ARTICLE IN PRESS

Journal of Strategic Information Systems xxx (2015) xxx–xxx

Contents lists available at ScienceDirect

Journal of Strategic Information Systems

journal homepage: www.elsevier.com/locate/jsis

# Resistance to crowdfunding among entrepreneurs: An impression management perspective

Rob Gleasure *

*Department of Accounting, Finance, and Information Systems, University College Cork, Cork, Ireland*

A R T I C L E I N F O

*Article history:*
Received 3 December 2014
Received in revised form 1 September 2015
Accepted 1 September 2015
Available online xxxx

*Keywords:*
Crowdfunding
Crowdsourcing
Entrepreneurialism
Resistance
Impression management

A B S T R A C T

Crowdfunding has been a topic of much excitement for scholars of entrepreneurialism. Onlookers and early adopters have noted the new strategies afforded when funding bottlenecks can be bypassed and members of the public can be engaged early in development. Yet if crowdfunding is to prove truly disruptive for entrepreneurs then greater efforts must be made to understand non-adopters. This study models entrepreneurs' resistance to crowdfunding using an impression management perspective. A case study of 20 entrepreneurs suggests that resistance is influenced by entrepreneurs' fear of disclosure, fear of visible failure, and fear of projecting desperation.



## Introduction

Crowdfunding technologies have emerged in the last decade as part of the broader paradigm of crowdsourcing (Howe, 2008). Rather than leveraging crowdsourcing for creative purposes (e.g. Threadless, Innocentive), crowdfunding offers businesses the opportunity to obtain funding directly from the public. This opportunity has particular significance for entrepreneurs, i.e. those individuals who seek to create new organisations (c.f. Gartner, 1988). Obtaining finance is one of the foremost challenges for such individuals and the strategies they adopt in doing so may ultimately determine their success (King and Levine, 1993; Shane and Cable, 2002). The new strategic capabilities for entrepreneurs offered by crowdfunding have significant disruptive potential for existing models of entrepreneurial financing (Lasrado and Lugmayr, 2013). This has been recognised by high-profile legislative changes around fundraising, most notably in the US with the 'Jumpstart Our Businesses' or 'JOBS' Act (Kitchens and Torrence, 2012; Stemler, 2013). Yet despite this disruptive potential, little is known about those entrepreneurs who are choosing to avoid these new technologies. This is a significant oversight from a strategic information systems perspective, as previous research suggests the value of crowdsourcing technologies may be limited when diverging groups of individuals and organisations are not considered (e.g. Majchrzak and Malhotra, 2013; Stol and Fitzgerald, 2014). Thus, if crowdfunding is to fulfil its disruptive potential, theorising must extend beyond the strategic perceptions of early-adopters.

This study investigates non-users by employing an Impression Management (IM) perspective that posits entrepreneurs' resistance to crowdfunding is impacted by their desire to manage external perceptions of their companies. The next section reviews existing research on the strategic use of crowdfunding by entrepreneurs. This includes a discussion of the public nature of crowdfunding and analysis of existing literature documenting the importance of IM for entrepreneurs. That

* Address: Room 2.112 O'Rahilly Building, University College Cork, Cork, Ireland. Tel.: +353 214902503.
*E-mail address:* r.gleasure@ucc.ie

http://dx.doi.org/10.1016/j.jsis.2015.09.001
0963-8687/© 2015 Elsevier B.V. All rights reserved.

Please cite this article in press as: Gleasure, R. Resistance to crowdfunding among entrepreneurs: An impression management perspective. J. Strateg. Inform. Syst. (2015), http://dx.doi.org/10.1016/j.jsis.2015.09.001

discussion is used to create a preliminary model which is investigated vis-à-vis a case study of entrepreneurs in Ireland. This case study looks at 20 entrepreneurs who have thus far avoided crowdfunding and investigates their key motivations for doing so. Finally, a refined model is presented and the implications for both practice and research are discussed.

## Literature review and development of a preliminary model

### *Crowdfunding as an entrepreneurial financing mechanism*

Crowdfunding has been employed to allow businesses to receive investment in a variety of ways (Haas et al., 2014; Beaulieu et al., 2015). Some models reward investment with material goods or pre-purchased products (e.g. Kickstarter, IndieGoGo), while others encourage investment purely for philanthropic or social reasons (e.g. Razoo, Fundrazr). Others reward investment with delayed financial returns, either in the form of unsecured interest-based loans (e.g. LendingClub, LinkedFinance) or by allowing businesses to sell equity (e.g. Crowdcube, Seedrs). More recently, businesses have begun to embed crowdfunding technologies directly into their personal websites, rather than relying on third party crowdfunding platforms (e.g. Robert Space Industries). In each case, crowdfunding allows individuals or businesses to make an open call for donations via the web in exchange for some commitment by those individuals or businesses.

The strategic benefits of crowdfunding for entrepreneurs are both direct and indirect. Directly, the smaller amount required by individual investors presents opportunities for start-ups who would be too high-risk in conventional settings, as new investors may be more likely to invest small amounts speculatively (Higgins, 2012; Stemler, 2013), to support portfolio development (Ley and Weaven, 2011), or for ideological or personal reasons (Gambardella, 2012; Kuppuswamy and Bayus, 2013). Indirectly, financial donations from potential customers encourage a long-term personal and emotional investment in the company (Ordanini et al., 2011) and may foster collaboration and market research as part of open innovation (Burtch et al., 2014). Further, hype around new products developed through crowdfunding can serve to boost sales, as seen in several high-profile projects, such as the Pebble smart watch and the Oculus Rift virtual reality headset.

Yet the public domain in which crowdfunding technologies operate also presents complexities for new businesses. Social capital is seen as an important asset for entrepreneurs (Davidsson and Honig, 2003), meaning how they manage their public image is crucial to their success (Baron and Markman, 2003; Nagy et al., 2012). This suggests the level of public dialogue and information sharing required by crowdfunding may present a meaningful concern for entrepreneurs. Thus, the objective of this study is to *investigate how concerns around impression management may impact upon entrepreneurs' resistance to crowdfunding*.

### *Crowdfunding and impression management*

The theory of Impression Management (IM) originated in the late 1950s (c.f. Goffman, 1959) and describes human behaviour as performances by individuals taking place before real or imagined audiences. IM is used to explain how individuals use their personal appearance and the tone of their interactions to control others' perceptions towards them, and illicit desired attributions (Dillard et al., 2000). Put differently, IM suggests the manner in which individuals present themselves is ultimately goal-oriented, directed towards encouraging esteem-enhancing external impressions (Leary and Kowalski, 1990). IM has been applied to a range of domains, including health (Leary et al., 1994), sports psychology (Halbert, 1997), social media (Krämer and Winter, 2008) management (Elsbach and Sutton, 1992), and ecommerce (Winter et al., 2003).

A review of research on IM in the field of psychology (Leary and Kowalski, 1990) suggests the process of impression management has two components. The first of these is 'impression motivation', which is heightened in situations that are explicitly judgmental and/or goal-oriented in nature (e.g. job interviews, first dates, public speaking). This implies impression motivation will be high during entrepreneurial fundseeking, which by its nature requires such explicit judgements from potential customers and investors (Cardon et al., 2011; Baron and Markman, 2003).

The second component of IM is 'impression construction', which describes the mindful and goal-oriented management of external perceptions. Impression construction for an organisation is typically performed through the interaction of upper management with potential customers or investors, whereby symbolic groups are formed and relationships are negotiated (Dutton and Dukerich, 1991; Dutton et al., 1994). This is especially vital for entrepreneurs, for whom external perceptions of characteristics such as personal credibility, organisational achievement, and interpersonal relationships can determine firm-level resource acquisition and business growth (c.f. Zott and Huy, 2007). However, crowdfunding typically demands fundraising takes place earlier and with a broader range of stakeholders than conventional funding (Burtch et al., 2014). This not only reduces an entrepreneur's ability to limit interpersonal relationships but also offers onlookers a publically visible quantification of their perceived potential from external parties. Such information may have significant future implications for that entrepreneur that supersede crowdfunding activities. This is because crowdfunding, like many other web-based technologies, operates within what may be described as a 'layered modular architecture' (c.f. Yoo et al., 2010; Yoo, 2012), in which the device and network layers of the Internet give rise to various services and content distributed among heterogeneous disciplines and communities. Thus, the impression constructed by entrepreneurs during crowdfunding is likely to become a part of their ongoing broader digital identity, and so may influence their dealings with a variety of stakeholders in the long term.

Please cite this article in press as: Gleasure, R. Resistance to crowdfunding among entrepreneurs: An impression management perspective. J. Strateg. Inform. Syst. (2015), http://dx.doi.org/10.1016/j.jsis.2015.09.001

*Modelling resistance to entrepreneurial crowdfunding*

This study seeks to engage with the community of non-users for crowdfunding, as understanding these non-users is important for predicting and explaining the growth of crowdfunding-based strategies. Thus, rather than theorising around adoption (c.f. Davis, 1989) or diffusion (c.f. Cooper and Zmud, 1990) which would focus on entrepreneurs already engaging with crowdfunding, this study seeks to model 'resistance'. Resistance refers to forces that prevent new behaviours from taking hold in seemingly functional systems (Keen, 1981; Gibson, 2003; Jasperson et al., 2005). Understanding resistance is important for IS researchers looking to explain the non-adoption of new innovations (Jiang et al., 2000). A review of research on resistance performed a decade ago (Lapointe and Rivard, 2005) suggested that resistance was rarely explicitly addressed in IS research at that time. Exceptions to this included a handful of studies looking at how proposed changes become entangled with on-going power struggles between individuals (e.g. Markus, 1983; Hirschheim and Newman, 1988; Joshi, 1991), or with personal stress resulting from the introduction of new technologies (Marakas and Hornik, 1996). Subsequent studies have expanded upon other sources of resistance, e.g. resisting transparent systems for fear of ridicule (Doolin, 2004), resisting organisational redefinition (Markus, 2004), and resisting the reallocation of valuable resources within an organisation (Kallberg and Mähring, 2007; Laumer and Eckhardt, 2012).

The model of resistance developed by Kim and Kankanhalli (2009) is selected to act as a theoretical foundation for this study for two reasons. Firstly, the individual-based view of resistance resonates with this study's focus on individual entrepreneurs, rather than organisations or markets. Secondly, the rational view of resistance presented by Kim and Kankanhalli assumes that an individual's resistance is, at least partially, concerned with the accomplishment of specific goals. This harmonises with the goal-oriented nature of IM, helping to ensure these multiple up-front theory building components are complementary, rather than in competition (Sarker et al., 2013).

A one-to-one mapping of this model to crowdfunding is made challenging by the fact that crowdfunding is not just about specific purpose-built technologies, but is rather a broader novel fund-seeking and customer-relationship paradigm enabled by a range of web-based resources. This means entrepreneurs must not only engage with new tools, but also new sets of established practices and social norms that may have evolved towards a variety of diverging goals. Thus, rather than prematurely committing to the specific constructs or hypotheses developed by Kim and Kankanhalli, this study initially applies the logic of that model at the proposition-level. This allows a preliminary model to be developed that maintains higher exploratory capacity (see Fig. 1).

Kim and Kankanhalli's model presents six key antecedents of an individual's resistance. Three of these antecedents reflect perceptions of usefulness, namely *perceived value*, *switching benefits*, and *switching costs*. *Perceived value* represents an individual's perception of the net benefits for adopting some new technology, and is influenced by the *switching benefits* and *switching costs* of that adoption. In this context, the *perceived value* reflects how strategically useful an entrepreneur perceives crowdfunding to be when compared to alternatives, such as venture capital or angel investment. Documented *switching benefits* of crowdfunding include market development and opportunities for feedback early in product development (e.g. Schwienbacher and Larralde, 2012), while documented *switching costs* include the loss of expertise and business connections afforded by venture capitalists (e.g. Hsu, 2004). These are all initially considered under the collective term of *entrepreneur's value perceptions of crowdfunding*. Kim and Kankanhalli suggest that higher value perceptions lead to lower resistance. Thus, the first proposition:

**Proposition 1A.** *Entrepreneur's value perceptions for crowdfunding will have a negative impact on their resistance to crowdfunding.*

The remaining variables described in Kim and Kankanhalli's model relate to an individual's personal awareness and social exposure to a new technology. These include an individual's *self-efficacy for change*, *colleague opinion* concerning the new technology, and *organisational support for change*. *Organisational support for change* is less relevant in this context, as entrepreneurs are by definition creating their own organisational environment. An entrepreneur's *self-efficacy for change* can be considered the extent to which they believe they are capable of managing a crowdfunding campaign. This requires not only digital literacy but also the ability to manage the social demands involved. *Colleague opinion* may take multiple forms for entrepreneurs, as an entrepreneur's 'colleagues' can include suppliers, partners, as well as acquaintances in neighbouring

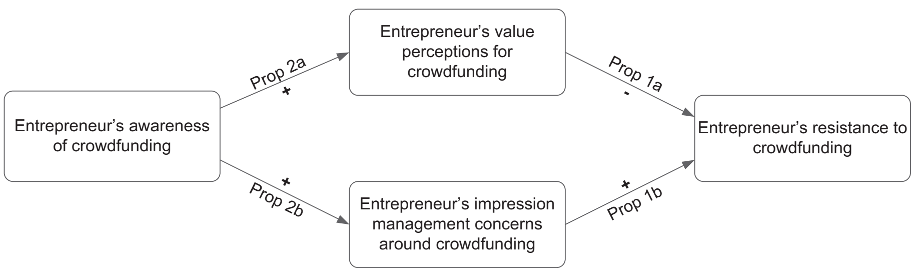


**Fig. 1.** Preliminary/sensitising research model.

markets (Carland et al., 1984). These variables are initially considered under the collective term of *entrepreneur's awareness of crowdfunding*. Kim and Kankanhalli's (2009) suggest such awareness does not impact directly on resistance, but rather impact on value perceptions. Thus:

**Proposition 2A.** *Entrepreneurs' awareness of crowdfunding will have a positive impact on their value perceptions for crowdfunding.*

Having considered entrepreneurs' resistance to crowdfunding in broad terms, an IM perspective may be developed. One IM-related concern is the lack of control that comes from the increased public transparency demanded by crowdfunding. This increased transparency has featured heavily in legal discussions of crowdfunding, where the assumption is that companies will seek to circumvent it where possible (Hazen, 2011; Palmiter, 2012). A further concern surrounds the IM cost of fundraising failure. Many well-known crowdfunding sites show high failure rates and public failures threaten to create an impression that the company is in crisis, so damaging their credibility (Elsbach and Sutton, 1992; Bansal and Clelland, 2004). Such concerns, initially considered under the collective term of *entrepreneur's impression management perceptions of crowdfunding*, are likely to influence entrepreneurs as they attempt to manage their impression construction. Thus:

**Proposition 1B.** *Entrepreneur's impression management concerns around crowdfunding will have a positive impact their resistance to crowdfunding.*

In addition to impacting upon their value perceptions, it is likely that *entrepreneurs' awareness of crowdfunding* will also influence their IM concerns. In terms of impression motivation, entrepreneurs with greater awareness of crowdfunding should be better equipped to gauge the level of IM risk, having observed successes and failures in comparable cases. Further, as IM is informed by expectancies built up over ongoing social interaction (Melone, 1990), more of these observations should also allow entrepreneurs to appreciate the level of skill required in the process of impression construction. This is supported by a study of 383 ventures seeking crowdfunding that suggested a subset of entrepreneurs were able to share less costly information, while still receiving investment (Davis and Allison, 2013). Thus:

**Proposition 2B.** *Entrepreneurs' awareness of crowdfunding will have a positive impact on their impression management concerns for crowdfunding.*

## Method

### *Selection of case: entrepreneurs in Ireland*

The nascent use of crowdfunding in entrepreneurial contexts means that flexible and exploratory approaches to theory development are preferable (Myers, 1997). Hence this study adopts a positivist case-study approach, in which one environment is explored in-depth to identify a range of emerging factors that may be tested and refined in subsequent research (Lee, 1989; Dubé and Paré, 2003). The Republic of Ireland presents a suitable environment for this case study for three reasons. First, entrepreneurialism is seen as an important economic and technological driver for the country (Guillén and Suárez, 2001; Dowell et al., 2012). Second, Ireland's economic downturn in late 2007/early 2008 significantly decreased the funding available from conventional sources such as banks (Honohan, 2009; Gurdgiev et al., 2011). Third, Ireland has a strong IT sector and relatively high levels of technological literacy (Heavin et al., 2003; Dowell et al., 2012). Thus, the basic infrastructural conditions are in place for entrepreneurs to leverage crowdfunding, should they choose to do so.

### *Data gathering and analysis*

Data were gathered over a twelve-month period from March 2014 to March 2015 for 20 entrepreneurs working full-time as founder of a startup. This took place over two stages, the first of which lasted from March 2014 to December 2014 and included Entrepreneurs A through J, the second of which lasted from January 2015 to March 2015 and included Entrepreneurs K through T. Sampling targeted those entrepreneurs who were in the early stages of fundseeking rather than those who had already been successful in attracting large amounts of venture capital, as these are the individuals for whom crowdfunding is seen as most disruptive (Bartram, 2011; Barry, 2012; Giudici et al., 2012). This number was not determined in advance, rather sampling ceased because insights generated from the iterative analysis of new entrepreneurs plateaued (Kvale, 1996). Data gathering was implemented using a *theoretical sampling* strategy that targeted entrepreneurs with potentially relevant differences, rather than seeking some homogeneous strata of the population (Eisenhardt, 1989; Corbin and Strauss, 1990; Urquhart et al., 2010). This resulted in a final sample of 7 of entrepreneurs in business-to-business (B2B) environments, 7 in business-to-consumer (B2C) environments, and 6 who identified their startup as a hybrid B2B/B2C model.

Analysis of each company focused upon a single one-to-one interview, complemented by analyses of available online records such as company websites, press releases, media coverage, and available financial records. Interviews formed the primary source of data for the analyses, with other sources treated as secondary to (i) triangulate findings and improve internal validity (Miles and Huberman, 1994) and (ii) increase immersion within the broader context of the case (Glaser and Strauss, 1967). Three interviews were conducted face-to-face (Entrepreneurs B, D, and F), however this was found to offer no advantage over phone calls, hence phone calls were preferred for all other interviews to maximise participant convenience and increase sampling reach. Interviews typically lasted half an hour (minimum 18 min, maximum 52 min) and were semi-structured in nature, guided by the evolving theoretical model and a set of corresponding open-ended and probing questions. To maintain consistency across interviews, questions about crowdfunding were prefaced by a description of crowdfunding that included rewards-based, equity-based, loan-based, and charity-based models. Discussions were transcribed and analysis was performed using the three grounded theory coding techniques (open, axial and selective) advocated by Corbin and Strauss (1990). This use of grounded theory techniques to expand upon an initial sensitising model is consistent with accepted practice (Birks et al., 2013; Urquhart and Fernández, 2013), so may be considered a 'valid combination' for qualitative IS research (Sarker et al., 2013).

Open coding required that a transcription of each interview was put through a 'line by line' exhaustive inspection (Bowen, 2008; Charmaz, 2006) and themes evolved continuously from the *constant comparison* of theoretical memos (c.f. Birks et al., 2013). Axial coding was performed iteratively after each interview to relate and compare concepts identified in open coding and to ensure the evolving interview protocol captured emerging constructs and relationships. This allowed the initial model to be expanded and delineated into a more defined and lucid hypothesis-based model, complete with explanations for the proposed hypotheses and the underlying mechanisms. It also allowed themes for constructs to be refined, combined, or abandoned based on ongoing observation. Finally, selective coding required transcripts were revisited and recoded according for the final set of constructs and themes to reinforce the validity and trustworthiness of the study (Denzin and Lincoln, 2000) and to ensure the reliability and replicability of findings (Mays and Pope, 1995).

The potential misinterpretation of data during coding was minimised in two ways. First, following the stabilisation of emerging themes, constructs, and interview structure from analysis of the 10 entrepreneurs sampled in the first stage of data gathering, a research assistant coded interview transcripts separately. Codes were compared and discussed at the level of constructs, themes, and relationships and any divergences were resolved before the second stage of data gathering proceeded. Second, conclusions were distributed to interview participants at the end of each stage as a form of 'venting', further testing the validity and reliability of the author's interpretation (Goetz and LeCompte, 1984).

## Findings and theory building

Proposition 1A was fully supported. Two constructs emerged relating to entrepreneurs' value perceptions (*perceived switching benefits of crowdfunding* and *perceived switching costs of crowdfunding*), each of which were found to impact on their *resistance to crowdfunding*. Proposition 2A was also fully supported. Three distinct constructs for entrepreneurs' IM-related concerns emerged (*fear of disclosure*, *fear of visible failure*, and *fear of projecting desperation*), each of which were also found to impact on their *resistance to crowdfunding*. Partial support was observed for Propositions 2A and 2B. The initial construct for entrepreneur's awareness of crowdfunding was redefined as *exposure to crowdfunding* and this construct was found to impact on the *perceived switching costs of crowdfunding* and two of three IM-related concerns (*fear of disclosure* and *fear of projecting desperation*). An additional construct was also identified as entrepreneur's *level of B2C focus*, which was found to impact on *perceived switching costs of crowdfunding*, *perceived switching benefits of crowdfunding*, and *fear of disclosure*. Fig. 2 presents the refined model.

The following sections describe the emerging constructs in the refined model, as well as the themes that characterised them, and the frequency with which those themes were observed.

### *Entrepreneurs' resistance to crowdfunding*

Entrepreneurs' *resistance to crowdfunding* was characterised by three themes, illustrated in Table 1. These themes collectively demonstrate the formative role of high profile success stories for many entrepreneurs' strategic understanding of crowdfunding, particularly stories of rewards-based early-stage crowdfunding of consumer-facing 'gadgets' or social movements. The first theme ($N = 9$) suggested resistance was greatest when entrepreneurs' believed the nature of their business means crowdfunding offers little strategic value. Five of these entrepreneurs were operating in B2B markets and felt their offerings were too niche to engage the general public, e.g. "It's alright for certain kinds of businesses, the business-to-consumer type ones or the ones that do things that that would be of interest to the general public... we're in the business-to-business area so it wouldn't really have a lot to do with us." (Entrepreneur A). Two entrepreneurs were operating with hybrid models but saw limited value in crowdfunding due to their companies' maturity, e.g. "I think it's ideal for early stage investment but I think we're beyond that now" (Entrepreneur O). The remaining two entrepreneurs were operating in B2C markets and believed crowdfunding was not strategically relevant as it's designed for social or philanthropic projects, e.g. one entrepreneur who had been party to a non-profit art-based crowdfunding campaign remarked that "The projects I do outside of the website... they're not really a business... When you intend to make money from something, crowdfunding doesn't seem, well it's not as easy anyway" (Entrepreneur G).

The second theme was more passive, with many entrepreneurs expressing enthusiasm for the strategic value of crowdfunding, just not for any of their business' existing offerings, e.g. "What I would be open to trying... I would be interested in putting up '[company] wants to build an app' and allowing the public to contribute to it if they wanted. So the public can say that they helped to build this" (Entrepreneur D). The third theme was more passive still, as the remainder of the

Please cite this article in press as: Gleasure, R. Resistance to crowdfunding among entrepreneurs: An impression management perspective. J. Strateg. Inform. Syst. (2015), http://dx.doi.org/10.1016/j.jsis.2015.09.001

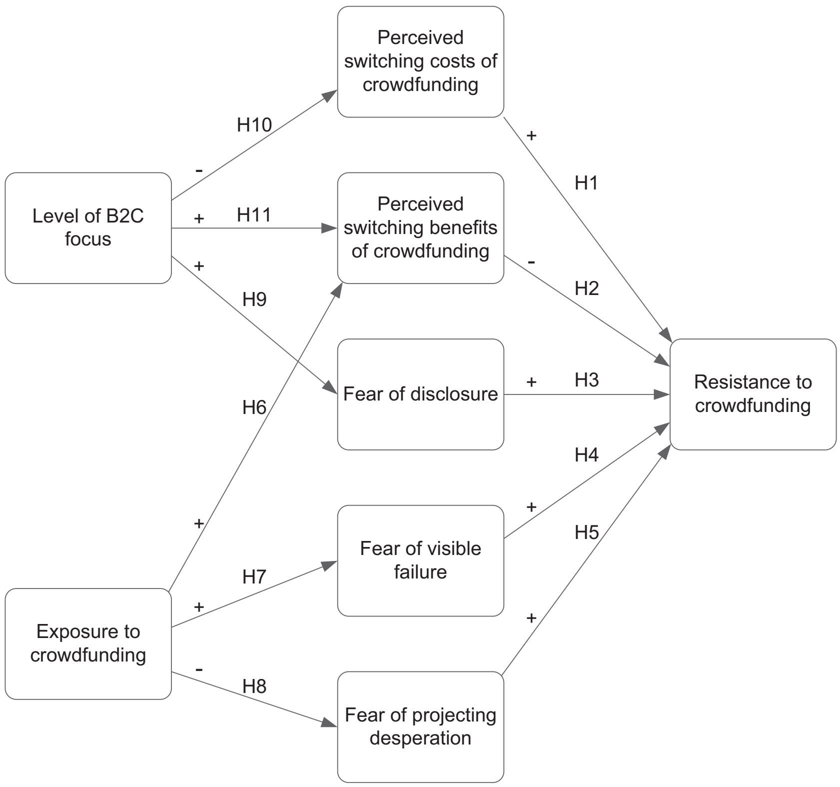


**Fig. 2.** Refined research model.

**Table 1**
Themes for entrepreneurs' resistance to crowdfunding.

| Construct | Explanation | Themes: Entrepreneur believes... |
|---|---|---|
| *Resistance to crowdfunding* | The extent to which an entrepreneur is actively or passively resistant to using crowdfunding | • the nature of their company means it is not suitable for crowdfunding ($N = 9$)<br>• the nature of their existing products means they are not suitable for crowdfunding ($N = 6$)<br>• they have been restricted by the time required to investigate a new financing paradigm ($N = 5$) |

entrepreneurs acknowledged that crowdfunding may offer strategic value in the context of their business' existing offerings. However these entrepreneurs were reluctant to commit time and effort into exploring these values until they were confident it would be worthwhile, e.g. "I'd need to know an awful lot more about the pros and cons of crowdfunding and what it means for you and your business" (Entrepreneur H).

*Entrepreneurs' perceived value of crowdfunding and its impact on their resistance*

Two constructs emerged around the *perceived value of crowdfunding*, themes for which are illustrated in Table 2. The first construct is *perceived switching benefits of crowdfunding*. This manifested five themes, two of which captured a desire to increase contact with future customers and three of which a desire to decrease contact with professional investors. The first theme was the potential for marketing offered by crowdfunding a new development. Such benefits were highly salient for all of the B2C-focused entrepreneurs and represented their dominant *perceived switching benefits of crowdfunding*, e.g. "I suppose really we're trying to develop a brand that has a transparency and an involvement level, so we think crowdfunding can reflect a little bit of the company ethos – that it's a community kind of thing or a family kind of thing" (Entrepreneur C). The second theme concerned the speed of development. Several entrepreneurs saw crowdfunding as a way of quickly testing a concept before engaging in full development, e.g. "We want to check whether the general framework works, then see if it can make a little bit of money... if I don't get money for financial services, that won't stop me from searching other domains" (Entrepreneur F).

The third theme reflected the most popular motive for wishing to decrease contact with professional investors, namely the slow speed of obtaining fundraising from them. This was especially salient for entrepreneurs who had already attracted

**Table 2**
Themes for the perceived switching costs and perceived switching benefits of crowdfunding.

| Construct | Explanation | Themes: Entrepreneur believes crowdfunding offers |
|---|---|---|
| *Perceived switching benefits of crowdfunding* | The strategic benefits perceived by an entrepreneur from crowdfunding, as opposed to conventional funding methods | • switching benefits from marketing ($N = 11$)<br>• switching benefits from product validation ($N = 7$)<br>• switching benefits from speed ($N = 9$)<br>• switching benefits from creative and strategic control ($N = 7$)<br>• switching benefits from retaining equity ($N = 6$) |
| *Perceived switching costs of crowdfunding* | The strategic costs perceived by an entrepreneur from crowdfunding, as opposed to conventional funding methods | • switching costs from loss of access to expertise ($N = 15$)<br>• switching costs from loss of access to business experience ($N = 15$)<br>• switching costs from loss of access to business connections ($N = 14$)<br>• switching costs from funders' lack of appreciation for investment risk ($N = 6$) |

funding and were frustrated with associated administrative overheads, e.g. "it's a huge amount of work to get investment from the VC community, the angel community, and from [national agencies]. It's extremely time consuming... We would probably update five or six people every month. And that's not something we'd have to do on a crowdfunding platform" (Entrepreneur N). The fourth theme concerned retaining creative control. This applied to both specific offerings, e.g. "you don't have a publisher saying "zombies are in vogue, you need zombies in your game" (Entrepreneur S), as well as the business itself, e.g. "I think the VCs, they call them vulture capitalists for a reason, they're very much out for their own benefits at the end of the day and I think maybe a crowd-type model may be more in the company's favour" (Entrepreneur I). The fifth theme also concerned ownership, however this time it was about retaining equity. Several entrepreneurs had followed and admired campaigns where developers had used crowdfunding to generate what were effectively pre-sales, e.g. "if we were selling the Tile™ or something, rather than giving equity away, that jumps out at me" (Entrepreneur B).

The second construct was the *perceived switching costs of crowdfunding,* which manifested four distinct themes. Interestingly, while several themes for switching benefits concerned increasing the distance to professional investors, each of the themes for switching costs lamented this increased distance. The first theme describes the inability to leverage the expertise accompanying conventional investors. For some this referred to expertise in their domain, e.g. "we specifically targeted angel investors that had some concept or had already invested in educational companies because we know that they can help us, and not just the money side of it" (Entrepreneur M). For others, this referred to a broad business skill-set to round out theirs, e.g. "we nearly teamed up with a company from [area]. They were bringing to the table a whole background of stuff. The accounts, the VAT, all the niggly stuff I wouldn't really know about" (Entrepreneur R). The second theme referred to the inability to leverage the general business experience accompanying conventional investors, e.g. "I'm a great believer that if someone has money to give away and invest then they have the brains to have made that money. You can get a lot of resources from speaking with these people" (Entrepreneur O). The third theme described the inability to use investors' connections to access potential suppliers, customers, and partners, e.g. "the doors will open. You have an advocate" (Entrepreneur Q). The fourth and final theme concerned the loss of established investors' understanding of risk. On one hand this had to do with the dangers of unanticipated costs, e.g. "I remember buying [an app], that was one I backed on Kickstarter, and I still haven't got it and it's four years later. You go on the blog and you see they're having a tough time of it. The thing about follow-on funding is you can't really go back to a crowd of angry people and ask them for more, whereas with investors you have a chance" (Entrepreneur O). More broadly, this had to do with a sense of letting down backers, e.g. "if you're an angel investor and you're seasoned you know that it's a high-risk game. With the best intentions in the world, things can go wrong. Everyone knows what the score is, and that's a safer place to be" (Entrepreneur Q).

The entrepreneurs presented each of these constructs as important determinants of their resistance to using crowdfunding. Thus, the following hypotheses:

**H1.** Entrepreneurs' perceived switching benefits of crowdfunding will have a negative impact on their resistance to it.

**H2.** Entrepreneurs' perceived switching costs of crowdfunding will have a positive impact on their resistance to it.

### *Entrepreneurs' IM perceptions and their impact on resistance*

Three constructs emerged concerning *entrepreneurs' impression management concerns around crowdfunding*, themes for which are illustrated in Table 3. The first and most frequent construct described a *fear of disclosure*. This construct was perhaps the most intuitive, as it reflected the desire to control the basic currency for IM, namely information flow. However, the nature of the information being protected varied. The first theme was the concern that other, larger companies could easily replicate their offering once they became aware of its potential, e.g. "say a big mobile phone provider, they could pump in a few hundred grand and put us out of business tomorrow" (Entrepreneur R). The second theme differed, in that entrepreneurs expressed concerns around the disclosure of operational information of strategic value. A striking example was the following anecdote from Entrepreneur C

> *I suppose a little bit of reservations would be in relation to that [fear of disclosure], because we have had, just say in the last number of months a competitor of ours who has been posing as someone else emailing us to try and find information in relation to our launch, like our launch timings, our retail price... we've been able to identify that and weed it out, but I suppose that's because we keep the information to ourselves.*

The third theme emerged because entrepreneurs felt that transparency could compromise ongoing strategic partnerships. In three cases, this issue was based on a subjective judgment from entrepreneurs, e.g. "I handle a lot of sensitive information and having a public 'comhairle' (council) probably wouldn't be a good way to start a business" (Entrepreneur P). In the fourth case, the issue was more explicit "we can't talk about those projects until our partner says 'you're allowed to talk about those projects'. We're developing [some offering] for a large multinational at the moment and it's virtually finished, the company want to launch it this July, but we're still not allowed to talk about it" (Entrepreneur S).

The second construct was a *fear of visible failure*. The entanglement of crowdfunding within other web-based technologies was not lost on several entrepreneurs, each of whom had concerns how poor performance during crowdfunding could affect future activities. The first theme was the concern that future investors might be deterred by failure to raise funds using crowdfunding, e.g. "I've always found it annoying that you're on the Web. You search for that company, that crowdfunding thing comes up and you see that they haven't hit their target, or they missed their target by a mile. For trying to find follow-on investors that's a massive flag" (Entrepreneur O). The second theme was related but less common, with several entrepreneurs expressing concerns that such failure might influence future customers, e.g. "if you were to go down the crowdfunding route and you were to fail to get funding it might send out a lack of confidence in your platform, which would not be positive for potential partners" (Entrepreneur P). The third theme describes a concern that failure might reflect badly on them personally, e.g. "Certainly I would feel, on a personal level, a level of insecurity over the backing of the project if that makes sense. And I would feel that there would be repercussions along the line because it is in some senses a very public forum" (Entrepreneur C).

The third construct was a *fear of projecting desperation*. Unexpectedly, in half of the cases entrepreneurs' felt that, regardless of its success or failure from a financing perspective, the mere act of adopting crowdfunding could create a negative external perception. Once more, this reflected the position of crowdfunding within the layered modular architecture of the web. This position meant several entrepreneurs were wary that adopting crowdfunding would mean more assertively adopting the web in general, possibly at the expense of existing non-web-based architectures. The first theme was a fear their company's brand might be damaged by opening it up to a less discriminatory architecture, e.g. "The only concern might be how having all those people involved might impact other investors or stakeholders, what other investors would think about that other class of people. I think that would be the concern" (Entrepreneur K). A second theme suggested onlookers might interpret their attempt to crowdfund their company as a lack of interest from conventional financiers, e.g. "I'd be nervous of going to Ernst and Young with what might be perceived as struggling for funding" (Entrepreneur B). Others felt that a product in need of funding would almost by definition be unfinished, hence not ready for mass exposure, e.g. "It doesn't do

**Table 3**
Themes for fear of disclosure, fear of visible failure, and fear of projecting desperation.

| Construct | Explanation | Themes: Entrepreneur believes crowdfunding |
|---|---|---|
| *Fear of disclosure* | The negative impact on image that entrepreneurs perceive from disclosing information when using crowdfunding | • may expose innovative aspects of their offering to competitors for imitation ($N = 15$)<br>• may expose innovative operational details to competitors for imitation ($N = 7$)<br>• may expose sensitive information that will damage partner or customer relationships ($N = 4$) |
| *Fear of visible failure* | The negative impact on image that entrepreneurs perceive when failing to raise the desired funds using crowdfunding | • may deter future investors, if applied unsuccessfully ($N = 8$)<br>• may deter future customers, if applied unsuccessfully ($N = 4$)<br>• may damage their professional image, if applied unsuccessfully ($N = 3$) |
| *Fear of projecting desperation* | The negative impact on image that entrepreneurs perceive when using crowdfunding in general | • may cheapen their brand by association ($N = 8$)<br>• may suggest a lack of interest from conventional investors ($N = 6$)<br>• may expose users to their offering prematurely ($N = 4$) |

you any favours to have it out there early on when you're trying to build something and you're not ready for it" (Entrepreneur A).

Concerns over the *fear of disclosure*, the *fear of visible failure*, and the *fear of projecting desperation* were all presented as significant contributors to entrepreneurs' *resistance to crowdfunding*. Several entrepreneurs noted that they simply would not consider any strategy involving crowdfunding unless they could nullify these concerns somehow. Examples of how the *fear of disclosure* and *fear of projecting desperation* might be nullified included setting up spin-off companies, such that sensitive information or company branding could be fenced off (e.g. Entrepreneurs F, S). However each of the entrepreneurs espousing such an approach admitted that the added burden of setting up a spin-off makes it impractical for them in the near future, as well as negating some of the benefits. Several entrepreneurs suggested they would negate the *fear of visible failure* by only running a campaign once they were convinced it would succeed (e.g. Entrepreneurs P, R). One entrepreneur remarked on colleagues who had donated money anonymously to their owning failing crowdfunding campaigns to avoid embarrassment, and admitted they might need to have emergency funds available for a similar contingency (Entrepreneur Q). The unavailability of such certainty (or the required emergency funds) also makes these strategies impractical to implement. Thus:

**H3.** Entrepreneurs' fear of disclosure will have a positive impact on their resistance to crowdfunding.

**H4.** Entrepreneurs' fear of visible failure will have a positive impact on their resistance to crowdfunding.

**H5.** Entrepreneurs' fear of projecting desperation will have a positive impact on their resistance to crowdfunding.

*Entrepreneurs' awareness of crowdfunding and its impact on value and IM perceptions*

Predicted considerations of *self-efficacy* offered little insights as none of the entrepreneurs doubted their personal ability to perform crowdfunding, e.g. "Every other day as an entrepreneur you're two steps outside your comfort zone... but you just do it, you learn whatever you need to" (Entrepreneur A). This is not entirely surprising given the personality of an entrepreneur is typically proactive and confident when engaging with new phenomena (Crant, 1996). However, two other constructs emerged in the form of entrepreneurs' *exposure to crowdfunding* and their *level of B2C focus* (see Table 4).

Themes for *entrepreneurs' exposure to crowdfunding* described an increasingly active relationship with the paradigm. The most common theme described observing media coverage, e.g. "Stuff in the media, reading things online... recently, the last year or so, the general population is finding out more and more about it" (Entrepreneur M). The second most common theme involved discussing crowdfunding with colleagues, e.g. "As I'm an entrepreneur... I have lots of other friends who are doing similar things to me, so it's come up in conversation a lot" (Entrepreneur H). Half of the entrepreneurs had gone one step further and followed specific campaigns, either because they were run by friends or colleagues or simply because they found the projects themselves interesting, e.g. "The first time I noticed it for myself is [describes a friend's business]... she had an idea in her head for a dress and she wanted to become a designer so she crowdfunded to be able to make the dresses and get her design out there" (Entrepreneur D). Finally, five entrepreneurs had actually backed specific crowdfunding campaigns, e.g. charitable causes (Entrepreneur J) or friends' theatre projects (Entrepreneur B).

While some entrepreneurs' businesses were clearly B2B or B2C in nature, several others reflected hybrid models. Hence, rather than viewing business models in binary terms, entrepreneurs' *level of B2C focus* was coded. The most basic theme for this construct was a strategy to sell primarily to the general public. This theme characterised all of the B2C entrepreneurs sampled, though several noted the importance of other businesses in the supply chain, e.g. "we have other product ranges for which we'll be looking for stockists as well... those are our sales channel at the moment" (Entrepreneur H). This was complemented by three additional entrepreneurs who had plans to subsidise their business with B2C offerings in the future, e.g. "in the roles and the time between signing contracts and getting purchase orders and getting through all the red tape of large multinationals... those lulls in development time we do our own independent development stuff to keep our development team working on something" (Entrepreneur S). Finally, an additional three

**Table 4**
Themes for exposure to crowdfunding and level of B2C focus.

| Construct | Explanation | Themes: Entrepreneur ... |
|---|---|---|
| *Exposure to crowdfunding* | The extent to which an entrepreneur has come across crowdfunding in different contexts | • has been exposed to media coverage of crowdfunding ($N = 17$)<br>• has discussed crowdfunding with colleagues ($N = 12$)<br>• has followed crowdfunding campaigns ($N = 10$)<br>• has backed crowdfunding campaigns ($N = 5$) |
| *Level of B2C focus* | The extent to which an entrepreneur's business strategy focuses on members of the public | • sells primary offering to the public ($N = 7$)<br>• relies on public perceptions to be competitive ($N = 4$)<br>• sells secondary offerings to the public ($N = 3$) |

Please cite this article in press as: Gleasure, R. Resistance to crowdfunding among entrepreneurs: An impression management perspective. J. Strateg. Inform. Syst. (2015), http://dx.doi.org/10.1016/j.jsis.2015.09.001

entrepreneurs with hybrid strategies noted the importance of public perceptions of their company even if they didn't sell to them directly, e.g. Entrepreneur R noted that, while hospitality businesses would actually purchase their product, it was the public who would drive the market "What we're really trying to do is... when you're walking down the street you're thinking... 'where's the nearest [name of offering]?' We're trying to establish a brand. That's really the idea – the brand itself will be valuable down the line".

Entrepreneurs' *exposure to crowdfunding* was found to be a significant contributor of their *perceived switching benefits of crowdfunding*. This was because those entrepreneurs who had closely followed other campaigns were more likely to observe the types of benefits accrued, e.g. "There are a few Kickstarters that just flood Facebook because their ideas are really smart and one like this has got a lot of attention from the people who hear about it. So if it did get going on Kickstarter, you never know how much exposure it could end up getting" (Entrepreneur R). This is in contrast with the entrepreneurs who had less exposure and struggled to identify benefits, e.g. "I actually don't know about it, the only thing I know is that you can get funding. That's about it" (Entrepreneur L). Thus:

**H6.** Entrepreneurs' exposure to crowdfunding will have a positive impact on their perceived switching benefits for it.

In IM terms, *exposure to crowdfunding* was presented as a significant contributor to the *fear of failure visibility* by the entrepreneurs. Those entrepreneurs who possessed most exposure to crowdfunding had also observed numerous failed crowdfunding campaigns and were more likely to find this situation intimidating. This meant these entrepreneurs were likely to worry about such public failures, e.g. "you go on those sites and you can see the companies that aren't raising money and of course you wouldn't like to be in that position" (Entrepreneur H), whereas less familiar entrepreneurs viewed the chances of success as lower, and were consequently less concerned about being seen to fail, e.g. "most things aren't going to make it. So if you're not one of the 10% or whatever that gets your money, what harm really" (Entrepreneur A). Thus:

**H7.** Entrepreneurs' exposure to crowdfunding will have a positive impact on their fear of visible failure.

Entrepreneurs' *exposure to crowdfunding* was also identified as a significant contributor to their *fear of projecting desperation*. This appeared to be because entrepreneurs with lower *exposure to crowdfunding* were aware of fewer success stories, hence saw it a last resort. This is demonstrated by contrasting perspectives from entrepreneurs with lower levels of exposure, e.g. "For a financial services company, I don't think it was appropriate. If I say some partner B, who was crowdfunded and handling lots of sensitive information... I'm not sure I'd look at it in a positive light" (Entrepreneur P), and higher levels of exposure, e.g. "I think, in this industry – the gaming industry – because crowdfunding has been successful it's not seen with any sort of stigma" (Entrepreneur S). Thus:

**H8.** Entrepreneurs' exposure to crowdfunding will have a negative impact on their fear of projecting desperation.

Almost all of the entrepreneurs expressed a *fear of disclosure*, yet this was more pronounced for entrepreneurs with a greater *level of B2C focus.* This can be attributed to the greater role of corporate partnerships and embedded offerings in those strategies aimed at B2B environments, meaning many of these entrepreneurs were less concerned they could be neatly replaced by competitors, e.g. "I know the barriers to entry in what we've done, so exposing that to your average Joe Soap, or even somebody who would have a bit of insight – I personally know the barriers that have to be overcome from a technology point of view to getting to where we are" (Entrepreneur I) and "Yes [the B2C developments tend to be more reproducible]. For us, in our B2B stuff we're using our partners' intellectual property in terms of their logo, so if someone tried to copy it they'd be in legal trouble" (Entrepreneur S). Thus:

**H9.** Entrepreneurs' level of B2C focus will have a positive impact on their fear of disclosure.

Entrepreneurs' *level of B2C focus* was also presented as a significant contributor to both the *perceived switching costs of crowdfunding* and the *perceived switching benefits of crowdfunding*. From the perspective of switching costs, several entrepreneurs noted the role of conventional investors in establishing dialogue with potential corporate clients, e.g. "for B2B it's paramount – you have to have contacts so you're not going in hat in hand. The businesses we're trying to deal with are very big players, so they're not going to take a call from me. It has to be done through a contact network... The investors, it's in their interest to allow me to utilise their contacts so I can take it further" (Entrepreneur 0). Similarly, entrepreneurs typically felt that many of marketing and public-engagement benefits were diminished when consumers were less directly targeted, e.g. "Hugely, yes I do [think the benefit of crowdfunding are less for B2B companies]. I think if you're B2B that advantage of the viral nature is gone because you might be selling to a corporation and they don't really care. That warm fuzzy feeling goes away if you've got a widget that connects to a widget... The consumer side is definitely part of that equation" (Entrepreneur Q). Thus:

**H10.** Entrepreneurs' level of B2C focus will have a negative impact on their perceived switching costs of crowdfunding.

**H11.** Entrepreneurs' level of B2C focus will have a positive impact on their perceived switching benefits of crowdfunding.

Please cite this article in press as: Gleasure, R. Resistance to crowdfunding among entrepreneurs: An impression management perspective. J. Strateg. Inform. Syst. (2015), http://dx.doi.org/10.1016/j.jsis.2015.09.001

## Discussion

The analysis in the previous section presents several important findings. First, IM was found to play an important role in explaining entrepreneurs' resistance to crowdfunding via three distinct constructs. Findings around the *fear of disclosure* reflect the reality that entrepreneurs are typically engaging with perishable opportunities where first-mover advantage is seen as a key strategic asset (Drucker and Drucker, 2007) and external perceptions must be carefully cultivated (Davidsson and Honig, 2003). Such *fear of disclosure* was particularly salient for entrepreneurs with a high *level of B2C focus*. The management and accumulation of relationships and interdependencies with partners is traditionally seen as a key strategic challenge for small-to-medium companies looking to penetrate B2B markets (Raisch, 2001; Gulledge, 2002), thus it is understandable why B2B-focused entrepreneurs are comparatively less likely to feel easily replaced. Findings around the *fear of projecting desperation* emerged from entrepreneurs' concerns their company could be 'cheapened' by association with crowdfunding. This fear faded for those entrepreneurs with greater *exposure to crowdfunding* who had followed successful campaigns by other relatable businesses. This resonates with previous work demonstrating the influence of social norms and accepted practices on entrepreneurs' decision-making (e.g. Meek et al., 2010). Perhaps the biggest surprise surrounded the *fear of visible failure*. Findings suggested the implications of such failures were more lucid for entrepreneurs who had observed them first-hand; this meant the *fear of visible failure* was greatest for entrepreneurs with higher *exposure to crowdfunding*. This makes sense in IM terms, yet contradicts observations of failure-desensitisation in other entrepreneurial contexts (Politis and Gabrielsson, 2009). This is symptomatic of crowdfunding's technological situation within the larger 'layered modular architecture' (Yoo et al., 2010) of the web. Entrepreneurs with greater web entanglement were more likely to encounter crowdfunding, thus more capable of inferring subtle or long-term impression costs associated with failure. Further, they were arguably more vulnerable to such costs due to greater content/service/architectural overlap with other activities.

Second, this study identified key strategic trade-offs that entrepreneurs perceived for crowdfunding. The *perceived costs of crowdfunding* were reasonably uniform, particularly as regards investors' expertise, experience, and connections. These assets were seen as a valuable means to access potential partners/corporate clients and access vital skills. The *perceived benefits of crowdfunding* noted by entrepreneurs were more varied. This makes sense, given the greater level of speculation required from the sample of entrepreneurs. The least obvious finding building upon existing research was entrepreneurs' enthusiasm for the creative and strategic freedom they felt crowdfunding would afford them, assets less common when seeking conventional funding (Hellmann, 1998). The attitudes of individual entrepreneurs surrounding this issue have been largely ignored to date and this study provides some insights into the perceived value therein. Other benefits echoed the strategic capabilities identified in existing literature, such as the ability to raise funds quickly and test offerings early in development (Gelfond and Foti, 2012; Burtch et al., 2014) and market offerings in novel and interesting ways (Ordanini et al., 2011). The interplay between these constructs, the nature of the business strategies employed, and the IM concerns identified offers new insights as businesses seek to apply crowdfunding in ever more varied contexts (Giudici et al., 2012; Danmayr, 2014).

### *Implications for research*

Much has been said about the strategic usefulness of crowdfunding for entrepreneurs (e.g. Bartram, 2011; Danmayr, 2014), yet little research to date has engaged with non-users. Understanding these individuals is important for predicting and explaining the growth of crowdfunding and this study provides a foundation by exploring non-users in a non-judgmental manner. Further, a vital pillar in this understanding is the recognition that crowdfunding behaviours and technologies are part of a larger web-based architecture, the uses for which far exceed fund-seeking for entrepreneurs. This suggests that, if IS scholars' are to truly understand how entrepreneurs are affected by the interplay of technologies, businesses, and communities involved in crowdfunding, the most effective strategy may not be to theoretically isolate and compartmentalise crowdfunding behaviours.

As regards IM, this study enables future theorising in this space by bringing to light a range of related themes describing each of the identified theoretical constructs. These themes may inform subsequent qualitative research which expands upon specific aspects of entrepreneurs' resistance, or they may inform the development of quantitative scales for survey-based field studies to determine the statistical generalisability of findings. Secondly, this study demonstrates the role of IM-related concerns for entrepreneurs considering the strategic use of crowdfunding. While previous research has suggested a role for IM in such contexts (e.g. Davis and Allison, 2013), it has not been addressed as a source of non-adoption. The findings from this study dig deeper into the entrepreneurial community and thus act to strengthen the link between theory development around crowdfunding and conventional models of entrepreneurialism.

This study also possesses limitations that must be acknowledged. Firstly, the exploratory nature of this research lent itself towards a qualitative case study approach that sampled across different industries in one country. This choice of method allowed for the analytical generalisability of findings but not the statistical generalisability (Yin, 2009). This means it is possible, for example, that resistance will take different forms in industries or regions where entrepreneurs' strategic use of crowdfunding is significantly more or less established, as the aggressiveness or passiveness with which new technologies are resisted is often determined at the group level (Lapointe and Rivard, 2005). Hence, future research in those domains may look to inform theorising by comparing findings with this study. Secondly, this study focused on entrepreneurs in the relatively early stages of fundseeking. These entrepreneurs were targeted as a priority group because it is to these individuals that much of the discussion around the potential for crowdfunding refers. Yet the perceived benefits of crowdfunding identified in this study may also apply to entrepreneurs with more mature ventures. This latter group must also be investigated in future research. Thirdly, it is not clear from this study how closely entrepreneurs' perceptions match the perceptions of other stakeholders. For example, many entrepreneurs were concerned as to how future investors may interpret the use of crowdfunding, yet it is not clear whether such concerns are warranted. Neither is it clear whether imitation from larger businesses represents a meaningful threat for entrepreneurs adopting crowdfunding. The validity of such perceptions remains open for future research.

### *Implications for practice*

This study has practical implications for the design and strategic use of crowdfunding technologies. For entrepreneurs seeking to use crowdfunding, this study brings three key issues to light. First, the layered interconnectedness of crowdfunding with other web-based technologies and behaviours means that it cannot be considered simply a one-to-one alternative for traditional fundseeking. Rather, this web-based context presents distinct strategic benefits, e.g. product testing and viral marketing, and costs, e.g. the comparative lack of a support ecosystem and risk-aware investors. Second, a range of Impression Management (IM) concerns may need to be considered. For example, to what extent are core innovations imitable by competitors, how would a failure to attract investment impact on perceptions of future business development, and will potential partners view the act of crowdfunding unfavourably? Third, and perhaps most importantly, an entrepreneur's ability to evaluate the strategic benefits and costs of crowdfunding, as well as the IM-related challenges they present, may depend on that entrepreneur's exposure to crowdfunding to date. Such exposure is essential for entrepreneurs to fully appreciate the challenges and opportunities they may face.

For designers, the implications are also threefold. First, the aforementioned interconnectedness between crowdfunding and other web-based behaviours and technologies must be reflected in the design of crowdfunding platforms. Current non-adopters may not be as sensitive to the IM-related activities that take place in the interactions between investors and entrepreneurs that occur before and after fundraising campaigns. Some entrepreneurs currently using crowdfunding possess tacit knowledge that makes them highly skilled at such activities. However, current non-adopters may not have sufficient exposure to understand the true strategic potential on offer, nor the risks. Therefore it is the responsibility of designers to make expectations more lucid for newer users, if crowdfunding platforms are to maximise the benefits for both investors and entrepreneurs. Second, this study demonstrates the perceived costs of transparency and disclosure. Thus the question must be asked whether such disclosure is desirable at a systemic level. If yes, then the design of crowdfunding technologies must encourage volunteering this information, for example by awarding transparency grades or explicitly requesting different types of information. If no, then the design of crowdfunding technologies should seek to lower costly forms of transparency, e.g. removing public records of failed campaigns or hiding sensitive information from the general public. Third, the design of crowdfunding technologies should consider if and how the expertise and network-related value of conventional financiers (e.g. venture capitalists) can be captured in crowdfunding platforms. If they can, then mechanisms should be introduced accordingly, e.g. by creating project-specific investor fora. If they cannot, then this limitation may need to be considered in the context of the social/political goals of sites like Kiva.org. Such sites are intended to support entrepreneurs in developing countries as a means of encouraging economic development (Galak et al., 2011; Barry, 2012), yet valuable aspects of the conventional funding process may be currently overlooked. This demands further consideration if microfinance is to bring about long-term socioeconomic change, rather than short-term injections of capital.

## Concluding remarks

The ability to make use of crowdsourcing technologies can be an important strategic asset for modern organisations (Howe, 2006; Awazu et al., 2009; Leimeister et al., 2009; Lindic et al., 2011; Antorini et al., 2012). Crowdfunding, while a relatively young form of crowdsourcing, promises significant international impact as a means of democratising entrepreneurs' access to capital. This creates new challenges and opportunities for entrepreneurs, the global nature of which demands they are taken seriously by scholars of strategic IS (Galliers et al., 2012).

This study has explored the role of Impression Management (IM) in entrepreneurs' resistance to crowdfunding, based on a case study of 20 entrepreneurs in Ireland. This makes an important contribution by elucidating a 'Strategic Use of IS' (Gable, 2010), specifically one that may inform the alignment of IT and business. A refined theoretical model is presented that illustrates the dialectical nature of entrepreneurs' strategic perceptions around crowdfunding. For example, as entrepreneurs become more aware of crowdfunding they are both more likely to recognise the strategic benefits of a successful crowdfunding campaign, as well as more concerned by the repercussions if it is unsuccessful. Similarly, entrepreneurs operating a B2C model are more likely to perceive strategic benefits from crowdfunding, yet also more sensitive to the dangers of disclosing sensitive business information in a public domain. This affords a more nuanced view of crowdfunding as a strategic tool for entrepreneurs, rather than one that attributes resistance simply to habit or technophobia. It further serves to explain and bound the disruptive potential of crowdfunding for entrepreneurs, for whom exposure to the crowd may be a double-edged sword.

## Acknowledgements

This research was funded by the Lewis Charitable Foundation (USA). Special thanks to Yvonne O'Connor for her help with the study and the JSIS review team for their helpful comments throughout the review process.

## References

Antorini, Y.M., Muniz, A.M., Askildsen, T., 2012. Collaborating with customer communities: lessons from the Lego group. MIT Sloan Management Review 53 (3), 73–79.
Awazu, Y., Baloh, P., Desouza, K.C., Wecht, C.H., Kim, J., Sanjeev, J., 2009. Information – communication technologies open up innovation. Research-Technology Management 52 (1), 51–58.
Bansal, P., Clelland, I., 2004. Talking trash: legitimacy, impression management, and unsystematic risk in the context of the natural environment. Academy of Management Journal 47 (1), 93–103.
Baron, R.A., Markman, G.D., 2003. Beyond social capital: the role of entrepreneurs' social competence in their financial success. Journal of Business Venturing 18 (1), 41–60.
Barry, J.J., 2012. Microfinance, the market and political development in the internet age. Third World Quarterly 33 (1), 125–141.
Bartram, P., 2011. 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 (11), 33–34.
Beaulieu, T., Sarker, S., Sarker, S., 2015. A conceptual framework for understanding crowdfunding. Communications of the Association for Information Systems 37 (1), 1–31.
Birks, D.F., Fernandez, W., Levina, N., Nasirin, S., 2013. Grounded theory method in information systems research: its nature, diversity and opportunities. European Journal of Information Systems 22 (1), 1–8.
Bowen, G., 2008. Grounded theory and sensitizing concepts. International Journal of Qualitative Methods 5 (3), 12–23.
Burtch, G., Di Benedetto, C.A., Mudambi, S.M., 2014. Leveraging information systems for enhanced product innovation. Handbook of Strategic e-Business Management. Springer, Berlin, pp. 211–216.
Cardon, M.S., Stevens, C.E., Potter, D.R., 2011. Misfortunes or mistakes?: Cultural sensemaking of entrepreneurial failure. Journal of Business Venturing 26 (1), 79–92.
Carland, J.W., Hoy, F., Boulton, W.R., Carland, J.A.C., 1984. Differentiating entrepreneurs from small business owners: a conceptualization. Academy of Management Review 9 (2), 354–359.
Charmaz, K., 2006. Constructing Grounded Theory: A Practical Guide Through Qualitative Research. Sage Publications Ltd, London.
Cooper, R.B., Zmud, R.W., 1990. Information technology implementation research: a technological diffusion approach. Management Science 36 (2), 123–139.
Corbin, J.M., Strauss, A., 1990. Grounded theory research: procedures, canons, and evaluative criteria. Qualitative Sociology 13 (1), 3–21.
Crant, J.M., 1996. The proactive personality scale as a predictor of entrepreneurial intentions. Management 29 (3), 62–74.
Danmayr, F., 2014. Archetypes of Crowdfunding Platforms. Springer Gabler, Germany.
Davidsson, P., Honig, B., 2003. The role of social and human capital among nascent entrepreneurs. Journal of Business Venturing 18 (3), 301–331.
Davis, F.D., 1989. Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly 13 (3), 319–340.
Davis, B.C., Allison, T.H., 2013. Crowd funding of entrepreneurial ventures: a comparison of signaling and impression management. In: Toombs, L. (Ed.), Academy of Management Proceedings. Orlando, Florida.
Denzin, N.K., Lincoln, Y.S., 2000. Handbook of Qualitative Research. Thousand Oaks, California.
Dillard, C., Browning, L., Sitkin, D., Sutcliffe, K., 2000. Impression management and the use of procedures at the Ritz-Carlton: moral standards and dramaturgical discipline. Communication Studies 51 (4), 404–414.
Doolin, B., 2004. Power and resistance in the implementation of a medical management information system. Information Systems Journal 14 (4), 343–362.
Dowell, D.J., Dawson, C., Fuller-Love, N., Hopkins, B., 2012. Entrepreneurial groups in Ireland and Wales: a preliminary typology of entrepreneurs using a marketing segmentation approach. Journal of Research in Marketing and Entrepreneurship 14 (2), 184–198.
Drucker, P.F., Drucker, P.F., 2007. Innovation and Entrepreneurship: Practice and Principles. Elsevier, UK.
Dubé, L., Paré, G., 2003. Rigor in information systems positivist case research: current practices, trends, and recommendations. MIS Quarterly 27 (4), 597–636.
Dutton, J.E., Dukerich, J.M., 1991. Keeping an eye on the mirror: image and identity in organizational adaptation. Academy of Management Journal 34 (3), 517–554.
Dutton, J.E., Dukerich, J.M., Harquail, C.V., 1994. Organizational images and member identification. Administrative Science Quarterly 39 (2), 239–263.
Eisenhardt, K.M., 1989. Building theories from case study research. Academy of Management Review 14 (4), 532–550.
Elsbach, K.D., Sutton, R.I., 1992. Acquiring organizational legitimacy through illegitimate actions: a marriage of institutional and impression management theories. Academy of Management Journal 35 (4), 699–738.
Gable, G., 2010. Strategic information systems research: an archival analysis. The Journal of Strategic Information Systems 19 (1), 3–16.
Galak, J., Small, D., Stephen, A.T., 2011. Microfinance decision making: a field study of prosocial lending. Journal of Marketing Research 48, S130–S137.
Galliers, R.D., Jarvenpaa, S.L., Chan, Y., Lyytinen, K., 2012. Strategic information systems: reflections and prospectives. The Journal of Strategic Information Systems 21 (2), 85–90.
Gambardella, M., 2012. How to (crowd-)fund and manage the (user-)innovation: the case of Big Buck Bunny. In: Workshop on Open Source and Design of Communication. Lisbon, Portugal.
Gartner, W.B., 1988. 'Who is an entrepreneur?' is the wrong question. American Journal of Small Business 12 (4), 11–32.
Gelfond, S.H., Foti, A.D., 2012. US$500 and a click: investing the "crowdfunding" way. Journal of Investment Compliance 13 (4), 9–13.
Gibson, C.F., 2003. IT-enabled business change: an approach to understanding and managing risk. MIS Quarterly Executive 2 (2), 104–115.
Giudici, G., Nava, R., Rossi Lamastra, C., Verecondo, C., 2012. Crowdfunding: the new frontier for financing entrepreneurship? Working Paper Department of Management, Production and Industrial Engineering, Politecnico di Milano. <http://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID2157429_code174108.pdf?abstractid=2157429&mirid=1> (retrieved 01.09.15).
Glaser, B.G., Strauss, A., 1967. The Discovery of Grounded Theory: Strategies for Qualitative Research. Aldine Publishers, Chicago, USA.
Goetz, J.P., LeCompte, M.D., 1984. Ethnography and Qualitative Design in Educational Research, vol. 19. Academic Press, Orlando, Florida.
Goffman, E., 1959. The Presentation of Self in Everyday Life. Doubleday, New York.
Guillén, M.F., Suárez, S.L., 2001. Developing the Internet: entrepreneurship and public policy in Ireland, Singapore, Argentina, and Spain. Telecommunications Policy 25 (5), 349–371.
Gulledge, T., 2002. B2B eMarketplaces and small-and medium-sized enterprises. Computers in Industry 49 (1), 47–58.
Gurdgiev, C., Lucey, B.M., Roche-Kelly, L., 2011. The Irish economy: three strikes and you're out? Panoeconomicus 58 (1), 19–41.

Halbert, C., 1997. Tough enough and woman enough: stereotypes, discrimination, and impression management among women professional boxers. Journal of Sport & Social Issues 21 (1), 7–36.
Higgins, J., 2012. Show us the money. Director 00123242, 43–47.
Haas, P., Blohm, I., Leimeister, J.M., 2014. An empirical taxonomy of crowdfunding intermediaries. In: International Conference on Information Systems. Auckland, New Zealand.
Hazen, T.L., 2011. 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.
Heavin, C., Fitzgerald, B., Trauth, E.M., 2003. Factors influencing Ireland's software industry. In: Korpela, M., Montealegre, R., Poulymenakou, A. (Eds.), Organizational Information Systems in the Context of Globalization. Springer, USA, pp. 235–252.
Hellmann, T., 1998. The allocation of control rights in venture capital contracts. Rand Journal of Economics 29 (1), 57–76.
Hirschheim, R., Newman, M., 1988. Information systems and user resistance: theory and practice. The Computer Journal 31 (5), 398–408.
Honohan, P., 2009. Resolving Ireland's banking crisis. Economic & Social Review 40 (2), 207–231.
Howe, J., 2006. The rise of crowdsourcing. Wired Magazine 14 (6), 1–4.
Howe, J., 2008. Crowdsourcing, Why the Power of the Crowd is Driving the Future of Business. Crown Publishing Group, New York, NY.
Hsu, D.H., 2004. What do entrepreneurs pay for venture capital affiliation? The Journal of Finance 59 (4), 1805–1844.
Jasperson, J.S., Carter, P.E., Zmud, R.W., 2005. A comprehensive conceptualization of post-adoptive behaviors associated with information technology enabled work systems. MIS Quarterly 29 (3), 525–557.
Jiang, J.J., Muhanna, W.A., Klein, G., 2000. User resistance and strategies for promoting acceptance across system types. Information & Management 37 (1), 25–36.
Joshi, K., 1991. A model of users' perspective on change: the case of information systems technology implementation. MIS Quarterly 15 (2), 229–242.
Kallberg, N., Mähring, M., 2007. Pushing organizational change with information technology: a resource/capability re-balancing act. In: European Conference for Information Systems. St. Gallen, Switzerland.
Keen, P.G., 1981. Information systems and organizational change. Communications of the ACM 24 (1), 24–33.
Kim, H.W., Kankanhalli, A., 2009. Investigating user resistance to information systems implementation: a status quo bias perspective. MIS Quarterly 33 (3), 567–582.
King, R.G., Levine, R., 1993. Finance, entrepreneurship and growth. Journal of Monetary Economics 32 (3), 513–542.
Krämer, N.C., Winter, S., 2008. Impression management 2.0: The relationship of self-esteem, extraversion, self-efficacy, and self-presentation within social networking sites. Journal of Media Psychology: Theories, Methods, and Applications 20 (3), 106–116.
Kvale, S., 1996. InterViews: An Introduction to Qualitative Research Interviewing. Thousand Oaks, California, USA.
Kitchens, R., Torrence, P.D., 2012. The Jobs act – crowdfunding and beyond. Economic Development Journal 11 (4), 42–47.
Kuppuswamy, V., Bayus, B.L., 2013. Crowdfunding creative ideas: the dynamics of projects backers in kickstarter. SSRN Working Paper Series. <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2234765> (retrieved 01.09.15).
Lapointe, L., Rivard, S., 2005. A multilevel model of resistance to information technology implementation. MIS Quarterly 29 (3), 461–491.
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 ACM. New York.
Laumer, S., Eckhardt, A., 2012. Why do people reject technologies: a review of user resistance theories. In: Information Systems Theory. Springer, New York, pp. 63–86.
Leary, M.R., Tchividijian, L.R., Kraxberger, B.E., 1994. Self-presentation can be hazardous to your health: impression management and health risk. Health Psychology 13 (6), 461–470.
Leary, M.R., Kowalski, R.M., 1990. Impression management: a literature review and two-component model. Psychological Bulletin 107 (1), 34–47.
Lee, A.S., 1989. A scientific methodology for MIS case studies. MIS Quarterly 13 (1), 33–50.
Ley, A., Weaven, S., 2011. Exploring agency dynamics of crowdfunding in start-up capital financing. Academy of Entrepreneurship Journal 17 (1), 85–110.
Lindic, J., Baloh, P., Ribiere, V.M., Desouza, K.C., 2011. Deploying IT for organizational innovation. Internal Journal of Information Management 31 (2), 183–188.
Leimeister, J., Huber, M., Bretschneider, U., Krcmar, H., 2009. Leveraging crowdsourcing: activation-supporting components for IT-based ideas competition. Journal of Management Information Systems 26 (1), 197–224.
Majchrzak, A., Malhotra, A., 2013. Towards an information systems perspective and research agenda on crowdsourcing for innovation. The Journal of Strategic Information Systems 22 (4), 257–268.
Marakas, G.M., Hornik, S., 1996. Passive resistance misuse: overt support and covert recalcitrance in IS implementation. European Journal of Information Systems 5 (3), 208–219.
Markus, M.L., 1983. Power, politics, and MIS implementation. Communications of the ACM 26 (6), 430–444.
Markus, M.L., 2004. Technochange management: using IT to drive organizational change. Journal of Information Technology 19 (1), 4–20.
Mays, N., Pope, C., 1995. Rigour and qualitative research. British Medical Journal 311, 109–112.
Meek, W.R., Pacheco, D.F., York, J.G., 2010. The impact of social norms on entrepreneurial action: evidence from the environmental entrepreneurship context. Journal of Business Venturing 25 (5), 493–509.
Melone, N.P., 1990. A theoretical assessment of the user-satisfaction construct in information systems research. Management Science 36 (1), 76–91.
Miles, M.B., Huberman, A.M., 1994. Qualitative Data Analysis: An Expanded Sourcebook. Thousand Oaks, California, USA.
Myers, M.D., 1997. Qualitative research in information systems. MIS Quarterly 21 (2), 241–242.
Nagy, B.G., Pollack, J.M., Rutherford, M.W., Lohrke, F.T., 2012. The influence of entrepreneurs' credentials and impression management behaviors on perceptions of new venture legitimacy. Entrepreneurship Theory and Practice 36 (5), 941–965.
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.
Palmiter, A., 2012. Pricing disclosure: crowdfunding's curious conundrum. Entrepreneurial Business Law Journal 7 (2), 373–427.
Politis, D., Gabrielsson, J., 2009. Entrepreneurs' attitudes towards failure: an experiential learning approach. International Journal of Entrepreneurial Behavior & Research 15 (4), 364–383.
Raisch, W.D., 2001. The e-Marketplace. Strategies for Success in B2B eCommerce. McGraw Hill, New York.
Sarker, S., Xiao, X., Beaulieu, T., 2013. Guest editorial: qualitative studies in information systems: a critical review of some guiding principles. MIS Quarterly 37 (4), iii–xviii.
Shane, S., Cable, D., 2002. Network ties, reputation, and the financing of new ventures. Management Science 48 (3), 364–381.
Schwienbacher, A., Larralde, B., 2012. Crowdfunding of small entrepreneurial ventures. In: Cumming, D. (Ed.), The Oxford Handbook of Entrepreneurial Finance. Oxford University Press, New York, USA, 369–362.
Stemler, A.R., 2013. The Jobs Act and crowdfunding: harnessing the power—and money—of the masses. Business Horizons 56 (3), 271–275.
Stol, K.J., Fitzgerald, B., 2014. Researching crowdsourcing software development: perspectives and concerns. In: Proceedings of the 1st International Workshop on CrowdSourcing in Software Engineering, ACM, pp. 7-10.
Urquhart, C., Fernández, W., 2013. Using grounded theory method in information systems: the researcher as blank slate and other myths. Journal of Information Technology 28 (3), 224–236.
Urquhart, C., Lehmann, H., Myers, M.D., 2010. Putting the 'theory'back into grounded theory: guidelines for grounded theory studies in information systems. Information Systems Journal 20 (4), 357–381.

Winter, S.J., Saunders, C., Hart, P., 2003. Electronic window dressing: impression management with websites. European Journal of Information Systems 12 (4), 309–322.
Yoo, Y., 2012. Digital materiality and the emergence of an evolutionary science of the artificial. In: Leonardi, P., Nardi, B., Kallinikos, J. (Eds.), Materiality and Organizing: Social Interaction in a Technological World. Oxford University Press, UK.
Yoo, Y., Henfridsson, O., Lyytinen, K., 2010. Research commentary-The new organizing logic of digital innovation: an agenda for information systems research. Information Systems Research 21 (4), 724–735.
Yin, R.K., 2009. Case Study Research: Design and Methods, vol. 5. Sage Publishing, California, USA.
Zott, C., Huy, Q.N., 2007. How entrepreneurs use symbolic management to acquire resources. Administrative Science Quarterly 52 (1), 70–105.