

Entrepreneurial Education During Pandemics: Challenges and Recommendations

Noorziah Mohd Salleh*

Faculty of Business and Management, Universiti Teknologi MARA Sabah

*Corresponding Author's Email: noorziah@uitm.edu.my

Cristina Andin

Faculty of Psychology & Education, Universiti Malaysia Sabah (UMS), Kota Kinabalu, Sabah

Received Date: 13 June 2023

Accepted Date: 04 September 2023

Available Online: 15 September 2023

ABSTRACT

In this article, an investigation of the challenges encountered by Higher Learning Institution students undertaking entrepreneurship course within the context of the COVID-19 pandemic is presented. In this study, seventy-nine students participated in this study for one semester for the Fundamentals of Entrepreneurship course, which employed a qualitative approach. A total of fifteen groups of students participated in the study. The data are derived from an analysis of the final project reports of the students, which contain a section dedicated to reflection on the challenges encountered during the project. Based on the results, there were two main challenges associated with the COVID-19 pandemic, namely, the Movement Control Order (MCO), which created problems with material supply, increased material costs, and loss of customers. Additionally, pandemics create logistical challenges. Meanwhile, the other four challenges are less tied to the pandemic, such as student factors such as commitment, time management, and skills. Students are also confronted with resource constraints such as a lack of business capital and a limited access to the Internet, as well as challenges related to product management and customer competition. It is anticipated that the results of this study will provide recommendations for improving entrepreneurship education programs among IHL students in the future.

INTRODUCTION

Entrepreneurship is an important field that generates jobs and contributes to economic development. There are a variety of approaches to understanding the concept of entrepreneurship, which is derived from the French word « entrepreneur, which translates into taking on tasks, responsibilities, or risking (Histrich & Peter, 2008). It consists of the creation of new businesses and the ability to cope with unfavourable circumstances likely to hinder the achievement of profitability and growth through the identification of and provision of resources to achieve them (Zimmerer Scarborough, 1998). Also, entrepreneurship does not merely involve the generation of

new ideas but also the time, effort, financial, psychological, and social risks that ultimately result in success in terms of financial gain, personal satisfaction, and freedom.

An entrepreneur is therefore different from a creator or designer in that an entrepreneur combines all the resources, such as money, manpower, strategy, and risk-taking ability, needed to transform an idea or design into a business that can survive and flourish (Hisrich & Peter 1998). According to Kuratko and Hodgetts (2007), entrepreneurship is a process of innovation and creation that involves four dimensions, including the individual, the organization, the environment, and the process, as well as network collaboration in government, education, and the constitution. Similarly, it can be concluded that entrepreneurship is an endeavour that requires a high level of commitment, beginning with identifying opportunities that lead to idea generation, idea marketing, and idea sales. Creating jobs through entrepreneurial activities can bring about greater economic prosperity (Chang & Rosli, 2019). Thus, entrepreneurial activities are very important to alleviate the problem of unemployment among students, which is increasing year by year. The Office of Chief Statistician, Department of Statistics, Malaysia (2022) reported that the number of unemployed graduates in 2022 was 197.4 thousand. Next, Environment, a less favourable economy in 2020 and its impact on market position, and labour have caused the number of unemployed graduates to increase significantly by 22.5 percent (+37.2 thousand people) to 202.4 thousand people (2019: 165.2 thousand). This increase is seen for both Degree holders (+22.4 thousand people) and diploma holders (+14.8 thousand people), mostly among graduates aged 35 and over" (Media Statement, Department of Statistics Malaysia, July 2021). An effort has been made to address the issue of unemployed graduates through various initiatives to emphasize entrepreneurship among students of the Institution of Public Higher Education (IPHE) and Private Institutes of Higher Learning (PIHL). In 2018, the Student Entrepreneur Development Program (PPUS) was established in order to cultivate entrepreneurial activities, change students' perspectives of careers as entrepreneurs, and reduce problems associated with unemployment among graduates (Tekun Nasional, 2018). PPUS activities include entrepreneurship training for students, which was replaced by an entrepreneurship module for first-year students; short-term entrepreneurial courses for final-year students; a promotion of student businesses on campus; the setting up of companies; and student-run businesses for community benefit. It is important that university students are introduced to entrepreneurship so that they will not be ineligible for employment opportunities in the future since they already possess the knowledge and skills necessary for such work (Muhammad Izzat et al., 2020).

The field of entrepreneurship can be trained and is not dependent upon innate personality traits or being born an entrepreneur. This is due to the fact that an interest in entrepreneurship is directly influenced by various environmental factors, including exposure through education (Azman, Wahid, & Yaacob, 2023). Gibb (1993) stated that education in entrepreneurship permits students to gain broad exposure to the knowledge of entrepreneurship, learn how an entrepreneur thinks, and learn the ins and outs of entrepreneurship. Prior to entering the world of business and

entrepreneurship, entrepreneurs need to familiarize themselves with the characteristics of an effective and efficient entrepreneur. Studies concluded that exposure to entrepreneurial educational activities during studies significantly enhances entrepreneurial interests and abilities (Laspita, Sitaridis, Kitsios, & Sarri, 2023; Saoula, Shamim, Ahmad, & Abid, 2023). As a result, different entrepreneurship education initiatives are expected to increase the number of entrepreneurs within the circle of HLI graduates. However, the COVID-19 pandemic will have a dramatic impact on learning when the Movement Control Order is implemented on March 18, 2020.

The COVID-19 pandemic has affected 1.5 billion students in more than 165 countries around the world, according to United Nations Educational, Scientific, and Cultural Organization (UNESCO) sources (Wan Ya Shin, 2020). The effects of this phenomenon are also felt by the learning system in the country, as the government took steps to close schools throughout the country to prevent the spread of COVID-19. The traditional face-to-face method of teaching and learning cannot be maintained and has been replaced with a completely online method. Therefore, the basic entrepreneurship course, which is the subject of this study, exhibits drastic changes in the implementation of teaching and learning processes. Thus, this can have implications for the desire for entrepreneurial education to foster a culture of entrepreneurship. In particular, even though many students aspire to become entrepreneurs, only a handful became entrepreneurs after graduation, based on the statistics of the Department of Higher Education in 2007. Many studies found HLI students are not interested in becoming entrepreneurs, although over 80% of respondents showed a positive attitude towards the concept of entrepreneurship (Kamarudin, Fuza, Ghani, Nawawi, Hamid, & Daud, 2023; Norfadhilah and Halimah (2010).

This raises questions about the challenges that can impact cultural adoption and entrepreneurship among HLI students, especially in the COVID pandemic situation 19, which forces the learning to be conducted solely by means of online meetings. There has yet to be any research conducted on the impact of entrepreneurship culture programs among HLI students, such as entrepreneurship courses, in light of the fact that COVID-19 is a new program. Studies on entrepreneurship in higher education institutions have mainly focused on trends. (Qiu, Garca-Aracil, & Isusi-Fagoaga, 2023; Zhai, Yang, Chen, Lin, Lu, & Jin, 2023); entrepreneurial awareness (Farhana, 2013; Wan Naqiyah & Rohana, 2021). There is a study on the issue of challenges to implementing entrepreneurship programs in HEIs. However, the focus of the study is on the Knowledge management initiatives, values, attitudes, and practices of senior officers of the institute of study that are more engaged in developing student entrepreneurship. (Adhikari & Shrestha, 2023).

During the COVID-19 pandemic period, this study aims to identify the challenges facing students in implementing entrepreneurial activities in the university's compulsory course, Fundamentals of Entrepreneurship. The specific objectives of the study are as follows:

1. Which type of business did students choose during the COVID-19 pandemic?
2. What challenges do students face in operating a business in the midst of a COVID-19 pandemic?

The study is expected to yield recommendations for enhancing entrepreneurial education programs among students in institutions of higher learning in the future.

LITERATURE REVIEW

Entrepreneurship is typically associated with groups, either individually or collectively. Rather than eating pay checks, self-employed groups engage in self-employment activities (Audia & Rider, 2005). Therefore, they are a group that is independent, able to work independently, and willing to sacrifice in terms of time allocation, focus, and ability. This commitment is critical to carrying out entrepreneurial activities, bearing financial, psychic, and social risks in the effort and process of producing products that are new and valuable, in turn gaining rewards or leading to the creation of a new organization (Gartner & Bellamy, 2009; Barot, 2015). As defined by Barot (2015), entrepreneurship is an endeavour that begins with action and leads to the creation of a new business that benefits from such efforts (Hisrich et al., 2008). It is not only possible for entrepreneurship to benefit an individual but at the same time contribute to the development of the national economy through the income earned in the field of entrepreneurship as well as to the development of business and community structures (Zhakupov, Berzhanova, Mukhanova, Baimbetova, & Mamutova, 2023).

Entrepreneurship venture. Due to these actions, there is a strong focus on identifying opportunities and emphasizing the importance of knowledge and skills as the foundation for entrepreneurship (Hessels and Naude, 2019). In addition, Moris et al. (2001) note that entrepreneurship is an opportunity-based business activity. In addition to the existence of opportunities, entrepreneurship can also be influenced by the existence of market demands (Ali et al., 2014). Furthermore, technological developments are also a motivation for the existence of various entrepreneurial activities to continue to grow (Nambisan, 2016). Studies related to entrepreneurship generally focus a great deal on exploring entrepreneurial management processes, such as creativity and autonomy, adaptability, and creating inspiration, as well as economic and social value (Negeri, Wakjira, & Kant, 2023).

Entrepreneurship requires at least three key skills: personal skills, management skills, and technical skills. An individual's skills include the ability to control emotions, accept risk, be creative, be able to adapt to sudden changes, persevere, always strive, and be foresighted

(Pyysiäinen et al., 2006). Similarly, skills management encompasses planning, organizing, and supervising; marketing skills (recognizing and marketing to customers); legal skills; financial management skills; skills administration (coordinating organization structures and strategies); and skills decision-making and problem-solving (Chang, 2013). Technical skills are essential for the development of writing skills, verbal or non-verbal communication, management skills, audio skills, capabilities for organizations, creating management networks, and teamwork (Aliman et al., 2013).

Based on the discussion above, this study adopted the theory of learning by doing (Anzai & Simon, 1979). The theory elucidates the cognitive processes involved in student learning during problem-solving activities. This theory provides a deep examination of the learning process within a specific context, focusing on a comprehensive analysis of a single individual's problem-solving technique at a microscopic level. It presents general mechanisms that do not specifically refer to any particular subject or task. It also demonstrates how these mechanisms interact with specific task knowledge acquired during the process of problem-solving. The effectiveness of the techniques employed to facilitate learning is ensured by the utilization of a computer simulation in the form of an adaptive manufacturing system (Anzai & Simon, 1979).

Numerous studies have been conducted on entrepreneurship education in recent years. However, there is a limited body of literature specifically addressing the need for an educational entrepreneurship course. Therefore, this study aims to fill this gap by conducting empirical research in a university setting. The objective is to provide recommendations for the future implementation of entrepreneurship education methods, should similar circumstances arise.

Teaching and learning the entrepreneurship course is in line with the recommendations of the educational model of entrepreneurship. Yet the COVID-19 pandemic has brought a lot of change since the limitations of the learning process only online. It is therefore important to study the challenges faced by students so that improvements can be implemented in accordance with current needs and conditions.

RESEARCH METHODOLOGY

The aim of this study is to focus on the quality or meaning of the students' experience on campus. In terms of design characteristics, they are flexible, evolving, and emergent. From a philosophical perspective, it is characterized by constructivism and interpretivism. The researcher acts as an instrument to collect and analyze data (Creswell, 2011). A thematic analysis was done of the data derived from the document. As such, qualitative research was chosen to carry out this study.

This course provides students with practical experience running a business, allowing them to learn by doing. On the basis of an analysis of the documentation in the project report, they were divided into fifteen groups. Seventy-nine students enrolled at the University of Malaysia, Sabah, in the basic Entrepreneurship course. Students run online businesses covering four major business categories, which include take orders and deliver, SULAM, gig economy, and virtual event management. This course provides students with practical experience running a business, allowing them to learn by doing. Students are required to present a report detailing the results of their entrepreneurial ventures as well as reflections on the challenges they face in managing a business (member checking validity, Creswell, 2011). The data derived from the document were analyzed thematically.

Teaching and learning methods: selection of pedagogical methods for each course Entrepreneurship education needs to look back at the objectives, the profile of the target group, the content, and institutional constraints. Basically, entrepreneurship education uses a learning by doing approach. This is in line with teaching methods and learning in the entrepreneurship course, where students undertake entrepreneurial projects and gain experience while running a project. As mentioned, in this study, groups of 5 to 6 people are given four project options, namely: take order and delivery-focuses on one business sector. For example, food and beverage businesses, beauty, household, clothing, etc. The gig economy focuses on offering short-term services and paying them (freelance) online or at their own location (offline). For example, create an advertisement for a local company. SULAM: volunteering as a consultant to help any local businesses that do not have any digital platforms (Facebook, Instagram). Members are responsible for helping set up or train the business locally. In particular, students should help local businesses create postings and market digitally. Virtual management: organizing virtual events (online) for free or for a fee (Table 1).

Table 1 shows the details of the business profiles run by the entrepreneurship students

Group name	Member			Category of business	Type of business
	L	P	f		
Jassy-Tout	0	5	5	Gig economy	Advertising services for UMS students who runs a business.
Creamy Co	1	4	5	Take it orders and send	A healthy beverage product without colorings and preservatives that is made from bananas, milk and brown sugar, three basic ingredients.
Jual Ja	3	4	7	Take it orders and send	Food industry - Various types such as biscuits, keropok lekor, chochojar and spaghetti.
Buaya Cookies	4	1	5	Take it orders and send	Food industry - buy in bulk from suppliers, and sell back to customers. Snack brownies, pour n dip & koocrunch mi.

Heaven Aroma	1	4	5	Take it orders and send	Sugarbomb, which can be used as a perfume, hand sanitizer, and water freshener. The Parfum Company is a dropshipper for a perfume brand known as Sugarbomb. They buy stock and resell.
The Girlish	0	5	5	Take it orders and send	Sell various types of gift boxes that contain a variety of items, our main products being scrunchies and a variety of by-products. Five gift boxes consist of Set A with Teddy Bear), Set C (Scrunchies and Basic Make-Up), Set D (Scrunchies and Satin Facemask) and Set E (Scrunchies and Fairy LED).
LaFarfum Sugar Bomb	0	5	5	Take it orders and send	Selling a variety of products from Sugarbomb, including perfumes, hand sanitizers, and air fresheners. The company Le Parfum is a dropshipper to the famous perfume brand Sugarbomb
Health and beauty-Jetitih	0	6	6	Take it orders and send	Selling Jamu Tun Teja beauty products. They buy stock and resell.
Lubuk Lautan	0	5	5	Take it orders and send	Amplang products are purchased wholesale from suppliers on a large scale, repackaged in a variety of sizes and packaged in bulk. The products were purchased from suppliers on a large scale, repackaged in various sizes, affixed with the Lubuk logo, and then resold.
ChocoCharm	2	4	6	Take it orders and send	Selling chocolate food products under the Choco brand. The company purchases wholesale and resells.
Chemalin	0	4	4	Take it orders and send	Food and beverage industry. Dropship to Chemalin brand business. Products included red velvet cookies, chocolate cookies, colourful chocolate block, crunchy fried chili, chili heritage salted fish and tempoyak fish sauce speed
Book Access	1	3	4	Gig economy	Virtual book sales and purchase services
Shugah Hux	0	5	5	Take it orders and send	They purchase wholesale products from vendors and resell them- snacks - tortilla corn chips - and clothing - t-shirts
Crunchy Pop	2	3	5	Take it orders and send	Skin-based snack products flavoured with real and spicy cheese. The company operates on a wholesale basis.
Nasi lemak kampung	7	0	7	Take it orders and send	Order nasi lemak from suppliers and resell it.
	25	58	79		

ANALYSIS AND FINDINGS

Both thematic analysis and descriptive analysis were used to analyze the results. The findings are as follows:

The Business Characteristics

Based on Table 2 the results show that the majority of students were female (a total of 58 students, or 73%), and only 21 of them (27%) were male. Group size is mostly 5 members, which is 9 groups (60%). The business category most popular is to take orders and send, which is 13 groups (86%). Only two groups (13%) chose the gig economy, and no group was interested in SULAM or virtual management. The most preferred type of business is related business with food and beverages, i.e., 9 groups (60%), followed by beauty products in 3 groups (20%). Only two groups (13%) do business service-based businesses, and one group (6%) runs a garment business.

Table 2: Business Characteristics

Item	Category	Frequency (f)	Percentage (%)
Gender	Male	21	73
	Female	58	27
Number of group members	4 members	2	13
	5 members	9	60
	6 members	2	13
	7 members	2	13
Business Category	Take order and send	13	86
	Gig economy	2	13
	SULAM	0	0
	Virtual Management	0	0
Type of business	Food and Beverage	9	60
	Beauty Products	3	20
	Clothing	1	6
	Services	2	13

Creamy Co (personal communication, June 20, 2021) stated that “Before the Movement Control Order (MCO) was announced in Malaysia, we easily get these supplies from small traders. For example, in places like, night markets, morning markets, and our close acquaintances who sell bananas. The prices they sell are very cheap and of good quality. The bananas sold by them are also very good and fresh. When PKP was announced all over the country, many of these small traders had to pause to trade on the basis of law government”.

Jual ja (personal communication, June 20, 2021) stated that "The problem I face for spaghetti products is that the necessary stuff is insufficient due to PKPD occurring. This is why I had to stop taking reservations during PKPD. Furthermore, the MCO situation has also caused production costs to increase. This is stated by the Creamy Co. group as follows: Creamy.co (personal communication, June 20, 2021) "This forced us to get a supply of bananas at the supermarket, which is allowed to operate while the PKP is implemented. When we buy from supermarkets, the price is fixed and cannot be negotiated, nor can it be wholesaled. This results in production capital for one unit of capital increasing while the return on business results decreasing.

The implementation of MCO also resulted in the cancellation of sales and the loss of customers.

The Girlish (personal communication, June 20, 2021) "The problem we face first and foremost is the primary source items with which we are stuck. On April 4, MOH announced that PKPD would be enforced for two weeks at three UMS residential colleges. This PKPD lasts up to four weeks. Students and university staff are prohibited from leaving their respective residences. All entrances and exits to the PKPD area were also closed. Items posted are also blocked. One of our group members was unable to make a sale for the gift box. The sale had to be postponed until PKPD ended."

Crocodile cookies (personal communication, June 20, 2021) "The issues faced by our company are the lack of customers. Initially, we planned to conduct sales operations at UMS because our target customers were UMS students among our peers. However, as a result of the PKP's instructions during the pandemic that did not inevitably occur, we will not be able to implement the plan that has been arranged.

Cruchypop (personal communication, June 20, 2021) "PKP has caused the market for businesses to be limited, as stated by the group Crunchypop. We also have trouble selling products other than those for the area residents due to the situation in PKP".

Logistical Challenges

In this study, logistical challenges experienced by the entrepreneurship students in the implementation of business projects have been identified as related to MCO transmission problems and also local factors. The book access group, which provides used book sales services, has the following problems:

Book Access (personal communication, June 20, 2021) "We had a hard time posting books and couldn't pick up the books from sellers who are far away from the residence."

Students also think that customers prefer Cash on Delivery (COD) as opposed to using the postal service. However, according to the Ocean Hole (personal communication, June 20, 2021), "The problem we face is not being able to meet customer needs, that is, to provide Cash on Delivery

(COD) service. This issue has an impact on our business because most customers want the COD service, but due to the implementation of PKP, our group could not make COD".

The same goes for students who used postal services; the situation is voiced by Heavan Aroma (personal communication, June 20, 2021): "For students living on the UMS campus, the PKPD that has been implemented makes delivery difficult due to the PKPD. Therefore, delivery outside the PKPD area has been stopped until the PKPD is over".

Crunchy Pop (personal communication, June 20, 2021) "While PKPD was being enforced around the UMS residential college, we also could not deliver products to customers at different colleges".

Logistics issues are not only related to delivery but are also influenced by geographical factors, particularly the shipping of goods to the peninsula, which incurs high costs. This was emphasized by students as follows:

Crocodile cookies (personal communication, June 20, 2021) "On the cost of shipping. Shipping costs from Sabah to the peninsula are very high, and there are a few places where the cost of postage is almost equal to the price of the product. This increases the risk of loss and decreases customer purchases on the peninsula".

Ocean Hole (personal communication, June 20, 2021) "Postage costs for shipments outside of Sabah are relatively high. Pricing and high postage are problems that we face when we are trying to convince customers to purchase our products. The amount the customer must pay".

Student Factor Challenges

There are a number of challenges related to student factors. Among these are their skills in time management, commitment, and communication. Regarding skills, most of the group felt insecure due to a lack of experience in conducting business online, in particular.

Crunchypop (personal communication, June 20, 2021) "Selling products online was a challenge since he had never previously sold a product via an Instagram story or a WhatsApp status".

Chemalin (personal communication, June 20, 2021) "As a result, we do less promotional work on social media sites. Our product is not known to the public".

LaFarfum (personal communication, June 20, 2021) "Due to the fact that our group members have never been involved in either online or offline business, we do not have any knowledge of the field. This makes it difficult for us to obtain followers on social media platforms such as Facebook and Instagram, and also prevents us from disseminating the products we have advertised on social media to the general public.

Jassy Tout (personal communication, June 20, 2021) "Getting customers is challenging given that our company is only known by a few groups... It is difficult to promote our services online due to the lack of influence on social media platforms".

Jual ja (personal communication, June 20, 2021) "Aside from the lack of skills, students also have difficulty managing their time to focus on their business projects... Trading requires a lot of time since traders must divide their time between learning and doing business. Limited time can make it difficult for traders to conduct business on certain days. Operating only on weekends"

Ocean Hole (personal communication, June 20, 2021) "To conduct marketing, time management is necessary. Because of time constraints to complete assignments and a host of other activities, our social media advertising is inconsistent".

LaFarfum (personal communication, June 20, 2021) "We are having difficulty delivering the food ordered by the buyer. This is due to the fact that COD delivery is restricted to times when it is suitable. We find it difficult to manage time for learning and for business. Therefore, we find it difficult to manage and record finances in terms of capital and profit".

Product Management Challenges

One of the challenges identified in the project implementation for student businesses in the entrepreneurship course is product management. For example, group comments are as follows:

StockSell (personal communication, June 20, 2021) "Quickly out of stock chocojar, stock is slow to arrive."

Shugah Hux (personal communication, June 20, 2021) "In the absence of a shirt size... it is difficult to predict what size will be most requested."

Nasi Lemak Kampung Style (personal communication, June 20, 2021) "We need help packing what is best for rice we sell".

Resource Challenges

A resource challenge is associated with the requirement for internet connections in order to conduct business online.

Crunchypop (personal communication, June 20, 2021) "As a result of a weak internet network, we are having difficulties marketing our sales products. Therefore, it is difficult to promote the product and to increase sales, and maintaining the network is time-consuming.

Heaven Aroma was the only group that raised concerns regarding capital transactions. Heaven Aroma (personal communication, June 20, 2021) "We are short of funds. With insufficient capital,

it is difficult to purchase stocks of products according to customer tastes, especially if we are purchasing fragrance products in large quantities. Customers who purchase fragrance products in large quantities are required to use our own savings and collect money from all members”.

Competition Challenges

Most groups also contend with the challenge of competition from other traders. The following statement illustrates this:

Book Access (personal communication, June 20, 2021) As reading material and a source of information, eBooks are now available to the general public”.

Nasi Lemak Kampung Style (personal communication, June 20, 2021) "Due to competition with the sellers available in UMS, the Nasi Lemak business is having difficulty gaining customers". Shugah Hux (personal communication, June 20, 2021) "Jersey clothes are widely sold and readily available”.

Additionally, other sellers sell Sugarbomb products, also known as fragrance products. Sugarbomb (personal communication, June 20, 2021) "Our company will be adversely affected by competition from sellers since it will negatively affect our sales". Heaven Aroma (personal communication, June 20, 2021) "Additionally, there is competition between our company and other companies in terms of customers who purchase fragrance products. Thus, intense competition between other companies may affect sales and customer trust in our products and services”.

Creamy co. (personal communication, June 20, 2021) "The current pandemic affects all traders, big and small. In the same manner, other competitors also use their own strategies to keep their customers buying their products. Other businesses, for example, have lowered the price of a unit of product. To retain customers, this matter forces us to follow market price trends". La Farpum (personal communication, June 20, 2021) "A number of distributors of sugar bomb products have registered”.

The Challenges of Implementing a Business Project During Pandemic

The results show that there are six main challenges faced by students when running their business i.e., student -related, Control Order Movement (MCO), logistics, student factors, resources, product management and competition) (Figure 1)

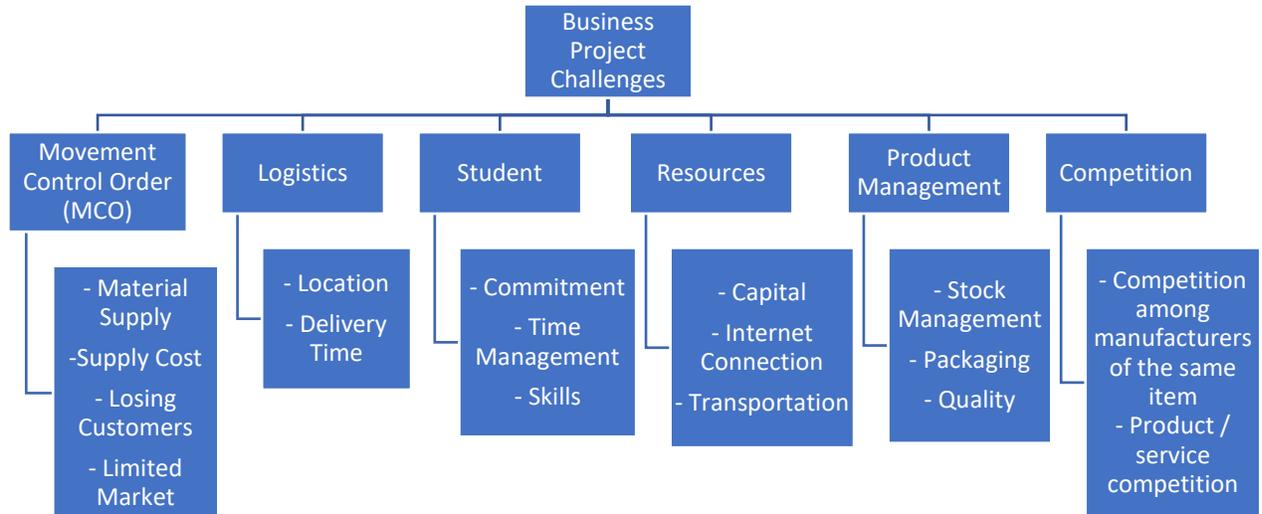


Fig 1: Business project challenges during the COVID-19 pandemic

FINDINGS

According to the results of this study, six major challenges faced by students while conducting their business during the COVID-19 pandemic were identified. Among the challenges directly related to the COVID-19 pandemic are the Movement Control Order (MCO) and logistical challenges. The tightened movement control orders (TMCO) at certain locations created an unexpected situation among the students, as many of them were unable to continue with their planned activities. Therefore, it is imperative to provide students with the knowledge and skills to deal with situations and uncertainties that may affect entrepreneurial activities in the future. As a result of a pandemic, many businesses experience problems and incur the need for a business continuity plan that includes a risk management plan, a business impact analysis, an incident action plan, and a recovery plan (Intesh Digital, 2020). It is imperative that the entrepreneurship course incorporate these new requirements into its course content. In addition, with a business continuity plan in place, related issues, such as logistical issues, can also be handled effectively.

Lecturers' roles are crucial to helping students overcome the challenges they face, especially when dealing with demotivated students and their inability to manage limited resources, mobility, capability, and funding. Given the importance of the role of the lecturers, they should be trained in the latest aspects of e-commerce trading.

Table 3: Review of entrepreneurial challenges before and after the coronavirus-19 pandemic

Categories	Sub-categories	PROPOSED ACTION		
		CONTENT	METHODS- Teaching & Learning Activities	ASSESSMENT
Pandemic	Movement Control Order (MCO) Material Supply Supply Cost Losing Customers Limited Market	Many businesses experience problems as a consequence of a pandemic, requiring a business continuity plan that consists of a risk management plan, a business impact analysis, an incident action plan, and a recovery plan (Intesh Digital, 2020).	As students are facing limited capabilities and limited suppliers as a result of MCO, it is lecturer's duty to provide them with ways to minimize these limitations, selling online. Since e-commerce is becoming increasingly popular, it is a means of pursuing income	It is appropriate to use logistical services when limited mobility makes it difficult to conduct business online.
	Logistics Location - Delivery Time	Additional topic of Logistics Planning and Optimization Problem: A logistics system (LS) is a network of organizations, people, activities, information, and resources involved in the physical flow of products from supplier to customer.	Making special arrangement with certain logistic companies- LOI- It is appropriate to use logistical services when limited mobility makes it difficult to conduct business online. Students can work and study online, and since internet connections are widely available and most households have a private internet connection, It is possible for students and businesses to conduct business and study online.	Survey of the best logistic companies in their local areas
Non-pandemic	Student commitment time management skills		Lack of commitment and time Management challenges. students are confined at home due to limited mobility; it can be used to motivate them to participate in online trading. Motivational activities -talk series: inviting successful young entrepreneurs - Student awards -specific schedule of each student tasks -Promoting self-directed learning (SDL)—how to fully used online learning material regarding entrepreneurship	

DISCUSSION AND RECOMMENDATIONS

Based on the research findings, some of the challenges are not caused by the pandemic but rather by the students' own behavior. Consequently, the opportunities offered by the pandemic do not materialize. The issue of attitude, which is the lack of commitment from members of the team, According to Norfadhilah and Halimah (2010), attitude is an influential factor influencing students to enter the field of entrepreneurship. Therefore, entrepreneurship programs should focus on the development of self-worth as well as exposing participants to the business environment. Additionally, students face time management challenges due to their commitments to other courses during the semester. Janssen (2006) defines time management as a technique and a way to organize, manage, and divide a person's daily time in an effective and efficient manner. A student who has many assignments to complete in a limited period of time should possess this skill (Norzaini, 2013). Consequently, the entrepreneurship course should provide exposure to current aspects of effective time management and how to implement entrepreneurial projects.

As discussed, although the opportunities for selling online are wide open for students, they face difficulties in implementing digital marketing. Based on the findings of this study, students are still less able to adapt to self-directed learning (SDL) and are more dependent on lecturers. As described by Hmelo-Silver (2004), SDL emphasizes the process of learning planning, constructing, and applying strategies to learn and use learning resources effectively. Due to this lack of skills, students are still unable to make full use of various resources and learning platforms for exploring business knowledge online. As a result, they may lack the knowledge and skills necessary to effectively manage various business challenges, such as competition and product development. The results of this study indicate that competition and product management are also challenges faced by students. In addition, there is a challenge related to business resources, such as capital and internet access. Students are insufficiently funded to purchase product stock. In a study on the constraints of doing business among university students, Norasmah et al. (2009) raised these issues regarding capital constraints. Therefore, business capital-related challenges are not new to students running a business. This should also be considered in the implementation of the entrepreneurship course so that appropriate assistance can be provided. Students also reported difficulties with internet connections. In this regard, the learning strategy as a whole need to be adapted to the diverse environment of entrepreneurship students.

COVID-19 has undoubtedly become the lesson we have learned. Like other viruses that are around us, such as dengue, malaria, etc., we must accept the fact that people are vulnerable. We must continue to be cautious about announcing the virus. Thus, social distance, mask wearing, hygiene precautions, and other precautionary measures will be followed daily. Due to the restrictions and fussiness associated with shopping in a mall, many people may choose to do their shopping online. Mobile devices have made browsing and shopping online more convenient. The customer can place an order from a device that is likely to be in their pocket or hand at all times. Furthermore,

as some items became scarce in physical stores, it was still possible to order via the internet. From the beginning, online shopping has been a source of convenience, selection, and savings. It is expected that this trend will continue to grow exponentially as e-commerce becomes increasingly popular and competitive. This trend is likely to persist even after the pandemic has ended. In local universities, the method of teaching entrepreneurship consists of focusing only on two online platforms, which are Facebook and Instagram. Platforms are readily available on the Internet and cost almost nothing to access. While the exposure may not have been used in their current studies, it may be used in the future. Thus, more platforms should be used for teaching and learning purposes.

CONCLUSIONS

The challenges posed during the CORONAVIRUS-19 pandemic, as well as the limitations imposed by the movement control order (MCO), should be addressed properly. In order for students to overcome the challenges they face, lecturers must take an active role in helping them achieve success, especially when they are dealing with demotivated students, limited resources, limited mobility, and limited funding. Since lecturers play an important role in the educational process, they need to be familiar with the latest developments in the field of e-commerce.

Students may access online platforms and should take advantage of online opportunities in order to achieve success, not just in this course but in the future as well. There have been a number of activities organized to encourage young generations to engage in entrepreneurial activities as a means of encouraging them to learn that they are capable of establishing their own businesses. The high level of graduate unemployment in Malaysia makes it essential to replace reliance on monthly wages with entrepreneurial opportunities. Additionally, students should view the course as a tool for training that can be utilized long after the course has been completed. Rather than seeing the course as a subject that must be passed, Also, curriculums need to be updated to reflect technological advancements and expand the platforms for online trading. This study has certain limitations. Firstly, it was conducted during a pandemic, resulting in a significant number of students being absent from the campus. Consequently, a considerable portion of the participants had to be contacted via telephone, which prevented the capture of facial expressions. As a result, the reliance on voice alone may introduce bias when interpreting their responses. This study was done inside the confines of a university setting, and as such, the findings are applicable only to the specific circumstances under which the study was conducted. It is important to exercise caution when generalizing the results of this paper.

Consequently, it is anticipated that the results of this research will provide guidance for continuous improvement of entrepreneurship education courses and, in the long run, produce a generation that is motivated towards entrepreneurship rather than becoming employees. As a result, economic growth will be enhanced and unemployment will be reduced.

ACKNOWLEDGMENTS

Thank you to the Universiti Malaysia Sabah who have participated in this study, especially those who took the entrepreneurship course in 2021.

DECLARATION OF INTERESTS

The authors declare no conflict of interest

REFERENCES

- Ali Sis and Aede Hatib Musta'Amal (2014) Cabaran kursus pendek keusahawanan di dalam pembelajaran sepanjang hayat di Kolej Komuniti Kementerian Pendidikan Malaysia. <http://eprints.utm.my/id/eprint/61317/1/>
- Adhikari, D. R., & Shrestha, P. (2023). Knowledge management initiatives for achieving sustainable development goal 4.7: higher education institutions' stakeholder perspectives *Journal of Knowledge Management*, 27(4), 1109–1139
- Aliman, S., Abdul Kadir, S., and Lope Pihie, Z.A. (2013) *Kemahiran keusahawanan di dalam pendidikan teknik dan vokasional*. In: Graduate Research in Education Seminar (GREduc 2013), 1 December 2013, Faculty of Educational Studies, Universiti Putra Malaysia (pp. 217–223).
- Anzai, Y., & Simon, H. A. (1979). The theory of learning by doing *Psychological Review*, 86(2), 124
- Audia, P., and Rider, C.I. (2005). A garage and an idea—what more does an entrepreneur need? *California Management Review*, 48(1), 6-28.
- Azman, A. S., Wahid, H., & Yaacob, S. E. (2023). The Impact of Morality on The Behavior of B40 Female Entrepreneurs in The Informal Economic Sector *International Journal of Academic Research in Business and Social Sciences*, 13(4), 503-518.
- Barot, H. (2015) Entrepreneurship: A key to success *The International Journal of Business and Management*, 3(1), 163–165
- Chang, J., & Rosli, A. (2019). Entrepreneurship education and employability agenda in Malaysia *Innovate higher education to enhance graduate employability: Rethinking the possibilities*, 133–147. Development economics: A review towards a new view *Journal of Economic Surveys*, 33(2), 389–403.
- Creswell, J. W. (2011) *Research Design: Qualitative, Quantitative, and Mixed Method Approaches* (4th Ed.) Los Angeles: Sage Publications.
- The Office of the Chief Statistician Malaysia Department of Statistics, Malaysia (2022, July 29) *Graduate Statistics 2021* Ministry of Economic Development Department of Statistics

- Malaysia Retrieved August 17, 2023, from <https://dev.dosm.gov.my/portal-main/release-content/graduates-statistics->
- Farhana, M. R. (2013) Pembudayaan keusahawanan ke arah mempengaruhi kecenderungan menceburi bidang keusahawanan dalam kalangan bakal graduan di UTHM. Projek Sarjana: Tidak diterbitkan. UTHM, Parit Raja: Universiti Tun Hussein Onn Malaysia.
- Fayolle, A., and Gailly, B. (2008). From craft to science: Teaching models and learning processes in entrepreneurship education *Journal of European Industrial Training*, 32(7), 569–593.
- Gartner, W. B., and Bellamy, M. G. (2009) *Creating the Enterprise* (1st Ed.) Canada: Thomson South-Western.
- Gartner, W. B., and Vesper, K. H. (1994). Experiments in entrepreneurship education: successes and failures *Journal of Business Venturing*, 9(2), 179–187
- Gibb, A. (1993). Enterprise culture and education: understanding enterprise education and its links with small business, entrepreneurship, and a wider education goal *International Small Business Management Journal*, 11 (3), 11–34.
- Hessels, J., & Naudé, W. (2019). The intersection of the fields of entrepreneurship and Development economics: A review towards a new view *Journal of Economic Surveys*, 33(2), 389–403.
- Hisrich, R. D., Peters, M. P., and Shephard, D. A. (2008) *Entrepreneurship* (International Edition) Singapore: McGraw-Hill Education Asia
- Hmelo-Silver, C. E. (2004) Problem-based Learning: What and How Do Students Learn? *Educational Psychology Review*, 16(3), September <https://www.ideas.org.my/pendidikan-sepanjang-krisis-covid-19/> . Dimuat turun pada 12 Mei 2020
- Intesh Digital (2020) Pelan Kesenambungan Perniagaan (Business Continuity Plan) - 4 elemen asas. <https://intesh.com.my/pandemik-covid-19-membuktikan-setiap-perniagaanmemerlukan-pelan-kesinambungan-perniagaan/>
- Identical Date Sales in Southeast Asia | GMO Research GMO Research (2021) Retrieved November 10, 2021, from <https://gmo-research.com/news-events/articles/identical-date-sales-southeast-asia>.
- Janssen, D. A. 2006. The ultimate self-challenge: Time management <http://www.jurnal.personalia.pelajar.com>, 12, 87–107.
- Kamarudin, W. N. B. W., Fuza, Z. I. M., Ghani, A. M., Nawawi, W. N. W., Hamid, R., & Daud, N. M. (2023). Inspirational Hospitality Entrepreneurship Model for Cultivating Entrepreneurship Education Among Malaysian Higher Institution Hospitality Students *Asian Journal of University Education*, 19(1), 53–71. Kuratko & Hodgetts (2007) *Entrepreneurship: Theory, Process, and Practice* USA: South Western Cengage Learning
- Laspita, S., Sitaridis, I., Kitsios, F., & Sarri, K. (2023). Founder or employee? The effect of social factors and the role of entrepreneurship education *Journal of Business Research*, 155, 113422

- Morris, M., Kuratko, D., & Schindehutte, M. (2001), Towards integration: understanding integration through frameworks, *International Journal of Entrepreneurship and Innovation*, 2 (1), 35–49.
- Muhammad Izzat Akmal Fakhrul Anwar, Nurazwa Ahmad, and Nor Kamariah Kamaruddin (2020) Faktor pendorong pelajar UTHM dalam bidang keusahawanan. *Kajian Kes di Malaysia*, Siri 4 UTHM: 63–72.
- Nambisan, S. (2016) Digital Entrepreneurship: Toward a Digital Technology Perspective of Entrepreneurship *Entrepreneurship Theory and Practice*, 41(6), 1029–1055.
- Nasharudin, N., and Harun, H. (2010). Aspirasi kerjaya keusahawanan dalam kalangan pelajar institusi pengajian tinggi awam. *Jurnal Pendidikan Malaysia*, 35(1), 11–17.
- Nasrul Hakim, M. (2015) Kajian kecenderungan keusahawanan pelajar di Universiti Kuala Lumpur. Projek Sarjana: Tidak diterbitkan. Sintok: Universiti Utara Malaysia.
- Negeri, D. D., Wakjira, G. G., & Kant, S. (2023). Meta-Analysis of Entrepreneurial Skill and Motivation on Business Performance: Mediating Role of Strategic Leadership in The SME Sector of Ethiopia *International Journal of Management and Digital Business*, 2(1), 1–13.
- Noor, N. M., and A. Rahim, N. (2011). Kecenderungan pelajar-pelajar Institut Kemahiran Mara (IKM) Johor Bahru terhadap bidang keusahawanan Fakulti Pendidikan, Universiti Teknologi Malaysia.
- Norasmah Othman, Azzyyati Anuar, and Muhammad Husin (2009) Kekangan dalam menjalankan perniagaan dalam kalangan pelajar di Universiti Kebangsaan Malaysia. *Jurnal Personalial Pelajar*, 12, 87–107.
- Norfadhilah, N., and Halimah, H. (2010). Aspirasi kerjaya keusahawanan dalam kalangan pelajar institusi pengajian tinggi awam. *Jurnal Pendidikan Malaysia*, 35(1), 11–17.
- Norzaini Azman (2013) Perkaitan antara pengurusan masa dan stress dalam kalangan pelajar siszawah di IPTA. *AJTLHE*, 5(1), 34–49. *Pelan Strategik Pendidikan Tinggi Negara 2011-2015*, Kementerian Pengajian Tinggi
- Pittaway, L. (2005) Philosophies in Entrepreneurship: A Focus on Economic Theories *International Journal of Entrepreneurial Behavior and Research*, 11 (3), 201–21.
- Rozaimy Baharuddin (2003) Modul OUM: Bab 1 Pengenalan Kepada Keusahawanan. Universiti Terbuka Malaysia
- Pyysiäinen, J., Anderson, A., McElwee, G., & Vesala, K. (2006). Developing the entrepreneurial skills of farmers: Some myths explored *International Journal of Entrepreneurial Behavior and Research*, 12(1), 21–39.
- Qiu, Y., Garca-Aracil, A., & Isusi-Fagoaga, R. (2023). Critical Issues and Trends in Innovation and Entrepreneurship Education in Higher Education in the Post-COVID-19 Era in China and Spain *Education Sciences*, 13(4), 407. Zhai, Y., Yang, K., Chen, L., Lin, H., Yu, M., & Jin, R. (2023).
- Rozaimy Baharuddin (2003) Modul OUM: Bab 1 Pengenalan Kepada Keusahawanan. Universiti Terbuka Malaysia

- Saoula, O., Shamim, A., Ahmad, M. J., & Abid, M. F. (2023). Do entrepreneurial self-efficacy, entrepreneurial motivation, and family support enhance entrepreneurial intention? The mediating role of entrepreneurial education *Asia Pacific Journal of Innovation and Entrepreneurship* (ahead-of-print)
- Tekun Nasional (2018, August 4). *Tekun Nasional*. Retrieved August 17, 2023, from <https://www.tekun.gov.my/en/tekun-entrepreneur/special-program/special-program-3/>
- Wan Ya Shin. (2020). Pendidikan Sepanjang Krisis COVID-19. 8 April 2020. Retrieved from the Institute for Democracy and Economic Affairs (IDEAS):
- Zimmerer, T. W., and Scarborough, N. M. (1998). *Essentials of Entrepreneurship and Small Business Management* (2nd ed.) New York: Prentice Hall.
- Zhai, Y., Yang, K., Chen, L., Lin, H., Yu, M., & Jin, R. (2023). Digital entrepreneurship: global maps and trends in research *Journal of Business and Industrial Marketing*, 38(3), 637–655.
- Zhakupov, Y. K., Berzhanova, A. M., Mukhanova, G. K., Baimbetova, A. B., & Mamutova, K. (2023). The impact of entrepreneurship on the socio-economic development of regions