

COVID-19 AND THE ADOPTION OF E-BUSINESS AMONG SARAWAK'S WOMEN ENTREPRENEURS

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1. INTRODUCTION

Over 4.3 million confirmed cases and 290,000 deaths have been reported worldwide because of the COVID-19 pandemic. It has also generated concerns about an approaching economic downturn. Social isolation, self-isolation, and travel limitations have resulted in a reduction in the workforce across all economic sectors, resulting in the loss of much employment (Nicola et al., 2020). To that, World Health Organization (WHO, 2021) announced that COVID-19 became a pandemic on March 11, 2020, with a 13-fold increase in the number of cases outside of China and a tripling of the number of countries afflicted. As a result, there are over 118,000 cases in 114 countries, with 4,291 people dying as a result. Thus, WHO expected the number of cases, deaths, and affected countries to continue to rise in the next days and weeks. Governments have implemented border closures, travel restrictions (Jazeera, 2020 & GOV.UK, 2020), and quarantine in countries that make up the world's top economy to 'flatten the curve,' (Avi, 2020) raising fears of an approaching economic crisis and recession (Buck et al., 2020).

In a response to this, the Malaysian government had implemented the Movement Control Order (MCO) from 18 March 2021 to 31 March 2020 to curb the spread of COVID-19 cases. The decision was made under the Prevention and Control of Infectious Diseases Act 1988 and the Police Act 1967. The prohibition of movement and mass assembly nationwide would include all religious, sports, social and cultural activities. This included business premises must be closed except for supermarkets, public markets, grocery stores, and stores selling necessities. On top of that, the implementation of MCO has its unfavourable impact on economic activities. Due to this, there are many economic sectors such as entrepreneurs had faced losses and some of them are unable to continue their businesses. Many businesses began to close and affected their income. Based on an online survey (Ratnasingam et al., 2020), 748 small and medium firms (SMEs) in the furniture industry were conducted in the aftermath of the global COVID-19 outbreak and the subsequent MCO in Malaysia. The primary goal was to assess the impact of the pandemic and following MCO on various elements of SMEs' operations, as well as to give recommendations to the government on SME2 support measures. The poll indicated that, while all elements of the business were impacted, the financial management and supply chain interruptions were the two primary worries of SMEs during the crisis. Inevitably, it was discovered that most SMEs were running at or below capacity, which was a big financial loss.

Hence, entrepreneurship is one of the economic sectors that are affected by the pandemic. An entrepreneur is a huge field that is dominated by either men or women. Women's participation in economic activity has become one of the most important factors in the

development of Malaysia's economy (Chen, 2001). Women's entrepreneurial influence is a force to be reckoned with, and their contributions have resulted in the country's economic progress and prosperity (Wendy, 2014). The amount of effort put in by the Malaysian government, non-governmental groups, and commercial enterprises that have provided support and advice over the years is related to the increase in entrepreneurial activity among women.

To attain this goal, a range of programs aimed at improving women's economic standing have been implemented, such as encouraging women to engage in entrepreneurship. According to Kamunyu and Theuri (2017), the financial empowerment of women could boost the country's overall development. Evidently, Amanah Ikhtiar Malaysia (AIM) and Tabung Ekonomi Kumpulan Usaha Niaga (TEKUN) provide financial assistance to women entrepreneurs as a form of encouragement (Alam et al., 2015). Women entrepreneurs are also assisted through products, skills, and entrepreneurial training, in addition to financial aid. Encouragement of women's participation in entrepreneurship is one of the most important goals. Further in 2019, the Malaysian government spent RM2.3 billion on 10 women entrepreneurship programs to spur women's participation in business (SME website, 30 January 2020). The then Deputy Prime Minister Datuk Seri Dr. Wan Azizah Wan Ismail said these programs provided intensive training in entrepreneurship, export support, and financial assistance for women entrepreneurs. It had benefited 364,052 Small and Medium Enterprise (SME) recipients. What is more, the minister also noted that in Malaysia, women-owned businesses constitute 20.6 percent of the total 907,065 SMEs. On the other hand, this is significantly lower than their male counterparts and of this figure, 97.2 percent of the women are in the services sector.

Nevertheless, for Sarawak, more measures were being made to encourage women in small and medium businesses to empower their economic status. The empowerment of women must be done through the economic approach and the Sarawak government would continue to provide the ecosystem, where spaces were being created for women to use the new technology to empower themselves. The government's initiative in supporting women's entrepreneurship is very enlightening. It was reported that the Sarawak government increased the seed capital for the Sarawak Department of Women and Family to RM1 million in 2020, following RM500,000.00 as seed capital to scale up women's businesses through the Ministry. This initiative had benefitted some 100 women entrepreneurs in 2019 (Teo, 24 March 2020).

To add to that is the government's special allocation of RM5 million for women to set up an incubator for women to use new ways to market their products, be it produced in the village or the house, and to connect their networking to the outside world through technology. As well as what is more, according to the statistics, the current population of Sarawak is about 2.8 million and out of that, 1.35 million are women.

Therefore, during the pandemic, e-business plays an important role for women entrepreneurs to run their businesses. E-business is the largest emerging trend in business today as according to Gasos (2013), "e-business is a way of using modern information and communication technologies to endorse their operations." During this pandemic, business is no longer a one for all concept, that concept is being replaced by a consumer economy that is driven by choice. These choices are not only in product and price but in the shopping environment as well, as most of the people are prefer doing home shopping than going to a big supermarket to shopping. The entrepreneurship of women is considered an effective instrument for the economic development and empowerment of women.

2. METHODOLOGY

The study was conducted quantitatively using a Cross-sectional method. Questionnaires items were adopted and adapted from past studies. This cross-sectional is based on the sample selected and the population of interest, which is focused on the women entrepreneurs in the Kuching, Sarawak area only. With a population of 24,871 women entrepreneurs registered in Sarawak, a sample of 378 was drawn from there. The questionnaires were distributed by using simple random sampling. Due to the pandemic COVID 19, the questionnaires were distributed using Google form.

3. FINDINGS

The survey managed to get 305 pieces of feedbacks used for final analysis. Most of the respondents were within the age of 20-59 years old (80.98 percent) and 60 years and above is (19.02 percent), having three types of business, namely, sole proprietorship business which is (32.1 percent), partnership, (43.0 percent) and limited liabilities company (24.9 percent). In terms of education, most of the respondents are from it showed that the majority had a degree (29.5%) whereas 26.9% were having their SPM qualification and only 15.4% had a master's degree. Whereas between 4.9% - 9.2% had their education level at Primary School, Form 3, Diploma and Ph.D. More importantly, is their year of involvement in business ranges from a year to more than 20 years. However, the percentages for those being in business between a year to 15 years is from 22.6% to 27.9%, of which 27.9% are those who have 5-10 years in business. 17.4% have 15-20 years in business whilst only 6.6% have more than 20 years of involvement in the business. On one hand, regardless of the number of years in business, the level of income among the entrepreneurs was between RM1,000.00 to more than RM5,000.00 however a majority of 34.4% had an income between RM3,001.00 to RM4,000.00. 28.2% gathered an income between RM1,000.00 to RM3,000.00 and a mere 13.1% had an income of more than RM5,000.00.

Table 1: Important Factors of Implementing E-Business among Sarawak's Women Entrepreneurs

	N	Mean	Std. Deviation
Size of business	305	2.8918	1.03782
Environment	305	3.0721	1.16474
Customer pressure	305	3.5902	.97968
Customer satisfaction	305	3.9311	.94860
Competitive pressure	305	4.0787	.95647
Technologies development and innovation	305	4.2197	.84348
Valid N (listwise)	305		

Table 1 indicates the distribution of studied variables to discuss the important factors of implementing e-business among Sarawak's women entrepreneurs. The mean value indicates the highest mean of implementing e-business is technologies development and innovation. This is followed by the mean of 4.07 represented by the competitive pressure of adopting e-business; whereas the least mean is the size of business which the mean is 2.89.

Table 2: Effect of Covid-19 towards Financial Income

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max.
					Lower Bound	Upper Bound		
RM1,000- RM3,000	86	19.8488	4.14024	.44645	18.9612	20.7365	10.00	27.00
RM3,001- RM4,000	105	21.4857	4.33925	.42347	20.6460	22.3255	10.00	29.00
RM4,001- RM5,000	74	20.7703	4.28616	.49826	19.7772	21.7633	10.00	29.00
MORE THAN RM 5,000	40	19.9250	4.98915	.78885	18.3294	21.5206	11.00	29.00
Total	305	20.6459	4.39713	.25178	20.1505	21.1414	10.00	29.00

The analysis of ANOVA is about the effect of COVID-19 on financial income among women entrepreneurs. The answers from the respondents are based on the Likert question that strongly disagrees, disagrees, neutral, agree, and strongly agree. The highest mean of 21.48 was from the business earned between RM3,001.00 – RM4,000.00. The overall effect of covid-19 towards financial income among women entrepreneurs was compared using ANOVA. The significant difference was found ($F(3, 301) = 2.63, p < 0.05$). The level of income shows the mean score for RM1000-3000 income is 19.84 (sd = 4.14). The level of income for RM3,001.00-4,000.00 shows the mean score around 21.48 (sd = 4.33). Meanwhile for RM 4001-5000 income mean score is 20.77 (sd = 4.28). More than RM5,000.00 income mean score are 19.92 (sd = 4.98).

Table 3: Effect of Covid-19 towards Financial Income Between and Within Groups

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	150.624	3	50.208	2.639	.043
Within Groups	5727.133	301	19.027		
Total	5877.757	304			

Table 3 shows the output of the ANOVA analysis and whether there is a statistically significant difference between group means. It shows that the significance value is 0.043 (i.e., $p = .043$) which is below 0.05, and therefore, there is a statistically significant difference in the mean length of effect of Covid-19 towards financial income.

4. DISCUSSION

The present study indicates that the most important factor of e-business among women entrepreneurs is technologies and innovation. This in accord with the earlier observation by a study from Mohammed et al., (2013), mentioned that technologies improvement is the factor that contributes toward the adoption of e-business among women entrepreneurs. More so, the positive impact on women entrepreneurs has its significance in the Industrial Revolution 4.0

(IR4.0) era as noted by Ms. Fatimah Alsagoff, Director of Public Affairs United Parcel Service Asia Pacific.

Accordingly, it was evident in the Asia-Pacific Economic Cooperation Secretariat's (APEC) workshop held in November 2020, the main objective was to elevate the knowledge and improve the skill of women entrepreneurs in the dynamic world of IR4.0 through an interesting and interactive discussion between government, entrepreneur (especially women entrepreneur), and other society, such as academics and college. According to Ms. Fatimah Alsagoff, she was opinionated that empowering woman by making trade easier and ensuring IR4.0 drives a level playing field in global trade; is done through (1) The digitalization of customs and border processes (2) Leveraging data analytics/AI to support stronger risk management, allowing further simplification of customs processes, (3) Promoting supply chain transparency through blockchain and (4) Financial inclusion through digital payments. This study confirms that Schwab (2016) is associated with the fact that IR4.0 is the interpretation and the movement of the economic sector toward the technologies and the digital users. Consistent with the literature, this research found that), the way of businesses operate will be affected due to the changes in technology (Ongori & Migiro, 2010).

Based on the effect of COVID-19 on the financial income among women entrepreneurs, in analysing the data, the researcher used ANOVA. This indicates that COVID-19 has significantly affected the financial income of women entrepreneurs. Based on the findings, the highest mean score of income among the respondents are between RM3,001.00-RM4,000.00, which means that their income is affected by pandemic COVID-19. This study supports evidence from previous observations as reported by Bank Negara Malaysia; most of the economic sectors had financial risk especially among the small and medium enterprises (SMEs) in the third and fourth phases of the year 2019 (Maizaitulaidawati & Razali 2020). Further, this result corroborates the findings based on the Department of Statistics Malaysia (2020); most of the companies did not survive and the statistics showed that the companies' business firms that we're able to survive were only at 4.7 percent in more than six months. More importantly, the Sarawak government is serious about assisting women in e-business. That is, the use of a digital economy platform to assist women entrepreneurs, particularly in promoting and marketing their products to local and global markets online is essential for all female entrepreneurs, as it aids in the development of their internet businesses.

5. CONCLUSION AND LIMITATIONS

The study was able to identify the causes and effects of pandemic Covid-19 to women entrepreneurs and how these women entrepreneurs manage to adopt using e-business in Sarawak. Apart from that, the self-driven effort is very important especially in terms of gaining knowledge, skills, and networks for women entrepreneurs to be sustainable in the entrepreneurship industry. The focus in this study has been only on women entrepreneurs in Sarawak's urban area which may not represent the whole population. Future studies could be extended in rural areas to represent all women entrepreneurs. The limitation of this research is that an online document was used due to the Standard Operation Procedure that we had to abide by. However, it is suggested that a more in-depth understanding of women's entrepreneurial intention on another dimension such as emotion, education, and structural inequalities would be useful to enhance the understanding of women's entrepreneurial intention in business. Hence, by completing all the research objectives, the researcher can conclude that all the objectives and the finding of this research are answerable.

6. REFERENCES

- Al Jazeera. (2020). *Coronavirus: Travel restrictions, border shutdowns by country*. Retrieved from <https://www.aljazeera.com/news/2020/03/coronavirus-travel-restrictions-border-shutdowns-country-200318091505922.html> [Internet]. [cited 23 September 2020].
- Alam, M. M., Hassan, S., & Said, J. (2015). Performance of Islamic microcredit in perspective of Maqasid Al-Shariah. *Humanomics*, 31, 374-384.
- APEC Small and Medium Enterprises Working Group. (March 2021). *Strengthening women empowerment in industry 4.0 through digital entrepreneurship training*. APEC Secretariat: Singapore.
- Avi, Loeb AB. Flattening the COVID-19 curves. (2020). Retrieved from <https://blogs.scientificamerican.com/observations/flattening-the-covid-19-curves/>
- Bernama. (2020). *Over 60,000 women entrepreneurs benefit from MEDAC programs*. Retrieved from <https://www.bernama.com/en/business/news.php?id=1915376>. [cited 23 September 2020].
- Bernama. (22 November 2014). *Wanita UMNO proposes setting up of women entrepreneur mindset centre*. Retrieved from blis.bernama.com/index.php?mod=articles&opt=la&cid=1&scid=5&aid=5570990
- Bernama. (22 December 2019). *Empowering women via a high-impact entrepreneur program from BLIS*. Retrieved from bernama.com/index.php?mod=articles&opt=la&cid=1&scid=5&aid=7896340
- Churchill, Edward. (2021). *The survey finds more than half of S'wak women entrepreneur respondents lost income during MCO*. Retrieved from <https://www.theborneopost.com/2021/02/11/survey-finds-more-than-half-of-swak-women-entrepreneur-respondents-lost-income-during-mco/> [cited 23 September 2020].
- Buck T., Arnold M., Chazan G., & Cookson C. (2020). *Coronavirus declared a pandemic as fears of economic crisis mount*. Retrieved from <https://www.ft.com/content/d72f1e54-6396-11ea-b3f3-fe4680ea68b5>
- Chen, M. A. (2001). Women and informality: A global picture, the global movement. *SAIS Review*, 21(1), 71-82
- Department of Statistics Malaysia. (2020). *Report of Special Survey on Effects of Covid-19 on Economy and Individual (Round 1)*. Retrieved from <https://www.dosm.gov.my/>.
- GOV.UK. (2020). *Guidance on social distancing for everyone in the UK*. Retrieved from <https://www.gov.uk/government/publications/covid-19-guidance-on-social-distancing-and-for-vulnerable-people/guidance-on-social-distancing-for-everyone-in-the-uk-and-protecting-older-people-and-vulnerable-adults>
- Kamunyu, C. W., & Theuri, F. S. (2017). Factors affecting the growth of women-owned small and medium enterprises in Kenya: A survey of women-led SMEs in South Coast Ukunda. *International Journal of Social and Development Concerns*, 19, 60-66.
- Maizaitulaidawati M. H., & Razali H. (2020). Micro, small, and medium enterprises' competitiveness and micro-takāful adoption. *ISRA International Journal of Islamic Finance*.
- Ten, Marilyn. (2016). *24,871 Sarawak women entrepreneurs registered with SSM*. Retrieved from <https://www.theborneopost.com/2016/03/28/24871-sarawak-women-entrepreneurs-registered-with-ssm/>.
- Mohammed, J. A., Almsafir, M. K., & Alnaser, A. S. (2013). The factors that affect e-commerce adoption in small and medium enterprise: A review. *Australian Journal of Basic and Applied Sciences*, 7(10), 406-412.

- Nicola, M., Zaid Alsafi, Catrin Sohrabi, Ahmed Kerwan, Ahmed Al-Jabir, Christos Iosifidis, Maliha Agha, & Riaz Agha. (17 April 2020). *The socio-economic implications of the coronavirus pandemic (COVID-19): A review*.
- OECD. (2004). *Women's entrepreneurship: Issues and policies*. 2nd OECD Conference of Ministers Responsible for Small and Medium-sized Enterprises (SMEs) Promoting Entrepreneurship and Innovative SMEs in a Global Economy: Towards A More Responsible and Inclusive Globalisation Istanbul, Turkey. 3-5 June 2004.
- Ongori, H., & Migiro, O.S. (2010). Information and communication technology adoption in SMEs: Literature review. *Journal of Chinese Entrepreneurship*, 2(1), 93-104.
- Ratnasigam J., Khoo A., Jegathesan N., Wei C. L., Latib H., Thanasegaran G., Liat C. L., Yi Y. L., Othman K., & Amir M. (2020). *How is a small and medium enterprise in Malaysia's furniture industry coping with the COVID-19 pandemic? Early evidence from a survey and recommendations for policymakers*. Retrieved from https://ojs.cnr.ncsu.edu/index.php/BioRes/article/view/BioRes_15_1_5951_Ratnasigam_Small_Medium_Enterprises_Malaysia/7813
- Schwab, K. (2016). *The fourth industrial revolution*. Retrieved from https://books.google.com.my/books?id=ST_FDAAAQBAJ&lpg=PR7&dq=fourth%20industrial%20revolution&lr&pg=PR7#v=onepage&q=fourth%20industrial%20revolution&f=false
- SME website. (30 January 2019). *Govt spent RM2.3 bil. on women entrepreneurs in 2018*. Retrieved from <https://www.smecorp.gov.my/index.php/en/resources/2015-12-21-10-55-22/news/3554-govt-spent-rm2-3-bil-on-women-entrepreneurs-in-2018>.
- Syed Shah Alam, Mohd. Fauzi Mohd Jani, & Nor Asiah Omar. (2011). An empirical study of success factors of women entrepreneurs in Southern Region in Malaysia. *International Journal of Economics and Finance*, 3(2), 166-175.
- Teo, Ronnie (2019). *Supporting women entrepreneurs in Sarawak*. Retrieved from <https://www.theborneopost.com/2019/03/24/supporting-women-entrepreneurs-in-sarawak/>
- Wendy, Ming-yen Teoh. (2014). Towards strengthening the development of women entrepreneurship in Malaysia. *Gender in Management: An International Journal*, 29(7), 432 – 453.
- WHO Director-General's opening remarks at the media briefing on COVID-19. (11 March 2020). Retrieved from <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>