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The Evolution of Entrepreneurial Mindsets in the Digital Age

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ABSTRACT

With everything going digital in this modern age, the world of entrepreneurship has shifted dramatically, and so has the mindsets of those navigating it. As compared to many years ago, entrepreneurs today think differently, due to the fast pace and constant change of the digital era. This paper explores how digitalisation has reshaped traditional mindset of entrepreneurs by looking at three crucial factors: digital literacy, adaptability, and network orientation. Digital literacy is the set of skills and knowledge required to use digital tools and platforms effectively. Adaptability refers to the ability to adapt and adjust strategies when technology or the market changes. Network orientation is about how entrepreneurs use digital platforms and social media to build connections, find resources, and grow their businesses, often reaching far beyond domestic markets. This paper builds on the Entrepreneurial Mindset Theory (EMT) to create a framework that reflects how entrepreneurs operate in the digital age. It addresses a clear gap in the literature by connecting digital skills with the entrepreneurial mindset, which is something many older models tend to overlook. This paper includes a detailed theoretical framework and a literature matrix to help clarify key ideas. It offers fresh insights into how entrepreneurial thinking is evolving in the digital age, and suggests directions for future research to explore these changes further.

1. Introduction

The digital age has altered entrepreneurship, changing how businesses and innovation work. For instance, the availability of Internet of Things (IoT), cloud computing, and artificial intelligence have completely changed how companies operate as well as how entrepreneurs spot and seize opportunities. Entrepreneurs today need to realise that it's not just competitors who can shake up their business—customers can, too, especially when they start using similar digital products or services from other sources. According to Valacich and Schneider (2018), businesses need to stay ahead of the five major trends that

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are reshaping the digital landscape: social media, cloud computing, mobile computing, Internet of Things (IoT), and big data. These advancements call for a change in entrepreneurial thinking—one that can keep up with these fast-changing technology, shifting customer behaviour, and a market that never stops evolving—to remain relevant in the market.

The entrepreneurial mindset has been discussed quite a lot throughout the years. The concept was first emphasized by Schumpeter (1934), in which according to him, the entrepreneurial mindset is often associated with characteristics like risk-taking, innovativeness, and opportunity recognition. While these traits remain relevant, the digital revolution has drastically changed the environment around them. It is necessary to re-evaluate how entrepreneurs engage with and utilise digital technologies since the widespread use of digital tools and platforms has given these mindsets new dimensions (Frederick, H., O'Connor, A., & Kuratko, D. F., 2016). As such, there is a growing need to rethink what it means to have an entrepreneurial mindset in today's digital world.

The main research gap lies in the absence of a comprehensive theoretical framework that demonstrates how digitalisation changes the way entrepreneurs think and act. Most existing literature either addresses digital entrepreneurship without connecting it to the mindset theory or only focuses on a single component separately, such as digital skills. Thus, this study builds on the earlier work of McGrath and MacMillan (2000) and others by including competencies relevant to the digital era, aiming to strengthen the theory of the entrepreneurial mindset and provide useful guidance for today's entrepreneurs. This paper proposes a conceptual model based on entrepreneurial mindset theory, combining digital literacy, adaptability, and network orientation.

This paper is organized as follows. In the next section, existing research is reviewed in regards to entrepreneurial mindsets and digital transformation, and a conceptual model that integrates network orientation, adaptability, and digital literacy is introduced. The next section looks at why this model matters—both in theory and in practice—especially in today's fast-changing entrepreneurial world. The paper wraps up by highlighting its key contributions, limitations, and suggested areas for future research. All in all, this paper aims to provide the readers with a better understanding of how digital advancements are influencing entrepreneurial mindsets, while also proposing a framework for investigating these changes.

2. Literature Review

2.1 *Entrepreneurial Mindset Theory (EMT)*

Entrepreneurial mindset has long been a main focus in entrepreneurial studies. They relate to the behavioural and cognitive traits that set successful entrepreneurs apart from others. The entrepreneurial mindset was first emphasised by Schumpeter (1934). According to them, entrepreneurs are someone who create something new by combining resources in new and unique ways. As a result of this creation, they are contributing positively to the economy. The Entrepreneurial Mindset Theory (EMT) was later developed by McGrath and MacMillan (2000). In their studies, they were highlighting traits like adaptability, opportunity recognition, and calculated risk-taking, all of which are important traits that allow one to recognise and seize opportunities in uncertain situations.

EMT offers a basis for understanding the way entrepreneurs think and behave. Entrepreneurs are typically self-driven and independent, and they place a high value on proactiveness, creativity, and innovativeness. They are often confident in handling uncertainties, are flexible to change, and are comfortable taking chances (Abdullah, A., Taliang, A., Efendi, B., Kasmi, M., & Aman, A., 2024). They also possess problem-solving skills on top of the ability to learn and adapt to new situations (Ganbat, D.,

Zanabazar, A., & Chen, S.-H., 2023). Entrepreneurial traits like the ability to spot opportunities, taking risks, and adapting to change—as seen in many entrepreneurs—are key when dealing with the uncertainty and complexity that often come with entrepreneurship. While EMT has influenced a lot of entrepreneurial studies, it was primarily developed in pre-digital era and does not adequately incorporate the digital competencies that are deemed to be essential for entrepreneurial success. As pointed out by Nambisan, Wright, and Feldman (2019), traditional entrepreneurial mindset models often fall short in explaining how digital technologies are changing the way entrepreneurs think and act.

This study connects traditional mindset theory with emerging digital competencies, thereby offering a thorough understanding on entrepreneurial cognition in modern settings. Therefore, EMT not only explains the core mindset of entrepreneurs but also supports the integration of new competencies needed in today's digital world, making it a relevant and valuable framework for analysing entrepreneurial mindsets today.

2.2 *Entrepreneurial Mindset in the Digital Age*

Building on the foundational understanding of Entrepreneurial Mindset Theory (EMT), this section examines how digitalisation reshapes entrepreneurial thinking and behaviour. Digitalisation refers to the integration of digital technologies into day-to-day business functions, interactions, and business models. From an entrepreneurial mindset perspective, it involves transforming business processes into digital formats to capitalize on emerging opportunities (Soltanifar and Smailhodžić, 2021). As digital tools and platforms become part of everyday business and life, entrepreneurs are expected to adjust how they approach problems, make decisions, and run their ventures. This means rethinking traditional ways of doing business and developing new habits that align with the fast-moving, tech-driven world we now live in.

Today's entrepreneurs don't just depend on their personal traits to succeed—they also rely heavily on external digital systems. These systems help them spot new opportunities, manage risks, and drive innovation more effectively. As Vial (2021) explains, digital transformation involves making big changes to how a business operates by using tools like information systems, computing technologies, communication platforms, and digital connectivity. Soltanifar and Smailhodžić (2021) further add that digitalization has pushed entrepreneurs to base their decisions on data, use cloud-based tools to stay flexible, and respond quickly to change. As a result, the entrepreneurial mindset has shifted—from focusing mostly on individual qualities to including essential digital skills and tools.

Entrepreneurs who fail to adapt their mindset to the digital age are at risk of being left behind. Without embracing digital literacy and new ways of thinking, they may miss out on emerging opportunities. Relying on traditional assumptions can also lead to poor decision-making that no longer fits the realities of today's tech-enabled landscape. Furthermore, these entrepreneurs may struggle with inefficiencies, as they fail to adopt tools like automation, analytics, and cloud technologies that can improve operations and reduce costs. Their limited experience with digital platforms can restrict access to new markets and make it more difficult to scale or compete globally. Perhaps most importantly, a rigid mindset leaves them more vulnerable to disruption—unable to respond to rapid technological changes or unexpected events, such as those seen during the COVID-19 pandemic. In Malaysia, during the Movement Control Order (MCO), 70% of SMEs reported a 50% drop in business, while digital services like e-commerce and online delivery surged—with GrabFood and Foodpanda seeing a 30% increase (LSE Southeast Asia Blog, 2020), proving the survival advantage of digital adoption. Naumann (2017) also states that during the COVID-19 pandemic, many entrepreneurs swiftly moved their operations online in order to survive. This highlights just how important digital-savvy and adaptable mindset has become in helping businesses survive and thrive during periods of uncertainty. Stated in another report by OECD (2020), the pandemic had a huge negative impact on the supply and demand of many businesses, particularly on SMEs that do not know how to utilize technology

and those who lack resilience and flexibility. In this context, failing to evolve the entrepreneurial mindset not only hinders innovation but also threatens the long-term sustainability of entrepreneurial ventures.

In response to this shift, researchers have proposed conceptual models that integrate digital dimensions into traditional EMT. For instance, Seitola and Abhari (2022) introduced the Digital Literacy Model, which views digital literacy—encompassing technical skills, information evaluation, and digital communication—as a fundamental competency. Their model highlights that entrepreneurial thinking now happens in digital spaces, where technological fluency is essential to spot business and innovation opportunities. Monferrer et al. (2021) argue that in order to successfully expand businesses globally, firms need to rely heavily on dynamic capabilities—which are often made possible by digital networks. Zhang and Zhang (2022) also point out that in today’s digital world, having a strong network orientation helps entrepreneurs connect with valuable external resources like tech expertise, market insights, and collaboration opportunities, all of which can support and grow their businesses.

In short, digitalization has transformed how entrepreneurs think and act by embedding their mindset within a fast-changing ecosystem of technologies, systems, and networks. To keep pace with this transformation, an updated theoretical model is needed to reflect how entrepreneurs’ thinking and behaviour are now closely linked to the digital environments they operate in.

2.3 Summary of Key Studies (Literature Matrix)

The following literature matrix synthesizes key empirical and conceptual studies relevant to entrepreneurial mindset, digital literacy, adaptability, and network orientation. It maps each study's theoretical grounding, contextual setting, and methodology to highlight gaps and inform the proposed framework.

Table 1: Literature Matrix

Author(s) & Year	Theory/ Framework	Context/ Setting	Methodology	Key Findings Related to Entrepreneurial Mindset and Digitalization	Source/Citation
Schumpeter, J. (1934)	Innovation Theory	Industrial economy	Conceptual	Entrepreneurs are agents of creative destruction who drive innovation through market disruption.	Schumpeter, J. A. (1934). <i>The Theory of Economic Development</i> . Harvard University Press.
McGrath & MacMillan (2000)	Entrepreneurial Mindset Theory	Traditional entrepreneurship	Conceptual	Entrepreneurial mindset centers on risk-taking, opportunity recognition, and innovation.	McGrath, R. G., & MacMillan, I. C. (2000). <i>The Entrepreneurial Mindset</i> . Harvard Business Review Press.
Nambisan, Wright, & Feldman (2019)	Digital Innovation Framework	Digital entrepreneurship	Literature Review	Emphasized adapting entrepreneurial mindset theory to include digital tech and innovation processes.	Nambisan, S., Wright, M., & Feldman, M. (2019). <i>The digital transformation of innovation and</i>

					entrepreneurship: Progress, challenges and key themes. <i>Research Policy</i> , 48(8), 103773.
Seitola & Abhari (2022)	Digital Literacy Model	Digital entrepreneurs	Empirical Survey	Digital literacy plays layered role in shaping digital entrepreneurial mindset.	Seitola, T. A., & Abhari, K. (2022). Digital literacy and entrepreneurial mindset: a study on digital entrepreneurs. <i>Journal of Small Business and Enterprise Development</i> , 29(3), 483-499.
Dheer & Castrogiovanni (2023)	Cognitive Adaptability Theory	Various entrepreneurial contexts	Mixed Methods	Cognitive adaptability key for navigating uncertainty & opportunity recognition in digital entrepreneurship.	Dheer, R. J. S., & Castrogiovanni, G. J. (2023). Cognitive adaptability and entrepreneurial success in digital contexts. <i>Journal of Business Venturing</i> , 38(1), 106345.
Zhang & Zhang (2022)	Network Orientation Framework	Technology startups	Qualitative Interviews	Network orientation boosts access to knowledge and innovation in digital firms.	Zhang, A., & Zhang, W. (2022). Network orientation, organisational improvisation and innovation: An empirical examination. <i>Systems Research and Behavioral Science</i> , 39(3), 668-678.
Sariwulan et al. (2020)	Digital Literacy and Entrepreneurship	University students & young entrepreneurs	Quantitative survey	Digital literacy positively impacts entrepreneurial attitudes and intentions in emerging digital economies.	Sariwulan, N., et al. (2020). Digital literacy and entrepreneurial intention among university students. <i>Journal of Entrepreneurship Education</i> , 23(4), 1-10.
Honig & Martin (2014)	Entrepreneurial Learning Theory	Nascent entrepreneurs	Qualitative	Entrepreneurial learning processes enhanced by digital tools facilitating opportunity recognition.	Honig, B., & Martin, B. (2014). Learning and the entrepreneurial mindset. <i>Entrepreneurship Theory and</i>

					<i>Practice</i> , 38(2), 219-238.
Daspit et al. (2021)	Entrepreneurial Orientation & Digital Literacy	SME entrepreneurs	Survey & SEM	Digital literacy mediates relationship between entrepreneurial orientation and business performance.	Daspit, J. J., et al. (2021). Digital literacy and entrepreneurial orientation: Effects on SME performance. <i>Journal of Small Business Management</i> , 59(3), 549-574.
Mustain et al. (2023)	Digital Skills & Entrepreneurial Intention	Early-stage entrepreneurs	Empirical survey	Digital skills critical predictors of entrepreneurial intentions and attitude formation.	Mustain, W., et al. (2023). Digital skills and entrepreneurial intention: Evidence from early-stage entrepreneurs. <i>Journal of Entrepreneurship Education</i> , 26(2), 1-15.
Naumann (2017)	Entrepreneurial Adaptability	Small businesses during COVID-19	Case study	Entrepreneurs' ability to pivot online was key to survival during pandemic disruptions.	Naumann, E. (2017). Entrepreneurial adaptability in crisis: The COVID-19 pandemic case. <i>Journal of Business Venturing Insights</i> , 8, e00121.
Monferrer et al. (2021)	Dynamic Capabilities & Network Orientation	International startups	Quantitative	Network orientation builds ambidextrous dynamic capabilities essential for international growth.	Monferrer, D., et al. (2021). Network orientation and dynamic capabilities in international new ventures. <i>International Business Review</i> , 30(5), 101842.
Giones et al. (2020)	Digital Entrepreneurship Framework	Various digital startups	Conceptual & Empirical	Digital technologies redefine opportunity recognition and value creation.	Giones, F., et al. (2020). Digital Entrepreneurship: Toward a Digital Technology Perspective of Entrepreneurship. <i>Entrepreneurship Theory and Practice</i> , 44(5), 722-740.
Levy & Powell (2020)	Digital Transformation &	SMEs in developing countries	Qualitative	Digital transformation fosters innovation and adaptability in	Levy, M., & Powell, P. (2020). Digital transformation and SME

	Entrepreneurial Mindset			entrepreneurial mindset.	entrepreneurial mindset. <i>Journal of Small Business and Enterprise Development</i> , 27(4), 601-617.
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The literature matrix shows how the entrepreneurial mindset has evolved over time, especially in relation to digitalization. Foundational theories such as those by Schumpeter (1934) and McGrath and MacMillan (2000) highlight key elements like innovation, spotting opportunities, and taking calculated risks. More recent empirical studies (e.g., Seitola & Abhari, 2022; Zhang & Zhang, 2022; Monferrer et al., 2021) build on earlier work by bringing in key digital elements such as digital literacy, network orientation, and adaptability. These studies show that entrepreneurial success today depends not just on personal traits, but also on external factors like technology, context, and institutional support—factors that have become critical in today’s digital business environments. Furthermore, the studies also point to an increase focus on dynamic capabilities, the influence of digital ecosystems, and the role of digital infrastructure in supporting entrepreneurial behaviour in volatile environments. Despite all that, research gaps remain, especially in understanding how entrepreneurial mindsets evolve over time across different settings. These insights highlight the need for a more integrated framework that brings together cognitive and digital variables to better reflect what entrepreneurship really looks like today.

2.4 Towards an Integrated View: Digital Literacy, Adaptability, and Network Orientation

Although digital literacy, adaptability, and network orientation have each been explored in entrepreneurial research, they are often studied separately. What is missing is a deeper understanding of how these elements work together to influence entrepreneurial behaviour in the digital age. This section aims to fill that gap by proposing an integrated view that connects these three dimensions as interrelated foundations of the modern entrepreneurial mindset.

2.4.1 Digital Literacy

In the digital age, digital literacy has emerged as a key element of the entrepreneurial mindset. It describes the capacity to recognise and seize opportunities by skilfully navigating, assessing, and utilising digital tools and platforms (Sariwulan et al., 2020). Entrepreneurs need to gain a thorough understanding of technology and its applications as digital systems become more and more integrated into company operations (Honig & Martin, 2014). Seitola & Abhari (2022) define digital entrepreneurial mindset as the ability to direct one’s attention and behaviour toward opportunity exploration enabled by digital technologies. They highlight three levels of digital literacy—declarative, procedural, and conditional knowledge—that support the cognitive skills necessary for spotting and seizing opportunities. Young et al. (2020) further stress the importance of digital literacy in fostering entrepreneurial mindset, since it helps them understand market trends, consumer behaviour, and business performance. Their conceptual model connects digital learning aptitude, digital literacy, and the entrepreneurial mindset in order to demonstrate how these components interact to drive entrepreneurial success in the digital economy. Daspit et al. (2021) emphasise the importance of integrating digital literacy into entrepreneurship education, arguing that it can have a big impact on the mindset and behaviour of aspiring entrepreneurs. This perspective is supported by Mustain et al. (2023), stating that digital literacy not only shapes entrepreneurial attitudes and intentions but also prepares entrepreneurs to succeed in digitally driven economies.

2.4.2 Adaptability

Adaptability plays a key role in shaping the entrepreneurial mindset. It refers to an entrepreneur's ability to adjust strategies and operations in response to changing customer needs, market trends, and new technologies. In today's fast-paced digital environment, being adaptable is essential for spotting opportunities, managing risks, and driving innovation. Research shows that entrepreneurs who can adapt quickly are better positioned to handle shifting conditions. For instance, during the COVID-19 pandemic, many businesses successfully transitioned to digital platforms, showing both resilience and strategic flexibility (Naumann, 2017). Similarly, Sussan and Acs (2017) pointed out that adaptability is crucial for navigating the complexities of the digital world. Entrepreneurs who are adaptable are able to adjust their strategies quickly based on real-time data and feedback, helping them stay ahead of others. Dheer and Castrogiovanni (2023), also highlight how cognitive adaptability improves problem-solving and decision-making in digital settings. Similarly, Rahmi and Mursyidin (2024) stress that adaptability helps entrepreneurs deal with uncertainty and make the most of new opportunities as they emerge. Together, these studies highlight that adaptability is a useful trait that enables entrepreneurs to thrive in technology-driven environments.

2.4.3 Network Orientation

The significance of network orientation in the entrepreneurial mindset has also been emphasised by the development of digital technologies. According to Dasmit et al. (2021), network orientation is the capacity of an entrepreneur to establish, maintain, and capitalise on connections, both internal and external, in order to accomplish strategic objectives and obtain critical resources. In an increasingly digital world, platforms like social media and online professional networks allow the growth of vast ecosystems that extend beyond geographic limitations. Therefore, overcoming the obstacles of the digital economy requires the capacity to use online networks for support and collaboration.

In today's information-driven world, having a strong network orientation is increasingly important, where businesses need to connect with external partners to grow and innovate, claim Zhang and Zhang (2022). When entrepreneurs actively build and maintain networks, they gain access to diverse knowledge, fresh insights, and new opportunities that can spur innovation and strengthen their competitive edge. Monferrer et al. (2021) found that this kind of outward-looking mindset supports dynamic capabilities, which are especially important for innovation and international expansion. Likewise, Daradkeh and Wathiq (2023) show that when network orientation is combined with an entrepreneurial mindset, it has a positive impact on startup performance. This suggests that cultivating strong networks helps foster a mindset focused on learning, creativity, and ongoing improvement. Dheer and Castrogiovanni (2023) add that network orientation, when supported by cognitive adaptability, improves opportunity recognition and strengthens entrepreneurial intention. Entrepreneurs who are well-connected tend to think in ways that help them spot and act on new opportunities. PeakGenesis (2024) also highlights that tech-savvy entrepreneurs who invest in their networks gain better access to expertise and innovation pathways. In this way, network orientation not only improves access to valuable resources and information but also reinforces the flexible thinking that defines the modern entrepreneurial mindset.

3. Proposed Framework

3.1 Framework Components

Digital Literacy: Building on Seitola & Abhari (2022), digital literacy encompasses the ability to navigate digital tools, critically assess information, and communicate effectively through digital channels. It provides the foundational skills necessary to engage in digital entrepreneurship.

Adaptability: Referencing Naumann (2017), adaptability reflects the capacity to respond flexibly and strategically to dynamic environments. This trait has become indispensable in a landscape marked by continuous technological disruption.

Network Orientation: Zhang and Zhang (2022) highlight that entrepreneurs who proactively build and leverage networks can access vital knowledge and resources. Network orientation supports collaboration and opportunity identification in a digitalized, interconnected world.

3.2 Interrelationships

Digital Literacy & Adaptability: Digital literacy enhances adaptability by equipping entrepreneurs with the skills to interpret and respond to digital signals and trends, enabling timely and informed adjustments.

Adaptability & Network Orientation: Adaptability is reinforced by network orientation, as access to diverse perspectives and resources through networks supports flexible decision-making and opportunity exploitation.

Network Orientation & Digital Literacy: Digital literacy empowers entrepreneurs to effectively engage in and leverage digital networks, thereby expanding their reach and collaborative potential. Together, these interactions cultivate an Integrated Digital Entrepreneurial Mindset which collectively drive entrepreneurial success in the digital economy.

3.3 Conceptual Diagram

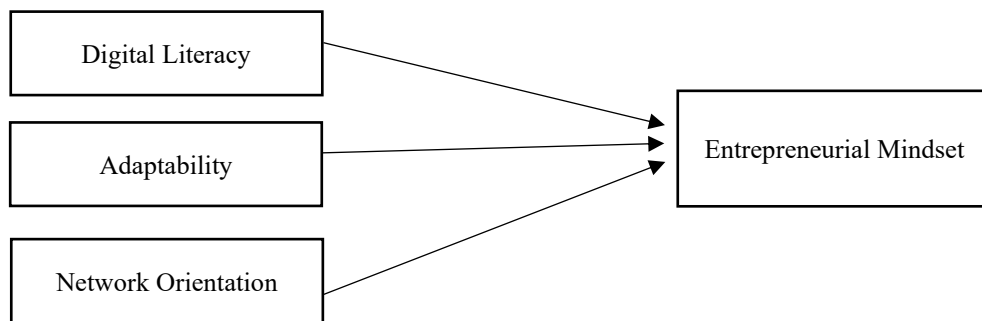


Figure 1: Conceptual Model

This framework proposes that digital literacy, adaptability, and network orientation directly influence the development of the entrepreneurial mindset in digital contexts. These competencies are interrelated and collectively shape how entrepreneurs think, make decisions, and act in digital contexts. By embedding these elements into the entrepreneurial mindset, the framework offers a more holistic and updated understanding of how entrepreneurs navigate challenges and seize opportunities in the digital economy.

3.4 Contribution to Knowledge

This integrated model addresses a critical theoretical gap noted in the literature by offering a cohesive framework that explains how entrepreneurial mindsets function in digitally intensive environments. It

advances Entrepreneurial Mindset Theory by incorporating dimensions—namely digital literacy, adaptability, and network orientation—that are essential to navigating the challenges and opportunities of the digital age and sets the stage for empirical validation in future research.

A persistent gap in the literature is the absence of a comprehensive theoretical framework that reflects how digitalization shapes entrepreneurial cognition and behaviour. Much of the existing literature either examines digital entrepreneurship without grounding it in entrepreneurial mindset theory or focuses narrowly on isolated aspects, such as digital skills. This study responds to that gap by extending the foundational work of McGrath and MacMillan (2000) by integrating digital-era competencies.

This model is the first to clearly incorporate digital literacy, adaptability, and network orientation into the structure of Entrepreneurial Mindset Theory (EMT). While past research often looks at these elements separately, this framework shows how they work together to shape how entrepreneurs think and act in today's digital world. By adding digital-era skills, the model not only strengthens EMT theoretically but also offers practical insights to better support entrepreneurs navigating modern challenges.

4. Research Gaps and Implication of Study

This study has important takeaways when it comes to understanding the entrepreneurial mindset in today's digital world. Although it is widely acknowledged that digital skills are essential for today's entrepreneurs, many existing theories and models still don't fully reflect this reality. Important digital competencies like digital literacy, adaptability, and digitally mediated network orientation are often studied separately, without showing how they work together in tech-driven environments. Because of this, there is still a lack of a clear and complete understanding of how entrepreneurial thinking and behaviour are actually changing in response to digital transformation.

This paper extends the EMT by adding key digital skills that reflect the way entrepreneurship is actually practiced today. As technology advances, our way of thinking should evolve too, to keep up with the fast-changing world without being left behind. In this framework, digital literacy gives entrepreneurs the confidence to use technology effectively; adaptability helps them stay flexible and bounce back when things don't go as planned; and network orientation enables them to form strong, meaningful connections in a digital setting. Together, these elements offer a more complete picture of how modern entrepreneurs think, make decisions, and thrive in today's fast-paced, tech-driven environment.

From an educational standpoint, it is just as important to embed these digital competencies into entrepreneurship training. As Daspit et al. (2021) point out, teaching digital skills as part of entrepreneurial education can greatly enhance students' mindset development and better prepare them for the real world. In this dog-eat-dog world where competition is fierce and rapid innovation has become the norm, a strong entrepreneurial mindset—supplemented by digital skills—are more important than ever. Hence, by helping future entrepreneurs build these capabilities, educators can shape more adaptable, creative, innovative, and well-connected business leaders.

While this conceptual framework offers a fresh perspective on the entrepreneurial mindset in the digital age, more research is needed to refine and validate its ideas. Future studies could look at how digital transformation affects entrepreneurs across different industries, or track over time how digital skills contribute to business success. It would also be useful to explore how different levels of digital literacy and network orientation impact various types and stages of entrepreneurial ventures. Overall, this study presents a clear and timely view of how the entrepreneurial mindset is evolving in today's digital world. It also offers practical insights for both educators and entrepreneurs, and lays the groundwork for further research in this area.

5.0 Conclusion

In sum, this study highlights how the entrepreneurial mindset must evolve in response to digital transformation. By identifying digital literacy, adaptability, and network orientation as key components of this shift, the proposed framework provides a timely lens for understanding how entrepreneurs can remain competitive and innovative in today's digital economy. Digital literacy provides them with the knowledge and confidence to navigate tech-driven markets. When changes happen around them, their adaptability enables them to make quick and strategic adjustments. Meanwhile, network orientation keeps them in touch with valuable knowledge, resources, and collaboration opportunities. In a rapidly changing digital economy, these qualities do not work separately—they support one another and foster a mindset that promotes better decision-making, increased resilience, and long-term success. Integrating these competencies into entrepreneurial practice and education is essential—not only for enhancing individual performance but also for fostering long-term resilience and growth. This conceptual model offers a foundation for future research and practical application in building digital-ready entrepreneurs.

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Conflict of interest statement

The authors agree that this research was conducted in the absence of any self-benefits, commercial or financial conflicts and declare the absence of conflicting interests with the funders.

References

- Abdullah, A., Talias, A., Efendi, B., Kasmi, M., & Aman, A. (2024). Examining The Effects of Entrepreneurial Mindset, Digital Marketing Innovation and Networking on SME Performance. *Journal of System and Management Sciences*, 14(6), 113-127.
- Brynjolfsson, E., & McElheran, K. (2016). The Digital Transformation of Business and Its Impact on Firms. *Management Science*, 62(3), 701-718.

- Daradkeh, M., & Mansoor, W. (2023). The impact of network orientation and entrepreneurial orientation on startup innovation and performance in emerging economies: The moderating role of strategic flexibility. *Journal of Open Innovation: Technology, Market, and Complexity*, 9(1), 100004.
- Daspit, J. J., D'Souza, D. E., & Dyer, J. H. (2021). Digital entrepreneurial mindset: How to nurture the next generation of digital entrepreneurs. *Proceedings of the Americas Conference on Information Systems*, 2022.
- Dheer, R. J., & Castrogiovanni, G. J. (2023). Cognitive adaptability's impact on entrepreneurial intent: The mediating roles of entrepreneurial passion and efficacy. *Journal of Business Research*, 160, 113798.
- Frederick, H., O'Connor, A., & Kuratko, D. F. (2016). *Entrepreneurship: Theory, process, and practice*. Cengage Learning.
- Ganbat, D., Zanabazar, A., & Chen, S.-H. (2023). The Correlation between Entrepreneurship Education, Entrepreneurial Mindset, and Entrepreneurial Intention among Undergraduate Students: The Mediating Function of Entrepreneurial Self-Efficacy. *International Journal of Entrepreneurship*, 27(5), 1–16.
- Giones, F., et al. (2020). Digital Entrepreneurship: Toward a Digital Technology Perspective of Entrepreneurship. *Entrepreneurship Theory and Practice*, 44(5), 722-740.
- Honig, B., & Martin, B. (2014). Entrepreneurship education. In *Handbook of research on entrepreneurship* (pp. 127-146). Edward Elgar Publishing.
- Katz, J. A., & Green, R. P. (2011). *Entrepreneurship* (4th ed.). Pearson.
- Levy, M., & Powell, P. (2020). Digital transformation and SME entrepreneurial mindset. *Journal of Small Business and Enterprise Development*, 27(4), 601-617.
- McGrath, R. G., & MacMillan, I. C. (2000). *The entrepreneurial mindset*. Boston: Harvard Business School Press.
- Monferrer, D., Moliner, M. Á., Irún, B., & Estrada, M. (2021). Network market and entrepreneurial orientations as facilitators of international performance in born globals. The mediating role of ambidextrous dynamic capabilities. *Journal of Business Research*, 137, 430-443.
- Mustain, M., Murwani, F. D., & Mukhlis, I. M. . (2023). The Effect of Digital Literacy on Entrepreneurial Intention through Entrepreneurial Attitude. *Formosa Journal of Applied Sciences*, 2(12), 3361–3370. <https://doi.org/10.55927/fjas.v2i12.7066>
- Nambisan, S., Wright, M., & Feldman, M.P. (2019). The Digital Transformation of Innovation and Entrepreneurship: Progress, Challenges and Key Themes. *Research Policy*, 48(8), 103773.
- Naumann, C. (2017). Entrepreneurial mindset: A synthetic literature review. *Entrepreneurial Business and Economics Review*, 5(3), 149-172.
- OECD. (2020). Coronavirus (COVID-19): SME policy responses. OECD. <https://www.oecd.org/coronavirus/policy-responses/coronavirus-covid-19-sme-policy-responses-04440101>
- PeakGenesis. (2024). How technology influences the entrepreneurial mindset. Retrieved from <https://peakgenesis.com/articles/tpost/0o58r28dz1-how-technology-influences-the-entreprene>
- Rahmi, R., & Mursyidin, M. (2024). Independence and Adaptability: Building Resilience and Competitiveness for Small and Medium-sized Enterprises in the Digital Era. *Golden Ratio of* <https://doi.org/10.24191/abrij.v11i1.7046>

Marketing and Applied Psychology of Business, 4(1), 22-44.

Sariwulan, T., Suparno, S., Disman, D., Ahman, E., & Suwatno, S. (2020). Entrepreneurial performance: The role of literacy and skills. *The Journal of Asian Finance, Economics and Business*, 7(11), 269-280.

Schumpeter, J.A. (1934). *The Theory of Economic Development*. Harvard University Press.

Seitola, T. A., & Abhari, K. (2022). *Digital Entrepreneurial Mindset: How to Nurture the Next Generation of Digital Entrepreneurs*.

Soltanifar, M., & Smailhodžić, E. (2021). Developing a digital entrepreneurial mindset for data-driven, cloud-enabled, and platform-centric business activities: practical implications and the impact on society. *Digital entrepreneurship*, 3.

Sussan, F., & Acs, Z. J. (2017). The digital entrepreneurial ecosystem. *Small Business Economics*, 49, 55-73.

The Impact of COVID-19 on SME Digitalisation in Malaysia. (2020, October 20). LSE Southeast Asia Blog. <https://blogs.lse.ac.uk/seac/2020/10/20/the-impact-of-covid-19-on-sme-digitalisation-in-malaysia/>

Valacich, J., & Schneider, C. (2018). *Information systems today: Managing the digital world*. Pearson.

Vial, G. (2021). Understanding digital transformation: A review and a research agenda. *Managing digital transformation*, 13-66.

Young, R., Wahlberg, L., Davis, E., & Abhari, K. (2020). Towards a theory of digital entrepreneurship mindset: The role of digital learning aptitude and digital literacy. In *26th Americas Conference on Information Systems, AMCIS* (pp. 1-10).

Zhang, A., & Zhang, W. (2022). Network orientation, organisational improvisation and innovation: An empirical examination. *Systems Research and Behavioral Science*, 39(3), 668-678.



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