

## **Bridging the gap between Higher education and self-employment: FPE economy department students' perspectives on Digital entrepreneurship.**

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## **ABSTRACT**

Entrepreneurship represents a viable career alternative for university graduates. Accessing the Moroccan job market represents a real challenge, particularly due to elevated unemployment rates and the substantial number of graduates vying for limited work opportunities. In this unpredictable work context, entrepreneurship education instills in students the principles of self-employment, project management and leadership that can offer alternative work opportunities for university graduates. This study aims to assess the perceptions of Economy department students at the polydisciplinary faculty of Errachidia Morocco regarding entrepreneurship education and its potential contribution to their self-employment. To this end, a quantitative research design was adopted, deploying an online survey that was distributed to economy department students,  $N=300$ , to gauge their perceptions on how digital entrepreneurship education might connect them to the job market. Findings demonstrated that students hold positive perceptions vis-à-vis digital entrepreneurship education and believe that it can positively bridge the gap between higher education institutions and self-employability.

## **Keywords**

Digital Entrepreneurship education, Digitalization, University graduates, Entrepreneurial intention.

## **Introduction**

Entrepreneurship education at the university level has the ability to instill in students and graduates affinities for self-employment. Higher education institutions can equip these students with the essential parameters to establish an entrepreneurial personality (Bergmaan et al, 2018). Actually, the entrepreneurial learning environments that these institutions offer support the development of entrepreneurial competencies (Taatala, 2010). Nonetheless, there is an urgent need to move beyond traditional entrepreneurship to more modern and developed entrepreneurial paradigms. In this regard, the inclusion of leading and modern technologies can positively influence and enhance entrepreneurship efficiency (Belik et al, 2020).

Digital entrepreneurship has emerged as a viable business alternative and a mainstream career path for many university graduates as well as traditional entrepreneurs. This emergence is mainly driven by the unprecedented accessibility of digital platforms, low initial investment requirements, and the ability to reach global markets with minimal overhead (Kraus et al, 2019). By eliminating many traditional hurdles to entry, digital entrepreneurship offers a flexible and dynamic approach to business creation that resonates with a generation of students and graduates seeking autonomy, creativity, and the opportunity for quick growth in an increasingly interconnected global market.

Thereof, digital entrepreneurship education has the potential to bridge the gap between the theoretical knowledge that students acquire during the time they spend at higher education institutions and their potential self-employability. By incorporating comprehensive curriculum that merge academic knowledge with practical entrepreneurial skills, higher education institutions can provide students with the sophisticated aptitudes required to navigate the intricate digital business environment contributing to their professional autonomy (Neck and Corbett, 2018).

This study seeks to examine the perceptions of Moroccan economy students and graduates regarding digital entrepreneurship education, aiming to gain insights into how such education influences the development of an entrepreneurial identity among these students, as well as the challenges they encounter in this domain. To attain this objective, an online survey was distributed to students, ( $n=300$ ), belonging to the economy department of the polydisciplinary faculty of Errachidia, Moulay Ismail university. The main questions raised to encompass the main research problem are the following: 1. To what extent does entrepreneurship education at the university level equip students with necessary skills to embark on a self-employment journey?, 2. How does digitalization enhance students' chances to create their own startups and

enterprises?, and 3. What support mechanisms students believe are necessary to bridge the gap between their entrepreneurship education, digitalization, and successful self-employment?

This article comprises four unique sections, each designed for a specific research objective. The initial section offers a comprehensive foundation for the study by delving into theoretical perspectives and background information. This is achieved through a general review of the literature about various aspects, including digital entrepreneurship education and students' perceptions of it. The second half of the paper delineates the methodological approach utilized in the research, specifying the processes adopted during the data collection phase. The third and fourth sections subsequently analyze and discuss the findings from the survey. In essence, this section serves as the empirical foundation upon which the study builds its analytical framework and draws its conclusions.

### **Literature review**

Digital transformation, as a contemporary phenomenon, has led to substantial alterations in entrepreneurship and has catalyzed the emergence of a novel sector within market processes, specifically digital entrepreneurial activities (Lungu and Georgescu, 2024). Hence, there is a general tendency in the deployment of ICT tools for entrepreneurial intentions as an attempt to connect entrepreneurship and digitalization. This tendency also manifests itself in entrepreneurship education that has shifted the focus towards instilling in students a more modern and digitalized model for startup creation and management (Elia et al., 2020; Nambisan, 2017).

According to Nambisan (2017), digital entrepreneurship denotes the utilization of digital platforms and technology for the establishment, administration, and innovation of new enterprises or creative startups. Research also suggests that digital entrepreneurship is characterized by the integration of traditional entrepreneurial techniques with novel approaches to enterprise creation and operation in the modern digital world (Le Dinh et al., 2018). Thereof, the digitalization of the entrepreneurial ecosystems entails the creation of technological infrastructures within and across enterprises to create value (Steininger et al., 2022).

According to Naudé and Liebrechts (2020), digital entrepreneurship must encompass opportunity recognition and exploitation within the digital economy, expressly incorporating the "digital" aspects of opportunities. This means that digital entrepreneurs must develop a sophisticated awareness of technical ecosystems, use digital platforms, algorithmic insights, and networked skills to spot and seize possible entrepreneurial prospects (Kraus et al., 2019). The digital dimension fundamentally reshapes traditional entrepreneurial processes by

introducing complex technological mediations that extend beyond conventional business models, requiring entrepreneurs to cultivate advanced digital literacies, adaptive technological competencies, and strategic algorithmic thinking (Nambisan, 2017).

This amalgam of skills and competencies that digital entrepreneurs should develop and manifest question the quality and content of curricula presented to students at higher education institutions. Despite the growing number of students engaging in entrepreneurship education, the efficacy of traditional teaching techniques in cultivating entrepreneurial values as well as digital aptitudes remains ambiguous and contentious (Nian et al., 2014). According to Rahim et al. (2021), the curriculum in entrepreneurship education and the pedagogical approaches employed by instructors can significantly augment students' inclination to pursue entrepreneurial ventures, especially when these pedagogical approaches include technological tools that would facilitate future entrepreneurs' ventures set up and management.

Recent research suggests that the youngest generation of students see the integration of digital technologies as an alternative in entrepreneurial endeavors (Rippa and Secundo, 2019). Therefore, doing business in a global society is strongly connected with understanding technological progress (Lungu and Georgescu, 2023). Research also demonstrates that attitude, subjective norm, perceived feasibility, perceived desirability, inclination to act, and digital entrepreneurial education, significantly impact entrepreneurial intentions amongst students (Alferaih, 2022).

The capacity of entrepreneurship education, especially digital entrepreneurship, to connect higher education with employability by enabling university graduates to create viable businesses remains to be seen. In this regard, Jones et al. (2017) found out that entrepreneurship education programs offer value to students by facilitating business start-ups and supporting various career trajectories through the entrepreneurial knowledge and skill sets that graduates obtain during their specialized studies. On the other hand, Ghafar (2020) suggests that teaching comprehensive and intricate industry knowledge may exceed the scope of entrepreneurship education systems; however, it is crucial for students to engage with organic industry knowledge through interaction and experiential learning. Thereof, blending both digital and organic knowledge is essential for students who aspire to create their own startups.

This study aims to shed light on the Moroccan context by assessing the digital entrepreneurship education provided to university students in the economics department and its impact on their entrepreneurial intention and identity. Thus, this research seeks to uncover students' perceptions vis-à-vis the efficacy of digital entrepreneurship education and its potential

contribution to their self-employment. The next section delineates the methodological procedures and choices carried out to encompass this research problematic.

### Methodology

The current study employed a quantitative methodology for data collection and analysis. Adhering to a quantitative philosophy stems from the fact that these methods transform complex phenomena into measurable data, enabling researchers to test hypotheses, establish causal relationships, and generalize findings with statistical precision. By employing rigorous techniques, quantitative research minimizes subjective interpretations and provides a structured framework for understanding intricate patterns (Creswell, 2014). To this end, an online survey was used to draw data from economy department students belonging to the Polydisciplinary Faculty of Errachidia (FPE). A sample of 300 students were chosen based on a convenient sampling philosophy where the researchers chose participants based on their availability and accessibility.

The deployed survey adhered to a 5-point Likert scale that ranges from 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), and 5 (strongly agree). Using specifically a 5-point Likert scale emanates from the fact that it is quite simple for participants to clearly read out and understand the complete list of scale descriptors (Dawes, 2008). Participants were given 11 statements that captured their perceptions vis-à-vis digital entrepreneurship education and entrepreneurial intention after graduation. These statements were meticulously developed to address various aspects, such as the curriculum's relevance and effectiveness, the development of digital skills, the perceived value of entrepreneurship education in fostering innovation, and the role of practical experience in shaping students' entrepreneurial mindsets. To test the reliability of the deployed scales, Cronbach's Alpha was utilized and it showed the following results:

**Table 1: Reliability Statistics**

<i>Cronbach's Alpha</i>	<i>N of Items</i>
<b>,86</b>	11

The analysis of the deployed 11 items yielded a Cronbach's Alpha value of **0.86**, demonstrating robust internal consistency and reliability of the scale, as this score exceeds the commonly accepted threshold of 0.8 for strong reliability (Nunnally, 1978). Descriptive statistics were then

employed to describe and analyze the collected data using SPSS software (Statistical Package for the Social Sciences).

## Results and discussions

Assessing students' and graduates' perspectives of digital entrepreneurship in higher education and its potential contribution to self-employment provided a variety of findings and answers to research questions. Initially, the sample characteristics are introduced to have an overview on the participants and their profiles. Subsequently, descriptive statistics are utilized to summarize and present findings.

### • Sample characteristics

**Table 2:** Frequency and percentage distributions pertaining to demographic variables.

#### Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	120	40,0	40,0	40,0
Female	180	60,0	60,0	100,0
Total	300	100,0	100,0	

#### Age

	Frequency	Percent	Valid Percent	Cumulative Percent
18-24	120	40,0	40,0	40,0
25-31	170	56,7	56,7	96,7
32-38	10	3,3	3,3	100,0
Total	300	100,0	100,0	

#### Educational Level

	Frequency	Percent	Valid Percent	Cumulative Percent
Bac+2	10	3,3	3,3	3,3
B.A	230	76,7	76,7	80,0
Master	50	3,3	3,3	83,3
Other	10	16,7	16,7	100,0
Total	300	100,0	100,0	

Table 2 offers a visual representation of the frequency and percentage distributions related to the demographic variables of the study. In terms of gender, the sample is 40.0% male (120 participants) and 60.0% female (180 participants). The age distribution reveals that the majority of participants (56.7%) are between the ages of 25 and 31, followed by 40.0% in the 18-24 age group, and a minor proportion (3.3%) in the 32-38 age range. In terms of educational level, the most common qualification is a Bachelor's degree (76.7%, 23 participants), followed by 16.7% with other educational credentials and 3.3% with both a Baccalaureate+2 years and a Master's degree.

### Digital entrepreneurship education and self-employment

**Table 3:** Central tendency scores pertaining to digital entrepreneurship intention.

Elements	Intention	Confidence	Motivation for digitalization	Digital education	Readiness	Optimism for digital entrepreneurship
Mean	3,63	3,83	3,97	3,83	3,73	4,27
Median	4,00	4,00	4,00	4,00	4,00	4,00
Mode	4	4	4	4	4	4
Std. Deviation	,964	,834	,928	,648	,868	,785

Table 3 outlines students' attitudes toward digital entrepreneurship and its probable contribution to their entrepreneurial intentions and personality. The findings show a particularly strong propensity toward optimism for digital entrepreneurship ( $M=4.27$ ,  $SD=0.785$ ), with the highest mean score of any evaluated variable. The results also show somewhat high levels of confidence in digitalization ( $M=3.97$ ,  $SD=0.928$ ), while intention and motivation for digitalization have similar averages ( $M=3.83$ ) but differ in their dispersion patterns ( $SD=0.834$  and  $SD=0.648$ , respectively). Digital education preparation shows somewhat lower but still positive findings ( $M=3.73$ ,  $SD=0.868$ ), but general intention has the lowest mean score ( $M=3.63$ ) and the biggest standard deviation ( $SD=0.964$ ), indicating more varied responses in this category.



Overall, we can conclude that digital entrepreneurship education has positive impacts on students' digital entrepreneurship intention, readiness, motivation, and optimism. This means that higher education institutions can work as catalysts of graduates' self-employment and the application of entrepreneurial intentions. By adding digital entrepreneurship courses and programs into their curricula, universities and colleges may provide students with the practical skills, mentality, and confidence they need to create their own businesses in today's increasingly digital economy.

### Digital entrepreneurial syllabus satisfaction

**Table 4:** Central tendency scores pertaining to syllabus satisfaction.

<i>Elements</i>	<i>Trust in self-employment</i>	<i>Satisfaction with Competencies</i>	<i>Syllabus satisfaction</i>
<i>Mean</i>	4,17	4,00	3,83
<i>Median</i>	4,00	4,00	4,00
<i>Mode</i>	4	4	4
<i>Std. Deviation</i>	,747	,788	1,117

The examination of students' opinions of digital entrepreneurship education revealed significant findings across the three major elements. Trust in self-employment had the highest rating, with a mean score of 4.17 ( $SD = 0.747$ ), indicating students' considerable confidence in pursuing entrepreneurial projects. This was followed by satisfaction with acquired competencies, which received a mean score of 4.00 ( $SD = 0.788$ ), showing that students felt well-equipped with the skills and information gained via their study. Syllabus satisfaction had a significantly lower mean of 3.83 ( $SD = 1.117$ ), indicating a generally good appraisal of the curriculum material. Interestingly, all three dimensions had the same median and mode values of 4.00, indicating a consistent positive skew in student evaluations.

Overall, these findings produced several significant insights regarding the effectiveness of digital entrepreneurship education. With mean scores consistently above 3.8 across all dimensions, the data demonstrates a robust positive perception among students, particularly in their trust towards self-employment ( $M = 4.17$ ,  $SD = 0.747$ ) and satisfaction with acquired competencies.

### **Necessary support mechanisms**

Through an open-ended section of the survey that asks students about prospects for digital entrepreneurship and the necessary support mechanisms they deem essential for an effective digital entrepreneurship course, participants provided various valuable insights. First, different participants highlighted the necessity of connecting the theoretical knowledge they acquire at higher education institutions to practical internships and trainings with experienced digital entrepreneurs. According to them, access to mentorship and networking is of a paramount importance as it will help guide them through the challenges of starting and running digital businesses. Second, participants accentuated the lack of access to digital tools and resources related to entrepreneurship such as website development platforms, digital marketing tools, and data analytics software. Participants stressed that understanding how to effectively use would be essential to their success in the digital entrepreneurship space. Finally, a number of responses stressed the importance of including financial resources research to teach students how to apply for grants and other forms of financial support. For them, securing funding could be immensely valuable as it will give their startups a great deal of support.

## **Conclusion**

Overall, we can conclude that digital entrepreneurship education has positive impacts on students' entrepreneurial intention, readiness, motivation, and optimism. Indeed, higher education institutions can serve as catalysts for graduates' self-employment and entrepreneurial endeavors. The convergence of digital technology and entrepreneurship education provides a critical opportunity for Moroccan higher education institutions to modernize their curricula and better educate students for today's business contexts.

Understanding student perceptions of digital entrepreneurship education can also help identify gaps between theoretical knowledge and practical implementation needs, particularly in the Moroccan context where digital transformation is still evolving. Higher education institutions in Morocco must thus understand how students view digital entrepreneurship education in order to close the gap between academic frameworks and the practical skills required in a quickly changing digital ecosystem.

## References

- Alferaih, A. (2022). Starting a new business? Assessing university students' intentions towards digital entrepreneurship in Saudi Arabia. *International Journal of Information Management Data Insights*, 2(2), 100087. <https://doi.org/10.1016/j.jjimei.2022.100087>
- Belik, E. B., Petrenko, E. S., Pisarev, G. A., & Karpova, A. A. (2020). Influence of technological revolution in the sphere of digital technologies on the modern entrepreneurship. In *The 21st century from the positions of modern science: Intellectual, digital and innovative aspects* (pp. 239–246). Springer International Publishing. [https://doi.org/10.1007/978-3-030-32015-7\\_27](https://doi.org/10.1007/978-3-030-32015-7_27)
- Bergmann, H., Geissler, M., Hundt, C., & Grave, B. (2018). The climate for entrepreneurship at higher education institutions. *Research Policy*, 47(4), 700–716. <https://doi.org/10.1016/j.respol.2018.01.018>
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage Publications.
- Dawes, J. (2008). Do data characteristics change according to the number of scale points used? An experiment using 5-point, 7-point and 10-point scales. *International Journal of Market Research*, 50(1), 61–104. <https://doi.org/10.1177/147078530805000106>
- Elia, G., Margherita, A., & Passiante, G. (2020). Digital entrepreneurship ecosystem: How digital technologies and collective intelligence are reshaping the entrepreneurial process. *Technological Forecasting and Social Change*, 150, 119791. <https://doi.org/10.1016/j.techfore.2019.119791>
- Ghafar, A. (2020). Convergence between 21st century skills and entrepreneurship education in higher education institutes. *International Journal of Higher Education*, 9(1), 218–229. <https://doi.org/10.5430/ijhe.v9n1p218>
- Jones, P., Pickernell, D., Fisher, R., & Netana, C. (2017). A tale of two universities: Graduates' perceived value of entrepreneurship education. *\*Education + Training*, 59\*(7/8), 689–705. <https://doi.org/10.1108/ET-03-2017-0030>
- Kraus, S., Palmer, C., Kailer, N., Kallinger, F. L., & Spitzer, J. (2019). Digital entrepreneurship: A research agenda on new business models for the twenty-first century. *International Journal of Entrepreneurial Behavior & Research*, 25(2), 353–375. <https://doi.org/10.1108/IJEBR-06-2018-0425>
- Le Dinh, T., Vu, M. C., & Ayayi, A. (2018). Towards a living lab for promoting the digital entrepreneurship process. *International Journal of Entrepreneurship*, 22(1), 1–17.

- Lungu, A. E., & Georgescu, M. R. (2023). Students' perceptions on digital entrepreneurship: A preliminary study. *Revista Economică*, 75(1).
- Lungu, A. E., & Georgescu, M. R. (2024). Digital entrepreneurship: An empirical approach on students' perceptions and attitudes. *Procedia Computer Science*, 237, 544–551. <https://doi.org/10.1016/j.procs.2024.04.063>
- Nambisan, S. (2017). Digital entrepreneurship: Toward a digital technology perspective of entrepreneurship. *Entrepreneurship Theory and Practice*, 41(6), 1029–1055. <https://doi.org/10.1111/etap.12254>
- Naudé, W., & Liebrechts, W. (2020). Digital entrepreneurship research: A concise introduction. *Small Business Economics*, 56(1), 1–6. <https://doi.org/10.1007/s11187-020-00367-3>
- Neck, H. M., & Corbett, A. C. (2018). The scholarship of teaching and learning entrepreneurship. *Entrepreneurship Education and Pedagogy*, 1(1), 8–41. <https://doi.org/10.1177/2515127417737286>
- Nian, T. Y., Bakar, R., & Islam, M. A. (2014). Students' perception on entrepreneurship education: The case of Universiti Malaysia Perlis. *International Education Studies*, 7(10), 40–49. <https://doi.org/10.5539/ies.v7n10p40>
- Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). McGraw-Hill.
- Rahim, I. H. A., & Mukhtar, D. (2021). Perception of students on entrepreneurship education. *International Journal of Business and Social Science*, 12(1), 94–102.
- Rippa, P., & Secundo, G. (2019). Digital academic entrepreneurship: The potential of digital technologies on academic entrepreneurship. *Technological Forecasting and Social Change*, 146, 900–911. <https://doi.org/10.1016/j.techfore.2018.07.044>
- Steininger, D. M., Brohman, M. K., & Block, J. H. (2022). Digital entrepreneurship: What is new if anything? *Business & Information Systems Engineering*, 64(1), 1–14. <https://doi.org/10.1007/s12599-021-00728-6>
- Taatila, V. P. (2010). Learning entrepreneurship in higher education. *\*Education + Training*, 52\*(1), 48–61. <https://doi.org/10.1108/00400911011017672>