competition. they replied. 61.80% of SMEs responded to the reasons for making digital investment plans in the next three years as the increasing importance of digitalization during the Covid-19 process, 58.20% to meet new customer demand and 54.60% to worry about falling behind in the competition.

5. SMEs IN MALAYSIA AND THEIR DIGITAL ACTIVITIES IN THE COVID-19 PROCESS

The official statistical institution in Turkey, TUIK, publishes some data on the digitalization activities of SMEs, summarized in tables above. However, the data published on the websites of the official statistics agency and SME Corporation in Malaysia were examined, and no data similar to the data in Turkey were found. However, relevant institutions and some research reports present some digitization data in Malaysia.

In Malaysia, the ratio of SMEs in total enterprises is 99%, their contribution to employment is 66.2% and their contribution to GDP is 38.3% (Tong & Gong, 2020).

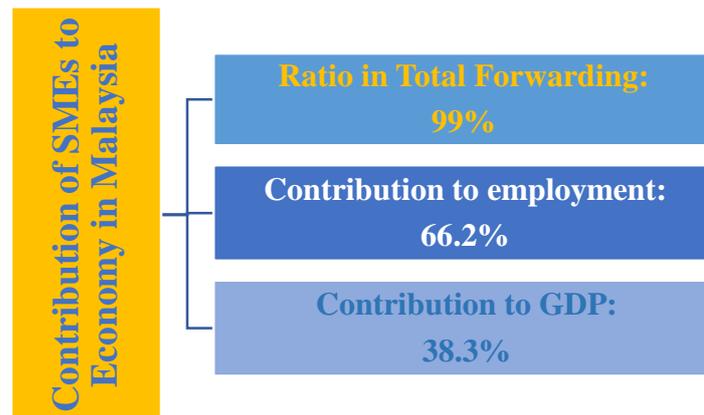


Figure 2: Contribution of SMEs to Malaysian Economy

There are assessments that local businesses in Malaysia are below the global average in terms of digitalization. As a matter of fact, according to a study conducted by the Malaysian SME Association, it has been determined that approximately 43% of SMEs attempt digitalization and one third of these enterprises are unsuccessful in this attempt (Lim, 2021). According to a study by Siemens Malaysia, half of the SMEs in Malaysia are not ready for digitalization in terms of infrastructure and systems during the pandemic (Farah, 2020). E-commerce in Southeast Asia is expected to reach \$102 billion by 2025, and SMEs need to keep up with digitalization for competitive advantage (Kang, 2020). In order to use this potential, it is thought that SMEs should focus on technological areas such as artificial intelligence (AI), blockchain and internet of things (IoT) (TM ONE, 2021). A study conducted in Malaysia in 2018 showed that digitalization has significant contributions to SMEs. According to the research, the use of social media increases the efficiency of SMEs by 26%, while the contribution of e-commerce to productivity is 27%. It has also been estimated that the use of advanced digital technology can increase productivity by 60% (Huawei Technologies, 2018). According to Yusuf (2020), utilizing digital technologies has contributed positively to SMEs both increasing their income and reducing their expenditures.

During the Covid-19 period, non-food shopping increased by 53%, grocery shopping by 144%, and meal deliveries by 61% in businesses providing digital services in Malaysia. On the other hand, it has been determined that 70% of the businesses that do not provide digital services have a 50% decrease in business. Again, the problems experienced in the logistics of agricultural products have been eliminated to a great extent thanks to e-commerce. Finally, during the Covid-19 process, 25% of businesses accelerated their digital transformation plans, while 60% slowed down their activities to realize their plans (Tong & Gong, 2020). According to Tong and Gong, although Covid-19 has the potential to increase digitalization, SMEs are at risk of falling behind in this process. Various supports have been provided to eliminate the negative economic effects of the Covid-19 outbreak in Malaysia. One of them is the grant package called SME Digitalisation Grant offered to SMEs. According to the data of the Malaysian official statistics agency, a total of 150.60 million RM grant support was given to 53,840 SMEs within the scope of this package.¹

¹https://www.dosm.gov.my/v1/index.php?r=column/ctwoByCat&parent_id=436&menu_id=Tm8zcnRjdVRNW WlpWjRlbmtlaDk1UT09

Table 9: SME Digitization Data in Malaysia

<i>Theme</i>	<i>Situation</i>	<i>Source</i>
<i>The use of social media and the effect of e-commerce on productivity</i>	The use of social media positively affected productivity by 26% and e-commerce by 27%. In addition, digitization can increase productivity by 60%.	Huawei Technologies, 2018
<i>The effects of digitization during Covid-19</i>	Non-food shopping increased by 53%, grocery shopping by 144% and meal deliveries by 61%. Jobs fell by 50% in 70% of businesses that do not offer digital services. In addition, 25% of businesses accelerated their digital transformation plans during the Covid-19 process.	Tong & Gong, 2020
<i>Digitization initiative</i>	43% of SMEs have attempted digitalization.	Malaysian SME Association (Lim, 2021)

Above, it can be concluded that businesses that have already adapted to the digital economy can reduce the effects of the pandemic thanks to e-commerce in the pandemic. On the contrary, it can be said that businesses that do not provide digital services are negatively affected by the pandemic. This shows that adaptation to the digital economy can yield positive results in reducing the effects of adverse conditions in case of pandemics or similar shocks.

CONCLUSION

Exceptional circumstances may require radical decisions or new strategies to be developed. The Covid-19 pandemic has also produced important problems in the economic field, such as production, supply chain, urgent financing problems and price increases, as in many areas. This situation necessitated taking radical decisions. If it is accepted that extraordinary situations also produce opportunities, one of the important opportunities produced by the Covid-19 pandemic is the transition to the digital economy. It can be said that businesses accelerate their pre-pandemic digitalization strategies or plans with the pandemic. As in Turkey and Malaysia, which form the scope of this study, SMEs, one of the most important components of economies, also developed digitalization initiatives during the pandemic. However, these initiatives differ from country to country.

In this study, data on digitalization of SMEs before and after the pandemic in Turkey and Malaysia were summarized and interpreted. Accordingly, there was no significant change in the pre-pandemic internet access rate of SMEs in Turkey during the pandemic. Although there is no data available for Malaysia on this subject, it is estimated that nearly half of SMEs have infrastructure and system problems. Considering the web page ownership rate of SMEs, there was a decrease during and after the pandemic in Turkey. One of the reasons for this may be that online sales are made through mobile applications, not the web page. Data on web page ownership rates in Malaysia could not be reached. When we look at the online order rates in Turkey, it is understood that there is no significant change compared to the pre-pandemic.

However, during the pandemic period in Malaysia, significant increases occurred in online sales, especially in businesses that provide services in the digital environment.

As a result, it can be said that SMEs are adversely impacted by the Covid-19 pandemic and they think that digitalization is necessary to reduce these negative effects. In addition, it can be said that they believe that strategies and plans should be developed, including the elimination of financing problems.

REFERENCES

- Atay, Mehmet. (2012). Financial Problems SMEs Experience with Banks in Turkey and Solution. *Journal of Financial Research and Studies* (pp. 1-7).
- Akaydın, H. (2021). The Effects of Covid-19 on Businesses: Determinations and Policy Suggestions Specific to SMEs. *Proceedings Book*.
- Bilen, Abdulkadir and Solmaz, Hasan. (2014). Structural Problems Encountered by SMEs and Solution Proposals (Diyarbakır Example). *Journal of Dicle University Faculty of Economics and Administrative Sciences* (pp. 60-79).
- Can, Ozge. (2021). The Effects of the Covid-19 Outbreak on Businesses in Turkey: Problems, Transformations, Opportunities. *Atatürk University Journal of Economics and Administrative Sciences* (p. 833-863).
- Department of Statistic Malaysia. (2020). https://www.dosm.gov.my/v1/index.php?r=column/cthemByCat&cat=159&bul_id=KzdrS25pRTZ1VGFkcTINY0FEczBYUT09&menu_id=TE5CRUZCblh4ZTZ2MODWZlBQ.
- Farah, Adilla. (2020). Half of Malaysia's SMEs Not Digitally Ready. <https://www.nst.com.my/news/nation/2020/11/645404/half-malaysias-smes-not-digitally-ready> (Accessed on 28.01.2022).
- Gezici, Ferhan, Celebi Gonidis, Dilay, Hatipoglu, Isra, Evci, Dilsad, & Selcuk, Fatma. (2021). Digitization in Food Retailing in Turkey and A Qualitative Research to Determine the Effects of COVID-19 on Digitization. *Hacettepe University Journal of the Faculty of Economics and Administrative Sciences. Covid-19 Special Issue* (pp. 91-107).
- Huawei Technologies. (2018). Accelerating Malaysian Digital Smes: Escaping the Computerization Trap. Retrieved From <https://Www.Huawei.Com/Minisite/Accelerating-Malaysia-Digital-Smes/Img/Sme-Corp-Malaysia-Huawei.Pdf>.
- Islam, Ariful, Jerin, Ishraq, Hafiz, Nusrat, Tali Nimfa, Danjuma & Sazali, Abdul Wahab. (2021). Configuring A Blueprint for Malaysian SMEs to Survive Through the Covid-19 Crisis: The Reinforcement of Quadruple Helix Innovation Model. *Journal of Entrepreneurship, Business and Economics* (pp. 32-81).
- Kang, Mint. (2020). E-commerce a Bright Spot Amid COVID Economic Gloom: Malaysia Digital Economy Corporation. <https://www.peoplesmattersglobal.com/article/leadership/e-commerce-a-bright-spot-amid-covid-economic-gloom-malaysian-digital-economy-corporation-26068>.
- Lim, Jotham. (2021). SME Digitalisation: Are Government Initiatives Really Effective?. https://www.ambankgroup.com/eng/Newsroom/Documents/2021/AmBank%20Digitalisation_10n11_industry_1358_v2.pdf.
- Myrzabekov, İlim, Abdulmanafov, Tabriz, Kupzhassarov, Meirambek, & Abdulai, Saedaa Mariam. (2018). The Problems of SMEs and Their Solutions: The Case of Turkey, Azerbaijan and Kyrgyzstan. *Turan: Center for Strategic Studies* (pp. 243-250).

- Nakiboglu, Aslihan and Isik, Sevgul. (2020). The Effects of the Covid-19 Outbreak on the Economy: A Study on Business Owners in Turkey. *Electronic Turkish Studies*.
- Ratnasingam, Jegatheswaran, Khoo, Albert, Jegathesan, Natkuncaran, Wei, Lum Chee, Hazirah, Abd Latib, Thanasegaran, Ganesh, Liat, Lim Choon, Yi, Lee Yan, Othman, Kamaruzaman & Afthar Amir, Mohd. (2020). How Are Small and Medium Enterprises in Malaysia's Furniture Industry Coping with Covid-19 Pandemic? Early Evidences from a Survey and Recommendations for Policymakers. *Bioresources* (pp. 5951-5964).
- Sahin, B. Deniz and Ozudogru, Hasim. (2019). Production and Marketing Problems in SMEs: The Case of OSTİM. *Third Sector Social Economic Review* (pp. 320-333).
- Tahiroglu, Ahmet Fatih and Bozkurt, Cuma. (2021). The Relationship Between Digitalization and Covid-19 Pandemic: An Applied Analysis, *Journal of Business and Economic Studies* (pp. 145-154).
- Tajudin, Putri Noorafedah Megat , Rahim, Nur Aira Abd , Idris, Khairuddin & Arshad, Mohd Mursyid. (2021). Weathering the Economic Impact of Covid-19: Challenges Faced by Microentrepreneurs and Their Coping Strategies During Movement Control Order (MCO)) in Malaysia. *Pertanika Journal Of Social Sciences & Humanities* (pp. 271-290).
- TheStar. (2021). Sustainability Through Digitalization, <https://www.thestar.com.my/business/business-news/2021/12/17/sustainability-through-digitalisation>, (Access Date: 17.02.2022).
- TM ONE. (2021). Three Digital Drivers That Can Reshape Malaysia's SME Sector. <https://govinsider.asia/digital-economy/tm-one-ai-blockchain-iot-malaysia-sme/>.
- TUIK. (2020). <https://data.tuik.gov.tr/Bulten/Index?p=Kucuk-ve-Orta-Buyuklukteki-Girisim-Istatistikleri-2020-41129#:~:text=KOB%C4%B0's were%202020%20y%C4%B1%C4%B1%20total,41%2C3'%C3%BCn%C3%BC%20o%C5%9F>. (Access Date: 03.02.2022).
- TUSIAD. (2020). The Effects of the Covid-19 Crisis on Businesses. <https://tusiad.org/tr/tum/item/10586-covid-19-krizinin-i-sletmeler-uzerinden-etkisinin-survey-sonuclari-was-announced>.
- Yi, Voon Zhen. (2020). Struggle Of Malaysian Smes During The Covid-19 Pandemic. Policy Brief. Ksi Strategic Institute for Asia Pacific.

INTERNET RESEARCHS

<https://www.kosgeb.gov.tr/site/tr/genel/destekler/3/destekler>
<https://www.mevzuat.gov.tr/MevzuatMetin/3.5.20059617.pdf>
<https://www.smeCorp.gov.my/index.php/en/>