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## **TRIPLE HELIX MODEL IN HANDLING CHALLENGES TO THE INFORMAL ECONOMIC ACTIVITIES**

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### **Abstract**

The COVID19 pandemic and the multiple phases of MCOs have caused a massive impact on informal economic activities. The operators have to transform their economic activities from physical to online platforms. However, changing the economic activity platform is not as easy as it may seem. It requires the operators to acquire new skills. Therefore, this paper intends to unleash the challenges faced by the operators in transforming their businesses from physical to online platforms. This study employs a qualitative approach to achieve the objective of this study. The main respondent in this study is the fishermen's community. Three parties are involved in this study: the operators (fishermen and the entrepreneurs), the government, and the academia. Findings show that the triple helix model provides a positive platform for operators to continue their businesses online. The bonding between these three parties provides a new path for the informal operators to sustain their well-being and better quality of life.

**Keyword:** fisherman, community, government, academia, operators, fishermen, entrepreneurs

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## **INTRODUCTION**

The world did not anticipate that the COVID19 pandemic would have a huge impact globally. The pandemic caught the world by surprise (Goldstein, Koijien & Mueller, 2021). Almost all countries experience lockdowns. This situation has caused a huge impact socially, physically, economically, and environmentally (Mofijur, et al., 2021). It has both positive and negative impacts. Positive to the environment since the mobility of the motorised vehicles was restrained (Debata, Patnaik & Mishra, 2020). It has resulted in a cleaner environment in cities such as Delhi, Bengaluru, and Kolkata.

However, the economy of those countries that strictly imposed the movement control order (MCO) has experienced a very bad impact. Many researchers have highlighted the abrupt effect of COVID 19 control systems such as lockdown and physical distancing on the economy of each nation and how the economic downturn due to pandemic created a domino effect on other factors (Ghosh et al., 2020; Nundy et al., 2021). Among the significant domino effects is the rose unemployment rate. Many people are out of jobs. Companies started to reduce their sizes to curb revenue losses (Debata et al., 2020). Many economic sectors especially tourism, aviation, and hospitality were badly hit by the MCO globally and have malfunctioned (Lagos, Poulaki & Lambrou, 2021; Abbas, Mubeen, Jorember, Raza & Mamirkulova, 2021). There were almost no physical activities in these sectors.

Food, nevertheless, is essential during the pandemic. Demand for food intensified during the lockdown. However, agricultural outputs experience supply chain issues (Debata, Patnaik & Mishra, 2020). Farmers were forced to reduce the food prices and increase supply to meet consumer demand while coping with production issues. Farmers' social well-being and economic sustainability have to be maintained. The government has to produce a policy that is able to provide a fair distribution of wealth in any situation, e.g. a pandemic, a lockdown, a war, or any major issue that will harm the liveability of human beings and nature. Food security should be treated as one of the most important issues globally.

## **RESEARCH BACKGROUND**

The Malaysian government has implemented the Movement Control Order (MCO) in various stages because of the COVID19 outbreak. The first MO was completely under lockdown from 18 March to 3 May 2020. Except for supermarkets, public markets, grocery stores, and convenience stores selling necessities, all movement and outside activities were restricted. The second MCO, which was conditional, occurred between May 4 and June 9, 2020. A recovery MCO was then used from 10 June 2020 to 31 March 2021. However, a new MCO was implemented between January 13, 2021, and May 31, 2021, due to the large number of instances that were occurring in several states. States

oversee it this time. A comprehensive lockdown was afterward implemented from June 1 until June 28, 2021. Finally, a National Recovery Plan was put into effect between June 15, 2021, and December 31, 2021.

The numerous instances of lockdown have had a significant negative impact on the environment, society, and the economy. Numerous enterprises were shut down. The tourism-related industries suffered a complete blow. The impact was most noticeable in the hotel and aviation industries. Many people experienced job losses. Entrepreneurs were unable to physically operate their enterprises. While businesses from other industries try to reorient towards measures intended to increase resilience, from rationalising manufacturing to redeploying talents, resetting management roles in the context of remote working, shifting operations, and launching new business models, some sectors, like travel, tourism, hospitality, or the arts, were severely affected by the pandemic (Pinzaru, Zbucea & Anghel, 2020).

However, the fishing sector is still going strong because it provides a necessary source of food for people. Although there is a significant demand for fish-related products during the MCO, their mobility is restricted to a confined geographic area. The fishermen were unable to make a sufficient living as a result. Due to their ignorance of online enterprises, they were unable to sell online. Additionally, Abdul Ghani et al. (2017) find that the fishermen rely heavily on the financial assistance given to them by the government to survive. Government grants and subsidies have both positive and bad consequences on the ability of fishermen to live comfortably now and in the future. Prior to the introduction of the COVID19 epidemic, a number of projects tried to improve the living conditions of fishermen. Fishermen and their communities need to upgrade fishing technology and their technical abilities (Abdul Ghani et al., 2017).

The development of technology in the fishing sector has several potential advantages, say Mazuki, Abu Samah, Bolong, and Idris (2020). Therefore, it is essential to inform the fishing industry and the local population of these achievements. In order to improve the fishermen's quality of life, LKIM and other relevant organisations must be aggressive and creative in helping them develop skills and cutting-edge fishing technology (QOL).

There is still more work to be done in Malaysia in terms of food security. The national agro-food policy was recently updated to address the problem of food security. Consumers must continue to receive important food supplies from fishing. The probable effects of COVID-19 on Malaysia's aquaculture industry concentrate around two key factors: the decline in domestic and international demand, as well as the disruption of the supply networks for seafood. It is anticipated that the COVID-19-related interruptions and losses will be lessened by the Malaysian government's and other organisations' efforts to offer economic stimulus packages and various incentives (Khor Waiho et. al. 2020).

As the driving force behind socioeconomic development, entrepreneurship was also not immune from the MCO's effects (Hassan, Sade, Rahman, 2020). Many of them operated offline and were unprepared to switch to an internet platform. It was difficult for them to rapidly alter their enterprises because they had insufficient experience in online operations. The expense of moving the companies' operations online remained uncertain. Many of them require knowledge expansion. It was quite difficult.

The Malaysian government has generally developed several initiatives to encourage entrepreneurship among Malaysians. These plans include the Rural Development Policy, Dasar Agromakanan Negara 2021–2030, Dasar Agromakanan Negara 2011–2020, and Shared Property Vision 2030. These regulations were created specifically to satisfy the social, economic, and environmental needs of rural residents and business owners. The infrastructure for communication and transportation is one of the fundamental issues that the government must address right away. In terms of financial support, currently the Malaysian government provides *Tekun* and *Geran Padanan* (Matching Grant) to the entrepreneurs.

Social innovation is a novel approach to fostering inventive teamwork between various stakeholders. It departs from the conventional method of problem-solving. It offers a unique way to solve social and economic issues. According to Mazigo (2017), social innovation has given rise to the so-called "constraint wealth generators." It has been successful in releasing creative ideas and solutions to problems encountered by individuals, sectors, and society thanks to the provision of suitable spaces for debate.

Helix theory explores the cooperation between various parties aimed at creating a thriving innovation environment in a knowledge-based economic development (Vlados & Chatzinikolaou, 2019). These parties may include the community, academia, the government, and the industry. It has gone through three main phases, namely the theoretical foundation (1995-2000), the conceptual expansion (2001-2010), and finally the recent developments, a systematic attempt of implementation (2011 – 2018). Vlados and Chatzinikolaou (2019) discover that the triple helix model that emerged from the third phase can act as an innovative mechanism for all the parts and interdependence socioeconomic systems. Martini, et al. (2012) claim that developing human capital with humanities education, competence, and integrity is a must for the concept. The most effective use of these human resources will be made possible by utilising the currently highly educated workforce.

Therefore, this study examines the needs of the fishermen's community in the post-MCO's phase and develops a model that can be used to assist them to overcome the challenges that they are currently facing. This study was conducted in a fishermen's village, Kampung Pulau Gajah in Kota Bharu, Kelantan. This

village is unique as it has decorative fishing boats which were designed and painted by the fishermen themselves. Figure 1 shows an example of a unique fishing boat.



**Figure 1:** The unique fishing boat in Kampung Pulau Gajah  
*Source: Field survey, 2022*

## **METHODOLOGY**

The research applied a qualitative method as part of the methodology. The interview approach is the primary method utilised in the data collection process. The interviewees were entrepreneurs and fishermen from a fishermen's community in Kampung Pulau Gajah, Kota Bharu, Kelantan. Their participation is on a voluntary basis and all the participants were informed on the details of the research project including the aim and objectives. The inquiries are detailed in Table 1.

**Table 1:** List of questions to the participants

Questions
What do you do? <i>Apakah pekerjaan anda?</i>
What is the condition of your work/business during the previous Movement Control Order (MCO)? <i>Bagaimanakah keadaan pekerjaan/perniagaan anda sewaktu Perintah Kawalan Pergerakan (PKP) yang lalu?</i>
What are the challenges faced? <i>Apakah cabaran yang dihadapi?</i>
Is online employment/business suitable for you? <i>Adakah pekerjaan/perniagaan melalui dalam talian sesuai untuk anda?</i>
Do you need assistance? <i>Adakah anda memerlukan bantuan?</i>
What help do you need? <i>Apakah bantuan yang anda perlukan?</i>
What kind of assistance is needed from the academics? <i>Apakah jenis bantuan yang diperlukan daripada ahli akademik?</i>
What kind of assistance is needed from the industry? <i>Apakah jenis bantuan yang diperlukan daripada industri?</i>
What kind of assistance is needed from the government? <i>Apakah jenis bantuan yang diperlukan daripada kerajaan?</i>

*Source: Researchers' Interview Questions, 2022*

## FINDINGS

Five business owners and six fishermen took part in the interview sessions. The entrepreneurs are made up of business owners and housewives. All the fishermen continued to operate as usual throughout the MCO. Many of the business owners, however, were impacted by the MCO. Businesses with a physical presence were shut down entirely. For individuals who conduct business online, moving products remains a challenge. On the supplier's end, products were available. Transporting items was however impossible due to the shutdown.

The fishermen and business owners alike acknowledged the fact that they all needed help. When asked what kind of assistance they need, people provide varying responses. Among the answers given were suggestions for tools, food, skills, infrastructure, financial assistance, and communication tools. When asked what help they want from academicians, they give knowledgeable and competent answers. The fishermen were taught how to integrate tourism with their main source of income, fishing. They desire the academician's assistance in spreading information and advancing the integration process. Like businesspeople, fishers are curious to learn about marketing strategies that might be used to advertise their goods online.

However, they need knowledge of using social media platforms to advertise their products if they want to conduct business online. The necessary skills are shown in Table 2.

**Table 2:** Skills required by the fishermen’s community

Skills		
Social Media Platform	Facebook, Tiktok, Instagram, Youtube,	Marketing skills such as copywriting, promotions, package
Website	Domain, Hosting	Visibility, Marketplace, Search Engine Optimization (SEO)
Point of Sale System (POS)	Payment system, Database system	Online payment systems such as Blizz, Toyyiba Database systems such as ME12Pay,

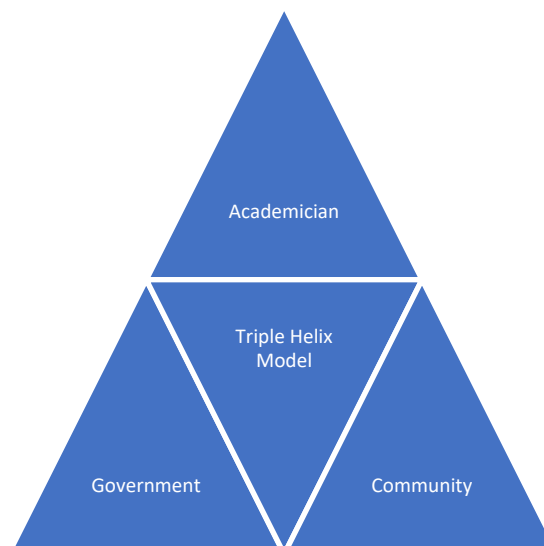
*Source: Analysis by the Researchers, 2022*

When asked what help they needed from the government, they mentioned a reliable internet connection and financial aid. Right now, their area's internet connection is terrible. They must leave their village if they need to access the internet. Given that Malaysia today uses 4G for internet connectivity, this condition is intolerable. To start doing business online, they also need financial support. Their money will come from this financial help, which will also aid in the transition of their company's move online. All of their attempts to move their company online would be useless without a strong internet infrastructure.

## DISCUSSION AND CONCLUSION

This pandemic's effects have demonstrated the magnitude of the economic impact that MCO might have on any nation. Numerous business activities were halted or significantly slowed down. The outcomes of the investigations demonstrated that the MCO had an impact on the fishermen and their neighbourhood. The fishermen were able to continue their normal operations, but due to a shortage of consumers, they were unable to market their typical output. The shutdown had prevented their clients from visiting there to purchase fish-related goods. To advertise their products, they must acquire new information. The local businesses were dealing with similar circumstances. They were forced to cease operations because of a lack of understanding of the web business. They must also acquire fresh information.

The Triple Helix model gives this group a fresh perspective. The skills and capabilities of the fisherman and their communities can be improved by collaboration between the community, the government, and academia. They require the academicians' expertise and knowledge. This cooperation is highlighted by Martini et al. (2012) and also by Vlado and Chatzinikolaou (2019). To increase their mobility, they need the government to upgrade the communication and transportation systems. Furthermore, they also need the government's financial and technological support. Their society can establish capable cooperative management to oversee both their resource use and commercial activity. The community's role is important in uplifting their well-being (Malik, et al.,2018). These three parties can work together to improve the quality of life for the fishermen and their community. The Triple Helix Model, seen in Figure 2, calls for collaboration between the three stakeholders for the benefit of the fishermen and their community.



**Figure 2: Triple Helix Model**  
*Source: Analysis by the Researchers, 2022*

This study shows the policy implications of cooperation between three parties: the community, the government, and the academician in proving a better quality of life for the fishermen and their community.

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## REFERENCES

- Abbas, J., Mubeen, R., Iorember, P. T., Raza, S., & Mamirkulova, G. (2021). Exploring the impact of COVID-19 on tourism: transformational potential and implications for a sustainable recovery of the travel and leisure industry. *Current Research in Behavioral Sciences*, 2, 100033. doi:<https://doi.org/10.1016/j.crbeha.2021.100033>
- Abdul Ghani, N., Raub, M. A., Adam, F., Abdullah, B., & Afgani, Y. (2017). Fishermen's dependence on government funds and its impact on their quality of life (QOL) in the West Coast of Peninsular Malaysia. *Mani In India*, 22, 341 - 351.
- Açikgöz, Ö., & Günay, A. (2020). The early impact of the Covid-19 pandemic on the global and Turkish economy. *Turk J Med Sci*, 50(Si-1), 520-526. doi:10.3906/sag-2004-6
- Burns, J., Movsisyan, A., Stratil, J. M., Coenen, M., Emmert-Fees, K. M. F., Geffert, K., et al. (2020). Travel-related control measures to contain the COVID-19 pandemic: a rapid review. *Cochrane Database of Systematic Reviews*(9). doi:10.1002/14651858.CD013717
- Cai, Y., & Amaral, M. (2021). The Triple Helix Model and the Future of Innovation: A Reflection on the Triple Helix Research Agenda %J Triple Helix. 8(2), 217-229. doi:<https://doi.org/10.1163/21971927-12340004>
- Debata, B., Patnaik, P., & Mishra, b. (2020). COVID-19 pandemic! It's impact on people, economy, and environment. *Journal of Public Affairs*, 20(4), 1 - 5.
- Foo, L.-P., Chin, M.-Y., Tan, K.-L., & Phuah, K.-T. (2021). The impact of COVID-19 on tourism industry in Malaysia. *Current Issues in Tourism*, 24(19), 2735-2739. doi:10.1080/13683500.2020.1777951
- Galvão, A., Mascarenhas, C., Gouveia Rodrigues, R., Marques, C. S., & Leal, C. T. (2017). A quadruple helix model of entrepreneurship, innovation and stages of economic development. *Review of International Business and Strategy*, 27(2), 261-282. doi:10.1108/RIBS-01-2017-0003
- Ghosh, A., Nundy, S., Ghosh, S., & Mallick, T. K. (2020). Study of COVID-19 pandemic in London (UK) from urban context. *Cities*, 106(August), 102928. <https://doi.org/10.1016/j.cities.2020.102928>
- Goldstein, I., Koijen, R. S. J., & Mueller, H. M. (2021). COVID-19 and Its Impact on Financial Markets and the Real Economy. *The Review of Financial Studies*, 34(11), 5135-5148. doi:10.1093/rfs/hhab085 %J The Review of Financial Studies
- Hassan, H., Sade, A. B., & Rahman, M. S. (2020). Shaping entrepreneurial intention among youngsters in Malaysia. *Journal of Humanities and Applied Social Sciences*, 2(3), 235-251. doi:10.1108/JHASS-02-2020-0029
- Khor Waiho, Hanafiah Fazhan, Sairatul Dahlianis Ishak, Nor Azman Kasan, Hon Jung Liew, Mohd Husin Norainy, Mhd Ikhwanuddin, Potential impacts of COVID-19 on the aquaculture sector of Malaysia and its coping strategies, *Aquaculture Reports*, Volume 18, 2020, 100450, ISSN 2352-5134, <https://doi.org/10.1016/j.aqrep.2020.100450>.
- Lagos, D. G., Poulaki, P., & Lambrou, P. (2021). COVID-19 and Its Impact on Tourism Industry. *Adv Exp Med Biol*, 1318, 815-824. doi:10.1007/978-3-030-63761-3\_45
- Malik, S., Khilat, F., Tariq, F., & Arifin, K. (2018). NCIA-AMB Masuk Kampung Project: A paradigm of opportunities and challenges for sustainable rural development. *Planning Malaysia*, 16(3), 285-296.

- Mazigo, A. F. (2017). Promoting Social Innovation Through Action Research: Evidence from an Empirical Study in the Fisheries Sector of Ukerewe District in Tanzania. *Journal of Human Development and Capabilities*, 18(2), 239-257. doi:10.1080/19452829.2016.1256276
- Mazuki, R., Samah, A. A., Bolong, J., & Idris, K. (2020). The Challenges of Technology Usage Among Coastal Fishermen in Malaysia: Review. *International Journal of Academic Research in Business and Social Sciences*, 10(16), 392 - 400.
- Melles, G. B. (2022). Designing Social Innovation for Sustainable Livelihoods. In G. B. Melles (Ed.), *Designing Social Innovation for Sustainable Livelihoods* (pp. 1-11). Singapore: Springer Nature Singapore.
- Mofijur, M., Fattah, I. M. R., Alam, M. A., Islam, A. B. M. S., Ong, H. C., Rahman, S. M. A., et al. (2021). Impact of COVID-19 on the social, economic, environmental and energy domains: Lessons learnt from a global pandemic. *Sustainable Production and Consumption* 2021 Vol. 26 Pages 343-359
- Nicola, M., Alsafi, Z., Sohrabi, C., Kerwan, A., Al-Jabir, A., Iosifidis, C., . . . Agha, R. (2020). The socio-economic implications of the coronavirus pandemic (COVID-19): A review. *Int J Surg*, 78, 185-193. doi:10.1016/j.ijisu.2020.04.018
- Nundy, S., Ghosh, A., Mesloub, A., Albaqawy, G. A., & Alnaim, M. M. (2021). Impact of COVID-19 pandemic on socio-economic, energy-environment and transport sector globally and sustainable development goal (SDG). *Journal of Cleaner Production*, 312(September 2020), 127705. <https://doi.org/10.1016/j.jclepro.2021.127705>
- Pinilla, J., Barber, P., Vallejo-Torres, L., Rodríguez-Mireles, S., López-Valcárcel, B. G., & Serra-Majem, L. (2021). The Economic Impact of the SARS-COV-2 (COVID-19) Pandemic in Spain. *Int J Environ Res Public Health*, 18(9). doi:10.3390/ijerph18094708
- Pinzaru, F., Zbucea, A. & Anghel, L. (2020). The impact of the COVID-19 pandemic on business. A preliminary overview. Conference Paper: Strategica 2020. Crisis and Risk Management. [https://www.researchgate.net/publication/345733364\\_The\\_Impact\\_of\\_The\\_COVID-19\\_Pandemic\\_on\\_Business\\_A\\_Preliminary\\_Overview](https://www.researchgate.net/publication/345733364_The_Impact_of_The_COVID-19_Pandemic_on_Business_A_Preliminary_Overview)
- Priya, S. S., Cuce, E., & Sudhakar, K. (2021). A perspective of COVID 19 impact on global economy, energy and environment. *International Journal of Sustainable Engineering*, 14(6), 1290-1305. doi:10.1080/19397038.2021.1964634
- Rahman, S. (2018). Emerging built heritage commodification of boutique hotels in world heritage site: evidence from George Town, Penang, Malaysia. *Planning Malaysia*, 16(4), 104-116.
- Škare, M., Soriano, D. R., & Porada-Rochoń, M. (2021). Impact of COVID-19 on the travel and tourism industry. *Technological Forecasting and Social Change*, 163, 120469. doi:<https://doi.org/10.1016/j.techfore.2020.120469>
- Vlados, C. M., & Chatzinikolaou, D. (2019). Developments on Helix Theory: Exploring a micro-evolutionary repositioning in Stra.Tech.Man terms. *International Journal of World Policy and Development Studies*, 5(10), 87 - 99.

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