



Emerging technologies and the democratisation of financial services: A metatriangulation of crowdfunding research



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ABSTRACT

Crowdfunding has grown quickly and attracted significant scholarly attention. However, the diverse approaches to crowdfunding that have emerged, as well as the uncertain relationship of these approaches to the umbrella concept of crowdsourcing, means it is not clear to what extent crowdfunding presents theoretically novel behaviours, nor what those behaviours may be. This study addresses this lack of clarity through a metatriangulation of 120 peer-reviewed studies on crowdfunding. These studies are distributed across the four dominant categories of crowdfunding, namely crowd lending, crowd equity, crowd patronage, and crowd charity. Research for each category is analysed separately to determine the topics of interest, the dominant theoretical perspectives, the methods employed, and the typical focus of analysis. We bridge these categories to identify three common variables relating to funding behaviours and three relating to impact. Of these, we argue that two are fundamentally novel and under-researched, namely the 'erosion of organisations' financial boundaries' and 'paying to participate'. The implications of these findings are discussed for crowdfunding and crowdsourcing.

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1. Introduction

The nature of work, creativity, and innovation has been challenged in recent years with the arrival of the related concepts of peer production (cf. Benkler, 2002) and crowdsourcing (cf. Howe, 2008). These approaches combine novel social and legal mechanisms to enable new modes of collaboration that blur the distinction between the organization and the individual, as well as between professionalism and volunteerism. As the ideas behind peer production and crowdsourcing have evolved, we have also seen that individuals are willing to commit more than just time or ideas to collaborative works. Crowdfunding environments have emerged in which individuals commit personal finances to fund business ventures, social initiatives and creative works. This extends the idea of the wisdom of crowds (c.f. Surowiecki, 2004) and allows crowdsourcers to engage with the wealth of crowds.

Research into crowdfunding has been encouraged by media coverage around several famous success stories, including the *Pebble* e-paper smart watch (which raised over \$10 million to develop a market-ready product), the *Veronica Mars* campaign (which raised over \$5 million from fans to create a feature film), and *Star Citizen* (which raised over \$110 million to fund the first full iteration of a video game). While these success stories are clearly outliers in terms of the amount raised, the growth of crowdfunding as an innovative fundraising mechanism is nonetheless significant. Crowdfunding was estimated to exceed \$5

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billion/year in 2013 (Massolution, 2013) and the World Bank predicts that will have grown to \$100 billion/year by 2025 (Best, Neiss, Swart, & Lambkin, 2013). This growth of crowdfunding is not only one of scale, but also one of purpose. Some crowdfunding platforms encourage rewards-based donations to support independent projects (e.g., *Kickstarter*, *Indiegogo*) while others encourage charitable pro-social donations to help those in need (e.g., *Razoo*, *Kiva*). Some platforms allow funders to adopt the role of banks and collectively provide commercial interest-based unsecured loans (e.g., *Prosper*, *Lending Club*), while others seek to move traditional venture capital markets online by allowing start-ups to sell equity or securities for seed finance (e.g., *Crowdcube*, *Symbid*).

Each of these categories can be related to existing financial activities (patronage, charity, lending, and angel investment), meaning it is unclear the manner and extent to which their application in a crowdfunding context creates novel challenges and opportunities. This study explores this question of theoretical novelty by analysing and integrating findings from existing research across all four major categories of crowdfunding. This is achieved through a metatriangulation (c.f. Lewis & Grimes, 1999) of 120 peer-reviewed studies on crowdfunding. The next section gives some background for the study, in particular why crowdfunding may or may not be considered radically new in light of existing fundraising and crowdsourcing behaviours. The methodology is then laid out, which defines the phenomenon of interest, the category-specific lenses, the approach to data gathering, and the data analysis methods employed. Studies are then coded according to these lenses and accounts are written for each category of crowdfunding. We discuss commonalities and differences between these categories and use this to develop a theoretically inclusive and holistic perspective. This cross-category perspective serves to unify the crowdfunding phenomenon and exposes the most innovative aspects of crowdfunding.

2. Crowdfunding – Old wine in a new bottle?

The novelty of crowdfunding as a phenomenon of interest for scholars of IT and innovation can be called into question on two fronts. First, the idea of raising money from a crowd is not new. Some of the earliest documented instances of crowdfunding are attributed to the rock band Marillion, whose fans raised the money for them to tour in 1997, and who also asked fans to pre-order a non-existent album in 2001 to give them the necessary funds to record it (Gerber, Hui, & Kuo, 2012). Yet charities have been asking for donations from the public to fund specific projects or philanthropic causes for hundreds (arguably even thousands) of years. Famous examples of large citizen-funded projects include the Statue of Liberty and London's Royal Albert Hall (Stiver, Barroca, Minocha, Richards, & Roberts, 2015). Likewise, there is nothing strikingly new about the idea that individuals would lend money to other individuals, or that businesses would seek investment from large numbers of investors, or that consumers would pre-order products at a discount. In his seminal book on crowdsourcing, Howe (2008, p.7) wrote “Crowdfunding isn't new. It's been the backbone of the American political system since politicians started kissing babies. The Internet so accelerates and simplifies the process of finding large pools of potential funders that crowdfunding has spread into the most unexpected nooks and crannies of our culture”.

Second, there is some suggestion that crowdfunding is simply another manifestation of crowdsourcing, albeit one in which financial resources are sourced, rather than ideas, opinions, or effort (e.g., Schwenbacher & Larralde, 2012; Estellés-Arolas & González-Ladrón-de-Guevara, 2012; Ashta & Assadi, 2010; Stiver et al., 2015). Research in technological fields has been known to overstate incrementally novel emerging phenomena as part of passing ‘fashion waves’ (c.f. Baskerville & Myers, 2009). Therefore, it must be considered whether novel and discreet theories are needed to understand the innovative potential of crowdfunding. Put differently, if crowdsourcing has built upon a ‘rise of amateurism’ (Howe, 2008), crowdfunding may simply be described as a rise in amateur investment. Thus, the central research question for this study asks *what, if anything, is fundamentally new about crowdfunding from a theoretical perspective?*

3. Methodology

This study performs a metatriangulation of crowdfunding studies to address this question of novelty. Metatriangulation allows existing research within diverse streams of research to be synthesized and analysed as one unified data set (Schultz & Hatch, 1996; Lewis & Grimes, 1999). Such unified analysis can establish theoretical correspondence across diverse areas of research, meaning findings can be carried over from one area to another, so facilitating the discovery and reconciliation of areas of theoretical conflict or neglect (Gioia & Pitre, 1990). This process of discovering and resolving theoretical conflict in a way that can withstand multiparadigmatic scrutiny can be an essential mechanism for creating meaningful scientific breakthroughs (Kuhn, 1970).

The metatriangulation performed in this study uses the framework presented by Lewis and Grimes (1999), and later refined by Jasperson et al. (2002). This framework involves three high-level stages, the first of which specifies that ‘groundwork’ be performed. Groundwork comprises (1) defining the phenomenon of interest in a way that transcends individual areas of research, (2) defining category-specific lenses through which to view existing studies, and (3) gathering a metatheoretic sample of studies. The execution and results of these three activities are described in the remainder of this section.

3.1. Defining crowdfunding as a phenomenon/phenomena of interest

Crowdfunding is funding behaviour that bypasses conventional intermediaries by directly connecting funders and fund seekers (Belleflamme, Lambert, & Schwenbacher, 2014; Ley & Weaven, 2011; Ordanini, Miceli, Pizzetti, & Parasuraman, 2011). The crowdfunding concept originates within the broader domain of crowdsourcing, in which crowds are leveraged to obtain ideas and effort to support organizational activities (c.f. Howe, 2008). Crowdfunding manifests significant new patterns of behaviour

in personal and business financing (Ordanini et al., 2011). This behaviour has been the subject of scrutiny from a wide range of scholarly perspectives; e.g., the economic impact of specific legislation (Kitchens & Torrence, 2012), crowdfunding scientific research (Wheat, Wang, Byrnes, & Ranganathan, 2013), and the role of crowdfunding in innovation (Singer, Seyff, & Fricker, 2011). Crowdfunding platforms present a number of advantages over traditional funding mechanisms, including: (1) funders and fundseekers can post and search for projects of shared interest with minimal cost and effort (Lin, 2009); (2) multiple micro transactions may be pooled together to fund projects with less concentrated distribution of risk (Chen & Han, 2012); and (3) online authentication and information search may mitigate information asymmetry between funders and fund seekers, so expanding lending/investment practices beyond the traditional circle of acquaintances (Rhodes, 2010; Lin, Prabhala, & Viswanathan, 2013).

This diverse range of ‘crowdfunding’ behaviours is defined in this study as *behaviour where groups of individuals use digital technologies to fund people, projects, or businesses in exchange for financial or developmental commitments from those people, projects, or businesses*. This techno-centric definition does not restrict crowdfunding to specific forms, yet maintains a focus on the behaviours most relevant to scholars of IT and management (c.f. Benbasat & Zmud, 1999, Orlikowski & Iacono, 2001).

3.2. Focusing category-specific lenses on crowdfunding

At the heart of the method of metatriangulation is a two-part review in which different areas of research are first ‘bracketed’ and subsequently ‘bridged’ (c.f. Lewis & Grimes, 1999; Jasperson et al., 2002). Bracketing means that the assumptions and focus of each research area are first made explicit in isolation. This singular perspective allows distinguishing characteristics of each area to be identified that may later be used to identify symmetries, asymmetries, and interactions between areas of research, i.e., ‘transition zones’, that may be bridged as part of meta-level theorizing (Gioia & Pitre, 1990; Grimes & Rood, 1995; Lewis & Grimes, 1999). Crowdfunding systems have been broken down differently according to a number of varying perspectives. In legal terms, one can differentiate between donation, rewards, pre-ordering, lending, and equity (Bradford, 2012a). An industrial perspective identifies only four categories, combining rewards-based crowdfunding and pre-ordering (Belleflamme et al., 2014; Schwienbacher & Larralde, 2012; Massolution, 2013; Mollick, 2014). An empirical perspective based on a cluster analysis of existing platforms reduces these to three (Haas, Blohm, & Leimeister, 2014), further combining equity and lending (though this additional grouping likely reflects the added legal hurdles that slowed the emergence of equity platforms (c.f. Stemler, 2013)).

Viewed theoretically, we argue the four category view of crowdfunding is most suitable, namely:

- 1) *Crowd lending*: investing in return for repayment at some agreed upon rate of interest
- 2) *Crowd equity*: investing in return for equity/securities
- 3) *Crowd patronage*: investing in return for benefits from a proposed product/service (e.g., provision of that product or service once developed, in-product acknowledgement, etc.)
- 4) *Crowd charity*: investing without expectation of additional material or financial returns

Each of these categories can be differentiated according to two key theoretical dimensions describing the returns for funders. First, these returns can be financial in nature or they can take other forms, typically material objects or social goods. Second, the

Definitive returns	Crowd Patronage	Crowd Lending
Uncertain or dynamic returns	Crowd Charity	Crowd Equity
	Material or social returns	Financial returns

Fig. 1. Categories of crowdfunding systems.

Table 1
Comparison of crowdfunding categories.

	Crowd lending	Crowd equity	Crowd patronage	Crowd charity
Returns	Investment plus defined rate of interest	Financial stake in company or project	Material objects	Self-esteem or social benefits
Examples	Lending Club, Funding Circle, Prosper	Seedrs, Crowdfunder, Sellaband	Kickstarter, Indiegogo, Unbound	GoFundMe, Razoo, Kiva

returns for funders can be definitive (i.e., the expected returns are clearly laid out in advance) or they can be more dynamic and uncertain (i.e., returns may change depending on future events). This is illustrated in Fig. 1 and Table 1.

Crowd lending systems manifest highly financial and definitive returns. The origins of this category are associated with *Zopa* in the UK (Iacobuzio, 2006; Kupp & Anderson, 2007; Briceno Ortega & Bell, 2008), the success of which paved the way for sites such as *Prosper* and *Lending Club* in the US (Wang & Greiner, 2011), *PPDai* in China (Chen & Han, 2012), and *Smava* in Germany (Pöttsch & Böhme, 2010). These platforms allow individuals or organisations to request small to medium loans for specific projects, such as student loan repayment, home improvement, etc.

Crowd equity systems manifest highly financial yet less definitive returns, as the exact scale and timeline of returns is less predictable. Sites such as *Symbid*, *MicroVentures*, *CrowdCube*, and *EarlyShares* present examples of platforms that provide a means for venture capitalists and entrepreneurs to interact and negotiate financial contributions in return for a stake in the borrowers' enterprise. Less traditional dynamics can be found with sites like *Sellaband*, in which musicians/fundraisers agree to share revenues with fans/funders, and *A Swarm of Angels*, an open source film project in which financial investors have input on issues such as script development, casting, and distribution.

Crowd patronage systems manifest less financial but highly definitive returns, as investors are given predefined artefactual or social benefits for different levels of investment. Some of these systems maintain a broad focus, e.g., *Kickstarter*, *Indiegogo*, while others are domain-specific, e.g., *Pozible* funds artistic projects, while *Unbound* funds (and publishes) books. In addition to pre-purchase of products and services, investors often receive token rewards, such as t-shirts, posters, gift boxes, or special access to live performances or events.

Lastly, crowd charity systems manifest less financial and less definitive returns. Investors are typically motivated by philanthropic or ideological intentions, the benefits of which are personal and often intangible. As with *Patronage* these platforms vary in the breadth of issues being addressed. For example, sites such as *Fundly*, *Fundraise*, and *GoFundMe* all facilitate a broad range of charitable projects, from individuals seeking medical care to volunteer expeditions to regions struck by natural disasters. Other platforms are more specific in their focus, e.g., *Kiva*. allows funders to make 0% loans to individuals in less developed countries, while *DonorsChoose* focuses on schools.

3.3. Collecting a metatheoretical sample of crowdfunding research

The multidisciplinary nature of the field of crowdfunding research meant that adopting a search strategy limited to a predefined set of outlets could have produced a non-representative sample of studies. Thus, the approach taken was to exhaustively search major multi-disciplinary databases (JSTOR, EBSCO, Web of Knowledge, ACM Digital, Science Direct and the AIS Electronic Library) using search terms, synonyms and variants identified a priori from crowd funding research. Databases were then re-queried using terms that emerged from analysing the initial search results. Searches were performed for each term in each

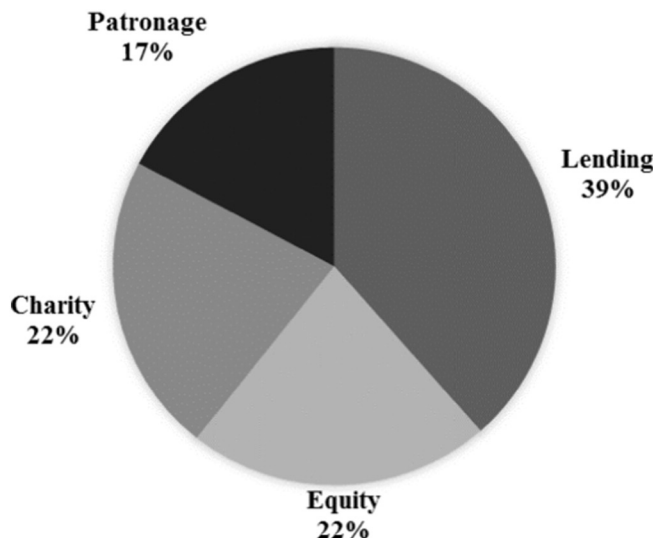


Fig. 2. Frequencies of studies by category.

database. Individual results were independently assessed at the title and abstract level by two researchers, disagreements in assessment were resolved, and only relevant studies were logged, producing an initial sample of 249 studies. Studies were excluded where (1) the subject matter was too far removed, or (2) no new theoretical/empirical knowledge was presented (e.g., book reviews). This refinement led to the removal of 152 studies from the sample, resulting in a data set of 91 studies. This was then complemented by ongoing searches in Google Scholar to identify remaining relevant research that may not yet have reached the sampled databases, e.g., working papers, research in progress, research presented at less mainstream conferences, and forthcoming articles. This led to the discovery of another 29 studies, for a combined total of 120.

4. Data analysis and category accounts

4.1. The distribution of crowdfunding studies

Studies were found focusing on each of the four categories identified a priori, the distribution of which is illustrated in Figs. 2 and 3. This distribution demonstrates that lending was the most popular form of crowdfunding studied ($N = 47$, i.e., 39%), followed by equity ($N = 26$, i.e., 22%) and charity ($N = 26$, i.e., 22%), with patronage least frequently represented ($N = 21$, i.e., 17%).

4.2. Emerging cross-category variables

A high-level distinction emerged early in analysis between studies focused on funding behaviours and those focused on the broader impact of crowdfunding platforms (see Fig. 3). The former characterised activities in different crowdfunding markets, and how these activities are explained or predicted by different social, economic, organizational, and personal factors. The latter focused on how mainstream markets, organisations, communities, and individuals are being affected by the growth and evolution of crowdfunding.

Further ongoing analysis identified three variables within each of these categories (funding behaviours and impact) common to each of the four categories of crowdfunding (albeit their manifestations varied). For funding behaviours, this included *paying for financial or material benefits*, *paying for social benefits*, and *paying to participate*. For impact, this included *competition and democratisation in financial services*, *greater availability of funding for pro-social projects*, and *erosion of organisations' financial boundaries*. These are illustrated via a concept-centric matrix (Webster & Watson, 2002) in Table 2 and discussed in more detail in subsequent sections.

4.3. Studies of crowd lending

Studies of crowd lending demonstrated a strong methodological preference for quantitative econometric approaches. Of the 47 studies studying peer-to-peer lending, 31 based theorizing on quantitative analyses of existing transaction records, 7 employed qualitative analyses of such records, 3 used self-reported data, and 6 were purely theoretical (i.e., they did not analyse any particular dataset). This appears to reflect a general willingness to apply existing economic perspectives (and subsequently econometric-based methods) to these systems under the assumption that activities are readily comparable with existing systems.

At the level of funding behaviours, the concept of *paying for financial or material benefits* was particularly prominent for crowd lending, whereby funders seek financial interest on their investment. To this end, numerous studies looked at the statistical impact on lending from fundseekers' credit data, including: their income (Puro, Teich, Wallenius, & Wallenius, 2010; Lu et al., 2012), credit grades, homeownership status (Herrero-Lopez, 2009; Larrimore, Jiang, Larrimore, Markowitz, & Gorski, 2011), their number of years in employment (Larrimore et al., 2011; Livingston et al., 2011), the amount being sought, the interest rate, and the loan duration (Puro et al., 2010; Wang & Greiner, 2010; Herzenstein, Dholakia, & Andrews, 2011a; Herzenstein, Sonenshein, &

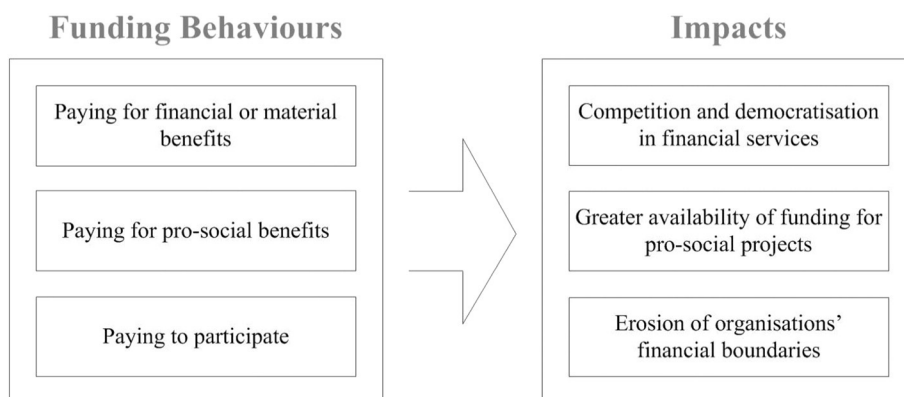


Fig. 3. Emerging crowdfunding variables.

Table 2
Emerging constructs.

	Use			Impact		
	Paying for financial or material benefits	Paying for social benefits	Paying to participate	Competition and democratisation in financial services	Greater availability of funding for pro-social projects	Erosion of organisations' financial boundaries
Lending	Funders benefit from financial interest on their investment e.g. Lu, Gu, Ye, and Sheng (2012), Dezsó and Loewenstein (2012)	Funders benefit from being part of a lending community e.g. Pope and Syndor (2011), Lin et al. (2013)	Funders benefit by being empowered to take charge of savings e.g. Kupp and Anderson (2007), Livingston, Glassman, and Wright (2011)	Platforms create pressure on financial services institutions e.g. Garman, Hampshire, and Krishnan (2008), Berger and Gleisner (2009)	Platforms create new finance options for the 'unbanked' e.g. Iacobuzio (2006), Herrero-Lopez (2009)	Funders become both customers and financial benefactors e.g. Branker, Shackles, and Pearce (2011), Pole, Puschmann, Fischbach, and Alt (2011)
Equity	Funders benefit from dividends or sale of equity e.g. Ahlers, Cumming, Günther, and Schweizer (2015), Cholakova and Clarysse (2015)	Funders benefit from helping responsible businesses e.g. Ordanini et al. (2011), Agarwal (2015)	Funders benefit through learning and portfolio development e.g. Schwiendbacher and Larralde (2012), Bretschneider, Knaub, and Wieck (2014)	Platforms create alternative finance options for SMEs e.g. Ley and Weaven (2011), Hornuf and Schwiendbacher (2014)	Platforms help to encourage socially responsible business e.g. Collins and Pierrakis (2012)	Funders may become customers and shareholders e.g. Schwiendbacher and Larralde (2012), Ordanini et al. (2011)
Patronage	Funders benefit from material rewards when project is completed e.g. Gerber et al. (2012), Mollick (2014)	Funders benefit from supporting projects with artistic or social value e.g. Burtch, Ghose, and Wattal (2013), Kuppuswamy and Bayus (2013)	Funders benefit through interaction and vicarious accomplishment e.g. Beaulieu and Sarker (2013), Zvilichovsky, Inbar, and Barzilay (2013)	Platforms allow new forms of relationship-building with consumers e.g. Singer et al. (2011), Belleflamme et al. (2014)	Patronage platforms facilitate community projects with limited scale or profitability e.g. Beer and Badura (2012), Wheat et al. (2013)	Funders may expect access to records, digital resources, and valuable information e.g. Gambardella (2012), Kuo and Gerber (2012)
Charity	Funders may benefit from tax breaks for donations made via crowdfunding e.g. Meer (2014)	Funders benefit from reputation and improving their environment e.g. Galak, Small, and Stephen (2011), Riggins and Weber (2012)	Funders benefit from self-image or empathy-related rewards e.g. Choy and Schlagwein (2015), Gleasure and Feller (2016)	Charity platforms stimulate financial markets in new domains and areas e.g. Cooke (2011), Ibrahim (2012)	Charity platforms can focus on the most vulnerable people in developing countries e.g. Heller and Badding (2012), Liu, Chen, Chen, Mei, and Salib (2012)	Funders may use projects as vehicles for collective initiatives e.g. Hollow (2013), Yang, Zhou, and Marquis (2015)

Dholakia, 2011b), the number of open credit lines for the borrower, their debt-to-income ratio, their utilization of revolving credit (Herrero-Lopez, 2009; Lin, 2009; Puro et al., 2010), and the numbers of credit inquiries made by other potential lenders for the borrower in the recent past (Lin, 2009; Larrimore et al., 2011).

The concept of *paying for social benefits* was also salient, as several studies noted that funders appeared to be subject to social influences from other community members. In many cases these social influences came from fundseekers. For example, Lin et al. (2013) noted the impact of 'home bias' and friendship networks on lending, suggesting that physical proximity between fundseekers and funders plays an important role. Other studies showed the importance of social cues from photographs (Pope & Syndor, 2011; Ravina, 2012), and the impact of emotional appeals (Pöttsch & Böhme, 2010; Larrimore et al., 2011; Sonenshein, Herzenstein, & Dholakia, 2011). There were also signs of social influence from other funders, e.g. studies showed signs of 'herding', in which the popularity of specific loan requests snowballed among mutually watchful funders (Lee & Lee, 2012; Yum, Lee, & Chae, 2012).

The concept of *paying to participate* was less prominent, though a handful of studies argued that funders benefit by being empowered to take charge of their savings. In particular, several scholars (e.g. Kupp & Anderson, 2007; Briceno Ortega & Bell, 2008; Pole et al., 2011) frame crowd lending as an evolution of Web 2.0 dynamics, in which social interactions between community members and a sense of empowerment provide some of the motivation for participation (O'Reilly, 2009). Further, a study by Livingston et al. (2011) demonstrated how a student-managed fund could be used to encourage student learning and generate 'business experience'.

At the level of impact, the concept of *competition and democratisation in financial services* discussed the capacity for crowd lending platforms to create pressure on financial services institutions. For the most part, this was seen as a positive development that could stimulate competition in financial markets and shake up industries where practices had become homogenised (Kupp & Anderson, 2007; Garman et al., 2008; Johnson, Ashta, & Assadi, 2010; Pole et al., 2011; Wang & Greiner, 2011; Gelfond & Foti, 2012). That literature was contrasted with cautionary legislation-based studies which discussed the regulatory mechanisms necessary to afford investors in new markets the necessary confidence and security (e.g., Chaffee & Rapp, 2012; Davis & Gelpert, 2010).

The concept of *greater availability of funding for pro-social projects* focused on the ability of crowd lending platforms to create new finance options for the 'unbanked'. In broad terms, there was a sense that the less bureaucratic nature of peer-to-peer lending had the potential to democratise access to capital to the benefit of those on the fringes of traditional markets (e.g., Iacobuzio,

2006; Kupp & Anderson, 2007). This may include those individuals who lack credit history, or who would be considered high-risk to traditional financial institutions (Yum et al., 2012). It also has the potential to open up financial markets for individuals in developing areas and make less wealthy geographical regions more internationally competitive (Barry, 2012).

The concept of *erosion of organisations' financial boundaries* discussed how funders can act as both customers and financial benefactors of a project. This was considerably less frequent in the crowd lending literature; however, notable examples exist. In the private sector, Pole et al. (2011) illustrate how crowd lending means customers may become increasingly entangled with banking processes that were traditionally handled internally, e.g. activities such as customer support and portfolio construction. In the public sector, Branker et al. (2011) described the usefulness of crowd lending systems for funding micro-entrepreneurs looking to house renewable energy technologies on their property. The ability of lending platforms to open up government-level initiatives to lower-income families creates an overlapping system of investment and returns, transcending traditional boundaries between the public from such initiatives.

4.4. Studies of crowd equity

Analysis of studies investigating crowd equity show relatively little discussion of individual use, compared with the number of studies focusing on impact. This is coupled with a strong tendency towards non-empirical work, which represented 15 of the 26 studies. This may be because motivations and returns on these systems are perceived to be more complex and/or novel. Alternatively, it may simply be because equity-based systems are still comparatively rare (c.f. Haas et al., 2014).

At the level of use, the concept of *paying for financial or material benefits* suggested funders benefit from dividends or the sale of equity as a funded business grows. While some research discussed the mechanics of crowd equity and its potential for financial returns (e.g. Schwienbacher & Larralde, 2012; Burtch, 2011), the majority of discussion on this concept was legal/regulatory in nature, as many scholars voiced concerns that abusive practices could prevent inexperienced investors from realising such returns. These studies were often based on observations of the 'Jumpstart Our Businesses' or 'JOBS' Act in the US in 2012, a high-profile legal change intended to support new crowdfunded start-ups. This law makes the sale of tradable assets for start-ups exempt from registration if a number of criteria are met, including limiting the types of companies that can use crowdfunding, the amount that can be raised in a 12-month period, the amount that any one individual can invest in a 12-month period, as well as how funds are raised and reported (see <http://www.whitehouse.gov/the-press-office/2011/09/08/fact-sheet-american-jobs-act> for a more detailed overview). Several studies offered summaries of the legal landscape surrounding the introduction of such legislation (e.g., Burkett, 2011) while others offered critiques of the technical qualities of the JOBS act (e.g., Bradford, 2012a, 2012b; Cohn, 2012), arguing that greater measures were needed to ensure the desired levels of security.

The concept of *paying for social benefits* suggested that funders benefit by helping to create the type of businesses that improve their personal and social environment. Bretschneider et al. (2014) hypothesise that funding is influenced by a range of social factors, including reciprocity and social recognition, direct identification (from friends and family), indirect identification (from shared characteristics), and regional identification. This is supported by observations from SellaBand, a crowdfunding platform that sells stakes in music, which showed that geographically nearer investors typically invest more early and are less swayed by herding (Agrawal, Catalini, & Goldfarb, 2015).

The concept of *paying to participate* describes the benefits to funders from the opportunities for learning and portfolio development. This knowledge-based motivation featured indirectly in many discussions of crowd equity, mostly as an explanation for why funders would opt for equity rather than lending (e.g. Ordanini et al., 2011; Lasrado & Lugmayr, 2013; Agrawal et al., 2015), though participatory motivations for equity funders may still be less than patronage (Cholakova & Clarysse, 2015). Bretschneider et al. (2014) differentiated between a general curiosity and a broader sense of 'fun' associated with funding a new business. Put differently, many crowd equity funders "do not have financial motivations. What they want is to participate into innovative projects, be able to say 'I did it', obtain recognition and personal satisfaction. These are intrinsic motivations" (Schwienbacher & Larralde, 2012, p. 17).

At the level of impact, the concept of *competition and democratisation in financial services* surrounded the potential for crowd equity platforms to create alternative finance options for start-ups and small-to-medium enterprises (SMEs). This presents a key question, namely whether crowd equity presents a complement or a substitute for conventional finance. Several studies suggest the latter, whereby crowd equity from a combined population of professional and casual investors can provide funding at the earlier stages of business development (Lasrado & Lugmayr, 2013; Hornuf & Schwienbacher, 2014). Despite this combined view, a qualitative study of Australian venture capitalists by Ley and Weaven (2011) suggests professional investors would rather co-invest with other experienced individuals and raised a number of concerns surrounding the management of ongoing interaction post funding, such as board representation, exit options, and a general desire to have creative or strategic input into a firm.

The *greater availability of funding for pro-social projects* was based on crowd equity platforms' ability to encourage socially responsible business. This was the least frequently discussed impact of crowd equity platforms. However, there was some discussion of the potential for crowd equity to support businesses offering social gains, e.g. Collins and Pierrakis (2012) discuss this using the example of Waka Waka light, a business that developed an efficient solar-powered LED light for use in developing countries. After generating €50,000 from a patronage campaign on Kickstarter, Waka Waka light successfully obtained a further €75,000 funding from socially-conscious funders on Netherlands-based crowd equity platform Symbid.

The concept of *erosion of organisations' financial boundaries* again focused on the ability of platforms to blur the line between a business' customers and investors. This included discussion of how new businesses could leverage equity-based crowdfunding to increase customers' long-term emotional and ideological commitment to a venture (Kappel, 2009; Ordanini et al., 2011). Legal and regulatory concerns were also voiced over the reliability of crowd equity intermediaries, the impact that a history of crowdfunding will have for the financial reputation of a business, as well as how small start-ups will communicate effectively to large numbers of inexperienced equity-holders at such early stages in the business lifecycle (Hanley & Bork, 2012).

4.5. Studies of crowd charity

A relatively balanced set of methodologies was evident for studies of crowd charity, with 10 of the 26 studies performing quantitative analyses of existing transaction records, 7 performing qualitative analyses of transaction records, 4 using self-reported data, and 5 performing purely theoretical research.

At the level of funding behaviours, the concept of *paying for financial or material benefits* was unsurprisingly less prominent than for crowd equity. However, there was some suggestion that funders obtain financial or material benefits in the form of tax breaks. Notably, Meer (2014) studied donations to DonorsChoose, a US-based crowd charity platform in which funders give to teachers to support different educational projects. Evidence from that platform suggests tax price and tax deductibility play an important role in explaining funding behaviours, as an increased 'price of giving' reduces the likelihood of a project being funded.

The concept of *paying for social benefits* was most prominent, wherein crowd charity funders benefit by generating reputation and improving the circumstances of people they perceive as similar to themselves. From a reputational perspective, evidence of charitable giving from Burtch, Ghose, and Wattal (2015) suggests that facilitating anonymity may have a significant impact on giving, e.g. because funders are embarrassed to give more or less than the norm, or because they are also involved as fundraisers/beneficiaries. From a similarity perspective, there is evidence that funders are impacted by cultural similarities (Sinanan, 2009; Riggins & Weber, 2012), similarities in occupation and gender, and even sharing a first initial (e.g. 'John' and 'Jack') (Galak et al., 2011). There were also suggestions that individual borrowers provoked greater empathy (and therefore funding) than groups or consortia (Galak et al., 2011; Ly & Mason, 2012). Interestingly however, this relationship may be moderated to some degree by the extent to which recipients are presented with positive features, e.g., experimentation suggests that groups of children in Africa attract more funding than comparable individuals, whereas groups of children in jail in Africa for committing crimes attract less than comparable individuals (c.f. Smith, Faro, & Burson, 2013).

The concept of *paying to participate* in crowd charity contexts was most focused on funders' sense of satisfaction or self-esteem. This was described by several studies with reference to the concept of 'warm glow', i.e. the idea that funders enjoy some hedonic benefits when they give to charitable fundraisers (Burtch, 2011; Wash, 2013), particularly when those fundraisers are individuals rather than organisations (Gleasure & Feller, 2016). These intrinsic motivations were expanded further by a case study of a US/Australia-based crowdfunding campaign to build a community centre in Malawi (Choy & Schlagwein, 2015). That case study identified key funder motivations as individual-intrinsic (personal enjoyment and satisfaction) and social-intrinsic (being part of a community of like-minded people).

At the level of impact, the concept of *competition and democratisation in financial services* discussed the impact of charitable crowdfunding markets and documented positive local outcomes associated the increased availability of capital from microfinance markets, such as Kiva.org (Ariza-Montes, López-Martín, Morales-Gutiérrez, & Lucia-Casademunt, 2012; Kauffman & Riggins, 2012; Merritt & Stubbs, 2012). Other studies looked critically at specific initiatives and elements of the microfinance process. One example of this was an investigation by Cooke (2011) of the heightened benefits of microfinancing first-order producers for efficient market growth, rather than second-order producers. Further examples included an exploration of how microfinance could provide much needed finance to sustainable small businesses growth in Indonesia (Ibrahim, 2012), as well as the potential for NGOs and civic organisations willing to compete for donations on crowdfunding platforms (Ly & Mason, 2012; Stiver et al., 2015).

The concept of *greater availability of funding for pro-social projects* focused on the role of crowdfunding and microfinance in helping the most vulnerable people in developing countries. For example, female borrowers tend to attract microfinance donation more easily, as do borrowers operating in the poorest regions, or those with health-related or educational goals (Heller & Badding, 2012; Ly & Mason, 2012; Moodie, 2013). This is supported by an analysis of lenders' accounts of their motivations on Kiva.org showed that the most active lenders are likely to mention claims of general altruism, group-specific specific altruism, religiousness, and support for the core principles of microfinance (Liu et al., 2012). This final factor, namely personal ideological support for the principles of microfinance, was echoed by numerous other studies of Kiva.org (Heller & Badding, 2012; Smith, Cronley, & Barr, 2012; Smith et al., 2013).

The concept of *erosion of organisations' financial boundaries* described a trend for funders to use crowdfunding projects as vehicles for mass participation in different projects. This was described in a European context as a means of engaging civic society in local or niche interests, as well as testing the mass appeal of different initiatives early in their development (Hollow, 2013). More extreme potential impact was observed in Chinese contexts, as charitable crowdfunding campaigns are used as a vehicle for 'subversive charities' (Yang et al., 2015). These projects may ostensibly address relatively nominal goals and outcomes, yet they have

the capacity to feed into mass political movements that may not be otherwise possible due to government constraints on formal charitable organisations.

4.6. *Studies of crowd patronage*

As with charity, studies of crowd patronage divided relatively equally between studies of use and studies of impact. Methods were distributed relatively evenly, with 8 of 21 studies performing quantitative analyses of existing transaction records, 2 performing qualitative analyses of transaction records, 4 using self-reported data, and 7 performing purely theoretical research.

At the level of funding behaviours, the concept of *paying for financial or material benefits* assumed a view of patronage that resembles pre-purchase. This was a prominent motivation identified by Gerber et al. (2012), who noted that many backers decided to support projects because they saw the accompanying rewards as a bargain compared to their worth, or because they liked receiving new products or services before the general public. Mollick (2014) also noted that many projects' level of success was perceived according to their ability to deliver rewards within an acceptable window of quality and timeliness. This theme was also indirectly supported by findings that fundraising success can be attributed to fundseekers' ability to communicate legitimacy and build trust (Beaulieu & Sarker, 2013; Frydrych, Bock, Kinder, & Koeck, 2014), further supporting a rewards-orientation among backers.

The concept of *paying for social benefits* assumed that supported projects reflected an underlying cause or sense of shared value. This motivation was also identified by Gerber et al. (2012), who observed backers' desire to help pro-social causes or contribute to projects run by friends or family. Evidence from Kickstarter shows that funders may be influenced by many of the same phenomena that impact upon ideology-based contributions, e.g., awareness building around causes, and a 'crowding out' effect where funders become less likely to contribute to projects as it becomes less important to that recipient reaching their target (Burtch et al., 2013; Kuppuswamy & Bayus, 2013).

The concept of *paying to participate* describes a desire to be part of the community responsible for some project. Again, this was identified by Gerber et al. (2012), who noted backers' desire to 'engage and contribute to a trusting and creative community'. This was also framed as a form of relationship building, either because of a desire to construct shared meaning (Beaulieu & Sarker, 2013) or because of the reciprocal social capital those relationships afford (Zvilichovsky et al., 2013). More broadly, backers may wish to participate because they wish to learn new knowledge or skills and enjoy the opportunity to observe a project unfold (Gambardella, 2012; Belleflamme et al., 2014; Mollick, 2014).

At the level of impact, the concept of *competition and democratisation in financial services* centred upon the new opportunities associated with fundraising directly from future customers. Belleflamme et al. (2014) argued that this allowed a form of price discrimination between pre-ordering consumers (crowdfunders) and other consumers that could mitigate risk and up-front costs, provided fundraising did not exceed the threshold at which it cannibalises post-production sales. Similar pragmatic business-oriented observations were made by authors such as Singer et al. (2011), Kuo and Gerber (2012), and Sung-Min (2012), who highlighted the benefits of crowdfunding in allowing creators to engage with potential users earlier in development during a fund-seeking campaign, such as additional opportunities for feedback and experimentation.

The concept of *greater availability of funding for pro-social projects* mostly focused on the impact of patronage crowdfunding on creative or cultural industries. A study of documentary-making in the UK argued that crowdfunding could increase the alignment of documentaries with the ideological interests of the public (Sorensen, 2012). Similar observations were made for supporting artists (Beer & Badura, 2012), supporting cultural heritage projects (Oomen & Aroyo, 2011), and supporting scientific research (Wheat et al., 2013). Each of these studies assumed that fundraising from the public allowed members of that public more a more direct voice in terms of the projects undertaken, as well as creating engagement around specific social or cultural issues. As with crowd lending, there were again suggestions that geographically disadvantaged fundseekers could benefit from crowdfunding, this time supported by analyses of geographical data from patronage-based crowdfunding and average house prices (Kim & Hann, 2013).

The concept of *erosion of organisations' financial boundaries* was illustrated by evidence that funders may expect access to records, digital resources, and valuable information. The most direct example of this was illustrated in a case study of 'Big Buck Bunny', a crowdfunded movie created under creative commons licenses that is free to copy, modify, and re-market (Gambardella, 2012). That study found that designers used the most open licenses available for the Big Buck Bunny project to encourage investors who wanted to be part of the project and to use or extend different aspects of the movie in future projects. More broadly, there were multiple examples that backers expected fundseekers to continuously share valuable information with them in exchange for their contribution (e.g. Gerber et al., 2012; Kuo & Gerber, 2012; Frydrych et al., 2014; Mollick, 2014). Sharing such information may appear costless, yet these additional expectations of transparency limit the ability of individuals or organisations to manage the image they present to external parties (Gleasure, 2015).

5. Discussion and theory building

This study identifies six variables common to each form of crowdfunding; three describing funding behaviours on crowdfunding platforms and three describing their impact (see Fig. 3). Each variable was observed across all four categories of crowdfunding, albeit with different levels of emphasis.

The importance of *paying for financial or material benefits* is perhaps the most intuitive finding to emerge and is especially dominant in studies of crowd lending. Rationalistic accounts of equity and patronage are also common, though the greater level of uncertainty associated with material benefits manifests a greater emphasis on social cues and interaction. Least well-

understood are the financial or material benefits associated with crowd charity, though such incentives are known to be an important aspect of understanding and incentivising charitable behaviours in general (c.f. Strahilevitz & Myers, 1998; Ariely, Bracha, & Meier, 2009).

The idea of *paying for social benefits* is also not a surprising finding and can be related back to earlier comparisons between crowdfunding and pre-existing examples of citizen donation. However, what was unexpected was that some degree of pro-social concerns appears to influence all four categories of crowdfunding, albeit to different extents. This is noteworthy for crowd lending and crowd equity in particular, as these categories are typically framed as business-minded and economically-motivated. This challenges the regulatory narrative for these categories, which has focused almost exclusively on protecting funders' capital investment (e.g. Bradford, 2012b; Cohn, 2012; Hanley & Bork, 2012; Chaffee & Rapp, 2012).

One of the more interesting funding behaviours is *paying to participate*. This is the least well-articulated emerging variable in the sampled literature, yet it appears to be an important component, particularly in crowd patronage, crowd equity, and crowd charity where motivations are holistic and often difficult to quantify. Under these circumstances, a significant motivation for investors may be the desire to observe and learn from fundseekers' subsequent development activities. This extends Howe's (2008) idea of the 'rise of amateurism' not only to include 'amateur investment', but more broadly to 'amateur business development'.

The most intuitive impact-related variable is arguably *competition and democratisation in financial services*. What is less intuitive is the under-representation of existing literature addressing this variable for the most financially-oriented category of crowdfunding, i.e., crowd lending. For example, while a significant proportion of literature has described the potential impact of crowdfunding on entrepreneurial and organizational fund-seeking (charitable, equity, or patronage), less has been said about the migration of interest-based crowd lending into mainstream financial markets. Discussion of crowd lending mostly assumes a complementary role aimed at high-risk fundseekers. Yet the disruptive threat (c.f. Christensen, Verlinden, & Westerman, 2002; Christensen, Anthony, & Roth, 2013) of crowd lending for traditional financial markets will be increasingly difficult to ignore if interest rates continue to fall on those sites.

The second impact-related variable is *greater availability of funding for pro-social projects*, which is noteworthy for the extent of discussion outside of crowd charity. In particular, instances were observed for crowd patronage, e.g., how scientific research can benefit from crowd patronage (Wheat et al., 2013), crowd equity, e.g., how companies may become involved as equity investors in pro-social ventures as part of corporate social responsibility commitments (Smith et al., 2012; Lehner, 2013), and crowd lending, e.g. how 'unbanked' individuals may be better economically integrated/reintegrated (Iacobuzio, 2006; Yum et al., 2012). Each of these studies points towards new issues raised by such dynamics. For example, how would more direct public fundraising impact the types of research conducted? Similarly, how does the presence of corporate crowd members influence equity crowdfunding for pro-social projects? These questions remain open to further exploration.

The least salient and perhaps most interesting impact is *the erosion of organisations' financial boundaries*. The argument that organizational boundaries are becoming less pronounced is common in peer production and crowdsourcing literature (e.g., Fleming & Waguespack, 2007; Dahlander & Gann, 2010). However, several crowdfunding studies illustrated that this erosion of boundaries is further accelerated when a crowd assumes responsibility for the financing of an organization, particularly those boundaries that separate customers and organisations (e.g., Ordanini et al., 2011; Singer et al., 2011; Sung-Min, 2012). Yet despite this sensitivity and the natural implications for governance and regulation, little discussion could be found addressing the implications of organisations' diminishing financial boundaries, nor their ability to protect and manage the flow of sensitive financial information.

6. Summary and conclusions

This study has investigated whether crowdfunding presents genuinely new ideas and behaviours, or simply a migration of established practices into a new domain. The findings suggest the former and highlight several resulting theoretical challenges and opportunities.

First, we identify two high-level concepts more-or-less unique to crowdfunding, i.e., *paying to participate* and the *erosion of organisations' financial boundaries*. The definition of these variables allows crowdfunding to be more carefully positioned and differentiated within its umbrella domain of peer production and crowdsourcing. For example, numerous studies of crowdsourcing have tried to make sense of participants' motivations where material incentives are inadequate (e.g., Boudreau, Lacetera, & Lakhani, 2011; Zheng, Li, & Hou, 2011; Cahalane, Feller, Finnegan, Hayes, & O'Reilly, 2014) or even non-existent (e.g., Hars & Ou, 2001; Hertel, Niedner, & Herrmann, 2003; Shah, 2006). Crowdfunding challenges these explanations to go further, as it creates circumstances where crowd members are not only volunteering time and effort (which may have otherwise been spent at leisure), they are assuming a tangible financial sacrifice to incentivise 'sourcers' to bring their projects or businesses into some shared space. Similarly, many scholars have sought to understand how organisations maintain their identity in light of decreasing knowledge and resource autonomy (e.g., Hippel & Von Krogh, 2003; Chesbrough, 2006; Afuah & Tucci, 2012). Crowdfunding potentially creates a type of customer/investor hybrid that further challenges traditional conceptual models of what it means to be an 'organization', not to mention concepts such as 'upstream' and 'downstream'.

Second, as part of the metatriangulation we present a view of different categories of crowdfunding that positions them along two discriminatory theoretical dimensions (whether returns are definitive or uncertain and dynamic, and whether returns are financial or material/social). These may serve to clarify and inform the theoretical comparison of observations made in different types of crowdfunding systems, and so create a more cohesive and integrated field of study. This means that observations of

crowd lending, for example, may be considered in terms of their implications for crowdfunding as a whole, rather than restricting discussion to solely the lending category. Such combined views are important if a cumulative body of work is to be maintained capable of keeping up with rapidly changing phenomena (DeLone & McLean, 1992; Benbasat & Zmud, 2003).

Third, we demonstrate areas of theoretical neglect within several categories of crowdfunding. At the level of individual use, we highlight under-researched issues around the influence of financial or material benefits for crowd charity (e.g., tax breaks) and the influence of pro-social influences in crowd equity and peer-to-peer lending. At the level of impact, we highlight under-researched issues in terms of transparency and governance for both ideological/charitable and commercial ventures. This represents one of the most profound blind-spots emerging from the metatriangulation. Regulatory discussion has focused almost entirely on protecting the financial expectations of funders. Yet for many funders these expectations of inclusion appear equally important, suggesting current regulatory dialogue may be overlooking significant scope for misunderstanding or abuse.

Lastly, this study has implications for the design of crowdfunding platforms. At a cross-category level, just as discussions of categories of crowdfunding have been modular in nature, so have the functions of the majority of platforms encountered. A cross-category perspective enables the development of more generic platforms or cross-category crowdfunding platforms. For example, *Indiegogo* and *Kickstarter* differ notably in their funding structure. Whereas *Kickstarter* focuses on fixed funding investment, (funding is returned to investors unless the set target is reached), *Indiegogo* caters for flexible funding (funds change hands regardless of whether the set target is reached). This flexible funding option is the default for campaigns run by non-profit organisations on *Indiegogo*, which unlike *Kickstarter*, are given their own subsection of the platform. Such a funding structure makes sense, given that the returns for funders from collective charity are likely to be less definitive, hence less tied to the completion of a specific project to some specific level of satisfaction. Thus *Indiegogo* begins to bridge the collective patronage/charity divide. Similarly, *Fundable*, ostensibly a system for equity, caters to collective patronage behaviour by allowing companies to offer pre-purchase as a benefit to funders. This offers them a potential source of competitive advantage but also complicates design. If such platforms continue expanding across categorical divisions, then the combined view of crowdfunding presented here affords valuable insights to their mindful design.

More broadly, the importance of funding behaviours based on *paying to participate* and impacts related to the *erosion of organisations' financial boundaries* have implications for design. Specifically, platforms need to embrace a view of crowdfunding that treats post-funding development and interaction as core activities, rather than simply an outcome of fundraising. Most platforms understandably focus on each project as a fundraising entity, with commentary and updates treated as ancillary. They also direct marketing and awareness almost exclusively towards projects that are currently fundraising. This makes sense given the commission-based revenue models of most crowdfunding platforms, for which fundraising is pivotal. Yet some platforms are beginning to move away from this, e.g. *Kickstarter* replaces the fundraising page with an updates timeline after funding is completed, *Patreon* allows funders to automatically and repeatedly make micro-donations as fundraisers deliver each new piece of content, and *Star Citizen* encourages funders to contribute art, bug reports, etc. The growth of these interaction-based approaches shows that crowdfunding is not simply about raising money; rather it reflects the next iteration of digitally-mediated collective action. This means funding cannot be separated from the funders, a reality that organisations must respect if they are to suitably involve those individuals.

It further suggests that the practical distinction between crowdfunding and crowdsourcing is likely to shrink in coming years. Sites such as *Threadless.com* and *Wikipedia* have successfully integrated crowdfunding-style donation models. This makes sense, considering they already possess engaged and pro-active crowds of users (albeit some users more than others). The temptation is therefore to see fundraising as simply an extension of crowd activity. However, the reality is that this extension into funding has the potential to create a new relationship between those platforms and their users; one in which internal financial workings become a matter of ongoing discourse and perceived shared ownership. This new relationship is likely to impact on some sites more than others, particularly for-profit businesses who may prefer discretion around investments in emerging markets or technologies.

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Appendix 1. List of search terms used in the collection of the metatheoretic sample

A Priori Search Terms	35 search phrases resulted from combining the following prefixes and suffixes: Prefixes: Crowd, Peer-to-peer, Peer-to-Peer, P2P, Person to Person, Person-to-Person, Social Suffixes: Funding, Lending, Investing, Borrowing, Banking For all 35 phrases: single word, space separated multi-word, and hyphen separated multi-word variants were searched, as well as searches using the constituent prefix and suffix joined with a Boolean AND flag. All searches were case insensitive.
Emergent Search Terms	"Micro loan" and "Micro lend" (plus all variants as described above) 20 additional combinations using the prefixes: People-to-People, Collective, Consumer-to-consumer, C2C (plus all variants as described above)

Appendix 2. List of studies sampled

	Individual use	Impact
Lending	Bachmann et al., 2011, Berkovich, 2011, Briceno Ortega & Bell, 2008, Ceyhan, Shi, & Leskovec, 2011, Chen & Han, 2012, Chen, Ghosh, & Lambert, 2009, Collier & Hampshire, 2010, Dezsó & Loewenstein, 2012, Do, Jeon, Banker, Lee, & Yoo, 2012, Duarte, Siegel, & Young, 2012, Freedman and Jin 2008, Greiner & Wang, 2009, Greiner & Wang, 2010, Herrero-Lopez, 2009, Herzenstein et al., 2011a, Herzenstein et al., 2011b, Iyer, Khwaja, Luttmer, & Shue, 2009, Jeong, Lee, & Lee, 2012, Klafft, 2008a, Klafft, 2008b, Larrimore et al., 2011, Lee & Lee, 2012, Lin, 2009, Lin et al., 2013, Livingston and Glassman, 2009, Lu et al., 2012, Luo, Xiong, Zhou, Guo, & Deng, 2011, Pope & Sydnor, 2011, Pötzsch & Böhme, 2010, Puro et al., 2010, Puro, Teich, Wallenius, & Wallenius, 2011, Ravina, 2012, Redmond and Cunningham, 2013, Sonenshein et al., 2011, Wang, Greiner, & Aronson, 2009, Wang & Greiner, 2010, Yum et al., 2012, Zhang and Liu, 2012	Barry, 2012, Berger & Gleisner, 2009a, 2009b, Branker et al., 2011, Chaffee & Rapp, 2012, Davis and Gelpern, 2010, Garman et al., 2008, Iacobuzio, 2006, Johnson et al., 2010, Kupp & Anderson, 2007, Pole et al., 2011, Wang & Greiner, 2011
Equity	Bretschneider et al., 2014, Burtch, 2011, Cholakova & Clarysse, 2015, Gelfond and Foti, 2012, Hanley & Bork, 2012, Hazen, 2012, Ingram et al., 2013, Ley & Weaven, 2011, Mitra, 2012, Schwienbacher and Larralde, 2012	Agrawal et al., 2015, Bartram, 2012, Bradford, 2012a, Bradford, 2012b, Burkett, 2011, Cohn, 2012, Collins & Pierrakis, 2012, Heminway & Hoffman, 2010, Higgins, 2012, Hornuf & Schwienbacher, 2014, Kitchens & Torrence, 2012, Lasrado & Lugmayr, 2013, Lehner, 2013, Ordanini et al., 2011, Stemler, 2013, Tomczak and Brem, 2013
Charity	Moqri & Bandyopadhyay, 2016, Burtch et al., 2014a,b, Choy & Schlagwein, 2015, Galak et al., 2011, Gleasure & Feller, 2016, Heller & Badding, 2012, Liu et al., 2012b, Ly & Mason, 2012b, Meer, 2014, Riggins & Weber, 2012, Sinanan, 2009, Wash, 2013, Webb, Kristiani, & Olaru, 2009	Altinkemer et al., 2007, Ariza-Montes et al., 2012, Cooke, 2011, Hollow, 2013, Ibrahim, 2012, Kauffman & Riggins, 2012, Ly & Mason, 2012, Merritt & Stubbs, 2012, Moodie, 2013, Smith et al., 2012, Smith et al., 2013, Stiver et al., 2015, Yang et al., 2015
Patronage	Belleflamme et al., 2014, Beaulieu & Sarker, 2013, Burtch, Ghose, & Wattal, 2014a; Burtch, Di Benedetto, & Mudambi, 2014b, Gerber et al., 2012, Kuppusswamy & Bayus, 2013, Frydrych et al., 2014, Mollick, 2014, Ward and Ramachandran, 2010, Zvilichovsky et al., 2013	Beer & Badura, 2012, Burtch et al., 2014a, 2014b, Gambardella, 2012, Kappel, 2009, Kim & Hann, 2013, Kuo & Gerber, 2012, Oomen & Aroyo, 2011, Singer et al., 2011, Sorensen, 2012, Sung-Min, 2012, Wheat et al., 2013

References

- Afuah, A., & Tucci, C. L. (2012). Crowdsourcing as a solution to distant search. *Academy of Management Review*, 37(3), 355–375.
- Agrawal, A., Catalini, C., & Goldfarb, A. (2015). Crowdfunding: Geography, social networks, and the timing of investment decisions. *Journal of Economics & Management Strategy*, 24(2), 253–274.
- Ahlers, G. K., Cumming, D., Günther, C., & Schweizer, D. (2015). Signaling in equity crowdfunding. *Entrepreneurship Theory and Practice*, 39(4), 955–980.
- Altinkemer, K., De, P., Ozcelik, Y., & Ozdemir, Z. (2007). Fundraising and the Internet. *Americas Conference on Information Systems* (Acapulco, Mexico).
- Ariely, D., Bracha, A., & Meier, S. (2009). Doing good or doing well? Image motivation and monetary incentives in behaving prosocially. *The American Economic Review*, 99(1), 544–555.
- Ariza-Montes, J. A., López-Martín, M. C., Morales-Gutiérrez, A. C., & Lucia-Casademunt, A. M. (2012). Virtual solidarity networks: The development of E-social banking. *China-USA Business Review*, 11(8), 1017–1030.
- Ashta, A., & Assadi, D. (2010). An analysis of European online micro-lending websites. *Innovative Marketing*, 6(2), 7–17.
- Bachmann, A., Becker, A., Buerckner, D., Hilker, M., Kock, F., Lehmann, M., ... Funk, B. (2011). Online peer-to-peer lending - a literature review. *Journal of Internet Banking & Commerce*, 16(2), 1–18.
- Barry, J. J. (2012). Microfinance, the Market and Political Development in the Internet Age. *Third World Quarterly*, 33(1), 125–141.
- Bartram, P. (2012, November). Peer - to - peer lending networks offer a new source of capital for smaller businesses. Peter Bartram examines their structure and benefits for the world's finance teams. *Financial Management*, 33–34.
- Baskerville, R. L., & Myers, M. D. (2009). Fashion waves in information systems research and practice. *MIS Quarterly*, 33(4), 647–662.
- Beaulieu, T., & Sarker, S. (2013). *Discursive meaning creation in crowdfunding: A socio-material perspective*. Milan: Paper presented at the International Conference on Information Systems.
- Beer, S. C., & Badura, K. E. (2012). The new renaissance: A breakthrough time for artists. *Berkeley Journal of Entertainment and Sports Law*, 1(1), 66–74.
- Belleflamme, P., Lambert, T., & Schwienbacher, A. (2014). Crowdfunding: Tapping the right crowd. *Journal of Business Venturing*, 29(5), 585–609.
- Benbasat, I., & Zmud, R. W. (1999). Empirical research in information systems: The practice of relevance. *MIS Quarterly*, 23(1), 3–16.
- Benbasat, I., & Zmud, R. W. (2003). The identity crisis within the IS discipline: Defining and communicating the discipline's core properties. *MIS Quarterly*, 27(2), 183–194.
- Benkler, Y. (2002). Coase's penguin, or, Linux and The Nature of the Firm. *Yale Law Journal*, 116(3), 369–446.
- Berger, S. C., & Gleisner, F. (2009a). Emergence of financial intermediaries in electronic markets: The case of online P2P lending. *BuR-Business Research*, 2(1), 39–65.
- Berger, S. C., & Gleisner, F. (2009b). Emergence of financial intermediaries in electronic markets: The case of online P2P lending. *Business Research*, 2(1), 39–65.
- Berkovich, E. (2011). Search and herding effects in peer-to-peer lending: Evidence from prosper.com. *Annals of Finance*, 7(3), 389–405.
- Best, J., Neiss, S., Swart, R., & Lambkin, A. (2013). Scaling innovation: Crowdfunding's potential for the developing world. *Information for Development Program (infoDev)*. The World Bank.
- Boudreau, K. J., Lacetera, N., & Lakhani, K. R. (2011). Incentives and problem uncertainty in innovation contests: An empirical analysis. *Management Science*, 57(5), 843–863.
- Bradford, C. S. (2012a). Crowdfunding and the Federal Securities Laws. *Columbia Business Law Review*, 1–150.
- Bradford, C. S. (2012b). The new federal crowdfunding exemption: Promise unfulfilled. *Securities Regulation Law Journal*, 40(3), 195–249.
- Branker, K., Shackles, E., & Pearce, J. M. (2011). Peer-to-peer financing mechanisms to accelerate renewable energy deployment. *Journal of Sustainable Finance & Investment*, 1(2), 138–155.
- Bretschneider, U., Knaub, K., & Wieck, E. (2014). *Motivations for crowdfunding: What drives the crowd to invest in start-ups?* Tel Aviv, Israel: Paper presented at the European Conference for Information Systems.
- Briceno Ortega, A. C., & Bell, F. (2008). *Online social lending: Borrower-generated content*. Paper presented at the American Conference for Information Systems. Toronto: Canada.

- Burkett, E. (2011). A Crowdfunding Exemption? Online Investment Crowdfunding and U.S. Securities Regulation. *Transactions: The Tennessee Journal of Business Law*, 13(1), 63–106.
- Burtch, G. (2011). *Herding behavior as a network externality. Paper presented at the International Conference for Information Systems*. China: Shanghai.
- 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.
- Burtch, G., Ghose, A., & Wattal, S. (2014a). Cultural differences and geography as determinants of online pro-social lending. *MIS Quarterly*, 38(3), 773–794.
- Burtch, G., Di Benedetto, C. A., & Mudambi, S. M. (2014b). Leveraging information systems for enhanced product innovation. *Handbook of strategic e-business management* (pp. 211–216). Berlin, Heidelberg: Springer.
- Burtch, G., Ghose, A., & Wattal, S. (2015). The hidden cost of accommodating crowdfunder privacy preferences: A randomized field experiment. *Management Science*, 61(5), 949–962.
- Cahalane, M., Feller, J., Finnegan, P., Hayes, J., & O'Reilly, P. (2014). *Leveraging distributed collective intelligence: An investigation of solver engagement with innovation challenges. International Conference on Information Systems*. New Zealand: Auckland.
- Ceyhan, S., Shi, X., & Leskovec, J. (2011). Dynamics of bidding in a P2P lending service: Effects of herding and predicting loan success. *Paper presented at the 20th International Conference On World Wide Web*. Hyderabad: India.
- Chaffee, E. C., & Rapp, G. C. (2012). Regulating online peer-to-peer lending in the aftermath of Dodd-Frank: In search of an evolving regulatory regime for an evolving industry. *Washington and Lee Law Review*, 69, 485–534.
- Chen, D., & Han, C. (2012). A comparative study of online P2P lending in the USA and China. *Journal of Internet Banking & Commerce*, 17(2), 1–15.
- Chen, N., Ghosh, A., & Lambert, N. (2009). Social lending. *Paper presented at the 10th ACM conference on Electronic commerce*. California: USA.
- Chesbrough, H. W. (2006). *Open innovation: The new imperative for creating and profiting from technology*. USA: Harvard Business Press.
- Cholakova, M., & Clarysse, B. (2015). Does the possibility to make equity investments in crowdfunding projects crowd out reward-based investments? *Entrepreneurship Theory and Practice*, 39(1), 145–172.
- Choy, K., & Schlagwein, D. (2015). IT affordances and donor motivations in charitable crowdfunding: The “Earthship Kapita” case. *European Conference on Information Systems*, Münster, Germany.
- Christensen, C. M., Verlinden, M., & Westerman, G. (2002). Disruption, disintegration and the dissipation of differentiability. *Industrial and Corporate Change*, 11(5), 955–993.
- Christensen, C., Anthony, S., & Roth, E. A. (2013). *Seeing what's next: Using the theories of innovation to predict industry change*. USA: Harvard Business Press.
- Cohn, S. (2012). The new crowdfunding registration exemption: Good idea, bad execution. *Florida Law Review*, 64(5), 1433–1446.
- Collier, B. C., & Hampshire, R. (2010). *Sending mixed signals: Multilevel reputation effects in peer-to-peer lending markets. Paper presented at the ACM conference on Computer supported cooperative work*. Georgia, USA: Savannah.
- Collins, L., & Pierrakis, Y. (2012). The venture crowd – Crowdfunding equity investments into business. NESTA Report. Retrieved 01/06/2015 from: http://eprints.kingston.ac.uk/29089/1/the_venture_crowd.pdf
- Cooke, A. (2011). Not All Micro-loans Were Created Equal: The Effect of Supply Chain Location on Micro-lending. *The American Economist*, 56(2), 69–73.
- Dahlander, L., & Gann, D. M. (2010). How open is innovation? *Research Policy*, 39(6), 699–709.
- Davis, K. E., & Gelpem, A. (2010). Peer-to-Peer Financing for Development: Regulating the Intermediaries. *N.Y.U. Journal of International Law & Politics*, 42, 1209–1268.
- DeLone, W. H., & McLean, E. R. (1992). Information systems success: The quest for the dependent variable. *Information Systems Research*, 3(1), 60–95.
- Dezso, L., & Loewenstein, G. (2012). Lenders' blind trust and borrowers' blind spots: A descriptive investigation of personal loans. *Journal of Economic Psychology*, 33(5), 996–1011.
- Do, H., Jeon, S., Banker, R., Lee, B., & Yoo, B. (2012). Is the Leaderboard Information Useful to Investors?: The leaderboard effect in P2P lending. *International Conference on Information Systems* (Orlando, USA).
- Duarte, J., Siegel, S., & Young, L. (2012). Trust and credit: The role of appearance in peer-to-peer lending. *Review of Financial Studies*, 25(8), 2455–2483.
- Estellés-Arolas, E., & González-Ladrón-de-Guevara, F. (2012). Towards an integrated crowdsourcing definition. *Journal of Information Science*, 38(2), 189–200.
- Fleming, L., & Waguespack, D. M. (2007). Brokerage, boundary spanning, and leadership in open innovation communities. *Organization Science*, 18(2), 165–180.
- Frydrych, D., Bock, A. J., Kinder, T., & Koeck, B. (2014). Exploring entrepreneurial legitimacy in reward-based crowdfunding. *Venture Capital*, 16(3), 247–269.
- Galak, J., Small, D., & Stephen, A. T. (2011). Microfinance decision making: A field study of prosocial lending. *Journal of Marketing Research*, 48, S130–S137.
- Gambardella, M. (2012). How to (crowd-)fund and manage the (user-)innovation: The case of Big Buck Bunny. *Proceedings of the workshop on open source and design of communication*, Lisbon, Portugal.
- Garman, S. R., Hampshire, R. C., & Krishnan, R. (2008). *Person-to-person lending: The pursuit of (more) competitive credit markets, paper presented at the International Conference on Information*. Paris: Systems.
- Gelfond, S. H., & Foti, A. D. (2012). US \$500 and a click: investing the “crowdfunding” way. *Journal of Investment Compliance*, 13(4), 9–13.
- Gerber, E. M., Hui, J. S., & Kuo, P. Y. (2012). 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*, Seattle, USA.
- Gioia, D. A., & Pitre, E. (1990). Multiparadigm perspectives on theory building. *The Academy of Management Review*, 15(4), 584–602.
- Gleasure, R. (2015). Resistance to crowdfunding among entrepreneurs: An impression management perspective. *The Journal of Strategic Information Systems*, 24(4), 219–233.
- Gleasure, R., & Feller, J. (2016). *Does heart or head rule donor behaviors in electronic charitable crowdfunding markets? International Journal of Electronic Commerce* (forthcoming).
- Greiner, M. E., & Wang, H. (2009). *The role of social capital in people-to-people lending marketplaces. International conference on information systems*, Phoenix, Arizona, USA.
- Greiner, M. E., & Wang, H. (2010). Building consumer-to-consumer trust in E-finance marketplaces: An empirical analysis. *International Journal of Electronic Commerce*, 15(2), 105–136.
- Grimes, A. J., & Rood, D. L. (1995). Beyond objectivism and relativism: Descriptive epistemologies. In J. P. Jones III, W. Natter, & T. R. Schatzki (Eds.), *Objectivity and its other*: (pp. 161–178). New York, USA: Guilford.
- Haas, P., Blohm, I., & Leimeister, J. M. (2014). *An empirical taxonomy of crowdfunding intermediaries. Paper presented at the International Conference on Information Systems*. New Zealand: Auckland.
- Hanley, D. F., & Bork, P. (2012). Crowdfunding: A new way to raise capital, or a cut-back in investor protection? *Insights: The Corporate & Securities Law Advisor*, 26(6), 44–49.
- Hars, A., & Ou, S. (2001). Working for free? Motivations of participating in open source projects. *Paper presented at the 34th Annual Hawaii International Conference on System Sciences*. Hawaii: USA.
- Hazen, T. L. (2012). Social networks and the law: Crowdfunding or fraudfunding? Social networks and the securities laws—why the specially tailored exemption must be conditioned on meaningful disclosure. *North Carolina Law Review*, 90, 1735–2162.
- Heller, L. R., & Badding, K. D. (2012). For compassion or money? The factors influencing the funding of micro loans. *The Journal of Socio-Economics*, 41(6), 831–835.
- Heminway, J. M., & Hoffman, S. R. (2010). Proceed at your peril: Crowdfunding and the securities act of 1933. *Tennessee Law Review*, 78, 879–972.
- Herrero-Lopez, S. (2009). Social interactions in P2P lending. *Paper presented at the 3rd Workshop on Social Network Mining and Analysis*. Paris: France.
- Hertel, G., Niedner, S., & Herrmann, S. (2003). Motivation of software developers in open source projects: An internet-based survey of contributors to the Linux kernel. *Research Policy*, 32(7), 1159–1177.
- Herzenstein, M., Dholakia, U. M., & Andrews, R. L. (2011a). Strategic herding behavior in peer-to-peer loan auctions. *Journal of Interactive Marketing*, 25(1), 27–36.
- Herzenstein, M., Sonenshein, S., & Dholakia, U. M. (2011b). Tell me a good story and i may lend you money: The role of narratives in peer-to-peer lending decisions. *Journal of Marketing Research*, 48(SPL), S138–S149.

- Higgins, J. (2012). *Show us the money. Director (July/August)*, 43–47.
- Hippel, E. V., & Von Krogh, G. (2003). Open source software and the "private-collective" innovation model: Issues for organization science. *Organization Science*, 14(2), 209–223.
- Hollow, M. (2013). Crowdfunding and civic society in Europe: A profitable partnership? *Open Citizenship*, 4(1), 68–73.
- Hornuf, L., & Schwiendbacher, A. (2014). Crowdfunding—Angel investing for the masses? In: Handbook of research on venture capital: Volume 3. Business angels, H. Landström & C. Mason (Eds.), Edward Elgar, UK.
- Howe, J. (2008). *Crowdsourcing: Why the power of the crowd is driving the future of business*. New York: Crown Publishing Group.
- Iacobuzio, T. (2006). Can't get a bank loan? Try asking your online peers. *Bank Technology News*, 19(7), 25–27.
- Ibrahim, N. (2012). The model of crowdfunding to support small and micro businesses in Indonesia through a web-based platform. *Procedia Economics and Finance*, 4, 390–397.
- Ingram, C., Teigland, R., & Vaast, E. (2013). *Is crowdfunding doomed in Sweden? When institutional logics and affordances collide,(re-)design matters. Paper presented at the International Conference on Information Systems*. Italy: Milan.
- Iyer, R., Khwaja, A. I., Luttmer, E. F. P., & Shue, K. (2009). Screening in new credit markets: Can individual lenders infer borrower creditworthiness in peer-to-peer lending? *Working paper*. Cambridge, USA: National Bureau of Economic Research.
- Jasperson, J., Carte, T. A., Saunders, C. S., Butler, B. S., Croes, H. J. P., & Zheng, W. (2002). Review: Power and information technology research: A metatriangulation review. *MIS Quarterly*, 26(4), 397–459.
- Jeong, G., Lee, E., & Lee, B. (2012). Does borrowers' information renewal change lenders' decision in P2P lending?: an empirical investigation. *Proceedings of the 14th Annual International Conference on Electronic Commerce* (pp. 83–86). ACM.
- Johnson, S., Ashta, A., & Assadi, D. (2010). Online or offline? The rise of "peer-to-peer" lending in microfinance. *Journal of Electronic Commerce in Organizations (JECO)*, 8(3), 26–37.
- Kappel, T. (2009). Ex ante crowdfunding and the recording industry: A model for the US. *Loyola of Los Angeles Entertainment Law Review*, 29(3), 375–385.
- Kauffman, R. J., & Riggins, F. J. (2012). Information and communication technology and the sustainability of microfinance. *Electronic Commerce Research and Applications*, 11(5), 450–468.
- Kim, K., & Hann, I. (2013). *Does crowdfunding democratize access to capital? A geographical analysis. Presented at the INFORMS Conference on Information Systems and Technology (CIST)*.
- Kitchens, R., & Torrence, P. D. (2012). The jobs act - Crowdfunding and beyond. *Economic Development Journal*, 11(4), 42–47.
- Klaffit, M. (2008). Online peer-to-peer lending: A lenders' perspective. *Paper presented at the proceedings of the international conference on E-learning, E-business, Enterprise information systems, and E-government*. Las Vegas: USA.
- Kuhn, T. (1970). *The structure of scientific revolutions* (2nd ed.). USA: Chicago Press.
- Kuo, P.-Y., & Gerber, E. (2012). *Design principles: crowdfunding as a creativity support tool. Paper presented at the 2012 ACM annual conference on human factors in computing systems, Austin, Texas, USA*.
- Kupp, M., & Anderson, J. (2007). Zopa: Web 2.0 meets retail banking. *Business Strategy Review*, 18(3), 11–17.
- Kuppuswamy, V., & Bayus, B. L. (2013). *Crowdfunding creative ideas: The dynamics of projects backers in Kickstarter*. Kenan-Flagler Business School: Working paper.
- Larrimore, L., Jiang, L., Larrimore, J., Markowitz, D., & Gorski, S. (2011). Peer-to-peer lending: The relationship between language features, trustworthiness, and persuasion success. *Journal of Applied Communication Research*, 39(1), 19–37.
- Lasrado, L. A., & Lugmayr, A. (2013). *Crowdfunding in Finland: A new alternative disruptive funding instrument for businesses. In proceedings of international conference on making sense of converging media, (194–201)*New York, USA: ACM.
- Lee, E., & Lee, B. (2012). Herding behaviour in online P2P lending: An empirical investigation. *Electronic Commerce Research and Applications*, 11(5), 495–503.
- Lehner, O. M. (2013). Crowdfunding social ventures: a model and research agenda. *Venture Capital*, 15(4), 289–311.
- Lewis, M. W., & Grimes, A. J. (1999). Metatriangulation: Building theory from multiple paradigms. *Academy of Management Review*, 24(4), 672–690.
- Ley, A., & Weaven, S. (2011). Exploring agency dynamic of crowdfunding in start-up capital financing. *Academy of Entrepreneurship Journal*, 17(1), 85–110.
- Lin, M. (2009). *Peer-to-peer lending: An empirical study. Paper presented at the Americas conference on information systems*. San Francisco: USA.
- 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.
- Liu, Y., Chen, R., Chen, Y., Mei, Q., & Salib, S. (2012). "I loan because...": understanding motivations for pro-social lending. *Paper presented at the proceedings of the fifth ACM international conference on web search and data mining, Seattle, Washington, USA*.
- Livingston, L., Glassman, T., & Wright, C. S. (2011). Using peer-to-peer student managed fund for community service. *International Journal of Interdisciplinary Social Sciences*, 5(10), 197–208.
- Livingston, L., & Glassman, T. (2009). Creating a new type of student managed fund using peer-to-peer loans. *Business Education & Accreditation*, 1(1), 1–14.
- Lu, Y., Gu, B., Ye, Q., & Sheng, Z. (2012). *Social Influence and Defaults in Peer-to-Peer Lending Networks. Paper presented at the international conference on information systems*. USA: Orlando Florida.
- Luo, C., Xiong, H., Zhou, W., Guo, Y., & Deng, G. (2011). Enhancing investment decisions in P2P lending: an investor composition perspective. *Proceedings of the 17th ACM SIGKDD international conference on Knowledge discovery and data mining* (pp. 292–300). ACM.
- Ly, P., & Mason, G. (2012). Individual preferences over development projects: Evidence from microlending on Kiva. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 23(4), 1036–1055.
- Massolution (2013). 2013 CF Crowdfunding Industry Report. Retrieved 25/04/2014 from. http://research.crowdsourcing.org/2013CF-Crowdfunding-Industry-Report#oid=1001_8_banner_13
- Meer, J. (2014). Effects of the price of charitable giving: Evidence from an online crowdfunding platform. *Journal of Economic Behavior & Organization*, 103, 113–124.
- Merritt, A., & Stubbs, T. (2012). Complementing the local and global: Promoting sustainability action through linked local-level and formal sustainability funding mechanisms. *Public Administration and Development*, 32(3), 278–291.
- Mitra, D. (2012). The role of crowdfunding in entrepreneurial finance. *Delhi Business Review*, 13(2), 67–79.
- Mollick, E. (2014). The dynamics of crowdfunding: An exploratory study. *Journal of Business Venturing*, 29(1), 1–16.
- Moodie, M. (2013). Microfinance and the gender of risk: The case of Kiva.org. *Signs*, 38(2), 279–302.
- Moqri, M., & Bandyopadhyay, S. (2016). Please Share! Online Word of Mouth and Charitable Crowdfunding. *Americas Conference on Information Systems* (San Diego, USA).
- Oomen, J., & Aroyo, L. (2011). Crowdsourcing in the cultural heritage domain: Opportunities and challenges. *Paper presented at the proceedings of the 5th international conference on communities and technologies*. Brisbane: Australia.
- 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.
- O'Reilly, T. (2009). *What is web 2.0?* O'Reilly Media, Inc.
- Orlikowski, W. J., & Iacono, C. S. (2001). Research commentary: Desperately seeking the "IT" in IT research—A call to theorizing the IT artefact. *Information Systems Research*, 12(2), 121–134.
- Pole, A., Puschmann, T., Fischbach, M., & Alt, R. (2011). *Web 2.0 applications in private banking-classification, potentials, and application fields. Paper presented at the European Conference on Information Systems, Helsinki, Finland*.
- Pope, D. G., & Sydnor, J. R. (2011). What's in a picture? Evidence of discrimination from prosper.com. *Journal of Human Resources*, 46(1), 53–92.
- Pöttsch, S., & Böhme, R. (2010). The role of soft information in trust building: Evidence from online social lending. *Paper presented at the 3rd international conference on trust and trustworthy computing*. Germany: Berlin.
- Puro, L., Teich, J. E., Wallenius, H., & Wallenius, J. (2010). Borrower decision aid for people-to-people lending. *Decision Support Systems*, 49(1), 52–60.
- Puro, L., Teich, J. E., Wallenius, H., & Wallenius, J. (2011). Bidding strategies for real-life small loan auctions. *Decision Support Systems*, 51(1), 31–41.
- Ravina, E. (2012). *Love & loans: The effect of beauty and personal characteristics in credit markets, working paper series*. Columbia Business School.

- Redmond, U., & Cunningham, P. (2013). A temporal network analysis reveals the unprofitability of arbitrage in The Prosper Marketplace. *Expert Systems with Applications*, 40(9), 3715–3721.
- Rhodes, M. (2010). Information asymmetry and socially responsible investment. *Journal of Business Ethics*, 95(1), 145–150.
- Riggins, F. J., & Weber, D. M. (2012). A model of peer-to-peer (P2P) social lending in the presence of identification bias. Paper presented at the proceedings of the 13th international conference on electronic commerce. Liverpool: UK.
- Schultz, M., & Hatch, M. J. (1996). Living with multiple paradigms: The case of paradigm interplay in organizational culture studies. *The Academy of Management Review*, 21(2), 529–557.
- Schwienbacher, A., & Larralde, B. (2012). Crowdfunding of small entrepreneurial ventures. In D. J. Cumming (Ed.), *The Oxford Handbook of Entrepreneurial Finance*. UK: Oxford University Press.
- Shah, S. K. (2006). Motivation, governance, and the viability of hybrid forms in open source software development. *Management Science*, 52(7), 1000–1014.
- Sinanan, J. (2009). Lenders, borrowers and fellows: personal narrative and social entrepreneurship in online microfinance. *Proceedings of the 21st Annual Conference of the Australian Computer-Human Interaction Special Interest Group: Design: Open 24/7* (pp. 293–296). ACM.
- Singer, L., Seyff, N., & Fricker, S. A. (2011). Online social networks as a catalyst for software and IT innovation. Paper presented at the 4th international workshop on social software engineering. Szeged: Hungary.
- Smith, B. R., Cronley, M. L., & Barr, T. F. (2012). Funding implications of social Enterprise: The role of mission consistency, entrepreneurial competence, and attitude toward social enterprise on donor behavior. *Journal of Public Policy & Marketing*, 31(1), 142–157.
- Smith, R. W., Faro, D., & Burson, K. A. (2013). More for the many: The influence of entitativity on charitable giving. *Journal of Consumer Research*, 39(5), 961–976.
- Sonenshein, S., Herzenstein, M., & Dholakia, U. M. (2011). How accounts shape lending decisions through fostering perceived trustworthiness. *Organizational Behavior and Human Decision Processes*, 116(1), 69–84.
- Sorensen, I. E. (2012). Crowdsourcing and outsourcing: The impact of online funding and distribution on the documentary film industry in the UK. *Media Culture & Society*, 34(6), 726–743.
- Stemler, A. R. (2013). The jobs act and crowdfunding: Harnessing the power—And money—Of the masses. *Business Horizons*, 56(3), 271–275.
- Stiver, A., Barroca, L., Minocha, S., Richards, M., & Roberts, D. (2015). Civic crowdfunding research: Challenges, opportunities, and future agenda. *New Media & Society*, 17(2), 249–271.
- Strahilevitz, M. A., & Myers, J. (1998). Donations to charity as purchase incentives: How well they work may depend on what you are trying to sell. *Journal of Consumer Research*, 24(4), 434.
- Sung-Min, P. (2012). New business applications for social networking. *SERI Quarterly*, 5(1), 121–125.
- Surowiecki, J. (2004). *The wisdom of crowds*. New York, NY: Doubleday.
- Tomczak, A., & Brem, A. (2013). A conceptualized investment model of crowdfunding. *Venture Capital*, 15(4), 335–359.
- Wang, H., & Greiner, M. E. (2010). *Herding in Multi-winner Auctions*. Paper presented at the thirty first international conference on information systems. USA: St. Louis.
- Wang, H., & Greiner, M. E. (2011). Prosper—The eBay for money in lending 2.0. *Communications of the Association for Information Systems*, 29(1), 243–258.
- Wang, H., Greiner, M., & Aronson, J. E. (2009). *People-to-people lending: The emerging e-commerce transformation of a financial market*. Paper presented at the Americas conference on information systems. San Francisco: USA.
- Ward, C., & Ramachandran, V. (2010). Crowdfunding the next hit: Microfunding online experience goods. *Workshop on Computational Social Science and the Wisdom of Crowds* (Whistler, Canada).
- Wash, R. (2013). The value of completing crowdfunding projects. In *International Conference on Weblogs and Social Media (ICWSM)*. Massachusetts, USA: AAAI Press.
- Webb, D., Kristiani, N., & Olaru, D. (2009). Investigating the key criteria for micro loan provider selection: The case of the poor in Kedungjati, Indonesia. *IUP Journal of Bank Management*, 8(3/4), 14–21.
- Webster, J., & Watson, R. T. (2002). Analyzing the past to prepare for the future: Writing a. *MIS Quarterly*, 26(2), 13–23.
- Wheat, R. E., Wang, Y., Byrnes, J. E., & Ranganathan, J. (2013). Raising money for scientific research through crowdfunding. *Trends in Ecology & Evolution*, 28(2), 71–72.
- Yang, Z., Zhou, Y., & Marquis, C. (2015). The emergence of subversive charities in China. *Stanford Social Innovation Review*, 13(4), 42–47.
- Yum, H., Lee, B., & Chae, M. (2012). From the wisdom of crowds to my own judgment in microfinance through online peer-to-peer lending platforms. *Electronic Commerce Research and Applications*, 11(5), 469–483.
- Zhang, J., & Liu, P. (2012). Rational herding in microloan markets. *Management Science*, 58(5), 892–912.
- Zheng, H., Li, D., & Hou, W. (2011). Task design, motivation, and participation in crowdsourcing contests. *International Journal of Electronic Commerce*, 15(4), 57–88.
- Zvilichovsky, D., Inbar, Y., & Barzilay, O. (2013). *Playing both sides of the market: Success and reciprocity on crowdfunding platforms*. Milan: Paper presented at the International Conference on Information Systems.

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