

Digital Skills Challenges Among Indigenous Entrepreneurs in Selangor

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Abstract

The development and integration of digital technologies are essential for the socioeconomic growth of modern civilizations, including the communities of Indigenous Peoples, in this period of rapid globalization and digitalization. However, rural Indigenous Peoples face a digital divide that limits their use of technology for economic betterment. This study explores the digital skill challenges faced by Indigenous Peoples, focusing on internet application access, internet usage skills, motivation, and information sources. It adopts a qualitative approach with a case study design involving five participants, using interviews as the primary data collection method. Thematic analysis with NVIVO11 identified three main themes: digital challenges, operational and marketing challenges in digital business, and the enhancement of digital skills. The study reveals variations in internet access among Indigenous entrepreneurs, high awareness of modern tools, and digital skills. Social media and WhatsApp are vital for marketing, but challenges in logistics, cash payments, and online content approval are significant. Despite efforts to improve digital skills, exposure to and access to the internet remain limited in rural areas. Enhancing internet access, digital skills, and problem-solving strategies are key to adapting businesses to the digital age. This study underscores the need to expand knowledge in digital skills and business, opening avenues for further research, especially in developing digital skills among Indigenous Peoples' students. By highlighting challenges and proposing solutions, it guides the development of inclusive policies to strengthen Indigenous Peoples' communities in the digital era.

1. Introduction

The Indigenous Peoples group, native to Malaysia and the Malay Peninsula, comprises a minority indigenous population mostly living in the remote areas of the peninsula. A significant portion of the population maintains traditional lifestyles that are strongly shaped by their surroundings and ancestral traditions (Wee et al., 2013). Nevertheless, there are often misunderstandings that categorize them using terminology such as "Sakai," which links them to a rudimentary existence in the jungle. The group is often seen as lacking a clear religious identity, adherence to certain codes of conduct, or intellectual capacity for progress. This leads to misconceptions about their untamed and violent character (Choy, Ariffin & Pereira, 2010). The Department of Indigenous Peoples Development (JAKOA) categorizes the Indigenous Peoples into three primary groups: Negrito, Senoi, and Proto-Malay, sometimes referred to as Indigenous Malays. This classification is based on their physical characteristics, language, and cultural traditions, despite there being over nineteen subgroups recognized by Carey in 1970.

The rights of Indigenous Peoples have been safeguarded in national development goals through government initiatives. The adoption of technology has become a vital objective in the process of transforming communities and workplaces, playing a significant role in various economic sectors (IDB, 2018). The development of the

Indigenous Peoples' community was instrumental in the Eighth (2001-2005) and Ninth (2006-2010) Malaysia Plans, which focused on national development strategies. The Village Information Centre (VIC) program was implemented as a key method to expand the availability of information and communication technologies in Indigenous Peoples' regions. This approach aligns with the goals of the National Information Technology Agenda (NITA), aiming to improve access to information and reduce the digital divide between urban and rural areas.

Despite numerous efforts to promote equitable access, the digital divide remains a barrier for rural residents, especially Indigenous Peoples (Van Laar et al., 2020). This challenge hinders their exploration of technological capabilities, specifically in enhancing economic prosperity. Consequently, it is imperative to carry out a comprehensive overhaul within the Indigenous Peoples' community to promote the use of technology for achieving economic empowerment (Polnaya, Murwani & Pariela, 2023). Achieving these objectives requires widespread access to technology (Tedesco, Barton & O'Flynn, 2017).

Understanding these factors enables the creation of an environment in which Indigenous Peoples not only incorporate technology into their daily lives but also use it as a driver for economic progress. Acquiring digital literacy is essential and imperative to enhance the Indigenous Peoples' community's standing in the global digital economy. This paper presents a strategy to strengthen the digital access rights of the Indigenous Peoples' community, leading to long-term and equitable economic development.

Moreover, the Indigenous Peoples in Malaysia face significant economic challenges compared to the dominant Malay, Chinese, and Indian populations. According to the 2010 Malaysian Census, 31.16% or 11,423 individuals who are heads of households in Indigenous Peoples' regions live below the poverty threshold (Abdullah et al., 2019). Indigenous Peoples in this situation encounter limited opportunities for education, employment, housing, and social infrastructure, contributing to their poverty. Additionally, the implementation of control mechanisms in water catchment areas and the prioritization of commodity crops such as palm oil and natural rubber indirectly contribute to the poverty experienced by the Indigenous Peoples' community (Saifullah et al., 2021).

The Selangor Indigenous Peoples Development Department, also known as the Department of Indigenous Peoples Development (JAKOA, 2017), has documented 2,828 instances of extreme poverty within the Indigenous Peoples' community. This figure accounts for 55% of the indigenous population in Peninsular Malaysia. The Eleventh Malaysia Plan (2015-2020) suggests implementing education and entrepreneurial programs aimed at the Indigenous Peoples' community. These programs would focus on activities such as farming, fish farming, and cattle rearing, as outlined in the Indigenous Peoples Development Strategic Plan of 2011. Despite concerted efforts, only a mere 595 Indigenous entrepreneurs, accounting for just 0.26% of the total Indigenous population, are engaged in various economic ventures, including the tourism sector (NTPR, 2017).

Online access to business opportunities is crucial for the economic well-being of the Indigenous Peoples' community in the aftermath of the epidemic. Despite Malaysia's efforts to bridge the digital divide between urban and rural areas, studies indicate that persistent digital inequality among Indigenous Peoples still exists, despite being considered a strategic response to post-pandemic economic challenges (Yu et al., 2017). Their engagement in digital entrepreneurship is limited by restricted access to digital infrastructure and online platforms, which could otherwise facilitate economic progress. Hence, the objective of this research is to investigate the obstacles faced by the Indigenous Peoples' population in terms of digital skills, specifically digital entrepreneurship.

1.1 Research Questions

The study is conducted to address the following research questions:

1. What are the digital skill challenges among the Indigenous Peoples in terms of internet application access, internet usage skills, motivation for internet usage, and sources of information?
2. What steps can be taken to foster the improvement of digital skills for engaging in online entrepreneurial activities?

1.2 Literature Review

According to Article 160 (2) of the Federal Constitution, the term "Indigenous Peoples" refers to the native inhabitants of the Malay Peninsula. The research conducted by Mohamed & Selvaratnam (2018) suggests that, despite the government's efforts to address the well-being of Malaysian society, particularly the Indigenous Peoples, socio-economic problems persist without resolution. Following the process of relocation, there has been little alteration in the population, namely in the domains of education and economy, especially in small settlements, as shown by Ariffin's study (2016). The research done by Hasan et al. (2016) on the Seletar Indigenous community in eight villages in the Johor Bahru District revealed that this population has a limited ability to adapt collectively and assimilate to the growing changes and advancements in the city.

The obstacles faced by the Indigenous Peoples in business include inherent elements such as mentality, ingenuity, and the efficient use of resources. Despite the conventional economic dependence on forest resources, efforts such as the Indigenous Peoples Cooperatives (KOA) and government backing strive to boost

entrepreneurship within the community. Nevertheless, obstacles remain, such as restricted availability of training and resources, cultural impediments, and the need for more societal acknowledgment of entrepreneurship within the Indigenous Peoples community. Research emphasizes the significance of addressing both internal and external issues to promote successful entrepreneurship and economic empowerment within the Indigenous Peoples community.

Technical literacy is of utmost significance, as it highlights the difficulties experienced by indigenous populations, namely the Indigenous Peoples, in acquiring digital skills and using the internet. Digital skills refer to the capacity to use digital communication and information technology (ICT) to access, comprehend, and generate knowledge. Nevertheless, the acquisition and use of digital skills within these populations are complicated by many variables, such as motivation, accessible resources, social capital, and cultural influences (Ng & Neo, 2022).

Access to internet applications encompasses more than just the ability to connect and includes considerations of availability, demand, and skill proficiency. Indigenous Peoples communities often face discrepancies in internet connectivity compared to metropolitan regions, which perpetuates a digital divide stemming from infrastructural constraints and socio-cultural circumstances (Mokhtar & Hanafi, 2020). Although the Indigenous Peoples show increasing interest in digital technology, their access to infrastructure and educational opportunities typically lags behind the rapid pace of technical developments.

The COVID-19 pandemic has highlighted the necessity of digital skills, yet some individuals, especially those in indigenous communities, lack the essential abilities to navigate the digital environment proficiently. Moreover, the Indigenous Peoples have ongoing difficulties in acquiring internet skills as a result of intricate infrastructural, socio-cultural, and educational barriers that impede their digital literacy and capacity to utilize the advantages of information and communication technology (Ghani, Muhammad & Jais, 2021).

The digital adoption process among indigenous populations is further complicated by problems related to motivation and information sources. The motivation of indigenous groups to engage with digital technology is influenced by factors such as access, experience, digital skills, and expectations. Nevertheless, factors such as availability, education, financial resources, and societal beliefs significantly influence their perspectives on internet usage and sources of information.

The Indigenous Peoples, an indigenous community, have both prospects and difficulties due to entrepreneurship and digitization (Cheng & Hong 2021). Indigenous entrepreneurs continue to face obstacles, including insufficient confidence, limited social networks, and inadequate computer literacy, despite the potential economic advantages offered by digital technology (Sandran, 2022). To tackle these complex challenges, it is necessary to implement comprehensive strategies that include the construction of infrastructure, programs to improve digital literacy, and initiatives to promote cultural sensitivity in the acceptance of technology. By confronting these obstacles, indigenous groups may more effectively assimilate into the digital realm and use its capacity for socio-economic progress and empowerment (Rahim & Zulkefli, 2022).

2. Methodology

2.1 Research Design

This study employed qualitative methodology with a case study design, which enable researchers to establish a closer connection with participants in order to collect data, comprehend their experiences from their own viewpoints, present comprehensive and detailed data summaries, and offer practical explanations of participants' experiences based on their responses (Ames et al., 2019). Hence, this research adopts qualitative methodology, using interviews as a means to enhance comprehension of the topic, whereby participants reflect about their own encounters with digitalization and entrepreneurship. Throughout the interview process, the recorded experiences of participants also emphasise their own views.

2.2 Sampling

The research utilized purposive random sampling, which involves selecting individuals based on certain criteria. The variation in perspectives, ideas, and experiences within Indigenous Peoples samples contributes to the diversity seen in the current study (Ames et al., 2019). Hence, the researcher has determined that the Indigenous Peoples chosen for this study are purposive samples that meet the requirements for participation. The selected Indigenous Peoples individuals are engaged in business and entrepreneurship among the Indigenous communities in Selangor. The participants in this research possess technological proficiency and willingly engage in the conducted interviews. The Mah Meri and Semai ethnic communities are actively engaged in marketing and managing their enterprises. There were 5 respondents selected in total, consisting of 3 individuals from the Mah Meri ethnic group and 2 persons from the Semai ethnic group. Furthermore, the respondents are those who actively engage in digital skills while operating online enterprises.

2.3 Data Collection

The data collection process included conducting semi-structured interviews with specifically chosen individuals. The interview questions were carefully crafted to correspond precisely with the research goals. The purpose of these inquiries was to get significant insights and perspectives on the study idea and aims. The interview questions were formulated in an open-ended structure, enabling participants to provide comprehensive and contextually appropriate responses (Tavory, 2020). The interviews were recorded in audio format and then transcribed for further study. Before conducting the interviews, the researchers got informed permission from all participants, ensuring that they understood the goal and characteristics of the study. Participants were guaranteed absolute secrecy and anonymity concerning their comments.

2.4 Data Analysis

Data collection was conducted via semi-structured interviews with specifically chosen individuals. Semi-structured interviews were used to provide a flexible framework that enabled participants to articulate their perspectives, interpretations, and personal experiences pertaining to the study goals (Karatsareas, 2022). The interview questions were intentionally crafted to be open-ended, enabling participants to provide elaborate and context-specific responses. The interviews were captured using audio technology and transcribed word for word for further examination. The collected data underwent rigorous qualitative data analysis utilizing thematic analysis, which entails identifying, examining, and documenting codes or themes that arise from the data. The technique used a methodical process of coding and categorizing interview transcripts in order to find repeating themes and get significant insights. The research used a reflexive and iterative technique, which allowed for the discovery of new themes and patterns that emerged throughout the examination.

3. Results and Discussion

3.1 Results

3.1.1 Theme 1: Digital Challenges

Theme 1, "Digital Challenges," provides a detailed analysis of the complex digital environment encountered by indigenous entrepreneurs in Selangor. This includes aspects such as their access to internet applications, proficiency in digital skills, and the incorporation of technology into their commercial ventures.

The study focuses on the adequacy of internet access among indigenous entrepreneurs in the context of Internet Application Access. It examines several criteria such as the quality of internet networks and the kinds of online services accessible in their operational locations. The existence of inequalities in internet access highlights the urgent need for improved digital infrastructure to provide equal possibilities for all businesses.

The subject of Internet Usage Skills focuses on the difficulties faced by indigenous businesses as they navigate the digital environment. Mastery of internet utilization is essential for obtaining company prospects, undertaking market analysis, and efficiently interacting with clients. Gaining an understanding of their information retrieval strategies and utilization of digital platforms provides vital insights into their proficiency in digital literacy.

Communication has a crucial role in the digital world, as shown by the study of Communication Media Usage. Indigenous entrepreneurs use diverse digital communication methods, including WhatsApp and social media platforms, to interact with clients and streamline commercial transactions. The incorporation of these platforms into their company plans highlights the significance of efficient digital communication in stimulating corporate development.

Moreover, the subject explores the significance of Social Media Usage among indigenous entrepreneurs, emphasising social media platforms as essential instruments for marketing, establishing a brand, and engaging with customers in the era of digital technology. Indigenous entrepreneurs demonstrate flexibility and ingenuity by using channels such as Facebook, Instagram, and TikTok to connect with their intended audience and broaden their market presence.

The significance of motivation becomes apparent when examining the involvement of indigenous entrepreneurs with digital technology, particularly concerning their reasons for using the internet. Understanding the internal and external variables that influence indigenous entrepreneurs' use of digital tools and platforms may provide important information for creating interventions and support systems that improve digital literacy and empower them in the digital age.

To summarise, Theme 1 offers a detailed examination of the complex digital obstacles and possibilities that indigenous businesses in Selangor face. This highlights the significance of fair and equal availability of digital resources, the acquisition of digital competencies, and the deliberate use of digital platforms to promote entrepreneurial achievement in the era of digital technology.

3.1.2 Theme 2: Operational and Marketing Challenges in the Context of Digital Business

The second subject explores the operational and marketing difficulties faced by indigenous entrepreneurs in the digital business domain. More precisely, it illuminates the complex challenges they have while overseeing daily activities, managing logistical tasks, and formulating marketing plans in the digital domain. The study seeks to get a thorough understanding of these obstacles to provide complete insights into the many issues that arise in the administration of their online company. Significant obstacles arise from the logistical complexities of effectively handling online purchases, particularly in rural regions, leading to frequent returns caused by issues in precisely monitoring and delivering products to distant locations. Moreover, indigenous businesses have expressed apprehensions about shifting away from third-party platforms like Shopee. They have cited problems such as damaged delivery and a need for greater control over the whole process. As a result, some of them are now considering independent marketing channels like FB Ads. In addition, they have challenges with the acceptance of material on different internet platforms and the efficacy of sponsored advertisements, leading to a transition towards free marketing tactics. These obstacles highlight the intricate difficulties that indigenous entrepreneurs face in the digital business environment, including operational, logistical, and marketing aspects.

3.1.3 Theme 3: Enhancement of Digital Skills

Theme 3 focuses on augmenting digital proficiencies among indigenous enterprises. This text examines efforts and suggestions targeted at enhancing their digital skills to promote resilient entrepreneurship in the digital age. The investigation uncovers efforts by organizations such as JAKOA to provide a range of services, including customized seminars and workshops, to enhance the enterprises of indigenous entrepreneurs by the digital environment. Respondent 3 emphasizes partnerships with platforms like Desa Mall to provide focused digital skills training for indigenous folks. The need to address the lack of digital skills among indigenous communities and the necessity for increased access and training are highlighted. One suggestion is to use online platforms such as TikTok, particularly for those who are unable to participate in conventional seminars. This approach emphasises a modern method of improving digital abilities. Furthermore, the issue of restricted internet availability in rural regions is seen as a hurdle for online education and the accessibility of digital instructional materials. The discussion is on the potential of educational technology, namely interactive e-books, to enhance learning by making it more interesting and effective. This aligns with the broader objective of improving digital skills.

3.2 Discussion

The results indicate that the Indigenous Peoples community faces numerous obstacles related to online application use, internet usage skills, motivation for internet use, and access to information sources. Firstly, respondents emphasized the significant impact of internet applications on participating in digital business operations. Nevertheless, a notable number of individuals lacked digital business competencies, and the accessibility of basic information and communication technology (ICT) tools, such as computers, was not widespread, particularly among households that rely on forest resources for their livelihood. The constraints highlighted were a lack of sufficient exposure to ICT education and the cost burden associated with purchasing digital tools.

Respondents noted the absence of access to digital skills training in their communities when it comes to internet usage skills. Although they demonstrate a reasonable level of expertise in using online applications for commercial purposes, their overall computer literacy remained at a basic level. The pandemic intensified challenges, as interruptions to brick-and-mortar businesses necessitated a shift to online platforms, requiring improved digital competencies.

Another issue arose in the use of internet services for business due to a lack of motivation. The e-Entrepreneur program, initiated by the Digital Economy Corporation Malaysia (MDEC), seeks to promote digital entrepreneurship among the Indigenous Peoples community. Although these programs offered motivation, personal dedication to learning and self-improvement were essential factors that influenced long-term engagement with digital activities.

Access to information sources was considered crucial, with respondents relying on e-commerce platforms such as Shopee and Lazada for product promotion. Despite facing obstacles, the respondents demonstrated adaptability in embracing new technology to expand the scope of their enterprises. The provision of government assistance, such as the establishment of the Indigenous Peoples Community Entrepreneurship Centre, has facilitated the acquisition of resources and training, thus fostering business growth.

Therefore, the issues about digital skills within the Indigenous Peoples community include limited access to online applications, lack of expertise in using the internet, low motivation for digital participation, and difficulties in accessing information. Although there was variation in the respondents' access to internet services, achieving universal access to digital tools and training remained challenging. Driven by individual determination and

supported by government programs, Indigenous business owners demonstrated resilience in adapting to digital platforms despite facing financial and geographic limitations. Efforts to improve digital literacy and increase access to ICT resources have the potential to empower the Indigenous Peoples community in the digital economy.

4. Conclusion

In conclusion, it is evident that the study has provided a comprehensive portrayal of the obstacles and prospects in cultivating digital skills and digital enterprises within the Indigenous Peoples community. The study results suggest that the growth of this community in the digital age is influenced by many critical elements, including access to internet applications, proficiency in using the internet, motivation to advance enterprises digitally, and access to information sources, as reported by the respondents. Nevertheless, there is recognition of the constraints faced by the Indigenous Peoples group, namely concerning economic and geographical aspects. The efficacy of fostering internet-savvy businesses is demonstrated by the positive outcomes and feedback received from programs like those carried out by JAKOA. Hence, it is essential to continue offering support and guidance to the Indigenous Peoples community to facilitate their ongoing progress in this era of digitalization.

The study results have the potential to significantly contribute to the development of the Indigenous Peoples community and the country, to achieve meaningful progress. By gaining a deeper understanding of the difficulties and needs of this community, it is anticipated that the results of this research can be used as a blueprint for creating and implementing more effective initiatives. The researchers hope these study results will motivate stakeholders, such as the government, business sector, and non-governmental organizations, to implement measures that can have a positive effect on the Indigenous Peoples. Moreover, the researchers anticipate that these findings might act as a catalyst for promoting positive change in terms of providing financial aid, facilitating access to equipment and training, and enhancing community awareness about the potential of digital technology.

Therefore, the goal of this research is to prioritize and actualize the enhancement of digital skills within the Indigenous Peoples population, thereby bolstering their competitiveness in the age of globalization and technology. By engaging in cooperative endeavors and fostering collaboration across various sectors, the aim is for the Indigenous Peoples community to capitalize on diverse opportunities in the digital business realm, thereby actively contributing to the development of the country. The researchers hope the results of this study will have a beneficial impact on both the Indigenous Peoples community and the country as a whole. The researchers aim for these study results to provide direction and assistance in enhancing the quality of life and development of the Indigenous Peoples community by acquiring proficiency in digital skills.

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