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Keywords: Digital Readiness, Digital Entrepreneurial Readiness Behavior, Digital Entrepreneurial Identity, Digital Entrepreneurial Intention, Digital Entrepreneurial Interest, Digital Entrepreneurial Potential

Authors:

Haseeb Khan Khakwani: PhD scholar, Department of Commerce, Bahauddin Zakariya University, Multan, Punjab, Pakistan.

Asif Yaseen: Professor of Entrepreneurship, Department of Commerce, Bahauddin Zakariya University, Multan, Punjab, Pakistan.

Masood-ul-Hassan: (Corresponding Author)
Professor of Management, Department of Commerce, Bahauddin Zakariya University, Multan, Punjab, Pakistan.

(Email: masood@bzu.edu.pk)

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How Digital Readiness Impacts Digital Entrepreneurial Readiness Behavior: An empirical investigation of GIG workers in Pakistan

Haseeb Khan Khakwani[1], Asif Yaseen[2], Masood-ul-Hassan (Corresponding Author)[3]

[1] PhD scholar, Department of Commerce, Bahauddin Zakariya University, Multan, Punjab, Pakistan.
[2] Professor of Entrepreneurship, Department of Commerce, Bahauddin Zakariya University, Multan, Punjab, Pakistan.
[3] Professor of Management, Department of Commerce, Bahauddin Zakariya University, Multan, Punjab, Pakistan.
(Email: masood@bzu.edu.pk)

Abstract

The gig economy in Pakistan has rapidly expanded, offering new opportunities for self-employment through digital platforms. Within this evolving landscape, digital readiness, the ability to effectively use digital tools, literacy, and communication technologies have become critical factors influencing entrepreneurial preparedness. This study examines the relationship between digital readiness and digital entrepreneurial readiness behavior (DERB), conceptualized as a higher-order construct comprising identity, intention, interest, and potential. Using data from gig workers in Pakistan, the study applies the two-step disjoint approach in partial least squares structural equation modeling (PLS-SEM) to validate the hierarchical relationship between readiness and entrepreneurial behavior. This study contributes theoretically by extending the discourse on digital entrepreneurship and, practically, by offering insights for policymakers, educators, and platform providers. Overall, the findings suggest that digital readiness plays a pivotal role in empowering gig workers to transition from digital labor to digital entrepreneurship, fostering innovation, and sustainable economic growth.

Keywords: *Digital Readiness, Digital Entrepreneurial Readiness Behavior, Digital Entrepreneurial Identity, Digital Entrepreneurial Intention, Digital Entrepreneurial Interest, Digital Entrepreneurial Potential*

Introduction

Rapid developments in digital technology have changed how work and entrepreneurship are conducted worldwide (Barzotto et al., 2025). The new age of labor markets is marked by the rise of the gig economy, which allows people to pursue digital entrepreneurship and digital jobs (Doargajudhur et al., 2026; Mellor, 2025). This trend is even more pronounced in emerging nations, such as Pakistan, where young people are increasingly using the Internet to overcome barriers to employment and pursue self-employment (Tunio, 2021). In this regard, digital readiness has become an important driver of entrepreneurial success by facilitating the effective use of digital technologies, applications, and communication tools (Wang et al., 2025). At the same time, digital readiness encompasses technical skills, behavioral characteristics, and psychological features.

Digital entrepreneurship is a new frontier that involves individuals leveraging digital tools to start, manage, and sustain their business operations (Bérastégui, 2021; Blackham, 2018; Drouillard, 2016). The skills and behaviors necessary to be a digital entrepreneur are different those from of traditional entrepreneurship, including the ability to work in online ecosystems, collaborate, and be innovators through the use of digital technology (Blackham, 2018). This is reflected in gig workers, who typically

work independently and extensively use digital technologies (Pereira et al., 2022). They demonstrate digital skills that affect their readiness behaviors as a result of expressing their entrepreneurial identity, staying engaged, building their potential, and developing positive intentions towards digital ventures. In today's era of growth in Pakistan's gig economy, it is vital to recognize the impact of digital readiness on entrepreneurial behavior.

Digital readiness is an important problem that is still largely neglected in the literature that examines how to apply digital readiness in educational or organizational contexts (Alanoglu et al., 2025; Huang, 2022). Digital literacy and student satisfaction in e-learning (Gaile et al., 2026) and readiness and employee participation in e-business systems (Hanafizadeh et al., 2013) have been investigated. However, the correlation between digital readiness and entrepreneurial readiness behavior of gig workers in developing economies is limited (Alanoglu et al., 2025). This distinction is significant because gig workers have become a significant part of the workforce and a growing trend, particularly in Pakistan, where digital platforms are rapidly gaining traction. If entrepreneurship is not conceptualized in the form of readiness, it will be hard for policy makers and teachers to devise interventions to promote and encourage digital entrepreneurship.

Moreover, this study addresses the identified gap by examining the empirical relationship between digital readiness and digital entrepreneurial readiness behavior of gig workers in Pakistan. The two-step method of partial least squares structural equation modeling (PLS-SEM) was applied to confirm the relationship between readiness and entrepreneurial behavior. The results are important for a number of reasons. The study contributes to the understanding of theory because it attempts to explain the translation of digital competencies in the study to entrepreneurial results based on the combination of concepts from the Resource Based View (RBV), Human Capital Theory (HCT), and Motivational Theory (MT). The study's practicality is reflected in concrete recommendations on how the digital entrepreneurship ecosystem can be improved, which can be implemented by policy makers, teachers, and platform providers. The study emphasizes the significance of digital readiness and suggests that gig workers are not only a component of the digital labor market but can also be entrepreneurs who can help foster innovation and economic growth in Pakistan's digital economy.

This study further builds on previous studies by providing empirical evidence on the importance of digital readiness in entrepreneurial behavior in a digital environment. The results show that digital readiness is a multidimensional phenomenon with technological, behavioral, and psychological aspects. Specifically, digital readiness has been proven to have an impact on entrepreneurial behavior based on entrepreneurial identity, entrepreneurial intention, entrepreneurial interest, and entrepreneurial potential, which provides a basis for further research. The study is situated in the Pakistani context of gig work, providing significant implications for using digital readiness to support youth as digital entrepreneurs.

Literature Review

Theoretical Foundation

Three theories, namely, the Resource-Based View (RBV) (Peteraf, 1993), Human Capital Theory (HCT) (Sweetland, 1996), and Motivational Theory (MT) (Locke & Latham, 2004), were used as the basis for this study.

In the context of entrepreneurial ecosystems, the RBV of digital readiness can be interpreted as a strategic intangible resource that creates a competitive advantage for an individual (Kaur & Kumar, 2024). The RBV states that the key to sustainable performance is valuable, rare, inimitable, and non-substitutable resources. Digital readiness skills are unique skills that assist individuals in identifying opportunities, innovating, and maintaining entrepreneurial businesses, which they have done in the gig economy (Giustiziero et al., 2021). Thus, readiness is not only knowledge of the technical skills of entrepreneurship but a strategic resource that enables entrepreneurial action.

At the same time, the HCT takes a developmental perspective, as digital readiness is related to the development of knowledge, skills, and competencies that enhance entrepreneurs' productivity

(Sitaridis & Kitsios, 2026). The HCT is based on the assumption that investment in education, training, and skill acquisition enhances their capacity to generate economic value (Nafukho et al., 2004). Readiness, in the view of digital entrepreneurship, is essentially the internalization of human capital by gig workers, which enables them to navigate digital platforms, initiate projects, and adapt to the evolving digital and technological environment (Sitaridis & Kitsios, 2026). This theory suggests that readiness will be displayed through entrepreneurial identity, interest, entrepreneurial potential, and entrepreneurial intent, which will further impact overall readiness behavior.

Finally, a psychological perspective, namely motivational theory, is introduced to explain the mechanisms that connect preparedness to entrepreneurial actions. Huang (2022) found that digital readiness increases psychological capital, self-efficacy, optimism, resilience, and hope, which further motivates people to carry on entrepreneurial activities. Empowering entrepreneurs, fostering positive expectations towards outcomes, and enhancing their ability to deal with challenges are critical aspects of sustaining entrepreneurial actions in digital contexts (Wolf et al., 2020; Shahri et al., 2020). Together, the three theories account for the findings of this study. The RBV emphasizes strategic readiness, while HCT emphasizes developmental readiness through the enhancement of entrepreneurial capacity, and MT sheds light on the motivational processes that help sustain entrepreneurial behaviors.

Digital Entrepreneurial Readiness Behavior

Digital entrepreneurial readiness behavior is considered a set of digital skills, psychological readiness, organizational environment, and socio-economic status. There is a significant body of literature that can be utilized to support the conceptualization of digital readiness in education, faculty development, and organizational transformation. For instance, Van de Werfhorst et al. (2022) identify the ability to use technology, not just availability, as the most critical component of readiness. They show that there is a very strong socio-economic divide in the use of ICT skills, which points to the entrepreneurial context in which digital skills are crucial to capitalize on possibilities online and to increase entrepreneurial possibilities. As such, entrepreneurs' readiness behavior is closely connected to digital skill learning and application ability and is frequently limited by structural inequalities.

In this way, Cutri and Mena (2020) broaden the focus on readiness to include affective and identity aspects. They explored faculty readiness to transition to an online course and determined that technical readiness is not sufficient, but emotional readiness is also important, such as resistance, fear of failure, and transformation of identity. For business owners, the struggle to adapt from a conventional to a digital business model is similar: being vulnerable, changing skills, and dealing with the mental and emotional impact of uncertainty. Hence, emotional resilience and identity adaptation are perceived as key elements of entrepreneurial transformation and need to be included in the framework of digital entrepreneurial readiness behavior.

Michelotto and Joia (2024) also expand the focus to include readiness in organizational ecosystems. They have defined their approach to organizational digital transformation readiness as technological resources, business processes, management capability, human capability, and corporate culture. Rarely are entrepreneurs alone in their activities, and their preparedness behaviors are influenced by the organization and institutional environments surrounding them. What is missing from the entrepreneurial ecosystem is the opportunity to embrace digital practices through culture, leadership, and infrastructure, which are essential for entrepreneurial success.

These views indicate that the speed of digital entrepreneurial readiness behavior is multidimensional. It includes personal and digital competence, psychological readiness, organizational support, and socioeconomic positioning. However, entrepreneurs need to be both technically competent in using digital technologies and emotionally resilient to manage identity changes, socio-emotionally supported to sustain change, and have socioeconomic resources to avail of opportunities. The integrated perspective highlights the fact that readiness is a personal and contextual phenomenon, while the development of digital entrepreneurial behavior and skills must take a multilevel approach, train relevant skills, provide emotional support, transform the organization,

and ensure that resources are shared fairly. In this way, it can be compiled an overall perception of readiness, which plays an essential role in the digital era of entrepreneurship.

Digital entrepreneurial readiness behavior has been identified as an important construct for analyzing the preparation and practice of entrepreneurial behavior in a digitally mediated context. Entrepreneurs need to be ready in several dimensions, especially with digital technologies: readiness, dimensions, identity, intentions, interests, and potential. Readiness involves more than just technical skills; it also includes socio-cognitive, affective, and contextual considerations. Education scholarship (van de Werfhorst, Kessenich, & Geven, 2022), faculty transition studies (Cutri & Mena, 2020), organizational change (Michelotto & Joia, 2024), and entrepreneurial identity (Radu-Lefebvre, Lefebvre, Crosina, & Hytti, 2021) point to the fact that readiness is complex, multi-layered, and segmented in terms of socio-economic status. Based on these, DERB can be viewed in four interrelated dimensions: digital entrepreneurial identity, digital entrepreneurial intentions, digital entrepreneurial interest, and digital entrepreneurial potential, which all provide different opportunities for hypothesis development.

Digital Entrepreneurial Identity

The study of entrepreneurial identity reveals that self-definitions are important for entrepreneurs' legitimacy, sense of belonging, and persistence (Radu-Lefebvre et al., 2021). Identity refers to both a property (stable attributes) and a process (socially constructed and evolving). In the digital context, digital identity formation is the process of incorporating ICT competencies into self-concept (Hytti & Heinonen, 2013). Van de Werfhorst et al. (2022) show that there is an unequal distribution of ICT skills among socio-economic groups and that, therefore, digital identity can be stratified. This is congruent with the research on identity that lends legitimacy in NEWs (Hytti, 2005; Marlow & McAdam, 2015). Therefore, it is expected that digital entrepreneurial identity will increase the likelihood of engaging in readiness behavior, since identity can serve as a motivator and legitimizer of digital involvement, fostering entrepreneurial behavior.

H1: Digital entrepreneurial identity, as a lower-order construct, is positively and significantly represented by its higher-order construct, namely, digital entrepreneurial readiness behavior.

Digital Entrepreneurial Intention

Intention is an important predictor of an entrepreneur's actions and is often correlated with self-efficacy and desirable intentions (Bernard et al., 2004). In the virtual world, intention to learn digitally (Al-Mamary & Alraja, 2022) and faculty members' openness to using digital technologies in teaching (Cutri & Mena, 2020) indicate that intentions are based on confidence in skills as well as emotional readiness. Faculty members' resistance due to fear of failure is similar to that of entrepreneurs hesitant to adopt digital models (Fisch & Block, 2020), while positive views of the digital environment predict success.

H2: Digital entrepreneurial intention, as a lower-order construct, is positively and significantly represented by its higher-order construct, namely digital entrepreneurial readiness behavior.

Digital Entrepreneurial Interest

Interest indicates curiosity and motivation to investigate digital options (Murayama, 2022; Hidi & Renninger, 2019). Bernard et al. (2004) noted that attitudes towards online education and motivation to interact influence success, thus emphasizing the importance of interest in perseverance. Michelotto and Joia (2024) noted that an organization's culture and human capacity are the two factors that lead to digital transformation readiness; thus, an interest in digital technology and platforms can be seen as the precondition for experimenting and opportunity identification. Entrepreneurs interested in digital environments can easily identify and exploit opportunities (Roach & Sauermann, 2015). Hence, digital entrepreneurial interest increases readiness behaviors by motivating exploration and participation.

H3: Digital entrepreneurial interest, as a lower-order construct, is positively and significantly represented by its higher-order construct, namely digital entrepreneurial readiness behavior.

Digital Entrepreneurial Potential

Potential refers to the latent capacity influenced by the skill set, resources, and enabling environment (Cummings & Oldham, 1997). According to Michelotto and Joia (2024), preparedness requires technological resources, managerial skills, and organizational culture, whereas van de Werfhorst et al. (2022) identify ICT skills as the main driver of digital divides. This implies that the potential for entrepreneurship is influenced by both the individual and the ecosystem around them (Krueger, 2020). Entrepreneurs with high digital potential due to competencies, organizational support, and socio-economic positioning tend to engage in preparatory efforts (Santos et al., 2013).

H4: Digital entrepreneurial potential, as a lower-order construct, is positively and significantly represented by its higher-order construct, namely digital entrepreneurial readiness behavior.

Digital Readiness

Digital readiness is an important factor in determining educational institutions and organizations (Wang et al., 2025). This reflects a broad concept that includes all the competencies that an individual or an organization needs to handle digital transformation. Digital readiness is seen as one of the essential criteria for student engagement and achievement in higher education (Gaile et al., 2026) and is a prerequisite for student satisfaction and learning outcomes. Digital readiness is linked to employees' engagement and trust in the workplace, as well as organizational performance in the business context (Gaile et al., 2026).

From an educational perspective, digital readiness involves cognitive skills, digital literacy, and digital proficiency to engage with e-learning ecosystems. According to Huang (2022), a student who is considered a 'digital native' should be regarded as having e-learning skills that can enhance learning effectiveness. However, evidence has revealed that many students are not digitally prepared, influencing their academic achievement (Dejene & Tilahun, 2024). Hence, it is crucial to consider digital readiness as a factor in students' satisfaction towards e-learning. It is important to note the complex aspects of readiness in this definition, as it covers more than just technical issues. Every student needs to be digitally literate and possess better academic outcomes. Digitally literate students are not only more successful academically but also report higher satisfaction with their e-learning experiences (Hong and Kim (2018). In contrast, if readiness is absent, there is a misunderstanding between the use of technology in play and at school, as these students struggle to use technology in the learning context. Moreover, students are known to use technology in a non-educational manner, as mentioned by Margaryan et al. (2011), so there will be a need to develop meaningful relationships with technology.

In terms of e-learning, there are certain elements that impact students satisfaction, including innovative teaching methods, psychological capital, and mindfulness. Huang's study merged these factors and found a positive correlation (Hasan et al., 2025). Psychological capital (PsyCap: self-efficacy, optimism, resilience, and hope) is a mediator between readiness and satisfaction (Kirrane et al., 2016). This result is in line with motivational theory, which states that students with high PsyCap are more confident, optimistic, and resilient in taking advantage of the online curricula. Readiness has a direct and indirect effect on satisfaction, which means that readiness is a part of PsyCap. One of the key mediators in this theory is mindfulness, which is the ability to be attentive and present to events without any evaluation. According to research conducted by Huang, digital readiness does not have any direct relationship with the level of satisfaction, whereas a direct relationship exists between psychological capital (PsyCap) and satisfaction, with mindfulness being a moderator. Mindfulness may be used to amplify the effects of PsyCap on students' ability to sustain themselves and flourish within the digital learning process. The processes involved in digital learning success become clearer due to the interactions between readiness, PsyCap, and mindfulness.

The concept of digital readiness is similar to the readiness of organizations to use e-business in practice, based on the findings from organizational studies. Lai et al. (2013) state that employee involvement and trust are important for e-business readiness, its benefits, and employee satisfaction. In the process of organizational transition from traditional to digital business models, readiness includes employees' willingness and ability to change their attitudes and adapt to innovations. Digital readiness is a non-material resource of organizations that demonstrates psychological and technological maturity and helps minimize the negative effects of resistance to change and successfully implement e-business. Trust is an important aspect of organizational readiness. However, trust is not only about the improvement of technology for the benefit of the business; it is necessary to trust that e-business services provide reliable and secure services to consumers.

Lai et al. (2013) reported a direct relationship between trust and satisfaction with e-business and an indirect relationship mediated by e-business readiness and benefits. The dual role of trust as a motivator of readiness and a generator of perceived benefits and satisfaction is highlighted. Participation also helps employees be ready by enhancing communication, job skills, and ownership, which minimizes resistance to change. Lai (2017) reiterated the findings of Vohra and Bhardwaj (2017), stating that active participation promotes system acceptance and commitment.

There is a strong link between readiness, benefits, and satisfaction in the organizational literature (Lai et al., 2012). The more ready an employee is for e-business, the more receptive they will be to change, from new technology to an organization's new structure, which can result in better performance and satisfaction for the employee (Wei & Chou, 2020). Truong (2008) showed that buyers' e-readiness could yield greater benefits from leveraging e-marketplaces, and Zhu et al. (2004) showed that e-readiness had a significant effect on individual performance and e-business value. The results of this study are consistent with educational research findings, which show that readiness significantly impacts satisfaction and outcomes.

The concept of readiness is not only technical but also multifaceted, encompassing psychological, behavioral, and attitudinal aspects, as evidenced by educational and organizational studies (Chounta et al., 2024) and the current study. Educational readiness enables students to critically participate in digital culture and feel good about learning through digital means. In organizations, readiness is evident when employees are willing to accept change, trust systems, believe in the benefits, and achieve satisfaction and performance (Tsou and Hsu, 2014). Furthermore, readiness in both cases is a psychological function, that is, through the mediating and moderating roles of PsyCap and trust, respectively. Therefore, human factors should be included in digital transformation strategies.

These results have implications. Increasing digital readiness for teachers requires more than simply providing them with digital tools; it requires digital literacy, skills in critical thinking, and psychological resilience. Innovative teaching strategies must be complemented by opportunities to improve students' PsyCap and mindfulness, enabling them to function successfully in digital environments (Kirrane et al., 2016). Finally, managers must create readiness for e-business by developing trust, ensuring participation, and offering staff assistance to cope with technological and organizational changes (Armenakis & Harris, 2002). Readiness can then be considered a strategic edge and will enable institutions to maximize gains from digital transformation (Gaile et al., 2026).

The literature reviewed shows that digital readiness is a key factor in satisfaction and performance in educational and organizational settings, including the workplace. It is complex and consists of technical, psychological, and behavioral skills. The level of readiness affects how much someone can benefit from digital transformation, how much they can adopt it, and how happy they will be with it in school and at work. Further research is needed to investigate the impact of readiness on psychological factors, participation, and trust, as well as novel knowledge on the management and implementation of digital transformation (Grandi & Giacomini, 2025).

Digital readiness, in both education and business, is a set of skills, literacy, and proficiency required to succeed in digital transformation (Gaile et al., 2026). Entrepreneurial readiness is the ability to leverage opportunities, innovate, and develop ventures in entrepreneurial settings using digital tools. Huang (2022) showed that the enhancement of students' psychological capital (self-efficacy,

optimism, and resilience) positively affected their entrepreneurial competencies, as they were more digitally ready and satisfied with e-learning. Likewise, Lai et al. (2013) stated that employee readiness improves employees' willingness to accept technological change, decreases resistance to change, and promotes pro-organizational behaviors in e-businesses. Based on these results, the following hypothesis can be formulated: digital readiness brings behavioral and cognitive flexibility to digital platform adoption, new business models, and maintaining entrepreneurial momentum. Digital readiness is not a collection of skills that have been memorized in the brain but rather a collection of behaviors that help digital literacy become digital entrepreneurship. Digital readiness is a key antecedent of digital entrepreneurial readiness behavior, thereby strengthening a person's ability to make the most of digital opportunities, embrace change in a rapidly changing world, and add value to the digital economy.

H5: Digital readiness positively and significantly impacts digital entrepreneurial readiness behavior.

Methodology

This study adopts a positivist philosophical approach to study the influence of digital readiness on digital entrepreneurial readiness behavior. A cross-sectional survey was used for this purpose, which involved data collection at one point in time. All the questionnaire items were measured on a standard 5-point Likert-type scale, which ranged from strongly disagree (1) to strongly agree (5). The questionnaire was based mainly on two sections: respondents' demographics and variable constructs. Demographic information included age and gender. The other part contained items or empirical indicators for every variable under a study, which were developed after a detailed literature survey.

A 12-item digital readiness questionnaire was adapted from Huang (2022) to measure digital readiness. The second-order construct of digital entrepreneurial readiness behavior was developed using a two-stage disjoint approach to construct development, where the four lower-order constructs of identity, intention, interest, and potential were used as lower-order constructs. Digital entrepreneurial identity (DEI) included ten items adapted from Davis (2013), Sellers et al. (1997), and Belk (2013). Secondly, digital entrepreneurial intention was assessed using a six-item scale developed by Liñán and Chen (2009). Thirdly, digital entrepreneurial interest was measured using five items, of which one item was borrowed from Bahaw et al. (2025), while the remaining items were from Mirhabibi et al. (2025). Finally, the Athayde scale (2009), consisting of 10 items, was adapted to measure digital entrepreneurial potential.

For this study, the population was gig workers in Pakistan. Data collection for the study was conducted between October 15, 2025, and December 15, 2025. Therefore, 343 responses were received, with 100% of the responses being considered valid for analysis. Partial least squares (PLS-SEM) was used in the data analysis by Smart PLS4. In several research situations and with more complex models, PLS (SEM) can be an effective method. (Chin et al., 1998). In addition, it is less restrictive with sample size than other covariance based methods. (Chin et al., 1998). Therefore, due to the small sample size, this study employed the PLS-SEM, which was suitable for providing robust data analysis (Hair et al., 2019).

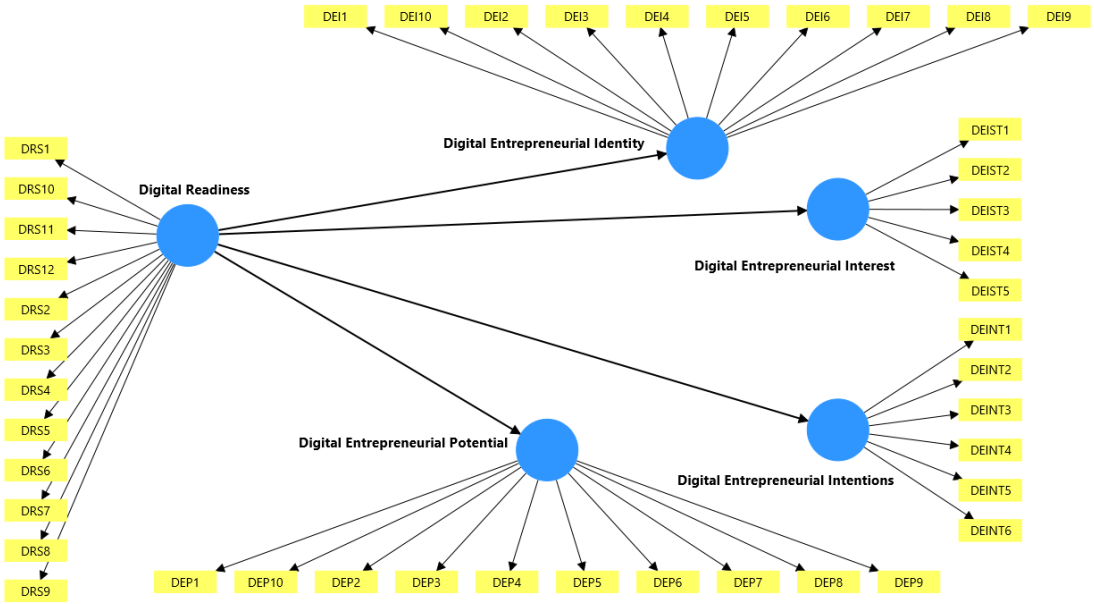
Conceptual Model

In line with the two-step disjoint approach in PLS, the conceptual model is structured by first estimating the lower-order constructs independently (Figure 1) and then linking them to the higher-order construct (Figure 2). In the first step, Digital Readiness was measured using 12 skill indicators (DRS1–DRS12), capturing competencies such as word processing, spreadsheet use, online collaboration, and digital communication. Similarly, the dimensions of digital entrepreneurial readiness behavior were modeled as separate lower-order constructs: digital entrepreneurial identity (DEI1–DEI10), digital entrepreneurial potential (DEP1–DEP10), digital entrepreneurial interest (DEIST1–DEIST5), and digital entrepreneurial intention (DEINT1–DEINT6). Each construct was tested for reliability, convergent validity, and discriminant validity to ensure accurate measurement before

aggregation. The next step involves assigning lower-order constructs to their higher-order constructs in a disjoint manner. That is, digital entrepreneurial readiness behavior (DERB) is posited as a second-order construct whose identity, potential, interest, and intention are the constructs. Digital Readiness remains a first-order construct that serves as an exogenous predictor. The structural path from Digital Readiness to DERB is the direct path linking readiness skills and entrepreneurial behavior, but DERB is manifested through the four constructs. This hierarchical structure illustrates how digital readiness facilitates the manifestation of entrepreneurial identity, maintaining the interest, potential, and intention of gig workers in digital entrepreneurship. Using the two-step disjoint approach, the model accounts for measurement problems at the lower-order level before aggregation.

Figure 1.

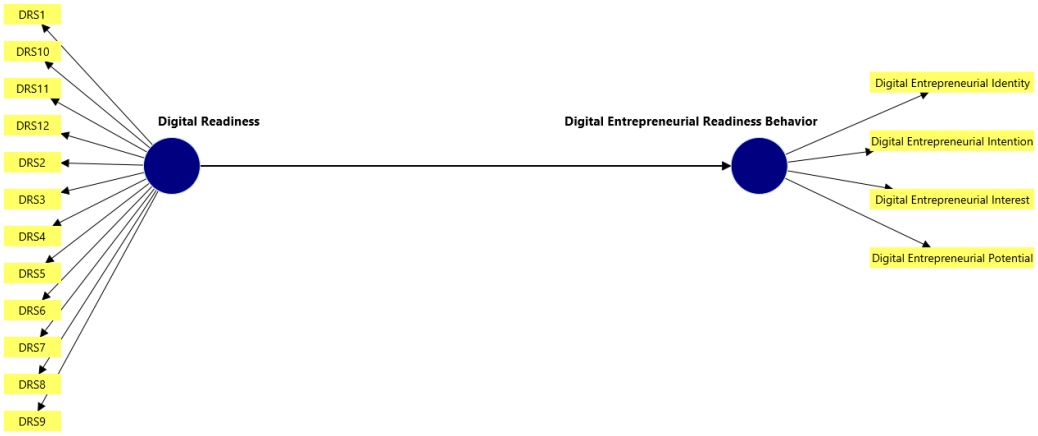
First Step in PLS-SEM disjoint approach



Source(s): Author(s) own work

Figure 2.

Second Step in PLS-SEM disjoint approach



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Data Analysis:

Demographics

Several participants in the study were male (221), with female participants (122), indicating the gender composition of the gig economy in Pakistan, which shows that males are more prominently involved in digital work (Table 1). These disparities indicate that the pattern of digital readiness and entrepreneurial behavior observed may be related to the experiences of men. However, the inclusion of female respondents indicates an increase in their involvement in digital entrepreneurship. The age distribution also highlights the youth-focused nature of the gig economy: 115 participants were 15–20 years old, and 140 were 15–25 years old, accounting for nearly 75% of the total participants. This cohort of younger workers highlights the importance of encouraging digital and entrepreneurial readiness behaviors among early career workers who are more open to technology and innovation. In comparison, mature professionals (26–35 and 31–36 years) are underrepresented among digital entrepreneurs, with 54 and 25 respondents, respectively, and only nine respondents above the age of 36.

Table 1.

Demographic Statistics of Sample

Respondents	n=343
Gender	
Male	129
Female	76
Age	
15-20	115
21-25	140
26-30	54
31-35	25
36 >	9

Source(s): Author(s) own work

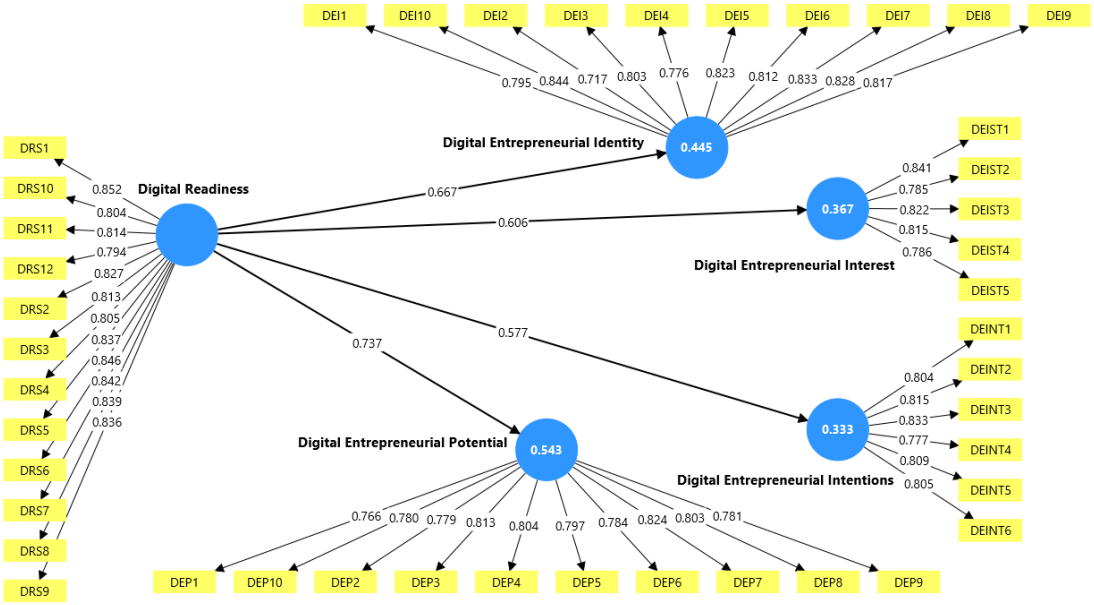
Reliability and Validity Tests

The measurement model was initially evaluated for its internal consistency (see Figure 3). Tables 2 and 3 show (a) indicator reliability values, which should not be less than 0.4 (Urbach & Ahlemann, 2010), (b) Cronbach's alpha (α), which should be 0.7 or higher (Nunnally & Bernstein, 1978; Nunnally, 1975), and (c) composite reliability values, which are acceptable from the range of 0.700 to 0.900 (Hair et al., 2019). The AVE was also reported, and values should be above 0.5 to confirm convergent validity (Hair et al., 2020).

Discriminant validity for lower-order and higher-order constructs was assessed using Fornell and Larcker's (1981) standards. As indicated in Tables 4 and 5, the correlation statistics are lower than the square roots of the AVEs (Hair et al., 2019). Additionally, the HTMT ratio was applied (Henseler et al., 2015). Tables 6 and 7 demonstrate that discriminant validity was confirmed, with HTMT values below 0.9 and significantly different from 1.0 (Hair et al., 2019). Hence, the measurement model achieved reliability and validity.

Figure 3.

Reliability and Validity Results



Source(s): Author(s) own work

Table 2.

Measurement Model Results

Variable	Code	Item	Cronbach's alpha	Composite reliability	Average variance extracted (AVE)	VIF values	Loadings	Source
Digital Entrepreneurial Identity	DEI1	I enjoy using digital platforms to experiment with my entrepreneurial ideas.	0.940	0.941	0.649	2.280	0.795	Davis (2013), Sellers et al. (1997), Belk (2013)
	DEI2	I feel that I can communicate my unique entrepreneurial personality online.				1.838	0.717	
	DEI3	Digital channels allow me to showcase an elevated version of my entrepreneurial identity.				2.478	0.803	
	DEI4	There are aspects of my entrepreneurial identity that I express more freely in digital environments than in offline environments.				2.183	0.776	
	DEI5	When I am online, I can present myself				2.702	0.823	

Variable	Code	Item	Cronbach's alpha	Composite reliability	Average variance extracted (AVE)	VIF values	Loadings	Source
		in a way that highlights my entrepreneurial strengths.						
	DEI6	Online, I feel I can express the entrepreneur that I aspire to be.				2.537	0.812	
	DEI7	Being recognized as a digital entrepreneur is an important reflection of my identity.				2.764	0.833	
	DEI8	I identify strongly with the community of digital entrepreneurs I interact with online.				2.664	0.828	
	DEI9	I feel a strong connection to other digital entrepreneurs through online networks.				2.494	0.817	
	DEI10	My online presence effectively represents the entrepreneurial identity that I embody.				3.032	0.844	
Digital Entrepreneurial Potential	DEP1	I proactively take the lead in digital business activities.	0.934	0.935	0.629	2.153	0.766	Athayde (2009)
	DEP2	I often initiate tasks and responsibilities in digital ventures.				2.297	0.779	
	DEP3	I tend to assume central roles in digital collaborations.				2.507	0.813	
	DEP4	I enjoy guiding digital business efforts and coordinating with others.				2.412	0.804	
	DEP5	I consider imagination a key asset for achieving digital business success.				2.300	0.797	
	DEP6	I appreciate learning environments that incorporate innovative and diverse strategies.				2.211	0.784	

Variable	Code	Item	Cronbach's alpha	Composite reliability	Average variance extracted (AVE)	VIF values	Loadings	Source
	DEP7	I am stimulated by experiences that stretch my imagination and foster creativity.				2.815	0.824	
	DEP8	I usually feel more energized and motivated than others around me in digital contexts.				2.450	0.803	
	DEP9	I prefer to get started independently rather than wait for external prompts.				2.188	0.781	
	DEP10	I enjoy figuring things out on my own instead of relying entirely on instruction.				2.301	0.780	
Digital Entrepreneurial Interest	DEIST1	I am interested in learning about the requirements for starting a digital business.	0.869	0.873	0.656	2.213	0.841	Bahaw et al. (2025)
	DEIST2	I value learning from the experiences of successful digital entrepreneurs.				1.865	0.785	Mirhabibi et al. (2025)
	DEIST3	When I begin to think about digital venture, I stay committed until I achieve meaningful results, regardless of how long it takes.				2.001	0.822	
	DEIST4	I dedicate myself fully to tasks that contribute to my goals in digital entrepreneurship.				1.973	0.815	
	DEIST5	I am interested in leading digital business initiatives that align with my personal or academic background.				1.872	0.786	
Digital Entrepreneurial Intention	DEINT1	I am ready to do anything to be a digital entrepreneur.	0.893	0.895	0.652	2.053	0.804	Liñán and Chen (2009)
	DEINT2	My professional goal is to become a digital entrepreneur.				2.220	0.815	
	DEINT3	I will make every effort to start and				2.359	0.833	

Variable	Code	Item	Cronbach's alpha	Composite reliability	Average variance extracted (AVE)	VIF values	Loadings	Source
		run my own digital business.						
	DEINT4	I am determined to create a digital business in the future.				1.920	0.777	
	DEINT5	I have very seriously thought of starting a digital business.				2.154	0.809	
	DEINT6	I have the firm intention to start a digital business someday.				2.022	0.805	
Digital Readiness Skills	DRS1	I can use the fundamental functions of word-processing programs to create and edit documents for various digital business tasks.	0.958	0.959	0.682	3.248	0.852	Huang (2022)
	DRS2	I can use spreadsheet programs (e.g., Microsoft Excel) to handle data and analyze it for various digital business tasks.				3.149	0.827	
	DRS3	I can use the basic functions of digital application/website, I often use.				3.100	0.813	
	DRS4	I am proficient in using standard software features to create and modify documents for digital applications and websites I regularly use.				2.655	0.805	
	DRS5	I can use spreadsheet programs (e.g., Microsoft Excel) to handle data and analyze it for digital application/website, I often use.				3.162	0.837	
	DRS6	I can effectively utilize various search tools and methods to locate specific information.				3.392	0.846	
	DRS7	I can inform others about different				3.087	0.842	

Variable	Code	Item	Cronbach's alpha	Composite reliability	Average variance extracted (AVE)	VIF values	Loadings	Source
		ways to effectively search for digital information.						
	DRS8	I can generate keywords to search for information for my work.				3.226	0.839	
	DRS9	I can interact with others using real-time communication tools, for example, video conferencing tools or messengers.				3.095	0.836	
	DRS10	I can share my opinions online, for example, with blogs, social networking services, or web pages.				2.752	0.804	
	DRS11	I can seamlessly distribute digital files to others through web-based platforms.				2.829	0.814	
	DRS12	I am able to work collaboratively with team members and peers using online tools.				2.530	0.794	

Source(s): Authors own work

Table-3.

Reliability and Validity of Higher-Order Construct

	Cronbach's alpha	Composite reliability	Average variance extracted (AVE)
Digital Entrepreneurial Readiness Behavior	0.895	0.904	0.760

Source(s): Author(s) own work

Table 4.

Discriminant Validity of lower-order constructs (Fornell-Larcker Criterion)

	Digital Entrepreneurial Identity	Digital Entrepreneurial Intentions	Digital Entrepreneurial Interest	Digital Entrepreneurial Potential	Digital Readiness
Digital Entrepreneurial Identity	0.805				
Digital Entrepreneurial Intentions	0.608	0.807			
Digital Entrepreneurial Interest	0.627	0.771	0.810		
Digital Entrepreneurial Potential	0.801	0.644	0.635	0.793	
Digital Readiness	0.667	0.577	0.606	0.737	0.826

Source(s): Author(s) own work

Table 5.

Discriminant Validity of lower-order constructs (Fornell-Larcker Criterion)

	Digital Entrepreneurial Readiness Behavior	Digital Readiness
Digital Entrepreneurial Readiness Behavior	0.872	
Digital Readiness	0.747	0.826

Source(s): Author(s) own work

Table 6.

HTMT Ratio of Lower order construct

	Digital Entrepreneurial Identity	Digital Entrepreneurial Intentions	Digital Entrepreneurial Interest	Digital Entrepreneurial Potential	Digital Readiness
Digital Entrepreneurial Identity					
Digital Entrepreneurial Intentions	0.661				
Digital Entrepreneurial Interest	0.690	0.872			
Digital Entrepreneurial Potential	0.854	0.702	0.700		
Digital Readiness	0.700	0.620	0.658	0.776	

Source(s): Author(s) own work

Table 7.

HTMT Ratio of Higher order construct

	Digital Entrepreneurial Readiness Behavior	Digital Readiness
Digital Entrepreneurial Readiness Behavior		
Digital Readiness	0.798	

Source(s): Author(s) own work

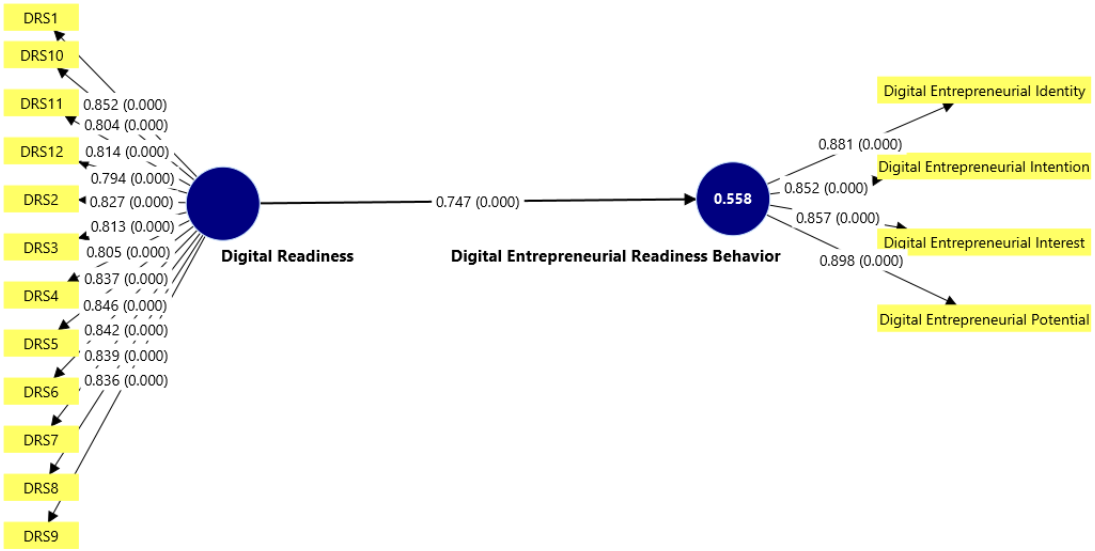
Structural Model Assessment

For structural model assessment, researchers must assess the influence of multicollinearity, the significance of the paths, R^2, effect sizes (f^2), and predictive relevance (Q^2) (Hair et al., 2019). Initially, collinearity among the constructs was examined. Table 8 shows that none of the VIF values exceed the recommended threshold of 5 (Hair et al., 2019); thus, there are no multicollinearity issues. Thus, the structural relationships were assessed. The predictive ability of the predictors of entrepreneurial readiness behavior is significant, that is, $R^2 = 0.558$ (adjusted $R^2 = 0.556$). According to Cohen (1988),

this is a moderate to substantial level of explanatory power in social science research. Moreover, from Table 9, a very large f^2 effect size of 1.261 is observed, which indicates that the exogenous constructs have a highly influential relationship with endogenous variables.

Figure 4.

Structural Model Results



Source(s): Author(s) own work

The predictive relevance is further supported by the Q^2predict value of 0.551, which is well above zero and falls into the category of large predictive relevance, confirming that the model has a strong out-of-sample predictive capability. The error metrics, RMSE = 0.677 and MAE = 0.490, were relatively low, indicating that the model's predictions were accurate and stable (Hair et al., 2019).

Table 8

Hypotheses Testing

Hypothesis	Path	β	SD	T statistics	P values	Confidence interval Bias Corrected 5%	95%	Decision
H1	Digital Entrepreneurial Identity <- Digital Entrepreneurial Readiness Behavior	0.881	0.015	57.983	0.000	0.844	0.905	Accepted
H2	Digital Entrepreneurial Intention <- Digital Entrepreneurial Readiness Behavior	0.852	0.038	22.258	0.000	0.755	0.908	Accepted

H3	Digital Entrepreneurial Interest <- Digital Entrepreneurial Readiness Behavior	0.857	0.034	25.331	0.000	0.774	0.908	Accepted
H4	Digital Entrepreneurial Potential <- Digital Entrepreneurial Readiness Behavior	0.898	0.015	59.654	0.000	0.865	0.924	Accepted
H5	Digital Readiness -> Digital Entrepreneurial Readiness Behavior	0.747	0.035	21.461	0.000	0.663	0.806	Accepted

Source(s): Author(s) own work

Table 9.

The Explanatory, Predictive, and Significant Power of Model

	R-square	R-square adjusted	F-square	Q^2predict	RMSE	MAE
Digital Entrepreneurial Readiness Behavior	0.558	0.556	1.261	0.551	0.677	0.490

Source(s): Author(s) own work

Discussion

The hypothesis testing result shows that the hypothesis is accepted as digital readiness is found to be significant and positively related with digital entrepreneurial readiness behavior of gig workers in Pakistan. The path coefficient of H5 ($\beta = 0.747$, $T = 21.461$, $p < 0.000$) indicates that the relationship between the two is strong and statistically significant, and showed that there is a strong positive relationship between entrepreneurial readiness skills in a digital context and the digital context of entrepreneurial readiness behaviors. This finding aligns with the previous studies in digital readiness that are based on three dimensions—technical skills, digital literacy, and behavioral skills (Huang, 2022; Hong and Kim, 2018). In the gig economy era, where the use of digital platforms is fundamental to the starting, managing, and sustaining of entrepreneurial initiatives, readiness emerges as an important variable in the entrepreneurial identity, potential, interest, and intention building process.

This further highlights the importance of digital readiness from the explanatory power of the model. The results reveal digital readiness with an R2 of .558 explaining more than 55% of the variance in entrepreneurial readiness behavior, and a large effect size of $f^2 = 1.261$, demonstrating that digital readiness significantly impacts entrepreneurial outcomes. This suggests that the skills of digital readiness are not just elements that are side-by-side to entrepreneurship, but are essential in entrepreneurial actions in digitally mediated work environments. Moreover, the predictive relevance

(Q^2 = 0.551) supports the robustness of the relationship between readiness and entrepreneurial behavior, which can be considered an excellent out-of-sample predictive ability.

The results are consistent with those of Huang (2022), who claimed that being digitally ready positively affects e-learning satisfaction and psychological capital, which consequently leads to the development of entrepreneurial skills such as self-efficacy, optimism, and resilience. Likewise, Lai et al. (2013) showed that readiness within organizational environments enhances the participation, trust, and satisfaction of employees towards e-business systems. In the context of the gig economy, extending these findings, the present study demonstrates how readiness enables workers to use digital platforms, technological tools, and digital literacy to become entrepreneurs. In a nutshell, readiness serves as a catalyst for behavior that helps build digital skills into entrepreneurial identity, potential, interest, and intention.

This is reinforced by the acceptance of H1–H4. In fact, all three variables of digital entrepreneurial identity, intention, interest, and potential were significantly related to entrepreneurial readiness behavior and had path coefficients of more than 0.85. This means that readiness behavior is a composite of several entrepreneurial dimensions, and digital readiness is the basis for the development of these behaviors. Digitally ready gig workers are also more likely to have strong intentions, maintain interest, manifest the potential to be successful in a digital venture, and express entrepreneurial identity digitally.

The results have significance for practice and suggest the urgent need for gig worker digital readiness training and capacity building programmes. In the era of the gig economy in Pakistan, equipping workers with digital skills is not only going to enhance their entrepreneurial readiness but also help them to participate in the global digital economy. Therefore, there is a need to focus on digital literacy programmes, access to technological infrastructure, and readiness skills development programmes in the policy, education, and provision of platform services. Thus, they can establish an ecosystem that enables digital labor to become digital entrepreneurs.

Therefore, empirical evidence confirms that the digital readiness level is a good predictor of digital entrepreneurial readiness behavior. This study addresses the gap between tech skills and entrepreneurship that allows gig workers to not only become a part of the platform but also actively create entrepreneurial opportunities. This study adds to the literature by empirically confirming the mediating function of digital readiness in entrepreneurial behavior and has implications for future research on the future of digital entrepreneurship in emerging economies and practice.

Implications of Research:

Theoretical Implications

This study contributes to the theoretical discussion of digital entrepreneurship by empirically validating the significance of digital readiness as a primary construct influencing digital entrepreneurial readiness behavior. The study suggests a high path coefficient between digital readiness and the phenomena of entrepreneurial readiness, proving that readiness consists not only of a set of technical competencies but also of a complex multidimensional resource integrating cognitive, behavioral, and psychological aspects. This approach correlates with the Resource-Based View (RBV), according to which digital readiness represents a strategic and intangible resource that facilitates the capabilities of the entrepreneurial ecosystem in gaining competitive advantage. On the other hand, the results support Human Capital Theory (HCT), which postulates that the development of digital competencies and literacy positively correlates with the formation of entrepreneurial identity, interest, potential, and intention. Lastly, the results are consistent with Motivational Theory (MT), which suggests that readiness serves as a catalyst for the development of psychological capital, self-efficacy, optimism, resilience, and hope, all of which are essential for sustaining entrepreneurial actions. All these theoretical frameworks offer strong bases for understanding the relationship between digital readiness and entrepreneurial outcomes, especially in emerging gig economies.

Practical Implications

This research shows the importance of developing digital readiness among gig workers to establish entrepreneurial capacity (Tunio, 2021). The government of Pakistan should focus on digital literacy initiatives, training programs, and technological infrastructure to enable gig workers to use digital platforms for entrepreneurial ventures. Digital readiness modules can be embedded within educational and skill development programs, enabling the knowledge and skills of young workers to be directly transferable for entrepreneurial identity, potential, interests, and intentions. The empowerment of gig workers as digital entrepreneurs can be achieved by investing in user-friendly tools, collaborative areas, and training sessions. The integration of readiness in national and organizational policies can contribute to developing an atmosphere that fosters innovation, entrepreneurship, and sustainable economic growth in the digital economy.

Limitations of Research

This study has some limitations: While useful, the study has some limitations: The first limitation is that the sample is limited to gig workers from Pakistan, which could make the results limited in their generalizability to other cultural or economic settings. The age distribution (mainly younger) means that the outcomes are likely to be more representative of younger age bands than older professionals. Second, self-reporting methods mean that there is a potential for social desirability or over-reporting of digital skills. Third, causality cannot be determined by the cross-sectional design because both readiness and entrepreneurial actions were taken at one particular point in time. Finally, while the model is a strong predictor and explains much about readiness and entrepreneurship, it may not necessarily capture any effects that outside variables may have on entrepreneurship. Future research is needed to address these limitations using longitudinal designs, larger samples in various contexts, and other moderating and mediating variables to add depth and breadth to the theoretical and practical knowledge of digital readiness in entrepreneurship.

Conclusion

This empirical study found that digital readiness plays a significant role in the formation of digital entrepreneurial readiness behavior among gig workers in Pakistan. It was found that readiness can be expressed in both technical and operational and behavioral and psychological aspects, which are part of entrepreneurial identity, interest, potential, and intention. Results showed that individual digital literacy, collaborative skills, and technological adaptability were significant and powerful path coefficients, indicating that these persons are more likely to commercialize their digital literacy. From a theoretical perspective, additional support for this relationship is provided by the model's ability to explain and predict, which also provides theoretical support for the RBV, HCT, and Motivational Theory.

This study highlights the importance of investing in digital readiness as a strategic enabler of entrepreneurship in the gig economy. The results indicate that policy, teaching, and platform solutions explicitly addressing digital skill development, access to digital infrastructure, and capacity building explicitly support improved entrepreneurial outcomes. This study was conducted in one national context and was self-reported; however, it offers a good basis for other studies, both self-reported and longitudinal, in other national contexts. Finally, at a theoretical and practical level, the digital readiness is demonstrated as an important key for entrepreneurial success in the digital era both theoretically and practically, providing theoretical insights and practical recommendations for fostering innovation and self-employment in emerging economies.

Contribution: All authors contributed equally to this study.

References

Alanoglu, M., Karabatak, S., & Yang, H. (2025). Understanding university students' self-directed online learning in the context of emergency remote teaching: the role of online learning readiness and digital literacy. *Journal of Computing in Higher Education*, *38*(2), 651–677. https://doi.org/10.1007/s12528-025-09458-0

Google Scholar Worldcat Fulltext

Al-Mamary, Y. H. S., & Alraja, M. M. (2022). Understanding entrepreneurship intention and behavior in the light of TPB model from the digital entrepreneurship perspective. *International Journal of Information Management Data Insights*, *2*(2), 100106. https://doi.org/10.1016/j.jjimei.2022.100106

Google Scholar Worldcat Fulltext

Armenakis, A. A., & Harris, S. G. (2002). Crafting a change message to create transformational readiness. *Journal of Organizational Change Management*, *15*(2), 169–183. https://doi.org/10.1108/09534810210423080

Google Scholar Worldcat Fulltext

Barzotto, M., Corradini, C., & Labory, S. (2025). Shuffling the deck? Multiple transitions and the new spatiality of places and workspaces in the polycrisis post-COVID economy. *Regional Studies*, *59*(1). https://doi.org/10.1080/00343404.2025.2451308

Google Scholar Worldcat Fulltext

Bérastégui, P. (2021). *Exposure to Psychological Risk Factors in the Gig Economy: A Systematic Review*. European Trade Union Institute. Brussels, Belgium. Research Paper - Report 2021.01, Available at SSRN: https://ssrn.com/abstract=3770016 or http://dx.doi.org/10.2139/ssrn.3770016

Google Scholar Worldcat Fulltext

Bernard, R. M., Brauer, A., Abrami, P. C., & Surkes, M. (2004). The development of a questionnaire for predicting online learning achievement. *Distance Education, 25*(1), 31–47. https://doi.org/10.1080/0158791042000212440

Google Scholar Worldcat Fulltext

Blackham, A. (2018). 'We are All Entrepreneurs Now': Options and New Approaches for Adapting Equality Law for the 'Gig Economy'. *International Journal of Comparative Labour Law and Industrial Relations*, *34*(Issue 4), 413–434. https://doi.org/10.54648/ijcl2018019

Google Scholar Worldcat Fulltext

Chin, W. W. (1998). The partial least squares approach to structural equation modeling. In *Modern methods for business research* (pp. 295-336). Psychology Press.

Google Scholar Worldcat Fulltext

Chounta, I., Ortega-Arranz, A., Daskalaki, S., Dimitriadis, Y., & Avouris, N. (2024). Toward a data-informed framework for the assessment of digital readiness of higher education institutions. *International Journal of Educational Technology in Higher Education*, *21*(1). https://doi.org/10.1186/s41239-024-00491-0

Google Scholar Worldcat Fulltext

Cohen, J. (1988), *Statistical Power Analysis for the Behavioral Sciences*, Routledge eBooks. https://doi.org/10.4324/9780203771587

Google Scholar Worldcat Fulltext

Cummings, A., & Oldham, G. R. (1997). Enhancing Creativity: Managing work contexts for the high potential employee. *California Management Review*, *40*(1), 22–38. https://doi.org/10.2307/41165920

Google Scholar Worldcat Fulltext

Cutri, R. M., & Mena, J. (2020). A critical reconceptualization of faculty readiness for online teaching. *Distance Education, 41*(3), 361–380. https://doi.org/10.1080/01587919.2020.1763167

Google Scholar Worldcat Fulltext

Dejene, W., & Tilahun, D. (2024). How ready are our students for e-learning? Evidence from Ethiopia. *Discover Education*, *3*(1). https://doi.org/10.1007/s44217-024-00359-5

Google Scholar Worldcat Fulltext

Doargajudhur, M., Hosanoo, Z., Rughoobur-Seetah, S., & Lichy, J. (2026). Digital entrepreneurship and gendered boundaries: technology, Work–Life conflict, and Well-Being. *Gender Work and Organization*, *33*(3), 883–899. https://doi.org/10.1111/gwao.70090

Google Scholar Worldcat Fulltext

Drouillard, M. (2016). Addressing Voids: How digital start-ups in Kenya create market infrastructure. In *Palgrave Macmillan UK eBooks* (pp. 97–131). https://doi.org/10.1057/978-1-137-57878-5_4

Google Scholar Worldcat Fulltext

Fisch, C., & Block, J. H. (2020). How does entrepreneurial failure change an entrepreneur's digital identity? Evidence from Twitter data. *Journal of Business Venturing*, *36*(1), 106015. https://doi.org/10.1016/j.jbusvent.2020.106015

Google Scholar Worldcat Fulltext

Fornell, C. and Larcker, D.F. (1981), "Evaluating structural equation models with unobservable variables", *Journal of Marketing Research*, Vol. 18 No. 1, pp. 39–50.

Google Scholar Worldcat Fulltext

Gaile, A., Zaumane, I., Stibe, A., & Kivipõld, K. (2026). Expanding the success factors of change management by incorporating crisis preparedness in the emerging AI world. *Review of Managerial Science*. https://doi.org/10.1007/s11846-026-00979-1

Google Scholar Worldcat Fulltext

Giustiziero, G., Kretschmer, T., Somaya, D., & Wu, B. (2021). Hyperspecialization and hyperscaling: A resource-based theory of the digital firm. *Strategic Management Journal*, *44*(6), 1391–1424. https://doi.org/10.1002/smj.3365

Google Scholar Worldcat Fulltext

Grandi, L., & Giacomini, D. (2025). Debate: Bridging technology and organization: a socio-technical checklist for AI readiness in the public sector. *Public Money & Management*, *46*(1), 10–12. https://doi.org/10.1080/09540962.2025.2552353

Google Scholar Worldcat Fulltext

Hair, J.F., Howard, M.A. and Nitzl, C. (2020), "Assessing measurement model quality in PLS-SEM using confirmatory composite analysis", *Journal of Business Research*, Vol. 109, pp. 101-110. https://doi.org/10.1016/j.jbusres.2019.11.069

Google Scholar Worldcat Fulltext

Hair, J.F., Risher, J.J., Sarstedt, M. and Ringle, C.M. (2019), "When to use and how to report the results of PLS-SEM", *European Business Review*, Vol. 31 No. 1, pp. 2–24. https://doi.org/10.1108/EBR-11-2018-0203

Google Scholar Worldcat Fulltext

Hanafizadeh, M. R., Hanafizadeh, P., & Bohlin, E. (2013). Digital divide and e-Readiness. *International Journal of E-Adoption*, *5*(3), 30–75. https://doi.org/10.4018/ijea.2013070103

Google Scholar Worldcat Fulltext

Hasan, M., Muchtar, S., Nurjannah, Kardoyo, & Sulistyowati, R. (2025). Investigating the role of entrepreneurship education on the entrepreneurial readiness of generation Z students: Why are growth mindset and positive psychological capital important? *Journal of Education for Business*, *101*(1), 10–18. https://doi.org/10.1080/08832323.2025.2592955

Google Scholar Worldcat Fulltext

Hidi, S. E., & Renninger, K. A. (2019). Interest development and its relation to curiosity: Needed neuroscientific research. *Educational Psychology Review*, *31*(4), 833–852. https://doi.org/10.1007/s10648-019-09491-3

Google Scholar Worldcat Fulltext

Hong, A. J., & Kim, H. J. (2018). College Students' Digital Readiness for Academic Engagement (DRAE) Scale: Scale development and Validation. *The Asia-Pacific Education Researcher*, *27*(4), 303–312. https://doi.org/10.1007/s40299-018-0387-0

Google Scholar Worldcat Fulltext

Huang, Y. (2022). The role of digital readiness innovative teaching methods in music art e-learning students' satisfaction with entrepreneur psychological capital as a mediator: Evidence from music entrepreneur training institutes. *Front. Psychol.* 13:979628. doi: 10.3389/fpsyg.2022.979628

Google Scholar Worldcat Fulltext

Hytti, U. (2005). New meanings for entrepreneurs: From risk-taking heroes to safe-seeking professionals. *Journal of Organizational Change Management, 18*(6), 594–611. https://doi.org/10.1108/09534810510628521

Google Scholar Worldcat Fulltext

Hytti, U., & Heinonen, J. (2013). Heroic and humane entrepreneurs: Identity work in entrepreneurship education. *Education + Training, 55*(8/9), 886–898. https://doi.org/10.1108/ET-06-2013-0086

Google Scholar Worldcat Fulltext

Kaur, K., & Kumar, S. (2024). Resource-based view and SME internationalization: a systematic literature review of resource optimization for global growth. *Management Review Quarterly*, *76*(1), 17–59. https://doi.org/10.1007/s11301-024-00478-1

Google Scholar Worldcat Fulltext

Kirrane, M., Lennon, M., O'Connor, C., & Fu, N. (2016). Linking perceived management support with employees' readiness for change: the mediating role of psychological capital. *Journal of Change Management*, *17*(1), 47–66. https://doi.org/10.1080/14697017.2016.1214615

Google Scholar Worldcat Fulltext

Krueger, N. (2020). Entrepreneurial potential and potential entrepreneurs: 25 years on. *Journal of the International Council for Small Business*, *1*(1), 52–55. https://doi.org/10.1080/26437015.2020.1714363

Google Scholar Worldcat Fulltext

Lai, J., Kan, C., & Ulhas, K. R. (2012). Impacts of employee participation and trust on e-business readiness, benefits, and satisfaction. *Information Systems and e-Business Management*, *11*(2), 265–285. https://doi.org/10.1007/s10257-012-0193-9

Google Scholar Worldcat Fulltext

Lai, Y., Hsu, M., Lin, F., Chen, Y., & Lin, Y. (2013). The effects of industry cluster knowledge management on innovation performance. *Journal of Business Research*, *67*(5), 734–739. https://doi.org/10.1016/j.jbusres.2013.11.036

Google Scholar Worldcat Fulltext

Locke, E. A., & Latham, G. P. (2004). What Should we do About Motivation Theory? Six Recommendations for the Twenty-First Century. *Academy of Management Review*, *29*(3), 388–403. https://doi.org/10.5465/amr.2004.13670974

Google Scholar Worldcat Fulltext

Margaryan, A., Littlejohn, A., & Vojt, G. (2010). Are digital natives a myth or reality? University students' use of digital technologies. *Computers & Education*, *56*(2), 429–440. https://doi.org/10.1016/j.compedu.2010.09.004

Google Scholar Worldcat Fulltext

Mellor, N. (2025). Navigating Precarity: Freelancers in Dubai's Creative economy. *Journal of Creative Communications*, *21*(1), 84–98. https://doi.org/10.1177/09732586251337571

Google Scholar Worldcat Fulltext

Michelotto, F., & Joia, L. A. (2024). Organizational digital transformation readiness: An exploratory investigation. *Journal of Theoretical and Applied Electronic Commerce Research, 19*(4), 3283–3304. https://doi.org/10.3390/jtaer19040159

Google Scholar Worldcat Fulltext

Murayama, K. (2022). A reward-learning framework of knowledge acquisition: An integrated account of curiosity, interest, and intrinsic–extrinsic rewards. *Psychological Review, 129*(1), 175–198. https://doi.org/10.1037/rev0000349

Google Scholar Worldcat Fulltext

Nafukho, F. M., Hairston, N., & Brooks, K. (2004). Human capital theory: implications for human resource development. *Human Resource Development International*, *7*(4), 545–551. https://doi.org/10.1080/1367886042000299843

Google Scholar Worldcat Fulltext

Nunnally, J.C. (1975), "Psychometric theory—25 years ago and now", *Educational Researcher*, Vol. 4 No. 10, pp. 7–21. https://doi.org/10.3102/0013189x004010007

Google Scholar Worldcat Fulltext

Nunnally, J.C. and Bernstein, I. (1978), *Psychometric Theory*, MacGraw-Hill, New York.

Google Scholar Worldcat Fulltext

Peteraf, M. A. (1993). The cornerstones of competitive advantage: A resource-based view. *Strategic Management Journal*, *14*(3), 179–191. https://doi.org/10.1002/smj.4250140303

Google Scholar Worldcat Fulltext

Radu-Lefebvre, M., Lefebvre, V., Crosina, E., & Hytti, U. (2021). Entrepreneurial identity: A review and research agenda. *Entrepreneurship Theory and Practice.* https://doi.org/10.1177/10422587211013795

Google Scholar Worldcat Fulltext

Roach, M., & Sauermann, H. (2015). Founder or joiner? The role of preferences and context in shaping different entrepreneurial interests. *Management Science*, *61*(9), 2160–2184. https://doi.org/10.1287/mnsc.2014.2100

Google Scholar Worldcat Fulltext

Santos, S. C., Caetano, A., & Curral, L. (2013). Psychosocial aspects of entrepreneurial potential. *Journal of Small Business & Entrepreneurship*, *26*(6), 661–685. https://doi.org/10.1080/08276331.2014.892313

Google Scholar Worldcat Fulltext

Shahri, A., Hosseini, M., Taylor, J., Stefanidis, A., Phalp, K., & Ali, R. (2020). Engineering digital motivation in businesses: a modelling and analysis framework. *Requirements Engineering*, *25*(2), 153–184. https://doi.org/10.1007/s00766-019-00312-1

Google Scholar Worldcat Fulltext

Sitaridis, I., & Kitsios, F. (2026). From entrepreneurship education to nascent digital entrepreneurship: The role of digital human capital. *The International Journal of Management Education*, *24*(2), 101414. https://doi.org/10.1016/j.ijme.2026.101414

Google Scholar Worldcat Fulltext

Sweetland, S. R. (1996). Human Capital Theory: Foundations of a Field of Inquiry. *Review of Educational Research*, *66*(3), 341–359. https://doi.org/10.3102/00346543066003341

Google Scholar Worldcat Fulltext

Truong, D. (2008). An Empirical Study of Business-to-Business Electronic Marketplace Usage: The impact of Buyers' E-Readiness. *Journal of Organizational Computing and Electronic Commerce*, *18*(2), 112–130. https://doi.org/10.1080/10919390801997614

Google Scholar Worldcat Fulltext

Tsou, H., & Hsu, S. H. (2014). Performance effects of technology–organization–environment openness, service co-production, and digital-resource readiness: The case of the IT industry. *International Journal of Information Management*, *35*(1), 1–14. https://doi.org/10.1016/j.ijinfomgt.2014.09.001

Google Scholar Worldcat Fulltext

Tunio, M. N. (2021). Role of ICT in promoting entrepreneurial ecosystems in Pakistan. *Journal of Business Ecosystems, 1*(2), 1–21. https://doi.org/10.4018/jbe.2020070101

Google Scholar Worldcat Fulltext

Urbach, N. and Ahlemann, F. (2010), "Structural equation modeling in information systems research using partial least squares", *AIS Electronic Library (AISeL).* https://aisel.aisnet.org/jitta/vol11/iss2/2

Google Scholar Worldcat Fulltext

van de Werfhorst, H. G., Kessenich, E., & Geven, S. (2022). The digital divide in online education: Inequality in digital readiness of students and schools. *Computers and Education Open, 3,* 100100. https://doi.org/10.1016/j.caeo.2022.100100

Google Scholar Worldcat Fulltext

Vohra, A., & Bhardwaj, N. (2017). From active participation to engagement in online communities: Analysing the mediating role of trust and commitment. *Journal of Marketing Communications*, *25*(1), 89–114. https://doi.org/10.1080/13527266.2017.1393768

Google Scholar Worldcat Fulltext

Wang, K., Xu, X., Mao, P., Deng, X., & Cao, D. (2025). Digital transformation and organizational readiness: evidence from Chinese construction SMEs with a dynamic managerial capabilities lens. *Engineering Construction & Architectural Management*, *33*(7), 5783–5819. https://doi.org/10.1108/ecam-01-2025-0069

Google Scholar Worldcat Fulltext

Wei, H., & Chou, C. (2020). Online learning performance and satisfaction: do perceptions and readiness matter? *Distance Education*, *41*(1), 48–69. https://doi.org/10.1080/01587919.2020.1724768

Google Scholar Worldcat Fulltext

Wolf, T., Weiger, W. H., & Hammerschmidt, M. (2020). Experiences that matter? The motivational experiences and business outcomes of gamified services. *Journal of Business Research*, *106*, 353–364. https://doi.org/10.1016/j.jbusres.2018.12.058

Google Scholar Worldcat Fulltext

Zhu, K., Kraemer, K., & Xu, S. (2004). Electronic business adoption by European firms: a cross-country assessment of the facilitators and inhibitors. *European Journal of Information Systems*, *12*(4), 251–268. https://doi.org/10.1057/palgrave.ejis.3000475

Google Scholar Worldcat Fulltext