

# Chapter 15

## Born to Be Alive? Female Entrepreneurship and Innovative Start-Ups



Paola Demartini and Lucia Marchegiani

**Abstract** Research into gender in management and organizations is constantly and rapidly evolving. Recently, the spur of innovative start-ups has provided unprecedented opportunities for female entrepreneurship as a remedy to gender gap in occupation. Studies on the way female entrepreneurs running an innovative start-up face new business challenges can contribute to understanding the new drivers affecting value creation dynamics in our knowledge-based society. Stemming from the argument that entrepreneurship is a trigger to foster female work, the main research question of this paper is: What are the peculiarities of female entrepreneurship and innovative start-ups? In particular, how do women behave in terms of propensity to innovation, approach to creativity, decision making, networking and co-creation when running innovative start-ups? This paper first relies on a literature review of gender and innovative start-up enterprises. Then, an empirical investigation is developed on a sample of innovative start-ups run by female entrepreneurs included in the Register of Italian Companies. This analysis aims to elucidate objective characteristics related to the business (i.e. sectoral and geographical breakdown). Finally, the quantitative inquiry is complemented with the analysis of soft variables through semi-structured interviews with the aim to gather data on personal characteristics and behaviour of female start-uppers. This paper contributes to expanding the literature on gender studies by supplementing the debate on innovative entrepreneurship and the gender gap. Moreover, it offers a new perspective applied to a topic of high relevance: how women create, process and share knowledge in innovative start-ups, through application and exploitation of novel creative ideas and solutions. The major implication is to advance knowledge and practice in the area of gender in management by focusing upon theoretical developments, practice and current issues as far as innovative start-ups are concerned. Better understanding of the factors that motivate and encourage

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female entrepreneurs to run an innovative start-up is useful for policymakers, practitioners, and educators. This understanding can help when allocating resources for the purpose of encouraging innovation and when trying to train entrepreneurs to enhance the competitiveness and sustainability of new ventures.

**Keywords** Women entrepreneurs · Women managers · Start-up Innovation · Gender studies

## 15.1 Introduction

Since the early 1980s there has been increased interest in women managers and entrepreneurs, often from an interdisciplinary approach combining, for example, sociology, psychology, management, organizational studies and economics. Nowadays the role of women in entrepreneurship, management and corporate governance is regarded as central to the development and welfare of economies. Accordingly, research into gender in management and organizations is constantly and rapidly evolving. Moreover, the spur of innovative start-ups provides unprecedented opportunities for female entrepreneurship as a remedy to gender gap in occupation. Studies on the way female entrepreneurs running an innovative start-up face new business challenges can contribute to understanding the new drivers affecting value creation dynamics in our knowledge-based society (Shah et al. 2012; Neill et al. 2015; Kuschel and Lepeley 2016).

Focusing on a sample of Italian female innovative start-ups, we attempt at answering the following research questions:

- RQ1: what are the distinguishing characteristics of female entrepreneurship and innovative start-ups?
- RQ2: In particular, how do women behave in terms of decision making, networking, propensity to innovation, approach to creativity and co-creation when running innovative start-ups?

To the best of our knowledge this is the first study investigating the phenomenon of female innovative start-ups in Italy. Building on the scarce literature on this topic, we focus our analysis on the Italian context where with the law 221/2012, a definition of innovative start-up, that is *a new innovative enterprise of a high technological value*, has been introduced with the purpose to provide a favourable environment for the establishment and the development of innovative companies. The legislation in question does not apply to all newly-established companies, but just to those that present a clear connection to technological innovation, regardless of their sector, be it software, manufacturing or agriculture.

Due to the fact that innovative start-ups must register in a special section of the Register of Companies, we had the opportunity to gather data from a selected universe where businesses ought to be characterised by a high innovative and technological value. In detail, most of those female entrepreneurs work in a

technological activity, such as software production, scientific research and other professional and technical services. All these activities have been in the past a “male domain.” Coherently, this allowed us to select and interview female start-uppers with (expected) high propensity to innovation, creativity and technology. Thus, we deem that their personal attitudes and behaviour in decision making, networking and co-creation are noteworthy to be investigated as a benchmark in female entrepreneurship.

From our exploratory survey some recurring features emerge in the management of new innovative ventures, which seem to be the key success factors for their birth and growth:

- entrepreneurs with high knowledge and expertise achieved mainly in their educational path (i.e. high school, master, Ph.D. in Italy and/or abroad);
- a participative leadership that fosters integrated thinking and co-creation;
- a strong focus on personal relationships and networking as an added value of the business model.

These aspects are worthy of being highlighted and deeply investigated in future research.

The paper is structured as follows. In Sect. 15.2, a brief review of the relevant literature is presented. Section 15.3 explains the details of the methodology and Sect. 15.4 summarizes our preliminary findings. Finally, Sect. 15.5 provides a research agenda for future investigation.

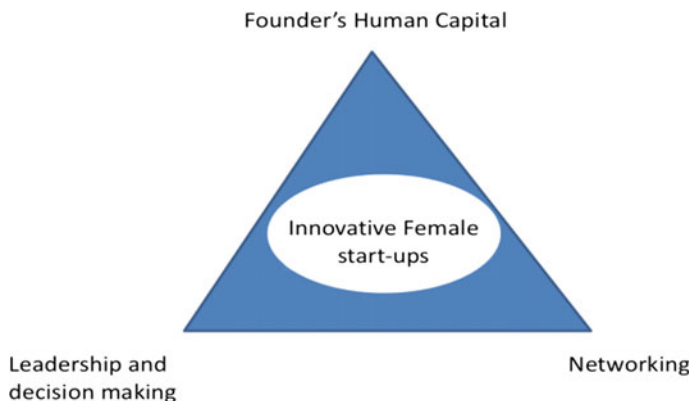
## 15.2 Theoretical Background

The literature on female entrepreneurship covers a vast array of topics, ranging from the analysis of the rate of female entrepreneurship (e.g. [Ramadani et al. 2015](#)) to gender issues and cultural stereotypes (e.g. [Gatewood et al. 2009](#)), and access to venture capitals (e.g. [Kaplan and Stromberg 2003](#)). A specific focus is on the relational aspects of female entrepreneurship, thus relevant studies focus on informal capital (e.g. [Abbasian and Yazdanfar 2015](#)). Nevertheless, a tendency persists on considering women’s businesses as being of less significance or, at best, as being a complement ([Ahl 2006](#)). A prolific stream of research has been tackling the issues of female venturing in innovative sectors, and of the relation between female venturing and technological innovation. A recent literature review confirms that the last few decades marked an exponential growth of women’s participation in entrepreneurship activity, but the amount of scholarly research and information about the participation of women in new high-technology ventures is still extremely limited ([Kuschel and Lepeley 2016](#)). In fact, the relation between female entrepreneurial venturing and technological innovation is still under research and more insightful studies are critically needed ([Wynarczyk and Renner 2006](#)). Previous studies show that personal characteristics of the entrepreneur are related to the

motivation to found a start-up company (Carter et al. 2003; Liñán and Fayolle 2015) and that gender-based differences exist on this matter (BarNir 2012). Among other factors, women have been found to be more motivated by internal self-realization motives, whereas men pursue more business opportunities (BarNir 2012). This is consistent with Human Capital theory, which posits that economic agents act leveraging their stock of personal skills (Becker 1975). Individuals with more or higher quality human capital achieve higher performance in venturing (Dimov and Shepherd 2005). In particular, three types of human capital help to achieve the results: a person's education, experiences, and skills (Rauch et al. 2005). Gender-based differences also exist in terms of human capital that is related to the attitude to start-up a new innovative venture. In fact, whereas men leverage on industry and occupational background to invest in innovative start-ups, women tend to leverage general human capital based on education and employment opportunity (BarNir 2012).

Studies on entrepreneurship and start-ups show that gender differences hold with respect to how decisions are made in the launch of the venture and in running the start-up. In female entrepreneurship, Brush (1992) introduced the idea that women perceive and approach business differently from men, and Gilligan (1982) suggests that women perceive their business as a cooperative network of relationships and as integrated into their life. A *women organizing* stereotype has been found, which is a non-hierarchical, participative organizational modality with diffused leadership (Brown 1993). More recent studies confirm these tendencies (Shepherd et al. 2015), attempting to explain the differences associated with gender in decision making across entrepreneurs (Bruni et al. 2014; Henry et al. 2016), for example, on the relationship between family-domain factors and work-domain factors (Powell and Greenhaus 2010; Sonfield et al. 2001), on organizational choices (Paoloni and Dumay 2015) and in general on decision making and integrated thinking.

Other gender-based differences in founding an innovative start-up are based on the higher level of difficulties that women encounter in securing resources (Gatewood et al. 2009) and accessing diverse social networks that are seen as a source of information and resources (Aldrich et al. 1989; Autio et al. 1997). These studies suggest that networking is a driver of the entrepreneurial ability to create new ventures. This is particularly true in the context of innovative or technological sectors, as leveraging on diverse networks gives the entrepreneur the possibility to gather diverse specific competences for founding and developing start-ups. The studies on gender and networking show mixed results. On one side, women seem to be at a disadvantage, as they generally encounter networking difficulties (Aldrich et al. 1989) and socialization experiences (Carter et al. 2003). Other studies show that, although female entrepreneurship is closely linked to the founder's network (Scott 1986), these relations are not always useful for business purposes (Paoloni and Dumay 2015). As a particular form of networking, a stream of literature has focused on the gender-effect of social media. The social networks of female tech-entrepreneurs have a positive effect on new venture performance (Xie and Lv 2016). Cesaroni et al. (2017) suggest that more research is needed to assess whether "the use of social media can enable women entrepreneurs to increase their business



**Fig. 15.1** Relevant variables to scrutinize the gender implication of innovative start-ups

effectiveness and competitiveness as well as improve their quality of life” (Cesaroni et al. 2017: 325).

All these considerations suggest that relevant variables to study the gender implication of innovative start-ups are: (a) founder’s human capital; (b) leadership and decision making; (c) networking. We use a framework based on these variables in the following empirical section (see Fig. 15.1).

### 15.3 Methodology

An empirical investigation is developed on a sample of Italian innovative start-ups run by female entrepreneurs.

Data have been gathered from the Register of Companies—Italian Chamber of Commerce, and downloaded on February 2018 ([startup.registroimprese.it](http://startup.registroimprese.it)). This analysis aims to elucidate special characteristics related to the business (i.e. sectoral and geographical breakdown).

Afterward, the quantitative inquiry is complemented with the analysis of soft variables by no 11 interviews to female start-uppers with the aim to gather data on personal characteristics and behaviour of female start-uppers (Table 15.1).

As far as the female start-uppers behaviour is concerned, our investigation should be considered as an exploratory study, which aims to uncover key themes and issues that can offer an agenda for future research (Van Teijlingen and Hundley 2001).

Interviews were based on a semi-structured questionnaire. Female entrepreneurs were asked to tell about their *curriculum vitae*, their competence and reasons for launching a new business. Then other questions dealt with the business, concerning: their style of leadership and decision making and the main factors fostering and hindering the start-up establishment and growth. Interviews were recorded while

taking notes and then transcribed. Each author read the empirical material independently and categorised the stream of words into meaningful categories, via manual open coding. Subsequently, the results obtained by each author were compared and discussed. In cases of disagreement in coding between the authors, interviews and other data were jointly re-analysed and codes were discussed to reach a consensus.

## 15.4 Empirical Context and Findings

The preliminary results of our investigation are presented as follows: first we illustrate the empirical context and the Italian regulatory background regarding start-ups; then we present some statistics on the data collected by the Register of Companies in order to illustrate the characteristics of the innovative female start-ups. Finally, we illustrate and comment on the main evidences of the interviews conducted on a pilot sample of female start-uppers.

### 15.4.1 *The Legal Context and the Definition of Innovative Start-Ups*

With the law 221/2012, a definition of innovative start-up, that is a *new innovative enterprise of a high technological value*, has been introduced into the Italian legal system with the purpose of providing a favorable environment for the establishment and the development of innovative companies.

By creating a regulatory framework congruent with the needs of all the players involved in the start-up ecosystem, Law 221/2012 transcends a simple law-making exercise. It is an organic and coherent policy for which public support for innovative entrepreneurship represents a new way of thinking about industrial policy-making. Hence, the approach towards public support to entrepreneurship has been renewed: new ventures can draw upon new instruments and support measures which have an impact on the whole life cycle of a company, from its launch to its growth, development and maturity stages (Italian Ministry of Economic Development 2016).

Italy's Start-up Act aims to create favorable conditions for the establishment and the development of innovative enterprises in order to contribute significantly to economic growth and employment, especially youth employment. It also fosters a knowledge spill-over in the whole economic fabric and, more specifically, supports a new Italian production system oriented towards high-tech and high-skill sectors.

The goals of the Italian Government seem to be multifaceted, as follows: to support innovative entrepreneurship; to contribute to greater social mobility; to strengthen the links between universities and businesses; to make people more

inclined to take business risks; and to contribute to making the country more attractive for foreign capital and talents.

This set of laws does not apply to all newly-established companies, but just to those that present a clear connection to technological innovation, regardless of their sector, be it software, manufacturing or agriculture.

### ***15.4.2 Definition and Characteristics of Italian Innovative Start-Ups***

Innovative start-ups are companies with shared capital (i.e. limited companies), including cooperatives, the shares or significant registered capital shares of which are not listed on a regulated market nor on a multilateral negotiation system. These companies must also meet the following requirements:

- be new or have been operational for less than 5 years;
- have their headquarters in Italy or in another EU country, but with at least a production site branch in Italy;
- have a yearly turnover lower than 5 million Euros;
- do not distribute profits;
- produce, develop and commercialize innovative goods or services of high technological value;
- are not the result of a merger, split-up or selling-off of a company or branch;
- be of innovative character, which can be identified by at least one of the following criteria:
  1. at least 15% of the company's expenses can be attributed to R&D activities;
  2. at least 1/3 of the total workforce are Ph.D. students, the holders of a Ph.D. or researchers; alternatively, 2/3 of the total workforce must hold a Master's degree;
  3. the enterprise is the holder, depositary or licensee of a registered patent (industrial property) or the owner of a program for original registered computers.

The innovative start-ups must be registered in a special section of the Register of Companies that has been created ad hoc at the Chambers of Commerce.

The following paragraph shows the main evidence of the relevance of female innovative start-ups in Italy.

### ***15.4.3 Italian Female Innovative Start-Ups: Main Findings***

As of February 2018, there were 8,475 innovative start-ups registered in the special section of the Register of Companies of the Chambers of Commerce. Businesses where women have an exclusive, main or high influence on corporate governance

**Table 15.1** Interviewed female start-uppers and business sector

Female start-upper	Business sector
Gaia	Information and communication
Elena	E-commerce
Marta	E-commerce
Anna	Consulting
Luisa	Information and communication
Benedetta	Information and communication
Mariella	Consulting
Claudia	Information and communication
Carla	Technical services
Roberta	Information and communication
Valentina	Consulting

**Table 15.2** Italian innovative start-ups (No, %)

	Exclusive female start-ups	Female start-ups	All start-up
No	377	1,114	8,475
%	4.46	13.14	100

Source Authors' analysis

**Table 15.3** Italian female innovative start-ups (No, %)

Female governance	No	%
Exclusive (100% women owners and directors)	377	33.84
Main (>66%)	232	20.83
High (>50%)	505	45.33
Total	1,114	100.00

Source Authors' analysis

amount to 1,114 and account for 13.14% of the total sample, start-ups run exclusively by women account for 4.5% of the selected universe (see Tables 15.2 and 15.3).

From a sectoral perspective, the majority of innovative start-ups (75%) work in the sector of services. Only 18,6% of innovative start-ups operate in the manufacturing and construction industries. Finally, trade accounts for only 4.47% of the total. Agricultural and fishing start-ups are very rare (0.67%).

The sectoral breakdown of female enterprises do not differ significantly from that of the total sample, except for a slightly minor presence in the manufacturing sector (see Tables 15.4 and 15.5).

In the services sector, the activities that are clearly the main ones are those related to consultancy and software production, scientific research and development, professional and technical activities.

Focusing on start-ups run exclusively by women in the services sector (no 283), it is worth to note that over 200 firms work in the J-Information and



**Table 15.4** Italian innovative start-ups: breakdown by sector and gender (No)

Industry	No		
	Exclusive female start-ups	Female start-ups	All start-ups
		1	27
Agriculture/fishery	3	11	53
Commerce	25	66	379
Manufacturing	59	184	1,577
Services	283	832	6,356
Tourism	7	20	83
Total	377	1,114	8,475

Source Authors' analysis

**Table 15.5** Italian innovative start-ups: breakdown by sector and gender (%)

	Exclusive female start-ups (%)	Female start-ups (%)	All start-ups (%)
Agriculture/fishery	0.79	0.99	0.63
Commerce	6.88	5.92	4.47
Manufacturing	15.61	16.52	18.61
Services	74.87	74.69	75.00
Tourism	1.85	1.80	0.98
Total	100.00	100.00	100.00

Source Authors' analysis

Communication ATECO<sup>1</sup> code (i.e. software, data processing, web design, etc.) and M-Professional, scientific and technical activities ATECO code (i.e. consulting, including scientific research, and technical professional services) (see Table 15.6).

The geographical breakdown of start-ups run exclusively by women is very widespread in the Italian territory, covering all regions and districts, showing a similar distribution to that of the total sample. There is a polarization only for Milan and Rome. Lombardy, Emilia Romagna, Lazio, Campania, Veneto and Sicily are the regions with the greatest presence of start-ups (see Table 15.7).

What emerges from this preliminary analysis is that the number of female start-ups represents a small percentage of the entire universe (13.4% and only 4.5% when considering the start-ups where all the owners and directors are women). However, their sectoral and geographical distribution does not differ from that of the whole sample.

It is also important to underline that women's businesses are also adequately represented in the Knowledge Intensive Business Services. Knowledge Intensive Business Services (commonly known as KIBS) are services heavily reliant on professional knowledge. They are mainly concerned with providing knowledge-intensive support for the business processes of other organizations.

<sup>1</sup>Italian classification of Economic Activity.

**Table 15.6** Exclusive female start-ups: breakdown in the services sector (No, %)

Services	No	%	
Information and communication	119	42.05	
Professional, scientific and technical activities	93	32.86	74.91%
Other services	71	25.09	
Total	283	100.00	

Source Authors' analysis

**Table 15.7** Innovative start up by Italian Regions. All sample and exclusive female start-ups in No and %

Regions	All start-ups (No)	Exclusive female start-ups (No)	% All	% Exclusive female
Abruzzo	207	6	2.44	1.63
Basilicata	73	2	0.86	0.54
Calabria	186	14	2.19	3.80
Campania	623	32	7.35	8.70
Emilia-Romagna	863	48	10.18	13.04
Friuli-Venezia Giulia	193	6	2.28	1.63
Lazio	839	43	9.90	11.68
Liguria	158	6	1.86	1.63
Lombardia	2,005	57	23.66	15.49
Marche	347	21	4.09	5.71
Molise	41	3	0.48	0.82
Piemonte	469	17	5.53	4.62
Puglia	323	14	3.81	3.80
Sardegna	166	7	1.96	1.90
Sicilia	438	30	5.17	8.15
Toscana	385	13	4.54	3.53
Trentino-Alto Adige	230	4	2.71	1.09
Umbria	140	12	1.65	3.26
Valle D'aosta	17		0.20	0.00
Veneto	772	33	9.11	8.97
Italia	8,475	368 <sup>a</sup>	100.00	100.00

Source Register of Companies—Italian Chamber of Commerce, downloaded February 2018 and our analysis

<sup>a</sup>Data about No 9 female start-ups are n.a.

### ***15.4.4 Italian Female Innovative Start-Ups: An Explorative Investigation***

In the remainder of the paper we provide an answer to RQ2: How do women behave in terms of decision making, networking, propensity to innovation and co-creation when running innovative start-ups?

To this end, we present in the following paragraphs the results of our interviews, highlighting the following key themes, selected also in light of the up-to-date debate in the literature highlighted in the literature review:

- Founder’s Human Capital;
- Leadership and Decision making;
- Networking;

In our interviews the object of investigation is not the enterprise, but rather the female entrepreneur whose personal characteristics, in terms of competence and motivations, and behavior gives a particular imprint to the government of the enterprise. All selected start-ups work in knowledge-intensive business sectors.

#### **15.4.4.1 Founder’s Human Capital**

*Competence (possession of skill, knowledge, qualification, or capacity).*

The eleven respondents are female entrepreneurs between the ages of 25 and 57 years old. Almost all of them confirm poor previous entrepreneurial experience. Only Carla, who likes to define herself as a “*serial entrepreneur*”, boasts, in fact, a past experience in the field of import-export. All female entrepreneurs own multiple degrees, diplomas, masters and doctorates. Among all, only Roberta, who happens to be the youngest, is a graduate in law. During her studies, however, she was able to gain experience in the start-up field by taking part in numerous training sessions and on the field, in Italy and abroad (i.e. Barcelona), until becoming a mentor at the Berlin start-up campus.

All interviewed female start-uppers show a professional profile highly specialized in the technology sector, traditionally considered the prerogative of the male gender. Actually the engineering studies have allowed Benedetta to face the challenge of the technological and strategic pole of Giunco s.r.l. which has as its mission “... *the design and development of complex technological architectures aimed at process innovation, guaranteeing the quality of the user experience.*” Likewise, Claudia proudly tells us that she is a pioneer in the field of renewable energy and how she has built on her doctoral research into the field of territorial marketing, to draw the strategic plan of the Lazio Region, which is still in action.

*Main motivations to run a new business*

Regardless of their age, all women entrepreneurs look to their business as a tool for self-fulfillment and economic independence. For some cases of particular interest, the realization of this desire has found further impetus from emotional needs resulting from particular personal life events, as happened to Claudia who confides

*“after the treatment that physically and mentally weakened me, I found health and I felt the need to put myself first.”* A similar experience was undoubtedly the one experienced by Roberta who saw the birth of her business as a result of a state of illness experienced by her father, caused by failure and timely compliance with the prescribed therapeutic plan. Hence the idea of offering a public care service to public and private health facilities that allows patients to acquire a correct health-care habit. Finally, a powerful motivation is that which has induced Mariella to make the object of her business an ethical value: the social aim of her business is, in fact, to promote and spread the value of diversity in companies, transforming the diversity management into an enabling factor, able to increase the company value. Generally, the opinion that the company is an expression of one’s own way of being emerged among all respondents and it is translated into the business through the personalization of the activities carried out and the creation of numerous personal contacts and relationships with the various stakeholders.

#### **15.4.4.2 Leadership and Decision Making**

The leadership adopted by all the female entrepreneurs can be defined as participatory. All the respondents emphasize the importance of the team and the value represented by the contributions that come from different backgrounds. The theme of a direct and challenging confrontation is well expressed by the words of Roberta as she describes the relationship with her employees: *“they are not just for me and will never be only employees. We work together to grow the start-up. The confrontation puts the different skills together, offering ideas that would have escaped the individual.”* A similar attitude is evident in Carla’s words, which defines her team as *“a team of workers, researchers, producers and communicators who work in a synergistic and complementary way.”* The same cohesion is found during breaks and moments of rest that favor the consolidation of relationships of trust, even outside of the workplace. In this way, the first informal network, consisting of friendship and parental relationships, which often characterizes the start-up phase, is strengthened. Not rare is the case in which the latter becomes the formal, transforming into lasting partnerships as co-workers, permanently inserted in the company structure. This circumstance has been verified both in the story of Mariella, and in that of Benedetta who sees her respectively involved mother and sister in the role of cfo and investor. However, it is appropriate to clarify that the entrepreneurs do not give up their leading role in decision making. It is the same Roberta to assert, without contradiction, that, *“although during the journey all are involved, the final decisions are taken by herself and by the partner.”*

Despite the very small size of the companies contacted, it is interesting to verify how, even if at a minimal state, it was possible to find the widespread use of three recurrent divisions: research and development, sales, and communication. It would be wrong, however, to believe them within disconnected structures, since the dynamics between them are developed horizontally, constantly oriented towards confrontation and sharing. It is easy to imagine how, in this mapping, the

entrepreneur represents the main connecting element and synthesis that, instead of positioning itself at the top of the hierarchy, prefers to put herself in an equal position, constantly trying to find harmonious and conciliatory solutions.

Finally, the attitude of seeing the employee's growth as coinciding with that of the company's is widespread, as witnessed in Claudia's words: *"I have personally trained all my collaborators, also using the BIC training courses, prepared by the Lazio Region, which have allowed them to acquire in their eyes esteem and greater credibility."* It is evident that to invest in their employees means to increase their trust and, with this, the attachment to the entrepreneurial project. Thus, a virtuous circle is triggered to the benefit of a participatory co-creation process, based upon internal relational capital.

#### 15.4.4.3 Networking

The usefulness and the need to develop an adequately articulated network emerged unequivocally from the results of the survey carried out. It is the natural propensity of women to maintain relationships, whether informal or formal, to encourage entrepreneurs to weave a dense network of tightly-knit relationships that has supported the start-uppers in the phase of launching a new business. At first informal relationships allowed Claudia to activate a university teaching contract, which recognizes the merit of having opened up new horizons, populated by researchers, experts who have given her further professional collaborations. It is always through the university network that Roberta has found the right channel through which to express the talent: *"they have understood in me the strong desire to launch a new business and introduced me into the field."*

All of the interviewees underlined the usefulness of the networking, even during the market studies carried out before the entrepreneurial activity, to better identify the needs of the environment and define the type of product and/or service to deliver. In this sense, the witness of Benedetta has been significant. She has put her technical skills at the service of citizens and municipalities, offering a concrete answer to the current problems concerning the management of the separate collection of waste. Thus she succeeded in strengthening the relationships between inhabitants and local administrators that, in this specific case, represent her main interlocutors. As stated by Benedetta: *"in this way, a formal network has been created that has involved more and more mayors who, by adopting the service offered, have seen their relationship with their citizens improved appreciably."*

The most significant example of the virtuous circle activated by a female start-upper, is clearly visible in Carla's project, which has launched a *"participatory portal"* in which profitable exchanges with photographers and writers create a flow of mutual benefits, which, together, enrich the overall value of the product.

#### *The role of Social Media*

Finally, all the interviewees expressed the absolute centrality of Social Media in feeding the networking activity and in daily operations, especially for

communication and marketing purposes. It is no coincidence that those most receptive to this issue created a specific organizational unit devoted to the development of social media, making it converge specialized human resources and substantial financial resources. Roberta talks about how much visibility her company has acquired thanks to the use of Social Media. Each platform, in fact, is an opportunity to create new contacts, useful for developing relationships and collaborations that often result in the signing of new commercial agreements. With particular conviction Carla declared herself determined to direct its activity towards a complete digitalization “... *overcoming the concept of the store as a formal place, to understand it in the virtual dimension, so as to be more capillary and effective.*” It is even more significant that Claudia, celebrating the 150,000 members on the Facebook page of her start-up, claims to entrust the development of her business project exclusively to social media.

## 15.5 Conclusions and Future Agenda

This study explores some issues related to an emerging phenomenon such as female entrepreneurship, with particular reference to the phenomenon of innovative start-ups.

To date (February 2018), the Italian female start-ups, object of our survey, amount at no 1,114 companies and count for 13.14% of the whole sample of companies registered in a specific section of the Italian Register of Companies.

It is also important to highlight the spread of female start-ups throughout the Italian Regions, with a distribution similar to that of the entire sample. Noteworthy to be analyzed in more detail in the future is the location of female enterprises: not only in metropolitan cities (i.e. Milan, Rome, Naples, Turin), but also in the different Italian districts and smaller municipalities.

Moreover, the high level of education and the high professional profile that derives from this, have created a fundamental prerequisite to make the phenomenon significant also in technologically advanced sectors, such as the KIBS, where the percentage of female start-ups does not differ from that of the sample as a whole (75%).

Aware that a statistical analysis can be useful to describe a phenomenon but not to answer questions regarding how and why women decide to start and run a business, direct interviews were conducted thanks to a first pilot sample of no 11 female start-uppers.

From this first exploratory survey some recurring features emerge in the management of these companies, which seem to us to be the critical success factors for their birth and growth:

- entrepreneurs with high knowledge and expertise achieved mainly in their high school educational path;
- a participative leadership that fosters integrated thinking and participatory processes of co-creation;

- a strong focus on personal relationships and networking as an added value of the business model.

These aspects are worthy of being highlighted and deeply investigated in future research.

The use of informal and formal relationships that the female entrepreneurs develop within and outside the company seemed essential for the birth and development of the companies analyzed (networking). The intensity of these relationships brings added value that can broaden the range of action and encourage the sharing of experiences and knowledge within the company, and also with the players in the ecosystem in which the start-up exists.

It is also important to underline the crucial role played by Social Media in the development and growth of the start-ups analyzed. Their use proves to be, in fact, particularly suitable both for identifying the needs of the consumers and for providing services that are more suitable for satisfying them, than for expanding the markets and stimulating consumption.

Aware of the limitations of our explorative survey, we intend not only to extend the study to the national territorial context, but also to replicate it for a similar sample, made of male start-ups. The latter purpose, on the other hand, would be particularly useful in order to verify how the recurring characteristics emerging during the survey are actually typical of women's companies or rather referable to the category of start-ups in general.

A better understanding of the factors that help a female innovative start-up is useful for policymakers, practitioners, and educators. This understanding can help when allocating resources for the purpose of encouraging innovation and for the training of entrepreneurs to enhance competitiveness and sustainability of new ventures.

The support of female entrepreneurship is undoubtedly a useful element for the economic recovery of our country and for sustainable growth. The economic benefit that can derive from the growth of female entrepreneurship will allow the diffusion of a greater well-being that represents a fundamental component for cultural growth, which is essential for achieving gender equality.

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