

**The Relationship Between the Development of Entrepreneurial
Activities in the Age of Technology and the Characters of
Digitally Oriented Generations Z & Y: What Is the
New Challenge for Business Schools?**

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The context of 2021, characterized by poor health, and economic-social situation, has accelerated the use of technology and made it an indispensable factor in many areas, including entrepreneurship. It is true that entrepreneurship is a key driver of the country's wealth and economic development, as it contributes to solving certain social and economic problems, such as the unemployment rate of young graduates. However, with the proliferation of new digital businesses, the need to understand the reasons for this transformation and the predominance of this digital domain has become evident, especially if we ask ourselves about the characteristics of generations Z and Y related to the virtual world and digital activities. In addition, this topic raises new questions, especially in education, namely the challenges of integrating new determinants in the curricula of education and training for entrepreneurship. This article aims to study the characteristics of generations Z and Y to discover the roots of the emergence of digital entrepreneurship by examining the facts.

Keywords: digital entrepreneurship, Generations Z and Y, characteristics and personality traits, entrepreneurship education, universities and training programs in entrepreneurship

INTRODUCTION

The development of entrepreneurship and creativity is a major challenge for the Moroccan economy, as it leads to more innovation, productivity gains, business creation, and job creation and thus contributes to the growth and well-being of a country.

In recent years, advances in digital technologies and the massive adoption of the Internet have created new opportunities for new entrepreneurial activities, such as digital entrepreneurship. As a result, the Moroccan government has demonstrated its commitment to strengthening these activities. In this sense, several financing opportunities have been supported by the government, such as “Innov Fund Invest”; with a financing capacity of up to 700 million DH, dedicated exclusively to innovative technology start-ups, aligned with the digital vision for 2020.

Therefore, this research will focus on the essential role of the university, which is no longer content to produce graduates but rather to train and educate creators and entrepreneurs by considering the technological and economic evolutions. As well as the inescapable role of the State to accompany the self-entrepreneurs and to encourage the investment in the electronic, digital businesses and the new artificial technologies.

The research will provide a vision to promote, improve and strengthen entrepreneurship programs and enrich the intentions of Moroccan university students by allowing them to open and discover new doors related to current progress.

Usually, the university student does not always have the vision to become an entrepreneur, and in this sense comes the role of the university. Recently, university initiatives have focused on developing this role to promote and support the entrepreneurial spirit. Yet, with these efforts, the university student does not choose entrepreneurship as an alternative career option. The decision to become an entrepreneur is considered voluntary and conscious, and usually, this entrepreneurial intention results in an attempt to start a business. However, these intentions and efforts must go hand in hand with technological transformation and must be accompanied by state support. To this end, the research problem will focus on the characteristics of Generation Y and Z, the impact of entrepreneurship education on the intentions of these generations, and its role in developing entrepreneurial efficiencies in the technological and digital context.

LITERATURE REVIEW

Classical Entrepreneurship

The term entrepreneurship has taken its meaning from the seventeenth century. However, this meaning was attributed to the only economic science due to the activity of authors who were interested in this area as Cantillon (1755). The term was used before Cantillon and other authors, but as Schumpeter (1928, 1934, and 1954) pointed out, Cantillon was the first to present a clear conception of the function of the entrepreneur. He described him as a man seeking business opportunities, concerned with astute and thrifty management that maximizes the return on investment. But in the end, it was Schumpeter who boosted the field of entrepreneurship by linking it to innovation and the exploitation of opportunities. Moreover, all of his works have highlighted the important role that this field plays in socioeconomic development. However, he is not the only one to associate entrepreneurship with innovation; there are Clark (1899), Higgins (1959), Baumol, Schloss, and Leibenstein (1968)

Despite the growing discourse around entrepreneurship linking it to innovation, it was only after the world economy underwent a radical transformation, “from an economy based on agriculture and industrialization to a connected economy,” that researchers turned their attention to the role played by technology in entrepreneurship.

In other words, it is from the third revolution 3.0, the era of a permanent connection, the use of social networks (such as Facebook, Instagram ...), WIFI, and connected smartphones, that the authors have focused their interests to the digital transformation and its role on the field of entrepreneurship.

So, it was not until the second half of the 20th century that the term “digital entrepreneurship” gained greater visibility.

Digital Entrepreneurship

The term “Digital Entrepreneurship” was born from the emergence of the Internet, new information and communication technologies (NICT), and e-commerce first, then from the interest of consumers for innovative, easy-to-use, and simple means and technologies. In addition, new generations are interested in the virtual world, which takes advantage of the various opportunities of the web to meet the demands of these consumers eager for innovation and creation.

Given that, digital entrepreneurship is an important process that affects economic growth (Zhao and Collier, 2016). It is important to understand it and refer to the definitions provided by the authors.

McKelvey (2001) is often the first to speak on the field, linking the concept to “attempts to capture innovation processes involving knowledge-intensive products on the Internet in the modern economy.” Then comes Kollmann (2006), who gave the following definition “Establishment of a new company with an innovative business idea within the net economy, which, using an electronic platform in data networks, offers products and/or services based on purely electronic value creation”. And there is Hull et al., (2007) who defined it as “A subcategory of entrepreneurship in which all or part of what would be physical in a traditional organization has been digitized and involves the use of the Internet.” Then in 2010, Davidson and Vaast defined digital entrepreneurship by going back to the origins of the concept, i.e., the Schumpeterian approach, where they linked the concept to the role of the entrepreneur in finding and exploiting opportunities. They defined it as “the pursuit of the various opportunities generated by the Internet, the World Wide Web, mobile technologies, and new media, such as dot-com and other information and communication technologies to take advantage of the Internet’s openness for commercial purposes.”

In addition, among the current definitions, there is Bacigalupo et al. (2016), defined digital entrepreneurship as “Entrepreneurship that involves the use of new digital technologies especially social media, big data, mobile and cloud computing solutions”, as there are many other authors who have defined the concept in a similar sense.

From these definitions and explanations, we can say that digital entrepreneurship is an emerging subcategory of classical entrepreneurship, which is fundamentally and extrinsically different from the latter, not only in terms of products and workplace but also in terms of creation, manufacturing and storage, type of service provided, distribution in the market, etc.... which leads us to advance the question that if:

Digital entrepreneurship would be different from classical entrepreneurship throughout the entrepreneurial process?

Factors That Differentiate Classic Entrepreneurship from Digital Entrepreneurship

Considered as a sub-category of entrepreneurship, what could be physical in a classic company will be digitalized in a digital company. To this end, Hull et al. (2007) propose certain factors that summarize the difference between digital entrepreneurship and traditional entrepreneurship, namely

TABLE 1
FACTORS PROPOSED BY HULL ET AL (2007)

Ease of creation	Ease of manufacturing and storage	Ease of distribution in the digital marketplace	Digital workplace	Product	Service
the creation of a new business takes only a few hours and does not require significant financial resources	in the digital sphere, inventory and manufacturing are not expensive	distribution of products in the digital world is much faster and less expensive	the internet allows digital entrepreneurs to hire their employees from anywhere and make partnerships around the world without relocating geographically	in addition to the benefits mentioned so far, digital products have other advantages. Product modification and even fundamental innovations can be established without interrupting production and sales	although digital services can be realized through an automated procedure or a program

Source: Hull et al (2007)

Characteristics of Generation Y & Z

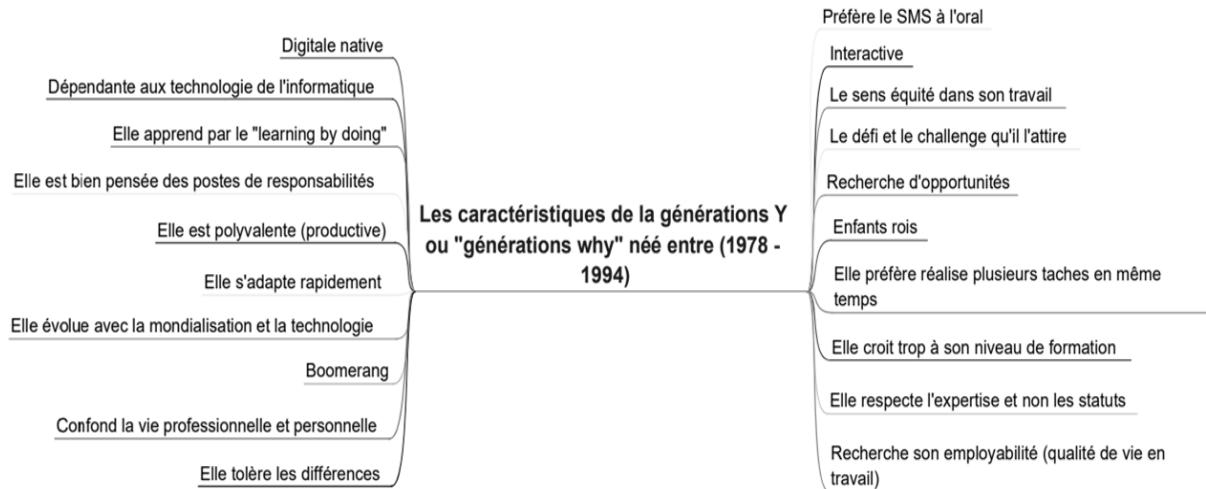
To clarify and organize the characteristics of generations Z & Y, we chose to use the visual representation Mind Mapping.

Generation Y

Generation Y, or Millennials, are typically defined as individuals born between 1980 and 1994. They are the first generation to have grown up with the internet and are known for being tech-savvy and connected. They are also known for being more diverse, educated, and likely to have grown up in a single-parent household than previous generations.

Generation Y, or digital natives, is the transition generation, the first one to experience the arrival of the connected world (the internet and smartphones), and who grew up with digital technology.

**FIGURE 1
CHARACTERISTICS OF GENERATION Y**

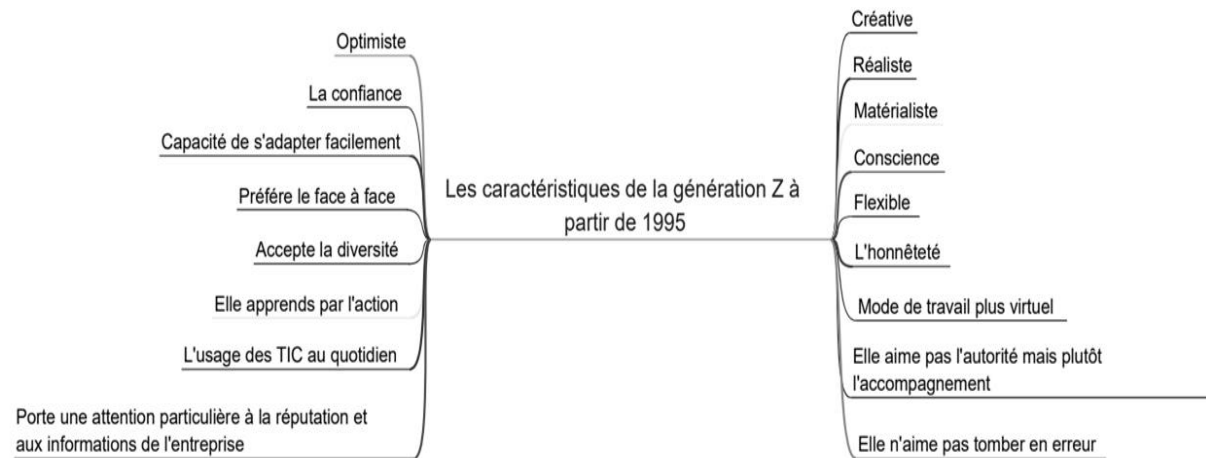


Source: Authors

Generation Z

Generation Z, or Post-Millennials or the iGeneration, are typically defined as individuals born between 1995 and 2010. They are the first generation to have grown up with smartphones and are known for being even more tech-savvy and connected than Millennials. Generation Z is the ultra-connected generation, who don't know life without the internet, and who use the remote control, smartphone apps, YouTube and streaming services. They are also known for being more diverse, politically aware, and more likely to be independent than previous generations.

**FIGURE 2
CHARACTERISTICS OF GENERATION Z**



Source: Authors

According to these mind maps that represent the main characteristics of generations Y and Z, we can now understand the choice of these generations for self-employment and not just any work but work by doing, full of challenges and especially must be innovative and creative.

Entrepreneurship Education

The formation of an entrepreneurial intention is an important step in the creation of a new company capable of facing the existing progress. To this effect, the entrepreneurial intention of Moroccan students, especially the new promotions (generations Y & Z) has become a major concern of public actors, as the case of the Ministry of National Education, Vocational Training, Higher Education and Scientific Research, which launched the SNEE, the SALEEM pole which aims to accompany the creation of startups these students. As well as the case of the Moroccan government, which has shown its support for encouraging entrepreneurship in the digital transformation era through several funding opportunities, such as the “Innov Fund Invest”. Thus, the technological revolution and digital acceleration comes the need to seek to integrate other determinants in the education and training programs for entrepreneurship, such as digital and artificial entrepreneurship.

The Importance of Entrepreneurship Education

Research conducted by Serarols et al. (2008) highlights the positive impact of the level of education on the success of traditional and digital businesses. It suggests that the higher the level of education of entrepreneurs, the more successful the start-up of their business will be. Consistent with these findings, other studies have emphasized the nature of education. Indeed, Zaheer, et al. (2019), found that most digital startup founders in stralian had a background in STEM (science, technology, engineering, and mathematics), especially computer science or information technology. Similarly, in the context of Cameroon, Ngoasong shared that having a computer science background or a passion for ICT gives one a clear vision for seizing entrepreneurial opportunities in the digital sphere. Recall Shahidi 2012 also showed that those who pursue entrepreneurship education have a very high level of intention.

The Relation Between Education and Digital Entrepreneurship

Education and digital entrepreneurship are closely related in several ways. Firstly, education provides individuals with the knowledge, skills, and training to start and run a successful digital business. This includes knowledge of business management, marketing, and technology.

Secondly, education can also give individuals access to resources and networks that can help them launch and grow their digital businesses. For example, universities and other educational institutions often have incubators and accelerators that provide funding, mentorship, and other support to entrepreneurs.

Thirdly, digital entrepreneurship education is becoming increasingly prevalent, with many universities and educational institutions offering specific courses and programs in digital entrepreneurship. This allows individuals to gain specialized knowledge and skills in areas such as e-commerce, digital marketing, and web development.

Finally, digital entrepreneurship education helps individuals to stay up to date with the latest trends and developments in the field, which is essential for staying competitive in the fast-paced world of digital business.

Overall, education is crucial in equipping individuals with the knowledge, skills, and resources needed to launch and grow successful digital businesses.

Challenge of Business Schools in the Era of Digital Transformation

(Facing the behavior of generations Z & Y and facing a new type of entrepreneurship “digital entrepreneurship”)

The creation of a digital company is a particularly difficult journey. In this sense, the entrepreneur must demonstrate certain personal qualities in different situations. In addition, it is important to have technological and entrepreneurial skills to succeed. Most of the skills being acquired we are talking here first about the role of business schools in the acquisition of these skills, then comes other sources (like internships...), because school is the first place where the student sets foot to learn, acquire and develop these skills that will help him/her to get the job of his/her dreams.

For a digital entrepreneur of the future, he expects the same from his business school; he is looking for a place that will allow him to develop the skills needed to run his digital startup in the future, a place that

creates an atmosphere of challenge and leadership. This organization evolves and always aims at the student's interest and is always aligned with the tide of globalization, evolution, and technology. This is the challenge that business schools face today. Today we are talking about the technological revolution and digital transformation. Shouldn't the education method evolve to counter this revolution and the behavior of generations Z & Y? Although we note many efforts and assistance from the state to help these generations and develop their entrepreneurial spirit. However, the basis for the success of a digital entrepreneur is his ability and especially his skill (Table 4), most of which he acquires in school, which may also be the source of his intention to start this entrepreneurial project. In this regard, we also add what Zuhair (2015) insisted on "the commitment", given the fact that without commitment, the skills would have no added value. At the same time, entrepreneurial commitment without proper entrepreneurial skills can be considered a waste of time and resources (Zaheer 2015). A digital entrepreneur must show commitment and persistence to succeed. Furthermore, it turned out that the entrepreneurial adventure in the digital sphere is not as easy as some people imagine, especially in the African context, where several challenges arise. Therefore, only the competent (here we are talking about the role of business schools) and the truly persistent can remain resilient to these challenges whenever they arise.

Business schools play an important factor and role in guiding, training and making the future entrepreneurs who are composed of "generations why" and "generation starting from 1995" ready to create their own digital company and face the market in the field in which they innovate "technology"

It is perfectly logical for an entrepreneur to clearly define the purpose of creating his business to give meaning to his work and to know exactly what he will have to produce, when, and at what cost, which generally affects the performance of his business. And this is where the role of the business school comes in, i.e., this Generation Z or Y student or aspiring young entrepreneur should, by the end of his or her educational career, have clearly defined the purpose of creating his or her future digital startup.

To sum up Business schools are facing several challenges in the era of digital transformation when it comes to educating and preparing students, particularly those from Generation Z and Y, for the world of digital entrepreneurship. Some of these challenges include:

- Keeping up with the pace of change: Digital technologies are evolving rapidly, and business schools need to keep up with these changes to provide students with relevant and up-to-date knowledge and skills.
- Adapting to the digital native students: Generations Z and Y are known for being tech-savvy and connected, and business schools need to adapt their teaching methods and curriculum to cater to these digital native students.
- Incorporating digital entrepreneurship into the curriculum: Business schools need to develop and offer courses and programs that specifically focus on digital entrepreneurship, including e-commerce, digital marketing, and web development.
- Providing practical experience: With the fast-paced and ever-changing nature of digital entrepreneurship, it's crucial that business schools provide students with hands-on experience and opportunities to work on real-world projects.
- Emphasizing on soft skills: As the digital world is all about innovation, collaboration, and communication, business schools need to focus on soft skills such as creativity, teamwork, and communication.

Overall, business schools need to adapt to the new reality of digital entrepreneurship by staying up to date with the latest trends and technologies and providing students with the knowledge, skills, and experience needed to succeed in the digital business world.

DISCUSSION

All developments that the world is witnessing today have radically changed the business environment and, consequently, created many opportunities for new young entrepreneurs (or these new generations Z &

Y addicted to technology) in various sectors of activity. Digital entrepreneurship has thus emerged as a form of entrepreneurship that fundamentally exploits and uses the Internet, Information, and Communication Technology within companies or for the creation of new start-ups. The use of new information and communication technologies (NTIC) has changed how, manner, and techniques of doing business.

The challenges of digital entrepreneurship in Morocco are diverse. From our literature study, we conclude that recruiting the right talent is a huge challenge. This is considered necessary, given the innovative nature and the climate of creativity that has developed within these companies (Korgaonkar, & O'Leary, 2006), especially since they operate in an environment that is rapidly evolving the Internet (Grossi and al., 2000; cited by Korgaonkar, & O'Leary, 2006) without talking about the competencies of an entrepreneurial company ledger. In addition, a challenge to mention is the size of the market, which is supposed to be small, especially when a company decides to launch in the local market, jeopardizing its growth and success. Therefore, we shed light on the role of educational schools that must guide and teach entrepreneurial students to face these challenges; to provide the necessary competencies for the success of their entrepreneurial digital project in this era of development.

CONCLUSION

Our study highlights the context of the digital economy, where entrepreneurs face many challenges in terms of not only access to qualified talent or the ability to succeed but also the market size that is considered modest.

By joining the studies related to the entrepreneur, our study shows us that technological knowledge is of great value and developing the capabilities and knowledge necessary are important, so schools will make a big difference in the future of their entrepreneurs' students and the success rate of their future entrepreneurial project if they take more initiative of interest in this topic. Without mentioning, another second factor that can play a crucial role as well is experience in the industry in which the digital enterprise operates. From the same perspective. However, the opinions of the authors converge on this topic. For some, Yee (2017), Slitten and Barthelemy (2010), having industry experience before creating a digital business is essential to ensure its profitability, while for others with industry experience or technical skills, it is a requirement to make a creative project a reality and not to ensure its viability and profitability. Hence, this leads us to mention the two indispensable factors mentioned above in addition to the role of business schools in the orientation and development of competencies, namely perseverance, and commitment. Adhering to Zuhair's assertion (2015), which stresses the importance of commitment, notes that without commitment, skills will have no added value and declares in parallel that entrepreneurial commitment, without sufficient entrepreneurial skills, can be seen as a waste of time and resources. For this requirement, a certain amount of perseverance and commitment is required to continue working on developing his startup until it reaches its first stages of success. On the other hand, or from another point of view, some researchers have linked digital entrepreneurship to its goal of achieving a purely digital benefit for the consumer, such as Bensaïd and Azdimousa (2019). While others, such as Giones and Brem (2017) have considered digital technologies as the primary entry factor, assuming that digital businesses would not exist at their base without these technologies.

In this research, we explored the role of business schools in developing the skills, motives, and intentions of their future entrepreneurial students, as well as the characteristics of the young entrepreneur's commitment and flexibility to succeed in this entrepreneurial adventure and resist the various changes and challenges that entrepreneurs are frequently exposed to. This study will provide some knowledge and insights to enhance the discipline of digital entrepreneurship and reveal the role educational business schools play in the shadows.

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