Entrepreneurial Intention Under Digital and Environmental Uncertainty: Evidence from Young Adults in an Emerging Economy

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Abstract: *This paper explores the influence of digital competencies and entrepreneurial competencies on entrepreneurial intention in the context of digital and environmental uncertainty among young adults from an emerging economy. The study investigates how technological adaptability, continuous learning, and entrepreneurial skills contribute to professional development and entrepreneurial orientation in a constantly changing economic environment. In the contemporary digital economy, technological transformation, artificial intelligence, and labour market instability increasingly influence individuals' professional perspectives and career development. Using a mixed-methods approach, the study combines quantitative analysis conducted in SPSS with qualitative analysis performed in NVivo in order to identify the main relationships, themes, and perceptions associated with professional and entrepreneurial success. The findings highlight positive relationships between digital competencies, entrepreneurial competencies, adaptability, and entrepreneurial intention. The results also emphasize the importance of continuous learning, technological skills, flexibility, initiative, and opportunity recognition in responding to the challenges generated by digital transformation and environmental uncertainty. The study contributes to the understanding of entrepreneurial intention in emerging economies and underlines the importance of developing digital and entrepreneurial competencies in contemporary education and professional development programmes.*

Key words: entrepreneurial intention, digital competencies, entrepreneurial competencies, digital uncertainty, environmental uncertainty, human capital.

JEL: L26, M13, O33, J24.

1. Introduction

In recent years, accelerated digital transformation and economic instability have redefined the way young people shape their professional paths. Emerging technologies, artificial intelligence, and the rapid pace of innovation have created a context in which entrepreneurial opportunities are more accessible than ever before, yet at the same time more difficult to predict. In emerging economies, where technological development coexists with economic and social uncertainty, young adults are required to navigate a professional environment characterized by continuous change and volatility (World Economic Forum, 2020; OECD, 2019).

In this context, entrepreneurial intention becomes an essential mechanism through which individuals express their willingness to start a business, being influenced both by the perception of opportunities and by the ability to manage risk and uncertainty. According to the Theory of Planned Behavior, intention represents the strongest predictor of entrepreneurial behavior and is shaped by attitudes, social norms, and perceived behavioral control (Icek, 1991). Similarly, the literature on self-efficacy emphasizes that confidence in one's own competencies directly influences the willingness to act in uncertain contexts (Bandura, 1997).

Digitalization adds a new dimension to this process. Digital competencies such as technological confidence, the ability to quickly learn new applications, and the perceived efficiency of technology have become essential components of human capital within the contemporary business environment (OECD, 2019). At the same time, digital uncertainty, generated by the rapid pace of technological change, may influence both risk perception and the motivation to initiate entrepreneurial projects (World Economic Forum, 2020).

For young people in emerging economies, entrepreneurship is no longer merely a professional option, but also a strategy for adapting to a constantly evolving environment. Studies show that young adults demonstrate high levels of flexibility, opportunity orientation, and openness toward continuous learning elements that may stimulate entrepreneurial intention even under conditions of uncertainty (Heckman & Kautz, 2012; Jackson, 2016). Nevertheless, unequal access to digital resources, economic instability, and the pressure generated by technological transformation may differently influence the way young individuals perceive the possibility of becoming entrepreneurs.

The paper is structured around the theoretical foundations of entrepreneurial intention, the methodological design of the empirical research, the interpretation of quantitative and qualitative findings, and the main conclusions regarding the role of competencies in entrepreneurial development.

2. Literature review

2.1 Entrepreneurial intention and human capital

Entrepreneurial intention represents one of the most important concepts analyzed in the literature on entrepreneurial behavior, being considered a key predictor of business creation and entrepreneurial activity. It reflects an individual's willingness and desire to develop an

entrepreneurial venture in the future, as well as their orientation toward assuming an active role within the economic environment.

In the economic and managerial literature, entrepreneurial intention is defined as the conscious intention of an individual to create a new business or to engage in independent activities oriented toward economic opportunities. According to (Icek, 1991), intention represents the closest determinant of actual behavior and is influenced by individual attitudes, perceived social norms, and perceived behavioral control. At the same time, (Bird, 1988) argues that entrepreneurial intention is the result of a combination of cognitive, motivational, and contextual factors.

In the current context of the digital economy, entrepreneurial intention is influenced by a variety of economic, social, and technological factors. Rapid technological development, digital transformation, and increasing economic uncertainty require individuals to continuously adapt their competencies and professional strategies. Consequently, digital competencies, adaptability, and the ability to identify new opportunities become essential elements in the development of entrepreneurial orientation (OECD, 2019) (World Economic Forum, 2020).

In the case of young adults, entrepreneurial intention is strongly influenced by the perception of existing opportunities within the economic environment and by confidence in their own competencies. According to Krueger, Reilly, and Carsrud (Krueger, Reilly, & Carsrud, 2000), individuals who perceive that they possess the necessary resources and abilities tend to exhibit higher levels of entrepreneurial intention. At the same time, constant exposure to technology and digitalization contributes to the development of a mindset oriented toward innovation and professional flexibility.

The literature also highlights the important role of entrepreneurial self-efficacy in the development of entrepreneurial intention. According to Zhao, Seibert, and Hills (Zhao, Seibert, Scott E., & Hills, Gerald E., 2005) individuals who demonstrate higher levels of confidence in their own abilities and competencies are more likely to express entrepreneurial intentions and engage in entrepreneurial activities. Therefore, the development of professional, digital, and entrepreneurial competencies contributes to strengthening self-confidence and increasing the likelihood of entrepreneurial action.

Human Capital Theory represents one of the most important theoretical perspectives used to explain the relationship between education, competencies, and economic performance. According to this theory, individuals invest in education, training, and personal development in order to increase their productivity, skill levels, and ability to integrate into the labour market. Human capital includes the totality of knowledge, abilities, and experiences acquired throughout individuals' educational and professional development, all of which influence economic performance and professional opportunities. Within the contemporary economy, human capital is considered an essential factor of competitiveness and economic development, as it contributes to increasing the ability of individuals and organizations to respond to changes and challenges within the economic environment.

(Becker, 1964) and (Schultz, 1961) argue that education and competency development constitute essential forms of capital because they contribute to improving professional performance and increasing economic opportunities. From this perspective, investments in education and

professional development generate benefits both for individuals and for the economy through increased productivity and innovation. In the entrepreneurial context, human capital includes not only technical and digital competencies, but also behavioural competencies such as initiative, leadership, critical thinking, creativity, and responsibility. These competencies contribute to the development of individuals' ability to identify economic opportunities, make effective decisions, and respond to the challenges generated by the contemporary economic environment.

The contemporary economy is characterized by accelerated digitalization, global competition, and continuous technological transformation. In this context, entrepreneurial success no longer depends exclusively on financial resources or access to economic capital, but also on individuals' capacity to engage in continuous learning, use technology efficiently, and rapidly adapt to changes within the economic and professional environment (OECD, 2019). The development of digital platforms, artificial intelligence, and emerging technologies continuously reshapes labour market structures and professional requirements, increasing the importance of digital competencies and adaptability. At the same time, the contemporary economic environment is characterized by high levels of uncertainty and competitiveness, which create the need for competencies such as flexibility, rapid learning capacity, and an orientation toward innovation.

2.2 Digital and entrepreneurial competencies

Digital competencies are considered a central component of human capital because technology influences most economic and professional activities. According to the (World Economic Forum, 2020), digital competencies and the ability to adapt to technological changes represent some of the most important skills required in the contemporary labour market. The efficient use of technology contributes to improved professional performance, increased flexibility, and enhanced decision-making processes. Digital competencies also facilitate access to information, resources, and economic opportunities, contributing to the development of innovative business models and increasing professional and entrepreneurial competitiveness. Moreover, individuals who demonstrate high levels of digital competencies also tend to exhibit higher levels of adaptability and confidence in their professional abilities.

In addition, the development of human capital contributes to increasing individuals' ability to identify economic opportunities and effectively respond to business environment challenges. In the current context, entrepreneurship requires not only technical competencies, but also flexibility, strategic thinking, creativity, and the ability to manage change and uncertainty. Entrepreneurs must be capable of using technology, adapting rapidly to market transformations, and identifying opportunities within an economic environment characterized by competition and continuous innovation. Therefore, human capital and the development of digital and entrepreneurial competencies represent essential factors for professional success and for the development of entrepreneurial intention in the contemporary economy.

The importance of human capital for entrepreneurial success is further supported by the findings of (Unger, Rauch, Frese, & Rosenbusch, 2011) who demonstrate a positive relationship between competencies, accumulated experience, and entrepreneurial performance. Their study

suggests that individuals who continuously invest in the development of their skills are better equipped to identify and exploit business opportunities and are more likely to achieve entrepreneurial success.

Digital competencies have become increasingly important in contemporary labour markets, influencing individuals' adaptability, technological confidence, and capacity to respond to rapid technological change. Previous studies suggest that individuals with stronger digital competencies are more likely to identify opportunities, embrace innovation, and engage in entrepreneurial activities (OECD, 2019; World Economic Forum, 2020; Nambisan, 2017).

Entrepreneurial competencies, including initiative, responsibility, opportunity recognition, and goal orientation, are widely recognized as key determinants of entrepreneurial behavior and business creation. Individuals who possess higher levels of entrepreneurial competencies are generally more inclined to pursue entrepreneurial opportunities and develop entrepreneurial intentions (McClelland, 1961; Bandura, 1997; Man et al., 2002).

Furthermore, recent literature suggests that digital competencies and entrepreneurial competencies are closely interconnected. The ability to adapt to technological change, learn continuously, and effectively use digital tools may contribute to the development of entrepreneurial skills and opportunity recognition capabilities (Van Laar et al., 2017; Kraus et al., 2019; Vial, 2019).

2.3 Uncertainty and entrepreneurial behaviour

Uncertainty represents a central element of the contemporary economic environment and directly influences the decision-making processes of individuals and organizations. (Milliken, 1987)defines uncertainty as individuals' difficulty in anticipating future changes and evaluating their impact on economic and organizational activities. At the same time, (Knight, 1921) considers uncertainty to be the inability to accurately predict the outcomes of economic actions, an aspect that influences decision-making and risk-taking processes.

Within the contemporary economy, uncertainty is intensified by globalization processes, accelerated technological development, and continuous labour market transformations. Consequently, individuals and organizations are required to constantly adapt their strategies and competencies in order to respond to economic and technological changes.

The concept of digital uncertainty refers to the accelerated pace of technological change and the difficulty of anticipating the evolution of digital technologies and their impact on the professional and entrepreneurial environment. The continuous development of digital platforms, artificial intelligence, and automation creates new professional competency requirements and increases the need for continuous adaptation to emerging technologies.

According to the (World Economic Forum, 2020), digital transformation significantly reshapes labour market structures and influences both the way individuals carry out their professional activities and the competencies required for integration into a technology- and innovation-based economy. In this context, digital competencies and continuous learning capacity become essential elements for professional and entrepreneurial success.

Digital uncertainty is also associated with individuals' difficulty in anticipating the impact of emerging technologies on career development and professional growth. The emergence of

artificial intelligence, process automation, and digital platforms generates both opportunities and risks regarding professional stability and adaptation to new labour market requirements.

On the other hand, the concept of environmental uncertainty includes economic instability, social changes, legislative modifications, and continuous transformations within the business environment. (Duncan, 1972) argues that environmental uncertainty is determined by the difficulty individuals and organizations experience in obtaining sufficient information to anticipate external changes and make effective decisions.

In the entrepreneurial context, environmental uncertainty may influence business development, investment processes, and individuals' ability to identify economic opportunities. Frequent changes in market demands, economic instability, and global competition create the need for competencies such as flexibility, resilience, and adaptability.

(McMullen & Shepherd, 2006) emphasize that uncertainty may have both negative and positive effects on entrepreneurial behavior. Although instability may create difficulties in decision-making and business planning processes, it may also stimulate the identification of new opportunities for individuals who demonstrate initiative and adaptability.

In the entrepreneurial context, uncertainty may represent both a challenge and an opportunity. Economic and technological changes influence the way individuals perceive the risks and opportunities associated with developing entrepreneurial activities. High levels of uncertainty may generate difficulties in decision-making processes and may influence individuals' perceptions regarding professional and economic stability.

(McMullen & Shepherd, 2006) argue that individuals who manage uncertainty effectively tend to demonstrate higher levels of initiative and orientation toward entrepreneurial opportunities. The ability to adapt to economic and technological changes influences the development of entrepreneurial behavior and individuals' capacity to identify and capitalize on economic opportunities within a context characterized by continuous change.

Furthermore, individuals who exhibit high levels of self-efficacy and digital competencies tend to demonstrate a greater capacity for risk management and adaptation to market changes. Thus, digital competencies and professional flexibility contribute to reducing risk perception and increasing confidence in the ability to develop entrepreneurial activities.

Uncertainty may also stimulate creativity and orientation toward innovation, as individuals are required to identify rapid and efficient solutions in order to respond to the challenges generated by the contemporary economic environment. In this context, entrepreneurial success increasingly depends on individuals' capacity for continuous learning, efficient technology use, and rapid adaptation to the changes generated by digital transformation and the evolution of the economic environment.

In the entrepreneurial context, uncertainty may represent both a challenge and an opportunity for individuals who are developing their professional and entrepreneurial orientation. (McMullen & Shepherd, 2006) argue that individuals who are able to manage uncertainty effectively tend to identify entrepreneurial opportunities more easily and demonstrate higher levels of initiative, innovation, and responsibility-taking.

The ability to adapt to economic and technological changes directly influences the development of entrepreneurial behavior and the level of individuals' involvement in activities oriented

toward innovation and professional development. In addition, individuals who demonstrate flexibility and confidence in their own competencies tend to perceive change not only as a risk, but also as an opportunity for professional development and differentiation within a competitive and dynamic economic environment.

Adaptability, continuous learning, and the efficient use of technology therefore become essential elements of entrepreneurial success in the current context. Furthermore, high levels of uncertainty encourage individuals to develop proactive behaviors and strategies oriented toward flexibility and innovation in order to respond rapidly to the changes generated by digital transformation and labour market evolution.

At the same time, digital and entrepreneurial competencies contribute to increasing individuals' ability to identify economic opportunities, make effective decisions, and capitalize on the advantages offered by technology and digitalization. In this context, professional and entrepreneurial success increasingly depends on individuals' capacity for continuous learning, efficient technology use, and rapid adaptation to the challenges generated by the contemporary economic environment.

Therefore, the literature suggests that digital competencies, entrepreneurial competencies, adaptability, and continuous learning should be analyzed together when explaining entrepreneurial intention among young adults exposed to digital and environmental uncertainty.

Based on these theoretical considerations, the following hypotheses were formulated:

H1: Digital competencies are positively associated with entrepreneurial intention among young adults.

H2: Entrepreneurial competencies are positively associated with entrepreneurial intention among young adults.

H3: Digital competencies are positively associated with entrepreneurial competencies among young adults.

The conceptual model of the study assumes that both digital competencies and entrepreneurial competencies contribute to the development of entrepreneurial intention in a context characterized by technological transformation and environmental uncertainty.

3. Research methodology

3.1 Research Design

The present research is based on a mixed-methods approach, combining both quantitative and qualitative perspectives, with the aim of analyzing the relationship between digital competencies, digital and environmental uncertainty, and entrepreneurial intention among young adults from an emerging economy.

The quantitative research has a descriptive-correlational character and employs a cross-sectional design, with data being collected at a single point in time through an online questionnaire. This type of research allows the identification of relationships between variables and the analysis of the influence of digital and entrepreneurial competencies on entrepreneurial intention.

The qualitative component complements the statistical analysis through the interpretation of open-ended responses and the identification of the main themes associated with competencies

considered relevant for professional and entrepreneurial success. The qualitative analysis was conducted using NVivo software, which enabled the organization and thematic interpretation of textual data.

According to Creswell (2014), mixed-methods approaches provide a more comprehensive perspective on social phenomena and allow the integration of quantitative and qualitative data within a unified analytical framework.

3.2 Research Population and Sample

The research population consists of young adults situated at different stages of academic and professional development. The selection of this target group is justified by young people's high exposure to digitalization processes and by their relevance for the future development of the entrepreneurial environment.

The research sample consisted of 246 respondents selected through the non-probability convenience sampling method. Participants voluntarily completed the online questionnaire distributed through digital platforms and social media networks.

Respondents came from different educational backgrounds, including undergraduate students, master's students, and university graduates. Furthermore, the study included both male and female participants in order to allow comparative analyses.

According to Saunders, Lewis, and Thornhill (2019), the use of convenience sampling is frequently encountered in exploratory and descriptive research conducted within the academic environment.

3.3 Data Collection Instrument and Questionnaire Structure

The main instrument used for data collection was an online questionnaire developed in accordance with the research objectives and the specialized literature regarding entrepreneurial intention and digital competencies.

The questionnaire was structured into two main sections:

- socio-demographic questions;
- items related to digital competencies, entrepreneurial competencies, and perceptions regarding the influence of technology.

The socio-demographic data included information regarding respondents' gender and current level of education.

The items used to assess digital and entrepreneurial competencies were formulated as statements evaluated on a 5-point Likert scale, where: 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; 5 = strongly agree.

The use of the Likert scale allows the measurement of individual attitudes and perceptions and is frequently used in social science and economic research (Likert, 1932).

Among the dimensions evaluated within the questionnaire are:

- comfort in using technology;
- digital learning capacity;

- efficiency in technology use;
- personal initiative;
- goal orientation;
- responsibility-taking;
- opportunity identification.

In addition, the questionnaire included an open-ended question regarding the competencies considered important for future professional success, which was subsequently used in the qualitative analysis conducted in NVivo.

3.4 Operationalization of Variables and Theoretical Constructs

Several categories of variables were analyzed within the research, structured according to the objectives and hypotheses of the study.

The variables related to digital competencies include:

- comfort in using technology;
- ability to learn digital platforms;
- perception of the professional advantages generated by technology;
- efficiency in ICT use.

The variables related to entrepreneurial competencies include:

- initiative;
- responsibility-taking;
- opportunity identification;
- goal orientation;
- professional motivation.

The dependent variable is represented by entrepreneurial intention, analyzed in relation to professional orientation and respondents' perceptions regarding entrepreneurial success within the current digital and economic context.

Table 1: Operationalization of the Main Variables

	Variable	**Analyzed Dimensions**
a.	Digital competencies	Technology use, digital learning, technological efficiency
b.	Entrepreneurial competencies	Initiative, responsibility, opportunities, motivation
c.	Entrepreneurial intention	Professional and entrepreneurial orientation

Source: Authors' own research results.

The operationalization of variables was carried out based on the specialized literature regarding digital competencies, entrepreneurship, and Human Capital Theory (Ajzen, 1991; Becker, 1964; OECD, 2019).

3.5 Data Collection and Processing Procedure

Data collection was conducted online through the distribution of the questionnaire to respondents via digital platforms and social media networks. Participation in the research was voluntary, and respondents were informed about the academic purpose of the study and the confidential nature of their responses.

The quantitative data were processed and analyzed using IBM SPSS Statistics software. The statistical analysis included:

- descriptive statistics;
- reliability analysis of the scales;
- Spearman correlations;
- Mann–Whitney and Kruskal–Wallis comparative tests.

For the qualitative component, the open-ended responses were analyzed using NVivo software. The qualitative analysis enabled the identification of the main themes and codes associated with the competencies considered important for professional and entrepreneurial success.

According to Bazeley and Jackson (2013), the use of NVivo facilitates the organization and systematic interpretation of qualitative data and contributes to increasing research rigor.

3.6 Reliability of the Instrument and Statistical Analysis Methods

The reliability of the research instrument was assessed using Cronbach's Alpha coefficient, employed to verify the internal consistency of the items included in the questionnaire.

According to Tavakol and Dennick (2011), Cronbach's Alpha values higher than 0.70 indicate an acceptable level of internal consistency, suggesting that the items consistently measure the same theoretical construct.

Within the research, non-parametric statistical methods were used, considering the ordinal nature of the data collected through the Likert scale.

Spearman correlation was used to analyze the relationships between the research variables and to test the formulated hypotheses.

The Mann–Whitney test was used to identify differences between two independent groups according to gender.

The Kruskal–Wallis test was used to analyze differences between multiple independent groups according to respondents' educational level.

The obtained results were interpreted in relation to the research objectives and the specialized literature analyzed in the previous chapters.

4. Results and discussions

The first stage of the empirical investigation focused on assessing the internal consistency of the measurement scales used in the study. Reliability was examined through Cronbach's alpha coefficients, which indicate the degree to which the items included in each scale measure the same underlying construct. This step is essential for ensuring that the composite indices digital

competencies, entrepreneurial competencies, and entrepreneurial intention are statistically robust and conceptually coherent.

The results of the reliability analysis are presented in Table 2. The digital competencies scale recorded a Cronbach's alpha of 0.598, a value that is considered acceptable for exploratory research. Although slightly below the conventional threshold of 0.70, this coefficient reflects the multidimensional nature of digital competencies, which encompass aspects such as technological comfort, perceived efficiency, rapid learning, and the perceived impact of technology. In contrast, the entrepreneurial competencies scale and the entrepreneurial intention scale both achieved Cronbach's alpha values of 0.776, indicating good internal consistency and confirming that the items within these scales reliably capture the constructs they were designed to measure.

Table 2: Reliability Statistics

Scale	Cronbach's Alpha	N of Items
DIG_Score	0.598	5
EC_Score	0.776	3
INT_Score	0.776	3

Source: Authors' own research results in SPSS.

Overall, the reliability results support the use of the three indices in subsequent analyses. The digital competencies scale should be interpreted with caution due to its moderate internal consistency, while the entrepreneurial competencies and entrepreneurial intention scales demonstrate strong psychometric properties.

To gain an initial understanding of the respondents' profiles in terms of digital competencies, entrepreneurial competencies, and entrepreneurial intention, descriptive statistics were computed for the three composite indices. These indicators provide insight into the central tendencies and variability of the data, offering a preliminary overview of how young adults position themselves in relation to the constructs examined.

As shown in Table 3, the median score for digital competencies is 4.40, indicating that respondents generally perceive themselves as highly competent in using technology, adapting to digital tools, and learning new applications. Entrepreneurial competencies register a median of 3.67, suggesting moderately high levels of opportunity recognition, initiative, and responsibility. Entrepreneurial intention presents a median of 4.00, reflecting a strong inclination among young adults to pursue entrepreneurial activities or consider entrepreneurship as a viable career path.

Table 3: Descriptive Statistics for DIG_Score, EC_Score, INT_Score

Variable	N	Minimum	Maximum	Median	25th Percentile	75th Percentile
DIG_Score	246	1.40	5.00	4.40	3.60	4.60
EC_Score	246	1.33	5.00	3.67	3.33	4.54
INT_Score	246	1.00	5.00	4.00	3.33	4.33

Source: Authors' own research results in SPSS.

The distribution of scores indicates that the sample is characterized by high levels of digital readiness and entrepreneurial orientation. The relatively narrow interquartile ranges suggest a consistent pattern across respondents, reinforcing the idea that young adults in emerging economies tend to develop strong digital and entrepreneurial profiles as adaptive strategies in uncertain environments.

The core objective of the study was to examine the relationships between digital competencies, entrepreneurial competencies, and entrepreneurial intention. To examine these relationships, Spearman's rank-order correlation coefficient was employed. This non-parametric statistical technique was selected due to the ordinal nature of the variables and the use of Likert-scale measurements.

The results indicate a moderate positive correlation between digital competencies and entrepreneurial intention. This finding confirms H1 and suggests that individuals who perceive themselves as more digitally competent are more likely to express entrepreneurial intentions. From a theoretical perspective, this relationship can be explained by the increasing role of digital technologies in shaping entrepreneurial opportunities.

The correlation between entrepreneurial competencies and entrepreneurial intention indicates a strong positive relationship, confirming H2. This suggests that individuals who perceive themselves as capable of identifying opportunities, taking initiative, and assuming responsibility are significantly more inclined to engage in entrepreneurial activities.

The results show a moderate positive correlation between digital competencies and entrepreneurial competencies, supporting H3. This relationship highlights the interconnected nature of digital and entrepreneurial skill sets in contemporary economic environments. Digital competencies appear to enhance entrepreneurial competencies by facilitating access to digital tools, enabling opportunity recognition, and supporting innovative thinking.

Table 4: Spearman correlations between the main variables

Relationship	**Spearman correlation**	**Significance**	**Hypothesis**
Digital competencies – Entrepreneurial intention	0.457	$p < 0.001$	H1 supported
Entrepreneurial competencies – Entrepreneurial intention	0.627	$p < 0.001$	H2 supported
Digital competencies – Entrepreneurial competencies	0.523	$p < 0.001$	H3 supported

Source: Authors' own research results in SPSS.

The results of the Mann–Whitney test indicate that no statistically significant differences were identified between male and female respondents regarding digital competencies, entrepreneurial competencies, or entrepreneurial intention. Although slight variations in median scores were observed between the groups, these differences were not sufficiently large to reach statistical significance. Therefore, gender does not appear to represent a determining factor in explaining

variations in the three constructs analyzed within the present study.

The results of the Kruskal–Wallis test reveal that no statistically significant differences were found according to educational level. Although respondents belonging to different educational categories displayed minor variations in their scores, these differences were not statistically significant. Consequently, educational level does not appear to significantly influence entrepreneurial intention within the analyzed sample.

The qualitative analysis was conducted using NVivo software, which was employed for the organization, coding, and interpretation of the open-ended responses provided by participants within the questionnaire. The purpose of the qualitative analysis was to identify the main competencies and characteristics considered relevant by respondents for professional and entrepreneurial success in a context characterized by digital transformation and economic uncertainty.

Following the coding process, several thematic categories associated with professional development and entrepreneurial orientation were identified, including adaptability and continuous learning, critical thinking and problem-solving, communication and leadership, professionalism and responsibility, and digital and technological competencies.

The obtained results highlight that respondents attach high importance to both digital competencies and behavioral and social competencies, which are considered essential for integration into a modern and competitive professional environment.

The qualitative analysis complements and supports the results obtained within the quantitative research by highlighting the main competencies and perceptions associated with professional and entrepreneurial success in the context of digital transformation and environmental uncertainty. The themes identified in participants' responses confirm the importance of digital competencies, adaptability, continuous learning, and entrepreneurial competencies in the development of the professional and entrepreneurial orientation of young adults.

Taken together, the quantitative and qualitative results suggest that entrepreneurial intention is shaped by a combination of digital readiness, perceived entrepreneurial capability, adaptability, and confidence in continuous learning.

5. Conclusions

The results of this research provide a comprehensive understanding of the way digital competencies and entrepreneurial competencies contribute to the development of entrepreneurial intention among young adults in an emerging economy. The quantitative analysis conducted in SPSS confirms all three hypotheses formulated in the conceptual model, demonstrating that both digital competencies and entrepreneurial competencies represent essential components of human capital that shape individuals' professional orientation and entrepreneurial motivation.

The strongest relationship was observed between entrepreneurial competencies and entrepreneurial intention, suggesting that individuals who perceive themselves as capable of identifying opportunities, taking initiative, and assuming responsibility are significantly more inclined to pursue entrepreneurial activities. This finding aligns with the theoretical assumptions of the Theory of Planned Behavior, which emphasizes the role of perceived behavioral control and self-efficacy in shaping entrepreneurial intention.

The positive association between digital competencies and entrepreneurial intention highlights the increasingly strategic role of digital literacy in contemporary professional environments. Respondents who reported higher levels of digital proficiency also expressed stronger entrepreneurial intentions, suggesting that the ability to use technology effectively enhances confidence in navigating uncertain environments, identifying opportunities, and engaging in innovative activities.

The study underscores the importance of integrating digital literacy and entrepreneurial training into educational programs and professional development initiatives. Strengthening these competencies may enhance young adults' capacity to adapt to technological changes, to innovate, and to pursue entrepreneurial activities. The results also highlight the need for educational institutions and organizations to promote continuous learning, creativity, and initiative, as these competencies play a crucial role in shaping individuals' professional trajectories in a rapidly evolving economic context.

The study presents several limitations. First, the use of a convenience sample limits the generalizability of the findings. Second, the reliance on self-reported data may introduce subjectivity in participants' evaluations of their competencies. Third, the cross-sectional design does not allow for the analysis of changes in competencies or entrepreneurial intention over time.

Future research could extend the sample, include longitudinal data, and explore how emerging technologies such as artificial intelligence reshape entrepreneurial behavior and competency development in different cultural and economic contexts.

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