ISSN: 2658-8455

Volume 3, Issue 3-2 (2022), pp.193-208.

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# Gender differences in IT entrepreneurship: comparing the entrepreneurial intention/behavior in the pre and post-implementation phases

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Disclosure Statement :	Authors are not aware of any findings that might be perceived as affecting the objectivity of this study
Conflict of Interest :	The authors report no conflicts of interest.
Journal statement:	This article is published without APC
Cite this article :	LAARAJ, N., AAZI, F. Z., & LAACHACH, A. (2022). Gender differences in IT entrepreneurship: comparing the entrepreneurial intention/behavior in the pre and post-implementation phases. International Journal of Accounting, Finance, Auditing, Management and Economics, 3(3-2), 193-208. <a href="https://doi.org/10.5281/zenodo.6591835">https://doi.org/10.5281/zenodo.6591835</a>
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Received: April 11, 2022 Published online: May 31, 2022

International Journal of Accounting, Finance, Auditing, Management and Economics - IJAFAME ISSN: 2658-8455

Volume 3, Issue 3-2 (2022)

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#### Résumé:

Actuellement, le nombre de femmes entrepreneures qui créent des entreprises est en augmentation. Les femmes gèrent entre un quart et un tiers des entreprises de l'économie formelle dans le monde. Au Maroc, les femmes entrepreneures représentent 10 à 12% du nombre total d'entrepreneurs avec une faible représentation dans le secteur des technologies de l'information<sup>1</sup>. L'objectif de ce papier est de comparer l'intention et le comportement entrepreneuriaux des femmes et des hommes entrepreneurs dans la phase pré et post implémentation, notamment dans le secteur des technologies de l'information. L'analyse de contenu des entretiens menés nous a permis de constater qu'au niveau de la phase pré-implémentation, la variable genre modère uniquement la relation entre les déterminants individuels et l'intention entrepreneuriale. Cependant, dans la phase post-implémentation, nous avons constaté que la variable genre modère à la fois la relation entre les déterminants individuels et contextuels et le comportement entrepreneurial. In fine, des différences en termes de liens sociaux, de désirabilité et de faisabilité ont été dévoilées.

Mots clés: Entrepreneuriat, entrepreneuriat féminin, approche genre, étude comparative, Secteur IT Maroc.

Classification JEL: L26

Type de l'article : recherche empirique

#### Abstract:

Currently, the number of women entrepreneurs starting businesses is increasing. Women manage between a quarter and a third of the companies in the formal economy in the world. In Morocco, women entrepreneurs represent 10 to 12% of the total number of entrepreneurs with a low representation in the information technology (IT) sector<sup>2</sup>. The purpose of this paper is to compare the entrepreneurial intention and behavior of female and male entrepreneurs in the pre- and post-implementation phase, particularly in the IT sector. The content analysis of the interviews conducted allowed us to observe that in the pre-implementation phase, the gender variable only moderates the relationship between individual determinants and entrepreneurial intention. However, in the post-implementation phase, we found that the gender variable moderates both the relationship between individual and contextual determinants and entrepreneurial behavior. Ultimately, differences in terms of social ties, desirability and feasibility were revealed.

Key words: IT entrepreneurship, women entrepreneurship, gender approach, comparative study, IT sector

Morocco.

JEL Classification: L26
Paper type: Empirical research

<sup>&</sup>lt;sup>1</sup> Selon une étude menée entre 2014 et 2015, par le Bureau International de Travail (BIT), en partenariat avec le ministère de l'Emploi, des Affaires sociales et le soutien financier de Global Affairs, Canada.

<sup>&</sup>lt;sup>2</sup> According to a study conducted between 2014 and 2015, by the International Labour Office (ILO), in partnership with the Ministry of Employment, Social Affairs and the financial support of Global Affairs, Canada.

ISSN: 2658-8455

Volume 3, Issue 3-2 (2022), pp.193-208.

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#### 1. Introduction

The economic crisis of the mid-1970s with the resulting restructuring, the relocations to new emerging countries, the rising power of the services sector and the technological developments that marked the last quarter of the twentieth century put the importance of the entrepreneurial function at the forefront of the global economy (Marcourt, 2009). In such a situation, Morocco, like the other developing countries, following the recommendations of the World Bank, implements guidance to promote the entrepreneurial practices that represent a source of value creation and wealth. Currently, the number of women entrepreneurs starting business is increasing. They manage between one-quarter and one-third of all companies in the formal economy around the world. In Morocco, at present, women entrepreneurs represent only 10 to 12% of the total number of entrepreneurs with a low representation in the sector of new technologies.

Currently, and since its emergence, the Information Technology (IT) sector continues to evolve at a rapid pace and is becoming a driver of socio-economic development and competitiveness of countries (Souter, 2004). The IT industry is becoming a real area of opportunity: for employment (Kuratko, 2005; Miller et al., 2009), business creation (Elia et al., 2016) and for the exchange of goods and services worldwide. Above all, technology is changing the way people do business (Anderson, 2014; Brynjolfsson and McAfee, 2014; World Bank, 2016). It provides the opportunity to innovate, to develop new activities that are partially or exclusively technological and to reduce the cost and barriers to entry, thus giving rise to a new generation of entrepreneurs (A. Ben Youssef, et al., 2021). However, despite its importance and rapid development, research on the specificities of IT entrepreneurship remains scarce, especially the gender differences and points of divergence and convergence between female and male entrepreneurs operating in this sector.

The objective of this work is to study the impact of gender on the entrepreneurial intention and behavior in the IT field. The choice of studying both aspects (intention and behavior) is justified by their strong dependence. Indeed, several researches encourage the analysis of the entrepreneurial behavior by observing the skills and attitudes of entrepreneurs over time (dynamic analysis). In the pre-implementation phase, it is mainly about entrepreneurial intention considered as the best predictor of behavior (Ajzen, 1991). This latter is generally analyzed during the post-implementation phase in terms of the management of the entrepreneurs' daily relations with their environment (suppliers, customers, partners, employees, ...). Thus, we study whether the factor (gender) is on the list of the determinants of intention and behavior during the two implementation phases of an IT project. The literature review reveals that the determining factors are generally classified into two categories: individual factors and those related to the context or environment (economic, family...).

More precisely, we try to analyze and explain, on the one hand, the role of gender and its influence on the intention to undertake in the IT sector (pre-implementation phase) and, on the other hand, its role in the orientation of the entrepreneurs' behavior in the post-implementation phase.

The rest of the paper will be organized as follow. The second section will present the theoretical framework of entrepreneurial intention and behavior and their main determinants. The third section will discuss the specificities of entrepreneurship in the IT sector and the role of gender while sections 4 and 5 will be dedicated respectively to the presentation of the methodology and the discussion of the main results. The last section concludes the paper.

#### 2. Theoretical framework: entrepreneurial intention and behavior

#### 2.1 Definitions

Entrepreneurial intentions are incarnated as a state of mind of entrepreneurs. They guide their attention, experience and actions towards a business concept (Bird, 1989). Intentions are considered as the prior and defining phase of the entrepreneurial process. They are widely recognized as an antecedent to future entrepreneurial activity (Shapero and Sokol, 1982; Bagozzi et al., 1989; Ajzen, 1991).

Many studies have focused on the concept of entrepreneurial intention. Some authors have sought to understand it through the theory of planned behavior (TBP) proposed by Azjen (1991) [Ko, and al., (2012); Guzmán-Alfonso & Guzmán-Cuevas, (2012); Yang, (2013); Rai and al., (2017)]. Others have used the theory of entrepreneurial advent emanating from the work of Shapéro and Sokol (1982) [Bird & Jelinek, (1989); Iakovleva & Kolvereid, (2009); Fayolle, (2005); Fayolle & Liñán, (2014)]. In practice, it was only since 2012, with the attempt to analyze the entrepreneurial intention and behavior, that some authors as Miao and al, (2018); Burnette & al., (2020); Giones and al., (2020) began to pay special attention to psychosociological variables.

The works that have focused on entrepreneurial behavior consider the creation of a new venture by the individual as a planned behavior that can be studied via intention models (Schlaegel & Koenig 2014; Alferaih, 2017...). They assume that intention is a 'good' predictor of individuals' future behavior (Gorgievski et al., 2018; Verma & Chandra, 2018; Munir et al., 2019; Feola et al., 2019).

According to the theory of planned behavior, the individual's intention is identified by three variables: the attitude towards the behavior under study, the perception of social norms and the possible control of the situation (Azjen, 1991; Maalaoui et al., 2014).

#### 2.2. Determinants of entrepreneurial intention and behavior

Based on a wide range of personal and social perceptions about entrepreneurship, individuals develop positive or negative entrepreneurial intentions (Liñán and Chen, 2009) that could be linked to entrepreneurial starting behavior or even to a subsequent career choice (Delanoë-Gueguen and Liñán, 2019). Far from shortcuts that make entrepreneurship only a singular event, most researchers argue that new business creation should be studied as a process that develops over time (Laguna, 2013; Santos & Liguori, 2019). This process is usually triggered by an entrepreneurial intention. However, before talking about entrepreneurial intention followed by behavior, there are entrepreneurial trends, inclinations or preferences that make an individual more likely to become an entrepreneur (Gerry, Marques & Noguera, 2008).

Many studies have been interested in identifying the factors that motivate an individual to become an entrepreneur (Gerry, Marques & Noguera, 2008). There is a substantial literature on entrepreneurship that focuses on its relationship with personality traits. Nevertheless, the nature of the relationship is far from clear (Rauch & Frese, 2007).

It should be noted that the factors most frequently associated with entrepreneurial intention are age, gender, education, work experience, psychological profile and family background (Nguyen, 2018).

Particular attention has been paid to the antecedents of entrepreneurial intention, including the different personal and contextual determinants (Obschonka & Stuetzer, 2017). Various studies have discussed the effects of personality traits on entrepreneurial intention (Zhao and al., 2010), conscientiousness, openness to experience, risk propensity (Zhao and al., 2010; Miao, 2015), emotional stability, extraversion (Zhao and al., 2010) and self-efficacy (Carr, and al., 2007; Zhao and al., 2005). In addition, entrepreneurial passion (Molino, 2017), creativity (Biraglia &

Volume 3, Issue 3-2 (2022), pp.193-208.

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Kadile, 2017), emotional intelligence and proactive personality (Miao, 2015) are other factors that have been considered by researchers (Molino et al, 2018).

In brief, the entrepreneurial behavior is determined by both individual factors related to the intrinsic characteristics and psychological attitude of the entrepreneur (age, risk aversion, ...) and contextual factors related to the socio-economic environment of the firm, educational system, etc.

# 3. Entrepreneurship in the IT sector and the role of gender

#### 3.1.Entrepreneurial intention and behavior in the IT sector

Entrepreneurship in the IT sector, referred to as digital entrepreneurship, is a form of entrepreneurship "in which some or all of what would be physical in a traditional organization is digitized" (Hull et al., 2007; Esmaeeli, 2011).

Esmaeeli (2011) proposes a typology and degrees of digitalization of a company depending on the nature of the goods and services offered (digital or not) and the digital potential of the: distribution process and the interactions with external stakeholders and internal activities of the company. In this sense, digital entrepreneurship refers to a new business model based on one or a combination of these elements (Gupta and al., 2008; Esmaeeli, 2011; Hafezieh et al., 2011). In addition to the factors determining entrepreneurial intention in general, there are a few ones that are specific to and motivate entrepreneurship in the digital domain rather than in a traditional one. The first factor is related to the recognition of an opportunity or need in the market and especially the ability to translate and respond to it with a digital product or service (Carrier and al., 2004; Hafezieh and al., 2011). This requires knowledge of digital.

Other so-called structural factors (Esmaeeli, 2011) are related to the economic context of the country: whether or not the state helps the entrepreneur to start his or her business, the level of digital literacy and the electronic infrastructure.

Dutot and Van Horne (2015), associate the intention to undertake digital entrepreneurship with the agility/ability to use digital technologies (to maintain relationships with internal or external partners, to store and manage information...) and with the individual characteristics of entrepreneurs who are generally young, educated, prefer to work for themselves and are very attentive and reactive to opportunities through their use of social media. Digital entrepreneurs are quick to act on entrepreneurial intention, although not always in a formal context.

As for the behavior of IT entrepreneurs (measured by Jelenc and Pisapia, 2015, by risk-taking inclination, innovation and proactivity), it is associated and explained by the strategic thinking skills of entrepreneurs. That includes the skills of imagination, reconciliation, gain-seeking, flexibility, defining a global strategy/vision ... (Jelenc, 2009; Jelenc and Swiercz, 2011). It is also attributed to other factors such as age, gender, type of organization, etc.

#### 3.2. Entrepreneurial intention and behavior in the IT sector: The role of gender

The impact of gender remains underdeveloped in most of the literature as it is considered a simple demographic variable (Kickul and Krueger, 2005; Wilson et al. 2007). In this study, we investigate whether the impact of individual and contextual determinants on entrepreneurial intention and behavior differs by gender, particularly in the IT sector.

Thus, as a relatively new discipline compared to the traditional fields of learning, activity and entrepreneurship, it was hoped that women would be able to reduce the gender gap and impose

their place in all aspects of IT. Unfortunately, the evidence shows that this is not the case even in advanced countries (Richardson and Hynes, 2006; Marlow and McAdam, 2012).<sup>3</sup>

Indeed, women are not only under-represented as owners of IT companies but also as students of technical classes and training and as employees in the field. In terms of education, the European Commission's 2003 report indicates that male graduates are systematically more likely to graduate from engineering, science, mathematics and computer science programs than women (with the exception of Belgium and Spain). In Ireland, around 20% or fewer places on engineering and technology (E&T) courses are taken by women (Hynes and al., 2002). In terms of employment, women represented only 30% of the 7 million IT workers in Europe in 2013 (European Commission, 2013). This low presence of women in science and engineering disciplines and in the labor market is reflected in the low share of technology companies founded by them (15% of technology companies in the US (Robb and al., 2010)). In Ireland, women are 2.6 times less likely to start a business than their male counterparts (more risk averse) (Fitzsimons, O'Gorman, & Roche, 2003).

In addition, the low share of women entrepreneurs in IT may also be due to various factors related to personal profiles, situational and personality characteristics, self-confidence, etc., factors that explain the low share of women business owners in general (Hynes, 1996; GEM, 2004).

In this context, several theoretical and empirical works have tried to explain the gap and underrepresentation of women in the IT field. Theoretical work on gender and ITs is generally based on two theories: Essentialism and social construction (Trauth, 2002).

The essentialism theory defends the idea of fixed, unified and opposite female and male natures (Wajcman, 1991). According to this theory, the biological difference between the two sexes explains all other gender differences (Marini, 1990). The under-representation of women in the IT sectors and the differential behavior are due to the different bio-psychological characteristics.

The second theory sees IT as a socially constructed male domain and considers that there is a fundamental incompatibility between the social construction of female identity and the social construction of information technology and IT work as a male domain. This theory explains the under-representation of women in the field by social rather than biological forces.

Empirical work on gender and information technology rely more on social construction theory rather than biological and psychological differences (Bem, 1974; Eriksson, Kitchenham, & Tijdens, 1991; Lovegrove & Segal, 1991; Wajcman, 1991; Adam et al, 1994; Spender, 1995; Comunale, & Belanger, 2002; Trauth, 2006; Marlow & McAdam, 2012). According to those works, the social conception of IT as 'men's work' places IT careers outside the domain of women. Furthermore, traditional stereotypes of women in science and business, combined with gender bias, contribute to the reduction of opportunities for women (Murray and Graham, 2007; McDonnell and Morley, 2015).

Both theories are widely criticized, which leaves the question open to the formulation of new ideas and suggestions to identify the factors that explain the under-representation of women in the field of new technologies. This explains the interest of our work.

# 4. Research methodology

#### 4.1.Moroccan context

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Despite the importance of the IT sector and its strong contribution to the growth of economies (Souter, 2004), research on its entrepreneurial specificities remains scarce and statistical data

<sup>&</sup>lt;sup>3</sup> Despite the presence of several women in the field from the beginning of high-tech entrepreneurship: Dina Vaughan and Stephanie "Steve" Shirley, owners of the first software companies in the UK (1959 and 1962), Elsie Shutt founder of the company "Computations, Inc." in 1958 in the USA, pioneer of the cottage industry of freelance women programmers working from home and others (Misa, 2010; J. Abbate (2012).

International Journal of Accounting, Finance,
Auditing, Management & Economics

allowing to follow its evolution and understand its structure (distribution by gender, by type of activity, etc.) is still not available, especially in developing countries. Thus, in Morocco, the only (very synthetic) data available, to our knowledge, are those published by the OMPIC (Moroccan Office of Industrial and Commercial Property). They reveal, as shown in Figure 1, a 60% growth in the number of companies created in the ICT sector between 2011 and 2021. Thus, the number of companies rose from 1,525 in 2011 to 2,440 in 2021. However, these are mostly SMEs with very modest revenues. Figure 2 gives the breakdown by revenue classes and shows that more than 86% of firms have a revenue of less than 3MDH. Unfortunately, we do not have information on the distribution by gender of the owner of the firm.

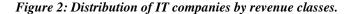
Evolution of business creation

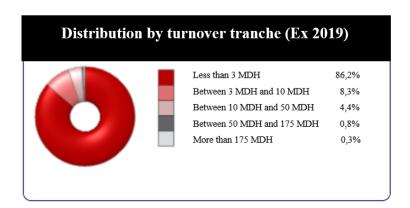
Distributions by sector

IT sector 100%

Figure 1: Evolution of business creation

Source: OMPIC





Source: OMPIC, 2019

The distribution by region in figure 3, reveals that the majority of companies are located in the Casablanca-Settat region, which justifies the choice of our sample described below.

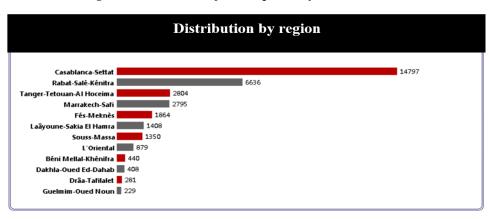


Figure 3: Distribution of IT companies by revenue classes.

Source: OMPIC, 2019

#### 4.2. Research hypotheses and methodology

Based on what has been revealed above and in order to frame the impact of gender on the entrepreneurial intention and behavior in the IT field, we propose to examine successively the intention and behavior on the pre-implementation and the post-implementation phase. Therefore, to compare them, we suppose that:

**H 1-1:** In the pre-implementation phase: gender moderates the effect of individual determinants on the entrepreneurial intention.

**H 1-2:** In the pre -implementation phase: gender moderates the effect of contextual determinants on the entrepreneurial intention.

**H 2-1:** In the post -implementation phase: gender moderates the effect of individual determinants on the entrepreneurial behavior.

**H 2-2:** In the post -implementation phase: gender moderates the effect of contextual determinants on the entrepreneurial behavior.

Since the aim of this study is to compare the entrepreneurial intention/ behavior in the pre and post-implementation phases in IT entrepreneurship between women and men, our paper give gender differences a basic role.

This paper use content analysis to examine the impact of gender on the entrepreneurial intention and behavior in the IT field. It is argued that, despite its limitations, content analysis widely used for studying qualitative interviews (Krippendorff, 2018; Duriau et al., 2007). The process of this approach has followed successive steps to establish a coding framework and to cover several main categories, then dividing the data into coding units (Schreier 2012). We will illustrate, on a few occasions, some of our statements with transcripts that reflect the exact expressions of the interviewees (verbatims).

#### 4.3. Description of the sample and data collection procedure

A total of 8 participants, mainly from Casablanca, took part in the study, with three female entrepreneurs aged between 35 and 55, and five male entrepreneurs aged between 30 and 40. All of the participants were highly educated with previous work experience and married with children. It should be noted that the identification of these participants was very difficult given the very low number of entrepreneurs in this field in Morocco, particularly women entrepreneurs. Data was collected through the recording of semi-structured interviews.

#### 5. Presentation and discussion of the results

In this section we assess the relationships between gender and the entrepreneurial intention in the pre-implementation phase and between gender and entrepreneurial behavior in the postISSN: 2658-8455

Volume 3, Issue 3-2 (2022), pp.193-208.

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implementation phase in terms of individual and contextual determinants. The literature presents sometimes gender differences in entrepreneurial intention and behavior with contradictory results. Thus, we chose to examine the impact of gender, both implicitly and explicitly, on the entrepreneurial intention and behavior in the IT sector in Morocco (H1-1, H1-2, H2-1, H2-2).

The results of this study suggest an important paradox in the pre-implementation phase, with women and men entrepreneurs generally proceeding in different ways to develop their businesses. Thus, a majority of women aspire to start a business, with some divergence in the factors that impact on this intention, particularly for small businesses.

Women entrepreneurs are fewer in number compared to men entrepreneurs in almost all countries (in terms of total entrepreneurial activity), except in Ghana, Costa Rica and Australia (Kelley et al. 2011). In Morocco, the trend is the same, we have a percentage of 10 to 12% of Moroccan entrepreneurs are women an even lower presence in the IT sector. This result is often confirmed by the literature.

The Moroccan woman entrepreneur is still confronted with several social and cultural factors that block her professional and personal development. Our results show that these factors are still present in Moroccan society and influence directly and / or indirectly the entrepreneurial intention and behavior of women particularly in the pre-implementation phase (self-confidence, risk aversion, ...). We found also, that personal profile, personality traits and self-confidence are different when comparing the two sexes. A finding that has been developed in the literature as a partial explanation for the low representation of women entrepreneurs in business in general (Hynes, 1996; GEM, 2004). This confirms our hypothesis H1-1 which states that gender moderates the effect of individual determinants of entrepreneurial intention.

According to the results found through the analysis of the different interview guides, we found that the management of human resources by the female entrepreneur is characterized by the human and relational aspect more than the male entrepreneur. "My secretary stayed with me for more than 25 years, until he retired". (Female)

The environment and the culture are two determining factors of the entrepreneurial adventure (intention and behavior) of women entrepreneurs. We must point out the double role played by these women, as businesswomen in a quite specific sector and wives and/or mothers. The question of work/family conciliation remains primordial in their life, which can even determine their level of efficiency at work. They even declare to have been motivated by their small families during the most difficult moments in business as in the period of health crisis, where working conditions have become difficult for all entrepreneurs, especially in the fast-growing IT sector "... at the beginning it was difficult for me to adapt to the telework mode, but finally, given the nature of our work, the main thing is to have my computer and a good internet connection. As for the children, it is my wife who takes care of everything" (Male).

The women entrepreneurs suffered a lot psychologically, which for some of them even caused great family conflicts (strong increase of divorce cases in Morocco in 2020) "... during the lockdown I suffered a little for work, but I could overcome the problems with difficulty" (Female). We also confirm that the cultural and social environment is a determining factor of the entrepreneurial intention and behavior of the female entrepreneur. This confirms hypothesis H 1-2 which states that in the pre-implementation gender moderates the effect of contextual determinants as well as hypothesis H2-2 which states that in the post-implementation gender moderates the effect of contextual determinants.

Women's entrepreneurial adventure seems to be conditioned by previous professional experience, they do not immediately start a business without having acquired some professional experience compared to men, especially in the IT sector "... it was through my experience in business, I started to think about entrepreneurship and this experience helped me a lot" (Woman). This is due to the technical and digital functions that are often exploited by men,

whereas for women it is generally human resources and communication aspects, i.e. support functions whether in the company or even during their academic career (contextual determinant: educational support).

On the other hand, we have not observed any influence from the contextual determinants on the entrepreneurial intention in the pre-implementation phaseThis can be explained by the efforts made by the Moroccan government to raise awareness among young entrepreneurs of the importance of entrepreneurship as an essential lever for economic and social development, particularly the efforts made during the Covid-19 pandemic. This leads us to reject hypothesis H1-2 which states that in the pre implementation, the gender moderates the effect of contextual determinants on the entrepreneurial intention.

The perception of the external environment (contextual determinant: relational support) of the entrepreneur, notably his or her relations with the different partners (suppliers, bank, clients, ...) is similar for both sexes, "In the field, I do not find differences between women and men in terms of management" (Woman & Man).

Furthermore, we found through our study that the majority of women and men entrepreneurs interviewed said that they had been encouraged during the start-up phase by their family and friends, husbands, more so than men. We note that desirability and feasibility seem to be higher among men than women. The latter are mostly less confident and reluctant to embark on the entrepreneurial adventure intention and behavior (individual determinants: H 1-1 and H2-1), although they feel better supported by their entourage.

#### 6. Conclusion

Currently, there is a growing awareness of the importance of women's economic empowerment and of bridging the gender gap to achieve gender equality. Women's entrepreneurship is proving to be a real lever for empowering women economically while reducing gender inequalities. On the African continent, the promotion of women's entrepreneurship has recently started to gain momentum and create employment opportunities in an environment that is generally "gender discriminatory". At a time when ITs are increasingly integrated into business practices, our work tries to understand the entrepreneurial behavior of women-entrepreneurs in the pre-implementation and post-implementation phases in the IT sector. To this end, we have tried to assess the impact of gender on entrepreneurial behavior in these two phases through a comparative study between female and male entrepreneurs.

Previous research, based on the theory of planned behavior, agrees that attitudes towards entrepreneurship are determinants of entrepreneurial intention and that gender also seems to play a crucial role. In the same perspective, our study focuses on the basic model of entrepreneurial intention and highlights the role of gender in this process in that men are more likely to think about starting a business than to be determined to do so (Miranda and al., 2017). Previous research (Díaz-García & Jiménez-Moreno, 2010; Shinnar and al., 2012; Sánchez & Licciardello, 2012; Camelo-Ordaz, al., 2016), which scaffolds the theory of planned behavior, tends to confirm that attitudes towards entrepreneurship are determinants of entrepreneurial intention and that gender may play a determining role (Vamvaka and al., 2020).

The analyze of the variables of entrepreneurial intention showed that Moroccan women are less likely to convert their entrepreneurial intentions into start-up activities than men. The results of our study point to a serious paradox in the pre-implementation phase, as female and male entrepreneurs generally proceed in different ways to develop their businesses. A large proportion of the female entrepreneurs interviewed consider lack of support as an obstacle to entrepreneurship. Furthermore, the entrepreneurial profile of a female or male entrepreneur usually contains traits that are often masculine. For example, the female entrepreneurial adventure is often conditioned by previous professional experience, particularly in the IT sector.

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Technical and digital functions are often dominated by men, while support functions are often occupied by women.

Our research also reveals that Moroccan women entrepreneurs often face several social and cultural factors that could hinder their professional development and influence directly and/or indirectly their entrepreneurial intention and behavior, especially in the pre-implementation phase where the degree of risk aversion and lack of self-confidence are very high. Our gender-related results are in line with the work of Gupta and al. (2008) in the US context. In Spain, for example, women are still defined by roles related to family and domestic responsibilities. In addition, social and cultural differences play an important role in explaining entrepreneurial cognitions (Instituto de la Mujer, 2005).

#### Limitations and extensions of the research

This paper makes important contributions to the literature by examining the different variables of entrepreneurial intentions using the TPB framework, but it is not without limitations, the main one being the number of participants in our survey.

It should also be noted that measuring the impact of gender on entrepreneurial behavior is subject to a temporal dimension (the pre- and post-implementation phase). Admittedly, the longitudinal approach could provide more explanations. However, it induces major constraints in terms of means and methods, mainly in the Moroccan context where access to the fieldwork is a real constraint for researchers.

Our perspective is to broaden the research to include the spatial dimension and proceed to a comparison by region. It will be instructive to check the relationship between the region (its culture and traditions) and the entrepreneurial intention/behavior of the women and men.

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Volume 3, Issue 3-2 (2022), pp.193-208.

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