Barriers to Digital Entrepreneurship among Persons with Disabilities: A Systematic Review

Abdul Azim Abdul Rashid[1], Isma Addi Jumbri[2*], Samer Ali Hussein Al-Shami[1]

[1]Institute of Technology Management and Entrepreneurship, Universiti Teknikal Malaysia Melaka, Malaysia

[2]Faculty of Technology Management and Technopreneurship, Universiti Teknikal Malaysia Melaka, Malaysia

***Corresponding Author**

DOI: https://dx.doi.org/10.47772/IJRISS.2025.910000436

Received: 22 October 2025; Accepted: 30 October 2025; Published: 14 November 2025

ABSTRACT

Digital entrepreneurship has emerged as a key enabler of economic inclusion, particularly for Persons with Disabilities (PWDs). In Malaysia, digital platforms offer opportunities for PWDs to overcome traditional physical and structural barriers; however, participation remains limited due to persistent challenges. This study employs a Systematic Literature Review (SLR) guided by the PRISMA framework and the PICo model to synthesise recent evidence on the barriers faced by Malaysian PWDs in digital entrepreneurship. Using the Scopus database, fifty studies were initially identified, and sixteen peer-reviewed articles meeting the inclusion criteria were selected for thematic analysis and quality appraisal using the JBI checklist. The findings reveal four interrelated categories of barriers—technological (limited access to assistive tools and digital infrastructure), psychological (low confidence and digital self-efficacy), institutional (weak policy implementation and limited training support), and social (stigma and exclusion from networks). These multidimensional barriers are mutually reinforcing, collectively restricting PWDs' ability to establish and sustain digital enterprises. The study highlights the importance of inclusive policies, enhanced digital accessibility, and empowerment-oriented capacity-building initiatives in supporting Malaysia's progress toward achieving Sustainable Development Goals (SDGs) 8 and 10, specifically decent work and reduced inequalities.

Keywords: Digital entrepreneurship, Persons with Disabilities (PWDs), Barriers, Systematic Literature Review, Accessibility.

INTRODUCTION

Entrepreneurship has long been recognised as a vital catalyst for economic growth, innovation, and social inclusion. For persons with disabilities (PWDs), however, the pathway to entrepreneurship is often constrained by structural, institutional, and attitudinal challenges that limit their participation in economic activities. In Malaysia, as in many developing economies, these challenges arise from social prejudice, inadequate accessibility, and limited institutional support (Cechony & Brown, 2025; Finkelstein & Gross, 2025). Although entrepreneurship provides opportunities for self-reliance, financial independence, and empowerment, many PWDs continue to encounter barriers that restrict their involvement in entrepreneurial ventures.

Globally, an estimated 1.3 billion people, or approximately 16 per cent of the world's population, live with some form of disability, and this proportion is expected to increase as populations age and life expectancy rises (World Health Organisation, 2020). In Malaysia, the number of registered PWDs has grown steadily, reflecting demographic shifts and greater recognition of disability through national registration systems (Department of Statistics Malaysia, 2023). The Malaysian government has implemented several important initiatives, including the Persons with Disabilities Act 2008, the National Policy and Plan of Action for Persons with Disabilities, and its ratification of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD). These

policy frameworks align with the Sustainable Development Goals (SDGs), specifically Goals 8 and 10, which promote decent work and economic growth, and aim to reduce inequalities and ensure social inclusion. They collectively affirm Malaysia's commitment to promoting equitable participation of PWDs in education, employment, and entrepreneurship.

Despite these progressive measures, significant barriers persist that prevent PWDs from fully engaging in entrepreneurial activities. Research highlights several challenges, including limited access to digital infrastructure, insufficient funding mechanisms, inadequate training opportunities, and persistent social stigma (Revillard, 2023; Semrau et al., 2024). Many PWDs also remain unregistered, which restricts their access to institutional programs and financial assistance. Consequently, a gap persists between policy intentions and actual implementation, indicating that inclusion efforts have not yet reached the most marginalised groups. Addressing these issues requires a comprehensive understanding of the specific barriers that constrain PWDs from participating in entrepreneurial ecosystems, particularly within the expanding digital economy.

Digital entrepreneurship has emerged as a transformative pathway that enables individuals to establish and operate businesses using online technologies, e-commerce platforms, and social media tools. For PWDs, it provides the potential to overcome mobility and accessibility constraints by allowing flexible work arrangements and access to global markets. However, digital entrepreneurship does not automatically guarantee inclusion. Many PWDs continue to face technological barriers, such as limited access to assistive tools, inaccessible web platforms, inadequate digital literacy, and restricted participation in online financial or mentorship networks (Kraus et al., 2023). These challenges highlight that digital transformation alone is insufficient without a parallel emphasis on accessibility and inclusion.

Although the literature on entrepreneurship and disability has grown, there remains a lack of comprehensive synthesis focusing specifically on the barriers that hinder PWDs from participating in digital entrepreneurship. Existing studies often examine isolated issues, such as accessibility or funding, without integrating them into a cohesive analytical framework. To address this gap, the present study conducts a systematic literature review to identify, categorise, and analyse the main challenges faced by PWDs in digital entrepreneurship. Through this method, the study aims to provide a comprehensive understanding of the technological, psychological, institutional, and social barriers that affect PWDs' participation in digital business activities.

By consolidating evidence from previous research, this study contributes to the ongoing discourse on inclusive and equitable digital economies. It offers valuable insights for policymakers, educators, and support organisations to design interventions that address these barriers and foster greater participation of PWDs in entrepreneurship. Ultimately, the study emphasises the need to develop a digital entrepreneurial ecosystem that is accessible, empowering, and inclusive for all individuals, regardless of ability.

LITERATURE REVIEW

Digital Entrepreneurship and Inclusion

Digital entrepreneurship refers to the process of identifying, developing, and managing business opportunities utilising digital technologies, including e-commerce platforms, social media, mobile applications, and cloud-based systems (Hong et al., 2024). Unlike traditional entrepreneurship, which often requires substantial capital investment and physical presence, digital entrepreneurship lowers entry barriers and allows ventures to operate flexibly from almost any location. Through online platforms, entrepreneurs can deliver products and services to global audiences with minimal overhead costs, fostering innovation and expanding economic participation (Widjajanti & Jumbri, 2025).

In Malaysia, the rapid growth of the digital economy has been driven by intense internet penetration and supportive policy frameworks. The Malaysia Digital Economy Corporation (2024) reported that 97.7% of Malaysians have internet access, and national e-commerce income reached RM1.2 trillion in 2023. Digital activities are projected to contribute 25.5% of the national GDP by 2025 (Malaysia Competition Commission, 2025). This expansion has created new opportunities for inclusive participation, enabling marginalised groups such as women, youth, and PWDs to engage in entrepreneurial activities (Dakung et al., 2022).

The COVID-19 pandemic further accelerated digital adoption, revealing the potential of online business models to foster resilience and adaptability (Kreiterling, 2023). Digital entrepreneurship is therefore seen as a transformative pathway for individuals with disabilities, allowing them to overcome traditional mobility and accessibility barriers while engaging in innovation-driven economic activities.

Barriers to Entrepreneurship for Persons with Disabilities

Despite the promise of digital entrepreneurship, PWDs continue to face multiple barriers that restrict their participation in entrepreneurial ecosystems. These barriers are multidimensional, encompassing physical, technological, social, and institutional challenges. Many PWDs encounter limitations in accessing affordable internet services, assistive devices, and accessible digital infrastructure (Droutsas et al., 2025). A significant number of websites, e-commerce platforms, and digital payment systems lack accessibility features, making it difficult for individuals with visual, hearing, or mobility impairments to navigate online business environments effectively (Tsatsou, 2020). Limited digital literacy also prevents many PWDs from maximising the benefits of emerging technologies. The high cost of adaptive tools and limited access to training programs compound these issues, creating a cycle of digital exclusion that reinforces socioeconomic inequality (Kraus et al., 2019).

Social stigma and negative perceptions of disability remain pervasive obstacles to inclusion. PWDs are frequently viewed as dependent or less capable of managing businesses, which discourages investors and partners from engaging with them (Yusof et al., 2020). This stigma often translates into internalised feelings of self-doubt and reduced entrepreneurial self-efficacy. As a result, even when digital opportunities exist, many PWDs hesitate to participate due to fear of failure or lack of confidence.

Policy frameworks such as Malaysia's Persons with Disabilities Act 2008 and the National Policy and Plan of Action for Persons with Disabilities demonstrate the government's commitment to inclusion. However, implementation gaps remain. Employment quotas, welfare-based assistance, and funding programs often fail to reach unregistered or rural PWDs (Izam & Mohamed, 2020). Bureaucratic constraints, lack of coordination among agencies, and inconsistent data collection further limit access to entrepreneurial resources. As a result, many PWDs remain excluded from capacity-building programs, financial support schemes, and mentorship networks that could foster digital business participation (Revillard, 2023).

Financial exclusion is another critical challenge. Many PWDs lack access to credit or investment capital due to restrictive eligibility requirements, lack of collateral, and perceived financial risk. Even when financing programs exist, awareness and accessibility remain limited. This restricts their ability to acquire necessary technology, build online platforms, or sustain business operations.

Collectively, these barriers illustrate that digital entrepreneurship is not inherently inclusive. Without intentional policy design and targeted intervention, PWDs risk being left behind in the digital economy.

Institutional and Policy Context

Malaysia has made notable progress toward creating a more inclusive digital economy through frameworks such as the Malaysia Digital Economy Blueprint (MyDIGITAL) and the Twelfth Malaysia Plan (2021–2025), which emphasise equitable access to digital opportunities. The country's adherence to the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) and alignment with the SDGs further demonstrate its policy commitment to inclusion.

However, policy implementation remains uneven, and many initiatives still adopt a welfare-based approach rather than an empowerment-oriented one. Scholars argue that policies must evolve to emphasise entrepreneurship as a form of economic participation rather than as a social support measure (Samer & Rashid, 2024). Furthermore, coordination between public institutions, private sectors, and non-governmental organisations is essential to ensure that digital infrastructure, financing, and training programs are accessible to all PWDs.

Inclusive design standards, targeted digital literacy initiatives, and incentive mechanisms for accessible technology development could play a pivotal role in reducing structural inequality. Raising societal awareness

through education and media representation is also crucial in challenging stereotypes and showcasing successful PWD entrepreneurs, which can inspire broader participation and acceptance.

Research Gaps

Although research on entrepreneurship and disability is expanding, existing studies remain fragmented and often context-specific. Most focus on traditional business environments, while limited attention is given to the distinct challenges associated with digital entrepreneurship. Moreover, the interaction between technological, psychological, and institutional factors is rarely analysed in an integrated manner.

This systematic review seeks to fill that gap by synthesising existing evidence on the barriers faced by PWDs in digital entrepreneurship, particularly in Malaysia. It identifies recurring themes across technological, psychological, institutional, and social dimensions, providing a comprehensive understanding of how these factors collectively shape entrepreneurial participation. The review also highlights areas requiring further policy attention and research to promote a truly inclusive digital entrepreneurial ecosystem.

METHODOLOGY

This study is based on qualitative research using the Systematic Literature Review (SLR) method. It focuses on identifying, analysing, and synthesising previous studies related to the barriers faced by PWDs in engaging with digital entrepreneurship in Malaysia. The systematic review process was conducted carefully to ensure a critical evaluation of past research findings and to obtain meaningful insights for future policy and practice.

Formulation of the Research Question

The formulation of research questions was guided by the PICo framework, which represents Population (P), Interest (I), and Context (Co). For this study:

- **Population (P):** Persons with disabilities (PWDs)
- **Interest (I):** Barriers and challenges in digital entrepreneurship
- **Context (Co):** Malaysia

Based on these elements, the main research question was developed as:

“What are the key barriers that hinder PWDs in Malaysia from participating effectively in digital entrepreneurship?”

The sub-questions focused on identifying types of barriers (technological, psychological, institutional, and social) and understanding their interrelationships.

Search Strategy

The Scopus database was selected as the primary source for this systematic review because it offers comprehensive coverage of peer-reviewed literature across disciplines relevant to entrepreneurship, digital innovation, and disability studies. Although this approach may have excluded some regionally indexed or earlier works, Scopus was prioritized to ensure methodological consistency, academic rigor, and access to high-quality, citable publications. The search was limited to the period from 2020 to 2025 to capture studies reflecting Malaysia's accelerated digitalisation phase, post-pandemic transformations, and policy reforms that have shaped contemporary entrepreneurial ecosystems. This timeframe aligns with national initiatives such as the Twelfth Malaysia Plan and the MyDIGITAL Blueprint, both of which emphasise inclusive participation in the digital economy. Consequently, the review provides a current synthesis of barriers encountered by Malaysian Persons with Disabilities (PWDs) in engaging with digital entrepreneurship within a rapidly evolving economic environment.

The search process adhered to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines to maintain transparency, replicability, and systematic rigour. Keyword combinations were developed using Boolean operators to identify relevant studies, as shown below:

(“digital entrepreneurship” OR “online entrepreneurship” OR “e-entrepreneurship”)

AND ("persons with disabilities" OR "PWD" OR "disabled entrepreneurs")

AND ("barriers" OR "challenges" OR "constraints" OR "obstacles")

AND ("Malaysia").

The search was limited to journal articles and conference papers published in English between 2020 and 2025. Only studies that explicitly examined barriers or challenges experienced by PWDs in the context of digital entrepreneurship in Malaysia were included.

The study selection process followed four key stages, as outlined in the PRISMA framework: identification, screening, eligibility assessment, and inclusion. In total, fifty records were initially retrieved from Scopus. After screening and assessment based on inclusion and exclusion criteria, sixteen studies were finalised for the systematic review and thematic synthesis. The overall selection process is illustrated in Figure 1.

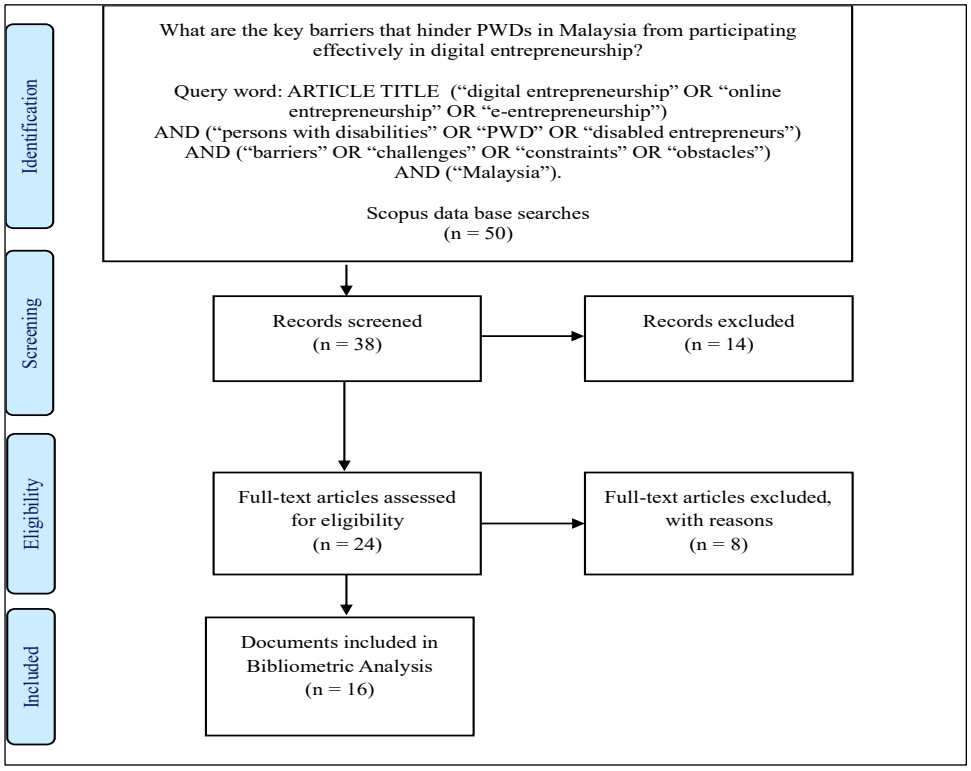

Figure 1: PRISMA Flow Diagram of Study Selection

Eligibility and Exclusion Criteria

To ensure that only high-quality and contextually relevant studies were included, specific inclusion and exclusion criteria were established. These criteria are summarised in Table 1.

Table 1: Criteria, Data Entry, and Exceptions

Criteria	**Inclusion**	**Exclusion**
Type of Document	Journal articles and conference papers	Books, book chapters, reviews

Language	English	Other languages
Publication Period	2020–2025	Before 2020
Focus Area	Barriers or challenges faced by PWDs in digital entrepreneurship in Malaysia	Studies on traditional entrepreneurship, general ICT use, or unrelated populations

The review process followed four stages under the PRISMA framework:

1. **Identification:** A total of 50 records were initially retrieved from the Scopus database using predefined search strings related to digital entrepreneurship, persons with disabilities, barriers, and the Malaysian context.

2. **Screening:** After removing duplicates and reviewing titles and abstracts for relevance, 38 records were retained for further consideration, while 14 were excluded because they did not meet the study scope.

3. **Eligibility:** The full texts of 24 articles were assessed against the inclusion and exclusion criteria to determine methodological suitability and contextual relevance.

4. **Inclusion:** Following detailed evaluation, 16 studies met all eligibility requirements and were included in the final synthesis for bibliometric and thematic analysis.

The complete article selection process is summarised visually in Figure 1 (PRISMA Flow Diagram of Study Selection).

Data Extraction and Analysis

Data from the selected studies were extracted systematically using a data matrix that included the author, year, objectives, methodology, and key findings. The extracted data were then analysed through thematic content analysis to identify patterns and categorise barriers into four major themes:

1. **Technological barriers** Include Limited digital access, a lack of assistive technology, and poor internet infrastructure.

2. **Psychological barriers** Include Low confidence, a lack of motivation, and a fear of failure.

3. **Institutional barriers:** Weak policy enforcement, inadequate financial support, and limited training programs.

4. **Social barriers:** Stereotyping, exclusion, and limited networking opportunities.

Quality Appraisal

To strengthen methodological rigor, the JBI Critical Appraisal Checklist for qualitative and cross-sectional studies was used to assess the quality of included articles. The checklist evaluates the clarity of research objectives, the appropriateness of the methodology, the validity of data analysis, and the relevance of the findings. Studies scoring below 50% were excluded to maintain the credibility of the results. Of the sixteen studies reviewed, twelve were rated as high quality and four as moderate quality. Table 2 summarises the appraisal outcomes.

Table 2: Summary of Study Quality Ratings According to the JBI Appraisal Tool

Quality Rating	**Number of Studies**	**Key Indicators**
High	12	Clear objectives, robust design, consistent data collection and analysis, strong contextual alignment

Moderate	4	Minor methodological or reporting limitations (e.g., limited sample size, incomplete data triangulation)
Low Quality	0	None included, as studies below the 50% JBI threshold were excluded

Quality Assessment

Each selected article was evaluated for methodological rigour, clarity of objectives, and relevance to the research questions. Only peer-reviewed publications from reputable journals indexed in Scopus were retained to ensure the validity and reliability of findings.

Ethical Considerations

As this study relies entirely on secondary data from published academic sources, no ethical approval was required. However, all original works were acknowledged and cited appropriately in accordance with academic integrity principles.

RESULTS

The systematic review analysed sixteen peer-reviewed studies published between 2020 and 2025 that explored the barriers faced by PWDs in engaging with digital entrepreneurship in Malaysia. The results reveal that these barriers are multifaceted and interconnected, spanning technological, psychological, institutional, and social dimensions.

Quality of Included Studies

The methodological quality of the sixteen studies included in this review was generally high. As presented in Table 2 (see Methodology section), twelve studies received a high-quality rating, and four were rated as moderate, according to the JBI Critical Appraisal Checklist. These results demonstrate a high level of methodological rigor, providing confidence in the reliability and validity of the evidence synthesized in this review.

Overview of Included Studies

Of the sixteen studies included in this review, nine focused explicitly on the Malaysian context, while the remaining seven examined broader international or regional settings that were partially relevant to Malaysia. This distinction is essential for understanding how global patterns of digital inclusion interact with the country's local realities. The Malaysian studies predominantly highlighted institutional and social barriers, including weak policy implementation, limited access to funding, and persistent societal stigma. In contrast, international studies tended to emphasise technological and accessibility challenges, reflecting variations in infrastructure, policy maturity, and cultural contexts. Table 3 summarises the characteristics of the Malaysian-focused studies.

Table 3: Summary of Malaysian-Focused Studies on Barriers to Digital Entrepreneurship among PWDs

No	Author (s) & year	Focus Area	Key Barrier Category	Methodology
1	Wahid et al. (2023)	Social entrepreneurship and empowerment models for PWDs in Malaysia	Social / Psychological	Qualitative (Interviews)
2	Rofe & Marzuki (2022)	Business sustainability and policy factors	Institutional / Social	Literature Review

3	Samer & Rashid (2024)	Personality traits and entrepreneurial behaviour among PWDs	Psychological / Institutional	Quantitative (Survey)
4	Halid et al. (2020)	Employment and self-employment initiatives for PWDs	Institutional / Social	Case Study
5	Izam & Mohamed (2020)	Barriers to employment and inclusion for PWDs in Malaysia	Institutional	Qualitative
6	Yusof et al. (2020)	Higher education and digital inclusion challenges	Social / Institutional	Mixed Methods
7	Dakung et al. (2022)	Entrepreneurship education and inclusion	Institutional / Psychological	Quantitative
8	Finkelstein & Gross (2025)	Barriers to equality and inclusion in developing economies	Institutional / Social	Thematic Review
9	Revillard (2023)	Disability employment quotas and policy implementation gaps	Institutional	Policy Analysis

These studies highlight that institutional and social barriers dominate the Malaysian landscape, particularly the lack of effective policy execution, fragmented support systems, and social stigmas that undermine confidence and opportunity among PWDs.

Thematic Findings

The thematic analysis identified four interrelated categories of barriers: technological, psychological, institutional, and social. These categories, while distinct, reinforce one another to form a systemic web of exclusion.

Technological Barriers

Technological challenges were the most consistently reported across the reviewed studies. PWDs often experience limited access to affordable digital tools, assistive technologies, and reliable internet connectivity, which are prerequisites for successful digital entrepreneurship (Samer & Rashid, 2024). Many e-commerce platforms and digital interfaces fail to comply with accessibility standards, such as the Web Content Accessibility Guidelines (WCAG), resulting in usability issues for individuals with visual, hearing, or mobility impairments.

Additionally, low levels of digital literacy and the high cost of adaptive technologies further limit participation in online business activities. These challenges are compounded by rapid technological change, which creates a continuous need for learning and adaptation. The findings suggest that without targeted interventions to enhance digital skills and provide access to affordable assistive tools, PWDs will remain excluded from the mainstream digital economy.

This underscores the importance of designing inclusive digital platforms and training programs that prioritise accessibility. Partnerships between government agencies, technology developers, and disability organisations could help bridge the accessibility gap and foster greater participation of PWDs in the digital entrepreneurial ecosystem.

Psychological Barriers

Psychological barriers, though less visible, deeply influence entrepreneurial intent and persistence among PWDs. Recurring themes include low self-efficacy, fear of failure, and internalised stigma, which discourage many from launching or scaling digital ventures. Many individuals internalise negative social perceptions of disability as incapability, resulting in reluctance to assume risk or innovate.

These constraints are exacerbated by limited exposure to role models and a lack of peer support networks. Studies of entrepreneurship among PWDs emphasise that mentorship and social support can help overcome psychological barriers (Wahid et al., 2023). Thus, capacity-building should integrate psychological coaching, role model exposure, and peer group interactions to foster confidence and resilience.

Institutional Barriers

Institutional barriers reflect weaknesses in policy design, implementation, and coordination. Although Malaysia has established strong legal and policy frameworks, such as the Persons with Disabilities Act 2008 and the National Policy and Plan of Action for Persons with Disabilities, these initiatives often face challenges in practical execution (Izam & Mohamed, 2020). Limited funding, bureaucratic inefficiencies, and inconsistent enforcement result in unequal access to entrepreneurial support programs.

Furthermore, many PWDs remain unregistered, preventing them from accessing financial aid, training opportunities, or other institutional resources (Rofe et al., 2022). The lack of integrated databases also hinders effective monitoring and evaluation of policy outcomes. Financial exclusion remains another pressing issue, as PWDs frequently encounter difficulties in obtaining loans or investment capital due to a lack of collateral or perceived credit risk.

The discussion reveals that addressing these institutional barriers requires a shift from welfare-oriented policies toward empowerment-based frameworks that promote entrepreneurship as a form of economic participation. Enhancing inter-agency coordination, simplifying administrative procedures, and ensuring inclusive access to digital finance schemes are essential steps toward achieving this goal.

Social Barriers

Social barriers remain deeply entrenched in cultural attitudes and societal perceptions of disability. Persistent stereotypes portraying PWDs as dependent or incapable of managing businesses contribute to discrimination in both formal and informal economic settings (Halid et al., 2020). Such attitudes limit access to professional networks, mentorship opportunities, and market trust.

The lack of visibility of successful PWD entrepreneurs in media and community narratives further reinforces these barriers. Public awareness campaigns that highlight positive examples of PWD-led enterprises can play a transformative role in reshaping societal perceptions of PWDs. Collaboration among public institutions, private organisations, and advocacy groups is also necessary to promote inclusive entrepreneurship as a legitimate and valued component of national economic development.

The findings align with previous studies, which emphasise that inclusion in digital entrepreneurship is not solely a technological issue, but also a social one. Changing attitudes and promoting acceptance are as crucial as providing infrastructure and financial resources.

INTEGRATED DISCUSSION

The findings of this review indicate that barriers to digital entrepreneurship among PWDs are highly interconnected and mutually reinforcing. Technological inaccessibility restricts opportunities for learning, networking, and business operations, which in turn intensifies psychological insecurities and reduces confidence. Limited institutional support, including insufficient funding mechanisms, inconsistent policy execution, and inadequate vocational training, further compounds these challenges. Social stigma and negative public attitudes continue to undermine self-efficacy and discourage participation, creating a cycle of exclusion that restricts PWDs from fully realizing their entrepreneurial potential. This dynamic interaction demonstrates that digital exclusion among PWDs is not only a technological issue but also a social and structural one that requires systemic intervention.

A comprehensive and inclusive policy response is therefore essential. Improvements in digital accessibility should be implemented in parallel with initiatives that expand financial inclusion, enhance entrepreneurial skills,

and foster social integration. Technological innovations, such as affordable assistive tools and universally designed digital platforms, must be accompanied by accessible training opportunities that build digital literacy and confidence among PWDs. Policy coherence is equally important to ensure that government programmes, financial schemes, and entrepreneurship initiatives reach the intended beneficiaries effectively and equitably.

The success of these interventions depends on collaborative engagement among multiple stakeholders. Government agencies should take the lead in strengthening policy frameworks, improving cross-agency coordination, and investing in accessible digital infrastructure. The private sector should contribute by incorporating inclusive design principles, promoting fair employment practices, and opening financial and market access to PWD entrepreneurs. Educational institutions have a pivotal role in integrating digital entrepreneurship education into inclusive learning programmes that cater to diverse abilities. Civil society organisations and advocacy groups can provide essential support through mentorship, awareness campaigns, and empowerment programmes that connect PWD entrepreneurs with resources and networks.

Within the Malaysian context, these collaborative efforts align with national strategies such as the Twelfth Malaysia Plan and the MyDIGITAL Blueprint, both of which emphasise digital inclusion and equitable participation in the digital economy. Strengthening the ecosystem for PWDs in digital entrepreneurship will not only enhance individual livelihoods but also contribute to national productivity and innovation capacity. By addressing the structural, psychological, and social dimensions of exclusion through coordinated action, Malaysia and other developing economies can build a more inclusive and resilient digital entrepreneurial landscape. Such progress will advance the achievement of the Sustainable Development Goals, particularly Goal 8 on decent work and economic growth and Goal 10 on reducing inequalities, ensuring that digital transformation becomes a driver of inclusive prosperity.

CONCLUSION AND POLICY IMPLICATIONS

Conclusion

This study conducted a systematic review to identify and synthesise the barriers that hinder PWDs from participating effectively in digital entrepreneurship in Malaysia. The findings demonstrate that these barriers are complex, multidimensional, and deeply interconnected, encompassing technological, psychological, institutional, and social dimensions.

Technological challenges remain a significant limitation, particularly in relation to inadequate digital infrastructure, high costs of assistive technologies, and the limited application of universal design principles in online platforms. Psychological barriers, including low self-efficacy, fear of failure, and internalised stigma, reduce entrepreneurial motivation and willingness to engage with digital opportunities. Institutional weaknesses, including fragmented policy implementation, inconsistent support mechanisms, and limited access to funding and training, further hinder inclusion. Social factors, including discrimination, stereotypes, and a lack of community acceptance, reinforce these structural barriers and sustain a cycle of exclusion.

The study concludes that digital entrepreneurship, while offering new and flexible pathways for empowerment, does not automatically guarantee inclusivity. Without deliberate and targeted interventions, the structural and attitudinal barriers identified will continue to marginalise PWDs from fully benefiting from the digital economy. To achieve genuine inclusion, coordinated and multi-stakeholder action is required. Government agencies must prioritise accessible policy frameworks, inclusive infrastructure, and effective implementation mechanisms. The private sector should contribute by embedding accessibility and universal design in digital innovation and entrepreneurship ecosystems. Educational institutions and training providers must cultivate digital literacy, entrepreneurial competence, and inclusive learning environments, while civil society organisations play a critical role in advocacy, mentorship, and capacity-building efforts.

Through these integrated efforts, Malaysia can strengthen its commitment to equitable digital transformation as envisioned in the Twelfth Malaysia Plan and the MyDIGITAL Blueprint. Promoting inclusive digital entrepreneurship not only enhances the economic independence of PWDs but also contributes to national productivity, innovation, and social cohesion. Ultimately, such efforts will support the attainment of the

Sustainable Development Goals, particularly Goal 8 on decent work and economic growth and Goal 10 on reducing inequalities, ensuring that no one is left behind in the country's journey toward digital inclusion and sustainable prosperity.

Policy Implications

The findings of this study offer several policy implications that can strengthen digital inclusion and entrepreneurship among PWDs in Malaysia.

First, improving digital accessibility and infrastructure is crucial. Governments and technology providers should ensure that all digital platforms comply with universal accessibility standards, while making affordable internet services and assistive devices widely available. Public and private sector partnerships can play a crucial role in expanding digital access to underserved and rural communities, thereby reducing the technological divide that limits participation and access to information.

Second, there is a need to strengthen digital and entrepreneurial skills among PWDs. Inclusive training programs that focus on digital literacy, business management, and financial competencies should be expanded to encompass a broader range of diverse groups. Mentorship and peer-support initiatives can also enhance self-confidence and provide practical exposure to real-world entrepreneurship practices.

Third, institutional coordination and policy implementation must be improved to enhance the efficiency of existing support systems. Policymakers should promote closer collaboration between relevant agencies to minimise duplication of efforts and ensure more effective program delivery. Regular updates of national disability databases are also needed to improve targeting and service delivery. Furthermore, policies should shift from welfare-based support toward empowerment-driven strategies that build independence and long-term sustainability.

Fourth, access to finance and markets remains a critical enabler. Financial institutions should develop inclusive financing mechanisms, such as microloans, grants, and social enterprise funding schemes, to support the growth of small businesses. In parallel, accessible e-commerce and networking platforms can help PWDs reach broader markets and connect with customers, suppliers, and business partners both locally and internationally.

Fifth, social inclusion and awareness initiatives should be intensified. Public campaigns, educational programs, and positive media representation can help change societal attitudes and reduce stigma associated with disability. Highlighting the achievements of PWD entrepreneurs will promote greater acceptance and encourage others to pursue digital business opportunities.

Ultimately, promoting multi-stakeholder collaboration is crucial for achieving sustainable inclusion. Effective participation of government, academia, the private sector, and civil society can foster the establishment of inclusive innovation hubs, accessible training centres, and integrated entrepreneurship support systems. Such collaboration ensures that digital transformation initiatives are both equitable and sustainable, aligning with Malaysia's national aspirations for inclusive growth under the SDGs.

Limitations

This review is limited by its reliance on the Scopus database and a five-year publication window (2020–2025). While these parameters ensured the inclusion of contemporary and high-quality research, they may have excluded earlier foundational or regionally published works. Future reviews should be expanded to include databases such as Web of Science, PubMed, or EBSCOhost, and incorporate grey literature to enhance comprehensiveness.

Future Research Directions

Future research should further investigate how different types of disabilities impact participation in digital entrepreneurship and how various barriers intersect across social, institutional, and technological dimensions. Comparative studies between urban and rural contexts could reveal regional disparities in digital inclusion.

Longitudinal studies also help evaluate the long-term impact of government initiatives, training programs, and policy reforms on entrepreneurial success among PWDs.

In addition, future investigations should examine successful models of digital entrepreneurship among PWDs to identify best practices that can be replicated across different socioeconomic settings. Greater empirical research on inclusive innovation ecosystems, the role of digital intermediaries, and cross-sector collaborations will provide deeper insights into building a more accessible and resilient digital economy for all.

ACKNOWLEDGEMENT

The authors express their sincere appreciation to Universiti Teknikal Malaysia Melaka (UTeM) for the continuous support, research facilities, and conducive academic environment provided throughout the completion of this study and its publication.

REFERENCES

1. Cechony, A., & Brown, A. (2025). Addressing structural, social, and symbolic exclusion of disabled people. Journal of Applied Social Science. https://doi.org/10.1177/19367244251344530
2. Dakung, R. J., Bell, R., Orobia, L. A., & Yatu, L. (2022). Entrepreneurship education and the moderating role of inclusion in the entrepreneurial action of disabled students. The International Journal of Management Education, 20(3), 100715. https://doi.org/10.1016/J.IJME.2022.100715
3. Department of Statistics Malaysia. (2025). *Person with disability statistics, Malaysia, 2023*. https://www.dosm.gov.my/site/downloadrelease?id=person-with-disability-statistics-malaysia-2023&lang=English&admin_view=
4. Droutsas, N., Spyridonis, F., Daylamani-Zad, D., & Ghinea, G. (2025). Web accessibility barriers and their cross-disability impact in eSystems: A scoping review. Computer Standards & Interfaces, 92, 103923. https://doi.org/10.1016/J.CSI.2024.103923
5. Finkelstein, A., & Gross, T. (2025). Insights of people with disabilities regarding barriers to equality and inclusion. Disability & Society, 40(3), 773–794. https://doi.org/10.1080/09687599.2024.2304243
6. Halid, H., Osman, S., Noor, S., & Halim, J. A. (2020). Overcoming Unemployment Issues among Persons with Disability (PWDs) through Social Entrepreneurship. Albukhary Social Business Journal, 1, 57–70. https://doi.org/10.55862/asbjV1I2a006
7. Hong, Y., Sawang, S., & Yang, H. P. (Sophie). (2024). How is entrepreneurial marketing shaped by E-commerce technology: A case study of Chinese pure-play e-retailers. International Journal of Entrepreneurial Behavior & Research, 30(2–3), 609–631. https://doi.org/10.1108/IJEBR-10-2022-0951
8. Izam, S., & Mohamed, W.A.W. (2020). The Unemployment of Special Needs with Learning Disability People in Malaysia: Reality or Fantasy. Journal of Economic Info, 7(2), 141–150. https://doi.org/10.31580/JEI.V7I2.1442
9. Kraus, S., Palmer, C., Kailer, N., Kallinger, F. L., & Spitzer, J. (2019). Digital entrepreneurshipA research agenda on new business models for the twenty-first century. International Journal of Entrepreneurial Behaviour & Research, 25(2), 353–375. https://doi.org/10.1108/IJEBR-06-2018-0425
10. Kraus, S., Vonmetz, K., Bullini Orlandi, L., Zardini, A., & Rossignoli, C. (2023). Digital entrepreneurship: The role of entrepreneurial orientation and digitalisation for disruptive innovation. Technological Forecasting and Social Change, 193, 122638. https://doi.org/10.1016/J.TECHFORE.2023.122638
11. Kreiterling, C. (2023). Digital innovation and entrepreneurship: a review of challenges in competitive markets. Journal of Innovation and Entrepreneurship, 12(1), 1–13. https://doi.org/10.1186/S13731-023-00320-0/TABLES/1
12. Malaysia Competition Commission. (2025). *Market review on the digital economy ecosystem under the Competition Act 2010: Interim report*. https://www.mycc.gov.my/sites/default/files/2025-03/Public_Interim%20report%20for%20Market%20Review%20on%20the%20Digital%20Economy%20Ecosystem%20under%20the%20Competition%20Act%202010.pdf
13. Malaysia Digital Economy Corporation. (2025). *Sharing Economy*. Retrieved October 14, 2025, from https://mdec.my/sharingeconomy

14. Revillard, A. (2023). The disability employment quota, between social policy and anti-discrimination. Global Social Policy, 23(1), 92–108. https://doi.org/10.1177/14680181221138558
15. Rofe, N.A.A., & Marzuki, S.Z.S. (2022). Person with disabilities and business sustainability factors in Malaysia: A review of literature. ASEAN Entrepreneurship Journal (AEJ) |Vol. 8(9). https://aej.uitm.edu.my/view-paper.php?paper=20220762e34e649b8fe
16. Samer, A.H.A., & Rashid, A. A. (2024). The influencing factors of personality that affect entrepreneurship development among people with disabilities. Journal of Enterprising Communities: People and Places in the Global Economy, 18(3), 576–600. https://doi.org/10.1108/JEC-09-2022-0138
17. Tsatsou, P. (2020). Digital inclusion of people with disabilities: a qualitative study of intra-disability diversity in the digital realm. Behaviour & Information Technology, 39(9), 995–1010. https://doi.org/10.1080/0144929X.2019.1636136
18. Wahid, H. A., Hishamuddin, A. Z., & Rahman, R. A. (2023). Social Entrepreneurship Approach Towards Leveraging Persons with Disabilities (PwD) in Malaysia. International Business Education Journal, 16(1), 85–97. https://doi.org/10.37134/IBEJ.VOL16.1.7.2023
19. Widjajanti, K., & Jumbri, I. A. (2025). Technopreneurship, innovation capability, and social media marketing as catalysts for competitive advantages: A study of batik MSMEs in Pekalongan, Indonesia. Multidisciplinary Science Journal, 7(8), 2025367–2025367. https://doi.org/10.31893/MULTISCIENCE.2025367
20. World Health Organisation. (2023). Disability. Retrieved October 6, 2025, from https://www.who.int/en/news-room/fact-sheets/detail/disability-and-health
21. Yusof, Y., Chan, C. C., Hillaluddin, A. H., Ahmad Ramli, F. Z., & Mat Saad, Z. (2020). Improving inclusion of students with disabilities in Malaysian higher education. Disability & Society, 35(7), 1145–1170. https://doi.org/10.1080/09687599.2019.1667304