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Crowdfunding: Outlining the New Era of Fundraising

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Abstract Crowdfunding is increasingly gaining attention in theory and practice. Various platforms have emerged, offering entrepreneurs and project owners the possibility to raise money from an undefined group of online users (“crowd”). In this article we aim to provide a deeper understanding of the rise of crowdfunding as an alternative funding opportunity by discussing its main characteristics, the market development, different classification approaches, its fields of application and by providing directions for future research.

Keywords Crowdfunding • Crowdinvesting • Crowdsourcing • Crowdfunding types • Crowdfunding platforms

1 Introduction

The development of Web 2.0 technologies within the past decade has enabled the evolution of new and innovative business models, in which the digital user plays an increasingly important role by changing the way goods are being used and consumed (Brenner et al., 2014). This digital user is no longer located at the end of the value chain. He is an integral part of it, a co-decision-maker. This change requires whole industries to think and act differently leading to a fundamental transformation from offline business models to digital ones. In this context, crowdsourcing is a striking example. It describes the outsourcing of various tasks to an undefined group of people using information technologies (Blohm, Leimeister, & Krcmar,

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2013; Leimeister, 2012). It helps companies to develop new ideas and innovations by including customers' needs and requests in the innovation process (Chesbrough, 2006). Crowdsourcing approaches often aim to benefit from the wisdom of the crowd (Surowiecki, 2004) and from collective intelligence (Leimeister, 2010).

One of the main crowdsourcing forms besides crowdvoting and crowdcreation is crowdfunding (Howe, 2006; Leimeister, 2012). It can be defined as an open call mostly through the Internet for the provision of financial resources by a group of individuals instead of professional parties either in form of donations, in exchange for a future product or in exchange for some form of reward (Belleflamme, Lambert, & Schwienbacher, 2014; Schwienbacher & Larralde, 2012). Using a proverb, crowdfunding can be described as "many a little makes a mickle", meaning that a large amount of money can be raised by accumulating small contributions from a large group of backers. Therefore, using Internet platforms as intermediaries between individuals, start-ups or companies on the one hand, and potential backers on the other, the process of fundraising is sourced out to the crowd (Moritz & Block, 2014).

Being referred to as an innovative method of funding, the basic idea of crowdfunding is not a new phenomenon. A frequently cited example of early crowdfunding is the pedestal of the Statue of Liberty. In 1885, Joseph Pulitzer, at that time publisher of New York's newspaper "World", asked the citizens of New York for a financial contribution to the pedestal of the statue. In return, he offered to print the name of each backer in his newspaper. After 5 months, the "World" announced that the donation campaign had reached US\$102,000. Remarkably, the funds of New Yorkers who donated less than US\$1 made up for 80 % of the grand total (Harris, 1986). More recent examples include the 2008 election campaign of US-president Barack Obama. Obama's team managed to raise three-quarter of a billion USD by crowdfunding. Of note, about half of the overall donation sum was raised by contributions under US\$200 (Kappel, 2009). Up-to-date various ventures, start-ups and individuals have already applied the method of crowdfunding (Bradford, 2012). Successful examples of crowdfunding campaigns reaching wide public attention are, for instance, the movie *Stromberg* (2011), a cinematic version of a German sitcom (BRAINPOOL Artist & Content Services GmbH, 2013) which raised 1 million euros in total in less than 1 week and *Coollest Cooler*, a portable cooler that includes extra-functions (e.g. an integrated blender and bluetooth speakers). *Coollest Cooler* was funded on *Kickstarter* attracting 62.642 backers and raising US\$13,285,226 (Kickstarter, 2014a).

Since 2007 crowdfunding is gaining attention both in theory and in practice. Different researchers from all over the world investigated crowdfunding by providing new insights in this emerging research field and thus creating different views. The purpose of this article is to consolidate some of these research streams by providing a holistic view on crowdfunding and crowdfunding-related topics as well as shedding light on the crowdfunding market in general, discussing current views on crowdfunding and its types and principles, identifying common fields of application and discussing potential future research directions. Our article will help

to understand crowdfunding as a new and important possibility of fundraising that has a great economic and social value.

2 The Crowdfunding Market

The crowdfunding market is still growing. The modern, digitised form of crowdfunding has its roots in the beginning of this century. Many of today's largest crowdfunding platforms are from the US and were launched from 2005 onwards. In 2010, the crowdfunding wave swapped over to Europe. From this moment on, crowdfunding started to particularly gain momentum in the UK, Germany and the Netherlands, the most mature European crowdfunding markets. The overall market numbers indicate an impressive development of crowdfunding. According to the Crowdfunding Industry Report 2013, over 800 crowdfunding platforms are currently active or in the process of being built (Massolution, 2012). The total volume is projected to US\$5.1 billion in 2013 (Massolution, 2012). The biggest crowdfunding platform, *Kickstarter*, has already reached a total of US\$1 billion of funds in 2014 (Kickstarter, 2014b). Nevertheless, crowdfunding has not yet reached its full potential. The growth of the crowdfunding market is not only limited to the US. Current figures from the European market show an increase in demand (Für-Gründer.de, 2014). In Germany there are 66 active crowdfunding platforms over which 19 million euros has been raised in 2013 (Blohm, Leimeister, Wenzlaff, & Gebert, 2013). Compared to 2012, the funding volume has doubled. With a share of 25 % of the global crowdfunding volume, the European crowdfunding market is the second largest in the world (Massolution, 2012).

The overall results of a Delphi study carried out by the University of St. Gallen in early 2014 show that the growth of the crowdfunding market will continue in the next years (Blohm et al., 2014). In this study, 70 experts were asked in two rounds on the future development of the crowdfunding industry in Germany, Switzerland and Austria. In detail, the experts think that the global crowdfunding volume will rise up to US\$35 billion in 2020. In the same period, the crowdfunding volume of the German market is expected to rise up to 359 million euros (median). The most significant growth is expected in profit-oriented models, such as equity-based and lending-based crowdfunding. According to the experts, these two models will reach a market share of around 60-80 %, both globally and in Germany. Looking at the years ahead, the experts are convinced that crowdfunding in Germany will be able to continue to grow, in particular helping creative projects (97 %), start-ups (87 %) and young growth companies (92 %) to raise money (see Table 1).

Table 1 Development of the fields of application of crowdfunding by the year 2020 (Blohm et al., 2014)

Crowdfunding for...	German-speaking market (Germany, Switzerland, Austria)				Global market			
	Very likely (%)	Likely (%)	Unlikely (%)	Very unlikely (%)	Very likely (%)	Likely (%)	Unlikely (%)	Very unlikely (%)
Private persons	4	28	64	4	4	53	40	2
Creative projects	40	57	2	0	64	36	0	0
Start-ups	51	36	11	2	70	23	6	0
Young growth companies	13	79	9	0	19	74	6	0
Small and medium enterprises	6	36	57	0	9	40	51	0
Large corporations and multinational groups	0	0	36	64	0	0	40	60

3 A Classification of Crowdfunding

3.1 Crowdfunding Principles

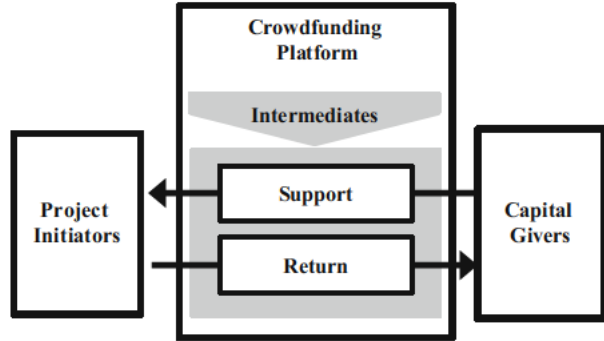
Crowdfunding typically contains three participating stakeholders: the project initiators who seek funding for their projects, the backers who are willing to back a specific project, and the matchmaking crowdfunding platforms acting as intermediaries (Belleflamme et al., 2014). Figure 1 illustrates the crowdfunding principle, containing the three mentioned stakeholders. Each stakeholder type shows differentiating characteristics, which have to be considered by attempting to describe basic principles of crowdfunding. Based on these basic principles, three archetypes of crowdfunding can be derived.

3.1.1 Project Initiators and Backers

Most frequently, project initiators and backers are private persons (Gerber, Hui, & Kuo, 2012; Verstein, 2011). However, organisational project initiators, like start-ups or non-governmental organisations (NGOs) can be found as well (Belleflamme et al., 2014; Bradford, 2012; Schwenbacher & Larralde, 2012). Furthermore, the recent adoption of the JOBS Act in the USA indicates that there are also organisational backers (Mollick, 2014; Ordanini, Miceli, Pizzetti, & Parasuraman, 2011).

Most research on the crowdfunding stakeholders refers to backers. Studies find that the investment decision of backers is influenced by social networks (Lin, Prabhala, & Viswanathan, 2013; Zvilichovsky, Inbar, & Barzilay, 2013), herding (Burtch, 2011) and free-riding behaviour (Burtch, Ghose, & Wattal, 2013). Lin, Boh, and Goh (2014) summarise that crowdfunding is manifold and addresses diverse interests. Backers also differ in their motivation for participation

Fig. 1 The crowdfunding principle (Haas, Blohm, & Leimeister, 2014)



(Bretschneider, Knaub, & Wieck, 2014). In the crowdfunding context, backers observe and are aware of the decisions from other backers and are influenced by their behaviour (Bretschneider et al., 2014). Family and friends are often important groups of backers in crowdfunding projects (Agrawal, Catalini, & Goldfarb, 2011). Agrawal et al. (2011) argue as follows: Backers could be motivated to support projects to which they have an emotional relationship, projects with which they are familiar, or projects that are initiated by somebody they have a friendship identification with. This is discussed as the direct identification-motive. Another motive theoretically discussed in the crowdfunding literature is regional identification. This motive is based on the geographical proximity between a project initiator and a backer (Agrawal et al., 2011; Lin & Viswanathan, 2013). It is argued that investors have a “home bias” in the allocation of credit (Lin & Viswanathan, 2013). The return-motive is primarily discussed in the context of equity-based crowdfunding. Bretschneider et al. (2014) discuss this motive in view of a backers’ goal of obtaining profit and/or capital gains on the invested capital. Further, there is the recognition-motive. In general, recognition is found to be a basic human need, as it gives people a sense of self-esteem (Nerdinger, 2006). This motive was discovered, for example, by Hars and Ou (2002) in open source software communities. In these communities, users expect positive reactions from other participants and feel proud when third parties acknowledge their contributions. Applied to the crowdfunding case, Bretschneider et al. (2014) argue as follows: The fact that backers are prominently visualised on a crowdfunding platform through their names may be perceived by these backers as an opportunity to receive recognition. More generally speaking, backers may invest in a project to receive recognition for their investment from other people, the community and the society (Bretschneider et al., 2014).

3.1.2 Crowdfunding Platform

Assessing the intermediary crowdfunding platform, several distinctive characteristics can be found. They refer to the funding mechanism, the fundamental specialisation of the crowdfunding platform and the type of support/return (Haas et al., 2014).

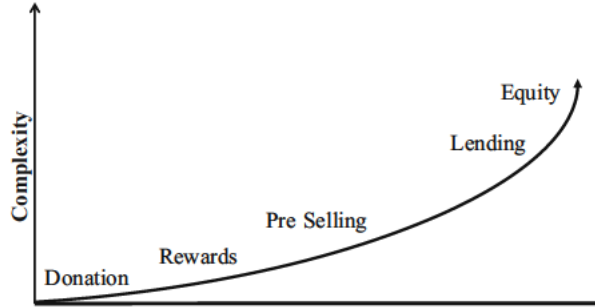
Funding Mechanism In contrast to traditional financial intermediaries, crowdfunding platforms do not borrow, pool, and lend money on their own account. They focus on the matching of project initiators and backers by providing information about the projects and functionalities, e.g. for reducing the risks of the investment. Therefore, crowdfunding intermediaries provide particular funding mechanisms, such as pledge levels, minimum pledge amounts and the all-or-nothing-/keep-it-all-principle (Gerber et al., 2012; Mitra & Gilbert, 2014; Mollick, 2014; Walsh, 2014).

Project initiators define levels of possible pledge amounts. Each pledge level implies a certain return, which increases with higher pledge amounts (e.g. a postcard for 5 euros, or a poster for 10 euros). A minimum pledge amount represents the lowest possible sum, which can be pledged by the backers. The minimum level of the pledge amount varies widely from almost zero, e.g. for charity projects, up to 100 or 1,000 euros for start-up funding. Central to most crowdfunding platforms is the all-or-nothing-principle (Cumming, Leboeuf, & Schwienbacher, 2014). Following the all-or-nothing-principle, project initiators are only paid out the collected amount in case they reach their pre-defined funding goal. This is based on the assumption that backers are only able to accomplish their project and to deliver the promised returns if they have the complete resources required for doing so. However, some crowdfunding platforms are based on a keep-it-all-principle in which project initiators receive any collected sum (Gerber et al., 2012). This funding principle is particularly used for charitable projects or projects which use crowdfunding as a subordinate source of funding (Blohm, Leimeister, Wenzlaff, et al., 2013).

Specialisation The Internet economy is characterised by so-called hyperspecialisation (Malone, Laubacher, & Johns, 2011). Serving the highly heterogeneous needs and requirements of project initiators and backers, crowdfunding platforms focus on specific niches and serve a particular segment of the crowdfunding market. Thus, crowdfunding platform specialisation may reach from innovative and creative projects or products (Agrawal, Catalini, & Goldfarb, 2010), start-ups and new businesses (Ahlers, Cumming, Günther, & Schweizer, 2012; Schwienbacher & Larralde, 2012) to sustainability and charity projects (Burtch et al., 2013).

Support and Return Type The most obvious characteristic of a crowdfunding platform is the type of return provided by the project initiator. In crowdfunding, project initiators offer a bandwidth of possible returns, reaching from altruistic returns to financial compensation. From a legal perspective, Bradford (2012) distinguishes five returns: (1) No compensation The backer makes a donation in order to support projects for the greater good. (2) Reward The backer receives a non-monetary return. (3) Pre-ordered product The backer's support is a prepayment for a product. (4) Interests The backer participates in a loan. (5) Profit shares The backer receives equity shares from the project (e.g. a start-up). The degree of complexity for the provision of capital and the resulting returns increase from donation, rewards, pre-selling, lending and equity, as shown in Fig. 2 (Hemer, Schneider, Dornbusch, & Frey, 2011).

Fig. 2 Complexity of return/support types (according to Hemer et al., 2011)



3.2 Crowdfunding Types

To summarise these differentiating characteristics, crowdfunding platforms differ on multiple dimensions. Thus, it is not surprising that different types of crowdfunding exist. In order to systemise crowdfunding and to develop a classification scheme for crowdfunding, researchers presented multiple approaches in the last few years. All of them are based on the return type offered for the backers' support. Beyond Bradford's (2012) legal distinction, researchers and practitioners have proposed different classifications of crowdfunding. Hemer (2011) distinguishes the seven types of donation, sponsoring, pre-ordering, membership fees, crediting, lending, and profit-sharing. Belleflamme et al. (2014) identify the two poles pre-ordering and profit-sharing. Further, the consulting agency Massolution (2012) developed the most common classification so far that differentiates between reward-based crowdfunding (subsuming rewards and pre-ordering), crowdlending, crowdinvesting and crowddonation.

All these classifications are based on one single aspect – the return type. This neglects that crowdfunding platforms differ on many dimensions, which have to be considered when distinguishing crowdfunding types. In this respect, Haas et al. (2014) identified 13 differentiating characteristics of crowdfunding platforms by linking crowdfunding to the theory of financial intermediation. Applying cluster analysis, they examine three generic crowdfunding archetypes. By taking a holistic view and considering multiple characteristics, these archetypes can be differentiated by their pursued value proposition, determining which project initiators are attracted in order to satisfy the backers' specific demands, e.g. regarding project type, return, risk, and platform functionalities for matchmaking. In total, Haas et al. (2014) identify three distinct types of crowdfunding, as shown in Fig. 3 Hedonism, Altruistic and For Profit.

Hedonism The hedonic value proposition primarily describes a crowdfunding type where backers pledge for innovative and creative projects and products, such as the well-known *Pebble* smart watch or the Oscar-winning movie *Inocente*, and receive a non-monetary return in form of pre-ordered products or rewards. Funding mechanisms are quite rigid, in order to reduce the risk of underfinancing and in order to motivate backers to spend more money. These platforms mostly apply the all-or-nothing principle and set minimum pledge amounts and pledge levels. Typical

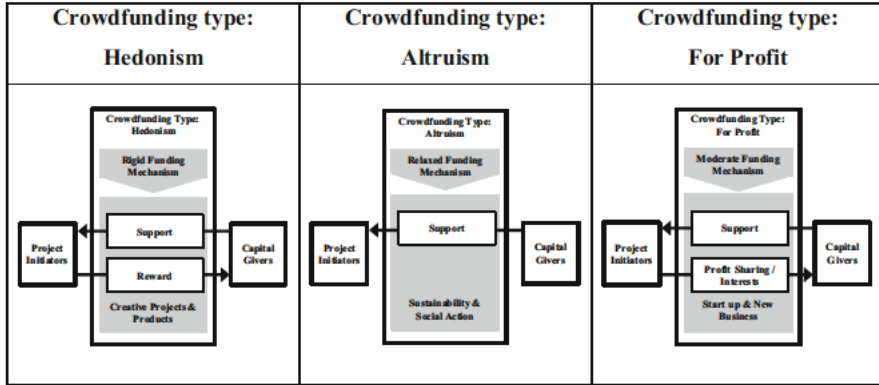


Fig. 3 Overview over crowdfunding types (Haas et al., 2014)

crowdfunding platforms within this type are *Kickstarter* or *Indiegogo*. These platforms have in common that they try to address a sense of interest or joy and thus strive to create hedonistic value that is realised by supporting such projects.

Altruism With the focus on charitable projects, this types prevailing form of support are donations. Thus no compensation is offered. Backers support projects of this kind for the “greater good” or altruistic reasons. Typical platforms, pursuing an altruistic value proposition include *Crowdrise* and *Kiva*. Loose funding mechanisms ensure greatest possible support for these projects. Therefore, these platforms do not use minimum pledge amounts or pledge levels and apply a keep-it-all principle.

For Profit A crowdfunding type with a profit-oriented value proposition often focuses on the funding of start-ups, but also on the granting consumer credits. Therefore, backers are offered monetary returns, like interests or profit shares. The value proposition aims at the profit orientation of backers. Representative platforms with a profit-oriented value proposition are *FundedByMe* which offers a profit-sharing model or the peer-to-peer-lending platform *Prosper*. Funding mechanisms are of moderate rigidity, in order to ensure enough flexibility for the individual requirements of start-ups. Therefore, these platforms apply pledge levels as well as minimum pledge amounts and use the keep-it-all and all-or-nothing principle alternatively.

4 Potentials and Challenges of Crowdfunding

4.1 Potentials

The potentials of crowdfunding may highly vary due to the diversity of crowdfunding projects and platforms.

Fundraising The main potential of crowdfunding is the acquisition of capital. In this regard, crowdfunding may help to overcome an early-stage gap of start-ups,

provide small- and medium-sized enterprises with capital to fund certain projects, or enable the realisation of creative, altruistic, ecological, and social projects (Belleflamme, Lambert, & Schwienbacher, 2010). All of these projects frequently reflect some sort of niche project or projects that have a strong regional focus. As a consequence, crowdfunding offers not only the possibility of raising money for start-ups and new ventures but also makes funding possible for niche projects which perhaps are perceived as non-profitable, and thus are not able to raise money from traditional sources. Therefore, crowdfunding not only enables prominent and lucrative projects to be funded but also helps to develop less prominent projects. Thus, crowdfunding may be described as an emerging long tail offer in the financial service industry.

(Pre-)Sales This form of application of crowdfunding involves businesses collecting payments in advance for products to be delivered at some later point of time (Hemer et al., 2011). Doing so, the fix costs of producing a product can be financed before production starts. In most cases, project initiators collect money to develop a future product, which usually exists only in form of a prototype. The project initiator guarantees the delivery of the final product in return for the contributor's pledge. The value of the pledge is determined by an assessment of the market value of the product. During the campaign, products might be offered at a discounted price to encourage potential backers to support the crowdfunding campaign.

Marketing Crowdfunding is heavily based on social media and online communication, radically simplifying the sharing of information about a crowdfunding project across geographical borders (Agrawal et al., 2010). For backers, promoting crowdfunding projects by forwarding information to friends and other interested parties is very easy and much faster than using offline techniques due to decreased transaction costs. Due to their financial investments, backers frequently show a high level of involvement, making use of the available communication tools in order to create awareness for projects. As a consequence, crowdfunding enables the creation of viral marketing effects.

Market Research Due to the fast, easy, and not geographically limited access to capital, the rapid exchange of information with potential backers allows for an initial testing of business ideas (Mollick, 2014; The World Bank, 2013). In this regard, successfully funded or even overfunded projects may serve as acceptance tests of potential products and value propositions. As potential customers do have to invest their money, crowdfunding might be more apt to elicit the true beliefs regarding a product or a service than rating scale based product evaluations and other crowdsourcing approaches (Riedl, Blohm, Leimeister, & Krcmar, 2013).

Co-creation Many crowdfunding projects have benefited from the crowd's feedback. This feedback can reach from simple questions regarding a future product or service, to concrete suggestions for improvement, or even innovative new ideas. Crowdfunding, therefore, is based on the fundamental idea of co-creation, in the

sense that customers or backers are directly integrated into value creation (Blohm, Leimeister, & Krcmar, 2013).

4.2 Challenges

Besides the manifold potentials, crowdfunding as a source of financing may also pose some challenges. Uncertainty and risk for backers and cost of capital for the project initiator are the most important ones.

Uncertainty and Risk Usually, the investment decisions of backers are not based on solid financial data but influenced by a high degree of emotionality and various decision biases, such as herding or supporting regional projects (Agrawal et al., 2011; Burtch et al., 2013). As a consequence, the funding usually implies risk and uncertainty. For instance, backers may not receive the return as specified. In this regard, start-ups going bankrupt or delayed delivery of pre-sold products are among the most prevalent problems (Gierczak, Bretschneider, & Leimeister, 2014). However, crowdfunding does not only include uncertainty for backers but also for project initiators. For instance, many project initiators who use crowdfunding as pre-sales mechanisms do not possess scalable production facilities. As a consequence, many products and other rewards are delivered with delay, potentially damaging the reputation of the project initiator. This may also decrease profitability of the project due to unforeseen extra costs.

Cost of Capital In sum, crowdfunding compared to other forms of financing exhibits high costs of capital (Agrawal, Catalini, & Goldfarb, 2013). On average, crowdfunding platforms request about 10 % of the raised capital and frequently charge additional fees for due diligence of projects or insurances reducing uncertainty and risk for the backers. Further, project initiators need to account costs for the potential returns such as interests, shared profits, discounts, or other types of rewards. Conducting crowdfunding campaigns frequently requires high efforts with respect to preparing a video and other information supporting the campaign, the management of the campaign itself (e.g. responding to questions of potential backers), and potentially increased investor relation efforts after the end of the project.

5 Future Research Directions

In view of the relatively new crowdfunding phenomenon, research lacks a deeper knowledge on crowdfunding and crowdfunding related topics. Therefore, no or only limited statements can be made with regard to a wide variety of questions (Burtch, Benedetto, & Mudambi, 2014), as for, for instance, backers' motivation to support a crowdfunding campaign as well as project initiators' motivation to start a

project, the influence of diverse facets of perceived risk on the funding behaviour and crowdfunding as an alternative fundraising method for small and medium enterprises. Crowdfunding research efforts cover inter alia topics on the effective use of crowdfunding (Schwienbacher & Larralde, 2012), different types of customers (Ordanini et al., 2011), the project-specific selection of crowdfunding platforms (Belleflamme et al., 2014), determinants of project success and failure, e.g. success factors (Mollick, 2014) or the influence of creativity and hedonic value (Schulz, Haas, Blohm, & Leimeister, 2015), investment decisions of backers, e.g. geographic barriers (Agrawal et al., 2010), the prevalence of herding behaviour (Burtch, 2011) or free riding behaviour (Burtch et al., 2013).

5.1 Backers' Motivation

In view of this, research still lacks a deeper knowledge about backers' motivation for participating in crowdfunding initiatives. In particular, empirically validated knowledge on what motivates the crowd to invest in certain projects is very limited, even though the motives to participate in other forms of crowdsourcing initiatives have been well investigated. For example, Bretschneider, Leimeister, and Mathiassen (2015) investigated why the crowd develops ideas for firms in crowdsourcing for innovation communities. However, there are calls to investigate a crowd's motivation for crowdfunding separately (Lehner, 2012; Moritz & Block, 2014), since it is expected that backers' crowdfunding motives differ significantly from motives for engaging in other forms of crowdsourcing initiatives. According to this and as presented in Sect. 3.1, preliminary research results discusses a few possible motives but they are still incomplete and just derived from theory and as already mentioned not empirically validated. For example, Bretschneider et al. (2014) discuss herding behaviour as a possible influencing motive for participation in crowdfunding. Banerjee (1992) describes herding behaviour as "everyone doing what everyone else is doing" (p. 798). Backers' motives already discussed in literature are not an exhaustive list of motives. Certainly, there are a lot more motives to be detected and to be derived from theory. Hence, crowdfunding researchers should focus on insights from motivation research and carefully analyse and screen the body of knowledge in this field. These efforts would certainly reveal further possible motivation factors that are relevant and applicable to the crowdfunding context. Also, there is the need for empirically validating backers' motivation factors in crowdfunding.

5.2 Project Initiators' Motivation

One further possible direction is strongly related to the preceding remarks. It is still unclear why project initiators are motivated to use crowdfunding. One might be

tempted to assume that it is of course the need for capital, which motivates project initiators to engage in crowdfunding. Even if this is right in many or most cases, it is by no means the only reason. Why project initiators are actually using crowdfunding might be the most basic question in this field, as it refers to the fundamental purpose of crowdfunding, which is the starting point and value proposition for any crowdfunding business model. As shown in the discussion about the fields of application of crowdfunding, combining the wisdom of the crowd (Surowiecki, 2004) with an efficient resource allocation mechanism (Belleflamme et al., 2014; Mollick, 2014; Schwienbacher & Larralde, 2012), which overcomes information asymmetries (Ahlers et al., 2012; Burtch et al., 2013) and transaction costs (Agrawal et al., 2010; Bakos, 1998) on an entertaining platform, reveals manifold opportunities, which address diverse project initiator's motives. A differentiated view on project initiators' motives is necessary in order to understand them. Therefore, project initiators' motives should be studied with respect to the different crowdfunding types, as they might differ a lot. Future studies should examine project initiators' motives to use crowdfunding instead of other forms of funding. This will highlight new insights into crowdfunding and new facets of this topic. Studying project initiators' motives provides a better understanding of different crowdfunding types, as it focuses on the value for the users not on how it works. Any business model should take a customer-centred perspective, rather than a functional perspective. Therefore, functionalities should serve the purpose of building proper crowdfunding business models, in order to get a better understanding of the principles and their correlations. Studying project initiators' motives will have important practical implications as well, as it provides insights in what actual crowdfunding platforms have to offer in order to satisfy customer needs. Knowledge about project initiators' motives will reveal manifold niches for new crowdfunding platforms as well as new fields of application for crowdfunding in general.

5.3 Risk in Crowdfunding

A further research direction should focus on what influences a customer's decision on whether or not to support a crowdfunding initiative financially. One possible direction derived from e-commerce and human behaviour literature could be the empirical investigation of perceived risk in crowdfunding (Gierczak et al., 2014). For practitioners, risk has been widely considered to be one of the important factors that influence customers' buying behaviour. To adequately assess and reduce these risks, it is crucial for project initiators and intermediaries to know which risk dimensions are of greatest concern to consumers. Risks mainly occur due to information asymmetries in transactions, in which the seller usually possesses more information than the buyer (Pavlou & Gefen, 2004). In general, perceived risks play a crucial role in all types of consumer behaviour (Mitchell, 1992). The more risks occur, the less likely a consumer is to purchase (Forsythe & Shi, 2003).

Therefore, according to Mitchell (1999), perceived risks are powerful at explaining consumers' behaviour because "consumers are more often motivated to avoid mistakes than to maximise utility in purchasing" (p. 454). Knowing the risks that arise in a crowdfunding campaign will help to systematically design and implement potential risk-reducing elements and strategies into the crowdfunding platforms and projects in order to attract the crowd to invest and therefore to increase their success (Mollick, 2014). Doing so can further help to convert some visitors into backers and thus helps to retain and expand the base of backers.

5.4 Crowdfunding for Small and Medium Enterprises

Small and medium enterprises (SME) seeking financial support from traditional funding opportunities bank loans and credits might now face more challenges upon their request than several years ago. Due to the financial market crisis and the resulting regulations, these requests seem to be significantly more difficult. In this regard, crowdfunding is seen as a valuable alternative to the traditional funding opportunities in order to provide SME with the financial resources required (Rossi, 2014). Nevertheless, crowdfunding research still lacks deeper understanding in this field. Answering questions on how to use crowdfunding for SME, when to use it, for what purpose as well as specifying general conditions on how platforms should be designed to ensure success of a crowdfunding campaign will help to strengthen this funding method for SME, irrespective of the crowdfunding type applied. In the case of researching on the applicability of crowdfunding for SME, it is important to note that SME differ a lot, particularly due to their size.

Beside these open research questions, there are further questions that need to be answered. Among these are issues relating to the following questions: How could SME and other crowdfunding stakeholders systematically use all potentials of crowdfunding, not only in terms of fundraising? Which business models are necessary to enable all these potentials? How should marketing, sales or product development processes as well as IT-systems be adjusted to ensure the use of crowdfunding?

These above-mentioned potential future directions for research represent only a minute proportion of potential research directions. Crowdfunding in general still lacks deeper understanding. Answering these and further questions on crowdfunding will help to increase its success for all involved parties (Mollick, 2014) and help to ensure the long-term efficiency and sustainability of crowdfunding in total (Burtch et al., 2013).

6 Conclusion

The aim of this article was to create a better understanding of the continuously changing field of crowdfunding by discussing different fundamentals and potential future research directions in order to make the term "crowdfunding" become more

accessible for backers, project initiators and intermediaries as well as for other interested parties. Crowdfunding is an umbrella term that basically describes the funding of a project or venture by many individuals (the crowd) using the Internet. Through crowdfunding, all kinds of projects that would otherwise eventually not receive funding get the possibility of raising money. Therefore, crowdfunding is currently gaining and will gain in the future a lot of attention from practice and theory. This emerging importance is already evident from current market figures and the predicted future development. In the near future, the funding volume will increase significantly, new crowdfunding platforms will be established and others will be withdrawn from the market. In total, this fragmented crowdfunding market will consolidate. As we have stated in this article, crowdfunding provides a lot of potentials. Besides its actual function of fundraising, there are further fields of interest, inter alia using crowdfunding for the purpose of (pre-)sale marketing and market research as well as for co-creating with possible future customers. There are still uncertainties and risks that may appear before, during and after a campaign. However, there is precious little knowledge about these potential risks and uncertainties. Thus, future research must examine, inter alia, the risks and uncertainties carefully and research questions on what motivates backers to participate in a crowdfunding campaign as well as what drives project imitators to call a project into being. Doing so will help to understand and bring forward this emerging field.

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References

- Agrawal, A., Catalini, C., & Goldfarb, A. (2010). *The geography of crowdfunding* (NET Institute Working Paper No. 10 08). doi:10.2139/ssrn.1692661
- Agrawal, A., Catalini, C., & Goldfarb, A. (2011). *Offline relationships, distance, and the Internet: The geography of crowdfunding*. <http://pages.stern.nyu.edu/~atakos/ResearchCamp/agoldfarbpaper.pdf>
- Agrawal, A., Catalini, C., & Goldfarb, A. (2013). *Some simple economics of crowdfunding* (NBER Working Paper Series No. 19133). doi: 10.3386/w19133
- Ahlers, G. K., Cumming, D., Günther, C., & Schweizer, D. (2012). *Signaling in equity crowdfunding*. doi:10.2139/ssrn.2161587
- Bakos, Y. (1998). The emerging role of electronic marketplaces on the Internet. *Communications of the ACM*, 41(8), 35–42. doi:10.1145/280324.280330
- Banerjee, A. V. (1992). A simple model of herd behavior. *The Quarterly Journal of Economics*, 107(3), 797–817.
- Belleflamme, P., Lambert, T., & Schwienbacher, A. (2010). *Crowdfunding: An industrial organization perspective*. Prepared for the Workshop Digital Business Models: Understanding Strategies, Paris, France.
- Belleflamme, P., Lambert, T., & Schwienbacher, A. (2014). Crowdfunding: Tapping the right crowd. *Journal of Business Venturing*, 29(5), 585–609. doi:10.1016/j.jbusvent.2013.07.003

- Blohm, I., Leimeister, J. M., Wenzlaff, K., & Gebert, M. (2013). *Crowdfunding Studie 2013/2014: Analyse, Perspektiven und Erfolgsfaktoren innovativer Unternehmen und Projektfinanzierungen*. Berlin: epubli GmbH.
- Blohm, I., Leimeister, J. M., & Krcmar, H. (2013). Crowdsourcing: How to benefit from (too) many great ideas. *MIS Quarterly Executive*, 12(4), 199–211.
- Blohm, I., Sieber, E., Schulz, M., Haas, P., Leimeister, J. M., Wenzlaff, K., et al. (2014). *Delphi Studie Crowdfunding 2020 Komplement oder Substitut für die Finanzindustrie?* Norderstedt: Books on Demand.
- Bradford, C. S. (2012). Crowdfunding and the federal securities laws. *Columbia Business Law Review*, 2012(1), 1–150.
- BRAINPOOL Artist & Content Services GmbH. (2013). *Stromberg – Der Film*. Retrieved August 15, 2013, from http://www.myspass.de/specials/stromberg_kinofilm/
- Brenner, W., Karagiannis, D., Kolbe, L., Krüger, J., Leifer, L., Lamberti, H. J., et al. (2014). User, use & utility research. *WIRTSCHAFTSINFORMATIK*, 56(1), 65–72. doi:10.1007/s11576-013-0394-y
- Bretschneider, U., Knaub, K., & Wieck, E. (2014). *Motivations for crowdfunding: What drives the crowd to invest in start ups?* Paper presented at the 22nd European Conference on Information Systems (ECIS 2014), Tel Aviv, Israel.
- Bretschneider, U., Leimeister, J. M., & Mathiassen, L. (2015). IT enabled product innovation: Customer motivation for participating in virtual idea communities. *International Journal of Product Development*, 20(2), 126–141.
- Burtch, G. (2011). *Herd behavior as a network externality*. Paper presented at the International Conference on Information Systems, Shanghai.
- Burtch, G., Benedetto, C. A., & Mudambi, S. M. (2014). Leveraging information systems for enhanced product innovation. In F. J. Martínez López (Ed.), *Handbook of strategic e business management* (pp. 211–216). Berlin: Springer.
- Burtch, G., Ghose, A., & Wattal, S. (2013). An empirical examination of the antecedents and consequences of contribution patterns in crowd funded markets. *Information Systems Research*, 24(3), 499–519.
- Chesbrough, H. W. (2006). *Open innovation: The new imperative for creating and profiting from technology*. Harvard: Harvard Business School Press.
- Cumming, D., Leboeuf, G., & Schwiendbacher, A. (2014). *Crowdfunding models: Keep it all vs. all or nothing*. doi: 10.2139/ssrn.2447567
- Forsythe, S. M., & Shi, B. (2003). Consumer patronage and risk perceptions in Internet shopping. *Journal of Business Research*, 56(11), 867–875. doi:10.1016/S0148-2963(01)00273-9
- Für Gründer.de. (2014). *Crowdfunding monitor*. Retrieved September 2, 2014, from [http://www.fuer-gruender.de/fileadmin/mediapool/Unsere Studien/Crowdfunding Monitor H1 2014 F%C3%BCr Gr%C3%BCnder.de.pdf](http://www.fuer-gruender.de/fileadmin/mediapool/Unsere_Studien/Crowdfunding_Monitor_H1_2014_F%C3%BCr_Gr%C3%BCnder.de.pdf)
- Gerber, E. M., Hui, J. S., & Kuo, P. Y. (2012). *Crowdfunding: Why people are motivated to post and fund projects on crowdfunding platforms*. Paper presented at the ACM Conference on Computer Supported Cooperative Work, Vancouver, BC, Canada.
- Gierczak, M. M., Bretschneider, U., & Leimeister, J. M. (2014). *Is all that glitters gold? Exploring the effects of perceived risk on backing behavior in reward based crowdfunding*. Paper presented at the International Conference on Information Systems (ICIS), Auckland, New Zealand.
- Haas, P., Blohm, I., & Leimeister, J. M. (2014). *An empirical taxonomy of crowdfunding intermediaries*. Paper presented at the International Conference on Information Systems (ICIS), Auckland, New Zealand.
- Harris, J. (1986). *A statue for America: The first 100 years of the statue of liberty*. New York: Simon & Schuster.
- Hars, A., & Ou, S. (2002). Working for free? Motivations for participating in open source projects. *International Journal of Electronic Commerce*, 6(3), 25–39.

- Hemer, J. (2011). *A snapshot on crowdfunding* (Working Papers Firms and Region, No. R2/2011). Karlsruhe: Fraunhofer Institute for Systems and Innovation Research ISI.
- Hemer, J., Schneider, U., Dornbusch, F., & Frey, S. (2011). *Crowdfunding und andere Formen informeller Mikrofinanzierung in der Projekt und Innovationsfinanzierung*. Stuttgart: Fraunhofer Verlag.
- Howe, J. (2006). *The rise of crowdsourcing*. Retrieved June 10, 2014, from <http://archive.wired.com/wired/archive/14.06/crowds.html>
- Kappel, T. (2009). Ex ante crowdfunding and the recording industry: A model for the U.S. *Loyola of Los Angeles Entertainment Law Review*, 29(3), 375–385.
- Kickstarter. (2014a). *COOLEST COOLER: 21st century cooler that's Actually Cooler*. Retrieved August 30, 2014, from <https://www.kickstarter.com/projects/ryangrepper/coolest-cooler-21st-century-cooler-thats-actually>
- Kickstarter. (2014b). *Kickstarter stats*. Retrieved April 18, 2014, from <http://www.kickstarter.com/help/stats>
- Lehner, O. M. (2012). *Crowdfunding social ventures: A model and research agenda*. Paper presented at the 2012 Research Colloquium on Social Entrepreneurship, University of Oxford, Skoll Center of SAID Business School UK.
- Leimeister, J. M. (2010). Collective intelligence. *Business & Information Systems Engineering (BISE)*, 4(2), 245–248.
- Leimeister, J. M. (2012). Crowdsourcing: Crowdfunding, crowdvoting, crowdcreation. *Zeitschrift für Controlling und Management*, 56, 388–392.
- Lin, Y., Boh, W. F., & Goh, K. H. (2014). *How different are crowd funders? Examining archetypes of crowd funders and their choice of projects*. Retrieved November 19, 2014, from [10.2139/ssrn.2397571](https://ssrn.com/abstract=2397571)
- Lin, M., Prabhala, N. R., & Viswanathan, S. (2013). Judging borrowers by the company they keep: Friendship networks and information asymmetry in online peer to peer lending. *Management Science*, 59(1), 17–35. doi:10.1287/mnsc.1120.1560.
- Lin, M., & Viswanathan, S. (2013). *Home bias in online investments: An empirical study of an online crowd funding market*. doi: [10.2139/ssrn.2219546](https://ssrn.com/abstract=2219546)
- Malone, T. W., Laubacher, R. J., & Johns, T. (2011). The big idea: The age of hyperspecialization. *Harvard Business Review*, 89(7/8), 56–65.
- Massolution. (2012). *Crowdfunding industry report market trends, composition and crowdfunding platforms*. Retrieved May 18, 2014, from <http://www.crowdsourcing.org/document/crowdfunding-industry-report-bridged-version-market-trends-composition-and-crowdfunding-platforms/14277>
- Mitchell, V. W. (1992). Understanding consumers' behaviour: Can perceived risk theory help? *Management Decision*, 30(3), 26–31.
- Mitchell, V. W. (1999). Consumer perceived risk: Conceptualisations and models. *European Journal of Marketing*, 33(1/2), 163–195.
- Mitra, T., & Gilbert, E. (2014). *The language that gets people to give: Phrases that predict success on Kickstarter*. Paper presented at the Proceedings of the 17th ACM conference on Computer Supported Cooperative Work & Social Computing, New York, NY, USA.
- Mollick, E. (2014). The dynamics of crowdfunding: An exploratory study. *Journal of Business Venturing*, 29(1), 1–16. doi:10.1016/j.jbusvent.2013.06.005
- Moritz, A., & Block, J. H. (2014). Crowdfunding und Crowdinvesting: State of the Art der wissenschaftlichen Literatur [Crowdfunding and Crowdinvesting: A Review of the Literature]. *ZfKE Zeitschrift für KMU und Entrepreneurship*, 62, 57–89. doi:10.2139/ssrn.2274141
- Nerdinger, F. W. (2006). Motivierung. In H. Schuler (Ed.), *Lehrbuch der Personalpsychologie* (2nd ed., pp. 385–404). Göttingen: Hogrefe.
- Ordanini, A., Miceli, L., Pizzetti, M., & Parasuraman, A. (2011). Crowd funding: Transforming customers into investors through innovative service platforms. *Journal of Service Management*, 22(4), 443–470.

- Pavlou, P. A., & Gefen, D. (2004). Building effective online marketplaces with institution based trust. *Information Systems Research*, 15(1), 37–59. doi:10.1287/isre.1040.0015
- Riedl, C., Blohm, I., Leimeister, J. M., & Krcmar, H. (2013). The effect of rating scales on decision quality and user attitudes in online innovation communities. *International Journal of Electronic Commerce*, 17(3), 7–37.
- Rossi, M. (2014). SMEs' access to finance: An overview from Southern Italy. *European Journal of Business and Social Sciences*, 2(11), 155–164.
- Schulz, M., Haas, P., Blohm, I., & Leimeister, J. M. (2015). *How idea creativity and hedonic value influence project success in crowdfunding*. Paper presented at the 12th International Conference on Wirtschaftsinformatik (WI2015), Osnabrück, Germany.
- Schwiebacher, A., & Larralde, B. (2012). Crowdfunding of small entrepreneurial ventures. In D. Cumming (Ed.), *The Oxford handbook of entrepreneurial finance* (pp. 369–391). Oxford: Oxford University Press.
- Surowiecki, J. (2004). *The wisdom of crowds: Why the many are smarter than the few and how collective wisdom shapes business, economies, societies, and nations*. New York: Doubleday Books.
- The World Bank. (2013). *Crowdfunding's potential for the developing world*. http://www.infodev.org/infodev_files/wb_crowdfundingreport_v12.pdf
- Verstein, A. (2011). Misregulation of person to person lending. *The University of California Law Review*, 45(2), 445–530.
- Walsh, A. (2014). SEEK!: Creating and crowdfunding a game based open educational resource to improve information literacy. *Insights*, 27(1), 63–66.
- Zvilichovsky, D., Inbar, Y., & Barzilay, O. (2013). *Playing both sides of the market: Success and reciprocity on crowdfunding platforms*. Paper presented at the International Conference on Information Systems, Milan, Italy.