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The Intervention of Micro, Small and Medium Enterprises (MSMEs) in Malaysia's Digital Economy

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Abstract
Digital economy is not a current thing in Malaysia when digitalization has been introduced since 1996 in order to become a developed nation. The digitalization in Malaysia has increased rapidly since then with the establishment of Cyberjaya and the fourth industrial revolution. Recently, Malaysia has introduced a digital economy blueprint through the 12th Malaysia Plan, as digital economy has been highlighted as a path towards the area of economic growth in order to achieve *Wawasan Kemakmuran Bersama* (WKB) 2030. The blueprint helps to boost the economy through the digitalization of business and education. One of the main focuses stated in the blueprint is on Micro Small and Medium Enterprises (MSMEs), where the government expects the MSMEs to develop eCommerce. Other than that, the blueprint also focuses on education to make sure all students in Malaysia have internet access. Recently, the gig-economy has risen and become a trend in this country to improve the livelihood of the households especially during COVID-19 pandemic. Therefore, the rise of the gig economy should also be focused in order to boost the digital economy in Malaysia. This paper explains in detail the digital economy in Malaysia and provides some recommendations to expand the digital economy.

Keywords: Digital economy; Gig economy; Malaysia; Medium, Small and Medium Enterprise.

Introduction

The introduction of Industrial Revolution 4.0 which emphasised on digitalization caused the world to focus on the digital economy. The term "digital economy" refers to activities i.e social and economic, which involve the production, and individuals, businesses and governments' use of digital technology (Bukht & Heels, 2017). Since then, many countries including Malaysia have focused on digitalization. Establishment of Cyberjaya as information and communication technology (ICT) hub and Multimedia Super Corridor are the initiatives made by Malaysia government to accelerate the nation's digital economy (Jehangir et al., 2011; Sarimin & Yigitcanlar, 2011).

Improving ICT access is one of the objectives to expedite the nation's digital economy. Table 1 shows there is a rapid increase in the percentage of households with access to ICT by having a computer from the year 2000 with only 13.49% to 77.6% in 2020. There was a campaign back then in 2003 through 8th Malaysia Plan (RMK-8) to encourage every household to own a personal computer (PC) where the household can withdraw their Employees Provident Fund (EPF) to purchase a PC (Rashid, 2016)

Referring to Table 1, it shows that the ICT usage in Malaysia has widened, where the percentage of households with access to ICT by owning mobile phone and internet are more than 90%. Owning a mobile phone is an essential nowadays hence explaining the high percentage of ownership. Subscribing to the internet is also an essential it is either the household or individual purchase mobile data or home internet.

Table 1: ICT Usage in Malaysia (2000, 2018-2020)

Equipment	Percentage of household with access to ICT (%)				Percentage of individuals with access to ICT (%)			
	2000	2018	2019	2020	2000	2018	2019	2020
Computer	13.49	71.7	71.3	77.6	n.a	70.5	72.1	80.0
Mobile phone	n.a	98.2	98.2	98.6	n.a	97.9	97.9	98.2
Internet	n.a	87.0	90.1	91.7	n.a	81.2	84.2	89.6

Source: Department of Statistics Malaysia (2021)
n.a: Not available

Access to ICT helps to boost the economy by creating jobs. This is as affirmed by Rockefeller Foundation (2014) who mentioned that digital jobs play the role in helping people to be out of poverty. Access to ICT may help individuals to create new jobs by founding a company and business owners to expand their businesses thus creating more jobs. With regard to that, there will be a decline in the unemployment rate hence improving economic growth.

Malaysia Digital Economy Blueprint

Since the establishment of the Multimedia Super Corridor in 1996, Malaysia has been on a road toward digitalization. The government has seen various success stories as a result of this programme, including the attraction of domestic and international information and communication technology (ICT) corporations to handle in specific economic zones. Furthermore, there are potentials in transforming the global economic landscape through the Fourth Industrial Revolution (4IR) and the quick progress of innovative technologies. The emergence of the COVID-19 epidemic has increased the pace of change and forced everyone in the country to adapt to digitalization in order to do daily tasks. If Malaysia does not adapt to the increasingly competitive global economy, it would suffer as a result of the inaction. Malaysia must embrace digitalization in order to raise the standard of living and increase economic success. In addition, digitalization will aid in the achievement of long-term sustainable growth. It is time to build the foundations for the country to transform itself into an advanced digital economy in order to ensure that no Malaysian is left behind to catch the wave of digitalization. It involves establishing infrastructure, advancing innovation, and creating an ecosystem in which all Malaysians can participate and benefit from better standards of living. MyDIGITAL is a government-led initiative that aims to strengthen the aforementioned foundation.

MyDIGITAL is an initiative by Malaysia government which represents the desire to transform the country into a digitally driven, high-income nation and a regional leader in the digital economy (Economic Planning Unit, 2021). The initiative is to enhance Malaysia's development strategies in particular the Twelfth Malaysia Plan (RMKe-12), and also the *Wawasan Kemakmuran Bersama* (WKB) 2030 as one of the key economic growth areas is the digital economy. In addition, WKB 2030 has emphasised to transform Malaysia to become a country that expands sustainably with comprehensive growth and equitable distribution in economy.

Vision and Outcomes

Malaysia will be able to successfully evolve into a digitally driven, high-income nation and a regional leader in the digital economy through MyDIGITAL. As a result, MyDIGITAL strives to help the people embrace digitalization to enhance their lives. The Malaysia Digital Economy Blueprint states the country's vision to become a regional leader in the digital economy as well as attaining inclusive, responsible, and sustainable socio economic development. With regard to that, MyDIGITAL visualizes Malaysia in future will provide the people with improved digital literacy, more high-paying jobs, improved social wellbeing, and environmental sustainability by having better business opportunities including micro, small and medium enterprises (MSMEs. Moreover, MyDIGITAL will also intend a digitally equipped government which will provide more efficient, effective, and transparent integrated end-to-end online government services and make it better than current government services.

Malaysia will make significant strides toward achieving the following targets by 2025:

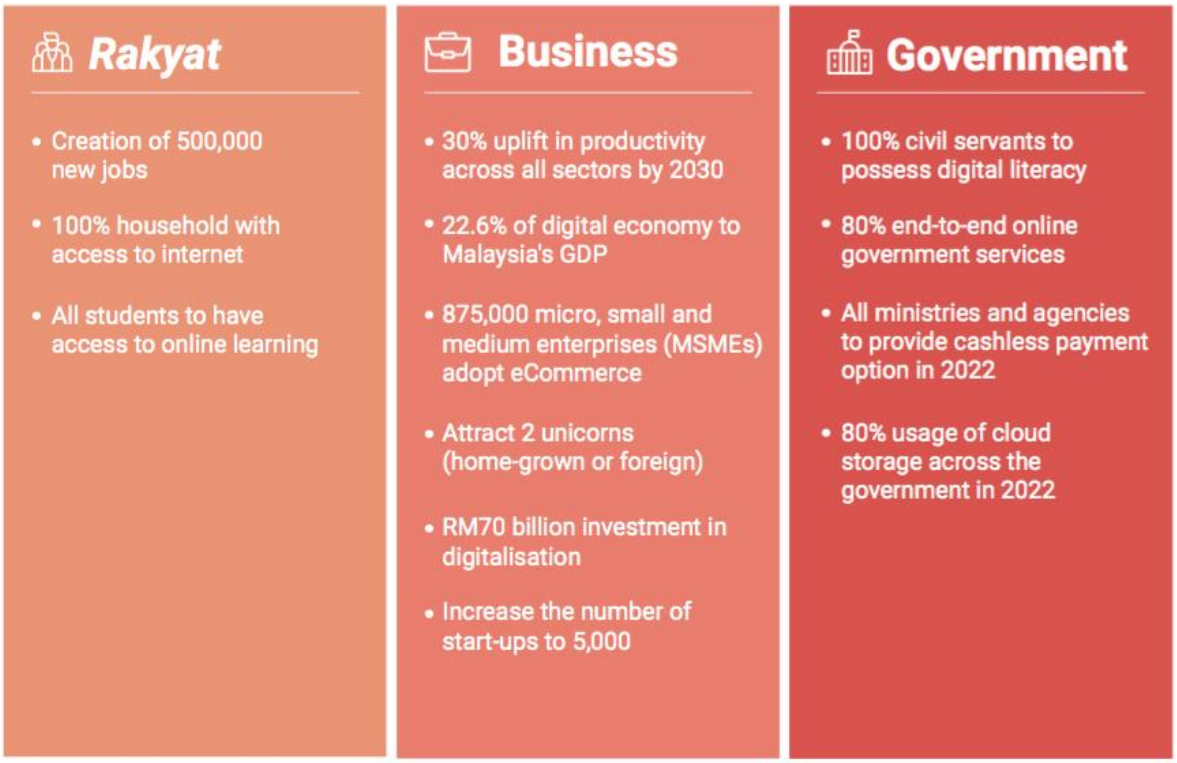

Figure 1: Malaysia's Digital Economy Blueprint
Source: Economic Planning Unit (2021)

MyDIGITAL outlines the integrated actions and targeted objectives for the people (rakyat), business, and government, over the course of three execution phases until 2030. All of these benefits will be delivered through the Malaysia Digital Economy Blueprint's six strategic thrusts with 22 strategies, 48 national projects, and 28 sectoral initiatives.
The key initiatives and objectives associated with the Malaysia Digital Economy Blueprint are:

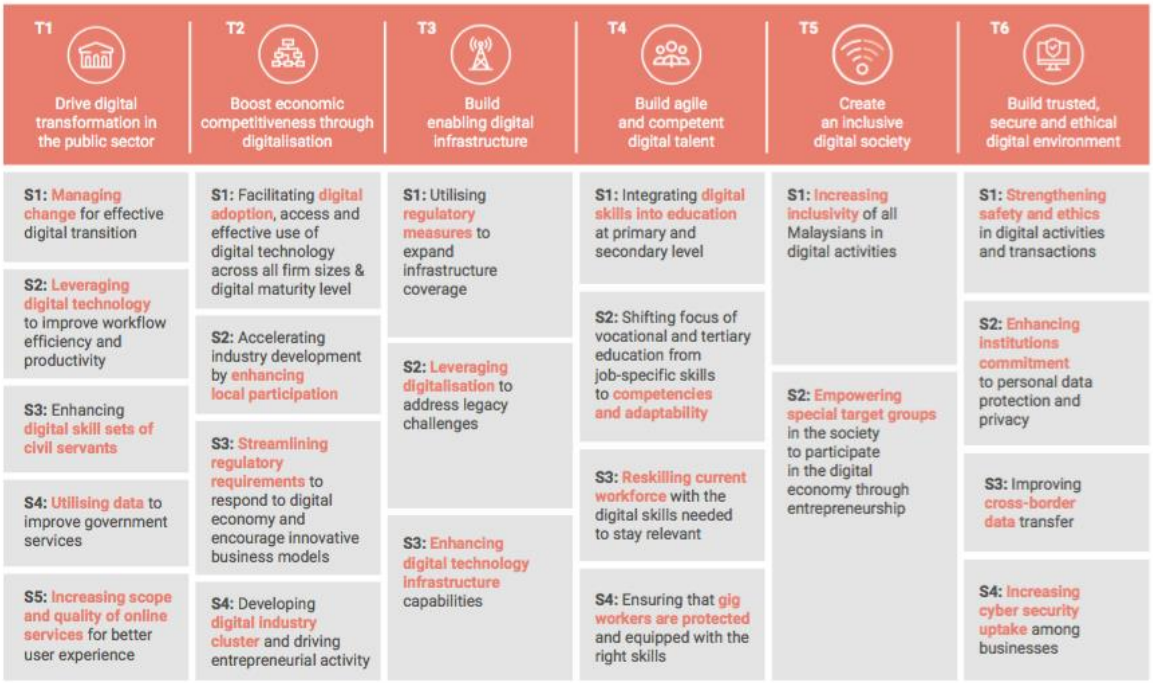

Figure 2: Key initiatives and objectives of Malaysia Digital Economy
Source: Economic Planning Unit (2021)

Phase 1 (starting in 2021 and running through 2022) is dedicated to increasing the use of digital services and platforms to prepare for Phase 2 and Phase 3. The focus is on driving digital change and inclusion throughout the digital economy in Phase 2 (2023-2025), emphasising inclusion between people and all business levels. Phase 3 (2026-2030) is setting the stage for strong, long-term growth by preparing Malaysia in order to become a maker for the regional market specifically on digital products and solutions.

Governance Structure

Malaysia's Digital Economy Blueprint integrates a results driven framework and strategy that entails collaboration between the people, business particularly private sector and the government. In November 2020, Malaysia established the National Digital Economy and 4IR Council, with the Prime Minister as the chair to expedite domestic capabilities in adopting digitalization.

To assist in the advancement of digitalization, every Malaysian citizen has a part to play. According to the Economic Planning Unit (2021), a governance system will be implemented for MyDIGITAL that incorporates:

1) Drive changes on the ground throughout the nation via a strategic change management office (SCMO). The changes will specifically inculcate digital and innovative mindset among the people;
2) A transparent and clear monitoring and evaluation mechanism to establish complete feedback loops, both top-down and bottom-up;
3) Ministers and the Chief Secretary to the Government chair the six specific clusters to improve overall efficiency, effectiveness, accountability and inter-ministry collaboration, each supported by subject matter experts of three key areas, namely regulation, cyber security and inclusivity and sustainability; and
4) Clear timelines to deliver measurable outcomes from each initiative.

Impact of COVID-19

The coronavirus (COVID-19) pandemic has had enormous repercussions on worldwide economics. It has had an effect on capital and supply networks, affecting product distribution and availability. China's factories, for example, ceased production due to a decline in demand for automotive parts, components, and clothing (Wang & Su, 2020). The global downturns and shutdowns of big industries such as hospitality, travel and retail sectors have caused considerably higher rates of unemployment globally. The pandemic also caused the unusual downturn in the magnitude of the global economy which caused ramifications for businesses' long-term operations, such as reduced business activities, human resource, and disruption of supply chain. Therefore, the governments all over the countries attempt to put a stop to the spread of COVID-19 by implementing several policies and action plans.

Small Business

In comparison with large and multinational companies, the severity of Covid-19 constraints is more on micro and midsize enterprises (MSEs) (Shafi et al., 2020). Given the importance of MSMEs in the economy, this situation gives rise to a major threat to the economy.

Small Business in Malaysia

In Malaysia, Micro, Small and Medium Enterprises (MSME) are grouped into three, which are micro, small, and medium. The grouping is according to their industry, sales turnover, and the number of employees. Table 2 shows the definition of MSMEs in Malaysia.

Table 2: Definitions of MSME's in Malaysia based on different size

Size	Manufacturing	Services and other sectors
Medium	Sales turnover between RM15 million and RM50 million OR Between 75 and 200 employees	Sales turnover between RM3 million and RM20 million OR Between 30 and 75 employees
Small	Sales turnover between RM300,000 and RM15 million OR Between 5 and 75 employees	Sales turnover between RM300,000 and RM3 million OR Between 5 and 30 employees
Micro	Sales turnover below RM300,000 OR Less than 5 employees	Sales turnover below RM300,000 OR Less than 5 employees

Source: Economic Planning Unit (2021)

MSMEs play an important role towards the economic growth in Malaysia, particularly on gross domestic product (GDP) and employment contribution. Table 3 shows that the sectors in Malaysia namely agriculture, construction, services, manufacturing, and mining and quarrying contributed in terms of GDP and employment. Agriculture sector contributed the most in terms of GDP in 2019, with 52.9%. This is because the agriculture sector is one of the main sectors in MSMEs (Hashim, 2000). On the other hand, the services sector contributed the most in terms of employment with a percentage of 50.5.

Table 3: GDP and Employment Contribution of MSMEs in Malaysia, 2019

Sector	GDP Contribution (%)	Employment Contribution (%)
Agriculture	52.9	41.4
Construction	46.5	48.3
Services	42.7	50.5
Manufacturing	34.6	46.7
Mining and Quarrying	2.6	28.1
Total	38.9	48.4

Source: Department of Statistics Malaysia (2021)

Although Malaysia's MSMEs are the backbone of the business environment, they lag behind in digitalization. In Malaysia, there is a digital divide between enterprises of all sizes. Digitalization is increasingly important to improve efficiency and competitiveness for small and medium-sized companies. Prior to the epidemic, there was considerable discussion about the condition of digitization among MSMEs and businesses more broadly in Malaysia. Despite the widespread belief that Covid-19 has heralded the beginning of a shift toward digitalization, there are still numerous obstacles that MSMEs must overcome in order to do so.

The impact of Covid-19 on small and medium enterprises in Malaysia

The Movement Control Order (MCO) mandated the temporary shutdown and forbade national mass movements of non-essential enterprises. Within a week, 70% of MSMEs experienced a 50% decline in business (Annuar, 2020). At the same time, online shopping for non-food climbed by 53%, while online shopping for grocery and food delivery have risen by 144% and 61% respectively (Vodus, 2021). The first day of the MCO 1.0 showed a 30% spike in orders from two food delivery services; GrabFood and Foodpanda (Free Malaysia Today, 2020). It is clear from the divergent growth patterns of online and offline economic activity that participation in the digital economy is essential for MSMEs if they are to survive and thrive in the post-COVID environment. The agriculture industry in the Cameron Highlands is a good illustration of how this might be accomplished. During MCO, the farmers were incapable of selling their crops because of logistical and transportation problems which forced them to dump all their produce. However, the e-commerce platforms such e.g., Lazada helped to solve the problems and the farmers were able to sell 70 tonnes of products online within three weeks (Kaur, 2020).

Besides that, the back-end functions such as accounting, administration, communications, data processing, and document handling services must also be digitized. 84% of MSMEs reported experiencing challenges with their online access and contact with clients and suppliers during the MCO. Many MSMEs have complained about insufficient work-from-home (WFH) (Ernst and Young, 2020). The poor back-end digitalization among MSMEs prior to COVID caused a decrease in productivity, efficiency, and lacklustre business operations throughout the MCO.

To support MSMEs, the Malaysian government has developed a variety of digitization programmes. For example, 28 measures – primarily financial assistance–are targeted at MSMEs as part of the PRIHATIN Economic Stimulus Package. Malaysia Digital Economy Corporation (MDEC) also collaborated with 237 local technology businesses, such as network providers, e-commerce platforms, and technology service providers, to provide discounts to MSMEs in order to encourage their digital transformation. In spite of these attempts, as a response to the Covid-19 outbreak, just 25% of Malaysian enterprises have advanced their digital transformation strategies (Business Today, 2020). Reduced cash flow has a significant

impact on MSMEs' efforts to digitise their operations during this crisis (Department of Statistics Malaysia, 2020). It is questionable whether there will be enough room for major growth in MSME digitization during the epidemic, given the tight financial restrictions. As the government works to help small and medium sized enterprises digitalize, there are still barriers that inhibit this process.

Rise of Gig-Economy in Malaysia

According to the International Labour Organisation (ILO, 2018), gig work is a vulnerable employment consisting of own workers and family workers who scarce the most fundamental of worker's rights, social security and one's say at work. In order to promote gig-work, there is an initiative of policy-level interventions by Malaysian Government's Digital Malaysia Strategy. The gig economy of Malaysia has risen when COVID-19 pandemic strikes. Retrenchment due to the pandemic cause many individuals opt for gig-work such as food delivery, e-hailing and also online business from home. Moreover, Anwar and Graham (2021) affirmed that gig work provides job opportunities with better pay than formal jobs. In addition, Anwar and Graham (2021) mentioned that gig work depends on the internet the most because the gig workers spend their money more on broadband internet compared to food as good internet connection makes them able to work more and earn more.

Digital Economy in Other Countries

Malaysia is not the only country which continues to develop the digital economy in the nation. Bilozubenko et al. (2020) analysed the Digital Economy development in European Union (EU) countries based on the parameters namely level of households' internet access, individual mobile internet access and individual internet use. Among the EU countries, Netherlands has the highest percentage of households' level of internet access, which is 98% while Bulgaria is the lowest with 75%. On the other hand, Denmark has the highest percentage of individual mobile internet access among the EU countries which is 58% while Italy is the lowest with 14%. In terms of parameter of individual internet use, Sweden has the highest percentage of 98%, and Bulgaria has the lowest percentage, which is 71%.

Meanwhile, Milošević et al. (2018) found that Denmark, Sweden and Netherlands are the top ranked European countries in terms of digital performances which affect the economies. In contrast, Romania and Bulgaria are at the bottom rank. Croatia is in lower rank as their low-performance internet infrastructure causes the slow down in digital performance.

These findings are the position of the EU countries on selected parameters based on the classification analysis by Bilozubenko et al. (2020). The findings are incomparable with Malaysia's ownership percentage of internet access, however the high ICT access among the households and individuals in Malaysia as shown in Table 1 proves that Malaysia is on par in the development of the digital economy with other countries.

On the other hand, Miethlich et al. (2020) showed the 2017 data of Switzerland, Russia and Azerbaijan on the percentage of households with internet access and owning the computer. Among the three countries, Switzerland has the highest percentage of households with internet access (86.8%), followed by Azerbaijan (77.4%) and Russia (74.8%). Switzerland also ranks the top in households' ownership of computers with the percentage of 89.3, followed by Russia with 74.3% and Azerbaijan with a percentage of 64.3.

Referring to Table 1, by taking the 2018 data to compare with 2017 data provided by Miethlich et al. (2020), Malaysia has a percentage of 87% of households with internet access and 71.7% in terms of households' ownership of computers. With regard to that, Malaysia is on par with Switzerland in terms of internet access and with Russia when it comes to computer ownership. Therefore, we can conclude that the digital economy in Malaysia is on the track and able to

contribute to economic growth.

Policy Recommendation

Micro, Small and Medium Enterprises (MSMEs)

These policies are aimed at fostering a comprehensive digital economy which benefits all stakeholders. With regard to that, the Malaysian government may take into consideration of the following strategies:

1. **Ascertain a cost-effective and high-quality digital infrastructure.**
   To eliminate the financial hurdles to MSME digitalization, public-private partnerships should form and maintain at aiming on the basic digital infrastructure cost. These efforts could be broadened to expedite the widespread development of inexpensive, high-quality digital infrastructure and services.

2. **Promoting the digitization of more sophisticated back-end procedures.**
   72% of MSMEs are unaware with regard to automate their business operations, while 42% of them are well informed about cloud computing services but have no idea on how to exploit cloud computing to revolutionise their organisations (SME corps, 2020). Along with increasing awareness of the benefits of digitising back-end processes, as discussed above, training and upskilling could help MSME employees enhance their technological competencies and encourage internal digitalization.

3. **Involve MSMEs in discussions about available government programmes and incentives.**
   Numerous MSMEs are almost certainly ignorant of government programmes and incentives for digital transformation. As indicated previously, 60% of MSMEs mentioned that funding is the obstacle to digitization as they were not having the knowledge of available financing aid to the MSME (Department of Statistics Malaysia, 2020) Additional engagement activities, such as direct outreach to those who are in MSMEs to inform them about available skills-based training programmes, could assist in increasing MSME digitalization rates.

4. **Expand incentives for digitalization to all interested MSMEs.**
   MDEC sponsors a number of programmes aimed at promoting MSME digitalization. However, these programmes are subject to certain limits. The MSME Business Digitalization Grant, for instance, is restricted to only 100,000 MSMEs. With regard to that, the participation on the programmes sponsored by MDEC may be minimal, as many MSMEs entrepreneurs might be unaware or uninterested to take part. Nevertheless, the government has the option of expanding these programmes to all interested MSMEs.

Education

These policies suggested not only to improve the digitalization but also to enhance the education system of the nation. There are several recommendations to be considered:

1. **High speed internet access**
   Even though the data shows the high percentage of internet access, there was a recent issue regarding the internet access in the rural areas of Malaysia. COVID-19 pandemic forced the implementation of teaching and learning via online, hence revealing the difficulties to access the internet. Providing internet access is one of the objectives stated in the Digital

Economy blueprint, but there is a need to increase the speed of action to make sure the high speed internet is accessible throughout the country.

2. **Laptop or tablet ownership**
   Recent online learning due to the pandemic and the possibility to have blended learning (face to face and online) in future make laptop and tablet become the necessities. Moreover, the educational sources are more accessible via online, such as e-library and educational YouTube channels. By adapting the one household one personal computer campaign back then, the government may organise a campaign to make sure all students in the country are able to own either a laptop or tablet for educational purposes.

3. **Improve ICT in school**
   Initiative to improve the ICT facilities in schools has started with the establishment of computer labs in all schools in the country, but improvements still need to be done. For example, boarding schools have started to use cloud storage for learning purposes. Therefore, it is recommended that the use of cloud storage be expanded to all schools in Malaysia. Other than that, the computer labs should be fully equipped with recent relevant software and also fully utilised for teaching and learning.

Conclusion

Digitalization is not a recent phenomenon even though the Industrial Revolution 4.0 was recently introduced. This is because digitalization has become a sensational issue with the invention of computers and mobile phones. Malaysia, on the other hand, appears to be lagging behind in terms of digitalization. Even with certain gains, Malaysia has a long way to go before it can claim to have a healthy digital environment. Since the outbreak of Pandemic Covid-19, the majority of transactions have been conducted online. Due to global lockdowns, digitization is necessary. Since then, working from home and taking online classes have become the new norm. In addition, the rise of the unemployment rate forced people to become gig workers and open up small businesses. Hence, the discussion of the paper centred on education and micro, small and medium-sized businesses (MSMEs). Government entities, too, were forced to abandon physical operations in favour of digital ones. However, because digitalization is not yet widespread in Malaysia, there are numerous obstacles that people must overcome in order to become acquainted with the digitization process. One of the several causes is the high expense of digital equipment. Apart from that, issues with internet connectivity, particularly in remote areas, were a source of concern. Therefore, this paper recommended some relevant policies to be considered in order for Malaysia to become a leading nation in the digital economy.

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