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**THE NEW ENTREPRENEURIAL LANDSCAPE AND THE  
VALUE CO-CREATION PROCESS: THE ROLE OF THE  
CROWD IN THE PRE-PURCHASE CROWDFUNDING**

**Coordinator**

Prof.ssa Cristina Mele

**Candidate**

Lucia Michela Daniele

**Tutor**

Prof. Francesco Gangi

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# Abstract

The entrepreneurial finance landscape is changing very rapidly (Block, Colombo, Cumming, Vismara, 2018). New players have emerged, with a determinant contribution of the technological revolution. The resources interplay in the peer-to-peer business and network has led to the development of new financing instruments able to boosting innovation and the creation of new ventures. Social and economic innovation is searching new ways to emerge; this requires new models for interpreting the enlarged notion of value in the crowd/entrepreneurs relationship.

Despite the rapid growth of alternative finance, the academic literature on crowdfunding as a new financing model able to reduce financing constraints for firms, still lack evidence whether and how these new players and their investment approach are transforming the entrepreneurial landscape. In particular, the reference is to the complex mix of economic and social expectations deriving from the participation to the crowdfunding mechanism. For new players in the alternative financial market, value creation is not only limited to provide financing to promising new business proposal, but also includes the provision of value-added expectations, that goes beyond the mere return of the investment made. Crowdfunding, in fact, differently from the conventional forms of collaboration among market actors, incorporates more proactive roles for consumers and incorporate a strong component related to the social and communitarian values.

In this sense, the crowdfunding mechanism can be addressed from the perspective of a value co-creation process, where several actors collaborate exchanging resources, in order to achieve individual benefits that are non-mutually exclusive. As a value co-creation process, in the crowdfunding mechanism, each actor has a specific role, and is required to provide a predefined typology of resources, which integrated with those generated by other market actors, will lead to a predefined outcome, from which each actor will gain a specific set of benefits. Crowdfunding, thus, enlarges co-experience opportunities, as supporters can simultaneously act as co-producer or co-investors of a new market proposal. Furthermore, as suggested by Agrawal et al. (2015), efforts of various stakeholders engaged in a value co-creation process can greatly impact society,

as the outcome of a value co-creation process can create opportunities or benefits for other actors, not involved in the process of value creation. Therefore, although the crowdfunding mechanism sharing some characteristics of traditional resource-pooling and social-networking phenomena, it shows some unique elements. In particular, the reference is to the experiment of new financial and consuming forms that roots in the path of social investment. Crowdfunding, in fact, acting as a social investing mechanism, reshapes process with which new businesses proposals land to the market.

From the entrepreneurial perspective, crowdfunding enables new ventures to collect financial resources from the crowd, rewarding supporters with material and immaterial benefits. The nature of these benefits depends on the model of crowdfunding adopted by the entrepreneurs. This study focuses on the pre-purchase model, a sub model of the pure reward crowdfunding, through which entrepreneurs solicit financial collection from the crowd, offering the pre-purchasing of a new market proposal, i.e. a new product. However, the complex mix of financial and non-financial motivations in this particular model is not fully investigated, thus limiting the knowledge creation about a model that, as found by Mollick and Kuppuswamy (2014), is leading a market growth, with overall benefits to the economy.

In the pre-purchase crowdfunding, consumers are encouraged to support financially a crowdfunding proposal by the possibility to obtain rewards, both materials and immaterial (Gerber et al., 2013; Giudici et al. 2013; Frydrych, 2016). Rewards in the pre-purchase model encompass a new product, thus this implies that supporters evaluate a new market proposal that presumably, reflects a specific business model based on a specific set of features, such as team competences and reliability, product quality, product crowdfunding price, availability of additional materials or emotional rewards. At the present stage, crowdfunding literature has been mainly focused on the motivation that can support the crowd engagement in the crowdfunding mechanism. Nevertheless, as serial enterprise crowdfunding is a growing phenomenon, there is a gap on which are drivers, from the crowd perspective, that can induce supporter to found a new market proposal. Donating for a social or philanthropic cause may be guided from personal or social benefits, as well as, invest in a new firm by equity crowdfunding, or exchange financial resources with other single actors on the p2p platforms may be supported by financial expectations. However, few studies have deepened the role of the crowd as an

early adopter of a new market proposal. Looking at the pre-purchase model from a utilitarian perspective, require to deepen how the attractiveness of a new market offering can drive the decision to finance and pre-purchase a new market proposal via crowdfunding. Starting from these observations, this study aims to explore drivers that can influence the consumers' willingness to pre-purchase a new product via crowdfunding. Additionally, framing the crowdfunding phenomenon as a value co-creation mechanism, this study explores whether, and to what extent, the success of a financial collection can produce positive externalities for stakeholders not involved in the pre-purchase mechanism.

Coherently with the research aims, this study adopts an explorative research approach, based on the case study of Ludus Magnus Studio (LMS). LMS is a serial crowdfunding enterprise, which produces and sell board games via crowdfunding on Kickstarter, a leading reward-based crowdfunding platform. In order to explore how the crowd approach toward a new market proposal, deciding to financially support its production, the study gathered data through a survey submitted to a community of backers who financed the last successfully founded crowdfunding campaign of LMS. The growing of the crowdfunding pre-purchasing model led to the emergence of several collateral services offered to entrepreneurs for managing commercial relationships with backers. These services allow entrepreneurs to collect additional financial resources from new backers who not participated in the crowdfunding campaign. This configures two first groups of target consumers: the ones who invest in the campaign and the ones who invest – on the same offer – in the following phases. In light of this, this study considered two sample of new consumers, namely a group who participated in the crowdfunding campaign, and a group that did not participate in the crowdfunding campaign but that get the opportunity to pre-purchase the same product after the campaign closing. Rather than using surrogate variables observed through the crowdfunding platform, this study relies on a large and rich set of data obtained from a survey submitted to 3764 supporters who pre-purchase a product via crowdfunding, to gather perceptions expressed by these two samples of supporters about their crowdfunding experience.

Evidence from this explorative study, provides a rich picture of the pre-purchase mechanism, offering several perspectives on entrepreneurial abilities and crowd perceptions' in the crowdfunding market. The pre-purchase mechanism is leading to

the configuration of new market niches, where supporters act as an informed investor and consumers. Additionally, the joint value created by the efforts made by entrepreneurs and the crowd, creates sounder positive externalities, that favor growth possibilities to survive of the new ventures.

The remaining of this study is organized as follow. Chapter 1 introduces and describes the research context, offering a discussion on the origin and evolution of the crowdfunding phenomenon in the entrepreneurial finance scenario, from a practical and theoretical perspective. Chapter 2 deepens the crowdfunding mechanism as a value co-creation process. Observing the crowdfunding market from the perspective of the value co-created from and for the various actors involved, led to frame research perspectives addressed in this study. Chapter 3 provides an overview of the research methodology adopted in this study. In particular, it describes the research philosophy and approach, which have guided the research process. Furthermore, it highlights the research methods, including the sources of data, the sampling plan and reliability analysis of the method employed. Chapter 4 focuses on findings and the evidence of the explorative study with reference to each dimension underlying this study, for the two samples investigated. Finally, Chapter 5 discuss the theoretical and practical evidence of the explorative research related to the investment approach of the consumers in the pre-purchase crowdfunding market. This chapter concludes by discussing the limitations of this study and the opportunities for future researches.



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# CHAPTER 1

## **Crowdfunding: Evolution and Theoretical perspectives**

### **1.1 Introduction**

The traditional concept of value creation process positions customer at the final stage of the value chain. Customers are outside the firm, they are the recipients of the value created by means of products or services offered by firms (Porter, 1980). In this perspective, firms and customers have different roles of production and consumption. The creation is unilaterally performed by the market where firms develop products or services, eventually with a limited interaction with the customers. The traditional view of the market as a target has shifted to a market as a forum (Prahalad and Ramaswamy, 2004a), characterized by interaction between firms and consumers, when the evolving needs of new types of consumers – defined by Toffler (1980) as prosumers – has required firms to consider a deeper involvement of consumers in their processes. Nowadays customers are more active, informed, networked and show a critical sensibility respect to the market offering of firms (Prahalad and Ramaswamy, 2004b). This profound change in the consumers' role, facilitated by the development of technologies, has led to a paradigm shift. Consumers no longer accept a receptive passive role of the market offering, they interact exercising their influence in different steps of value creation process, defining the points of exchange and extraction of the value expected within the bidder firm. The global Internet diffusion has enabled the interaction and dialogue across consumers' communities that share opinions and information, allowing users no longer be dependent uniquely from firm's information flow in the evaluation of utility expected to buy some products or services. The new

awareness of the consumer as a determinant unit of value creation processes has lead firms to rethink their approach to market (Prahalad and Ramaswamy, 2004) in order to capitalize the resources' richness coming from an emerging networking economy. The involvement of the consumers in different stage or activities of the converting process of inputs to outputs, has generated several form of interaction between firms and customers, fall under the wide umbrella of value co-creation.

This growing tendency of cooperation among market actors has recently expanded including also financial support. Crowdfunding (CF) phenomenon describes a collaborative process, via Internet, that allows through the financial support of many individuals (the crowd) the creation of new ventures (Ordanini et al., 2011). Crowdfunding can be read as an innovative value co-creation model where all actors involved operate to achieve individual or collective benefits due to the synergy created by the different types of resources exchanged. Differently from other forms of value creation, in the crowdfunding context the actors involved have different and complex roles that redefine the concept of what kind of value is created, for whom, and within which kind of resources. The crowdfunding mechanism modifies frontiers among buyers, sellers and investors. This collective process of funding extends the role of consumers; the latter, preferring to financing for production rather just paying for the purchase, become a new hybrid market actors: co-producers and co-founder of new market offers (Ordanini et al. 2011, Payne et al., 2008; Grönroos and Ravald, 2011). From the entrepreneurial side, risks associated to the start-up of a new initiative is shared with the crowd, and a crowdfunding campaign represents the starting point of the value co-creation process that will be carried out by the resources shared and integrated by the actors involved in the process to achieve non-mutually exclusive benefits.

Several macroeconomics conditions favoured the exponential growth of crowdfunding as a financing model for new entrepreneurial activities. The rise of the crowdfunding industry over the last years is strictly dependent on the advancement in web and mobile-based applications and services (De Buysere, Gajda, Kleverlaan, and Marom, 2012). Entrepreneurs can interact directly with the crowd to get ideas, financial resources, and solicitations on a new market proposal toward new or potential consumers, thus overall creating a collective decision-making environment and processes. Although crowdfunding platforms are still evolving with reference to their business model, they

have already revolutionized the traditional practices of gathering funds for finance new ventures or organizations (Howe, 2008). Crowdfunding is, in fact, a crowdsourcing model that increases and simplifies social and financial processes associated with entrepreneurial resources assembly (Bruton et al., 2015). As a result, entrepreneurs have started to exploit the opportunities coming from the crowdfunding process to facilitate business development and reduce the capital gap caused by what Stinchcombe (1965) defined the “liability of newness”.

Financial resources coming from traditional actors such as banks or venture capital, are usually more easy to obtain in the later stages of a start-up development, while in the initial stage of development entrepreneurs often rely on personal or familial financial resources, or business angles if opportune conditions occur (Robb and Robison, 2014; Collins and Pierrakis; 2012). Many new ventures cannot access to debt or equity finance since they are accompanied by information asymmetry (Akerlof, 1970), by agency theory issues or they cannot rely on a stable cash flow to ensure interest or debt repayment (Hall and Lerner, 2010; Block et al., 2018). The global financial crisis exacerbated these conditions, increasing the risk-adverse behaviour of traditional financial resources providers, resulting in the need for entrepreneurs to explore new channels to collect financial resources. As noticed by Harrison (2013), the funding chain for new ventures looks very different if observed before 2008 and after the financial crisis. In particular, after the financial crisis, bank finance was less available, also due to the increase of patrimonial requirements stated by the Basel Committee conceived to prevent financial turbulence. Also “soft finance”, such as resources from families and privates resulted drastically reduced, as well as, sponsorship funding, philanthropic, and altruistic or patron funding (Harrison, 2013). This shift in the availability of funding for new businesses represents one of the most severe tightening in the market in recent times. However, it has been accompanied by the emergence and growth of crowdfunding as an alternative way of raising capital. This further explains the growing body of literature on crowdfunding from the perspective of entrepreneurs (Moritz and Block, 2016).

The funding of new ventures by the crowd has been explored intensively, both from a theoretical and practical perspective. As anticipated previously, the crowdfunding process configures a particular social and financial resources process assembly, which

poses at the centre of the financial resource collection, the crowd. Nevertheless, research on criteria relevant to the investment decision of capital providers is thus far in its infancy (Mortiz and Block, 2016). As the crowd is the main actors of this new financial phenomenon is crucial understand whether the crowd is driven by well-known evaluation factors typically employed by professional investors (e.g. entrepreneurial team, protection of intellectual property through patents, or newness of the business model), or if, and with which intensity, the decision process is instead influenced by emotions, social and communitarian values, herd behavior or altruistic motives.

This thesis aims to contribute to the knowledge and understanding of crowd motivations and expectations, by investigating the capital providers' activities and perceptions in the reward-based crowdfunding. In light of the above, the study presented aim to contribute to alternative financial models' literature for new ventures, deepening the crowd perspective and expectations in a specific model, namely the pre-purchase crowdfunding model. In particular, this research offers a debate on the crowdfunding phenomenon as a particular form of value co-creation process, whose outcome is to the growth of new ventures. After having described what configures a crowdfunding process as a collaborative process, the study focuses what motives the crowd in founding new businesses on crowdfunding platforms. From the crowd's perspective, several studies detect a mix of motivations belonging to both utilitarian and emotional sphere that encourage the crowd engagement in the crowdfunding mechanisms. However, the complex mix of financial and non-financial motivations in this particular model is not fully investigated, thus limiting the knowledge creation about a model that, as found by Mollick and Kuppaswamy (2014), is leading a market growth, with overall benefits to the economy.

## **1.2 Crowdfunding: origins and actors**

Crowdfunding is a relatively new phenomenon, often associated with the concept of crowdsourcing introduced in the entrepreneurial studies by Howe (2006). As stated by Howe (2006), crowdsourcing *“represents the act of a company or institution taking a function once performed by employees and outsourcing it to an undefined (and generally large) network of people in the form of an open call.”*

From this perspective adopted by several seminal studies on crowdfunding (Lehner, 2013; Belleflamme et al., 2014; Mollick, 2014), entrepreneurs can exploit the possibilities offered by a direct interaction with a large number of individuals, in order to achieve several business goals. In fact, as crowdfunding establishes an innovative mechanism to interact with a large community of people, this phenomenon is characterized by a multidisciplinary nature, where different disciplines focus on various perspective related to the crowdfunding phenomenon, resulting in a broad range of definitions that cannot be condensed in a universal definition (Valanciene and Jegeleviciute, 2013).

In the entrepreneurial studies, crowdfunding can be exhaustively conceptualized relying on three definitions. Schwienbacher and Larralde (2010) and Belleflamme et al. (2014) defined crowdfunding as *“an open call, essentially through the Internet, for the provision of financial resources either in form of donation or in exchange for some form of reward and/or voting rights in order to support initiatives for specific purposes”*. Mollick (2014) enriched this definition within an entrepreneurial context: *“Crowdfunding refers to the efforts by entrepreneurial individuals and groups – cultural, social and for-profit – to fund their ventures by drawing on relatively small contributions from a relatively large number of individuals using the internet, without standard financial intermediaries”*.

Taking together, these three definitions offer a clear picture of the multifaceted nature of the crowdfunding. This thesis builds on this three definition, which essentially suggests that crowdfunding refers to an open call to the public, trough specialized crowdfunding site or platforms, whit which an entrepreneur can collect financial resources from a large audience of non-professional investors (i.e. savers, consumers or supporters). Additionally, these definitions allow identifying which are the market actors involved in this new financial model, as well as, the ability of this model to serve a wide range of scopes, both for-profit and for non-profit organizations.

In fact, while in the definition of Belleflamme, Schwienbacher and Larralde the emphasis is on the resources process exchange, in his definition Mollick (2014) pointed out that proponents of a crowdfunding campaign is not necessarily an entrepreneur. As the crowdfunding is a process of assembling of resources, in a broader view, the crowdfunding can be considered as a stakeholder engagement model, as it integrates,

into the same direct process of interaction with stakeholders, various types of resources. In this perspective, the crowdfunding model can be understood as a model for better management of stakeholders' relationships. In fact, as noticed by Mollick (2014), funding need may be not the only goal of a crowdfunding effort, even in an entrepreneurial context, because a large audience represents a wide variety of goals. Crowdfunding allows generating collateral benefits that overcome the financial need, such as marketing purpose, pre-launches and market test, creating awareness toward new initiatives, obtain feedback and suggestions from the crowd, gain visibility in professional investors' channel etc. Considering that, beyond financial contribution, organizations can benefit from a more deeper and direct interactions with stakeholders, since the crowdfunding process can be applied to a wide range of economic areas, such as philanthropy, creative, cultural, social innovation and entrepreneurial project (Hemer, 2011; Mollick, 2014). With reference to actors involved in the crowdfunding process, the definitions adopted in this study allow to clearly identify players involved in the crowdfunding process:

- The crowd;
- The project creator(s);
- The crowdfunding platform.

The crowd is the main actor in the crowdfunding process. It represents a spontaneous aggregation of individuals, normally on dedicated online platforms, which identifies itself in an initiative or in a business proposal, or simply embraces its philosophy, deciding to contribute with a financial effort. The concept of the crowd can be explained by the definition of online communities of practice (Johnson, 2001), namely any virtual space where people interact, dialoguing, exchanging information or resources, learning and sharing knowledge. In these communities, members can contribute to the community growth by performing several tasks, such as coordinating discussion, content production, managing relationship and process of resources exchange. The centrality of the crowd is an attribute that crowdfunding inherits from the practice of crowdsourcing. As Kleeman et al. (2008, pag.6) stated *“Crowdsourcing takes place when a profit-oriented firm outsources specific tasks essential for the making or sale of its product to the general public (the crowd) in the form of an open call over the internet, with the intention of animating individuals to make a contribution to the firm's*

*production process..*”. Compared to the traditional outsourcing of business activities, crowdsourcing generates a significant benefit in terms of social and innovative capital that a company can draw for the development of a project (Peng and Zhang, 2010). The principle on which the practices of crowdsourcing and crowdfunding are based is, therefore, the same, what diverges is the purpose. In fact, while in the first the involvement of a large number of individuals is aimed at generating a community that exchanges, in relation to a specific commercial, technical or entrepreneurial goals, knowledge, and expertise, in the second the crowd becomes central for the financial contribution to support a new initiative. The crowd in the crowdfunding context is thus a virtual community that shares interest or beliefs related to a topic, a project or a specific virtual contents or proposal. Member of these communities in crowdfunding are labelled as crowdfunders, backers, supporters, advocates or investors<sup>1</sup>. Supporters can come from the closest circle of the project creator as family and friends, but they can also be anonymous and very distant geographically through the Internet as explained by Agrawal et al. (2011).

The project creator or the proponent of a crowdfunding campaign is not necessarily an entrepreneur. Given the ability of crowdfunding to mobilize large networks around a project proposal, this mechanism can be fruitfully employed by a large audience of capital seekers. According to Hemer (2011), in fact, the category of projects’ creator in the crowdfunding context is strongly heterogeneous, being consist of at least three main categories:

- Independent: any individual starting in business;
- Integrated: the project creator is related to a private firm, NGO or institution;
- Start-up: entrepreneurial team, new venture, start-up, individual entrepreneurs.

The creator of a crowdfunding campaign it is he who, faced with a scarcity of resources scenario, seizes the opportunity offered by crowdfunding by launching an open call to a community, aimed at exchange some form of values (financial and not ), to reach a predefined objective.

The third actor is the crowdfunding platform. The crowdfunding growth has been favoured by the proliferation of applications, systems that allow pioneers and creatives

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<sup>1</sup> In this study, the terms crowdfunders, backers, supporters, advocates or investors are employed as synonymous.

to dialogue with the "crowd" to get ideas, raise funds and draw attention to new products and services proposal. Interactive applications, media sharing platforms, social media are the natural habitats of the crowd, the virtual places where the aggregation processes of ideas and funds are realized in real time, allowing a direct and immediate exchange of contents and information to projects, commercial activities, social and cultural events. Crowdfunding platforms are relations mediators that act as a facilitator between supply and demand, by bringing entrepreneurs and customers or investors together. The crowdfunding platforms, thus, perform several tasks, such as to furnish the technology, build an architecture of transaction mechanism and social norms to regulate crowd-entrepreneur relationships. A platform should ensure supporters and investors an adequate process selection of project presented to the crowd, and to the crowd entrepreneurs the opportunity to spread an open call that aims for a social validation (Agrawal, Catalini and Goldfarb, 2011). The characteristics highlighted allow us to easily deduce the complexity of the role played by the platforms. They do not represent simple intermediaries, but microenvironments in which communication and financial flows are developed and intertwined to and from different types of actors. The presence of a system of direct interaction between two kinds of market actors, which objectives are not mutually exclusive, qualifies the crowdfunding platforms as a multi-sided market (Hagiu and Wright, 2011). Multisided platforms (MSPs) are technologies, products or services that create value primarily by enabling direct interactions between two or more customer or participant groups, extracting profit at least from one group of users.

### **1.3 Crowdfunding Models**

Since 2010, the crowdfunding market has experienced a rapid growth, with a worldwide growth rate of 167% from 2013 (Massolution, 2015). Most recent available data on crowdfunding market confirm that CF constitutes a global phenomenon. In terms of regional investment distribution, Europe growth rate grows 41% annually, this growth has been accelerating in mainland Europe in large part due to fast developing markets in smaller European countries. The Asia-Pacific region experienced an annual growth rate of 134%, which was largely driven by the Chinese market. Finally, the Americas grew by a more 22% against the previous year (University of Cambridge, 2017).

At the beginning, entrepreneurs from industries unserved by traditional financial services, such as social or creative sectors (Lehner, 2013), started to exploit fundraising opportunities via crowdfunding. However, insofar as it offers a direct market-oriented approach to supporters and to entrepreneurs to access capital, crowdfunding has developed into several modalities. Crowdfunding can serve different stakeholders' expectations (e.g. network or donors, consumer, stockholder, partner), as well as, can serve several types of entrepreneur (team, new ventures, social enterprises, no-profit organization, civic communities). In relation to the stakeholders' form of compensation for the financial support to a specific initiative or cause, investment can take the form of equity purchase, loan, donation, or pre-ordering of the product (Hemer, 2011; Agrawal et al., 2011; Ahlers et al., 2012; Kuppuswamy and Bayus, 2013; Mollick, 2014). Thus, it is not surprising that different types of crowdfunding exist. In order to systemize crowdfunding and to develop a classification scheme for crowdfunding, researchers presented multiple approaches. Lambert and Schwienbacher (2010) identified three crowdfunding investment categories, such as active investment, passive investment and donation. Hemer (2011) distinguishes among donation, sponsoring, pre-ordering, membership fees, crediting, lending, and profit sharing. Belleflamme et al. (2014) investigated the pre-ordering and profit sharing crowdfunding for new ventures. All these classification are based on the type of return offered to supporters. The evolution of crowdfunding has led to the definition of at least four main models (see Tab. 1.1) that, accordingly with the motivations and the set of benefit expected by the crowd, can be classified into two macro categories (Kirby and Worner, 2014).

Community crowdfunding models are models of online fundraising that do not subtend speculative purposes for the supporters, such as donation-based crowdfunding or reward-based crowdfunding. Whereas, financial crowdfunding models are characterized by the investors' expectation of a financial return from the investment of financial resources.

Table 1.1 - Community and Financial Crowdfunding Models

<i>Community Crowdfunding</i> (Non-speculative model)	<b>Donation CF</b>	This type of crowdfunding entirely relies on donations and does not provide any material or financial return for supporters. This model is the most used by non-profit organizations and foundations, which rely on patronage for their projects.
	<b>Reward CF</b>	Reward-based crowdfunding consists of individuals support to a project or business with the expectation of receiving a non-financial reward in return, such as goods or services at a later stage, or other forms of material and/or emotional compensations.
<i>Financial Crowdfunding</i> (Speculative model)	<b>Lending CF</b>	Lending-based crowdfunding or p2p lending is a model that matches the demand and the offering of financial resources trough disintermediated virtual businesses. In this model, individuals lend money to businesses or other individuals with the expectation that it will be repaid together with interest added.
	<b>Equity CF</b>	Equity crowdfunding is an alternative source of equity capital for new business, who launched an open call to a wide audience of professional and non-professional investors. Supporters in this model become a stockholder.

Source: author's adaptation from Kirby and Worner (2014).

Donation-based crowdfunding is probably the first form of collecting financial resource from the crowd via the Internet. This type of crowdfunding entirely relies on donations and does not provide any material or financial return for its supporters. This model is the most used by non-profit organizations and foundations, which rely on patronage for their projects. The crowd, in this case, is motivated by social or philanthropic aims, thus they adhere to support a cause that reflects their personal view of the world. Capital formation is essential to economic developments, as it enables entrepreneurs to create new opportunities (Cumming, 2012). Lehner (2013), consider this assumption true for social entrepreneurs in discussing the donation crowdfunding as an opportunity for social entrepreneurs to seek and exploit new financial practices.

Reward-based crowdfunding consists of individuals support to a project or business with the expectation of receiving a non-financial reward in return, such as goods or services at a later stage, or other forms of emotional or material compensations. In the reward-based crowdfunding, supporters are rewarded with non-financial benefits for their financial contributions. Nevertheless, these rewards arousing considerable interest in the

crowd, as the crowd attributes great value to emotional gestures of thanks such as mail, personal quotes, and/or personalized rewards (Gerber, 2013). These non-financial benefits can range from emotional rewards to material goods, such as new products or services. Given the possibility to engage a large audience providing some form of compensation, without dispersing financial resources, the reward-based model is largely adopted also at the entrepreneurial level. The reward model, unlike other more speculative crowdfunding models, is not exclusively placed in entrepreneurial financing models. However, where the campaign is aimed at attracting the interest of the crowds for the launch of a product/service that satisfies nascent or latent needs, crowdfunding sets up a new model of support for the new ventures' growth and development (Belleflamme et al, 2013; Mollick, 2014).

Lending-based crowdfunding or p2p lending is a model that matches the supply and the demand of debt capital, through disintermediated virtual businesses. This model of crowdfunding involves requesting financial resources from other investors in exchange for interest. Debt-based crowdfunding can be a valid alternative for startups (Paschen, 2017), because although it is similar to acquiring a traditional bank loan, often ensure more competitive interest rates, with more flexibility and options to manage resources.

The most recent evolution in the entrepreneurial financing options is the equity-based crowdfunding model. According to Ahlers et al. (2015), *"equity crowdfunding is a method of financing whereby an entrepreneur sells equity or equity-like shares in a company to a group of (small) investors through an open call for funding on Internet-based platforms"*. Equity crowdfunding is an alternative source of financial resources for smaller companies or the initial phase of starting up (Wilson and Testoni, 2014). Venture and private equity funds' covenants do not fit with the managerial, commercial and financial structure of companies in the early stages of development, making it difficult for companies wishing to implement their business ideas to be active on the market. A critical issue regarding equity crowdfunding relates to the risks it poses for investors, which are higher than those of lending model. Non-professional investors become a shareholder, sharing the entrepreneurial risk with the proponent team, with the expectation of a capital gain. This explains why equity crowdfunding has been the subject of ad hoc regulation in the majority of nations where this form of equity capitals collection is allowed.

Each of these four models subtends specific functioning logic, dictated by the capital providers' expectations and the expectations of the actors who demand financial resources. From an entrepreneurial perspective, beyond the speculative crowdfunding models of equity and debt crowdfunding, also the reward model is evolving as a model that support the growth of new ventures. Skirnevskiy et al. (2017) reveal that in the reward-based crowdfunding, is growing the presence of the serial crowdfunding entrepreneurs, namely entrepreneurs who recur repeatedly to crowdfunding to grow their venture. Entrepreneurs who rely on crowdfunding to finance new market proposals show greater possibility to reach success thanks to the accumulation of social capital from the specific community to whom crowdfunding proposal is presented (Skirnevskiy et al., 2017). This further reinforces the evidence that in the pre-ordering crowdfunding model, the utility function of the supporter is enriched by an investing experience, which will turn in a consuming experience of the service or the new product. The role of the crowd and the relevance of their expectations in this financial and commercial mechanism are not fully investigated. This contributes to clarify why this research aims to deepen the crowd motivation in the pre-purchasing model, which unlike from other most investigated models (Belleflamme et al., 2013; Gerber, 2013; Cholakova and Clarysse, 2015; Vismara, 2016; Aitamuro, 2011; Bretschneider et al., 2014) shows a peculiar mix of investing and consuming experience, enriched by a strong social connotation. This thesis focuses on the specific sub-model of the reward pre-purchasing crowdfunding, accurately described in the following section.

### **1.3.1 The pre-purchase model**

Pre-purchase model is a growing segment of the reward model by which new enterprises choose the crowd as a financial provider in order to launch a new product or service. Entrepreneurs collect financial resources from the crowd, offering in pre-purchasing the product for which are collecting capitals. Normally products bought by a crowdfunding campaign are available only at the later stage (Mollick and Kuppuswamy, 2014), often several months or years later. In order to collect financial resources to launch a new product or service, entrepreneurs offer a detailed textual and visual description of technical and commercial features associated with the project, as well as, video, and several material graphics that should allow consumer to evaluate the utility expected

from the product itself and from the features associated with product. The product or the service in pre-selling is generally offered in several commercial formulae, that starting from a base price, result incremented according to the quantity of exclusive material encompassing the reward, or the emotional value associated with the reward. This explains why the reward offering is largely heterogonous among crowdfunding campaigns since each entrepreneur can choose a different reward and price structure. This type of crowdfunding often requires the entrepreneur to have at least a prototype of the product ready at the time of crowdfunding (Belleflamme et al., 2014). Funders are seen as early customers that get products earlier than other does, at a better price or with a special mix of benefits (Mollick, 2014). Crowdfunders, thus, participate both a consuming and an investment experience.

Belleflamme et al. (2013) attribute to pre-purchase model three major characteristics: pre-purchase a product, willingness to pay and mutual benefits. According to Belleflamme et al. (2013), when an entrepreneur tries to gather relatively a small amount from the crowd, she/he should be more efficient in choosing the pre-ordering model, instead of the equity o profit-share model. If the amount of financial resources is relatively small, the pre-ordering scheme gives the possibility to generate higher net profits due to the optimal price discrimination. In a pre-purchase campaign, the entrepreneur has the possibility to observe directly the willingness to pay of the community thus can discriminate among supporters who are not interested or sufficiently confident in the product, and consumers who pre-purchase the product, choosing among different price levels. Beyond the possibility for an entrepreneur to test the market appeal of a new market proposal, as further confirmed by Mollick and Kuppuswamy (2014), entrepreneurs are additionally motivated in found their ventures via crowdfunding, because the social validation reduces the risk associated with the startup phase. The crowd certification offers for new ventures the possibility to mitigate adverse selection by professional investors, allowing a startup to obtain equity capital more easily in subsequent capital rounds (Drover et al., 2017). Additionally, entrepreneurs attribute to the crowdfunding mechanism other positive externalities. Examples are the possibility to engage new consumers in the vision of the new venture, the possibility of having feedback and useful insight from the crowd about a project, collect financial resources at lower cost and create awareness and visibility around a new business project (Agrawal et al., 2011; Gerber et al., 2013). From the

entrepreneurial profile drawn by Mollick and Kuppuswamy (2014), a crowd entrepreneur is generally well educated, with 95% having at least some college, normally is self-employed. While previous research outlined that, the higher amount of financial resources in a reward crowdfunding campaign was furnished by family and friends (Agrawal et al., 2011), entrepreneurs affirmed that backers are not their family or friends, but consumers that are contributing to the growth of a new business.

From the backers' perspective, supporters seem to be encouraged in funding new market proposal from a mix of motivations belonging to both commercial and emotional sphere. In the study of Gerber et al. (2013), supporters are strongly motivated by the possibility to test as early adopter a product and contribute to its production on large scale. At the same time, several social mechanisms encourage the crowd to support an entrepreneurial initiative. Among others, dominant motivations are related to the voluntary help of the entrepreneur, to be part of a creative and innovative community, or to the possibility of gaining forms of compensations enriched by a strong emotional value, such as the personalized rewards.

The study of Mollick and Kuppuswamy (2014) reveals that the reward-based model may be a useful path to creating a new business. Entrepreneurs, who successfully raise capital from the crowd, tend to continue to pursue the new businesses, also relying upon serial approach to crowdfunding. A project that becomes new ventures, tend to increase of 2.2 employees per year, also confirming several collateral benefits related to the direct interaction with the crowd, such as benefits in building customer communities, learning about market preferences and opportunities.

### **1.3.2 The role of the reward in the pre-purchase crowdfunding**

Mollick (2014) argues that the difference between the crowdfunding models lies in the primary goals of the entrepreneurs and supporters. Unlike the conventional retail setting, in the pre-purchase model, entrepreneurs can raise funds from potential new early adopters (Belleflamme et al., 2014). In return, creators offer products to the crowd, so in this model supporter not only to commit to pre-purchasing the product but also prepays for the product, allowing the entrepreneur to produce it. A pre-purchasing crowdfunding campaign integrates, in fact, a pre-order mechanism in the reward structure showed in the crowdfunding campaign. Even if the reward is considered as the

main driver to found a crowdfunding pre-purchase campaign (Hardy, 2013; Thürridl and Kamleitner, 2016; Wei Shi, 2018; Cholakova and Clarysse, 2015), little evidence there are on which are drivers that characterize the supporters' decision to pre-order a product, financing its production. Differently from other most investigated features associated with the success of a crowdfunding campaign, the reward structure and its effect on the advocates' decision-making behavior is a less investigated topic in the crowdfunding literature.

In order to collect financial resources to launch a new product or service, entrepreneurs offer a detailed textual and visual description of technical and commercial features associated with the product, as well as, video, and several material graphics that should allow consumer to evaluate the utility expected from the product itself and from the features associated with product. Crowdfunding platforms offer maximum flexibility to entrepreneurs in setting their reward structure, such as in terms of the number and types of product or rewards offered to fully capturing consumer heterogeneity in terms of price sensitivity and preference for various product configuration. Thus, rewards are often offered in the form of a commercial offering menu.

As the crowd shows heterogeneous evaluations, the entrepreneur provides several reward choice. The base-product is offered in several commercial formulae that, starting from a base price, tend to increment according to the quantity of exclusive material encompassing the reward, the scarcity, or the emotional value associated with the reward. This explains why the reward offering is largely heterogenous among crowdfunding campaigns since each entrepreneur can choose a different reward and price structure.

The underlying logic of a pre-purchase crowdfunding campaign is a pay-what-you-want (PWYW) model (Hardy, 2013), in which a consumer pays the price that considers adequate for the proposed product. Thus, looking at the reward offering, a supporter can choose the reward in accordance with the expected functional and emotional value. In this sense, Belleflamme et al., (2013) conclude that pre-purchase special feature is price discrimination by the circumstance of individual crowdfunder behavior. The pre-purchase model enables entrepreneurs to discriminate among the crowd, particularly between supporters who are willing to pay for the product and supporters how are not interested or sufficiently confident toward the commercial proposal.

Traditionally, following Pigou (1932) is possible to discern among three degrees of price discrimination. The first degree takes place when a monopolist is able to charge a maximum price to each individual buyer, as the entrepreneur exactly know which price a buyer will be willing to buy the product. The second degree takes place when a buyer gains discounts acquiring a larger quantity of a good. Lastly, the third-degree discrimination takes place when the seller is able to charge a different price to different groups of people on the basis of characteristics like region, status, etc. that could be correlated with these consumers' willingness to pay. Pre-purchase model mostly makes use of second-degree discrimination by offering larger quantities or bonuses to people who contribute more to the crowdfunding campaign.

Nevertheless, as Hardy (2013) noticed, since the model is an expanded pay-what-you-want one, the crowd is encouraged to increase financial support in accordance with their perceived value, because each marginal contribution should increase expected utility. In this sense, this model seems to converge toward the perfect discrimination (the first-degree), because, even if the entrepreneur set a starting price to buy the base version of the product, it will be the supporter to choose the financial contribution level. The higher is the supporters' perception that benefits will surpass costs, the more they will contribute. In this sense, Hu et al. (2015) further advance the knowledge about product and price analyzing pricing decision in crowdfunding context, observing two group of buyers, to which is presented the same product in a two-period game. Authors found that high-type buyers (e.g. backers who firstly access the crowdfunding offer) show greater willingness to pay, due to the condition that if the financial threshold is not reached, the entrepreneur will lack financial resources to realize the product. This constrains produce a sense of common responsibility among first supporters, who tend to contribute more. This is a specific feature of the crowdfunding pre-purchase model, deriving from the implicit coordination among crowd and entrepreneurs to ensure the success of the pre-sale (Hu et al., 2015).

Since pre-purchasing campaign covers a short period of time, often no more than two months, the timing represents a constrains for entrepreneurs in setting the optimal price scheme, from which will depend on the success of the financial collection. The majority of crowdfunding campaigns follow the "all-or-nothing" mechanism, namely if the funding target required by the entrepreneurs are not reached, contributions made by the

crowd will be reimbursed, this will frustrate both entrepreneurial and the crowd efforts. This contribute to explain why some authors suggest that reward are vital in attracting consumer in reward crowdfunding, especially when the reward is a commercial offering.

The seminal study of Gerber et al. (2013), highlight that crowd participation in the crowdfunding mechanism is encouraged by the possibility to obtain material compensation, such as reward. In particular, supporter seems to be encouraged to finance creative and innovative entrepreneurial new market proposal, by the possibility to buy new product at lower price. Considering that in the pre-purchase campaigns the product is offered at a lower price compared to the price practiced to the large-scale market, supporters who aim to be early adopter can be encouraged to pre-purchase a new product or services. Cholakova and Clarysse (2015) found that in the reward-based crowdfunding, as in the equity model, expected utility is more influent respect to non-financial motivations. Wei Shi (2018), analysing how the link between the reward structure and the backers' responsiveness, found that the type of reward that provides the strongest incentive to found a campaign, is the product it-self, and its accessories.

All these previous evidence converge with the evidence obtained by Ryu and Kim (2015), who analysing crowdfunding motivation framework, identify four types of crowdfunding sponsors: angelic backer, reward hunter, avid fun and tasteful hermit.

Reward hunters in the study of Ryu and Kim are not really motivated by philanthropic or altruistic benefits in funding new initiative; they are mainly driven by the product offering, showing a higher willingness, respect to other types of crowdfunders, in financing a campaign also after the financial goal was reached. Reward hunters are found to be more interesting in financially support an innovative project since they are younger on average and interested in discovering new market proposal. They tend to act as investors who expect a reasonable return from their investment in the product.

To explore the drivers that influence the crowd in pre-purchase a product, requires addressing the complexity that the reward scheme can subtend in a pre-purchase mechanism. As the reward strategy is a balanced mix of material and immaterial incentives to the crowd, in the form of a new consuming experience, pre-purchase model subtend an intrinsic multiplicity of the rewarding scheme that may be offered by the entrepreneurs. To address this multiplicity, Hardy (2013) deepen the rewarding scheme in terms of general incentive to participate and to pay that entrepreneurs can embed in

their offer to increase the perceived value associated with the consumption experience. Hardy (2013), identify four types of incentive:

- *General incentive to pay*: Although entrepreneurs set a financial target to reach in order to start the product production, they usually offer to expand their concept of the product after reaching the additional funding goals, namely "stretch goals". These stretch goals represent an incremental level of funding, that if reached will allow the entrepreneur to expand the basic good's value. Stretch goals are a general incentive because the product value will increase for all consumers. Another general incentive is related to the proposal deadline, if the contributions exceed the initial goal, utility perceived tend to increase for supporters.
- *Individual incentive to pay*: Entrepreneurs often choose to reward particularly engaged backers, according to the amount that they decided to contribute. The pre-purchase model relies on a rewarding scheme that, starting from the basic good allows supporter to acquire additional benefits as the financial contribution increase. Any additional pledge will yield additional benefits, which may range from special versions of the product to add-ons, such as exclusive materials that increase the value of final products features. The price and reward scheme ranges from small contribution to the larger amounts, financed by supporters willing to pay more for this kind of incentives.
- *Incentive to participate*: Entrepreneurs can embed in the reward structure other incentives, like a personal reward if the supporter is engaged in some activities related to the product or the campaign. These incentives might include a special recognition, discount or material offering if the supporter participates in some crowdsourcing activities related to the crowdfunding outcome, such as incrementing the good's value through his expertise or efforts. Others incentive to participate are related to the possibility to introduce a stretch goal structure, where the product increases in its value each time a predefined number of new contributors pre-purchase the product.

- *Other incentive*: Other general incentives to participate or found the campaign can be an incentive not necessarily directly linked to the financial collection. Entrepreneurs can reward crowdfunders who act as an ambassador, spreading the project through a targeted community, or through his network. Even if these types of incentive might not directly increase the financial resources collected, can increase the exposure of the new market proposal, encouraging new contributors.

In the pre-purchase model, as material and immaterial compensation dictate the nature of financial return, they may be strategically design to make project more attractive and consequently turn potential supporters into investors. Thürridl and Kamleitner (2016), observing 180 crowdfunding campaign, identify characteristic on which rewards may differ from each other (see Table 1.2). In particular, authors identified eight reward dimensions:

- *Reward Type*: The reward type depends on the project type and category. Crowdfunding campaigns that aim to pre-sell a product are more likely to offer a larger proportion of material reward, while creative projects are more likely to offer a symbolic or emotional reward, associated with a low economic value. Pre-purchase rewards primarily include new products, technological innovations, and tools.
- *Tangibility*: The tangibility is referred to whether rewards are material or immaterial in nature. The material rewards include product, merchandise, and in general all physical forms of compensation. Immaterial rewards either include intangible benefits or experiences that increase the participation value for supporters.
- *Scarcity*: Rewards can be limited in number; this can depend on the project category, purpose, replicability, monetary value, the actual availability of the reward, and potential geographical limitations. A start-up that produces innovative product might only be able to manufacture a certain amount of and would not be able to satisfy a potentially unlimited amount of product pre-sell. However, scarcity can be strategically created, as an entrepreneur can signal a scarcity in order to encourage participation.

- *Geographical Limitation*: Sometimes, the reward can be geographically constrained, it depends if the project address a local or a global crowd. If the project addresses a certain area, or aim to create a new offer limited to this area, the reward can be offered at a lower price or with more convenience for people how are located in a specific area. Additionally, some emotional reward (e.g. a meeting or an activity with the entrepreneur or with the team) can require that entrepreneur and crowd be not far, from a geographical point of view. In general, entrepreneurs who are seeking financing for products have more leeway in terms of geographical limitations as physical offerings are much easier to distribute globally.
- *Monetary Value/Reward Tier*: Crowdfunding projects provide several tiers of contribution, ranging from a symbolic support of little money to larger sums. The distribution of the individual tiers is usually uniform with a large range between the lowest and the highest reward. Reward, thus, differ in terms of monetary value, and these differences reflect the exclusivity of material and immaterial of the reward. Thus, higher is the reward exclusivity, both in terms of material and symbolic value, higher is the reward price.
- *Recognition*: Beyond to material and/or immaterial reward, the project creator can symbolically reward supporters though recognition. This type of engagement, independently from its private or public nature, has the scope to improve individuals' attitudes and participation to the project. In fact, where present, recognition enables a higher level of contribution, due to the personal appreciation made by the entrepreneur toward supporter.
- *Level of Collaboration*: Some project provides supporters the opportunity to contribute to improving the outcome, through collaboration. A supporter can collaborate in several ways, supporters can be able to customize their reward accordingly to their desire or needs, or they can be involved in more influential decision-making. Through collaboration, supporters co-create the product, as they are invited to actively participate, sharing their expertise or commitment for product development and innovations.
- *Core Features*: Previously discussed characteristics represent technicalities that are not sufficient to capture the essence of a reward. Each individual reward exhibit at least one of the core features aforementioned. Individual rewards are

predominantly either the pre-purchase product, an experience, a bundle or combination of different reward or an exclusive offering not available after the crowdfunding campaign.

Table 1.2 - Dimensions and Levels of Rewards

Dimension	Levels of Characteristics
Purpose/Reward Type	<ul style="list-style-type: none"> <li>• Pre-purchase of product or service</li> <li>• Symbolic reward</li> </ul>
Tangibility	<ul style="list-style-type: none"> <li>• Material or tangible</li> <li>• Immaterial or intangible</li> </ul>
Scarcity	<ul style="list-style-type: none"> <li>• Limited in terms of number</li> <li>• Unlimited in terms of number</li> </ul>
Geographical Limitation	<ul style="list-style-type: none"> <li>• Local/geographically dependent</li> <li>• Global/geographically independent</li> </ul>
Monetary Value / Reward Tier	<ul style="list-style-type: none"> <li>• High value</li> <li>• Medium value</li> <li>• Low value</li> </ul>
Recognition	<ul style="list-style-type: none"> <li>• Public recognition</li> <li>• Private recognition</li> <li>• No recognition</li> </ul>
Level of Collaboration	<ul style="list-style-type: none"> <li>• Supporter involvement – participation</li> <li>• Supporter involvement – decision-making</li> <li>• Support involvement – customization</li> <li>• No supporter involvement</li> </ul>
Core Feature	<ul style="list-style-type: none"> <li>• Product or service</li> <li>• Merchandise</li> <li>• Experiences</li> <li>• Bundles</li> <li>• Exclusive rewards</li> </ul>

Source: Thürridl, C., & Kamleitner, B. (2016). What goes around comes around? Rewards as strategic assets in crowdfunding. *California management review*, 58(2), 88-110.

Based on these characteristics Thürridl and Kamleitner (2016) identify a strategic rewards toolbox (see Table 3.2) useful to discern the different types of reward strategy that an entrepreneur can offer to attract supporters.

Table 1.3 - Scheme for the Strategic Toolbox of Rewards

Strategic Tool	Core Idea	Main Reward Type	Tangibility	Scarcity	Geographical Limitation	Mean Value
<i>Purchase Me: The pre-purchase Tool</i>	Generate early demand; Entice funders by being the first to receive the functional value of the offering	Pre-purchase	Tangible or Intangible	Limited or unlimited	Mostly global	Low-Medium, depends on the product service.
<i>Top It Up: The Bundling Tool</i>	Entice through unique bundles. Pay more, get an extra bonus.	Pre-purchase or symbolic reward	Tangible or Intangible	Mostly unlimited	Global or local	Medium-high
<i>Collectible Tokens: The Merchandise Tool</i>	Trust that supporters share the vision and reward many with small symbolic and visible tokens.	Symbolic reward	Tangible or Intangible	Mostly unlimited	Mostly global	Low-Medium
<i>Something special: The Exclusivity Tool</i>	Appeal to the need to feel special and unique by offering limited editions.	Pre-purchase or symbolic reward	Tangible or Intangible	Mostly limited	Mostly global	Low-high
<i>Pursuit of Pleasure: The Experience Tool</i>	Appeal to the desire for special experience together with few select others by offering scarce experiences.	Symbolic reward	Tangible or Intangible	Mostly limited	Mostly local	Medium-high
<i>Highly Appreciated: The Recognition Tool</i>	Creating a bond by offering a personal thank you					
<i>Let's Collaborate: The Co-creation Tool</i>	Create a bond and entice by letting backer become part of the project					

Source: Thürridl, C., & Kamleitner, B. (2016). What goes around comes around? Rewards as strategic assets in crowdfunding. California management review, 58(2), 88-110.

In the frame of this study, the focus is on the strategic tool “Purchase me”, as it identifies a typical reward structure associated with a pre-purchase crowdfunding campaign. The core idea associated with this reward strategy is to obtain a first market test for a new market proposal, testing the interest of an initial customer base. The product is the core offering of the crowdfunding campaign, entrepreneurs who adopt this strategy often have already made all decisions about the final product, thus generally, the level of collaboration is low. As the focus is on the offering, supporters are primarily attracted by the functional value associated with the product. The latter is offered at a preferential price, usually lower than the retail price, and price level associated with the different type of rewards are products or combinations of product, depending on their monetary value. Generally, higher reward tiers englobe the product and several product accessories or expansion, whereas, reward priced lower are incentive to individuals who are not willing to invest a large amount to pre-purchase the product. This type of offer

is generally non-geographically limited, as the product, being material, can be easily delivered to supporters. As Thürridl and Kamleitner (2016) argue, this type of reward is often associated with supporters who searching for innovative market proposal, as well as early adopters who tend to acquire novel products and services before the public.

All these studies, together suggest that the success of a crowdfunding project depends entirely from the crowd participation and thus, deepen their behaviors and motivations is fundamental. As suggested by Wei Shi (2018), understanding how the consumer reacts to rewards is a nascent area of research.

#### **1.4 Literature review**

CF is a new phenomenon inspired by the logic of microfinance and crowdsourcing. The interest of academics, professionals and policy makers is justified by the global growth rates and the potential contribution of the CF in relaxing capital constrains faced by new ventures. In addition, the intrinsic characteristics, mainly linked to the use of the internet for communicating with a crowd of potential investors, have contributed to motivate a growing scientific interest in this phenomenon. The CF, in fact, enhances the traditional methods of financing with new rational and emotional implications linked to the logic of the crowd (Méric 2016), stimulating interdisciplinary interpretive trails that range from finance to marketing or management, sociology, and psychology. Therefore, the research of a common thread is not simple. Moritz and Block (2016) in their literature review detect 127 scientific articles in the crowdfunding market from an economic perspective. A more recent literature review (Short et al., 2017), detects 21 original research in the crowdfunding literature, concluding that scholarly knowledge on this new financial model needs to be further expanded.

The literature review can be addressed from four main perspectives: the financial and non-financial motivation of actors involved in the process, the success factors that contribute to the resources assimilation process, the particular configuration of information asymmetry and the relevance of the social capital in the crowdfunding mechanism. Even if the literature is often transversal respect to the model(s) observed, in this thesis are in large part considered relevant for the literature review the articles that deepened the aforementioned dimensions in the context of the reward-based crowdfunding, where possible.

#### **1.4.1 Financial and non-financial motivations**

The majority of crowdfunding models embrace, full or in large measure, the two extremities that can explain the crowd's willingness to contribute via crowdfunding, namely the financial or non-financial motivations. As pointed out by Belleflamme et al. (2014), the pre-purchase model differs from the equity crowdfunding model also for the crowd expectations, which in the equity (or profit share) model are mainly financial. Investors in the equity crowdfunding or lending model are not engaged in a consumption experience, they can be attracted from the perspective of future capital gains showing less attitude to be influenced by non-financial motivations.

In the reward-based model, the borders between the financial and non-financial expectations and motivation are difficult to identify, because these dimensions tend to influence each other, mostly from the backers' perspective.

The collection of financial resources is a critical step in the launch of a new venture. By the proponent side, crowdfunding is an innovative low-cost tool for capital raising which introduces and test new products through marketing campaigns and pre-selling initiatives. In addition, CF allows to building professional relationships, promoting the dissemination of new projects, thanks to viral power of social media (Belleflamme et al. 2014; Lambert and Schwienbacher, 2010; Mollick 2014; Agrawal, Catalini and Goldfarb 2015; Gerber 2013, Giudici et al. 2013). This versatility of the model is confirmed by the variety of the proponents that may consist of entrepreneurs, private citizens and public administrations. The CF, hence, is not only a method for funding, but an innovative logic for the promotion and dissemination of a new venture. The recourse to the crowd represents a means to collect financial resources and an opportunity to activate a relational capital, which can help to increase the quality and not only the quantity of the collected resources (Skirnevskiy et al., 2017).

On the side of the crowd, potential advantages include a mix of tangible and intangible benefits related to the personal sphere. Supporter might contribute resources according to the expected utility derived from consumption of the product, or the rewards associated with the resources commitment (Belleflamme et al. 2014; Gerber and Hui, 2013). Considering that most reward-based crowdfunding campaigns offer the product at a lower price compared to the price practiced to the large-scale market, supporters who aim to be early adopter can be encouraged to pre-purchase a new product or

services. Deepening the financial and non-financial motivations comparing the equity and reward models, Cholakova and Clarysse (2015), found that, surprisingly, in the reward-based crowdfunding, as in the equity model, expected utility is more influential respect to non-financial motivations. This suggests that rewards and pre-purchased product are the main drivers behind a single individuals' decision to financially support a campaign.

The literature highlights also the social and psychological aspects associated with the decision to support a CF campaign (Frydrych et al. 2014; Jardat and Pesqueux 2016). In this perspective, literature speaks about an ego-boosting phenomenon, such as social prestige in a community (Colombo et al. 2015), or the possibility to obtain information related to a specific market proposal through the community engagement and the backers' word of mouth within their virtual spaces of dialogue. In the reward-based crowdfunding, generally the platform provide a space for a two-way communication between supporters and the entrepreneur, thus as the reward crowdfunding is aimed to finance a product that during the crowdfunding campaign is still in its pre-production phase, backers and entrepreneur can share feedback and information. Backers can be also motivated by the possibility to share their expertise and knowledge within the entrepreneurial team, that might lead to elevate the overall quality and efficiency of the business proposal presented to the market (Kelly et al., 2010; Kim and Viswanathan, 2018). Moreover, the participation in a CF campaign can be seen as a means to meet an extended utility function including both emotional and economic needs (Harms, 2007), as in the case of testing new goods or services in advance respect the market launch (Gerber 2013; Mollick, 2014).

Smith (2015), in his research found that in the video game crowdfunding market backers resources exchange is not limited to the financial contribution, but it can encompass also a closely working relationship between crowd and the entrepreneurs. Regardless if a supporter becomes a consumer or not, the utility perceived from the participation tends to increase by the possibility of investing financial resources, enjoying the feeling to be part of a community that is starting a market proposal (Gerber, 2013). This confirms the position of Leibovitz et al. (2015) that includes crowdfunding as a new media practice that relies on the development of a more participatory culture.

### **1.4.2 Success factors of crowdfunding campaign**

Since the evidence suggests that the legitimacy of a project to be funded is not easy to obtain during crowdfunding (Frydrych, et al., 2014), one of the most salient research topics is the study of determinants of a successful CF campaign. The theoretical perspective of information barriers to the legitimacy and success of a CF campaign returns several distinctive features in comparison with more conventional financing models. This occurs because the informative and relational levers among funders and proponents show very specific characteristics.

First, given the information technology development, the use of social media and digital platforms contributes to modifying the ways in which the storytelling of a new initiative is built, and conveyed by the proponents (Frydrych et al., 2014). The crowdfunding campaign represents a window of investment opportunities that remain open for a short period of time during which the creator interacts with the crowd through contents, updates, and comments. All information is public and shared, generating, in theory, an original application of a democratic capitalist model. Due to the absence of personal dialogue for the explanation of characteristics and purposes, a new initiative is described through virtual pages and multimedia materials that are translated in a mix of texts and images with the intention of stimulating and inform the potential funder of the project. Referring to the concept of preparedness (Chen et al. 2009), Mollick (2014) emphasizes the role of quality signals addressed to the crowd as the insertion of video, the smaller presence of spelling errors within the content description and the project updates that should contribute to a selection process based on more rational criteria. According to this perspective, Koch and Siering (2015) highlight that the length of the description and the presence of updates during the campaign are signals for a valid initiative.

Some of the researched success factors are related to the venture itself. The type of project affects the success of a venture – including whether the venture is non-profit or for-profit, as well as which field and industry the project is set in. The type and level of rewards offered to the crowd also affect success rates (Giudici et al., 2013). In addition to rewards, contact with the entrepreneur and the project seems important.

The entrepreneur and their actions also affect the potential success of the funding project. The number of entrepreneurs taking part in the venture (Frydrych et al., 2014) and their professional background has an effect on reaching the funding target (Ahlers

et al., 2015, Gangi and Daniele, 2017). According to Frydrych et al. (2014), the education level and the work experience of the entrepreneur also affect organizational legitimacy and thus success rates.

Further studies (Belleflamme et al. 2014) emphasized the role of a large community built around the project. In this respect, Courtney (2016) confirms that a large number of positive comments posted on the web improves the likelihood of achieving success. Moreover, Hardy (2013) highlights that with the increase in the number of backers, more funders are willing to enlarge their contribution for ensuring the success of the CF initiative.

Finally, some success factors are associated with the network of potential funders available to a project. The number and intensity of social media connections the entrepreneurs have and the number of web users that have seen their pitches both affect how successful the crowdfunding initiative is (Giudici et al., 2013). This is in line with the findings of Jin, Wu and Hitt (2017), who found that the social media engagement of new ventures is positively associated with capital investment by investors who generally rely on more informal network, such as business angels. This is consistent with the hypothesis that social media increase an investor's ability to discover potential investments. In addition, the positive influence of the social media in the collection of financial resources is stronger for startups outside geographic venture capital clusters reinforcing the evidence that social media act as an additional information channel to increase information about new investment opportunities mostly for less visible new ventures.

#### **1.4.3 The information asymmetry in the crowdfunding market**

Entrepreneurial activities are inherently risky and those commit financial resources carry a substantial part of that risk (James et al., 2013). In the pre-purchasing model, the investors-early adopter assumes a portion of the risk related to the launch of a new venture. Even if experts in the crowd highly contributes to a better selection of best market new proposal (Kim and Viswanathan, 2018), supporters are not fully informed about entrepreneurs' competence and reliability, thus entrepreneur can rent from this condition (Alvarez, 2007).

From the literature, theoretically, the mix of economic and experiential benefits related to the functioning of CF can strengthen the ties of proponents with potential funders, so increasing the legitimacy of projects. However, the creation of a shared value between the proponent and the crowd (Lambert and Schwiendbacher 2010; Awdziej et al. 2016), cannot be interpreted in a deterministic way. In particular, a value co-creation is only a potential condition of CF which requires an efficient channeling of reliability signals to mitigate the distortions arising from information asymmetries (Akerlof, 1970). The latter is a condition inherent to every resource exchange between outsiders and insiders of a project, but in the case of CF, it assumes specific characteristics due to the virtual environment in which relationships among crowd and entrepreneurs take form. For instance, being an electronic market, the CF may increase the risk of fraud due to the creation of fictitious profiles of applicants and the disclosure of information not easily verifiable remotely (Tomboc, 2013). Furthermore, compared to more conventional forms of financing, the CF does not offer the same opportunities to assess the quality of a project and the credibility of its proponent on the basis of a mix of hard information and soft information usually obtainable through financial statements and repeated personal interactions (Stein 2002; Petersen 2004).

In the pre-purchase model crowdfunding, the relationship between the proponent and the crowd is not necessarily regulated by pre-contractual relationship. In this regard, paradoxically, the same theoretical attitude of crowdfunding to mitigate the economic disadvantage associated with the geographical distances (Agrawal et al., 2011; Mollick, 2014) can be a weak point from the side of the ex-ante and ex-post control by the supporters. In fact, in the reward-based CF the geographic diversity between funder and funded can become a factor that reduces the backer protection not only for a potential lack of control, but also for the possible conflicts between different jurisdictions (Tomboc, 2013). Moreover, in the practice of crowdfunding the promotion of online initiatives sharpens some underlying risks that can degenerate into an information screwing. In particular, while in the case of a relationship with institutional funders, the possibility to protect sensitive information encourages proponents to make a wide disclosure on the project, in the reward-based CF confidential agreements are not usual. Therefore, the proponent may have a less incentive to provide significant information not protected by instruments to safeguard creator 'rights, with the consequence of exacerbating the information asymmetry between applicants and backers. Moreover, the

latter do not have the same possibility to adopt the control systems generally applied by institutional investors. In this respect, the parallelism with the venture financing (Mollick 2014; Cordova et al. 2015) does not seem entirely convincing, not only because it can be limited to few aspects of the equity CF model, but also because in the reward-based CF the basic elements that contribute to mitigate information asymmetries during the venture financing process are absent. There isn't a due diligence, the logic of stage-financing is not suitable for one time projects, there are no forms of governance control because probably there isn't a legally recognized company, thereby the certifying and monitoring function that literature attributes to venture capitalists (Megginson and Weiss, 1991; Gompers, 1995) are missing.

The specific and multiform nature of asymmetric information underlying a reward-based CF campaign is a problem that can power the risk of adverse selection. Namely, whether the creators are not able to convey the credibility of the project and if the crowd is not able to discern the quality of new initiatives, the risk is the disappearance from the market of the most valuable proponents. If perceived, the risk of adverse selection may induce on individual potential supporter to take decisions based on the orientation of the crowd. This can be translated into opportunistic behaviors. Specifically, the asymmetric information, eventually combined with the lack of ability to decode signals not always strong, but weak or faint, launched by the CF campaign, may determine that the single founder stands in a waiting position, looking at the crowd actions for deciding to take part only in projects already supported by other backers.

Therefore, in the perspective of asymmetric information, a critical component for a better functioning of the reward-based CF model is represented by signals that, directly or not, the proponent and the crowd may launch for less naïve evaluation of the initiatives presented through the online platforms. In theory, signals are those “activities or attributes which, by design or accident, alter the beliefs of or convey information to other individuals in the market”, (Spence 1974, p.1). Their quality will depend on an unobservable ability of the signaler to fulfill the needs or demands of the outsider observing the signal (Connelly et al., 2011). In the case of CF, given the different phases of a campaign (Beaulieu et al. 2015; Kunz et al. 2017), signals may be embedded within the design of the project (e.g.: funding target, quality of contents, clear description of

scopes and methods), or may be launched during the fundraising phase (e.g.: project upgrades by the proponent, comments by the crowd, influencer and reviewers).

Signals able to mitigate information asymmetry can be produced also by the same supporters, as some researchers deepening the role of specific category of backers in produce positive outcome for the capital collection process. In particular, in the reward based crowdfunding, Colombo et al. (2015) empirically test that the early contributions positive affect further contribution the following phases of the crowdfunding campaign. Gangi and Daniele (2017) further deepen the role of behavioral influence among backers, showing that also the backers placed at the end of campaign boost the possibility of successfully fund a campaign. Moreover, the same study, by isolating renowned companies from backers who intervene in the funding process, shows that this new form of mentoring is a determinant of the success of crowdfunding campaigns, acting as an asymmetry mitigation mechanism.

#### **1.4.4 The role of social capital**

Belleflamme et al. (2013) stated that collaborating with the crowd, allows entrepreneurs to extract additional value. Crowdfunding facilitates resources exchange, both relational and material, is thus able to turn the community affection for a cause, in economic support. Although in crowdfunding the main contribution required to the crowd has a financial nature, social capital plays a primary role in the financing of crowds. The social capital represents an intangible resource, generated from the knowledge exchanged in the context of relational networks between different subjects, both individuals and organizations (Coleman, 1988). Unlike human capital or financial resources, social capital allows individuals in a network to coordinate and cooperate to obtain mutual benefits (Putnam, 1995). Thus, social capital is a strategic asset, for businesses and stakeholders, able to make available cognitive and regulatory resources that reduce transaction and monitoring costs, encouraging the establishment of relationships of trust that positively influence the employment, and therefore on the return, of the human and financial capital employed (Bosma, et al., 2004).

The social capital shows different implications studied in the crowdfunding context. The higher is the social capital of the entrepreneurs, the higher are the probability that the financial goal will be reached (Mollick, 2014; Ordanini et al., 2011; Colombo et al.,

2015; Giudici et al., 2013; Belleflamme et al., 2013). However, the relational element permeates the whole mechanism, acting as a regulatory mechanism that moderates the relationship among actors involved in the process. Crowdfunding platforms represent virtual activators of social relations between different subjects. This latter, as pointed out by Agrawal et al. (2011), not only convey information related to the project proposals but also provide information on the platform users, on the financing mechanisms and on the investment choices made by other supporters on the platform. Although research on the social and financial role of crowdfunding intermediaries is very in infancy (Moritz and Block, 2016), some evidence in the lending model suggest that trust mechanism favour the prosperity of on-line marketplace (Greiner and Wang, 2010).

In the relational-cognitive dimension, the social capital embraces the resources providing shared representations, interpretations, values and systems of meaning among parties (Nahapiet and Ghoshal, 1988). With particular reference to the groups organized for the achievement of common objectives, sharing values predispose individual to collaborate (Pizzorno, 2001; Healey, 2003). This direct involvement benefits both entrepreneur and crowd, reinforcing the trust mechanism that shows to be particularly relevant in the crowdfunding mechanisms. The study of Zheng et al. (2016) reveals that the accumulation by the entrepreneurs of trust from the crowd will become another type of asset that affects the willingness to pay of consumers in the crowdfunding market. In other words, it is not sufficient that the potential supporters are motivated by the expectation of a return. Crucial factors encouraging individuals to engage in a process of co-creation are values such as trust, affiliation, and identification with the cause or the entrepreneur.

The potential supporters of a project should be able to overcome a double mechanism of diffidence, both with respect to the reliability of the entrepreneur and of the platform. The greater the convergence between the scheme of values and principles promoted by a certain group of individuals and the potential supporters, the greater the chances that the latter perceive affection toward a crowdfunding proposal that justifies the monetary support. However, social capital is not just a pre-condition of a successful collaborative process. It can also be analysed as the output - real or potential - of a crowdsourcing process. In fact, taking the perspective of Nahapiet and Ghoshal, social capital is not

just the network but includes all the assets that can be made available through this network. Therefore, social capital, acting as an enabler of trust and exchange relationships, laying foundations to access several resources available within the network.

From a communitarian perspective, Colombo et al. (2015) show that higher is the internal social capital of the proponent that derives from previous experiences as an entrepreneur or as a backer, the higher the chance to reach the funding target for a new initiative. On a similar line, for Giudici et al. (2013) the size of the individual social capital enables economic transactions because it implies trust, which encourages the project success. A relational component as driver for the successful projects has been also interpreted in function of the technological environment where an initiative is promoted and discussed. At this regard, even if referred to the donations segment, Balboni et al. (2016) find that the probability of success is a function of the number of Twitter followers and the number of retweets of the campaign link. Similarly, Mollick (2014) shows that the number of Facebook friends has a positive impact on successful projects presented on Kickstarter platform. So, the digital networks are considered as levers to improve the communication capability of the proponent in addition to the platform visibility. The recourse to the internet, in fact, can aid to overcome the geographical barriers between funders and founders (Agrawal et. 2011), so expanding the set of potential backers.

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## CHAPTER 2

### The crowdfunding as a value co-creation process

#### 2.1 Introduction

The role played by the various players in the market is changing very rapidly, largely due to the possibilities offered by the new information and communication technologies. Current technological advances allow market entities to participate in broader and more diverse forms of value co-creation, which are completely redefining logics underlying the competitive advantage. The many to many networks (Gummesson, 2006), the service-dominant logic (Vargo and Lusch, 2004, 2006, 2008), and service logic (Grönroos and Ravald, 2011) represent theoretical approaches able to explain how new more opened business models are reshaping the market actors role.

Value co-creation implies that several actors collaborate exchanging resources, in order to achieve individual benefits that are non-mutually exclusive. Clearly, even if the concept was employed mainly to discuss new forms of collaboration between firms and consumers, value co-creation principles has been rapidly employed to analyze several market actors exchange resources processes, completely generated or redefined by new technologies development. Vargo and Lusch (2008) in fact clarified that *“while we initially focused on exchange between two parties, we have increasingly tried to make it clear that it needs to be understood that the venue of value creation is the value configurations economic and social actors within networks interacting and exchanging across and through networks.”* In the framework of this study, the value co-creation philosophy is employed as a theoretical model to better frame the complex set of motivations, benefits, resources and expected outcome that characterize actors in the crowdfunding context. Following sections will present (i) a brief frame of literature on value co-creation, and (ii) a theoretical model, which grounded on value co-creation principles aims to explain why the crowdfunding can be considered a value co-creation process.

## 2.2 Value co-creation: framing the research context

Value co-creation could be defined a many-way, open and dialectical process of interaction and knowledge sharing between a firm and its stakeholders, whereby the participating parties engage in a dialogue to jointly define reciprocal beneficial solutions. The term value co-creation emerged from the foundational paper of Prahalad and Ramaswamy (2004), in parallel with a new view in innovation management stream that shifted the locus of value creation for organizations from the transactional toward a more collaborative perspective.

The discussion on value co-creation concept started in the marketing stream when researchers begin to investigating how companies engage in an open process with customers for new product development (Riggs & Von Hippel, 1994; Von Hippel & Katz, 2002) and service delivery (Gronroos, 2002). The debate was thus fuelled by the emergence of the foundational studies on the service-dominant (S-D) logic (Vargo and Lusch, 2004; Lusch and Vargo, 2006; Vargo and Lusch 2008). The service-dominant (S-D) logic, as introduced by Vargo and Lusch (2004, p. 9), is “*a mindset, a lens through which to look at social and economic exchange phenomena so they can potentially be seen more clearly.*” One of the core tenets of the S-D logic is the co-creation of value, where the customer is “a co-creator of value” (Vargo & Lusch 2008, p. 7) and an organization offers a value proposition; together, the customer and organization create value. The S-D logic views at services as the fundamental component of economic exchange. In this perspective, goods are functional for service provision, because is the service experience that defines the degree with which firm competencies are able to satisfy consumer expectations.

Although developed primarily in the marketing area, the S-D logic results applicable to several resources exchange process. Briefly, in fact, the debate has widened to the management field when Prahalad and Ramaswamy (2004) pointed out that value co-creation is not only about the consumer, but involve all type of stakeholders, such as suppliers, public organization, partners, and competitors.

The debate on value co-creation and its practical managing is still ongoing, considering that is a business approach that relies on a more active market actors' involvement, tends to show more complexity and multifaceted aspects that interact. Embracing value co-creation each activity among different stakeholders direct to achieve broader group

benefits through the share of resources, the concept of value co-creation has an intrinsic nuanced nature. This has led to a variety of academics' contributions on the theme that, embracing different conceptual stances, has clarified which are the factors underlying the co-creation processes. The combined interpretation of this knowledge' mosaic guides into a deeper understanding of principles and pillars at the basis of this concept, and its convergence with the crowdfunding model.

The fundamental premise of the value co-creation process is the cooperation of market actors. If the process is not characterized by collaboration, is a creating value process, but not a co-created value process (Cova, 2011). A value co-creation process requires reciprocal influence among different participating actors. This process of perspectives' contamination is possible only when is established a "point of contact", a direct interaction. Interactions represent reciprocal actions through which the parties can affect each another (Grönroos, 2011).

The value co-creation mechanism is intrinsically an active and direct dialogue among actors that, exchanging resources, are encouraged in collaborating by the possibility to achieve mutual benefits (Foster, 2007; Galvagno and Dalli, 2014; Cova, 2011; Prahalad and Ramaswamy, 2014b). Mutual benefits represent a second pillar in the value co-creation process, Gupta and Lehman (2005), in fact, clarify that since different actors participate in creating value, all actors' perspective should be taken in account to capitalize value co-creation opportunities. Actors are encouraged in taking part in a co-creation value by the possibility to gives and receives several kind of benefits (Foster, 2011; Cova, 2011; Grönroos, 2011; Vargo & Lusch, 2004), which value is “uniquely experienced and determined by the beneficiary” (Greer, Lusch and Vargo, 2016, p.3). In the co-creation practices, the architecture of extrinsic and intrinsic motivation (Holbrook, 2006) plays a determinant role in the decision to take part in collaborative activities. This because, motivation focus on the reason that underpins a decision to collaborate, and should be separated from the concept of value. In fact, as Holbrook (2006) specifies, the value of a product, service or activity perceived by the consumer depends on the objective and subjective consumer interaction, within a particular situation. A value co-creation process can be in fact also describes as the way actors interpret, and evaluate propositions based on the social construction of which they are a part, or at least aim to be part (Lusch and Vargo 2006; Prahalad and Ramaswamy 2004).

Thus, engaging actors into an innovative resources integration process require set appropriate incentive, either monetary or more intrinsic or subjective expectations (Lusch and Vargo, 2014).

The integration of different type of resources from various actors, in accordance with their role in the specific value co-creation process undertaken, is the third pillar of the value co-creation. All actors involved in a value co-creation process are viewed as resource-integrator, as they collectively contribute to set an ecosystem of shared value to perform activities in a collaborative process (Gupta and Lehman, 2005; Foster, 2007; Vargo and Lusch, 2004; Vargo and Lusch, 2008). Accordingly, Vargo, Maglio, and Akaka (2008) specify that value co-creation process rely on the resources that in this model are complementing each other to create benefits to actors involved. The greater value coming from value co-creation is strictly dependent on a predefined and heterogeneous set of resources exchangeable. As Vargo and Lusch (2011) argued, “the usefulness of any particular potential resource from one source is moderated by the availability of other potential resources from the other sources”, this suggests that co-creation takes form to cover a resources lack.

Actors involved, do not have all resources required to operate isolate, thus a value co-creation process allows actors, throughout resources integration and reciprocity, to achieve a greater benefit. The FP (1)<sup>2</sup>, namely the first of foundational aspects describing the S-D logic, considers skills and knowledge as fundamentals unit of exchange, thus in the S-D logic resources are mainly intangible or linked to specific expertise background. Following the S-D logic, resources contributed by actors can be classified in operant or operand resources (Vargo and Lusch, 2004). Operant resources are those that act upon other resources to create benefit, such as competences, thus are typically related to the human sphere (e.g., the skills and knowledge of individual), organizational, informational (e.g., knowledge about market segments, competitors, and technology), and relational (e.g., relationships with competitors, suppliers, and customers) (Hunt, 2004). Operand resources are those resources, which must be acted on to be beneficial, are thus typically physical. Nevertheless, leaving the marketing perspective, in a wider approach to co-creation, resources exchanged can vary be both

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<sup>2</sup> In framing the S-D logic as a mindset, Vargo and Lusch (2008, p.6), describe that exchange of service is the fundamental concern of organizations, markets, and society. Authors present a theoretical framework based on ten foundational premises (FP). S-D Logic foundational premises are reported in Table 2.1.

tangible and intangible, as well as highly specialized or not, or related to a functional or emotional sphere. The resource exchange theory can be a useful pattern to better understanding what can be exchanged in a collaborative process. Foa (1971, p.346) identifies at least six resources typology that can be exchanged, such as status, information, money, goods, and services, and Pyane (2008) added also work and time as resources valuable in a collaborative relationship.

Finally, some authors (Prahalad and Ramaswamy, 2004; Cova et al., 2011) pointed out that a value co-creation model has to be managed through a regulatory mechanism aim to define and monitor how resources are integrated between and among actors.

Thus, from this brief literature excursus, a co-creation model is characterized by the presence of several actors, who are engaged in a collaborative process, exchanging resources with the aim of gain mutual non-mutually exclusive benefits, and is regulated by a mechanism that defines how resources have to been integrated to create more value.

Table 2.1 - Service Dominant Logic Foundational Premises

(FP1) Service is the fundamental basis of exchange
(FP2) Indirect exchange masks the fundamental nature of exchange
(FP3) Goods are distribution mechanism for service provision
(FP4) Operant resources are the fundamental source of competitive advantage
(FP5) All economies are service economies
(FP6) The customer is always a co-creator of value
(FP7) The enterprise cannot deliver value, but only offer value propositions
(FP8) A service-centered view is inherently customer oriented and relational
(FP9) All economic and social actors are resource integrators
(FP10) Value is always uniquely and phenomenologically determined by the beneficiary

Source: Vargo and Lusch (2004); Vargo and Lusch (2008).

### 2.3 Crowdfunding as a value co-creation process

The present study relies on the following value co-creation definition, able to condensate all aspects previously discuss, and that, compared with the more specific research-area driven definitions, offers more adaptability to the crowdfunding context.

Leclercq et al. (2016, p. 5), define value co-creation as *“a joint process during which value is reciprocally created for each actor (individuals, organizations, or networks). These actors engage in the process by interacting and exchanging their resources with one another. The interactions occur on an engagement interface where each actor share its own resources, integrates the resources provided by others, and potentially develops new resources through a learning process”*.

Intuitively, the value co-creation definition offered by Leclercq et al. (2016) can be easily adapted to the crowdfunding context. As a value co-creation process, in the crowdfunding mechanism, each actors has a specific role, and is required to provide a predefined typology of resources, which integrated with those generated by other market actors, will lead to a specific outcome, from which each actors will gain a specific types of benefit.

In order to explain, in which measure the pre-purchase crowdfunding model can be read as a value co-creation model, is employed the conceptual model developed by Saarijärvi et al. (2013) that has the great advantage of deepening value co-creation processes acting on its constituents parts:

- “*Value*”- what kind of value? for whom?
- “*Co*”- through which kind of resources?
- “*Creation*”- through which mechanism?

Value prefix should clarify, within a value co-creation process, what kind of value actors searching to be encouraged to join the collaboration. As Saarijärvi and colleagues (2013) pointed out, is not sufficiently assert the value is jointly created, and that this value is multidimensional. In order to understand how market a many to many collaboration can create greater value, is necessary define, firstly, for which kind of actors value is created and, secondly, whether this value converges more toward a more utilitarian or hedonistic dimension, or if encompass both. The “co” prefix define which are the actors involved in the process, or more specifically, what kind of resources will be shared by actors. Finally, a third step is to clarify what kind of mechanism will capitalize the resources integrated into the process by actors, with the aim to generate value. The mechanism can be referred both to the role that in a specific co-creation context can be assigned to market actors, and to the whole mechanism that will allow the resource integration.

Clearly, the definition of these three constituents will be dictated by nature and by the objectives that the process aim to catch.

Framing the crowdfunding as a value co-creation process allows to better clarifying what kind of value is created for each crowdfunding actors, which are resources involved, and with which mechanism. Additionally, this theoretical framework is functional to address the research questions of this thesis, because framing the pre-purchasing crowdfunding model through this conceptual model, allow observing the financial collection process from the perspective of each actor. This, in turn, may help in reducing an important knowledge gap related to the crowd role in the pre-purchase mechanism.

Table 2.2 - Crowdfunding as a value co-creation process

"What kind of Value? And for whom?" <b>Crowdfunding actors</b>	"What kind of Value? And for whom?" <b>Actors' expected benefits</b>	"Co"- through which kind of resources? <b>Resources interchanged</b>	"Creation"- through which mechanism? <b>Process regulatory mechanism</b>
Entrepreneur(s)		<u>Material</u>	
		New market proposal	
	Financial resources	Reward	
	Visibility	Promotional effort	
	Legitimation	Graphics and video	Crowdfunding platforms
	Market test	<u>Immaterial</u>	
	New costumers	Time	
	Feedback from the crowd	Update	
	Social and relational capital	Storytelling	
		Emotional engagement	
Consumer / investors (s)	New consuming experience	<u>Material</u>	
	Immaterial rewards	Financial resources	
	Collaboration	<u>Immaterial</u>	Crowdfunding platforms
	Social benefits	Time	
		Feedback, comments	
		Expertise	
Crowdfunding platforms		Word of mouth	
	Fee	<u>Material</u>	
	Visibility	Technologies to create the project virtual storytelling	
	Reputation	Technologies to regulate financial transaction	
		Technical Support	Digital technologies
		Technologies to dialogue with the crowd	
		<u>Immaterial</u>	
		Platforms' community	
		Visibility	
		Social and financial regulatory norms	
		Marketing	

Source: Author, adapted from Saarijärvi et al., 2013.

Scholars have argued that in crowdfunding, value is co-created (e.g. Ordanini et al., 2011) by the two sides of the market; project owners and backers. Nevertheless, looking at the relationship and processes that allow capital collection, also crowdfunding platform intervene in the process. Thus, differently from other well-known forms of collaboration among market actors, in the crowdfunding context, value co-creation process is not a dyadic interaction process between two entities, but relies on the collaboration and the interaction of a multiplicity of stakeholders.

In the S-D logic, firms cannot deliver value but only offer a value proposition. Vargo and Lusch (2008), identifying the foundational premises of S-D logic, asserting that in a value co-creation process, a firm can offer its applied resources and collaboratively create value, but cannot create or deliver value alone (FP7). In the crowdfunding context, this axiom is verified. Crowdfunding entrepreneurs are those who share with a large audience a new market proposal, but this proposal cannot be realized until the beneficiaries of the entrepreneurial proposal, both customers and crowdfunding platform, integrate and apply the resources of the service provider with their resources (Vargo and Akana, 2009).

In the pre-purchasing model, the entrepreneurs searching for financial resources, offers a new product or service proposal, not previously tested in the market, posing at the disposal of the crowd, a mix of material and immaterial resources. These resources provided by entrepreneur, should reduce backers' uncertainty toward a market proposal presented in an exchange domains where uncertainty and information asymmetry are dominant (Belleflamme et al., 2014; Colombo et al., 2015). Entrepreneur, thus, employ and provide several material and immaterial resources finalized to engage the crowd in the value co-creation process. Previous researches suggest that an effective storytelling is essential to establishing firm legitimacy and acquiring capital (Roddick, 2000; O'Connor, 2004). The entrepreneurial narrative in the crowdfunding context assumes specific connotations (Frydryck, 2016) because the entrepreneurial proposal is presented on a digital platform, through a set of intangible and tangible resources, able to create a shared sense-making between the entrepreneurs and the stakeholders (Martens et al., 2007). This implies that the entrepreneur creates an emotional storytelling that reflects the emotional engagement embedded in the market proposal, in order to increase the possibility of successful funding. Time spent by entrepreneurs for the launch of the new proposal via crowdfunding, the virtual storytelling, and emotional engagement and experience can be considered as immaterial resources that entrepreneurs make available to the crowd. In this framework, a mix of graphical, textual and video description mainly represents material resources contributed by entrepreneurs, throughout which backers can evaluate the utility generable by the product proposed. Among the material resources offered by the entrepreneurs, rewards, in the form of pre-purchase of product, assume a central relevance. Entrepreneurs, in order to achieve a large audience, spread his proposal investing in promotion by traditional and non-traditional media. As in the

S-D logic, in the crowdfunding context entrepreneurs propose value and provide resources as input to its realization.

Since in the value co-creation model, the consumer assume the role of the main stakeholder (Agrawal and Rahman, 2015), the value can be co-created only when a customer joins the collaboration proposal made by the entrepreneurs. In the S-D logic's conceptualization of value co-creation, Vargo and Lusch (2004, 2008) affirm that "Value is always uniquely and phenomenologically determined by the beneficiary (FP10)". Consequently, in the S-D logic's value co-creation goes beyond a mere invite to the customer in business process, embracing the concept of the market as a "forum for co-creation experiences" expressed by Prahalad and Ramaswamy (2004). In the crowdfunding context, supporters are immersed in a peculiar consuming-investing experience, where consumers can debate in the crowd, gaining the possibility to choose in autonomy a new market proposal. In the pre-purchase model consumers acquire the power in define which proposal can approach to the market, and thus they benefit from multiple experiences since they have the possibility to share several resources (financial, of consuming, expertise, knowledge etc.).

As pointed by Prahalad and Ramaswamy (2004) the development of unique values to customers, resulting from converging roles of producer and consumer. Looking at the crowdfunding as a virtual space of potential co-creation experience, individuals' percept a high degree of freedom in choosing for which experience they are willing to pay for. Crowdfunding thus enlarges co-experience opportunities, as backers can simultaneously act as co-producer or co-investors of a new market proposal. Following the "Five co-s" model developed by Russo-Spena and Mele (2012), a consumer can perform several roles: (1) co-ideation, (2) co-evaluation of idea, (3) co-design, (4) co-test, (5) co-launch. Ordanini et al. (2011), looking at the crowdfunding as a value co-creation model, identify other two roles of consumer participation in crowdfunding: (6) co-investment and (7) co-production. All these roles that a consumer can perform are identified looking at the type of collaboration required by the firms, conversely, in the crowdfunding context, supporters can choose if and how many roles perform and with which intensity, in accordance with the benefits expected from the crowdfunding participation. This further contribute to explain why in the crowdfunding context, a supporter can participate exchanging several resources, both material and immaterial. This resources

exchange between the crowd and the entrepreneur is made possible by a set of technologies provided by the crowdfunding platform. If a supporter found the crowdfunding proposal made by an entrepreneur valid and reliable, can limit his participation to financial contribution, or can act more proactively, socializing within other supporters, acting as an ambassador (e.g. spreading the crowdfunding campaign among his or her own network), or performing more specialized activity, such as contribute with feedback and insight to the product design and test. Obviously, in the pre-purchase mechanism, supporters are mainly co-investor and co-producer, as they finance the production of a product presented in the prototype version before it is marketed, with the aim to be among the early adopters. Finally, even if a backer is not emotively engaged with a crowdfunding campaign, the mere fact that a portion of consumers chooses to finance a market proposal, implicitly all the supporters participate in the test and the launch of a new market proposal certifying his legitimation in approaching to the main market.

Customer participation in the value-creation process suggests a larger, more extended venue for value creation because neither firms nor the crowd lack of adequate resource to create the same value autonomously. In the crowdfunding business model, crowdfunding platforms intermediate the demands for the test and launch a new market proposal, with the willingness to the crowd of experience a more inclusive role in business processes, and in the market outcomes. The crowdfunding platform is not the owner of resources exchanged; it facilitates social and financial interactions with digital technologies-based systems. The intermediary provides functionalities to match benefits expected, with the scope to mitigate information asymmetries and minimizing transaction costs for entrepreneurs, and maximizing the experience for the crowd. Beyond online payment systems for the collection of capitals, these platforms provide, such as a virtual forum or a community, an architecture of social and transaction norms that regulate the crowd-entrepreneur relation. As a web-resources integrator, crowdfunding platform benefits from successfully crowdfunding campaign both in terms of revenues and in terms of social capital. The fee represents the revenue stream of crowdfunding platforms, applied at a fixed rate or variable rate to the capitals successfully collected by entrepreneurs. In terms of social capital, the crowdfunding platforms benefit from the successful campaigns in term of visibility, and thus in term of community that can be reached. The higher is the number of successfully funded

crowdfunding campaigns, the higher is the platform reputation. A well-reputed crowdfunding platform is often associated with a high level of social capital, trust relationship, transparency and community engagement. This favours larger community, and more demand from the entrepreneurial side.

All these benefits searched by crowdfunding' actors are realized only when the crowd successfully funds the entrepreneurial proposal. Discussing the value co-creation process from the perspective of the outcome, requires to clarify the concept of "value". The concept of value can have several interpretations, and if it is not linked to a specific purpose or objective, it results in an elusive concept (Woodall, 2003; Grönroos, 2011).

Crowdfunding, in the sense described by Gummeson (2006) is complex because it subtends many-to-many relationships, as different agents participate in the value creation, and the structure and functioning of value processes require and include a broader range of roles and resources. It is precisely this complexity that configures a broader concept of value, that in the Gummeson's perspective (2006, p. 328) should be "centric-balanced", as the collaborative and interconnected nature of value co-creation requires that must be designed in order to search for benefits for all actors involved. In this sense, crowdfunding realizes, at least theoretically, what Gummeson (2008) defined "balanced centrality", namely the ability to create a long-term relationship and promote a well-functioning of market adopting a more opened perspective, that encompasses the expectations of many stakeholders, from customer to society at whole. This perspective converges with the observation of Agrawal et al. (2015, p.446) on the outcome of a value co-creation process, that consider "*efforts of various stakeholders engaged in co-creation of value for themselves and others is an example of how co-creation can greatly impact society*".

## **2.4 Crowdfunding as a stakeholders engagement model**

As anticipated, in crowdfunding the promoters can benefit from a series of collateral benefits deriving from direct relations with the crowds and the media exposure. The relevance of the social capital in the crowdfunding mechanism is confirmed by seminal studies that discuss the possibility of extending crowdfunding from the economic purposes of organizations, to the corporate social responsibility commitment (Shaike and Marom, 2017; Spanos, 2018).

Corporate Social Responsibility (CSR) refers to “corporate decisions fostering social, corporate governance, ethical and environmental issues.” (Renneboog et al., 2008). Although relevant theory (Carroll, 1999) identifies Bowen (1953) as a seminal work, there is not a universally accepted definition of CSR. In a broader literature review, Dahlsrud (2008) showed that in the CSR conceptualization, the prevailing reference is to stakeholder theory of Freeman (1984). An organization committed in CSR activities, is thus an organization that recognise that is a part of society, not separate from it, and being conscious that stakeholders well-being depend on each other, and is likely to be moving along a spectrum of relationships with its stakeholders (Andriof and Waddock, 2002). CSR activities are, in fact, addressed both toward internal and external stakeholders (Hopkins, 2003).

Stakeholder engagement means creating new relationships, using the principles underpinning CSR, with the individuals, groups and organisations. Andriof and Waddock (2002) define stakeholder engagement as a process to adequately managing businesses operational and reputational risks, creating interaction with stakeholders and building social capital. In the resource-based view perspective (Barney, 1991) the accumulation of knowledge about stakeholders provides to the organization an intangible asset that should increase the ability of companies to provide innovative solutions. In this perspective, the stakeholder management processes are considered as a two-way communication model, through which the management actively seeks to dialogue with the stakeholders with the aim of defining a system of shared values regarding issues of common interest. Inclusiveness is the founding criteria of stakeholder engagement models, as these models are defined to offer stakeholders the possibility of a greater participation in the definition of companies CSR policies.

Crowdfunding can be analysed through the stakeholder theory perspective, considering that this model allows a direct, and more destructured, forms of dialogue and collaboration among firms and the crowd. Shaik and Marom (2017) deepen the role of CSR within the context of crowdfunding platforms, mapping and identifying stakeholders in crowdfunding along three dimension (power, legitimacy and urgency of the claim). Additionally, the study of Shaik and Marom pose adequate basis to further extending the possible interrelations between CSR and CF, offering a conceptual

framework for measuring the social responsibility commitment of Crowdfunding platforms.

Spanos (2018) adopts a case study in the banking industry, highlighting that crowdfunding enlarges CSR opportunities for organizations. Crowdfunding is emerging as a new financial model able to mitigate the equity gap for several organizations (e.g. SME, social enterprises) often excluded from traditional financial channels, especially in the seed early stage. In the CSR literature, the firms' size is considered a predictor of the CSR engagement and performance. A firm with higher cash flow or with a resource-slack is better able to reply to the CSR demand of stakeholders and society, as well as, large firms tend to be more exposed to social judgments, and thus are more proactive in activating CSR activities (Donaldson, 2001; Johnson and Greening, 1999; McGuire et al., 1988; Brammer and Millington, 2006). From the perspective of the small and medium company, a firm less equipped of knowledge and financial resources, can thus limitate expenditure or investment in CSR.

Crowdfunding can alleviate this condition by offering the opportunity to expand CSR funding options, with the support of the crowd. Additionally, using the crowdfunding for financing CSR, allow organizations to reply more effectively to the demand for transparency from stakeholder on how a company performs CSR activities.

Stakeholders, such as consumers, suppliers, community, can be sceptical toward firms' CSR activities. Crowdfunding offers a precious opportunity to build trust and commitment inviting the crowd to actively discussing and participate to define the company's CSR activities and policies. A more proactive dialogue can be reached employing crowdfunding and crowdsourcing principles also to increase the employees' engagement in CSR strategies. Employees can participate in the selection of new CSR activities, or promote internal fundraising on a project or cause that can promote CSR culture. This, in turn, should increase performance, guarantying a better alignment between organizations and stakeholders expectations.

Taking together, these studies suggest that crowdfunding can be fruitfully employed not only to explore financial or economic benefits but also to expand CSR benefits, allowing a more direct interaction with a wide spectrum of stakeholders.

## 2.5 Framing research perspectives

Entrepreneurial activities are recognized as one of the main important pillars of the wealth of an economy (Baumol and Strom, 2007), in this sense, the emerging phenomenon of crowdfunding, is progressively expanding as a new financial source able to overcome the lack of financial resources available for entrepreneurship. Framing the CF mechanism as a value co-creation process, intuitively, make clearer that the ability of crowdfunding to adequately supporting the entrepreneurial growth is strictly linked to the architecture of value searched for by various actors engaged in the processes of resource exchange. The crowdfunding process configures a particular social and financial resources process assembly, which poses at the center of the financial resource collection, the crowd. The pre-purchase model, differently from other models, offers a unique occasion to observe crowd behavior in a value co-creation process that requires the integration of multiple resources, from multiple actors, that can perform likewise several roles. The literature in this sense has posed attention to the reward crowdfunding market as a whole, but in a pure reward crowdfunding campaign, not always the crowd is asked to evaluate, test and financing a prototype that can represent a new market proposal.

Intuitively, in the crowdfunding pre-selling mechanism investing, consuming and social experience tend to blend. The complex mix of financial and non-financial motivations in this particular model is not fully investigated, thus limiting the knowledge creation about a model that is leading a market growth, with overall benefits to the economy (Mollick and Kuppuswamy, 2014). This thesis builds on the call from previous research (Moritz and Block, 2016; Block, Colombo, Cumming, and Vismara, 2018) to further investigate the role of the crowd in the collective financial resources mechanism. In this sense, a gap literature is thus identified on the factors that can affect the crowd decision to engage as a co-producer and co-investor toward a new entrepreneurial market proposal.

Firstly, as highlighted by previous studies, in the reward-based crowdfunding, supporters are encouraged to support financially a crowdfunding proposal by the possibility to obtain rewards, both materials and immaterials (Gerber et al., 2013; Giudici et al. 2013; Frydrych, 2016). Reward in the pre-purchase model encompass a

new product, thus this implies that supporters evaluate a new market proposal, that presumably, reflect a specific business model based on a specific set of features, such as team competences and reliability, and product quality, product crowdfunding price, availability of additional materials or emotional rewards. Looking at the pre-purchase model from an utilitarian perspective, require to deepen how the crowd evaluate and judge a new market proposal. Specifically, in order to facilitate financial collection by entrepreneurs, a gap in the literature was detected with reference the crowd ability to discriminate among new entrepreneurial proposals. The focus is on the evaluation mechanisms adopted by new consumers.

As previously discussed, from a social perspective, the crowdfunding mechanism heavily rely on network relationship and shared values and meanings. Since in the crowdfunding, herding behavior and word of mouth were found determinant mechanisms that influence the financial resources collection, is important to address in which measure in the pre-purchasing model, information made available by several actors involved in the financial collection impact on the consumers' willingness to participate and pay.

Finally, if the crowdfunding as a value co-creation model can create benefit from others actors, beyond the leading actors acting in the crowdfunding context, a new stream of research in the crowdfunding context could be related to positive externalities coming from successfully founded crowdfunding campaign. A positive externality on consumption occurs when the consumption of a good confers a benefit on third parties who are not involved in the production or consumption process. A third aim of the explorative study is to investigate whether other market actors, such as new consumers, benefits from the information cascade produced by supporters during the crowdfunding time window.

In this perspective, the present study aims to explore new hypotheses related to the three main topics:

- ✓ The crowd motivations' in its role of co-producer and co-investor, identifying to what extent crowd is driven by irrationality or by expertise in deliver to the main market valuable new entrepreneurial proposals;
- ✓ The role of the electronic word of mouth, deepening the informational abilities of specific actors involved in the crowdfunding campaign;

- ✓ The positive externalities and their effects, on the actors do not involved in a pre-purchase campaign.

Taking together, these three perspectives aim to contribute to the knowledge and understanding of crowd motivations and expectations, within the specific context of pre-purchase reward crowdfunding, by investigating the capital providers' activities and perceptions toward a new market proposal, from both a utilitarian and a social perspective. Findings from these separated, but strongly interdependent studies, can be relevant both from academic and theoretical perspective, giving that deepening the role of the crowd in the crowdfunding mechanism, further contribute to clarify on which dimension entrepreneurs need to pose attention, in order to overcome information asymmetry between themselves and potential investor in the crowdfunding market. Additionally, the aim of the third study, represent a seminal tentative to examine the ability of crowdfunding to produce positive externalities for the main market.

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## **CHAPTER 3**

### **Research framework and Sampling Procedure**

#### **3.1. Introduction**

This chapter provides an overview of the research methodology adopted in this study. In particular, it describes the research methods, the sources of data, the sampling plan and reliability analysis of the method employed.

#### **3.2 Research Approach**

Research is creating new knowledge (Neil Armstrong). Therefore, conducting a research is the consequence of the emergence of a question that has not yet been answered, or that has been not fully answered. In order to frame the goals of a specific project, it is useful to identify the purpose of the research. Research projects can be classified into three categories: exploratory, descriptive, and explanatory research (Saunders, 2009). These three type of categories are adequate to reply to certain types of questions, relying on different sources of data and analyses.

Exploratory research is defined as the initial research into a hypothetical or theoretical idea. An exploratory research project is an attempt to lay the groundwork that will lead to future studies or to determine if what is being observed might be explained by a currently existing theory. The goal of the exploratory research is to formulate problems, clarify concepts, and form hypotheses. Exploratory research typically seeks to create hypotheses rather than test them.

Due to the limited evidence on the aspects that may interfere with the decision of advocates in the pre-purchase crowdfunding market, this study adopts an explanatory research pattern. An exploratory strategy is particularly suitable for this study, considering that it allows discovering and evaluating, and forming hypotheses regarding some dimension that has not been fully investigated in the pre-purchase crowdfunding model.

### 3.3 Research Method

Yin (2009) defines the research design as “a logical plan for getting from here to there” where “here” represent the initial set of questions to answer, and “there” as the final set of answer or conclusion obtained from studies. Accordingly to the Yin’s definition, the research design deals with the decision for data types and sources, collection and analyses methods, as well as, the identification of which dimension and variables are really of interest (Blaikie, 2010; Bryman & Bell, 2011). As Saunders et al. (2000) pointed out that there are several research strategies that can be employed in the research such as experiment, survey, case study, grounded theory, ethnography and action research. These strategies should not be considered as being mutually exclusive. In this study, a mixed research method is applied, that is a survey strategy applied to a case study.

Creswell (2013, p.97), stated “The case study method explores a real-life, contemporary bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in depth data collection involving multiple sources of information, and reports a case description and case themes”. Although some researchers consider case studies a controversial approach, according to Eisenhardt and Graeber (2007) case studies are particularly suitable for extending relationship and logic among constructs. Employing a case study can offer some relevant advantages, among which (i) the exploration of data is conducted within the context of its use (Yin, 1984); (ii) the possibility to collect both qualitative and quantitative data (Yin, 2015; Zucker, 2009; Eisenhardt, 1989); (iii) qualitative data offer the possibility to explain the complexities of real situations which may not be captured through experimental research (Zaidah, 2003). This is a research strategy that fits with exploratory studies (Cargan, 2008, p. 204), and additionally can provide insights for a theory-building (Eisenhardt, 1989, p. 535). With reference to the case study selection, considering that the purpose of the case study research is to get an in-depth understanding of at least one case, Eisenhardt (1989) suggests conducting more than four cases, in order to derive strong generalizable findings. Nevertheless, some authors argue that the number of case is not a pre-condition to generalizability. According to Yin (2014, p.63), even one case is enough to generate valid data and result. Following Stake’s approach (1995, p.3), with reference to the number of cases to be

conducted, he concludes that is not necessary to define a finite number of a case study. In terms of advantages, using a case study is particularly suitable to gain a holistic and real-world perspective (Yin, 2014).

In the crowdfunding literature, the case study method has been employed by several studies (Mollick, 2014; Lehner, 2014; Gleasure and Feller, 2016; Lam and Law, 2016; Aitamurto, 2011; Schwienbacher and Larralde, 2010; Althoff and Leskovec, 2015). This confirms the ability of this research method of provides realistic insights into the fundraising process, without underestimating social and communitarian ties particularly meaningful in some crowdfunding models, such as the donation or the reward crowdfunding model. A case study enables researcher to deepen multifaceted social phenomena (Yin, 2009), thus given the complexity of crowdfunding economic and social interrelations, using a case study might allow, with adequate robustness, to depict the variety and the distinct features of crowdfunders' engagement in the crowdfunding market. The reasons that justify the use of the selected case study are rooted in the relevance of social capital and trust relationships in the crowdfunding market, both as transaction and social mechanism. As the concepts of social capital and trust are strictly dependent on the quality and intensity of interactions developed in and with a community (Ellision et al., 2007; Nahapiet & Ghoshal, 1998), the case study configures an occasion to deepen the crowdfunding mechanism relying on a community of consumers, who share, as social group, trust relationship, common interest and beliefs. In the frame of this study, a case study results adequate to investigate research questions, due to the limited research undertook on the topic proposed, and due to the privacy policy limitation on crowdfunding platforms.

As a case study is a detailed study based on the direct observation of intrinsic details of individuals' mechanism of choice or behaviors, this research method is particularly suitable for an exploratory study that aims to search for patterns or driver that can motive or discourage the crowd in participating to financial and commercial entrepreneurial initiatives via crowdfunding. This study is based on a case study of a serial enterprise crowdfunding, Ludus Magnus Studio LTD (detailed in the following section).

As specified before, a case study allows observing intrinsic details of individuals or organizations. Since the study aims to catch crowd perceptions' about financial and social implications, a reliable feedback can be obtained only through a direct

interrogation of the actors. This further explains why in this study the second research method employed is a survey.

A survey is defined by Sreejesh et al. (2014, p.58) a quantitative instrument, through which gather empirical data asking a representative sample of a population. In the survey research method, questions follow a pre-formulated order, this guarantees the standardizations of dimensions investigated, leading to a higher degree of objectivity of results (Sreejesh et al., 2014). A survey can be conducted in different manners (face to face, by phone, by mail or with the aid of computer programs). The specific method will be defined by the level of interaction searched by the researcher with the population of reference. Even if this method is often used for descriptive studies, data coming from a survey can be used as well for quantitative research (Sreejesh et al. 2014; Muijs, 2004). If dimensions gathered with a questionnaire are numerically coded by using a Likert scale, data obtained can be turn from qualitative to quantitative and employed with statistical instruments of analysis for explanatory research.

In the crowdfunding literature, several researchers have developed questionnaires or conducted interviews with crowdfunding actors, especially to deepen what motive the entrepreneurs or the crowd in participating in this particular co-creation process (Gerber and Hui, 2013; Cholakova and Clarysse, 2015; Jian and Shin 2015; Bretschneider, Knaub and Wieck, 2014; Gerber, Hui and Kuo, 2012). Considering that crowdfunding shows some particular features, and considering his newness in the business literature as a topic, a survey or a questionnaire is often considered a reliable method to explore an emergent phenomenon. In the framework of this study, the survey is a particularly suitable instrument, able to catch effective backers' perceptions on the crowdfunding experience.

### **3.3.1 Case study background**

The case study is the crowdfunding campaign “Black Rose Wars”, launched on Kickstarter in 2018 by *Ludus Magnus Studio*<sup>3</sup> in the game category.

Kickstarter represents a leading reward-based crowdfunding platform based in the USA, where project supporter receive non-financial rewards for their contributions (Mollick, 2014). Kickstarter adopts an all-or-nothing crowdfunding approach, thus if a project

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<sup>3</sup> <http://ludusmagnusstudio.com/>

proposal does not reach the capital requested, the campaign is defined failed, and supporters are reimbursed for financial support made to the campaign. Kickstarter projects fall into 15 categories<sup>4</sup>, since its launch in April 2009, this platform has several million community members, who have combined to pledge billions of dollars to fund creative and entrepreneurial ideas. At the date of this study, through Kickstarter was collected \$3,904,099,839 billion from 150.456 successfully funded projects, supported by more than 15.000.000 backers, 35% of which are serial backers, namely recurrent users. The game category is among the five categories for the number of the projects launched, with a success rate of 37%, slightly greater than the general success rate<sup>5</sup> of the platform (36.38%). In terms of projects launched, in this category were funded more than 15.000 projects, with \$914 millions pledged. Interestingly, this category shows the highest level of capital collected. Even if categories such as Film, Publishing, and Music are on the podium relatively to the number of the proposals presented to the crowd, the game category is the first for financial resources allocated to these projects (followed only by the Design category, with \$847 million collected).

Ludus Magnus Studio is an Indie hobby game company who has gained a reputation in the crowdfunding games' market from its first successful Kickstarter Project, Nova Aetas, launched in 2016, founded by 1.125 backers. The second crowdfunding campaign was launched in 2017, with the presale of Sine Tempore game. The campaign reached the 1455% over the funding requested and was founded by more than 4094 backers worldwide. Finally, the third campaign, that represents the referring population of this study, Black Rose Wars, closed with an overfunding of 2185% with respect to the funding requested. A community of 8223 supporters participated in the campaign. The 95% of supporters in this campaign are returning backers, namely backers that had backed a project on Kickstarter before.

Table 3.1 - Ludus Magnus Studio, Crowdfunding campaigns' overview

Crowdfunding campaigns	Funding Goal	Funding Obtained	Overfunding	Supporters	Year
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<sup>4</sup> Kickstarter categories: Art, Comics, Crafts, Dance, Design, Fashion, Film & Video, Food, Games, Journalism, Music, Photography, Publishing, Technology, Theater. Accessed: July,2018.

<sup>5</sup> Kickstarter calculates the success rate by dividing the number of successfully funded project by the number of all project that have reached their deadline, including successful, unsuccessful, suspended and cancelled projects.

Nova Aetas	\$40.000,00	\$170.118,00	425%	1103	2016
Sine Tempore	\$45.000,00	\$654.848,00	1455%	4094	2017
Black Rose Wars	\$60.000,00	\$1.311.558,00	2185%	8223	2018
Grand Total	\$145.000,00	\$824.966,00	-	13.420	-

### 3.4 Data collection & Methods

Theoretically, the population to be studied should comprise all backers who had funding experience on Kickstarter. The Kickstarter protocol on personal protection information prevents access to all backers' mail due to the privacy concerns. This explains why this study considers a non-probabilistic sampling procedure, e.g. a convenience sampling was used to collect data. The purpose of this research is to investigate and describe the crowdfunding phenomenon both as a transaction mechanism and a social value exchange phenomena. Considering the research aims, this study matched three datasets.

Starting from Kickstarter, this study collected information about the 8223 backers who participated in the LMS crowdfunding campaign. A second source of data comes from BackerKit<sup>6</sup>, a data management platform for crowdfunding proponents, with which is possible after the campaign, manage several aspect related to the backers participation. On BackerKit successful project creators can manage a set of strategic and useful information about backers, such as shipping details, preferences, quantities pre-ordered, pledge levels and additional orders. The most interesting feature of this management tool is that it works as an extension of the crowdfunding offer, because on this platform, after the campaign closing, new supporters can pre-order the product or the service crowdfunded at similar conditions offered to the crowd in crowdfunding. Activating the *late pledge option* in Kickstarter, a successful crowdfunding campaign can continue to collect pre-orders until the entrepreneur decide to close the pre-order phase to pass to the production one. In addition, as a crowdfunding campaign offer the possibility of additional materials, on Backer Kit both crowdfunding and late supporters can integrate their order with these materials. LMS open the late pledge option from July to September 2018. This study gathered information from Backer Kit on supporters intervened in the late pledge phase. Finally, a third set of information was retrieved from

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<sup>6</sup> <https://www.backerkit.com/>

the survey, submitted both to Kickstarter supporters and to late pledge supporters. Results from survey were thus accorded with data gathered from both Kickstarter and Backer Kit (see Table 3.2). This research strategy follows to obtain two samples of crowdfunding consumers': a group who participated in the crowdfunding campaign, and a group that did not participate in the crowdfunding campaign but that get the opportunity to pre-purchase the same product after the campaign closing.

Table 3.2 – Dataset Overview

<i>Data Source</i>	<i>Observation available</i>	<i>Data</i>
Kickstarter	8.223	Kickstarter Backers' information.
Backer Kit	316	Late Pledge Backers' information.
Survey	8.539	Backers' motivations and perception.

### 3.4.1 Primary Data: the Survey

This study adopts a survey to catch more precisely a complex set of motivations, benefits, and perceptions associated with the crowdfunding experience. Gathering information in the social sciences, marketing or business, relative to attitudes, emotions, opinions and people's preferences, require considering measuring an individual's attitude towards complex entities. Thus, it is unrealistic to consider measuring an individual's attitude towards complex entities with measurement scales consisting of a single item. The methodology adopted is a questionnaire based on a Likert-scale (Likert, 1932) submitted to the samples, compatibly with the theoretical framework that conceptualizes a measurement scale as a series of indicators, the items, able to capture different aspects of a single common latent construct. In the following section, will be discussed the sampling procedure, the interview protocol and the tests for the reliability of the items presented to the crowd within the questionnaire.

The Likert scale attributed to Rensis Likert (1932) is one of the most used technique for the assessment and measuring psychological constructs trough attitude score (Croasmun & Ostrom, 2011). Likert (1932) developed the principle of measuring attitudes by asking people to respond to a series of statements about a topic, in terms of the extent to which they agree with them, and so tapping into the cognitive and affective

components of attitudes. McIver and Carmines (1981, pp. 22- 23) described the Likert scale as *“a set of items, composed of approximately an equal number of favorable and unfavorable statements concerning the attitude object, is given to a group of subjects. They are asked to respond to each statement in terms of their own degree of agreement or disagreement. Typically, they are instructed to select one of five responses: strongly agree, agree, undecided, disagree, or strongly disagree”*.

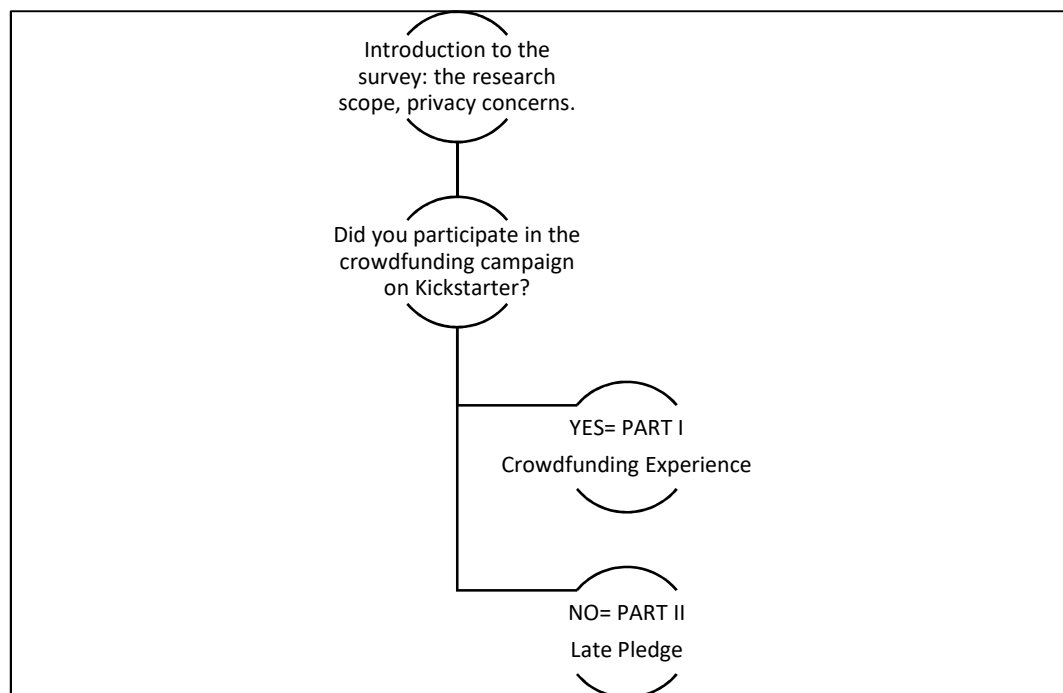
Likert-scale, thus, use fixed choice response formats and is designed to measure attitudes or opinions. A Likert-type scale assumes that the strength/intensity of the experience is linear, i.e. on a continuum from strongly agree to strongly disagree, and assumes that attitudes can be measured. Respondents are presented a choice of pre-coded responses with a neutral option of being neither agree nor disagree. As noticed by Spector (1992), four features describe this type of scale. First, a scale must contain multiple items that can be combined or summed. Second, each individual item measures a dimension that underlies a quantitative measurement continuum. Third, each item presented to the respondent has no “right” answer, this makes this type of scale different from a multiple-choice test. Finally, each item in a scale represents a statement and respondent are asked to indicate which of available responses can reflect his/her feeling about the proposed statement. Reasons for using a multi-item measure, instead of a single item, for measuring social attributes were discussed by several authors (McIver and Carmines, 1981; Spector, 1992). The major critiques are associated with the discrimination power of the individual item. In fact, an individual item allows only categorizing people into groups, without the possibility to discriminate among fine degrees of an attribute. As noticed by McIver and Carmines (1981, p.p. 15), *“is very unlikely that a single item can fully represent a complex theoretical concept or any specific attribute for that matter”*. Thus, going beyond the validity, accuracy or reliability, the fundamental problem is that the researcher rarely has sufficient information to estimate social attitudes with an individual item.

Usually, a Likert scales employs five categories of responses ranging from 5= strongly agree, to 1= strongly disagree, with a neutral response in central position between extremities “strongly agree” and “strongly disagree”. However, there is a debate among researcher concerning the optimum number of choice in a Likert-type scale. Considering the number of Likert items, Cronbach (1951) stated that increasing the number of items

from three to five, contributed to a higher internal reliability and extra discrimination power. Some researcher suggest that a larger numbers of response categories led to higher levels of reliability, and validity (Garner, 1960; Hancock and Klockars 1991). On the contrary, others authors suggested that the number of options to reply do not have any influence on the reliability of the scale, or on its validity (Chang 1994). Overall, evidence suggests that (i) researcher should avoid presenting few option responses in order to avoid that respondent could feel not able to express adequately their true opinion; and (ii) benefits of increasing the number of responses will vanish if more than seven options are provided to reply, because respondent might be not able to discriminate among reply (Miller, 1956). Given this brief background on the benefits related to the Likert-type scales, in order to grab several dimensions related to the consuming and investing experience of consumers in the crowdfunding market, in this study all items were measured on a five-point Likert-type scale, ranging from “strongly disagree”, to “strongly agree”. The preference expressed by supporters are in this survey coded numerically (from from 5= strongly agree to 1= strongly disagree).

The survey follow a two-way reply and was structured in three main parts. The first section included an explanation of the general research purposes, including the policy for privacy concerns and email checking to match all the databases used. In the second section, participants were asked to indicate whether they participated in the crowdfunding campaign or to the late pledge phase (see Fig. 3.1). Accordingly, respondents were sorted into two sample and invited to reply to the survey in the third part.

Figure 3.1 – Survey structure



### 3.4.2 Protocol Interview

The research model was tested using an online survey method, in which the 8223 supporters of the Black Rose Wars, and 319 supporters from Backer Kit were invited to participate, for a total of 8542 survey delivered. Supporters were invited by mail, they received an introduction mail to explain the motivations and aims of the survey. A hyperlink of the on-line questionnaire was included in the e-mail, thus the community could directly access to the survey page via the link. Supporters who participated in the survey were rewarded with a special additional prize offered by LMS. Respondent were asked to recall and fill the survey accordingly with their crowdfunding or late pledge experience. A pilot study was conducted prior to the actual data collection, in which 50 randomly selected supporters were asked to fill out the online survey and report any difficulties in understanding the questions, inviting to give suggestions. Results indicated that there were no major problems in understanding the questionnaire instruction and items.

### 3.4.3 Survey Construct Items

All instrument items included in the questionnaire are adapted from previous research, with some amendments where needed to fit the context of the present research. In particular, starting from the literature review discussed in Chapter 1 (see section 1.4), the questionnaire submitted to crowdfunding supporters, consider several dimensions in order to catch drivers and motivations of advocates in the pre-purchase crowdfunding market. Dimensions from which derive items included in the questionnaire are discussed in depth in the research strategy of the explorative study (see Chapter 4, section 4.3).

Table 3.3 - Measurement, items and constructs for Crowdfunding Experience Sample

Construct items	Items (n°)	Instruments
<i>Expertise</i>	4	I am an expert in the game sector.
		I well know how Kickstarter works.
		I often support other KS campaigns in the games category.
		I often support KS campaigns in other categories.
<i>Team</i>	2	The team is competent and reliable.
		The team communicates adequately and frequently with supporters.
<i>Quality</i>	4	The overall quality of KS campaign was high (textual description, images, multimedia contents etc.).
		<i>Team</i>
<i>Reward &amp; Pledge Choice</i>	6	Pre-purchase price is a great deal.
		Exclusive Kickstarter materials influenced my reward choice.
		The number of times the reward had already been chosen by other supporters influenced my choice.
		The Add-ons motivated me to choose the reward.
		The stretch goals motivated me to choose the reward.
		I supported the campaign for an amount greater than the reward value, in view of additional orders.
<i>Word of mouth</i>	6	Shipping time estimation influenced my pledge.
		Based on the reviewer importance, reviews are trustworthy.
		Reviews reinforced the information I had previously about the product.
		Reviews motivated me to make the purchase decision.
		Backers comment and opinion reinforced the information I had previously about the product.
		Backers comment and opinion reinforced my willingness to purchase the product.
<i>Word of mouth</i>	6	I interacted with other supporters of the project.

Source (Author)

Even if all backers received the same survey link, items presented to Crowdfunding' Backers slightly differ from the items presented to Late Pledge backers. This is justified due to the condition that the two samples have supported the project at different moments.

Table 3.4 - Measurement, items and constructs for Late Pledge Sample

Construct items	Items (n°)	Instruments
<i>Expertise</i>	4	I am an expert in the game sector. I well know how Kickstarter works. I often support other KS campaigns in the games category. I often support KS campaigns in other categories.
<i>Team</i>	2	The team is competent and reliable. The team communicates adequately and frequently with supporters.
<i>Quality</i>	3	The quality of the product is higher than the average quality of games pre-launched on Kickstarter. I was interested in the rewards offered during the campaign. Pre-purchase price is a great deal.
<i>Reward &amp; Pledge Choice</i>	5	Exclusive Kickstarter materials influenced my reward choice. The number of times the reward had already been chosen by other supporters influenced my choice. The Add-ons motivated me to choose the reward. The stretch goals motivated me to choose the reward. Shipping time estimation influenced my pledge.
<i>Word of mouth</i>	5	Based on the reviewer importance, reviews are trustworthy. Reviews reinforced the information I had previously about the product. Reviews motivated me to make the purchase decision. Backers comment and opinion reinforced the information I had previously about the product. Backers comment and opinion reinforced my willingness to purchase the product.
Source (Author)		

Items employed in the survey, are thus coded as research items (see Table 3.5) and tested for reliability and consistency, as discussed in the next section.

Table 3.5 – Survey Research Items

Construct items	Instruments	Research Items
<i>Expertise</i>	I am an expert in the game sector.	<i>Exp_1</i>
	I well know how Kickstarter works.	<i>Exp_2</i>
	I often support other KS campaigns in the games category.	<i>Exp_3</i>
	I often support KS campaigns in other categories.	<i>Exp_4</i>
<i>Team</i>	The team is competent and reliable.	<i>Team_1</i>
	The team communicates adequately and frequently with supporters.	<i>Team_2</i>
<i>Quality</i>	The overall quality of KS campaign was high (textual description, images, multimedia contents etc.).	<i>Qt_1</i>
	The quality of the product is higher than the average quality of games pre-launched on Kickstarter.	<i>Qt_2</i>
	I was interested in the rewards offered during the campaign.	<i>Qt_3</i>
	Pre-purchase price is a great deal.	<i>Qt_4</i>
<i>Reward &amp; Pledge Choice</i>	Exclusive Kickstarter materials influenced my reward choice.	<i>Rw_Pl1</i>
	The number of times the reward had already been chosen by other supporters influenced my choice.	<i>Rw_Pl2</i>
	The Add-ons motivated me to choose the reward.	<i>Rw_Pl3</i>
	The stretch goals motivated me to choose the reward.	<i>Rw_Pl4</i>
	I supported the campaign for an amount greater than the reward value, in view of additional orders.	<i>Rw_Pl5</i>
	Shipping time estimation influenced my pledge.	<i>Rw_Pl6</i>
<i>Word of mouth</i>	Based on the reviewer importance, reviews are trustworthy.	<i>Wom_1</i>
	Reviews reinforced the information I had previously about the product.	<i>Wom_2</i>
	Reviews motivated me to make the purchase decision.	<i>Wom_3</i>
	Backers comment and opinion reinforced the information I had previously about the product.	<i>Wom_4</i>
	Backers comment and opinion reinforced my willingness to purchase the product.	<i>Wom_5</i>
	I interacted with other supporters of the project.	<i>Wom_6</i>

Source (Author)

### 3.4.4 Measurement Model Analysis

Although is desirable have as many factors as possible, in order to capture the optimum number of supporters decision-making style variations, is necessary to test the scale internal consistency and reliability. Internal consistency and reliability refers to the extent to which items in an instrument are consistent among themselves, and with the overall instrument. The internal consistency of a questionnaire based on multiple Likert-type scales and items can be tested using Cronbach's  $\alpha$  (DeVellis 1991; Field, 2009), which remains largely adopted, despite critiques (Sijtsma, 2009). Cronbach's alpha estimates the internal consistency and reliability of an instrument by determining how all items in the instrument relate to all other items and to the total instrument (Gay, Mills, & Airasian, 2006, pp. 141-142).

Cronbach's Alpha reliability coefficient ranges between 0 and 1, thus the closer Cronbach's alpha coefficient is to 1.0 the greater the internal consistency of the items in the scale. Following George and Mallery (2003), with an alpha of .5, the test can be considered poor, while starting with an alpha of .7 is reliable.

In this study, the Cronbach test was conducted on the questionnaire delivered to the two sample of supporters employed. Results confirm that the questionnaire can be considered reliable, with reference to all dimensions included in the analysis. In particular, on average, evaluated dimensions show an alpha of 0.727 on average (see Table 3.6). Nevertheless, not all items considered positively contributed to the reliability of the questionnaire, thus, accordingly with Cronbach's analysis, some items were excluded to strengthen the reliability of the questionnaire.

Table 3.6 - Likert-scale Survey, Reliability analysis

<i>Dimension: Expertise</i>					
Statistics for Scale	N	Mean	Variance	SD	
Items: 2	3620	8,35	2,399	1,549	
	Mean	Min	Max	Min/Max Range	Variance
Item Means	4,177	4,149	4,205	1,101	0,002
Item Variances	0,750	0,665	0,834	1,255	0,140
Inter-Item Correlations	0,604	0,604	0,604	1,000	0,000
Item Total Statistics	Scale Mean if item is deleted	Scale Variance if item is deleted	Corrected item total correlation	Squared Multiple Correlations	Alpha if item is deleted
Exp_1	4,200	0,834	0,604	0,365	-
Exp_2	4,150	0,665	0,604	0,365	-
Reliability Coefficients	Alpha	Alpha Standardized			
	0,750	0,753			

(to be continued)

***Dimension: Team***

Statistics for Scale	N	Mean	Variance	SD	
Items: 2	3620	7,83	1,681	1,296	
	Mean	Min	Max	Range	Variance
Item Means	3,914	3,828	3,999	1,045	0,150
Item Variances	0,542	0,487	0,597	1,225	0,006
Inter-Item Correlations	0,553	0,553	0,553	1,000	0,000
Item Total Statistics	Scale Mean if item is deleted	Scale Variance if item is deleted	Corrected item total correlation	Squared Multiple Correlations	Alpha if item is deleted
Team_1	4	0,60	0,553	0,306	-
Team_2	3,83	0,49	0,553	0,306	-
Reliability Coefficients	Alpha	Alpha Standardized			
	0,710	0,712			

***Dimension: Quality***

Statistics for Scale	N	Mean	Variance	SD	
Items: 3	3620	8,35	2,399	1,549	
	Mean	Min	Max	Min/Max Range	Variance
Item Means	4,008	3,746	4,413	1,178	0,126
Item Variances	0,589	0,456	0,669	1,466	0,013
Inter-Item Correlations	0,439	0,400	0,496	1,241	0,002
Item Total Statistics	Scale Mean if item is deleted	Scale Variance if item is deleted	Corrected item total correlation	Squared Multiple Correlations	Alpha if item is deleted
Qty_1	7,612	1,861	0,531	0,290	0,592
Qty_2	8,159	1,567	0,542	0,305	0,564
Qty_4	8,278	1,634	0,475	0,225	0,657
Reliability Coefficients	Alpha	Alpha Standardized			
	0,696	0,701			

***Dimension: Reward Choice & Pledge***

Statistics for Scale	N	Mean	Variance	SD	
Items: 7	3620	24,17	17,909	4,232	
	Mean	Min	Max	Min/Max Range	Variance
Item Means	3,453	2,522	4,353	1,726	0,565
Item Variances	1,082	0,483	1,469	3,043	0,109
Inter-Item Correlations	0,236	0,033	0,452	13,740	0,012
Item Total Statistics	Scale Mean if item is deleted	Scale Variance if item is deleted	Corrected item total correlation	Squared Multiple Correlations	Alpha if item is deleted
Rw_1	21,649	13,343	0,373	0,200	0,642
Rw_2	20,318	14,282	0,373	0,213	0,641
Rw_3	20,259	13,314	0,486	0,295	0,609
Rw_4	21,236	13,190	0,369	0,170	0,645
Rw_5	21,590	14,192	0,290	0,133	0,666
Pl_1	19,818	15,408	0,370	0,266	0,648
Pl_2	20,156	13,386	0,464	0,303	0,615
Reliability Coefficients	Alpha	Alpha Standardized			
	0,673	0,684			

***Dimension: WOM***

Statistics for Scale	N	Mean	Variance	SD	
Items: 5	3620	16,55	13,89	3,728	
	Mean	Min	Max	Range	Variance
Item Means	3,310	2,943	3,555	1,208	0,070
Item Variances	0,987	0,699	1,211	1,734	0,048
Inter-Item Correlations	0,457	0,274	0,796	2,909	0,030
Item Total Statistics	Scale Mean if item is deleted	Scale Variance if item is deleted	Corrected item total correlation	Squared Multiple Correlations	Alpha if item is deleted
Wom_1	12,995	10,319	0,536	0,408	0,786
Wom_2	13,001	9,713	0,600	0,491	0,767
Wom_3	13,197	8,867	0,630	0,502	0,756
Wom_4	13,400	8,928	0,610	0,651	0,763
Wom_5	13,606	8,801	0,595	0,652	0,769
Reliability Coefficients	Alpha	Alpha Standardized			
	0,806	0,808			

Source (Author)\_Software SPSS

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## **CHAPTER 4**

### ***The role of crowd in the pre-purchase crowdfunding***

#### **4.1 Introduction**

This chapter presents and discusses theoretical dimensions considered in the frame of the study, and findings related to the explorative study conducted. In particular, starting from the literature review discussed in Chapter 1, and from the theoretical framework discussed in the Chapter 2, some gaps emerged with reference to the role of the crowd in the pre-purchase model. This study employs an explorative study based on a survey delivered to a sample of early adopters retrieved from a case study described in Chapter 3 (see section 3.3.1). Discussion of findings, theoretical and practical implication, as well as further research perspectives and limitation of the study, are discussed in Chapter 5.

#### **4.2 Explorative study: research strategy**

This study seeks to deepen the role of the crowd as co-producer and co-investor in the pre-purchase crowdfunding market. This investigation applies an explorative empirical research method, thus does not attempt to test a set of hypotheses. Given that this is an emergent area of research in crowdfunding, the focus is on identifying patterns and potential causal relationship able to generate preliminary conclusions and advance future studies (Blaikie, 2010). The exploratory analysis draws upon a dataset derived from the “Black Rose Wars” case study, a pre-purchase campaign by Ludus Magnus Studio (LMS) in which have been involved 8542 early supporters.

Belleflamme et al. (2013) argued that in a pre-purchase campaign, the same offer can be in future deliver to other market niches. Recently, Kickstarter offered to entrepreneurs the possibility to extent pre-purchase after the campaign closing. Activating the late pledge option in Kickstarter, a successful crowdfunding campaign

can continue to collect pre-orders until the entrepreneur decides to close the pre-order phase to pass to the production one. LMS opened the late pledge option from July to September 2018. This study gathered information also on supporters intervened in the late pledge phase. In order to catch more precisely the complexity of motivations and perceptions that can drive the choice to pre-purchase a new product through a crowdfunding campaign, the study adopts a questionnaire based on a Likert-scale (Likert, 1932). The reliability of multiple-item variables with the Cronbach alpha test, the test confirmed the reliability of items included in the questionnaire. All instrument items included in the questionnaire are adapted from previous research, with some amendments where needed to fit the context of the present research. In particular, starting from the literature review discussed in Chapter 1 (see section 1.4), the explorative study considers several dimension, which relevance in the framework of this study is discussed in the following section.

#### **4.2.1 Theoretical background of dimensions underlying the explorative study**

##### *Expertise*

The crowdfunding market differs from the traditional funding mechanism for several key points. While traditional markets restrict financial participation to experts possessing precise expertise, which are often costly to acquire (Shapiro, 1986), the crowdfunding functioning enables individuals to participate with the required capital resources, even if they have not the relevant expertise required to evaluate an entrepreneurial proposal. As noticed by Kim and Viswanathan (2018), crowdfunding mechanism unbundle resources (capitals and expertise) that in traditional financing systems are seen as complementary. In traditional setting, such as Venture Capitals and Business Angels, investors not only provide financial resources, but also their expertise in evaluating, monitoring and managing risk associated with a new venture. On contrary, in the crowdfunding context, the “democratization” of resources facilitates a broader participation from a large number of potential investors, who not necessarily are expert in the sector relative to the crowdfunding proposal. Analyzing the role of the experts in the crowdfunding, Kim and Viswanathan (2018) found that supporters with expertise, although constitute a small portion of the market, have a strong effect on the investment

behavior of the crowd. Similarly, Mollick and Nadia (2015), comparing expert and crowd's judgment in financially support artistic projects presented on Kickstarter, find that the crowd evaluations and the expert judgments tend to converge.

In this study, the expertise dimension is firstly addressed with reference to supporters. Two sub-dimensions are employed to evaluate supporters' expertise. A first dimension is related to the sectorial expertise of backers, that is to what extent a supporter is an expert in the games industry. Given the relevance of crowd in determining the ability of a new market proposal to approach to the main market, appears relevant understand to what extent expertise can influence the decision to pre-purchase a new market proposal, by financing its production. In fact, differently from other crowdfunding models, in the pre-purchase mechanism, the product and its functionalities primarily attract supporters. This could suggest that among supporters that pre-purchase a product there could be a higher percentage of experts willing to pay for a new specific market proposal, compared with other crowdfunding models.

Digital platforms for ideas, knowledge, and resources transfer are two-sided in nature: solution seekers are on one side and solvers are on the other (Eisenmann et al., 2006). The shifting towards a more digital arena implies a new way of sharing knowledge internally and across organizational boundaries. This, in turn, means that new skills, tools, and management structures are necessary to incorporate external knowledge inside the consumers' decision process. Eshet (2004) defines digital literacy as a survival skill in the digital era, as it constitutes a system of skills and strategies employed by users to reinforce their capabilities in searching and maximizing their virtual experience. Thus, a second perspective addressed in this study is relative to the digital literacy expressed by supporters toward the specific crowdfunding platform where the transactions take forms. This information signals to what extent supporters are familiar with the typical consuming and investing mechanism underlying the crowdfunding.

#### *Team Preparedness*

Entrepreneurial team preparedness is an important signal that a new venture is likely to succeed, considering the inherent opaqueness associated with investment in early stages. To reduce the risk intrinsically associated with equity investments a new venture, professional investors consider the entrepreneurs' preparedness as a quality signal (Chen et al., 2009). Because of information asymmetry between potential funders and

entrepreneur, the latter need to disclose credible and reliable information that potential backers can use to evaluate the market proposal (Ahlers et al., 2015; Mollick, 2014). This information can be considered signals able to reduce information asymmetry among market actors (Spence, 1973). Even if the theme of the team preparedness was mainly addressed in the equity crowdfunding context (Ahlers et al. 2015), studies suggest that also in the reward-based crowdfunding, entrepreneurial team and activities have a relevant role in the success of a crowdfunding campaign (Mollick, 2014; Frydryck et al., 2014). Entrepreneurs in crowdfunding are required to be competent and expert in the category in which they made a proposal, as well as show a strong commitment in communicating adequately and frequently with the backers in order to dissipate, doubts or uncertainties related to the product proposed.

As the visual appeal of a new proposal plays a crucial role in the decision of investing in, Mollick (2014) found that entrepreneurs who demonstrate preparedness are more likely to be crowdfunded, where preparedness was understood as whether or not the project explicitly show an early version of the final product. Following Frydrych et al. (2014), the education level and work experience of the entrepreneur affect legitimacy and thus success rates, as well as the narration of the entrepreneurial proposal. Several studies confirm that the number of comments and updates posted by the entrepreneurial team, also positively affect the funding success (Mollick, 2014; Kuppusmwamy and Bayus, 2015; Kunz et al. 2016). Finally, also the entrepreneur reputation among the community can play a role. As highlighted by Zvilichovsky et al. (2013), a positive effect on funding collection occur when an entrepreneur has had previous funding experience, both as backer and promoter.

Facing a new entrepreneurial activity, that will presumably lead to new venture creation, it is important to identify what makes individuals take the decision to engage in this process of creating a new venture and to dedicate the required time and resources (Cross & Travaglione, 2003). Preparedness represents a demonstration of the “immense complexity of accumulated learning that individuals bring to the new venture creation process” (Cope, 2005, p.378). Recently, the research focus on entrepreneurial preparedness and commitment has expanded to include the entrepreneurial intentions and social behavior in determining the success of a new venture creation (Baron and Markman, 2002; Bauman, 2011). Chen et al. (2009) analyzing the role of “passion” in

entrepreneurial context, found that venture capital are more encouraged in funding new venture characterized by high level of commitment and passion to their business idea. Pollack et al. (2012), investigating entrepreneurs seeking for financial resources from investors via pitching their business idea, found that entrepreneur influence with their own behavior the level of financial resources collected. The growing body of literature on the “emotional intelligence” (Goleman, 2001) of entrepreneurs, is increasingly recognize entrepreneurial behavior and social skills as strategic way to communicate with stakeholders to reach desirable responses.

In this sense, social and soft skills are becoming relevant as new dimension associated with the ability of leadership and management of entrepreneur. Noe et al. (2015), argued that “Skills refer to the level of performance of an individual on a particular task or the capability to perform a job well which can be divided into technical elements and behavioral elements”. The entrepreneurial ability can be in fact evaluated both from the perspective of hard and soft skills. Hard skills are easily transferable as they are related to the technical and knowledge abilities, as they define the level of competency needed in a specific sector or job. Soft skills are subjective skills that are much harder to quantify, as they relate to the way entrepreneurs interact with other people. Soft skills are broadly recognized, especially in the entrepreneurial field, able to enhance the productivity of hard skills.

In this perspective, both soft and hard skills of the entrepreneurial team constitute driver of success for entrepreneurs seeking funding, given their ability to facilitate good perceptions and legitimacy (Pollack et al. 2012; Chen et al., 2009; Frydryck et al., 2014). In this study, the team preparedness is addressed from the perspective of supporters, who was asked to evaluate technical and social skills of the entrepreneurial team.

### *Quality*

In the crowdfunding context, as previously discusses, the information asymmetry assume a specific configuration, due to the virtual relationship among entrepreneurs and the crowd. In fact, as argued by Wells et al. (2011), in the context of e-commerce, signals play a vital role as consumer have little opportunity to adequately analyze physical

attributes of product prior to purchase. As in the pre-purchase context, entrepreneur engage the crowd in the financing of a new market proposal, the format of the product presentation and information transmitted determine the willingness to invest. In particular, differently from e-commerce, where a product and its functionality can be evaluated through reviews and feedback by other buyers, in the pre-purchase model, at the funding time, the product is not yet ready for consumption, supporters derive the quality of the product from the quality of the campaign. For example, Mollick (2014) found that video and the spelling errors negatively affect motivation to fund and thus the success. Mollick (2014) measure preparedness in relation to the efforts profuse by the entrepreneur in preparing the crowdfunding campaign. In particular, as in the crowdfunding context, the entrepreneurial proposal is disclosed through a mix of multimedia materials such video, graphical and informational materials, the quality of the crowdfunding campaign is a proxy of the quality of the product pre-purchased. In the frame of this study, quality is addressed both with reference to the campaign presentation and with reference to product.

A third perspective related to the quality of the proposal made by entrepreneurs, is represented by the price settled by entrepreneurs for the rewards tiers reported in the crowdfunding campaign. The product price represents the launching price, as configured, generally, a price lower of which will be practiced on the main market. Heyman and Ariely (2004) define two categories to describe the exchange relationship, namely money-market and social-market relationships. In the money market relationship, the exchange between at least two parties is regulated by a utility metric, the money. In contrast, a social market relationship is characterized by non-monetary exchange because relationship among actors are regulated by social norms, such as reciprocity or cooperation. However, Heyman and Ariely (2004), found that when a relationship is characterized both by monetary and social norms, is configured a mixed market. Interestingly, in mixed market even if the form of compensation is not monetary, “the mere mention of monetary payment is sufficient to switch the perceived relationship from a social-market relationship to money-market relationship” (Heyman and Ariely, 2004, p.792). That is, evoking a monetary exchange shift individuals perception toward the money-market relationship, influencing their propensity in exerting efforts in the relationship. Crowdfunding, for its own nature, is permeated by social norms, thus from the perspective of Heyman and Ariely, is a mixed market. The

presence of a price in the crowdfunding campaign brings the consumer in the perspective of a money-market relationship, where the price is the effort required to the consumer.

Crowdfunding, as previously discussed, can be considered from the price perspective as a pay-what-you-want model, in which are the supporter that can exert some control over the price paid for the transaction. Nevertheless, this can be applied to non-consumers supporters, e.g. supporters who financially participate in the crowdfunding campaign without order the product. These supporters, in fact, can decide autonomously if set a price above or equal to zero, namely if contribute for a small amount (under the first reward tier) or if not contribute at all. Contributors who pre-purchase the product via crowdfunding cannot decide which prices set, they can choose from a menu offering of several version of the product, where the entrepreneur predetermines price. Entrepreneur in pre-purchase mostly uses a second-degree discrimination, as they know only the preferences' distribution of potential supporters. In order to extract the maximum profit from the crowdfunding, entrepreneurs discriminate among backers, trying to engage consumers with high favorable perception. At the same time, entrepreneurs try to avoid that consumer with high favorable perception can be deviated by the consumer with a low favorable perception, namely consumers who consider the cost-benefit trade-off not satisfying to invest in a product. The consumers' price sensitiveness thus can be a function of their expertise within a specific sector, higher is the backer expertise, lower the possibility of an evaluation bias. Finally, the price evaluation can be also related to the overall quality and appeal of the campaign, as well as the average quality of a similar products presented via crowdfunding.

### *Reward Choice & Pledge Choice*

From the literature review, several conditions can influence the willingness to buy a product via crowdfunding. In the frame of the pre-purchase model, are individuated several factors, strictly related to the reward structure, that can affect the decision to pre-purchase a product.

The first set of motivation that can influence the reward choice in the pre-purchase model are related to the material and functional value associated with the pre-purchase experience. In this sense, the general and personal incentive to pay described by Hardy

(2013), can foster participation through the provision of additional materials (such as add-ons, exclusive materials or stretch goals) that tend to increase the value of the product and thus the utility perceived by supporters.

A second motivation that can affect supporters' decision to invest in the crowdfunding campaign is the shipping time estimate by entrepreneurs. In the pre-purchase model, after the crowdfunding campaign, an intermedium phase occurs, during which an entrepreneur provide to physically producing the product pre-sealed. Information about shipping is generally available in the crowdfunding campaign, thus supporters can evaluate if they are willing to invest in a product that will be available some months later, or sometimes a year later.

Since Mollick (2015) stressed that on Kickstarter the 65% of backers of successful CF project did not receive rewards on time and that the 9% of a project funded never received perks, shipping time provision can influence the choice to invest in a product that is not immediately available. Referring to the causes of delays, Agrawal et al., (2014) confirm that delay can arise from the technical transformation of prototypes in the product, or from the underestimation of the real costs of manufacturing and shipping, as well as incompetence in addressing the supply-chain partners. Even if this condition is intrinsic to the pre-purchase mechanism, some supporters can perceive delay as the incompetence of the team in fulfill promise reward. Considering that, in the context of a crowdfunding campaign, rewards are generally shipped at the same time, the expected shipping date affect all reward indistinctly. The expected shipping can thus influence the pledge level, namely the contribution made by supporters, because the supporter who really is interested in pre-purchase the product can choose a lower reward tier, to reduce risk perceived from the investment made.

### *Word of mouth*

Social dynamics permeate the crowdfunding ecosystem, which is constructed around the relationships in heterogeneous virtual networks. Crowdfunding is intended to leverage the 'wisdom of the crowd' (Surowiecki, 2004), as entrepreneurs identify and or create a community accessible via the online platform to which launch an open call to financing a product (Belleflamme et al., 2014). Peer-effects are important in these communities since membership and communications are publicly observable and likely

to influence individual decisions and outcomes. In turn, these effects increase the availability of internal and external social capital, both for the crowd and the entrepreneurs, mitigating the information asymmetry between parties involved (Colombo et al., 2015).

Pre-purchase crowdfunding projects are often at an early-stage (Belleflamme et al. 2014), information provided by parties involved can facilitate the mitigation of the uncertainty. Courtney et al. (2016), analyzing the reward-based crowdfunding from the perspective of information asymmetry, argue that signals that positively increase the crowd engagement are not only those produced by the entrepreneur but also from third parties. A unique feature of the crowdfunding is that several actors can intervene in the process increasing the information available on the product proposal, beyond the entrepreneurs.

Supporters can actively and publically debate and communicate with the entrepreneurial team since platforms provide a space in the project page dedicated to a direct communication between supporter and proponent. Communities particularly skilled or interested in a specific product typology often are an active member of dedicated virtual forums where the electronic word of mouth is the main informational driver that can reinforce the consumers' perception toward a specific product.

Therefore, the intervention of the crowd, through opinions, doubts and suggestions, may help to generate a specific sentiment about the project, which can be processed for a more informed decision (Cordova 2015; Courtney et al. 2016). Early and early late backers, who intervene respectively in the first and final stages of a crowdfunding campaign reinforce the participation of others consumers or supporters (Gangi and Daniele, 2017; Colombo et al. 2013). Additionally, experienced backers such as companies or organizations, which finance a project increase the credibility and reliability of the proposal, leading to an increase in the likelihood success of the financial collection (Gangi and Daniele, 2017).

The electronic word of mouth (e-wom) generated around a campaign condensate the overall communitarian judgment about a crowdfunding proposal, which is made available from and to a multitude of people and institutions via the Internet (Hennig-Thurau, et al.2004). Traditional (offline) word-of-mouth has been shown to play a major role for customers' buying decisions (Hennig-Thurau, et al.2004). Similarly, in the

virtual context, reviews from expert or influencer, comments, opinion and rating, has been shown highly relevant in influencing the consumers behavior and perception about a product (Rindova, Petkova, & Kotha, 2007). In online behavior research, the major theoretical model to explain the persuasion mechanism in online auctions is the elaboration likelihood model (Bi et al., 2017).

Following this model developed by Petty and Cacioppo (1983), an online consumer can rely on two routes of information: central and peripheral. The peripheral route is related to all informational source coming from the environment in which the product is embedded, as the review of others consumer on online shops. Applying this theoretical model to the reward crowdfunding context, Bi et al. (2017) found that the central route (information provided by entrepreneurs) and the peripheral route (information derived by e-wom), affect the success in the same measure. These two information sources are equally impactful on consumer behavior. Thus, is possible to conclude that also in the pre-purchase crowdfunding context the electronic word of mouth produces a different informational pattern that could affect the decision of a supporter to pre-purchase a product.

In the frame of this study, the e-wom is analyzed from two perspectives and with reference to two categories of information-producer. Firstly, since project backers are potential early customers of the product, backer comments can contain information about the technical feasibility and market viability of the product, similar to what happens in an online transactions with consumers review. Additionally, a second high relevant source of information in evaluating a product are expert reviewers. Some endorsements from informed third parties, for example, product reviews by an online remarkable exponent of the sector, and publishers may contain information about the product features and functions that help potential buyers to make purchasing decisions (Chen & Xie, 2005; Zhu & Zhang, 2010).

This implies that both backers and reviewers enlarge the informational base of potential new consumers. However, the condition that a supporter that can benefit from heterogeneous of information does not necessarily imply that a supporter that will buy a product. Stated differently, is not clear to what extent these information sources increase the willingness to pay of new supporter via crowdfunding. In the framework of

this study, the information capacity expressed by backers and expert reviewers are discussed from the perspective of their ability to influence the pre-purchase decision.

#### **4.2.2 Sample(s)**

This study considers a non-probabilistic sampling procedure, as Kickstarter does not provide private information to third parties about supporters, a convenience sampling was used to collect data. The purpose of this research is to observe the role of the crowd from a transactional and social perspective. Considering the research aims, this study matched three datasets. Data collection and method of primary and secondary data are described in Chapter 3. In this section, are detailed the samples obtained matching three datasets.

##### *Kickstarter Experience Sample*

With the aim to investigate which are factors influencing the decisions to pre-purchase a new product via crowdfunding, the first sample is represented by the supporters who financed the crowdfunding campaign. Starting from Kickstarter, this study collected information about 8223 backers who participated in the crowdfunding campaign. All backers were invited to participate in the questionnaire, with an incentive of an exclusive additional material. Supporters who received the survey, was asked to use the same e-mail address employed to pledge during the Kickstarter, this allowed to match perception of backers gathered through the survey with their specific level of contribution to the campaign. Survey collected reply from 3620 crowdfunding backers, the 44% of the total population available. With reference to the reward scheme offered by Ludus Magnus Studio, supporters during the crowdfunding campaign could choose among four level of rewards, detailed in Table 4.1.

Table 4.1 – Black Rose Wars Campaign, Reward Structure

Reward Tiers	Price (\$)	Supporters	Supporters (%)	Impact on funding (\$)	Impact on funding (%)
No reward	-	416	5%	1.639,00	0%
Rw_1	99\$	1616	20%	181.935,00	14%
Rw_2	\$129	741	9%	130.347,00	10%
Rw_3	\$134	1503	18%	188.807,00	15%
Rw_4	\$139	4397	53%	788.953,00	61%
Total	-	8673	105%	1.291.681,00*	100,0%

Source: Author ; \* the final amount of resources collected slightly differ from the total showed in the campaign, as backers after the campaign is close can require refund.

### *Late Pledge Sample*

A second source of data comes from Backer Kit, a management platform that enable entrepreneurs to manage pre-purchase orders, after the campaign closing. The most interesting feature of this management tool is that it works as an extension of the crowdfunding offer, because on this platform, after the campaign closing, new supporters can pre-order the product or the service crowdfunded at similar conditions offered to the crowd in crowdfunding. Activating the *late pledge option* in Kickstarter, a successful crowdfunding campaign can continue to collect pre-orders until the entrepreneur decide to close the pre-order phase to pass to the production one. LMS open the late pledge option from July to September 2018, collecting additional orders from 319 additional backers. As for the Kickstarter supporters', Late Pledge backers were invited to participate in the survey. Survey collected reply from 144 late pledge backers, the 45% of the total population observed.

Late Pledge backers, differently from Kickstarter' backers, had the opportunity to pre-order only the product corresponding at the reward level four (*Rw\_4*), incremented of ten dollars (price for Late Pledge: 149\$).

### 4.2.3 Variables

This section details and justifies the variables featuring in this study, which can be classified in two categories: data about (i) financial efforts made by supporters and (ii) potential criteria that are likely to influence the choice to pre-order.

*Address Country:* This study do not gathered personal or private information about backers. Kickstarter and Backer Kit provide for each backer an ID, namely a personal code to match and identifies backers' orders. Nevertheless, as control variable, this study consider the address country code accordingly with the ISO 3166<sup>7</sup>.

*Pledge Amount:* In a crowdfunding campaign, backers that would like to pre-order a new product can choose to invest an amount greater than the price of the reward they like to pre-order. This variable enables to catch the additional financial efforts made by backers during the campaign, beyond the price they paid for the reward tier chosen.

*Reward Price:* The variable reward price represents the price correspondent to each reward tier reported in the campaign. This variable enables to deepen motivations and backers perceptions in relation to the reward tier choose. In the frame of the case study adopted, there are four level of price, detailed in Table 4.16.

*Pledge Dummy:* A dummy variable is employed to detect if backers have financed the campaign for a higher amount than the price of a reward. The variable was assigned the value of 1 if the backers pledged during the campaign for a higher amount then the reward price, 0 otherwise.

*Funds Added:* As Late Pledge Backers, also the Kickstarter' backers can access to the Late Pledge, acquiring the possibility to charge additional funds to complete their order with additional materials available. This variable gather the additional funds of backers.

*Total Contribution:* The variable total contribution catches the total financial efforts made by backers to the entrepreneurial' new market proposal, being constituted by the total amount of financial resources invested by backers.

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<sup>7</sup> ISO 3166 is the International Standard for country codes and codes for their subdivisions. In this study is adopted the ISO 3166-1 alpha-2, in which a country is identified by two-letter codes.

*Previous Knowledge:* Considering that Ludus Magnus Studio has run three crowdfunding campaigns, can be considered a serial entrepreneurship crowdfunding. In the survey were asked supporters to indicate if they already knew the entrepreneurial proponent team at the crowdfunding campaign time. The variable was assigned the value of 1 if the backers already knew the entrepreneurial team, 0 otherwise.

*Additional Info:* Backers how have never (virtually) met the team, was asked if they, before to pledge, have collected additional info beyond these reported in the campaign. The variable was assigned the value of 1 if the backers have searched for additional info, 0 otherwise.

*Backers Expertise:* The variable indicate to what extent backers who financially supported the crowdfunding campaign, rate themselves experts in the games field.

*Backers KS Knowledge:* The variable indicate to what extent backers who supported the crowdfunding campaign, are aware of the logic underlying the crowdfunding platform mechanisms.

*Team Expertise:* Supporters were asked to evaluate the preparedness and reliability of the entrepreneurial team. This variable, thus, catch backers perception about the hard skills of the proponent team.

*Team Soft skills:* Supporters were asked to evaluate the team ability to dialogue whit the crowd. This variable catches the supporters' perceptions about the ability of the team in communicating adequately and frequently with early adopter and potential consumers.

*Overall Campaign Quality:* Supporters were asked to rate the overall quality of campaign presented by the entrepreneur. This variable condensate the supporters' perception about the quality of textual description, images, multimedia, and video contents, which constitute the product virtual storytelling.

*Product Quality:* In the crowdfunding market, products offered in pre-purchase modality show key features different from products available from traditional channels. Supporters were asked to indicate what they felt about product quality. This variable indicates if supporters consider the quality of the product higher than the average quality of games pre-launched on the same platform.

*Price perception:* In a pre-purchase campaign, supporters can choose among several reward tiers, which are nothing but price levels. Supporters were asked to indicate their perception about the price of the reward chose.

*Exclusive Material:* Exclusivity of materials offered during the crowdfunding campaign is a strategy employed by entrepreneurs to encourage early adopters to buy the product. This variable gathers on what extent these materials can increase the willingness to buy of consumers.

*Add-On:* Add on represent expansions and accessories of the base product. This variable gathers on what extent the availability of expansions and accessories increase the willingness to buy of consumers.

*Stretch Goals:* Stretch Goals represent additional funding goals, that if reached unlock additional materials for supporters free. This variable gathers on what extent the availability of expansions and accessories increase the consumers' willingness to buy.

*Shipping Time Provision:* Shipping time provision is an information reported in the campaign by the entrepreneur for each reward tiers that indicate the date within which the consumer will receive the final product. The variable evaluates if the shipping time provision can influence the choice of backers' to invest in the crowdfunding campaign.

*Supporter e-wom:* Comments and opinion released by supporters can increase the information source available from potential supporters, enhancing their willingness to buy. This variable captures the ability of information generated by the supporters to influence the consumers' willingness to pre-purchase a product.

*Reviewer e-wom:* Reviews by experts can increase the information source available for potential supporters. This variable captures if the information disclosed by experts influence the consumers' behavior.

#### 4.2.4 Descriptive statistics

Table 4.2 and Table 4.3 show the descriptive statistics of the main variables discussed, divide by samples.

Table 4.3(a) - Crowdfunding Experience Sample Descriptive

Dimension	Variables	Mean	Median	St. Dev.	P 0.25	P 0.50	P 0.75
Observation= 3620							
<i>Financials</i>	Pledge Amount	184,0	139,0	121,2	139,0	139,0	228,0
	Reward Price	129,9	139,0	14,9	129,0	139,0	139,0
	Funds Added	49,2	27,0	80,1	0,0	27,0	60,0
	Total Contribution	225,7	197,0	166,6	139,0	197,0	287,0
<i>Expertise</i>	Backers Expertise	3,5	4,0	1,0	3,0	4,0	4,0
	Backers KS Knowledge	4,2	4,0	0,8	4,0	4,0	5,0
	Team Expertise	3,8	4,0	0,7	3,0	4,0	4,0
<i>Team</i>	Team social skills	4,0	4,0	0,8	4,0	4,0	4,0
	Overall Campaign Quality	4,4	4,0	0,7	4,0	4,0	5,0
<i>Quality</i>	Product Quality	3,9	4,0	0,8	3,0	4,0	4,0
	Price perception	3,8	4,0	0,8	3,0	4,0	4,0
	Exclusive Materials	4,0	4,0	1,0	4,0	4,0	5,0
<i>Reward &amp; Pledge Choice</i>	Reward Signaling	2,5	2,0	1,2	2,0	2,0	3,0
	Add On	3,9	4,0	1,0	3,0	4,0	4,0
	Stretch Goals	3,9	4,0	1,0	3,0	4,0	5,0
	Shipping Time Provision	2,6	3,0	1,1	2,0	2,0	3,0
<i>WOM</i>	Reviewers' signalling ability	3,6	4,0	0,9	3,0	4,0	4,0
	Reviewers e-wom	3,4	3,0	1,0	3,0	3,0	4,0
	Supporters' signalling ability	3,2	3,0	1,1	2,0	3,0	4,0
	Supporters' e-wom	2,9	3,0	1,1	2,0	3,0	4,0

Descriptive statistics exhibit for the sample of 3620 crowdfunding supporters, an average pledge amount of nearly \$184, while the average price paid by supporters (\$125) for pre-purchase is slightly lower than the reward tier number two priced 129\$ (Rw\_2 in Table 4.1). The average of funds added for the sample size is of \$49. On average, both supporters who pledged more than the price of the reward during the campaign and crowdfunding supporters how added financial resources in the late pledge, have invested additional financial resources for an amount of nearly \$50. The average of total contribution for the sample size is of \$225.

Table 4.2(b) - Crowdfunding Experience Sample - Dummies (Frequencies)

Previous Knowledge: You already know the team? (yes:1_no:0)	Valid	Frequencies	Percentage	Valid percentage
	0	2959	81,7	81,7
	1	661	18,3	18,3
	Total	3620	100,0	100,0
Additional Info (Add_info): I collected info about the team before to pledge (1); No I trusted them based on the KS campaign presentation (0)	Valid	Frequencies	Percentage	Valid percentage
	0	1789	49,4	60,5
	1	1170	32,3	39,5
	Total	2959	81,7	100,0
Missing*		661		
*The Missing values (661) correspond to supporters who already know the entrepreneur.				
I supported the campaign for an amount greater than the reward price. (yes:1_no:0)	Valid	Frequencies	Percentage	Valid percentage
	0	1294	35,7	35,7
	1	2326	64,3	64,3
	Total	3620	100,0	100,0

From Table 4.2(b), the 81% of the sample did not have occasion to be in contact with the team before the crowdfunding campaign. Supporters, who did not know the team, did not acquire additional info before to pledge in the 60% of the cases. The 64% of respondent did not invest an amount greater than the reward price during the campaign. Finally, observing the geographical distribution of the Kickstarter Experience Sample (Table 4.2c), the 37% of replies come from USA supporters, while the remaining replies are strongly fragmented among the other countries.

Table 4.2(c) – Crowdfunding Experience Sample Descriptive

Country	Frequencies	%
Argentina	3	0,08%
Australia	115	3,18%
Austria	33	0,91%
Belgium	80	2,21%
Bolivia	1	0,03%
Brazil	12	0,33%
Brunei Darussalam	1	0,03%
Bulgary	4	0,11%
Canada	236	6,52%
Chile	5	0,14%
China	20	0,55%
Croatia	5	0,14%
Cyprus	3	0,08%
Czechia	18	0,50%
Denmark	38	1,05%
Estonia	4	0,11%
Finland	17	0,47%

France	292	8,07%
Germany	327	9,03%
Greece	18	0,50%
Honk Kong	15	0,41%
Hungary	14	0,39%
Iceland	1	0,03%
Indonesia	4	0,11%
Ireland	6	0,17%
Israel	7	0,19%
Italy	193	5,33%
Japan	21	0,58%
Korea	5	0,14%
Kuwait	1	0,03%
Latvia	2	0,06%
Lithuania	2	0,06%
Luxembourg	10	0,28%
Malaysia	6	0,17%
Malta	3	0,08%
Mexico	15	0,41%
Monaco	1	0,03%
Netherlands	71	1,96%
New Caledonia	2	0,06%
New Zealand	13	0,36%
Norway	17	0,47%
Peru	1	0,03%
Philippines	3	0,08%
Poland	41	1,13%
Portugal	11	0,30%
Puerto Rico	2	0,06%
Romania	9	0,25%
Russia	9	0,25%
Saudi Arabia	2	0,06%
Singapore	21	0,58%
Slovakia	8	0,22%
Slovenia	1	0,03%
South Africa	5	0,14%
Spain	197	5,44%
Sweden	51	1,41%
Switzerland	37	1,02%
Taiwan	14	0,39%
Thailand	25	0,69%
UK	196	5,41%
Ukraine	1	0,03%
USA	1345	37,15%
Total	3620	100%

Late pledge supporters did not have the same possibility of crowdfunding to choose among several rewards tiers. During the late pledge, they can only choose to pre-purchase the reward tier priced \$139, and offered at 149\$. On average, late pledge supporters added fund for \$260, spending in total, on average nearly \$300. Late pledge supporters financed on average more than crowdfunding backers', their final contribution is higher than the one of crowdfunding supporters of nearly 70\$.

Table 4.3 (a) - Late Pledge Sample Descriptive

Dimension	Variables	Mean	Median	St. Dev.	P 0.25	P 0.50	P 0.75
Observation= 144							
<i>Financial</i>	Reward Price	149,00	149,00	149,00	149,00	149,00	149,00
	Funds Added	263,76	256,50	88,60	188,00	256,50	346,00
	Total Contribution	295,53	325,00	147,09	149,00	325,00	429,00
<i>Expertise</i>	Backers Expertise	3,33	3,00	0,92	3,00	3,00	4,00
	Backers KS Knowledge	4,01	4,00	0,84	4,00	4,00	5,00
<i>Team</i>	Team Expertise	3,78	4,00	0,66	3,00	4,00	4,00
	Team social skills	3,89	4,00	0,73	3,00	4,00	4,00
<i>Quality</i>	Product Quality	3,94	4,00	0,77	3,00	4,00	4,00
	Price perception	3,79	4,00	0,81	4,00	4,00	5,00
<i>Reward &amp; Pledge Choice</i>	Exclusive Materials	4,23	4,00	0,80	4,00	4,00	5,00
	Add On	3,44	3,50	1,09	3,00	3,50	5,00
	Stretch Goals	3,98	4,00	0,91	4,00	4,00	5,00
	Shipping Time Provision	2,86	3,00	1,20	2,00	3,00	4,00
	Reviewers' signalling ability	3,69	4,00	0,92	3,00	4,00	4,00
<i>WOM</i>	Reviewers e-wom	3,56	4,00	1,14	3,00	4,00	4,00
	Supporters' signalling ability	3,40	3,50	0,91	3,00	3,50	4,00
	Supporters' e-wom	3,21	3,00	1,09	2,00	3,00	4,00

From Table 3.5(b), 90% of the sample did not have occasion to be in contact with the team before the crowdfunding campaign. The 52% of supporters collected additional info on the proposal before to pledge, while 47% of the same decide to pledge without collect additional info. Interestingly, late pledge backers that collected more information before to pledge, are little higher than crowdfunding supporters who decided to collect additional info (47% versus 39%).

Finally, observing the geographical distribution of the Late Pledge Sample (Table 4.3c), the 36% of replies come from USA consumers, while the remaining replies are strongly fragmented among the other countries.

Table 4.3 (b) - Late Pledge Sample - Dummies (Frequencies)

Previous Knowledge: You already know the team? (yes:1_no:0)	Valid	Frequencies	Percentage	Valid percentage
	0	131	90,97	90,97
	1	13	9,03	9,03
	Total	144	100	100
Additional Info: I collected info about the team before to pledge (1);No I trusted them based on the KS campaign presentation (0)	Valid	Frequencies	Percentage	Valid percentage
	0	69	47,9	52,7
	1	62	43,1	47,3
	Total	131	91,0	100
Missing*		13		
*The Missing values (13) correspond to supporters who already know the entrepreneur.				

Table 4.3 (c) - Late Pledge Sample Descriptive

Country	Frequencies	%
Australia	3	2%
Austria	2	1%
Belgium	4	3%
Brazil	2	1%
Canada	12	8%
Chile	1	1%
Czech Republic	2	1%
France	10	7%
Germany	10	7%
Greece	1	1%
Honk Kong	2	1%
Hungary	1	1%
Indonesia	1	1%
Italy	7	5%
Japan	1	1%
Korea	1	1%
Mexico	2	1%
Netherlands	3	2%
New Zealand	2	1%
Norway	1	1%
Poland	1	1%
Romania	2	1%
Singapore	4	3%
Slovakia	1	1%
South Africa	1	1%

Spain	5	3%
Sweden	3	2%
Switzerland	1	1%
United Kingdom	5	3%
USA	52	36%
Total	144	100%

### 4.3 Findings

This section presents and discusses the findings related to the variables presented in the section 4.2.1 divided by sample and by the dimensions underlying this study.

In particular, section 4.3.1 displays findings related to the Cf Experience Sample, overall considered. Sections 4.3.2 and 4.4.3 propose findings coming from the same sample, but from two different perspectives: the backers' entering timing and the reward tiers. Motivations for these additional analyses are exposed in each sub-section. Finally, section 4.4.4 details the findings related to the Late Pledge Sample.

#### 4.3.1 Kickstarter' Supporters findings

##### *Expertise*

In the framework of this study, are considered two sub-dimension to evaluate supporters' expertise. A first dimension is related to the sectorial expertise of backers, that is to what extent a supporter is an expert in the games industry. A second perspective addressed in this study is relative to the digital literacy expressed by supporters toward the specific crowdfunding platform where the transactions take forms.

Table 4.4 - Supporters' Expertise, overall sample

<b>Expertise</b>	<i>Backers Expertise</i>		<i>Backers KS Knowledge</i>	
	Frequencies	Percentage	Frequencies	Percentage
Observations 3620				
Strongly Disagree	126	3%	61	2%
Disagree	461	13%	80	2%
Neither agree nor disagree	1217	34%	367	10%
Agree	1275	35%	1862	51%
Strongly Agree	541	15%	1250	35%
Grand Total	3620	100%	3620	100%

With reference to the backers' expertise, the 50% of supporters consider themselves an expert in the game field, whereas only the 16% of sample disagree with this statement. These results suggest that the majority of the supporters are specialized in the games field. Even if a relevant portion neither agrees nor disagree with this statement, only 587 on 3620 supporters do not confirm to be expert.

Crowdfunding supporters show a high degree of familiarity with the crowdfunding mechanism. More than the 85% of respondent declared to be highly active on Kickstarter and to be familiar with the pre-purchase mechanism. This signals that these supporters acquired skills and knowledge in evaluating a pre-purchase proposal in the specific context of crowdfunding.

### *Team*

In the frame of this study, team preparedness is addressed both from the perspective of hard and soft skills. Findings from the sample show that the 70% of supporters agreed in sustain that the entrepreneurial team was highly skilled in performing pre-sale via crowdfunding. This evidence is strengthened by the condition that in this specific sample, only 9% of supporters already knew the entrepreneurial team.

Table 4.5 – Team Hard and Soft skills, overall sample

<b>Team</b>	<b>Team Hard Skills</b>		<b>Team Soft Skills</b>	
Observations 3620	Frequencies	Percentage	Frequencies	Percentage
Strongly Disagree	28	1%	40	1%
Disagree	18	0,5%	93	3%
Neither agree nor disagree	1024	28%	562	16%
Agree	2028	56%	2059	57%
Strongly Agree	522	14%	866	24%
Grand Total	3620	100%	3620	100%

With reference to the social and soft skills associated to the team, also characteristics/skills referred to the emotional intelligence have proven to be linked positively to the pre-sales of the new product via crowdfunding. Nearly 81% of the sample, confirmed that the team communicated adequately and frequently with supporters.

## Quality

Quality associated with a new business proposal is hard to assess, mostly in a context such as the crowdfunding market, where the product presentation presents two main characteristics: (i) product is presented in a virtual context; (ii) the same has not yet come into existence. In the crowdfunding context, entrepreneurs narrate their proposal relying on a mix of multimedia materials. The quality of the crowdfunding campaign signal the efforts profuse by an entrepreneur in attract new consumers.

Supporters were asked to evaluate three sub-dimension related to the crowdfunding experience in the quality dimension. Firstly, crowdfunding supporters were asked to indicate if they perceived the crowdfunding campaign qualitatively adequate, in terms of graphical and video material prepared and posted by the team. Results clearly indicate the nearly 95% of the sample has found the overall quality of the campaign very high in terms of storytelling, coherently with the other quality sub dimensions.

Table 4.6 – Quality, overall sample

Quality	Overall Campaign Quality		Product Quality		Price Perception	
Observations 3620	Frequencies	Percentage	Frequencies	Percentage	Frequencies	Percentage
Strongly Disagree	41	1%	31	1%	38	1%
Disagree	4	0,11%	33	1%	131	4%
Neither agree nor disagree	129	4%	1152	32%	1165	32%
Agree	1691	47%	1581	44%	1663	46%
Strongly Agree	1755	48%	823	23%	623	17%
Grand Total	3620	100%	3620	100%	3620	100%

As the crowdfunding campaign page can be considered a surrogate of the quality of product proposed, supporters were asked how they have perceived the quality of the product, compared to the other product/campaigns in which they have taken part as a supporter. The product offered via crowdfunding is not yet available to supporters during the crowdfunding campaign, thus, product quality can be evaluated only through visual material that helps to reduce the sensation of immateriality associated with a pre-purchase via crowdfunding. Supporters, in crowdfunding, differently from the online consumer, cannot rely on the review of other users, they can only observe the product through the campaign, and evaluate its potential quality, and thus his potential ability to satisfy their expectations. Considering these specific characteristic, supporters were

asked to indicate if they perceived that the quality of product presented was higher than the average quality of games pre-launched on Kickstarter. The 66% of sample converge toward a positive evaluation. As expected, a part of the sample remain neutral toward this assumption, considering that at the time of the crowdfunding campaign they could not be sure about the effective quality of the product.

Finally, as the quality perception of a product influence the price that a consumer is willing to pay, supporters were asked to indicate if they considered the pre-purchase price an advantageous price. Supporters indicate in 60% of cases that the pre-purchase price was adequate to the proposal and fair.

### *Reward and Pledge*

In this dimension are investigated the set of general and personal incentive strategically designed by the entrepreneur to increase the attractiveness of the product proposal (Hardy, 2013). All these incentives should increase the willingness to pay and participate of supporters. In particular, are identified three categories of incentive that could favor the collection of financial resources pre-purchasing a new product. Generally, in a crowdfunding pre-purchase campaign, supporters are incentivized in financing the production by the provision of a special edition of the product and of features associated with a product that will be not available anymore for future consumers.

Supporters interviewed suggest that exclusive materials can represent an incentive to buy the product, as the 76% of them confirm that the decision to pledge the campaign and buy the product was highly influenced by the provision of exclusive materials.

Add-on crowdfunding rewards is an additional incentive that the entrepreneur can pitch to current backers, as they represent expansions or/and accessories that are not necessary to use the base product, but that can increase the value and functionalities associated with the product. Add-ons are not part of the product base, are generally additional materials that can complete or personalize the product, and are conceived to provide more perks among which supporters can choose. The 75% of supporters consider the add-on a strong incentive to buy a product.

Table 4.7 - Reward and Pledge Choice, overall sample

<b>Reward &amp; Pledge</b>	<i>Exclusive Materials</i>		<i>Add-on</i>	
	Frequencies	Percentage	Frequencies	Percentage
Observations 3620				
Strongly Disagree	109	3%	115	3%
Disagree	231	6%	244	7%
Neither agree nor disagree	524	14%	551	15%
Agree	1390	38%	1857	51%
Strongly Agree	1366	38%	853	24%
Grand Total	3620	100%	3620	100%

<b>Reward &amp; Pledge</b>	<i>Stretch Goals</i>		<i>Shipping Time</i>	
	Frequencies	Percentage	Frequencies	Percentage
Observations 3620				
Strongly Disagree	113	3%	713	20%
Disagree	265	7%	1032	29%
Neither agree nor disagree	539	15%	1119	31%
Agree	1612	45%	569	16%
Strongly Agree	1091	30%	187	5%
Grand Total	3620	100%	3620	100%

Stretch goal represents a progressively higher funding goal, that, where unlocked will expand the product concept with new development stages or materials. Additional funding goals are generally detailed in the crowdfunding campaign, and when a new funding target is reached, the entrepreneur provides additional benefits to supporters. These additional rewards, that may represent both new project developments and new/special materials, that offer the supporters the possibility to increase, without additional financial effort, the product value. Stretch goals are incentives to contribute for either old supporters that for new supporters, as these latter may not see a compelling reason to contribute or buying the product. Stretch goals are a general incentive because the product value will increase for all consumers. As for the others personal and general incentives, 75% supporters consider the possibility of receiving additional materials, for free, a high incentive to buy a product.

Finally, among the factors that can influence the supporter decision of buying a product via crowdfunding, there could be the date within which the consumer will receive the product. Information about shipping is generally available in the crowdfunding campaign, thus supporters can evaluate if they are willing to invest in a product that will be available some months later, or sometimes a year later. As discussed previously, in a pre-purchase crowdfunding campaign, supporters are aware that product will be available only later stages. However, even if the shipping time provision does not affect

the decision to buy a product, can affect the financial resources that a consumer would like to invest, namely the pledge amount. Interestingly, shipping time variable shows that the nearly a half of the sample do not consider the shipping time a deterrent to his investment/consuming decision. The 30% of the sample neither agree nor disagree, while a percentage nearly 20% consider a medium-long term delivery a disincentive to invest money in a new market proposal.

### *Word of mouth*

Supporters interviewed have perceived as highly important the information provided by others actors during the period of the crowdfunding campaign. On average (3.6) supporters asserted that information provided by expert reviewers helped them in acquiring additional information on the product. In fact, the 50% of supporters indicate that the information provided by expert further motivated them in pre-purchase the product.

Information ability of supporters is lower than the information ability of reviewers; however, the 33% of supporters interviewed considered the electronic word of mouth inside the community as an additional informational driver.

Table 4.8 - Word of mouth, overall sample

<b>WOM</b>	<i>Reviewers e-wom</i>		<i>Supporters e-wom</i>	
Observations 3620	Frequencies	Percentage	Frequencies	Percentage
Strongly Disagree	213	6%	421	12%
Disagree	516	14%	808	22%
Neither agree nor disagree	1091	30%	1175	32%
Agree	1381	38%	987	27%
Strongly Agree	419	12%	229	6%
Grand Total	3620	100%	3620	100%

#### **4.3.1.1 Kickstarter Experience Sample findings: by timing**

Kuppuswamy and Bayus (2013) argued that the funding cycle of a crowdfunding campaign tends to change over the time of the campaign. A crowdfunding campaign can be divided into three main phases (Beaulieu et al., 2015): the starting phase, the middle phase, and the final phase. Generally, while the starting and final phases are characterized by a high participation of supporters to the funding cycle, during the middle phase the crowdfunding campaigns register physiologically decline of contributions. Supporters who approach to the crowdfunding page can observe a set of information related to the time, such as the number of days remaining until the deadline expires, the current funding status of the project, and the ultimate funding goal. Several researchers suggest that the supporters' timing enter in a campaign has several effects on other backers and on the probability of success of the funding cycle. Kuppuswamy and Bayus (2013), analyzing Kickstarter' projects along the time dimension, found that investors tend to do not finance campaigns near to the deadline, that has already reached their initial goals, as they percept to be less responsible for the success of the entrepreneurial proposal. At the same time, additional promotional efforts made by the entrepreneur to reach the financial goal during the last phase, increase the financial resources collected. Colombo et al. (2013) observe the role of the internal social capital of proponent, defining it as the degree to which the proponent has been supportive of Kickstarter projects and therefore has established social contacts with peers inside the community. Authors found that early contributors - supporters intervening in the first phases of a campaign - are closely associated with the likelihood of a project reaching its target capital. Gangi and Daniele (2017) found that early-late supporters, namely supporters that intervene in the tail of the campaign, send a signal to other "waiting" supporters, enhancing the probability of success.

Each phase of a crowdfunding campaign is characterized by a different set of information available. After the first days that the campaign is online, for example, the word of mouth mechanism, tend to produce additional information that supporters can observe or acquire to reduce information asymmetry. Considering that the timing in which supporters enter in a campaign, determine the level of engagement and information that supporters can acquire, a further analysis is conducted on dimensions

previously discussed in order to evaluate if the entering time of supporter in the campaign can influence the consumers' attitude in financing a new product.

The campaign adopted in this study, Black Rose Wars, has been posted online for 24 days (from April 26th to May 20th, 2018) thus the sample was divided in three stage (t1, t2, t3) where each time fraction is equal to eight days (see Table 4.9). The entering time of each supporter who replied to the survey was gathered from Kickstarter, as for each supporter the crowdfunding platform shows the pledging date of the supporter.

Table 4.9 - Crowdfunding Experience Sample by timing

<b>Timing</b>	<b>t1</b>	<b>t2</b>	<b>t3</b>	<b>Total</b>
<b>Supporters</b>	1304	525	1791	3620
<b>% on sample</b>	36%	15%	49%	100%

As showed in Table 4.9, the campaign analyzed follow the timing scheme described by Kuppuswamy and Bayus (2013). In the first and final stages are concentrated the 85% of the sample, while the remaining 15% intervened in the middle phase (t2).

### *Expertise*

Generally speaking, as for the overall sample, also in this case, supporters who financed the campaign are both expert in the game field and aware of the functioning of the crowdfunding platform (respectively 50% and 85%). However, a slight difference can be detected among the three periods. The findings seem to suggest that expert supporters are willing to enter in the first stages of the crowdfunding campaign, as in t1 the 55% of supporters have expertise in the game field. Observing the responses percentage of supporters intervened in t2, and t3, the experts tend to decrease. Respectively, in t2 the experts represent the 50% of the sample, while in t3 the 47%.

Table 4.10 - Supporters' Expertise by Timing

<b>Expertise</b>	<i>Backers Expertise</i>			<i>Backers KS Knowledge</i>		
Observations 3620	<i>t1</i>	<i>t2</i>	<i>t3</i>	<i>t1</i>	<i>t2</i>	<i>t3</i>
Percentage						
Strongly Disagree	4%	3%	4%	2%	2%	2%
Disagree	12%	13%	14%	1%	3%	3%
Neither agree nor disagree	30%	35%	36%	8%	12%	11%
Agree	36%	38%	34%	46%	52%	55%
Strongly Agree	19%	12%	13%	43%	31%	30%
Grand Total	100%	100%	100%	100%	100%	100%

With reference to the supporters' knowledge of the platform logic, the timing of entering the campaign does not suggest a difference between the three phases. The majority of supporters, in each phase, affirm to know how the platform operates.

### *Team*

In the crowdfunding context, entrepreneurs can increase the information available in the crowdfunding campaign, adding visual and textual descriptions that further detail the product. Observing the supporters from time perspective, findings suggest that the phases do not determine a strong change in consumers' perception. Considering the overall sample, the 70% of supporters considered the team prepared and reliable, this perception tends to be strong for supporters in the initial and the middle phases of the pre-purchase, respectively for the 72% and 73% of supporters. The team has proved to be able to communicate adequately for the 81% of supporters. Among the supporters interviewed, those placed at the beginning of the crowdfunding campaign expressed appreciation for the communication skills of the team in the 84% of cases.

Table 4.11 – Team Hard and Soft skills by Timing

<b>Team</b>	<i>Team Hard Skills</i>			<i>Team Soft Skills</i>		
Observations 3620	<i>t1</i>	<i>t2</i>	<i>t3</i>	<i>t1</i>	<i>t2</i>	<i>t3</i>
Percentage						
Strongly Disagree	1%	2%	0%	1%	2%	1%
Disagree	1%	0%	0%	2%	2%	3%
Neither agree nor disagree	27%	25%	30%	13%	14%	17%
Agree	55%	58%	56%	57%	55%	58%
Strongly Agree	17%	15%	13%	27%	28%	21%
Grand Total	100%	100%	100%	100%	100%	100%

### *Quality*

Supporters' perception about the quality of the crowdfunding campaign, and of the product, does not result influenced, in this study, by the timing. As in the case of the overall sample, the quality of the campaign was considered on average high by all the three timing sub-sample. Percentage associated with the perception of supporters do not diverge, signaling that all supporters find the overall campaign quality highly satisfactory. The product quality variable does not show a significant difference among the three samples, finally, a favorable price perception is associated with all three sub-samples.

Table 4.12 - Quality by Timing

<b>Quality</b>	<i>Overall Campaign Quality</i>			<i>Product Quality</i>			<i>Price perception</i>		
Observations 3620	<i>t1</i>	<i>t2</i>	<i>t3</i>	<i>t1</i>	<i>t2</i>	<i>t3</i>	<i>t1</i>	<i>t2</i>	<i>t3</i>
Percentage									
Strongly Disagree	1%	2%	1%	1%	2%	1%	1%	2%	1%
Disagree	0%		0%	1%	1%	1%	4%	3%	4%
Neither agree nor disagree	3%	4%	4%	30%	27%	35%	32%	31%	33%
Agree	46%	41%	49%	46%	44%	42%	47%	46%	46%
Strongly Agree	49%	53%	47%	23%	26%	21%	17%	18%	17%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%

### *Reward and Pledge Choice*

Observing the responses released by customers on the reward and pledge choice, in relation to the timing a supporter enter in the campaign, previous positive evidence about the presence of general and personal incentive embedded in the reward strategy are confirmed. However, some difference in the supporters' evaluation are detected. The presence of exclusive material is highly relevant for all supporters, but supporters placed in t3 tend to attribute a greater relevance to the possibility to obtain the first special edition of a product.

Table 4.13 - Reward and Pledge Choice by Timing

<b>Reward and Pledge</b>	<i>Exclusive Materials</i>			<i>Add-on</i>		
Observations 3620	<i>t1</i>	<i>t2</i>	<i>t3</i>	<i>t1</i>	<i>t2</i>	<i>t3</i>
Percentage						
Strongly Disagree	4%	3%	2%	3%	3%	3%
Disagree	6%	6%	6%	6%	7%	7%
Neither agree nor disagree	14%	15%	15%	13%	15%	17%
Agree	37%	37%	40%	52%	49%	51%
Strongly Agree	39%	39%	37%	26%	26%	21%
Grand Total	100%	100%	100%	100%	100%	100%

<b>Reward and Pledge</b>	<i>Stretch Goals</i>			<i>Shipping Time</i>		
Observations 3620	<i>t1</i>	<i>t2</i>	<i>t3</i>	<i>t1</i>	<i>t2</i>	<i>t3</i>
Percentage						
Strongly Disagree	4%	4%	2%	20%	17%	20%
Disagree	7%	6%	8%	28%	32%	28%
Neither agree nor disagree	15%	15%	15%	32%	28%	31%
Agree	43%	45%	45%	14%	16%	17%
Strongly Agree	30%	30%	30%	6%	7%	4%
Grand Total	100%	100%	100%	100%	100%	100%

With reference to the add-ons, while in the overall sample the 75% of supporters consider them a strong incentive to buy a product via crowdfunding, this effect tends to soften as the campaign nearing the deadline. Add-ons are more relevant for early supporters (78%), supporters placed in the middle phase rate them relevant for 75%, whereas the supporters in the last period of the crowdfunding respond to 72%.

The general incentive of the stretch goals tends to be quite significant mostly for supporters that intervened starting from the middle phase, in fact for the 73% early supporters stretch goals are incentive to buy a product, whereas this percentage increase until the 75% for supporters placed in t2 and t3.

Finally, the shipping time prevision, as in the overall sample, do not really affect the consumer's' willingness to pay that decide to finance a product in the middle phase (20%). However, supporters intervened in the middle phase have considered more impactful the shipping time in their funding decision (23%).

### *Word of mouth*

Observing the supporters from the time perspective, the effect of word of mouth created by a reviewer is more relevant for supporters placed in the middle phase (52%), while supporters who entered in the first stage of the campaign, considered relevant information disclosed by reviewers in the 49% of cases. With reference to the information ability of supporters, it shows a greater effect for supporters entering in the first stages of the fundraising process (35%). For supporters in the middle and later stages of the campaign, the informational utility of supporters tends to decrease (33%).

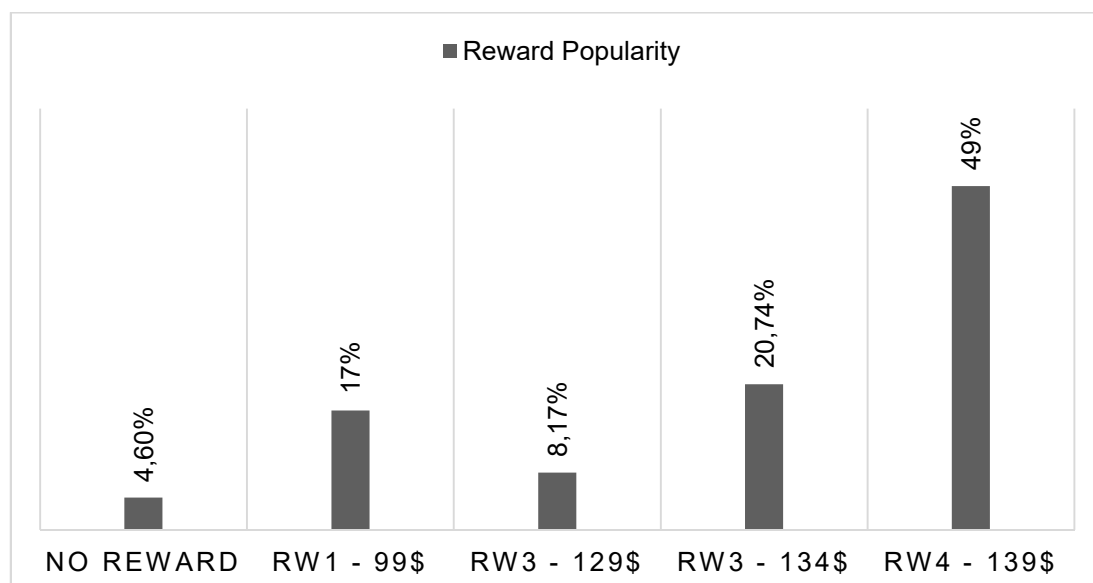
Table 4.14 – Word of mouth by Timing

<b>WOM</b>	<i>Reviewers e-wom</i>			<i>Supporters e-wom</i>		
Observations 3620	<i>t1</i>	<i>t2</i>	<i>t3</i>	<i>t1</i>	<i>t2</i>	<i>t3</i>
Percentage						
Strongly Disagree	6%	6%	5%	13%	10%	11%
Disagree	15%	14%	14%	22%	22%	23%
Neither agree nor disagree	31%	27%	30%	31%	34%	33%
Agree	37%	38%	39%	28%	26%	27%
Strongly Agree	12%	14%	11%	7%	7%	6%
Grand Total	100%	100%	100%	100%	100%	100%

#### 4.3.1.2 Kickstarter Experience Sample findings: by reward tiers

The survey gathered information from a sample of 3620 supporters who financed the crowdfunding campaign. Restricting the analysis to the pre-purchase of the product, the sample represents the 36% of the total funding collected by Ludus Magnus Studio.

Figure 4.1 – Black Rose Wars Reward Popularity



With reference to the reward scheme offered by LMS, supporters during the crowdfunding campaign could choose among four levels of rewards, detailed in Table 4.15. In terms of preference among the several reward tiers, the sample follows the same trend of the entire population of supporters, as shown by the reward popularity of the entire sample of 8226 supporters reported in Figure 4.1.

Table 4.15 – Kickstarter Sample divided by Rewards Tiers

Reward Tiers	Price (\$)	Supporters	Supporters (%)	Impact on Funding (\$)	Impact on Funding (%)
<b>Rw_1</b>	99\$	653	18%	64.647,00	14%
<b>Rw_2</b>	129\$	425	12%	54.825,00	12%
<b>Rw_3</b>	134\$	541	15%	72.494,00	15%
<b>Rw_4</b>	139\$	2001	55%	27.8139,00	59%
<b>Grand Total</b>	-	3620	100%	470.105,00	100%

The 55% of sample choose to pre-purchase the reward tier correspondent to the level price of 139\$. The 18% of sample pre-purchase the second reward tier priced 99\$, a 12% select the reward priced 129\$, while a 15% of supporters choose to pre-purchase the product sold at 134\$.

All rewards tiers offered by the entrepreneurial team, start from the product base enriched by exclusive materials and stretch goals unlocked (see Table 4.16). The core offering of the four reward tiers is almost the same, reward tiers slightly differ in term of scarcity, namely availability during the funding phases. The reward tier 1 represents the base product, while the reward tier 4 encompasses the base product enriched by an expansion in a special edition. The reward tiers 2 and 3 have the same product offering of tier 4 but are subject to two different timing-constraints. The reward tier 2 represents the early bird, a strategy commonly used in the pre-purchase by making available the reward to a discounted price for a limited number of supporters. A reward can be also time-limited, is the case of the reward tier 3 that remained available only for 24 hours. The reward structure, mostly in the case of tier 2 and 3, is characterized by scarcity constraints.

Table 4.16 – Rewards Tiers, time availability and commercial offer

<b>Reward Tiers</b>	<b>Price (\$)</b>	<b>Scarcity</b>	<b>Description</b>
<b>Rw_1</b>	99\$	Available, no scarce	The game's Core Box will come with at least 34 miniatures, over 350 cards, dozens of tokens, 23 room tiles, 130 plastic cubes, 1 rulebook and 1 Codex Arcanum, 2 Black Rose boards and more. Black Rose Wars plus all the unlocked Stretch Goals.
<b>Rw_2</b>	129\$	Limited: Early Bird	The game's Core Box will come with at least 34 miniatures, over 350 cards, dozens of tokens, 23 room tiles, 130 plastic cubes, 1 rulebook and 1 Codex Arcanum, 2 Black Rose boards and more. Black Rose Wars plus Crono expansion (KS exclusive) and all the unlocked Stretch Goals.
<b>Rw_3</b>	134\$	Limited: Available only for 24 hours	The game's Core Box will come with at least 34 miniatures, over 350 cards, dozens of tokens, 23 room tiles, 130 plastic cubes, 1 rulebook and 1 Codex Arcanum, 2 Black Rose boards and more. Black Rose Wars plus Crono expansion (KS exclusive) and all the unlocked Stretch Goals.
<b>Rw_4</b>	139\$	Available, no scarce	The game's Core Box will come with at least 34 miniatures, over 350 cards, dozens of tokens, 23 room tiles, 130 plastic cubes, 1 rulebook and 1 Codex Arcanum, 2 Black Rose boards and more. Black Rose Wars plus Crono expansion (KS exclusive) and all the unlocked Stretch Goals.

Mittone and Savadori (2009) define that the scarcity bias as a psychological condition that acting on the subjective evaluation of a good, because the mere fact that a product is scarce, modify the consumer perceptions. In the consumers' behavior literature the scarcity is an attribute from which consumers infer other attributes, such as the price (Lynn & Bogert, 1996), or exclusivity (Snyder & Fromkin, 1980).

The scarcity attribute of reward in a crowdfunding campaign is artificially created by an entrepreneur to drive consumer preferences, as the perception of scarcity lead consumer to assume that the good is scarce because possess some particular properties. Considering this bias, an additional set of analysis is conducted on the dimensions considered in this study, in order to evaluate how the characteristics associated with each reward tiers can influence consumers' perception and decision to buy a product.

### *Expertise*

The supporters' expertise observed in relation to the reward tiers offer some insight about the crowd behavior. In general, consumer particularly expert in some commercial categories, tend to choose limited reward. The 59% of supporter who pledged reward tier 2 defined themselves expert, similar percentage are detected in correspondence of reward tier 1 and 3 (respectively 53% and 55% of sample).

Table 4.17 – Supporters' Expertise by Reward

<b>Expertise</b>	<i>Backers Expertise</i>				<i>Backers KS Knowledge</i>			
Observations 3620	<i>Rw_1</i>	<i>Rw_2</i>	<i>Rw_3</i>	<i>Rw_4</i>	<i>Rw_1</i>	<i>Rw_2</i>	<i>Rw_3</i>	<i>Rw_4</i>
Percentage								
Strongly Disagree	4%	5%	3%	3%	1%	2%	2%	2%
Disagree	12%	8%	13%	14%	3%	0%	1%	3%
Neither agree nor disagree	31%	28%	29%	37%	12%	7%	9%	11%
Agree	39%	37%	36%	34%	54%	42%	45%	55%
Strongly Agree	14%	22%	19%	12%	31%	49%	43%	30%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%

Consumers who are more sensible to the scarcity signals (reward tiers 2 and 3), are in this study associated with higher knowledge about underlying the pre-purchase mechanism via crowdfunding (respectively the 91% and 88%).

### *Team*

The entrepreneurial team preparedness results confirmed as a relevant dimension in relation to all reward tiers. The higher positive perception is detected in relation to the reward tier 2 (75%), while the lowest (65%) is associated with consumers who choose the tier 1. A positive evaluation of social skills, as the communication ability of the entrepreneurial team, accounted in the overall sample for the 81%. These abilities are confirmed as relevant mostly for supporters that are sensible to the scarcity signal, who choose to buy reward limited in quantity or time (reward tier 2 and 3, 85-84%).

Table 4.18 – Team Hard and Soft skills by Reward

<b>Team</b>	<i>Team Hard Skills</i>				<i>Team Soft Skills</i>			
Observations 3620	<i>Rw_1</i>	<i>Rw_2</i>	<i>Rw_3</i>	<i>Rw_4</i>	<i>Rw_1</i>	<i>Rw_2</i>	<i>Rw_3</i>	<i>Rw_4</i>
Percentage								
Strongly Disagree	1%	2%	1%	1%	1%	2%	2%	1%
Disagree	1%	1%	1%	0%	3%	3%	1%	3%
Neither agree nor disagree	34%	21%	26%	29%	17%	10%	13%	17%
Agree	56%	59%	55%	56%	60%	57%	57%	56%
Strongly Agree	9%	16%	18%	15%	20%	28%	27%	24%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%

### *Quality*

All the supporters interviewed considered the quality of the campaign very high (95%). This favorable perception result homogenously in relation to all the clusters of customer detected in relation to the reward tiers. The higher value is associated with the reward tier 2 (96%), even if similar percentages are detected also for the remaining reward tiers (94% and 95%). With reference to the product quality, while in the overall sample the 66% of supporters considered the quality perceived higher than product generally sold via crowdfunding, this perception appears reinforced when the sample is observed in relation to the reward tier choose. Supporters who chose the reward tier 2, consider the quality on average higher for the 73%, while supporters who pledge the reward tier 3 considered the quality a relevant drive in buying a product for the 68%.

Table 4.19 – Quality by Reward

Quality	Overall Campaign Quality				Product Quality			
	Rw_1	Rw_2	Rw_3	Rw_4	Rw_1	Rw_2	Rw_3	Rw_4
Observations 3620								
Percentage								
Strongly Disagree	1%	2%	1%	1%	1%	1%	1%	1%
Disagree	0%	0%	0%	0%	2%	0%	1%	1%
Neither agree nor disagree	3%	2%	4%	4%	34%	26%	30%	33%
Agree	48%	41%	48%	47%	42%	47%	46%	43%
Strongly Agree	48%	55%	46%	48%	21%	26%	22%	23%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%

Quality	Price Perception			
	Rw_1	Rw_2	Rw_3	Rw_4
Observations 3620				
Percentage				
Strongly Disagree	1%	2%	1%	1%
Disagree	4%	4%	3%	3%
Neither agree nor disagree	37%	27%	32%	32%
Agree	42%	49%	47%	46%
Strongly Agree	16%	18%	17%	17%
Grand Total	100%	100%	100%	100%

Finally, with reference to the price perception, some difference within the clusters can be highlighted. The percentage of supporters that in the overall sample considered the pre-purchase price adequate is of the 60%. Observing the supporters in relation to the reward tiers, it can be noticed that this perception is more favorable for the supporters who pre-purchased the reward tier 2 and 3 (respectively for the 67% and the 64%). Interestingly, supporters who pre-purchase the base product perceived the price fair in the 58% of cases.

#### *Reward and Pledge Choice*

From the responses released by customer for each cluster on the reward and pledge choice, positive evidence about general and personal incentive to buy are confirmed. In particular, the supporters who invest more in the campaign, such as supporters in reward tier 2, 3 and 4, attributed a great importance to the presence of exclusive materials. The 78% of supporters who chose the reward tier 4 considered the exclusive material an incentive to buy, whereas in cluster 2 and 3, this perception is confirmed for the 77% of

the sample. Consumers who chose the base product seem to attribute lower relevance to the presence of exclusive materials (70%).

Table 4.20 – Reward and Pledge Choice by Reward

<b>Reward and Pledge</b>	<i>Exclusive Materials</i>				<i>Add-on</i>			
Observations 3620	<i>Rw_1</i>	<i>Rw_2</i>	<i>Rw_3</i>	<i>Rw_4</i>	<i>Rw_1</i>	<i>Rw_2</i>	<i>Rw_3</i>	<i>Rw_4</i>
Percentage								
Strongly Disagree	4%	4%	3%	2%	6%	4%	2%	2%
Disagree	10%	5%	5%	6%	15%	7%	4%	5%
Neither agree nor disagree	16%	13%	14%	14%	21%	13%	13%	14%
Agree	39%	38%	37%	39%	47%	53%	52%	52%
Strongly Agree	31%	39%	40%	39%	11%	24%	28%	27%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%

<b>Reward and Pledge</b>	<i>Stretch Goals</i>				<i>Shipping Time</i>			
Observations 3620	<i>Rw_1</i>	<i>Rw_2</i>	<i>Rw_3</i>	<i>Rw_4</i>	<i>Rw_1</i>	<i>Rw_2</i>	<i>Rw_3</i>	<i>Rw_4</i>
Percentage								
Strongly Disagree	3%	4%	4%	3%	18%	21%	18%	20%
Disagree	8%	7%	6%	8%	30%	28%	29%	28%
Neither agree nor disagree	13%	15%	17%	15%	27%	32%	32%	32%
Agree	46%	43%	44%	45%	20%	15%	13%	15%
Strongly Agree	30%	32%	30%	30%	5%	4%	7%	5%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%

The possibility to enrich the product pledged during the campaign with add-ons, in the overall sample was positively associated with the intention to buy the product for 75% of supporters. This positive perception is more impactful for consumers with higher willingness to pay. Supporters in reward tier 3, considered the add-on an incentive to buy the product for the 80%, supporters in reward tier 2 consider the add-on as an incentive in the 77% of cases, while supporters in the reward tier 4 consider for the 79% the presence of add-on an incentive to buy a product. With reference to stretch goals, these are confirmed a general incentive for all supporters. Observing the sample in relation to the reward tiers, no significant difference in supporters' perception is detected. The stretch goals represent an incentive for all supporters, independently from the value of the reward. Finally, the negative perception associated with the supposed shipping date, differ slightly among the supporters divided by the pledging-time. This information is considered negatively associated with the decision to buy in the reward tier 1 for the 25%. As the reward value increases, the negative perception tends to less

influence the willingness to buy. For example, supporters who chose the reward tier 2, considered the shipping date negatively associated to their decision in the 19% of cases, while supporters in reward tiers 3 and 4 rated this aspect negatively associated with their decision to buy in the 20% of cases.

### *Word of mouth*

Supporters who pre-purchase the reward tiers 1, 2 and 3, consider the information ability of supporters more relevant (36%), while the positive perception is lower for supporters who pre-purchase the reward tier 4 (32%). Interestingly, all the supporters considered highly relevant the information disclosed by reviewers, mostly supporters of reward tier 1 (55%).

Table 4.21 – Word of mouth by Reward

<b>WOM</b>	<i>Reviewers e-wom</i>				<i>Supporters e-wom</i>			
Observations 3620	<i>Rw_1</i>	<i>Rw_2</i>	<i>Rw_3</i>	<i>Rw_4</i>	<i>Rw_1</i>	<i>Rw_2</i>	<i>Rw_3</i>	<i>Rw_4</i>
Percentage								
Strongly Disagree	6%	5%	7%	6%	12%	11%	12%	12%
Disagree	13%	16%	14%	14%	22%	24%	21%	22%
Neither agree nor disagree	25%	32%	31%	31%	31%	29%	31%	34%
Agree	43%	35%	35%	38%	27%	30%	28%	26%
Strongly Agree	12%	10%	13%	11%	8%	6%	7%	6%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%

### 4.3.2 Late Pledge Sample Findings

In this section are reported findings related to the Late Pledge Sample, disclosed for each sub-dimension considered in this study, as for the Crowdfunding Experience Sample.

#### *Expertise*

In the Late Pledge Sample, experts account for the 46% of the sample. Supporters who decided to pre-purchase the product after the crowdfunding campaign can be considered, as the supporters of the crowdfunding campaign, passionate of the product typology. Compared with the overall sample of supporters who financed the crowdfunding campaign, the percentage of supporters who declared to be aware of the mechanism of functioning of the crowdfunding platform is slightly lower (respectively 79% and 85%).

Table 4.22 – Supporters’ Expertise Late Pledge Sample

<b>Expertise</b>	<i>Backers Expertise</i>		<i>Backers KS Knowledge</i>	
	Frequencies	Percentage	Frequencies	Percentage
Observations 144				
Strongly Disagree	4	3%	2	1%
Disagree	21	15%	5	3%
Neither agree nor disagree	53	37%	23	16%
Agree	55	38%	73	51%
Strongly Agree	11	8%	41	28%
Grand Total	144	100%	144	100%

#### *Team*

Late pledge supporters affirmed for the 64% that the entrepreneurial team is competent and reliable, thus confirming that the preparedness is a driver that influence the consumer decision-making process. The 74% of late pledge supporters confirm that the entrepreneurial team was able to adequately communicating with the supporters. Findings confirm the relevance of the hard and soft skills of the entrepreneurial team in the evaluation process of a product virtually presented and sold.

Table 4.23 - Team Hard and Soft skills Late Pledge Sample

Team	Team Hard Skills		Team Soft Skills	
	Frequencies	Percentage	Frequencies	Percentage
Observations 144				
Strongly Disagree	0%	0%	1	1%
Disagree	0%	0%	2	1%
Neither agree nor disagree	51	35%	35	24%
Agree	74	51%	80	56%
Strongly Agree	19	13%	26	18%
Grand Total	144	100%	144	100%

### *Quality*

Late Pledge supporters did not participate during the crowdfunding campaign, thus the quality dimension, in this case, is observed only with reference to the product quality and the price perception. Supporters in the late pledge phase perceived the product quality higher than the supporters who participated in the crowdfunding campaign (respectively 72% and 66%). With reference to the price sensitiveness, consumers how decided to pledge later the product, even if they paid a higher price for the reward, considering the price a pretty good deal in the 64% of cases, more than overall crowdfunding campaign supporters (60%).

Table 4.24 – Quality Late Pledge Sample

Quality	Product Quality		Price Perception	
	Frequencies	Percentage	Frequencies	Percentage
Observations 144				
Strongly Disagree	1	1%	0	0%
Disagree	1	1%	7	5%
Neither agree nor disagree	38	26%	44	31%
Agree	69	48%	65	45%
Strongly Agree	35	24%	28	19%
Grand Total	144	100%	144	100%

### *Reward and Pledge Choice*

Late pledge supporters considered the presence of exclusive materials as a strong incentive to buy the product, as these materials are made available for the last time to consumers who did not participate in the crowdfunding campaign. After this phase, these materials will be no longer available to the main market, thus the 85% of late supporters perceive this limited availability a strong incentive to buy the product.

The possibility to enrich the product functionalities with additional materials is not so strong positively associated with the decision to pre-purchase for late pledge supporters, as in the case of the overall sample who financed the crowdfunding. In the overall campaign, the add-on is a strong incentive to buy in the 76% of cases, while in the late pledge sample, this percentage decrease to 50%.

The strategy of providing progressive stretch goals, reward the entrepreneur also in the case of late pledge supporters. Even if these supporters did not participate in the crowdfunding campaign, they considered the stretch goals a strong incentive to buy the product in the 76% of cases. Finally, the 29% of late pledge supporters considered the shipping time prediction a disincentive to invest in the product.

Table 4.25 – Reward and Pledge Choice Late Pledge Sample

<b>Reward &amp; Pledge</b>	<i>Exclusive Materials</i>		<i>Add-on</i>	
	Frequencies	Percentage	Frequencies	Percentage
Observations 144				
Strongly Disagree	1	1%	5	3%
Disagree	3	2%	25	17%
Neither agree nor disagree	18	13%	42	29%
Agree	62	43%	45	31%
Strongly Agree	60	42%	27	19%
Grand Total	144	100%	144	100%

<b>Reward &amp; Pledge</b>	<i>Stretch Goals</i>		<i>Shipping Time</i>	
	Frequencies	Percentage	Frequencies	Percentage
Observations 144				
Strongly Disagree	2	1%	22	15%
Disagree	8	6%	34	24%
Neither agree nor disagree	25	17%	45	31%
Agree	65	45%	28	19%
Strongly Agree	44	31%	15	10%
Grand Total	144	100%	144	100%

### *Word of mouth*

Late pledge sample perceptions about the information ability of reviewers and of supporters are positive as in the case of the consumers who participated in the crowdfunding campaign. On average (3,69) late pledge supporters asserted that reviewers offer additional technical and commercial information related to the product, in fact, the 58% of late pledge confirmed that information provided by reviewers positive affected their decision to pre-purchase. With reference to the supporter informational ability, the late pledge supporters, on average (3,40) consider e-wom created by internal community useful to evaluate the product. However, this additional information does not affect significantly the choice of pre-purchase the product for the late pledge supporters, as in the case of consumers how participated to the crowdfunding campaign.

Table 4.26 – Word of mouth Late Pledge Sample

<b>WOM</b>	<i>Reviewers e-wom</i>		<i>Supporters e-wom</i>	
Observations 144	Frequencies	Percentage	Frequencies	Percentage
Strongly Disagree	800%	6%	11	8%
Disagree	1900%	13%	27	19%
Neither agree nor disagree	33	23%	40	28%
Agree	52	36%	53	37%
Strongly Agree	32	22%	13	9%
Grand Total	144	100%	144	100%

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## ***CHAPTER 5***

### ***Discussion and Conclusion***

#### **5.1 Introduction**

The objective for this investigation was to emphasize the role of supporters in funding new market proposal presented on crowdfunding platform by entrepreneurs. The following sections discuss the theoretical and practical evidences of the explorative research related to the investment approach and evaluation methods of the consumer in the pre-purchase crowdfunding market. As suggested by Block et al. (2018), the crowdfunding market calls for further inquiries to deepen new trends in entrepreneurial finance from both a practical and theoretical perspective. This chapter concludes by discussing opportunities for future researches, and the limitations of this study.

#### **5.2 Discussion of findings of the explorative study**

In this section are discussed the main theoretical and practical implications of findings previously presented in Chapter 4. An explorative research was conducted on a sample of 3764 supporters who financed a new game via crowdfunding presented by the serial crowdfunding creator Ludus Magnus Studio. The explorative study relied on two sample of crowdfunding supporters. Supporters of the crowdfunding campaign represent the first sample, while a second sample was gathered from the late pledge supporters, intervened after the crowdfunding campaign closing.

The methodology adopted, a survey delivered to the two sample, is coherent with the aim of the explorative study of lay the groundwork that could lead to future studies on the role of consumers in the crowdfunding context or to determine if what is being observed might be explained by currently existing theories.

In undertaking independent, yet interlinked theoretical dimensions currently constituting the theoretical background of the crowdfunding phenomenon, the study

deepens the evaluation process and consumers' behavior in the crowdfunding market. Each of these dimensions addresses specific supporters and entrepreneurial characteristics and behaviors that can affect the value co-creation process. In particular, these dimensions are employed as a theoretical background to evaluate which are factors that can affect supporters' decision to buy a product via crowdfunding. The sample of the crowdfunding supporters' was additionally observed from two perspectives, the supporters' participation timing perspective, and the consumption perspective related to the tier of the product pre-purchased.

A summary of the findings is provided in Table 5.1. In order to facilitate results' readability, percentages associated with each dimension employed, represent only the aggregation of the levels of preference associated with the perceptions: agree and strongly agree. Thus, hypotheses developed are conceived to be read as positive statements.

Table 5.1 Findings of the explorative study

Crowdfunding Experience Sample									Late Pledge Sample	Overall Sample
Dimension	Overall	By Timing			By reward					
	t1	t2	t3	Rw_1	Rw_2	Rw_3	Rw_4			
Expertise										
Backers Expertise	50%	55%	50%	47%	53%	59%	55%	46%	46%	48%
Backers KS Knowledge	86%	89%	83%	85%	84%	91%	88%	85%	79%	83%
Team Hard and Soft Skills										
Team Hard skills	70%	72%	73%	69%	65%	76%	73%	70%	65%	68%
Team Soft skills	81%	82%	83%	79%	79%	85%	84%	80%	74%	78%
Quality										
Overall Campaign Quality	95%	95%	94%	95%	96%	96%	94%	95%	-	-
Product Quality	66%	69%	70%	63%	63%	73%	68%	66%	62%	64%
Price perception	63%	64%	64%	63%	58%	67%	64%	63%	75%	69%
Reward and Pledge Choice										
Exclusive Material	76%	76%	76%	77%	70%	77%	78%	78%	85%	81%
Add On	75%	78%	74%	72%	57%	77%	80%	79%	50%	63%
Stretch Goals	75%	73%	75%	75%	76%	75%	74%	74%	76%	76%
Shipping Time Provision	21%	20%	22%	21%	25%	19%	21%	20%	30%	26%
Word of mouth										
Reviewers e-wom	50%	48%	53%	50%	55%	46%	48%	49%	58%	54%
Supporters e-wom	34%	35%	34%	33%	35%	36%	35%	32%	46%	40%

The expertise dimension, in this study, was primarily explored with reference to supporters. Findings suggest that the supporters' expertise is positively associated with the intention to pre-purchase a product via crowdfunding. In this study, a relevant portion of supporters, in both samples, are expert in the field in which the entrepreneurial proposal was made. The 50% of crowdfunding supporters confirmed to have good knowledge about the game industry, as in the late pledge sample the 46% of supporters are expert. Kim and Viswanathan (2018) found that supporters with expertise, although constitute a small portion of the market, have a strong effect on the investment behavior of the crowd. While in their study, Kim and Viswanathan observed that experts were a little percentage of their sample (16%), in this study the experts represent the 48% of

the overall sample. Interestingly, on average, the 82% of supporters have are familiar with the specific consuming and investing mechanism underlying the crowdfunding.

Entrepreneurial team preparedness related findings, also suggest that in the crowdfunding context, the soft and hard abilities of entrepreneurs are a driver to reduce information asymmetry and that significantly enhances the possibility that new consumer evaluate to pre-purchase a product via crowdfunding. In the overall sample, on average, the 67,5% of supporters considered the team skilled in the game field. The communication abilities of the entrepreneurial team, are considered by the 77,5% of the supporters highly relevant in their decision to pre-purchase a product. In this study, the soft skills expressed by the team accounted more than the technical skills.

With reference to the quality dimension, the study considered three drivers: the quality of the overall campaign, the perceived quality of the product, and the supporters' price perception. Late Pledge does not reply to this question, as they did not participate during the crowdfunding campaign. Nearly the whole of crowdfunding supporters interviewed agreed that the quality of the project visual narration was high (95%). As in the crowdfunding pre-purchase, the quality of the product can be only derived from the quality of graphics, image and video aim to show the products, the supporters show more prudence in rating the product quality. The 64% of supporters interviewed considered the perceived product quality higher than the average of product presented via crowdfunding. Finally, with reference to the price, the measure of customers who considered the price fair is on average of 69%.

General and personal material incentives related to the product are found to be highly important in the decision-making process of early consumers. On average the 80% of the overall sample have considered the presence of exclusive material an incentive to pre-purchase the product. The personal incentives in the form of additional functionalities that enrich the product influenced the willingness to buy a product via crowdfunding for 63% of the overall sample. Finally, the general incentive of the stretch goals represented 75% of the overall sample a strong stimulus in consider to pre-purchase the product via crowdfunding.

These findings suggest that among the material incentive provided by the entrepreneurs, personal incentive, such as exclusivity of materials conceived for crowdfunding supporters, and general incentive, such as stretch goals that increase the commercial

value of the product, are the main drivers that positively affect the decision to buy a product. A fourth variable considered in this dimension is related to the shipping time provision. Studies on the reward-based market showed that on average successful campaign register delay in providing product pre-purchased. The findings suggest that supporters do not consider the shipping time provision a condition that can affect their decision to pre-purchase a product. Only 26% of supporters interviewed considered the shipping a condition that has influenced their choice to finance the product.

The last dimension explores the impact of to the electronic word of mouth generated about the new market proposal by supporters and reviewers, on the intention to purchase of consumer through crowdfunding. Traditional (offline) word-of-mouth has been shown to play a major role in customers' buying decisions (Hennig-Thurau, et al.2004). Similarly, in the virtual context, reviews from expert or influencer, comments, and rating, has been shown highly relevant in influencing the consumers' behavior and perception about a product (Rindova et al., 2007). Analyzing the role of electronic word of mouth in the reward crowdfunding context, Bi et al. (2017) found that information provided by entrepreneurs and information derived by e-wom, affect the success in the same measure. These two information sources are equally impactful on consumer behavior, whereas this study finds a notable difference in the crowd perception about the ability of supporters and reviewers to produce new useful information about the product. In particular, the 54% of supporters considered the information divulged by reviewers and experts a driver that reinforced their positive perception of the product, increasing the willingness to buy. Similarly, 40% of the overall sample, considered impactful on their decision to buy the informational cascade produced by supporters about the product proposal.

In this study, the consumers' behavior in the pre-purchase mechanism is observed in relation to two additional perspectives. Kuppuswamy and Bayus (2013) argued that the funding cycle of a crowdfunding campaign tends to change over the time of the campaign. A crowdfunding campaign can be divided into three main phases: the starting phase, the middle phase, and the final phase. Supporters who approach to the crowdfunding page can observe a set of information related to the time, such as the number of days remaining until the deadline expires, the current funding status of the project, and the ultimate funding goal. Researchers suggest that the supporters' timing

enter in a campaign can influence perceptions and willingness to financially contribute to producing a product. Adopting this perspective, the study, observed the sample of supporters of the crowdfunding campaign, from the perspective of their entrance in the funding cycle. The study identifies three entering timing ( $t_1$ ,  $t_2$ ,  $t_3$ ) that correspond to the starting, middle and final phases of the campaign.

The time perspective offers some interesting insight on the consumers' behavior in the pre-order mechanism. Expert supporters tend to enter in the first stages of the financial collection. In fact, the percentage of expert supporters is higher than in the other stages (55%). This percentage tends to decrease as the campaign is nearing the deadline. At the same time, the experts in the crowd are those who show strong familiarity with the crowdfunding mechanism, more than others supporters. These experts not only are expert toward a specific product group but also are also expert with the logic of pre-purchase via crowdfunding. They can be considered serial crowdfunding consumers.

With reference to the entrepreneurial team preparedness, are not detected a significant difference in supporters. Independently from the timing of entering, supporters considered the hard and soft skills of the entrepreneurial team a factor that positively affect their willingness to pay. Is interesting to notice that soft skills are considered more relevant for the supporters interviewed and that the influence of social skills on the campaign outcome is strongest in the initial stages of the financial resources collection.

Findings on the quality dimension confirm that supporters, in each time-window considered, expressed a strongly favorable judgment about the quality of the virtual storytelling. These findings confirm that effective storytelling is essential to establishing firm legitimacy and acquiring capital (Roddick, 2000; O'Connor, 2004), independently from the stage of the financial collection. Both price perception and quality product do not show a significant difference among the three sub-samples. Supporters' evaluation is homogeneous with reference to both the price of pre-purchase and the perceived product quality. Comparing the quality of the overall campaign, and the judgment about the expected product quality (respectively, 95% and 63% on average), can be noticed that consumers even if evaluated very positively the quality of the campaign high, the positive perception on the quality expected from the product tend to be lower. This suggests that consumers are aware that the product promise can diverge from expectations, independently from their expertise.

The general and personal incentives considered in this study are positively recognized by supporters as factors that influenced the decision to pre-purchase the product. Notably, the presence of an exclusive version of the product, limited only to crowdfunding consumers', represent a strong incentive to buy for all supporters, independently from the phase in which they enter in the campaign. The provision of add-on, namely accessories that increase the value of the product and that expand its functionalities, is perceived as an incentive mostly for supporters entering in the first phases of the financial collection. Supporters placed in the middle and final stage tend to recognize the add-ons as an incentive to buy, but with a lower intensity than early supporters do. At the same time, stretch goals, are strong incentive to contribute and purchase mostly for the supporters placed during the middle and the last phases of the crowdfunding campaign. These trends can be explained by the deadline effect (Ariely and Wertenbroch, 2002), that explains that with the expiry of a deadline, the balance between benefits and costs in consumers decision-making process tends to change. Stretch goals are progressive funding goals that if unlocked will provide additional benefits to supporters, both material and immaterial. Intuitively, they represent an additional incentive to participate mostly for the supporters that intervene after that the original funding goal was reached. Early supporters are involved in reaching the first financial milestone, thus they consider the stretch goals an incentive to buy, but in a lower measure than subsequent supporters do. Finally, the shipping time provision does not impact significantly on the supporters, a higher percentage is detected in the middle phase of the campaign (22%). This can be generated by the condition that being the funding in its central phase, supporters can percept more risk about the final outcome. These findings confirm that in the crowdfunding context, supporters are aware of that from the financial collection and the production phase, there is a physiological time window in which entrepreneur will commit to the production and shipment of the product.

The last dimension, is related to the ability of supporters and reviewers of enlarge the informational base provided by the entrepreneurs. Notably, the additional information provided by supporters on the product, are high relevant for the supporters who enter in the first stage of the financial collection. Whereas, the additional information provided by third parties such as experts or reviewer, are more relevant for supporters placed in the middle of the campaign. Is interesting to notice that the electronic word of mouth

affect inversely, with reference to the temporal sub-samples, the financial outcome. The electronic word of mouth of supporters and reviewers diverge in terms of the effect on the financial outcome from the temporal perspective. Whereas the word of mouth of supporters is crucial in the first phases of the crowdfunding campaign, its effect tends to soften in the middle and final stages. Conversely, the word of mouth created by reviewers, tend to significantly affecting the willingness to pay of the consumers who are placed in the middle and final stages of the crowdfunding campaign.

The second perspective adopted to explore consumers' behaviors patterns in the pre-purchase crowdfunding focuses on reward tiers offered during the campaign. Supporters that participated in the crowdfunding campaign was divided accordingly with the reward tiers chosen. In this study, the reward structure is composed of four commercial formula. The base product responds to the reward level 1, while the reward tier 4 encompasses the base product enriched by an expansion in a special edition. The reward tiers 2 and 3 have the same product offering of tier 4 but are subject to two different timing-constrains. The reward tier 2 represents the early bird, made available for a limited number of supporters. The reward tier 3 that remained available only for 24 hours. Mittone and Savadori (2009) define that the scarcity bias as a psychological condition that acting on the subjective evaluation of a good, because the mere fact that a product is scarce, modify the consumer perceptions. Considering this bias, and its impact on the product tiers choice, findings suggest interesting insight related to the consumers' decision-making process.

The scarcity bias effect in the crowdfunding context is confirmed with reference to this study. Supporters tend to buy firstly reward corresponding to a greater commercial value but limited in its availability. Limited rewards encompass generally the reward corresponding to the highest value, limited in its availability to incentive consumers. Notably, the reward 2 and 3, that in the framework of this study are limited, are associated with a higher level of expertise. This suggests that the experts in the crowdfunding pre-purchase market are more sensible to the scarcity effect. They are expert in evaluating the benefits associated with the product pre-purchase, at the same time, having familiarity with the crowdfunding strategies, they engage in the pre-purchase in the early stages to benefit of the limited offering. To the reward tier 2 (available only for 24 hours) is related the highest percentage of experts (respectively

59% and 91%), follow the reward tier 3, where experts in the game industry are 55% of the sample, while 88% of supporters have familiarity with the pre-purchase mechanism via crowdfunding.

Supporters who pre-purchased the product offered in limited quantity or for little time consider relevant the team preparedness more than others. This suggests that in a crowdfunding campaign, where the product quality is not physically available, willingness to participate and to pay is driven by the team preparedness. While the overall quality of the campaign does not differ in terms of perception among consumers observed by rewards tiers, the supporters who pre-purchase limited rewards considered both the price and the quality of the product more positively than others supporters who pre-purchased reward tiers 1 and 4.

Findings related to the general and personal incentives to buy a product via crowdfunding offer some interesting insight. The provision of exclusive materials is positively associated with the intention of pre-purchase a product, independently from its price. Supporters who choose limited products are highly motivated by the presence of add-ons, such as functionalities and additional materials that expand the value of their products. This effect tends to decrease for supporters who pre-purchased the base version of the product (reward tier 1). Conversely, the presence of incremental level of funding, decrease as the reward price increase. Thus, supporters who pre-purchased the base product, assigned greater importance than other supporters do to stretch goals. Finally, with reference to the shipping time provision, the probable negative effect on the willingness to participate appear to be more influential for supporters that decide to test the base version of the product (25%).

Observing how the supporters and reviewers ability to produce information can affect the participation of consumer in the crowdfunding market, findings suggest that supporters that are less expert and that choose the base version of the product considered the reviewers' information more relevant than information provided by other supporters. Reviewers' ability to produce information is positively linked to the extremities of reward scheme: the lower and the highest prices.

Conversely, consumers who pre-purchase limited reward, more experts, agreed in considering information provided by supporters relevant to their decision to pre-purchase (respectively, 36% and 35%). The supporters' ability to increase the

information available on the product significantly affect also the willingness to buy of less expert consumers who choose the reward tier 1.

Table 5.2(a) - Findings of the explorative study - Summary descriptive

Samples		CF Experience Sample		Late Pledge Sample
Dimension	Variables	Mean		Mean
	Observation= 3764			
<i>Financials</i>	Pledge Amount	183,98		-
	Reward Price	129,86		149,00
	Funds Added	49,19		263,76
	Total Contribution	225,74		295,53
<i>E-wom</i>	Reviewers' ability	signalling	3,60	3,69
	Supporters' ability	signalling	3,20	3,40

Table 5.2(b) - Findings of the explorative study - Summary descriptive, dummies frequencies

Samples		CF Experience Sample		Late Pledge Sample	
Dimension	Variables	% frequencies		% frequencies	
	Observation= 3764	YES	NO	YES	NO
<i>Trust &amp; Information asymmetry</i>	Previous Knowledge of the entrepreneur	18%	82%	9%	91%
	Additional information	39%	61%	47%	53%

The third set of evidence is drawn by the comparison of the two sample of customers, namely the supporters intervened in the crowdfunding campaign, and supporters who intervened in a later stage. This comparison is justified by the condition that these two type of consumers have adhered to the same crowdfunding proposal. They pre-purchase the same product, in two different periods, but the late pledge consumers' are more similar to consumers on the main market, as they can evaluate if are willing to pay a product, without participating with the entrepreneur to the risk of launching a new market proposal.

From the perspective of financial contribution, the late pledge supporters have invested, on average, more than crowdfunding supporters have. Crowdfunding supporters

financed the entrepreneurs on average for \$225, whereas late pledge for nearly 300\$. In both samples, the majority of consumers did not have occasion before the campaign to be in contact with the entrepreneur, respectively the 91% of crowdfunding supporters did not know the entrepreneurial team, whereas this percentage is of 82% in the late pledge sample. Notably, the percentage of supporters in the late pledge sample (47%) who declared to have acquired more information about the team and the product before to finance the product, is higher than crowdfunding supporters' (39%). The samples expressed the same positive judgments about the ability of reviewers to leverage the information available for evaluating the product, however, for the late pledge supporters, the information cascade produced by supporters during the campaign is found to be useful to reinforce the decision to buy the product.

The experts in the crowdfunding market tend to participate to the financial collection, in fact the percentage of expert supporters is higher in the crowdfunding sample, than the late pledge sample (respectively, 50% and 46%). Supporters interviewed in the late pledge sample, however, declared to be familiar with the crowdfunding mechanism of pre-purchase. The digital literacy rate is however slightly higher for the crowdfunding supporters than the late pledge sample (respectively, 86% and 79%).

Late pledge supporters, as crowdfunding supporters, considered hard and soft skill relevant in their decision to pre-purchase, even if in lower percentages (65% and 74%; 70% and 81%). The slightly diverging differences observed can be attributed to the non-participation to the crowdfunding campaign by the late pledge sample. During the crowdfunding time window, entrepreneurs multiply their effort to communicate and present the product exclusivity, thus technical and soft skills assume a greater role in the decision to pre-purchase.

Interestingly, the price is considered more than fair by the 75% of late pledge supporters. Is important to notice that these consumers could choose only the reward tier 4, the reward associated with the highest price. In the crowdfunding sample, supporters who considered the price more than fair represent the 63% of supporters.

From the perspective of personal and general incentives provided by entrepreneurs, late pledge, as crowdfunding supporters, consider a strong incentive to buy the provision of an exclusive version of the product that will no longer be available for new consumers in later stages. The possibility of buy expansions, such as add-ons, constitute a great

incentive for the crowdfunding supporters (75%), as for the late pledge, even if in a lower measure (50%). Supporters intervened after the campaign closing, confirmed that their decision to pre-purchase was highly driven by the presence of stretch goals. Notably, the percentage of supporters who considered the stretch goals relevant in their decision making process is higher for late supporters (76%). Even if the difference could seem irrelevant, suggests that late pledge supporters benefit from the financial efforts made by supporters during the crowdfunding campaign. The late pledge sample gathers additional benefits, unlocked by the financial effort of the crowd during the collection of financial resources via crowdfunding. Finally, supporters of the late pledge considered the consignment of the product a condition that negatively influenced their decision to pre-purchase in the 30% of cases (whereas in the crowdfunding sample this percentage is on the average pair to 21%).

To conclude, late pledge supporters benefited more of the electronic word of mouth created around the new market proposal by both supporters and expert reviewers. In the crowdfunding sample, the supporters and reviewers' ability to generate information useful for the product evaluation positively affected the decision of pre-purchase the product, respectively for the 50% and 34% of the interviewed. In the late pledge sample, these percentages increase to 58% and 46%. This preliminary evidence suggests that consumers who intervene after the campaign closing can benefit from informational positive externalities created by the crowd during the financial collection.

### **5.3 Theoretical and practical implications of the explorative study**

Given the rise of the crowds as a vital part of the decision-making process in areas ranging from the social to the economic value, the crowds' judgment and behaviors in the pre-purchase crowdfunding are of a great importance.

Crowdfunding provides entrepreneurs an alternative method for collect resources that differs in several ways from traditional funding sources. First, the crowdfunding process configures a particularly democratic process, where the decision to found or launch a new product is in the hands of small communities of new consumers or supporters. Entrepreneurs ask the crowd to evaluate a new market proposal and provide financial resources if they judge a new product valuable. Second, in the crowdfunding context, social capital assumes a greater importance, because of communications from entrepreneurs who seeking funding and the supporters potentially interested to finance a new product, occur in open and online communities. Third, pre-purchase crowdfunding in its current configuration does not involve, as the equity model, monitoring or voting rights on the investment made. There is not a formal due diligence, the financing method by stages is unsuitable for one time projects, and there are no governance agreements due to the frequent absence of legally recognized companies behind the new venture. As the supporters, have little or no influence over venture they have backed, motivations to engage are mostly related to the possibility of enjoying or experience a new experience.

Given these specific characteristics, the aim of the explorative study is to provide some evidence to what extent the crowds' judgment about a new market proposal, is driven by rational or emotional cues. The main objective of the study, is thus understand whether crowd-based decision are irrational or inconsistent related to professional investors, or if are wise, that is generally consistent with a good selection of new ventures proposed via crowdfunding. Additionally, framing the crowdfunding financial resources collection as a value co-creation process, actors not involved in the process could benefit from positive externalities coming from the resources assembly by actors involved in the process. The second question aims to understand if a founded crowdfunding proposal, offer benefits to other consumers not involved in the pre-purchase mechanisms.

Evidence suggests that differently from other crowdfunding models, in the pre-purchase mechanism, early consumers are primarily attracted by the product and its functionalities. The explorative study confirms that in the pre-purchase mechanism, among supporters there is a higher percentage of experts willing to pay for a new specific market proposal, compared with other crowdfunding models. Despite the frequent parallelism drawn between crowdfunding and the venture capital market (Cordova, Dolci, & Gianfrate, 2015; Courtney, Dutta, & Li, 2017; Mollick, 2014), this explorative study confirms that this parallelism does not contribute to explaining the role of the crowd in the pre-purchase mechanism. In the pre-purchase mechanism, supporters tend to focus on specific categories that reflect their expertise or interests, as confirmed by the explorative study that detected a strong presence of well-informed consumers. The crowd is heterogeneous and might lack the sophistication and expertise generally associated with traditional investors (VC, BA or financial institutions), but in its specific certification function, the crowd act as an expert in evaluating material and immaterial benefits that can get from the pre-purchase of a product. In the pre-purchase mechanism, the crowd's expertise is related to the ability of consumers to evaluate a new market proposal that aims to reach the main market. In this study, the expertise defines a specific approach to the crowdfunding. Supporters who have a sufficient knowledge to assess a new market proposal, tend to enter in the first phases of the crowdfunding campaigns, pledging the reward tiers affected by scarcity in order to maximize their financial participation. Expert supporters tend to be among the early investors and contribute significantly to mitigate information asymmetry among the crowd. This confirms the study of Kim and Viswanathan (2018) who found that supporters with expertise have a strong effect on the investment behavior of the crowd.

Crowdfunding offers to entrepreneurs the possibility of promoting and pre-sell a business idea rather than present or pitch a business plan to a formal investor, or financial institutions. As noticed by Frydrych et al. (2014), “for entrepreneurs crowdfunding is a new way of marshaling capital resources, learning from the wisdom of the crowds and or creating a market for nascent business”. In this perspective, entrepreneurs in crowdfunding are required to be competent and expert in the category in which they made a proposal, as well as show a strong commitment in communicating adequately and frequently with the backers in order to engage early customers. The explorative study, confirm the evidence of Chen et al. (2009) and Pollack et al. (2012),

who found that venture capital is more encouraged in funding new venture characterized by high level of commitment and passion to their business idea. Notably, the explorative study suggests that in the pre-purchase mechanism, soft skills, passion, and commitment of entrepreneurial team impact more than hard skills on the consumer willingness to pay and participate. Adequate and frequent dialogue with the crowd, as well as passion and enthusiasm, are drivers on which consumers base their investment and consumption decisions.

By packaging the firm's intangible and tangible resources into a meaningful bundle, entrepreneurial narratives reduce the appearance of uncertainty to external stakeholders, encouraging investment at the margin (Shane and Cable, 2002; Smith and Anderson, 2004). Stories provide a link for shared sense-making between the entrepreneurs and the stakeholders (Martens et al., 2007). In this framework, the campaign storytelling by the entrepreneur would appear to be the primary tools for attracting supporters, as potential investors are attracted to projects that 'appear likely to succeed' (Mollick, 2014). The explorative study confirms that the overall quality of the crowdfunding campaign, more than other dimensions related to supporters' perception on the product quality and price, represent one of the main driver to attract a sufficient number of new consumers. The quality of the entrepreneurial narration determines the legitimation degree of a new product proposal via crowdfunding.

Observing the supporters' behavior and preferences related to the reward structure, the explorative study confirms the relevance of the product characteristics and of the offering scheme within a pre-purchase campaign. In the pre-purchase crowdfunding, the crowd participation is encouraged by the possibility to obtain material compensation, such as reward (Gerber et al., 2013), this confirms that, differently from other crowdfunding models, in the pre-purchase crowdfunding, expected utility is more influent respect to non-financial motivations. Supporters are encouraged by the possibility to finance creative and innovative entrepreneurial new market proposal, and they carefully evaluate personal and general incentive to buy.

In the framework of this study, supporters reply to the reward hunter archetype identified by Ryu and Kim (2015). Early crowdfunding consumers are not really motivated by philanthropic or altruistic benefits in funding new initiative; they are mainly driven by the product offering, showing a higher willingness, respect to other types of

crowdfunders, in financing a campaign also after the financial goal was reached. They tend to act as investors who expect a reasonable return from their investment in the product.

Crowdfunding is intended to leverage the ‘wisdom of the crowd’ (Surowiecki, 2004), as entrepreneurs identify and or create a community accessible via the online platform to which launch an open call to financing a product (Belleflamme et al., 2014). The explorative study confirms that in the pre-purchase context, as in the traditional and online market, the electronic word of mouth plays a vital role in determining the amount and the reliability of information produced and made available by the crowd. The crowd is not only able to leverage the information contained in early investments by supporters with expertise, but also leverage information released by the experts.

To conclude, the positive externalities related to the success of a crowdfunding proposal derives mainly from the level of available and reliable information produced by all actors engaged, in various roles, in the financial collection. Supporters who intervene in successive stages, after the crowdfunding campaign closing, benefit more than other supporters of information pattern derived from multiple sources intervened in the crowdfunding campaign. Additionally, they tend to benefit of the financial efforts made by supporters during the crowdfunding campaign, in terms of additional materials and expansions unlocked through the stretch goals.

Taking together, this preliminary evidence on the pre-purchase crowdfunding demonstrate that the crowd is evolving toward a new form of highly specialized consumers. The crowd in the pre-purchase mechanism is able to discriminate among new entrepreneurial proposals and employing an evaluation mechanism that mix consumers’ behaviour and professional investors’ behaviour. The findings demonstrate the importance for entrepreneurs to familiarise themselves with pre-purchase strategies and to observe consumers' approach. This includes understanding the importance of co-creation, engaging the crowd in a transparent, communitarian and open dialogue around the new market proposal, which creates precious conditions for entrepreneurs of capitalizing the wisdom of the crowd.

## **5.4 Limitation and further research perspectives**

This thesis and its studies' portfolio is subject to limitations that require adequate acknowledgment in order to stimulate further investigations in this field.

First, this study in order to evaluate the consumers' willingness to pay and participate in the crowdfunding context, gathered information from a convenience sample extracted from a case study. The selection bias, obviously, limits the generalizability of findings. Theoretically, the population should comprise all backers who had funding/ consuming experience on Kickstarter. The Kickstarter protocol on personal protection information prevents access to all backers' mail due to privacy concerns. This explains why this study considers a non-probabilistic sampling procedure. Further studies can apply this conceptual model to a large and more heterogeneous sample, to strengthen the evidence obtained.

The case study adopted was referred to the pre-purchase a new board game via crowdfunding by Ludus Magnus Studio, a young venture born via crowdfunding that is increasingly recurring to this mechanism to leverage consumers' willingness to pay in new markets niches. The game category, as explained in detail in Chapter 3, is on the podium of Kickstarter projects for the financial resources collected. In this category, a growing number of new entrepreneur are entering fostering the competitive arena. From this perspective, the selected samples are adequate to reply to the research question, as they represent new consumers rather than mere supporters. Nevertheless, the gamer communities are generally highly creative and engaged, thus their commitment could differ from the commitment of other typologies of communities of consumers. In this sense, further investigations should consider to include several categories of business or sectors, to reinforce the generalizability of findings.

Third, in this study, the complex evaluation process of early consumers interested only supporters who have financed the product. As the incentive to fill the survey furnished by LMS was an expansion to the game pre-purchased, the survey gathered information only about consumers who decide to invest in the product. This constrains determined the impossibility of discriminate the crowd by observing buyers and non-buyers' behaviours. Additionally, evidences obtained by the explorative study, and findings related to each theoretical dimension employed in this study, require additional empirical quantitative test.

Future research should further analyze the theoretical models of the value co-creation applied to the crowdfunding mechanism. Framing the financial collection process as a model in which actors bring together resources to obtain benefits that are non-mutually exclusive, require a careful and deeper observation of benefits, and incentives for all actors involved in the mechanism, to adequately address the specific type of value co-created or searched by actors involved. Finally, an emerging research area is related to positive externalities that can be generated from the value co-creation for stakeholders who not participate in the crowdfunding process.

These further investigations can lead to valuable contributions that advance the field of entrepreneurial pre-purchase crowdfunding.

## **5.5 Conclusion**

One of the central insights of the Schumpeter theory (1942) was to highlight the distinct roles played by entrepreneurs and investors in bringing new ideas. The central role of investors was offer funding possibility to potential innovation that might be precluded from the market as they were unable to attract investors. In the traditional financial market settings, professional investors serve as gatekeepers of vital resources for the new venture. As Ferrary and Granovetter (2009, p. 346) wrote, "By selecting start-up, the VC firms implicitly prevent the other agent in the complex network of innovation from collaborating with start-up that do not get VC funding. It could be argued that potential valuable innovations have never reached customers because they did not get VC funding".

The rapid growth of technologies has made significantly easier and fast for entrepreneurs to circumnavigate the Internet to get in touch with a large number of heterogeneous and potentially interested supporters. Phenomena such as crowdfunding pose at the center of the firms' value creation process, the crowd. The importance of the crowd-based decision is significantly influencing a wide range of business activities and field. Crowdfunding is rapidly reconfiguring funding opportunities for new entrepreneurs, actively contrasting the adverse selection. The crowd, intervening in the decision to pre-purchase and finance a product, reduce the risk of adverse selection.

Despite the growing role of the crowd in participating in the business decisions, little is still known about some specific crowdsourcing models, and their ability to drive and support entrepreneurial development. Policymakers focus on the equity-based crowdfunding and issues related to selling equity-shares to accredited and unaccredited investors over online crowdfunding platforms, meantime the reward-based crowdfunding as an entrepreneurial model is gaining its momentum in financing new ventures. Entrepreneurial activities in non-equity crowdfunding, such as reward-based crowdfunding, which has been the focus of this thesis, accounts for 9.2% of today's European crowdfunding market, whereas the equity crowdfunding accounts for the 10% (University of Cambridge, 2017).

The particular ability of the crowdfunding mechanism to pooling several forms of capital - financial and social capital - is gradually attracting new entrepreneurs, constituting a suitable model for enlarging the funding and market possibilities associated to a new market proposal. The growing presence of the serial crowdfunding entrepreneurs, namely entrepreneurs who recur repeatedly to crowdfunding to grow their venture, confirms the relevance in the entrepreneurial finance of the pre-purchase crowdfunding model. The ability of this new model of support new venture appears to be not limited to the financial collections, allowing new venture to grow and prosper after the crowdfunding campaign (Mollick and Kuppaswamy, 2014).

Evidence from this explorative study, provides a rich picture of the pre-purchase mechanism, offering several perspectives on entrepreneurial abilities and crowd perceptions' in the crowdfunding market. Crowdfunding, like the other emergent crowdsourcing models based on a large audience of stakeholders, heightening the risk that the crowd could be subject to irrational exuberance, or other collective bias and pitfalls. Evidence from this study controvert these observations within the context of the pre-purchase crowdfunding, highlighting that the crowd, in financing and evaluating a new market proposal, show evaluation attitudes ranging from the consumers' behavior to the investors' behavior. The pre-purchase mechanism is leading to the configuration of new market niches, where supporters act as an informed investor and consumers. Additionally, the joint value created by the efforts made by entrepreneurs and the crowd, creates sounder positive externalities, that favor growth perspective and possibilities to survive of the new ventures.

Crowdfunding creates an inspiring entrepreneurial finance mechanism that can guide the future of venture capital. The exciting prospective of entrepreneurial crowdfunding should encourage scholars to continue researching the complexity of the crowdfunding phenomenon and to advance understanding about the different social, economic and managerial dimensions of crowdfunding through multidisciplinary perspectives.

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