Analysis of Factors Impeding Access to Finance in Internet Enabled Crowdfunding: A Systematic Literature Review

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Authors' bio

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Dr Vahid Jafari-Sadeghi is a Lecturer in Business Strategy in the School of Strategy and Leadership at Coventry University. Vahid holds his PhD in international entrepreneurship from the University of Turin where he has served as a post-doctoral fellow for one year. Also, he has been a visiting research scholar at the University of Regina and contributed to different research projects with various scholars and universities. Vahid has published papers in several international journals and publications such as International Business Review, Journal of International Entrepreneurship, Research in International Business and Finance, International Journal of Entrepreneurship and Small Business, etc. He acted as guest editor and reviewer for several academic journals and performed as track chair and presenter for a number of international conferences.

Dr Kaushik Pandya has been undertaking research and lecturing for over 30 years. In terms of research, he undertakes research in the value-adding operations and management of business processes, to gain competitive advantage, in any industrial sector in the global environment. This has been enabled through identifying, analysing and modelling these processes, and using the appropriate technology. This has resulted in over seventy articles. In terms of lecturing he teaches subjects that are related to his research interest, however, he is capable of teaching other subjects. He is strongly of the opinion that research, teaching, consultancy and supervisions should have a symbiotic relationship. Publications are included in teaching material to enhance the lecturing. In addition to formal lectures, seminars and workshops he uses various tools to enhance the teaching. This includes; Blackboard/WebCT, NATALIE (currently Turning Point system) and University of Buckingham's LEAN game.

Dr Sepideh Khavarinezhad is a doctoral research fellow at the Università degli Studi di Torino. Her research interests are international entrepreneurship, female entrepreneurship, and internationalisation. she has published papers in several international journals and publications such as European Journal of Islamic Finance, International Journal of Applied Research in Management and Economics and as a PhD student has some papers in process of Publishing. Sepideh is a member of editorial board/ reviewer of scientific journals.

Abstract

Internet Enabled Crowdfunding (IECF) is evolving fast to become a global phenomenon and has an increasingly important role in the financing of Entrepreneurs. The debates around problems faced by entrepreneurs in securing funding through IECF is reviewed in this paper. Through a Systematic Literature Review (SLR), the paper explores the themes emerging from the review and discusses the emerging issues that prevent access to funding through crowdfunding platforms. Research suggests a lack of access to funding as being a fundamental problem faced by entrepreneurs, but this paper goes beyond the identification of traditional barriers and focusses on issues that are emerging because of the innovative use of web 2.0. Further, it concludes with practice and policy implications on the emergence of new barriers for entrepreneurs.

Keywords

Entrepreneurship, Crowdfunding, Funding, Systematic Literature Review, Internet

1. Introduction

Internet Enabled Crowdfunding (IECF) is evolving rapidly to become a global phenomenon and has an increasingly important role in the seed financing of entrepreneurs (Schwienbacher & Larralde, 2010; Kuppuswamy & Bayus 2017; Martínez-Climent; Zorio-Grima & Ribeiro-Soriano 2018; Sadraei et al., 2018). IECF is a Web 2.0 enabled phenomenon, where websites, referred to as 'platforms', act as intermediaries to connect entrepreneurs to web users, who provide funding in exchange for some claims on the project revenues/ownership (equity-based), or for a reward (rewards-based), or simply for donation. IECF encompasses the use of existing modes of finance of equity, loans and donations. The basic tenants of crowdfunding can be traced back to the use of a large mass of people by corporates to obtain feedback on products/services (Afuah & Tucci, 2012). In the modern manifestation, crowdfunding, involves entrepreneurs forming ties with the crowd for raising finance for business ventures (Belleflamme et al., 2014). The crux of crowdfunding is the premise that the strength of individual contributions from the crowd can enable business ventures to be feasible and more importantly, especially, for entrepreneurial start-ups, an alternate/supplement to traditional sources of finance (Giudici et al., 2013). In the crowdfunding environment, prospective entrepreneurs seek funding for their ventures through web sites or dedicated social sites called crowdfunding platforms (Gedda et al., 2016). These platforms provide the environment for the confluence for the entrepreneurs and the crowd for exchange of ideas, currency, feedback and information (Beaulieu et al., 2015). From the perspective of the crowd, their motivation to participate in business ventures ranges from economic reward, donation, belief systems, community building or social commitment. Regardless of the modes and the motivation to participate, achieving ‘strategic ties’ with the crowd is critical to the success of crowdfunding projects (Belleflamme et al., 2014).

The growth in alternative finance initiatives has also been impressive, for example, in the United Kingdom (UK), the transaction value of rewards-based crowdfunding was estimated to be around £3.2 billion in 2015 and predicted to be worth around £12.3 billion in 2020 (Zhang et al., 2016). Similarly, transactions value in equity-based crowdfunding was estimated to be around £ 332 m in the UK in 2015, and World Bank expects by 2025 global investments through the use of crowdfunding platforms is expected to reach $93 billion (World Bank, 2013). The uptake in crowdfunding can be attributed to the perceived benefits it provides in comparison with traditional sources of finance (Gerber & Hui, 2013). These include community participation, sharing of common passion or pursuit and vicarious learning (Sadeghi et al., 2014; Gurău & Dana, 2018). Web 2.0 and social media appear to play a key role in facilitating interactions that may not have been possible before. In the case of emergent entrepreneurs, Crowdfunding is an innovative way to gain access to both finance and resources. However, more critically, it is providing a process to evaluate ideas prior to a commitment of major resources or finance, a valuable process to deal with risk for all stakeholders (Biancone & Jafari Sadeghi, 2016; Boudlaie et al., 2020; Mollick & Kuppuswamy, 2014; Gerber et al., 2012). Other perceived benefits of crowdfunding have also been noted, for example, Schwienbacher and Larralde (2010), propose that crowdfunding aids stakeholders access technical expertise. Whilst Hu et al. (2015), state that by participating in crowdfunding, emerging entrepreneurs can gain assistance in relation to pricing decisions of their product/services.

While the advantages/motivations for engaging in crowdfunding has received considerable attention (Jafari-Sadeghi 2020; Macht & Weatherston, 2015; Belleflamme et al., 2013) other research dimensions within the crowdfunding domain has also benefitted from further exploration. Notable, among them are in the areas of interest and value matching (An et al., 2014; Gerber et al, 2012), reciprocity and community building (Zvilichovsky et al, 2015; Gerber et al, 2012), reducing possible gender bias (Greenberg & Mollick, 2014; Mollick, 2013; Gerber et al, 2012), the role of social information in the success of crowdfunded projects (Kuppuswamy & Bayus, 2015), information disclosure to the crowd (Ahlers et al, 2015), geographical distance in crowdfunding (Agrawal et al, 2015; Mollick, 2014), non-economic aspects of crowdfunding (Gerber & Hui, 2013; Moritz & Block, 2016) and regulations related to the crowdfunding environment (Hornuf & Schwienbacher, 2014).

Mollick (2014) and Rezaei et al. (2020) suggests although Crowdfunding is growing in popularity, basic academic knowledge in understanding the general phenomena is still required. While there is a growing literature, there are also areas that warrant further investigation. It is accepted that new entrepreneurs and firms face difficulties in attracting external finance in their initial potential start-up stages (Cosh et al., 2009; (Sadeghi & Biancone 2017a). Business ventures typically fail due to insufficient funding or entrepreneurs failing to convince potential investors regarding the value of their ventures (Casamatta & Haritchabalet, 2011). Academic and policy attention is drawn to the high growth "Gazelle's" rather than the more typical entrepreneur who starts from an underprivileged position, using their own savings to start a low-productivity firm in a highly competitive market (Nightingale & Coad, 2014). Gazelle's attract finances more readily due to the perceived outcomes from high growth, of rent for investors, job creation and value creation for economic contribution (Brown et al., 2017). The typical owner/manager is marginalised, as contributing minimally to the economy due to potential value destruction and the high risk of business failure (Sadeghi et al. 2017; Nightingale & Coad, 2014). Crowdfunding offers a way to overcome initial investment barriers; however, for many entrepreneurs, it can be a source of uncertainty and not the first choice to raise finance. While there are tremendous opportunities for entrepreneurs to make use of IECF, it must be acknowledged that there is still a high failure rate to reach funding goals, for example in 2014 the platform 'Kickstarter' lists about 57% of projects failed to achieve their goals (Belleflamme & Lambert 2014). It is in this context that this study is set; the rationale behind this study is to identify main issues that act as barriers when internet-based crowdfunding platforms are used to raise finance. It is structured in a way to thematically explore, the evidence around issues that can act as a deterrent in securing finance through these crowdfunding platforms. The core objective of this study is to map the extant evidence relating to raising finance in the crowdfunding arena and explore areas where further evidence is required. The remainder of the study is structured as follows; a detailed explanation of the systematic literature review methodology will be presented, followed by a thematic analysis based on the results of the review. The final sections detail, the further areas for exploration as well as the implications and contributions achieved.

2. Methodology

Our review adapts the process followed by Tranfield et al. (2003), Pittaway and Cope (2007) describe the Systematic Literature Review (SLR) process in relation to Management Research and Macpherson and Holt (2007) who demonstrated its use within a small and medium-sized enterprise context. Within these articles, the principles of SLR are established as accessibility, clarity, equality, focus and transparency. These principles are used to guide the processes followed here, as while these techniques are generally applied to established research fields in management research the topic of Crowdfunding is still nascent with only six years of available literature.

The SLR process emerged from Medical Science and has been developed as a positivistic approach to synthesise quantitative Medical studies in a systematic, transparent and reproducible manner (Tranfield et al. 2003). However, it is being adapted for use within the Management research field and combined with a more interpretative synthesis of the findings with the aim of obtaining an increased understanding by combining the underlying reasons or resources identified within studies (Tranfield et al. 2003; Boland et al., 2014). The SLR principles distinguish it from the traditional approach of narrative analysis as the process of search, selection and synthesis of these findings is clearly described, and the quality of the evidence is evaluated (Pittaway and Cope, 2007). Easterby-Smith et al. (2012: 107) suggests that systematic reviews are restricted to published peer-reviewed journals, nevertheless as shown by Macpherson and Holt (2007), sources from less established journals can be included where it can be demonstrated they are robust and relevant to the synthesis, and as long as the transparency principle is followed. Tranfield et al. (2003) identify meta-analysis as the main tool used within systematic reviews, to pool quantitative data in Medical Studies. In Management research, where there are qualitative studies, other approaches are being developed as an alternative to narrative review as a more transparent approach and include realist synthesis, meta-synthesis and metaethnography. These approaches, whilst more suitable for interpretative studies, aim to create a clearer audit trail through tabulating the findings (Tranfield et al. 2003).

The review process for this article is developed in the context of the crowdfunding topic, which, as discussed, is in nascent stages. Platforms that were researched in the initial years either have been taken over or significantly adapted the business model to a rapidly changing market. For these reasons, the search criteria were kept broad with published papers, working papers and conference papers included in the search criteria. A multi-disciplinary perspective was also employed to capture the advances in this area. To understand the barriers, this study follows a structured methodology in identifying articles pertaining to entrepreneurial activity, Crowdfunding and use of Crowdfunding in entrepreneurship. There were eight stages in the literature review methodology, and the steps used in the review are outlined in Table 1.

Please insert **Table 1** here

The review began by broadly exploring journals listed within the 'entrepreneurship' and 'Finance' journals ranking list. The articles for review were sourced from popular ranking lists, and the citation indexes were systematically searched for articles. The citations were downloaded into bibliographic software (Endnote), then exported and analysed using a spreadsheet. Duplicates and papers that met the exclusion criteria (Table 2) were identified and removed from the list. After developing an initial table of citations, a series of systematic reviews stages were employed, resulting in a final count of 94 academic articles. The papers in publication date from 2008 to 2016 and the abstracts of each paper were coded in NVivo. Table 2 describes the exclusion criteria used, and the next section explains the thematic analysis and introduces a framework that further explores the barriers in the context of crowdfunding.

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3. Thematic analysis

Nvivo was used to carry out the thematic analysis of the barriers to internet-enabled crowdfunding. The abstracts were checked for each individual citations and using narrative coding, themes were allowed to evolve from the abstracts being studied. After the first extraction of themes, data were further analysed to derive secondary themes. In total, the first level resulted in three major categories and the level coding revealed eight sub-categories.

In order to understand the barriers faced by seekers of crowdfunding, a thematic framework examining the different factors is given in Figure 1. The framework summarises the key areas that act as barriers in an Internet-based crowdfunding environment. The first macro-level theme is the role of the Internet as a network in raising barriers in relation to crowdfunding efforts. Within this theme, the role played by an individual's social media presence, and the ability to work the existing online network in the propagation of funding messages are explored. The second macro theme to emerge from the analysis is related to an individual's personal attributes and the role they play in securing crowdfunding. Issues relating to digital literacy, digital communication skills are examined to see evidence for the creation of barriers in the crowdfunding environment. The final macro theme identifies the financial issues that hinder the uptake of crowdfunding. The different types of crowdfunding platforms, the trade-offs involved and the cost of securing online funding is also examined. The following section details the results from the thematic analysis explores the evidence-base derived from the systematic literature review and expands our knowledge in relation to barriers in the area of crowdfunding.

4. Results of the Review

The results from the systematic literature review highlight several factors that play a key role in the use of internet-based crowdfunding platforms. The majority of studies reviewed highlighted the benefits of the use of virtual platforms in enabling entrepreneurial activities to develop (Lehner et al., 2015; Macht & Weatherson, 2015). Overall, the barriers to entry were varied and reflected the different stages of entrepreneurial activities. For example, obligations to reciprocate (Boeuf et al. 2014), fear of disclosure, fear of visible failure, trade-offs (Gleasure, 2015), geographic proximity or home bias has been identified -resulting in relocations (Agrawal et al., 2015, Burtch 2014, Giudici et al., 2013, Lin & Viswanathan 2016). Other issues include the need to understand the priorities and specific mechanisms of crowdfunding, project planning involved in campaigning and knowledge of the process (Jafari-Sadeghi, et al., 2019; Antonenko et al., 2014; Davidson & Poor 2016; Hobbs et al., 2016; Antonenko et al., 2014; Davidson & Poor, 2016; Hobbs et al., 2016) can sometimes hinder the use of online crowdfunding platforms to seek finance/support for ventures. Examining the issues from a thematic viewpoint, i.e., breaking the results into the key themes identified in the thematic framework, the following sections examine the gathered evidence during the systematic literature review process.

4.1. Network Barriers

One of the first emergent themes from the analysis was the role played by existing online networks. A significant barrier for entrepreneurs in undertaking crowdfunding is the size of their existing online social network. The importance of having a social network, ideally beyond immediate family and friends, has been shown to significantly influence the early stages backers which then signal to others the legitimacy of the project, i.e., success breeding success (Mollick 2014; Colombo et al, 2015; Vismara, 2016). Social networks take time and effort to build (Schutjens & Stam 2003, Dana et al., 2001), hence entrepreneurs considering utilising Crowdfunding need to work on building their network in advance before launching projects on online platforms. Even before the launch of a crowdfunding project, there is a need to satisfy potential contributors, the strength and reach of the individual entrepreneur in the online environment. Impression management is a challenge that needs to be addressed (Gleasure, 2015) since available information on online platforms plays a vital role in decision making (Garousi Mokhtarzadeh et al., 2021, Mahdiraji et al., 2020; Mensah et al, 2021), insignificant online presence may hinder the backing of potential investors. Within the main theme of 'network barriers', three subcategories emerged:

Please insert **Figure 1** here

4.1.1. Geographic Proximity

A sub-theme identified here is the 'Geographic Proximity', some backers have a 'Home Bias' in that they identify with projects that are geographically close. The research focused on peer-to-peer lending in the USA shows that geographic proximity played a significant factor in funding projects through crowdfunding platforms. This has been attributed to behavioural factors such as homophily rather than economic considerations (Lin & Viswanathan, 2016). In contrast to this, research on an adapted profit-sharing model for music, it was found that investment patterns are not correlated to geographic proximity (Agrawal et al., 2015). Similar findings were reported by Vulkan et al. (2016), who made observations when examining the online equity platforms in the UK. While the evidence towards geographic proximity is mixed, from an entrepreneurial perspective, a major factor that needs to be considered when applying for crowdfunding is the choice of platform used. Evidence suggests that when it comes to online peer-to-peer lending, there is a potential barrier in the form of geographic proximity between investors and investee. Other than online platforms, Kim and Hann (2013), have also stated that small cities get a disproportionate benefit from crowdfunding compared to traditional centres of venture capital activity. In their work on American online platforms, they noted that within rewards-based crowdfunding, ventures originating from smaller cities were able to secure funding more easily compared to cities/towns with a history of venture capitalist activity. The premise that online platforms would make it easier to source funding is somewhat negated by the evidence gathered. Depending on the platform and mode of funding/support sought, the online platforms can self-initiate barriers that can prevent potential entrepreneurs from looking for alternate sources for funding.

4.1.2. Personal Network Management

A second emergent sub-theme examined the strength of the individual network, in their investigation of American crowdfunding platforms, Hekman and Brussee (2013) found that successful projects have more friends and sparse networks. By investigating the online funding platform- Kickstarter, they found that there was a minimal correlation between an entrepreneur's social media presence and their ability to secure funding. By examining the Facebook interaction of individuals who were successful in crowdfunding, they reached the conclusion that having several Facebook friends does not necessarily lead to increased sources of funding. On the contrary, a larger Facebook presence can give potential projects a push, but the progression and resultant funding are mainly dependent on the project initiator's individuals in other personal networks (Hekman & Brussee, 2013, Garousi Mokhtarzadeh et al., 2020). Additionally, they also note that by being successful in online platforms like Kickstarter, it becomes easier securing further funding for current or future projects.

Gaining attention on online crowdfunding platforms is difficult. The degree to which support is secured can be limited by the amount of funding sought, in the Kickstarter platform, it has been found that it becomes increasingly difficult to secure funding when of more than $10,000 (Hekman & Brussee, 2013). Converting the number of clicks to potential investments in projects is dependent on online impression management (Gleasure, 2015). Access to seed financing is supported by reducing information asymmetries (Moritz et al., 2015). Online communities facilitate the generation and observation of additional information about entrepreneurs and the viability of their projects (Moritz et al., 2015). The viral propagation of a project is founded on novelty, reviews, backing received, mutual identification and reciprocity (Gerber & Hui, 2013). For example, Galuszka & Bystrov (2014), while examining the adapted equity model for music in Poland observed that successful projects attract several music fan investors who repeatedly made small contributions and were incentivised to promote the project.

4.1.3. Community Building

A further barrier is an ability and willingness to interact and be transparent with the community (Gleasure, 2015). The Crowdfunding community, particularly in the cultural sector, is a place where many proactively seek the opportunity for involvement and co-creation beyond the financial benefits (Ordanini et al. 2011; Hills 2015; Sadeghi, et al., 2019a). Successful projects create social capital within the Crowdfunding community, in complement to their existing social networks of family and friends (Colombo et al., 2015). This is nurtured by supportive behaviours of mutual identification and norms of reciprocity (Colombo et al., 2015). Ordanini et al. (2011) in the context of online platforms note that consumers are motivated to become investors and desire to see the creation of value to engage in online funding environments. Backers desire patronage, social participation and investment (Younkin & Kashkooli, 2016). Moreover, backers have an innovative orientation and desire to be early-adopters and co-creators of value. Platforms are orchestrating consumer-investors and these investors not necessarily see financing as a motive to engage in crowdfunding; rather their engagement is based on community benefit, social value or wider engagement. From a barrier point of view, if the project does is not deemed viable, it risks being judged as a “stagnant project” (Ordanini et al. (2011). Potential investors view these projects as risky, less attractive and missing the vital ‘engagement moment’ (Ordanini et al. (2011). The ability to trigger the crowdfunding process is dependent on the timing of the release of projects, it's perceived social value if any and its ability to generate positive initial quick-wins in the crowdfunding platforms (Kuppuswamy & Bayus, 2015; Colombo et al., 2015). Any perceived risk due to the stagnation of funding received is viewed negatively, and such conations' can spread through social media and personal networks, thus hampering the prospects of securing funding from the crowd (Colombo et al., 2015).

4.2. Personal Barriers

The second emergent theme from the analysis is related to the personal attributes of crowdfunding seekers. It looks at the characteristics and skills of entrepreneurs and whether they contribute towards barriers in the use of crowdfunding platforms. The sub-categories emerging from the analysis, are discussed as follows,

4.2.1. Personal characteristics

The first of the sub-themes to emerge is that of the personal characteristics of Crowdfunding seekers. Evidence has shown that personality types can influence individuals seeking funding through online platforms. Davidson and Poor (2015), in their work on rewards-based crowdfunding in the USA highlight that personalities types of culture workers, such as extraverts, have an existing well-established community of supporters prior to crowdfunding and are less dependent on their close social network and so enjoy the crowdfunding experience. The question of personality traits influencing entrepreneurship has been explored extensively (Dana 2001; Rauch et al 2007; Nga & Shanmuganathan, 2010; Wei & Ismail, 2008; De Pillis & Reardon, 2007), with reference to the crowdfunding environment and the limited evidence highlights that some of the traditional traits, i.e., like being an extrovert, self-belief etc. are also visible in the online environment and may contribute towards success in raising crowdfunding for projects. Personality types/traits also raise an interesting paradox when examined through the lens of online crowdfunding, the very nature of crowdfunding is to seek alternate sources of finance and a chance to showcase potential projects that are traditionally neglected by mainstream funding mechanisms. It is the very purpose is to bring the 'crowd' closer to support and nurture future entrepreneurs, but similar to traditional funding mechanisms, there is a need to demonstrate proactive behaviours in the online environment as well. The nature of proactive behaviour is vastly different from offline environments, and clearly, there will be certain personality types that excel in the sharing process and those that are happier away from the limelight (Davidson & Poor 2015).

4.2.2. Emotional effects

Gleasure (2015) suggests resistance to engage with crowdfunding is influenced by the fear of disclosure, of visible failure and of projecting desperation. For investees who lack crowdfunding experience, there is a perceived danger that their failures are broadcasted across the Internet and amplified by connections through social media (Gleasure, 2015). Whilst many will discover they enjoy the feeling of emotional support generated by receiving the backing of an extensive community, some will regard this as pressure (Harburg et al., 2015; Yoon; May; Kang and Solomon (2019). Moral and ethical considerations may introduce additional layers of complexity and an obligation to satisfy the 'crowd' may altogether prevent engagement with crowdfunding platforms (Harburg et al., 2015). Self-efficacy of entrepreneurs can be increased by the public validation of financial and emotional support from an audience, although not everyone receives these benefits (Harburg et al., 2015).

4.2.3. Effective communication

Effective communication skills are clearly an important factor in ensuring regular updates and prompt feedback (Antonenko et al., 2014). Allison et al. (2015) found that the use of specific types of language within the narrative can have an impact on backer propensity for pro-social lending. The use of language on profit and risk decreases prosocial lending, and the use of language on human interest increases prosocial lending. In comparing the online platforms in the USA, Antonenko et al. (2014), observed that successful projects responded to questions and comments promptly and shared them on FAQs. The project owners also provided status updates and disseminated regular progress reports to their investors. Moreover, the personality factors of sympathy, authenticity and transparency, communicated via social media helps to reduce information asymmetry in the perception of potential investors in Equity crowdfunding (Moritz et al. 2015). Those entrepreneurs who are technophobic or lack training may struggle to provide relevant messages that meet the needs of the investing ‘crowd’ (Gleasure 2015). Lack of effective communication can hinder the progress of projects and will not sustain the traction required to transform entrepreneurial ideas into reality (Frydrych et al., 2014, Jafari-Sadeghi et al., 2021). To add to this, with the potential for the domain to present a high risk in terms of financial loss, aside from regulation by governments and quality checks by the platforms, ideally, the entrepreneur should be willing to take control of their legitimacy through actions such as transparent and honest disclosure (Baucus & Mitteness, 2016) and clearly taking a proportion of the risk themselves, which some refer to as having 'skin-in-the-game' (Ahlers et al., 2015). In addition, Ponzi entrepreneurs can circumvent investor protection. Thus the recommendation is that entrepreneurs obtain certification, engage in full disclosure and honest discussion of concerns (Baucus & Mitteness, 2016). The ability to communicate through the online medium is an essential criterion for success in crowdfunding platforms and is a pre-requisite for engaging with potential investors/supporters. Lack of experience in this area will initiate barriers that will prevent the translation of ideas into practice.

4.3. Resource Barriers

Depending on the type of resource/engagement sought, there exists barriers that hinder the access to fiancé in IECF, two sub-categories dominate this area, they are related to the choice of finance source, levels of finance sought and the expected design of benefits.

4.3.1. Choice of engagement

This sub-theme concerns the type of transaction the participants enter into. For instance, the return for donations is intangible; the donatee obtains a feeling of satisfaction for assisting and may be anonymous. The return for sponsoring is also intangible and is often expressed in the form of public appreciation, whereas the return for Equity and some Loans is tangible in the form of a financial return. In addition, platforms have differing pay-out models; Keep-it-all, where all money raised (fewer fees) is retained; and All-or-nothing where payout (fewer fees) only occurs when the goal is achieved. Research into the use of funding platforms in the USA and UK considering which transaction type and pay-out model is optimal first considered each party to the transaction. They found that entrepreneurs favour lower-cost forms of finance and hence the most popular form of crowdfunding model is "sponsorship" where the return is in the form of public recognition but also connects them to the funder. However, funders favour at least an element of financial return, so prefer equity (Gedda et al., 2016). So, there needs to be a trade-off between access to the finance required and the cost of that finance. The optimal model is all-or-nothing payout with both non-financial and equity crowdfunding (Gedda et al., 2016). The entrepreneur favoured the Keep-it-all pay-out model with All-or-nothing a close second. The funders favoured an All-or-nothing pay-out model and combining the preferences shows All-or-nothing as the highest preference. This model works well for both entrepreneurs and funders as there are no obligations if the goal is not met and no commitment of finance to potentially underfunded projects (Gedda et al. 2016). In addition to the preference for these models, the chances of success vary depending on the type of transaction chosen. On average, 50% of campaigns offering rewards are successful, whereas, on average, only 33.9% of campaigns offering Equity are successful (Vulkan et al., 2016).

The amount of finance being sought will impact the type of crowdfunding accessed (Vulkan et al., 2016). As the industry develops, the amounts raised are changing, however, average amounts raised through the different types of the transaction remains relative. Early studies have found that the average equity raised was £188,000 (Ahlers et al. 2015), and rewards were $7,825 (Mollick 2014) and a more recent study average equity raised £138,000 and rewards $9,866 (Vulkan et al., 2016). To add to this, average pledge values vary, inequity £1,370 and rewards $80 (Vulkan et al., 2016) and the maximum feasible amount raised is from rewards where over $10million has been raised by one campaign (Hobbs et al. 2016). Some entrepreneurs are deterred from accessing crowdfunding due to the limited amounts that are being raised (Ingram et al., 2014). As entrepreneurs develop their business, there becomes a need for further rounds of capital (Bellavitis et al., 2017). Entrepreneurs are able to access crowdfunding repeatedly, but those who remain heavily dependent on a small number of higher value backers are less likely to attempt a second round due to failure to develop their networks sufficiently (Davidson & Poor, 2016). This will increase the complexity and therefore, the cost both initially and in terms of ongoing returns.

4.3.2. Design of benefits and regulations

Costs of the variety of rewards or returns required to incentivise the community will need to be carefully factored into the overall project (Antonenko et al., 2014) and consideration given to how to incentivise a significant backer that is willing to contribute to a third of the project value (Vulkan et al., 2016) and therefore is likely to need the effort to be nurtured into that role. Regulation of certain types of crowdfunding effectively creates a barrier to funders reducing the size and composition of the crowd. Additionally, the platforms themselves enact their own criteria directly excluding some entrepreneurs from the service. As Equity involves the sale of a security, it is subject to the legislative environment of its home country, and this has meant until recently equity crowdfunding has been restricted including in the USA (Ahlers et al. 2015; Jafari-Sadeghi et al., 2020a,b). The UK was the first to regulate for equity to be sold through crowdfunding but applies restrictions on investors to those who are wealthy or those who self-certify against the criteria (Vismara 2016). This effectively reduces both the number of potential investors but also restricts them to those with relatively significant disposable income (Sadeghi, et al., 2019b). This also effectively increases the competitiveness between the entrepreneurs for investment. Further to this, platforms create criteria and screen and approve projects before publication (Ingram et al., 2014, Dana et al., 2005). This ranges from superficial reviews to extensive due diligence on credit and trading history (Macht & Weatherston, 2015; Ordanini et al., 2011). An example being a requirement for two years of trading history to access loans. Zhang et al. (2016) found that initial access to platforms can be as low as 21% for Equity, 32% for Rewards and up to 66% for Donations. Further barriers that potentially restrict the number of potential investors are that many platforms that offer Lending or Equity in return for a financial return, do not offer a secondary market, thus tying the investor into the term of the loan or until the equity can be realised, such as from an IPO (Borello et al., 2015).

In crowdfunding, risks are spread for funders who contribute small amounts to projects, creating a novel way to access financial resources (Olufolaji & Phillips 2015; Cumming et al., 2014). Despite this, Crowdfunding involves several features that have implications for those seeking to raise finance. There is a trade-off between accessing traditional sources of finance that do not expose entrepreneurs to such public scrutiny but are potentially more driven by economic gains than buying into the passion and vision of the entrepreneur. Decisions are required to be made on the audience to target (Martinez-Canas et al., 2012, Mokhtarzadeh et al., 2020). Promotion resources will be limited, so an understanding of the likely preferences of the target audience in terms of proximity, for economic value or for involvement, connection and inclusion, will help direct efforts. Technical and communication abilities can be improved through training and experience, although may take time to accrue, whereas clearly demonstrating passion, emotional and material commitment to a project may require tacit personal resilience. The intensity of conducting a crowd-funded project is likely to be an emotional rollercoaster, demanding a high level of engagement with a new audience who are attention poor. It would seem that preparedness is an important factor. Preparedness in terms of strategies for targeted promotion, both on social media and offline. Preparedness to handle questions with honesty and humility and with a willingness to be open to collaboration should opportunities arise. Moreover, being prepared for future reciprocation with those offering support, particularly if that is being offered goes beyond backing the project. Community building may lead to future support when further rounds of finance are required. Unwillingness to take a path requiring intense technical, emotional and collaborative commitments may make accessing finance in traditional ways more attractive by comparison.

Apart from identifying the macro themes, the framework also lists the gaps, where we currently, do not have a sufficient evidence base. Crowdfunding is an emerging phenomenon, there is strong evidence of success factors and in determining what works in securing funding in online platforms, but our understanding of other issues is limited. There are research gaps that warrant further investigation, currently what is known is that there is a considerable effort in analysing what works in a crowdfunding scene, issues relating to the content of the funding page, its ability to attract funding and extent of support offered. As an alternative source of finance, the movement is still in its infancy stage; the individual funding platforms are still under the purview of institutional and government policies. Mainstream finance is regulated, and grievance is suitably addressed, but when it comes to alternative sources of finance, there is a policy gap, government and institutional policies are yet to catch up with the innovations in the crowdfunding environment (Hu et al., 2017; Sukumar et al., 2020). Another area of deficiency is the role of wider social and cultural factors in the crowdfunding environment if it considered crowdfunding as a systematic process of value creation- inputs- process-output, then the evidence is yet to understand the role of social and cultural factors in this systematic process. The influence of wider social and cultural issues within the scope of alternate sources of funding is under-researched. Other issues including personality traits, ethnicity, moderating factors (e.g. digital literacy) as barriers are still open to research and debate.

5.1. Conclusion

The main conclusion from the thematic analysis is that, while the barriers to crowdfunding have received considerable attention in the last few years, more understanding is required in order to develop a comprehensive picture to see what prevents the general public from engaging in crowdfunding initiatives. The diversity of platforms, the ability to reach a wider target audience should encourage participation in crowdfunding, but if there are entry and further barriers, then evidence has shown that success is limited. Further work is required to integrate and analyse the themes and address specific barrier issues at different levels in order to contribute to the current debates on crowdfunding, alternate sources of finance and social and economic value creation.

Given the limited scope of research on Crowdfunding, there are many opportunities for future research. We list a few suggestions based on the above analysis. Given there is data within the crowdfunding platforms on failed projects, it could be a useful source to reduce the sample bias in entrepreneurship research that inevitably samples those that are successful as they are still in business. Research on Crowdfunding so far is concentrated on businesses in the USA/UK. More research is required in other country contexts, particularly those where cultural norms may be different. There is minimal research on post-CF activities or impacts on nascent ventures. The research could look into how conducting a CF affects a venture, be it successful in raising the required finance or not and whether perceived fears, as discussed earlier, are actually realised. Several studies have utilised cultural and music projects as their data sources. Crowdfunding may be a useful context in which to compare the effects of non-economic activities and behaviours between cultural, music, high-tech and other more formal industries. It would also be of use to practitioners to know if there are industry categories where IBCF is not applicable or if it may be suitable but not yet attempted. There is limited research, which addresses the process and experience of the CF campaign (Hui et al., 2012; Sadeghi & Biancone, 2017b).

In relation to methodologies adopted in the studies so far, crowdfunding has predominantly benefitted from case study approach or social network analysis. More longitudinal studies focussing on the manifestation of barriers when crowdfunding pages are 'live' requires further investigation. Methodological approaches, deviating from the case studies and 'web-based' textual information are required to understand the process and difficulties faced by entrepreneurs in using crowdfunding platforms. This study is not without limitations; the main weakness derives from its use of abstracts to conduct the systematic literature review. The quality of the abstracts has an important play in the outcome of the analysis. The abstracts are useful in drawing out themes, which gives the scope to conduct detailed reviews. If the abstracts are of poor quality, then further analysis becomes difficult. The other drawback is to do with the number of abstracts available for the review, crowdfunding is a recent phenomenon and has less than 10 years' worth of material to review, with time, and further articles available one may obtain a richer picture of the barriers faced by entrepreneurs.

Research suggests a lack of access to funding as being a fundamental problem faced by entrepreneurs and with the proliferation of crowdfunding platforms, this thematic framework of barriers will assist in providing an enhanced understanding of what is happening in practice. As an alternative source of finance, crowdfunding is developing into an active competition to traditional sources of finance. In the future, it will be subjected to further policies and regulations that will improve its efficiency. From a practice point of view, understanding the barriers is important so that they can be addressed, and to see whether crowdfunding can offer a true scope for entrepreneurs and the engagement of entrepreneurial activities. Understanding the barriers is also important because unless the barriers are better understood, the full potential offered by various crowdfunding mechanisms cannot be realised. From a policy perspective, research is still required on the governance mechanisms and role of regulators in developing crowdfunding as a viable source of funding and by highlighting the barriers, this research points out to areas where regulations can be better drawn and enforced.

References

Afuah, A. and Tucci, C.L., (2012). Crowdsourcing as a solution to distant search. *Academy of Management Review*, *37*(3), pp.355-375.

Agrawal, A., Catalini, C. and Goldfarb, A. (2015). Crowdfunding: Geography, Social Networks, and the Timing of Investment Decisions. *Journal of Economics and Management Strategy*, 24 (2), 253-274.

Ahlers, G.K., Cumming, D., Gunther, C. and Schweizer, D., (2015). Signalling in equity crowdfunding. *Entrepreneurship Theory and Practice*, 39(4), pp.955-980.

An, J., Quercia, D. and Crowcroft, J., (2014), April. Recommending investors for crowdfunding projects. In *Proceedings of the 23rd international conference on World Wide Web* (pp. 261-270). ACM.

Antonenko, P. D., Lee, B. R. and Kleinheksel, A. J. (2014). Trends in the crowdfunding of educational technology startups. *Techtrends*, 58 (6), 36-41.

Allison, T.H., Davis, B.C., Short, J.C. and Webb, J.W. (2015), "Crowdfunding in a Prosocial Microlending Environment: Examining the Role of Intrinsic Versus Extrinsic Cues", *Entrepreneurship Theory and Practice*, Vol. 39, No. 1, pp. 53-73.

Baucus, M. S. and Mitteness, C. R. (2016). Crowdfunding: Avoiding Ponzi entrepreneurs when investing in new ventures. *Business Horizons*, 59 (1), 37-50.

Beaulieu, T., Sarker, S. And Sarker, S. (2015), "A Conceptual Framework for Understanding Crowdfunding", *Communications of the Association for Information Systems*, Vol. 37, pp. 1.

Bellavitis, C., Filatotchev, I., Kamuriwo, D.S. and Vanacker, T., (2017). Entrepreneurial finance: new frontiers of research and practice: Editorial for the special issue Embracing entrepreneurial funding innovations.

Belleflamme, P., Lambert, T. and Schwienbacher, A., (2013). Individual crowdfunding practices. *Venture Capital*, *15*(4), pp.313-333.

Belleflamme, P. and Lamber, T., (2014). Crowdfunding: Some empirical findings and microeconomic underpinnings. Available at SSRN 2437786.

Belleflamme, P., Lambert, T. And Schwienbacher, A. (2014). Crowdfunding: Tapping the right crowd. *Journal of Business Venturing*, 29 (5), 585-609.

Biancone, P. P., & Jafari Sadeghi, V. (2016). Risk Management in Export Compliance: Concepts, Procedures, and Solutions. In V. Cantino, P. De Vincentiis, & M. G. Racca (Eds.), Risk management: Perspectives and open issues (pp. 64–78). McGraw-Hill, London, UK.

Boeuf, B., Darveau, J., and Legoux, R., (2014). Financing Creativity: Crowdfunding as a New Approach for Theatre Projects. *International Journal of Arts Management*, 16 (3), 33-48.

Boland, A., Cherry, M., and Dickson, R. eds (2014). Doing a Systematic Review: A student's guide. Sage.

Borello, G., De Crescenzo, V. and Pichler, F., (2015). The funding gap and the role of financial return crowdfunding: Some evidence from European platforms. *The Journal of Internet Banking and Commerce*.

Boudlaie, H., Mahdiraji, H.A., Shamsi, S., Jafari-Sadeghi, V., & Garcia-Perez, A. (2020). Designing a human resource scorecard: An empirical stakeholder-based study with a company culture perspective. *Journal of Entrepreneurship, Management and Innovation*, 16(4), 113-147. https://doi.org/10.7341/20201644

Brown, R., Mawson, S., and Mason, C., (2017). Myth-busting and entrepreneurship policy: the case of high growth firms. Entrepreneurship & Regional Development, 29(5-6), 414-443.

Burtch, G., Ghose, A. and Wattal, S. (2014). Cultural differences and geography as determinants of online prosocial lending. *MIS Quarterly: Management Information Systems*, 38 (3), 773-794.

Casamatta, C and Haritchabalet.C. (2011) Dealing with venture capitalists: shopping around or exclusive negotiation, Working Paper

Colombo, M.G., Franzoni, C. and Rossi-Lamastra, C., (2015). Internal social capital and the attraction of early contributions in crowdfunding. *Entrepreneurship Theory and Practice*, 39(1), pp.75-100.

Cosh, A., Hughes, A., Bullock, A. and Milner, I., 2009. SME finance and innovation in the current economic crisis. *Centre for Business Research (http://www.CBR.cam.ac.UK/pdf/crcr_econcrisis. pdf)*.

Cumming, D.J., Leboeuf, G. and Schwienbacher, A., 2014, December. Crowdfunding models: Keep-it-all vs all-or-nothing. In *Paris December 2014 finance meeting EUROFIDAI-AFFI paper* (Vol. 10).

Dana, L. P. (2001). The education and training of entrepreneurs in Asia. *Education+ Training.*, 43 (8/9), 405-416.

Dana, L. P., Etemad, H., & Wright, R. W. (2001). Franchising in emerging markets: Symbiotic interdependence within marketing networks. International franchising in emerging markets: Central and Eastern Europe and Latin America, 119-129.

Dana, L. P., Bajramovic, M. B., & Wright, R. W. (2005). The new paradigm of multipolar competition and its implications for entrepreneurship research in Europe. Entrepreneurship Research in Europe: Outcomes and Perspectives, 102-117.

Davidson, R. and Poor, N. (2016). Factors for success in repeat crowdfunding: why sugar daddies are only good for Bar-Mitzvahs. *Information Communication and Society*, 19 (1), 127-139.

Davidson, R., and Poor, N., (2015). The barriers facing artists' use of crowdfunding platforms: Personality, emotional labour, and going to the well one too many times. *New Media & Society*, 17(2), pp.289-307.

De Pillis, E. and Reardon, K.K., (2007). The influence of personality traits and persuasive messages on entrepreneurial intention: A cross-cultural comparison. *Career Development International*, *12*(4), pp.382-396

Easterby-Smith, M., and Thorpe, R and Jackson, P.R., (2012). Management Research. Sage.

Frydrych, D., Bock, A.J., Kinder, T. and Koeck, B., (2014). Exploring entrepreneurial legitimacy in reward-based crowdfunding. *Venture Capital*, 16(3), pp.247-269.

Galuszka, P. and Bystrov, V. (2014). Crowdfunding: A Case Study of a New Model of Financing Music Production. *Journal of Internet Commerce*, 13, 233-252.

Garousi Mokhtarzadeh, N., Amoozad Mahdiraji, H., Jafarpanah, I., Jafari-Sadeghi, V., & Bresciani, S. (2021). Classification of inter-organizational knowledge mechanisms and their effects on networking capability: A multi-layer decision-making approach. *Journal of Knowledge Management*, https://doi.org/10.1108/JKM-07-2020-0579

Garousi Mokhtarzadeh, N., Amoozad Mahdiraji, H., Jafarpanah, I., Jafari-Sadeghi, V., & Cardinali, S. (2020). Investigating the impact of networking capability on firm innovation performance: using the resource-action-performance framework. *Journal of Intellectual Capital*, 21(6), 1009-1034. https://doi.org/10.1108/JIC-01-2020-0005

Gedda, D., Nilsson, B., Såthén, Z. And Søilen, K.S., (2016). Crowdfunding: Finding the Optimal Platform for Funders and Entrepreneurs. *Technology Innovation Management Review*, pp.31-40.

Gerber, E.M. and Hui, J., (2013). Crowdfunding: Motivations and deterrents for participation. *ACM Transactions on Computer-Human Interaction (TOCHI)*, *20*(6), p.34.

Gerber, E.M., Hui, J.S. and Kuo, P.Y., (2012), February. Crowdfunding: Why people are motivated to post and fund projects on crowdfunding platforms. In *Proceedings of the International Workshop on Design, Influence, and Social Technologies: Techniques, Impacts and Ethics*, Vol. 2, p. 11.

Giudici, G., Guerini, M. And Rossi-Lamastra, C. (2013). Crowdfunding in Italy: State of the art and future prospects. *Economia e Politica Industriale*, 40 (4), 173-188.

Gleasure, R. (2015). Resistance to crowdfunding among entrepreneurs: An impression management perspective. *Journal of Strategic Information Systems*, 24 (4), 219-233.

Greenberg, J. and Mollick, E.R., (2014) Leaning in or leaning on. *Gender, Homophily, and Activism in Crowdfunding (July 3, 2014)*.

Gurău, C., & Dana, L. P. (2018). Environmentally-driven community entrepreneurship: Mapping the link between natural environment, local community and entrepreneurship. *Technological Forecasting and Social Change*, 129, 221-231.

Harburg, E., Hui, J., Greenberg, M. and Gerber, E.M., (2015), February. Understanding the Effects of Crowdfunding on Entrepreneurial Self-Efficacy. In Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing (pp. 3-16). ACM.

Hekman, E. and Brussee, R., (2013) Crowdfunding and Online Social networks. Accessed from http://www.werkenstudie.hu.nl/~/media/sharepoint/Lectoraat%20Crossmedia%20Business/2013/FCJ%202013%20Erik%20Hekman%20Rogier%20Brussee%20CARPE.pdf 8th February 2016

Hills, M. (2015). Veronica Mars, fandom, and the 'Affective Economics' of crowdfunding poachers. New media and society, 17 (2), 183-197.

Hobbs, J., Grigore, G. and Molesworth, M. (2016). Success in the management of crowdfunding projects in the creative industries. *Internet Research*, 26 (1), 146-166

Hornuf, L. and Schwienbacher, A., 2014. Crowdinvesting–Angel Investing for the masses, Available at SSRN 2401515.

Hu, L., Gu, J., Wu, J., & Lado, A. A. (2017). Regulatory focus, environmental turbulence, and entrepreneur improvisation. *International Entrepreneurship and Management Journal*, No. 1, pp. 1–20.

Hu, M., Li, X. and Shi, M., 2015. Product and pricing decisions in crowdfunding. *Marketing Science*, *34*(3), pp.331-345.

Hui, J.S., Gerber, E. and Greenberg, M., (2012). Easy money? The demands of crowdfunding work. *Northwestern University, Segal Design Institute*, pp.1-11.

Ingram, C., Teigland, R. and Vaast, E., (2014), January. Solving the puzzle of crowdfunding: Where technology affordances and institutional entrepreneurship collide. In System Sciences (HICSS), 2014 47th Hawaii International Conference on (pp. 4556-4567). IEEE

Jafari-Sadeghi, V., Garcia-Perez, A., Candelo, E., & Couturier, J. (2021) Exploring the impact of digital transformation on value creation through technology entrepreneurship: Role of technology readiness, exploration and exploitation. *Journal of Business Research*, 124(2021), 100-111. https://doi.org/10.1016/j.jbusres.2020.11.020

Jafari-Sadeghi, V. (2020). The motivational factors of business venturing: Opportunity versus necessity? A gendered perspective on European countries. *Journal of Business Research*. 113(May 2020), 279-289. https://doi.org/10.1016/j.jbusres.2019.09.058

Jafari-Sadeghi, V., Dutta, D. K., Ferraris, A., & Del Giudice, M. (2020a). Internationalisation business processes in an under-supported policy contexts: evidence from Italian SMEs. *Business Process Management Journal*, 26(5), 1055-1074 https://doi.org/10.1108/BPMJ-03-2019-0141

Jafari-Sadeghi, V., Nkongolo-Bakenda, J-M., Dana, L-P., Anderson, R. B., & Biancone, P. P. (2020b). Home Country Institutional Context and Entrepreneurial Internationalization: The Significance of Human Capital Attributes. *Journal of International Entrepreneurship*, 2020(18), 165-195. https://doi.org/10.1007/s10843-019-00264-1

Jafari-Sadeghi, V., Kimiagari, S., & Biancone, P. P. (2019). Level of education and knowledge, foresight competency and international entrepreneurship: A study of human capital determinants in the European countries. *European Business Review*, 32(1), 46-68. https://doi.org/10.1108/EBR-05-2018-0098

Kim, K. and Hann, I.H., (2013). Does crowdfunding democratize access to capital? A geographical analysis. In Informs Conference on Information Systems and Technology (CIST).

Kuppuswamy, V. And Bayus, B.L., (2015). Crowdfunding creative ideas: The dynamics of project backers in Kickstarter. UNC Kenan-Flagler Research Paper (2013-15).

Kuppuswamy, V., and Bayus, B. L. (2017). Does my contribution to your crowdfunding project matter? *Journal of Business Venturing*, 32(1), 72-89.

Lehner, O. M., Grabmann, E. And Ennsgraber, c. (2015). Entrepreneurial implications of crowdfunding as an alternative funding source for innovations. *Venture Capital*, 17 (1-2), 171-189.

Lin, M. and Viswanathan, S. (2016). Home bias in online investments: An empirical study of an online crowdfunding market. *Management Science*, 62 (5), 1393-1414.

Macht, S.A. and Weatherston, J., (2015). Academic Research on Crowdfunders: What's Been Done and What's To Come? *Strategic Change*, *24*(2), pp.191-205.

Macpherson, A., and Holt, R., (2007). Knowledge, learning and small firm growth: a systematic review of the evidence. *Research Policy*, 36(2), pp.172-192.

Mahdiraji, H. A., Hafeez, K., Kord, H., & Kamardi, A. A. (2020). Analysing the voice of customers by a hybrid fuzzy decision-making approach in a developing country's automotive market. Management Decision.

Martínez-Cañas, R., Ruiz-Palomino, P. and Del Pozo-Rubio, R., (2012). Crowdfunding and social networks in the music industry: Implications for entrepreneurship. *The International Business & Economics Research Journal (Online)*, *11*(13), p.1471.

Martínez-Climent, C., Zorio-Grima, A., & Ribeiro-Soriano, D. (2018). Financial return crowdfunding: literature review and bibliometric analysis. *International Entrepreneurship and Management Journal*, 14(3), 527–553.

Mensah, E. K., Asamoah, L. A., & Jafari-Sadeghi, V. (2021). Entrepreneurial opportunity decisions under uncertainty: Recognizing the complementing role of personality traits and cognitive skills. *Journal of Entrepreneurship, Management, and Innovation*, 17(1). https://doi.org/10.7341/20211711

Mokhtarzadeh, N., Amoozad Mahdiraji, H., Jafari-Sadeghi, V., Soltani, A., & Abbasi Kamardi, A. (2020). A product-technology portfolio alignment approach for food industry: A multi-criteria decision making with z-numbers, *British Food Journal. 122(12), 3947-3967*. https://doi.org/10.1108/BFJ-02-2020-0115

Mollick, E., (2013). Swept Away by the Crowd? Crowdfunding, Venture Capital, and the Selection of Entrepreneurs." SSRN working paper, available at: http://ssrn.com/abstract, 2239204.

Mollick, E. (2014). The dynamics of crowdfunding: An exploratory study. *Journal of business venturing*, 29 (1), 1-16.

Mollick, E.R. And Kuppuswamy, V., (2014). After the campaign: Outcomes of crowdfunding. UNC Kenan-Flagler Research Paper (2376997).

Moritz, A. and Block, J.H., (2016). Crowdfunding: A literature review and research directions. In *Crowdfunding in Europe* (pp. 25-53). Springer International Publishing.

Motitz, A., Block, J. and Lutz, E., (2015). Investor communication in equity-based crowdfunding: a qualitative-empirical study. *Qualitative Research in Financial Markets*, 7(3), pp.309-342.

Nightingale, P., and Coad, A., (2014). Muppets and gazelles: political and methodological biases in entrepreneurship research. Industrial and Corporate Change, p.dtt057.

Nga, J.K.H. and Shamuganathan, G., (2010). The influence of personality traits and demographic factors on social entrepreneurship start-up intentions. *Journal of business ethics*, *95*(2), pp.259-282.

Olufolaji, A., and Phillips, R. A. (2015). A Qualitative Analysis of Successful Crowdfunding Campaigns for UK-Based Ventures. IUP Journal of entrepreneurship development, 12 (4), 59-72.

Ordanini, A., Miceli, L., Pizzetti, M., and Parasuraman A., (2011). Crowd-funding: Transforming customers into investors through innovative service platforms. *Journal of Service Management*, 22(4), 443-470.

Pittaway, L., and Cope, J., (2007). Entrepreneurship education a systematic review of the evidence. *International Small Business Journal*, 25(5), pp.479-510.

Rauch, A. and Frese, M., (2007). Let's put the person back into entrepreneurship research: A meta-analysis on the relationship between business owners' personality traits, business creation, and success. *European Journal of Work and organizational psychology*, *16*(4), pp.353-385.

Rezaei, M., Jafari-Sadeghi, V., & Bresciani, S. (2020). What drives the process of knowledge management in a cross-cultural setting: The impact of social capital. *European Business Review*. 32(3), 485-511. https://doi.org/10.1108/EBR-06-2019-0127

Sadeghi, V.J., Nkongolo-Bakenda, J-M., Anderson, R. B., & Dana, L-P. (2019a). An institution-based view of international entrepreneurship: A comparison of context-based and universal determinants in developing and economically advanced countries. *International Business Review*, 28(6), [101588]. https://doi.org/10.1016/j.ibusrev.2019.101588

Sadeghi, V.J., Biancone, P. P., Anderson, R. B., & Nkongolo-Bakenda, J-M. (2019b). International entrepreneurship by particular people 'on their own terms': a study on the universal characteristics of entrepreneurs in evolving economies. *International Journal of Entrepreneurship and Small Business,* 37(2), 288-308. https://doi.org/10.1504/ijesb.2019.100109

Sadeghi, V. J., & Biancone, P. P. (2017a). Shariah Compliant International Entrepreneurship: A Study of Islamic Finance in Europe. *European Journal of Islamic Finance,* 8. https://doi.org/10.13135/2421-2172/2328

Sadeghi, V.J., & Biancone, P. P. (2017b). Exploring the Drivers of Gender Entrepreneurship: Focus on the motivational perspectives in USA, Italy, and France. In V. Ratten, V. Ramadani, L-P. Dana, R. D. Hisrich, & J. Ferreira (Eds.), Gender and Family Entrepreneurship (pp. 124–141). Routledge, London, UK.

Sadeghi, V.J., Biancone, P. P., Giacoma, C., & Secinaro, S. (2017). Export Compliance: A Missing Component of International Entrepreneurship. *International Journal of Business and Management*, 12(11), 103-110. https://doi.org/10.5539/ijbm.v12n11p103

Sadeghi, V.J., Jashnsaz, A., & Honari Chobar, M. (2014). Organization's Conformity Assessment with Peter Senge's Learning Organization Principles in Municipality of Saveh: A Case Study. *IOSR Journal of Business and Management,* 16(5), 51-58. https://doi.org/10.9790/487x-16555158

Sadraei, R., Jafari Sadeghi, V., & Sadraei, M. (2018). Biotechnology revolution from academic entrepreneurship to industrial: chemo-entrepreneurship. Biom Biostat Int J, 7(6), 546-550.

Schutjens, V. and Stam, E., (2003). The evolution and nature of young firm networks: a longitudinal perspective. *Small Business Economics*, 21(2), pp.115-134.

Schwienbacher, A. and Larralde, B., (2010). Crowdfunding of small entrepreneurial ventures. Handbook of entrepreneurial finance, Oxford University Press, Forthcoming.

Sukumar, A., Jafari-Sadeghi, V., Garcia-Perez, A., & Dutta, D. K. (2020). The potential link between corporate innovations and corporate competitiveness: Evidence from IT firms in the UK. *Journal of Knowledge Management*, 24(5), 965-983. https://doi.org/10.1108/JKM-10-2019-0590

Tranfield, D., Denyer, D. and Smart, P., (2003). Towards a methodology for developing evidence-informed management knowledge by means of a systematic review. *British Journal of Management*, 14(3), pp.207-222.

Vismara, S., (2016). Equity retention and social network theory in equity crowdfunding. *Small Business Economics*, 46(4), pp.579-590.

Vulkan, N., Åstebro, T. and Sierra, M. F. (2016). Equity crowdfunding: A new phenomena. *Journal of Business Venturing Insights,* 5, 37-49.

Wei, O.J. and Ismail, H.B., (2008). Revisiting personality traits in entrepreneurship study from a resource-based perspective. *Business Renaissance Quarterly, 3*(1), p.97.

World Bank (2013). Crowdfunding's potential for developing world, *infoDev*, Finance and Private Sector Development Department, Washington DC: World Bank

Yoon, J., May, K., Kang, J.H. and Solomon, G.T. (2019), "The impact of emotional self-management on benefit offerings and employment growth: an analysis of the fastest growing businesses in the United States", International Entrepreneurship and Management Journal, Vol. 15, No.1, pp.175-194.

Younkin, P., and Kashkooli, K., (2016). What Problems Does Crowdfunding Solve? *California Management Review*, 58 (2), 20-43.

Zhang, B., Baeck, P., Ziegler, T., Bone, J. and Garvey, K., (2016). Pushing Boundaries. The UK Alternative Finance Report, Judge Business School: University of Cambridge

Zvilichovsky, D., Inbar, Y. And Barzilay, O., (2015). Playing both sides of the market: Success and reciprocity on crowdfunding platforms. Available at SSRN 2304101.

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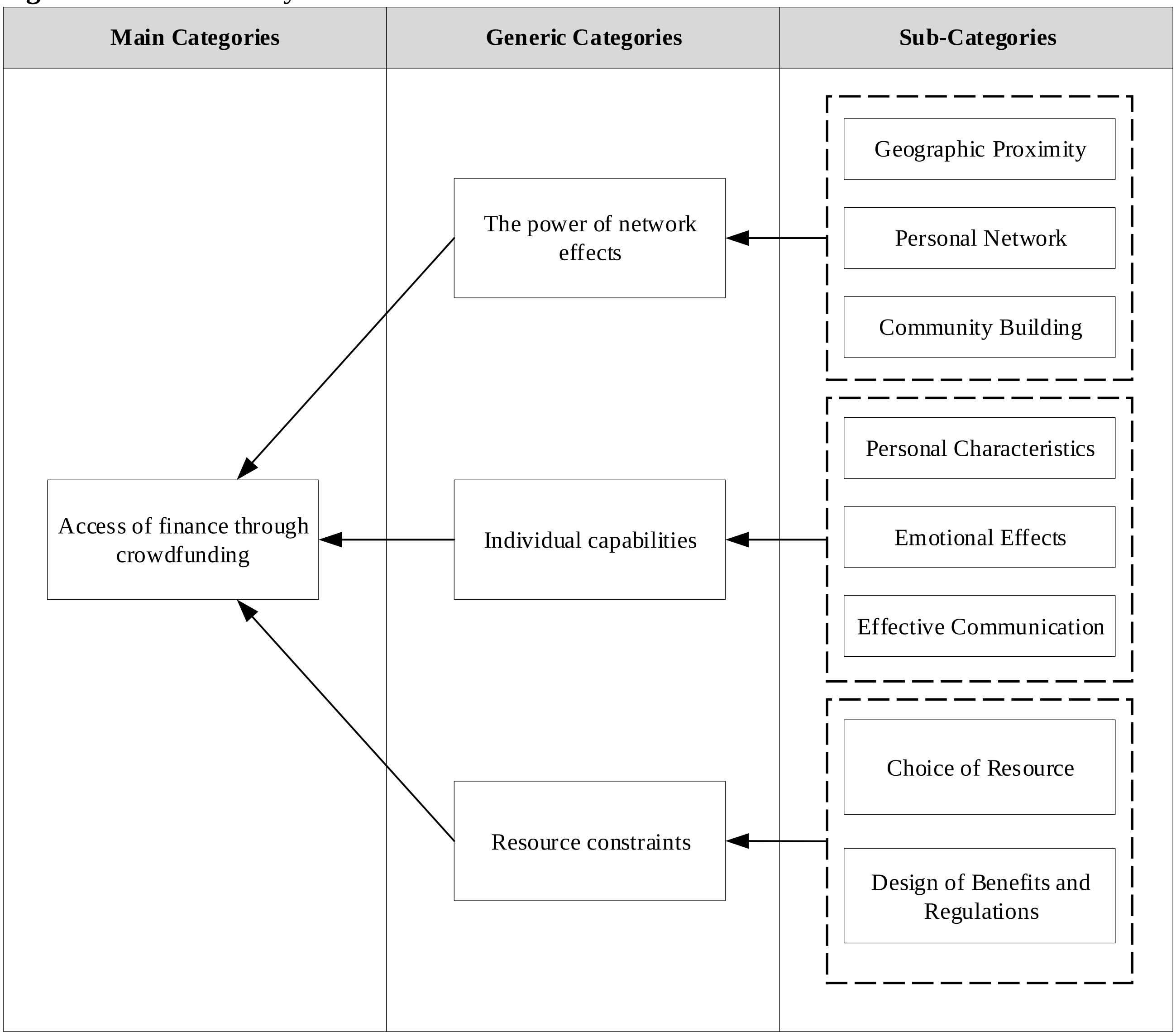
Figure 1. Thematic analysis



List of Tables

Table 1. Stages of the SLR process

Stage	Description
1	The researchers used ABS ranking list to identify key journals in the fields of entrepreneurship and finance. A total of 125 journals were identified.
2	The citation indexes of the journals from 2005 to 2016 were searched for the key term “funding”, Subsequently, the abstracts and article citations were downloaded into bibliographical software (EndNote). The software was used to identify keywords used in the citations that could inform the basis of search strings to look at wider citation indexes. There were 12 keywords at this stage.
3	Citation indexes like Scopus, World of Science and Business Source Premier were used to identify relevant articles using search strings from 2005 to 2016. (for example "crowdfunding", “crowdfunding”, Crowdfunding”, Crowd Funding”, “Crowd*”, “crowd*”). Eight search strings were identified.
4	Relevant citations and abstracts were downloaded into bibliographic software (587 papers) and exported into a spreadsheet to sort for and exclude duplicates (495 papers)
5	The citations were sorted for all articles related to law and regulation and these were excluded. The abstracts were then reviewed and the exclusion criteria were developed and applied (94 papers)
6	Articles were downloaded and imported into narrative coding software Nvivo. A first-level thematic analysis was conducted by coding abstracts of identified articles
7	The second level of thematic analysis was conducted by using the output from the first level coding. Several sub-themes were identified and a thematic framework was developed.
8	Articles were reviewed based on impact criteria and focus themes

Table 2. Exclusion Criteria

Number	Criteria	Reason For Exclusion
1	Foreign Language	Exclude articles not written in English.
2	All non-Business Sectors	Philanthropic, Governmental Organisations that do not trade are excluded.
3	All Research and Development projects	R&D projects that are in early development stages with significant timeframe before trading will commence.
4	Law and Regulation	Exclude articles on law and regulation as the focus is on operations rather than the external environment.
5	Crowdfunding incidental	Inclusion of the topic of crowdfunding is incidental to the article subject.
6	Descriptions of the Crowdfunding process	Any articles that only explain the process.
7	Discussion and conceptual articles	The focus is only on empirical studies.