

Empowering Asnaf Entrepreneurs in the Digital Era Through Productive Zakat: A Conceptual Framework for Sustainable Entrepreneurship

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Abstract: *The rapid evolution of digital technology and the proliferation of e-commerce platforms have transformed the entrepreneurial landscape, presenting both opportunities and challenges for marginalized groups such as asnaf entrepreneurs. As recipients of zakat under Islamic social finance, asnaf represent a unique demographic whose integration into the digital economy requires targeted and faith-aligned interventions. This conceptual article explores the intersection of productive zakat, digitalization, and e-commerce, and proposes a multidimensional framework to support the sustainable empowerment of asnaf entrepreneurs. Drawing upon ten key research themes including digital transformation through zakat, digital literacy levels, platform effectiveness, digital business models, and barriers to adoption this study synthesizes existing literature and highlights institutional efforts by zakat bodies in Malaysia and other Muslim-majority contexts. It adopts a qualitative conceptual methodology, reviewing empirical and theoretical contributions across Islamic economics, entrepreneurship, and digital inclusion domains. The findings indicate that while various digital initiatives have emerged, challenges such as limited digital competencies, inadequate infrastructure, and fragmented training modules persist. Moreover, the lack of performance measurement tools and integration of AI-driven strategies hampers the scalability and sustainability of asnaf enterprises. This article proposes the development of a zakat-based digital entrepreneurship model, supported by tailored training, strategic platform engagement, and AI-enabled marketing analytics. The framework aims to bridge gaps between Islamic social finance principles and modern digital business practices. In conclusion, the paper calls for collaborative efforts between zakat institutions, policymakers, and academia to create evidence-based, digitally inclusive ecosystems that transform asnaf beneficiaries into resilient, self-reliant digital entrepreneurs thereby aligning social justice with economic innovation in the digital age.*

Keywords: Asnaf entrepreneurs, productive zakat, digital economy, e-commerce empowerment, Islamic social finance

1. Introduction

The convergence of digital technology and Islamic social finance offers unprecedented opportunities to uplift economically disadvantaged communities, particularly the asnaf a group eligible to receive zakat (almsgiving) under Islamic law. As the global economy becomes increasingly digitalized, the imperative to empower asnaf entrepreneurs through e-commerce and digital platforms has grown significantly (Bahri et al., 2021). Zakat institutions, historically tasked with social welfare distribution, are now reimagining their roles to foster sustainable livelihoods among recipients through productive zakat mechanisms. E-commerce and digital entrepreneurship provide viable pathways for income generation, skills enhancement, and long-term economic independence. Given the increasing emphasis on inclusive digital economies and the United Nations' Sustainable Development Goals (SDGs), particularly Goal 1 (No Poverty) and Goal 8 (Decent Work and Economic Growth), the digital transformation of asnaf represents not just a faith-based obligation but also a strategic development agenda for Muslim-majority countries such as Malaysia, Indonesia, and others in the Global South (Dumanska et al., 2021).

A growing body of research has begun to explore the role of zakat in economic empowerment, particularly through entrepreneurial development. Several studies affirm that productive zakat, zakat disbursed for entrepreneurial purposes rather than short-term relief can play a transformative role in alleviating poverty (Mawardi et al., 2023). Concurrently, literature on digital inclusion reveals that the digital divide continues to marginalize certain demographics, including the asnaf, from reaping the full benefits of digital economies (Xia et al., 2024). Research by Joremi et al., (2023) further show that asnaf entrepreneurs encounter multiple challenges in leveraging digital platforms, such as inadequate digital literacy, limited infrastructure, and lack of personalized training modules. While there are isolated success stories of zakat-assisted microenterprises thriving on platforms like Shopee or TikTok, systematic evidence on scalability and long-term sustainability remains sparse. Additionally, the effectiveness of digitalization initiatives launched by zakat institutions such as training programs or AI-enhanced marketing support has not been uniformly evaluated or benchmarked.

Despite these advancements, critical gaps persist in both practice and scholarly discourse. Many studies emphasize general entrepreneurship or Islamic finance but fail to adequately capture the intersectionality of faith-based funding, digital ecosystems, and marginalized communities. There is a noticeable lack of longitudinal research that evaluates the long-term performance, scalability, and sustainability of asnaf-led digital ventures. Moreover, there is insufficient integration of modern tools such as customer analytics, artificial intelligence (AI) and content performance metrics to enhance decision-making among asnaf entrepreneurs. Existing frameworks often neglect behavioral, cultural, and spiritual dimensions that influence digital readiness and entrepreneurial motivation among zakat recipients. Thus, a more holistic, interdisciplinary research agenda is needed one that incorporates Islamic socio-economic philosophy, digital business strategy, and real-world impact assessment (Meerangani et al., 2023).

In light of these findings, this article proposes a multidimensional approach to investigating the digital empowerment of asnaf entrepreneurs. It argues for deeper institutional collaboration between zakat boards, digital platforms, and academic researchers to co-create scalable, evidence-based models of empowerment. Future research should prioritize the development of contextualized training modules, the use of adaptive technologies such as AI and mobile-first

applications, and rigorous evaluation using metrics tailored to the asnaf demographic (Ahmad, K. A. et al., 2024). Policymakers must also consider revising zakat disbursement policies to favor outcome-oriented entrepreneurship and digital readiness over conventional consumption-based models. By filling empirical and conceptual gaps, scholars and practitioners can collectively enhance the transformative capacity of zakat in the digital age ensuring that the asnaf are not just passive recipients but active participants in shaping an equitable and resilient digital economy (Mohd Khalil & Mohamed Saniff, 2023).

2. Methodology

This conceptual article adopts a qualitative, theory-building research design to examine the intersection of asnaf entrepreneurship, productive zakat, e-commerce, and digitalization. As this study does not involve primary empirical data collection, the methodology is grounded in integrative literature synthesis and conceptual framework development an approach well-suited for theory advancement and interdisciplinary inquiry (Baraldi, 2023; Hilal, 2022; Rocco & Plakhotnik, 2009).

The data for this study comprises a comprehensive selection of scholarly literature sourced from reputable academic databases. Selection criteria include peer-reviewed journal articles, book chapters, and institutional reports published over the last two decades, with a focus on Islamic social finance, asnaf empowerment, digital transformation in small enterprises, e-commerce adoption, and the application of artificial intelligence in entrepreneurship. Preference is given to studies offering theoretical models, case studies, or evaluative insights relevant to the empowerment of marginalized communities through digital inclusion (Thomas & Harden, 2008).

A thematic analysis was employed to organize the literature into ten core research themes: (1) digital transformation through productive zakat, (2) digital literacy among asnaf entrepreneurs, (3) effectiveness of e-commerce platforms, (4) zakat-based digital entrepreneurship models, (5) barriers to digitalization, (6) tailored digital training programs, (7) digitalization initiatives by zakat institutions, (8) digital marketing strategies, (9) AI and customer analytics for empowerment, and (10) business sustainability in the digital economy. These themes serve as the foundation for synthesizing conceptual insights and identifying critical success factors, institutional enablers, and systemic constraints (Castleberry & Nolen, 2018; Kiger & Varpio, 2020).

Based on this synthesis, the study proposes a multidimensional conceptual framework that integrates Islamic social finance principles with contemporary digital entrepreneurship enablers. The framework highlights the roles of zakat institutions, digital training, AI-driven marketing tools, and platform ecosystems in facilitating sustainable economic empowerment for asnaf entrepreneurs. Additionally, the article recommends the development of performance measurement metrics such as income growth, digital adoption levels, and business sustainability indicators to guide future empirical validations. This methodological approach not only advances theoretical understanding but also offers a strategic foundation for policymakers and practitioners aiming to build digitally inclusive zakat ecosystems.

3. Literature Review

The intersection of Islamic social finance, digital entrepreneurship, and economic empowerment has gained increasing scholarly and institutional attention in recent years,

particularly in relation to marginalized groups such as asnaf entrepreneurs. Asnaf defined as zakat-eligible beneficiaries under Islamic jurisprudence represent a socioeconomically vulnerable demographic whose transformation into self-reliant entrepreneurs has become a central concern in Malaysia's zakat management discourse. With the proliferation of digital tools and e-commerce platforms, there is a timely imperative to explore how technology, when synergized with productive zakat, can catalyze inclusive and sustainable development.

Existing literature reveals a growing body of work on digital transformation within small and micro-enterprise contexts, as well as Islamic social finance mechanisms aimed at poverty alleviation. However, studies explicitly examining the nexus between zakat-funded entrepreneurship and digital inclusion remain sparse. While several empirical works highlight the challenges faced by asnaf in business development such as low digital literacy, limited access to markets, and infrastructural constraints systematic frameworks that align digital entrepreneurship strategies with zakat principles are noticeably lacking. Moreover, the effectiveness of interventions by zakat institutions in facilitating digital readiness and business sustainability among asnaf remains underexplored.

This review synthesizes scholarship across ten key thematic areas including digital literacy, e-commerce performance, zakat-funded entrepreneurship models, digital marketing strategies, and AI integration to uncover prevailing trends, institutional practices, and theoretical propositions. Particular attention is paid to conceptual gaps, including the absence of AI-informed performance analytics, fragmented digital training programs, and the lack of measurable outcomes tied to zakat disbursement for entrepreneurial purposes. By bridging these gaps, the literature review seeks to provide a holistic foundation for the development of a multidimensional framework that can guide future research, policy design, and institutional innovation at the intersection of digital transformation and Islamic social finance.

3.1 Digital Transformation of Asnaf through Productive Zakat

Digitally empowered productive zakat programmes have recently emerged as catalysts for entrepreneurial transformation among asnaf in Malaysia. Asni et al. (2025) conceptualised a Digital Marketing Support Scheme to be delivered via zakat institutions, integrating digital advertising subsidies, structured training, continuous mentoring, and community building to improve asnaf entrepreneurs' market access and e-commerce readiness. It proposes a phased rollout identification and basic training, subsidized support and monitoring, followed by self-empowerment recognition aimed at bridging the gap between zakat-funded capital assistance and actual sales growth through e-commerce integration. Meanwhile, Najwa Mohd Khalil & Shereeza Mohamed Saniff (2022) reviewed the transformation strategies employed by zakat bodies nationwide, highlighting that although institutions invest in developing asnaf entrepreneurs, clearer digital ready frameworks are still underdeveloped; their exploratory findings call for formalised digital transformation pathways within zakat frameworks.

Complementing this institutional perspective, real-world outcomes have shown encouraging signs. The MAIWP Pembangunan Premis Digital Usahawan programme (MAIWP–MyNIC collaboration, 2024) trained 100 asnaf entrepreneurs in digital marketing and website development, resulting in reported income increases of around 30 %, with participants earning between RM 3,500 - 6,000 monthly post intervention. Additionally, Meerangani et al., (2023) assessed digital entrepreneurship literacy among asnaf in Melaka, finding that literacy-driven support significantly enhances competitiveness in online marketplaces and aligns zakat interventions with IR 4.0 readiness. Together, these studies demonstrate that when productive zakat extends beyond capital provision to include digital transformation components such as

marketing training, platform adoption support, and continuous mentorship, it can substantially boost sales performance, market reach, and long term business sustainability among asnaf entrepreneurs.

3.2 Digital Literacy among Asnaf Entrepreneurs

Digital literacy among asnaf entrepreneurs plays a pivotal role in enabling their integration into the digital economy and enhancing business viability. Razinda Tasnim Abdul Rahim et al. (2023) conducted a study in Perlis focusing on digitalization channels such as social media, business websites, and delivery apps used by asnafpreneurs. The study highlighted nine business model elements (e.g., value propositions, customer segments, channels) and demonstrated that many asnaf entrepreneurs utilize digital channels predominantly for marketing and customer outreach. However, adoption is inconsistent, often limited by skill deficits in platform utilization and digital content management. Similarly, Khairul Azhar Meerangani et al. (2022) measured digital entrepreneurship literacy among asnaf zakat entrepreneurs in Melaka using quantitative survey methods. Their findings revealed moderate overall digital literacy, with gaps in areas such as digital marketing, data-driven decision-making, and use of e-commerce tools suggesting that training focused on these competencies significantly enhances competitive readiness in online markets.

More broadly, Rosli et al. (2023) developed a conceptual model linking business digitalization to performance outcomes for asnaf micro-entrepreneurs in Malaysia. Their PLS-SEM analysis of 155 respondents showed that digital values such as cost-effectiveness and interactivity significantly influence business performance, while technological compatibility and trust had no meaningful effect in this particular context. Taken together, these studies underscore that digital literacy is not merely a matter of access to devices or infrastructure but involves practical competencies such as content creation, e-commerce navigation, customer engagement, and interactive online behavior. For policy-makers and zakat institutions, this means that support programs must go beyond hardware distribution and focus on learner-centered, contextualized training modules that build digital confidence and actionable skills for asnaf entrepreneurs.

3.3 Effectiveness of E-Commerce Platforms on Asnaf Product Sales

E commerce platforms and digital marketing support schemes have increasingly been positioned as mechanisms to elevate the business performance of asnaf entrepreneurs. Asni et al. (2025) proposed a Digital Marketing Support Scheme for Asnaf Entrepreneurs, implemented by zakat institutions, that integrates structured training, advertising subsidies, continuous mentoring, and community building. They argue this model is capable of widening market access and optimizing platform adoption among asnaf, thereby enhancing sales outcomes and aligning with national digital economy goals. Similarly, Meerangani et al. (2025), evaluating the AsnafTech 4.0 Module in Negeri Sembilan, found that digital entrepreneurship training and mentorship significantly improved digital competencies and the marketability of asnaf products, although sales outcomes were measured indirectly via self-reported competitiveness.

Further qualitative research by Nuryati & Bahri (2022) in the ITQAN Journal identified the use of platforms such as Facebook, Instagram, WhatsApp, and YouTube as key channels for asnaf engagement. Their findings indicate that the combination of ongoing mentoring and platform-specific training improves online presence and business performance during and after pandemic lockdowns. Additional evidence comes from field-based training initiatives, such as the MAIWP Pembangunan Premis Digital Programme (Federal Territories), where asnaf entrepreneurs reportedly achieved up to 30% income growth and monthly earnings between

RM3,500 and RM6,000 post-training and website development support. Together, these studies illustrate that digital platforms when paired with targeted support interventions can substantively enhance sales and customer reach for asnaf entrepreneurs. However, success is contingent on professional training delivery, sustained institutional support, and access to affordable digital marketing tools.

3.4 A Digital Entrepreneurship Model Based on Zakat Support

In Malaysia, zakat institutions have increasingly sought to evolve beyond capital disbursement toward more holistic entrepreneurial ecosystems. Asni et al. (2025) propose a Digital Marketing Support Scheme aimed at empowering asnaf entrepreneurs through phased interventions by zakat bodies. Their model, published in *IJEMP*, emphasizes structured training, advertising subsidies, ongoing mentoring, and community building to facilitate e-commerce adoption and improve sales outcomes. This zakat-powered model is designed to move from capital dispersal to digital entrepreneurship via a three-phase approach: onboarding and basic training; subsidized digital support and monitoring; and empowerment with recognition.

Supporting the broader institutional and technological context, Abdul Rahman et al. (2023) conducted a systematic review on technological integration in zakat institutions, identifying awareness, perceived risk, and information integration as key enablers of digital readiness. Their study highlights that effective digital transformation in zakat frameworks requires strategic alignment across technological, organizational, and environmental dimensions. Additionally, Che Mohd Salleh & Chowdhury (2020) observe that despite widespread adoption of online zakat payment systems by Malaysian institutions, digital tools remain underutilized for zakat distribution and entrepreneurship support. There is a notable gap in operationalization of digital zakat mechanisms to spur business development among beneficiaries. Complementing these findings, Naimah Zaini et al. (2024) highlight that key success drivers for empowering zakat micro entrepreneurs toward sustainable outcomes include robust governance, customer support, financial literacy, and technology infrastructure. Their literature-based synthesis underscores that zakat programmes aligned with digital tools and strong interpersonal support can yield enduring business impact. Combined, these studies indicate that while zakat institutions are adopting digital practices, only strategic, layered interventions can realize an inclusive digital entrepreneurship model.

3.5 Challenges and Barriers to Digitalization among Asnaf Entrepreneurs

Digital adoption among micro entrepreneurs in Malaysia has made significant strides, but structural and behavioral barriers continue to impede meaningful digital transformation especially for vulnerable groups such as asnaf entrepreneurs. According to a report by SME Corp (citing World Bank data), approximately 77% of Malaysian micro, small, and medium enterprises remain at a basic stage of digital maturity, with limited presence on the web and minimal uptake of advanced technologies such as IoT or data analytics. Key barriers include high costs of internet access, digital hardware, and software subscriptions; lack of awareness about financing options; low levels of ICT expertise among business owners; and inconsistent infrastructure, especially in rural areas. These systemic challenges suggest that asnaf entrepreneurs who often face additional socioeconomic constraints are particularly vulnerable to digital exclusion.

Research focused directly on asnaf populations further supports this view. Yahaya & Ahmad (2019), applying the UTAUT model to fintech adoption by asnaf for zakat distribution, found that performance expectancy and effort expectancy were significant predictors of acceptance,

yet many recipients remain reluctant due to concerns about trust, perceived complexity, and low familiarity with mobile banking platforms. Meanwhile, Rahim et al. (2023), studying digitization practices among asnafpreneurs in Perlis, identified inconsistent adoption of platforms like social media, websites, or delivery apps attributable to gaps in content creation abilities, inability to manage digital channels effectively, and limited understanding of integrated business model components. Taken together, these findings indicate that the obstacles to digitalization are multi-dimensional: infrastructural (cost, connectivity), technical (skills, literacy), financial (unfamiliarity with funding), and psychological or cultural (trust, perceived risk), all of which must be addressed in any holistic intervention targeting asnaf entrepreneurs.

3.6 Designing Digital Training Programs for Asnaf Entrepreneurs

Effective digital training programs tailored for asnaf entrepreneurs are critical for bridging the gap between digital opportunity and actual business performance (Bahri et al., 2021). MAIWP's Pembangunan Premis Digital initiative (2024), in collaboration with MyNIC, successfully trained 100 asnaf entrepreneurs in digital marketing, website design, and e-commerce strategies. Post-training, participants reported average income growth of 30% and earnings between RM3,500 and RM10,000 per month, demonstrating clear linkage between contextualized training and improved outcomes. However, this programme also underscored the importance of continuous mentorship and follow-up support, which were instrumental in sustaining performance gains.

Academic studies further emphasize the need for structured, competency-based training. Meerangani et al. (2022) assessed digital entrepreneurship literacy among asnaf zakat entrepreneurs in Melaka, finding that while basic awareness existed, significant gaps remained in digital marketing, data-driven decision making, and e-commerce tools. Their mixed-methods survey revealed that training which addresses these specific competencies can significantly strengthen readiness for digital markets and entrepreneurial resilience. Complementing this, Rosli et al. (2023) conducted PLS-SEM analysis on 155 asnaf micro-entrepreneurs to examine how values of digitalization such as cost-effectiveness and interactivity influence business performance. Results show that training programs emphasizing these values can effectively drive behavior change and improve outcomes, while factors like technological trust and compatibility were less predictive in their context. Collectively, these findings support the design of digital training systems that are context-specific, skills-based, and grounded in real business metrics to enhance the productivity and sustainability of asnaf entrepreneurs.

3.7 Evaluating the Impact of Digitalization Interventions by Zakat Institutions

Zakat institutions in Malaysia have embarked on digitalization efforts not only for fund collection but also to enhance the transparency, efficiency, and governance of zakat management. Arshad et al. (2023) present a collaborative digital zakat management model, developed for PPZ-MAIWP, which leverages digital systems to shortlist NGOs for zakat projects based on governance, capability, and measurable socioeconomic impact. This system has enabled faster decision-making, remote coordination, and more objective monitoring of impact outcomes reflecting a shift toward good governance in zakat distribution. Similarly, Mat Saad et al., (2023) evaluated the ZoT ("*Zakat on Touch*") e application platform in Kedah, showing that digital application systems reduce processing time, increase accessibility for applicants, and enhance user satisfaction, though they require further iterative improvement to fully replace manual procedures.

Complementing these institutional mechanisms, evidence from micro entrepreneur interventions underscores broader impact potential. Alliance Islamic Bank's AZAM Zakat Micro Financing Programme combining zakat funds with financial support demonstrated a 36% average revenue increase among asnaf entrepreneurs within one year, evidencing substantial outcomes when digital and financial mechanisms are combined (Chin & Nor, 2016). Together, these cases illustrate that digital interventions covering management systems, beneficiary application platforms, and fintech-enabled micro-financing can significantly improve operational efficiency, inclusivity, and socioeconomic impact. Yet, there remains a gap in rigorous outcome evaluations that isolate the specific effects of digitalization on entrepreneur performance. More empirical studies are needed to determine long-term sustainability, cost benefit ratios, and user experience, especially across diverse state-level zakat boards (Asni, F. et al., 2023).

3.8 Digital Marketing Strategies for Asnaf Products: Content and Performance Analysis

Research indicates that digital marketing, particularly via social media platforms and messaging apps, is instrumental in enhancing the outreach and sales performance of asnaf entrepreneurs. A qualitative study by Nuryati & Bahri (2022) explored the use of Facebook, Instagram, WhatsApp, Twitter, YouTube, and other platforms among asnafpreneurs, concluding that the combination of structured training and continuous mentoring is vital for optimizing content creation and improving customer engagement factors that directly influence business survival and growth, especially during crisis periods such as COVID-19. Similarly, Qarnizatul Akmar Ismail et al. (2019) conducted in-depth phenomenological interviews with successful asnaf entrepreneurs in Selangor and identified that strategic use of Facebook and WhatsApp when guided by zakat institutions can be powerful catalysts for transforming marketing practices and expanding both local and international reach.

Beyond platform selection, broader empirical evidence supports the effectiveness of digital marketing strategies in under resourced micro enterprises. A case study of Terengganu batik SMEs by Sharma & Sharma, (2024) documented how entrepreneurs prioritize social media and mobile marketing, followed by e-commerce sites and websites, as primary channels for audience segmentation and engagement. Barriers such as limited digital content development capacity, weak intellectual property awareness, and constrained finances were highlighted as obstacles to maximizing performance. At the broader SME level, Hasbolah et al. (2024) found that social media and omnichannel marketing significantly enhance firm performance in cyber entrepreneurship, correlating strongly with higher engagement, brand visibility, and revenue growth in quantitative models of Malaysian SMEs. These findings collectively underscore that digital marketing strategies when aligned with training, mentorship, and resource support can significantly improve business outcomes for asnaf entrepreneurs. The research gap remains centered around evaluation of different content types, campaign metrics, and performance linkage within zakat-supported programs.

3.9 Integrating AI and Customer Analytics to Empower Asnaf Entrepreneurs

The integration of artificial intelligence (AI) and customer analytics within Small and Medium Enterprises (SMEs) in Malaysia has shown promising potential for driving business performance improvement, yet remains largely unexplored in the context of asnaf entrepreneurs. Research by Seah et al. (2023) investigated the determinants of AI adoption within Malaysian SMEs and found that factors such as organizational readiness, strategic openness, and knowledge significantly influenced adoption intention, as modeled through the Technology Acceptance Model (TAM) and Theory of Reasoned Action frameworks. Similarly, Azian Othman et al. (2025) examined AI adoption through the Technology Organization

Environment (TOE) lens, highlighting that top management support, perceived usefulness, and organizational preparedness are critical enablers of AI implementation. These findings suggest that, for asnaf entrepreneurs to benefit from AI, foundational readiness and strategic leadership support via zakat institutions are essential.

From a practical standpoint, AI-powered marketing and analytics tools can offer personalized customer engagement and predictive insight even for underserved micro-entrepreneurs. Funding Societies Malaysia (2025) identified practical applications such as AI chatbots, predictive campaign tools, content optimization, and recommendation systems as accessible yet impactful ways SMEs increase efficiency and customer satisfaction many of which could be scaled to asnaf businesses via subsidized programs. Meanwhile, The Edge Malaysia (2025) highlighted cases where Malaysian SMEs achieved up to 40% reduction in customer service calls and >25% increase in satisfaction through AI chatbots and sentiment analysis, demonstrating real efficiency gains that could benefit micro-entrepreneurs with limited resources (Yeke, 2023). Combining these insights creates a rationale for designing zakat-funded digital programs that integrate AI analytics from customer segmentation to automated engagement tailored to asnaf entrepreneurs' capacities, enabling equitable access to higher-value digital tools that enhance marketing performance and business resilience.

3.10 Business Sustainability of Asnaf in the Digital Economy

Ensuring long-term business sustainability for asnaf entrepreneurs in Malaysia's evolving digital economy remains a critical challenge. A study by Sulaiman et al. (2024) examined success factors in post-pandemic asnaf micro-businesses, using survey data from 163 entrepreneurs. Their regression analysis revealed that systematic record keeping and strategic use of digital platforms significantly improve business resilience and sustainability, especially when combined with support for marketing strategies. The study emphasises that digital documentation and online sales channels provide a foundation for continuity and growth in uncertain economic conditions.

Complementing this, Zaini et al. (2024) conducted a systematic literature review of key success factors in zakat micro-entrepreneur sustainability, highlighting that sustainability arises not only from financial assistance but also from strong governance, digital infrastructure, customer service capability, and interpersonal competencies. They argue that digital readiness when supported by institutions and integrated into zakat programmes is essential for ensuring sustainable outcomes among asnaf businesses. Finally, Yusof et al. (2025) in *Resilience Unveiled* explored the role of digital readiness and psychological resilience in asnaf entrepreneurial persistence. Their qualitative findings confirm that self-efficacy, adaptive mindset, and digital capability are interwoven components underpinning sustainability in challenging environments. Collectively, these studies demonstrate that achieving sustainability in the digital economy for asnaf entrepreneurs requires a holistic approach combining digital tools, institutional support, psychological resilience, and good governance.

4. Discussion

In conclusion, the ten themes identified at the intersection of asnaf entrepreneurship, e-commerce, digitalization, and zakat reveal critical gaps and opportunities for both theoretical advancement and practical implementation. While zakat institutions have traditionally focused on capital support, frameworks such as the Digital Marketing Support Scheme for Asnaf Entrepreneurs (Asni et al., 2025) demonstrate how a structured, phased intervention can bridge digital literacy, market access, and revenue growth. At the same time, studies like Digital

Entrepreneurship Literacy by Meerangani et al. (2022) underscore the importance of competence-based training to prepare asnaf entrepreneurs for digital marketplaces. The research themes ranging from evaluating e-commerce effectiveness, addressing barriers, designing tailored training, integrating AI tools, to measuring long-term sustainability collectively call for an integrative and impact-oriented research agenda that aligns zakat resources with Malaysia’s national digital economy objectives.

The proposed conceptual framework positions zakat institutions as enablers of digital entrepreneurship for asnaf through four interconnected pillars:

Table 1: Interconnected Pillars

Themes of Pillar	Core Focus
Institutional Support	Zakat-funded digital entrepreneurship interventions
Digital Capability Building	Literacy, barriers, training design, marketing content
Technology Integration & Analytics	E-commerce adoption, AI-based customer and marketing analytics
Evaluation & Sustainability	Impact measurement, business resilience, scaling frameworks

Source: Adapted and arranged by the authors

- Institutional Support & Productive Zakat:** Zakat bodies provide structured capital assistance, digital training, advertising subsidies, and mentoring to foster digital uptake among asnaf entrepreneurs.
- Digital Capability Building:** This pillar focuses on enhancing digital literacy, overcoming infrastructural or cognitive barriers, designing contextual training modules and optimizing marketing content strategies.
- Technology Integration & Analytics:** Supporting asnaf adoption of e-commerce platforms, customer analytics, and AI tools to drive marketing performance, customer engagement, and revenue generation.
- Outcome Evaluation & Business Sustainability:** Rigorous measurement of intervention impact including income growth, digital engagement, conversion rates, and long-term business resilience to inform scalability and policy design.

This framework serves as a guiding structure for future empirical studies or pilot interventions, inviting mixed-methods investigation that blends quantitative performance metrics with qualitative insights on adoption experiences, user readiness, and institutional integration.

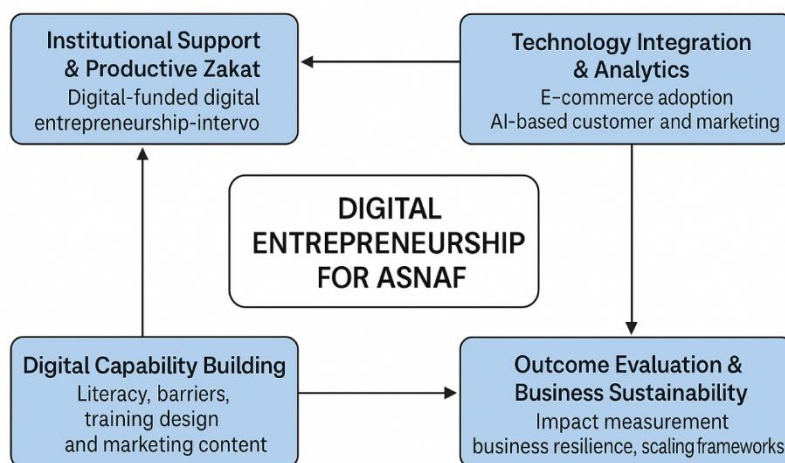


Figure 1: Conceptual Framework Positions Zakat Institutions as Enablers of Digital Entrepreneurship for Asnaf

Source: Adapted and arranged by the authors

5. Conclusion and Recommendations

In conclusion, the ten research themes outlined, notably on productive zakat digital transformation, digital literacy, e-commerce adoption, AI integration, and business sustainability illustrate compelling gaps and opportunities within the asnaf entrepreneurship ecosystem. Current empirical evidence highlights that zakat institutions, though established in providing capital assistance, often fall short in leveraging technology and structured interventions to foster lasting digital inclusion and market competitiveness. Studies emphasize phased zakat based digital marketing frameworks, while research on fintech adoption among asnaf under UTAUT2 confirms that digital readiness requires attention to trust, education, and religious context. Meanwhile, digitalization of zakat systems and AI tools remains confined to administrative innovation rather than entrepreneurial empowerment. Collectively, these findings demonstrate an urgent need to develop research and intervention programs that bridge zakat practice with strategic digital entrepreneurship.

Recommendations for future research are twofold. First, scholars should develop integrative conceptual frameworks such as a zakat powered digital entrepreneurship model and pilot these in collaboration with zakat institutions, using mixed methods to evaluate outcomes on sales growth, customer analytics, and sustained resilience. Second, interventions focusing on digital literacy training and AI-enhanced analytics must be rigorously evaluated, with metrics on conversion rates, customer segmentation accuracy, and user experience, to establish evidence-based design of scalable programs. In particular, comparative studies across states (e.g., Perlis vs Melaka) can reveal contextual enablers and barriers, while longitudinal research on business sustainability can track performance post-intervention. In sum, research should pivot from descriptive or capital-based models toward impact-oriented, data-driven designs that align zakat institutions' objectives with Malaysia's digital economy agenda.

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Conflict of Interest Statement

The authors declare that there is no conflict of interest regarding the publication of this study.

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