Leveraging Technology Through Crowdfunding to Ease Barriers of Entry Into the Marketplace

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Abstract

Small businesses and entrepreneurs face barriers to entering new markets, such as access to capital. Crowdfunding is one method for financing new ventures. The purpose of this article is to explore how crowdfunding can ease barriers of entry into new markets. Drawing from strategic management, planning, marketing, and technology acceptance literature, we present a conceptual model to explain the use of crowdfunding by small businesses and entrepreneurs. Factors that impact individuals’ propensity to utilize crowdfunding as a source of capital include ease of use, intention to use, attitudes toward use, and effectiveness.

Keywords: strategic management; strategy; technology; marketing; barriers to entry; crowdfunding; social networking

Date Submitted: January 25, 2019 | Date Published: June 1, 2020

Recommended Citation

Introduction

Incorporating short- and long-term business objectives is a core activity of strategic management (Porter, 1980). However, new technology and digitization is redefining long term (Oviatt & Miller, 1989). For many years, companies were told to develop a strategic plan and stick to the plan, making only minor tweaks along the way (Jennings & Disney, 2006). With technology enhancements, organizations must be nimble and make strategic corrections more often (Cumnings et al., 2013; Nyuur, 2015). More importantly, technology gives adept entrepreneurs a competitive advantage in dynamic markets (Saviotti & Pyka, 2011; Spulber, 2003).

Background of the Problem

A major market barrier for entrepreneurs and small startups is the ability to raise capital (Porter, 1980; Talaia et al., 2016). Minorities, women, and entrepreneurs from less developed countries face extra challenges for raising capital to start new business ventures (Bewaji et al., 2015; Naidu & Chand, 2017; Saviotti & Pyka, 2011). One method of raising capital through technology is crowdfunding which is an “open invitation addressed to the public, (with) the aim to obtain financial resources for a specific project,” (Wierzbicka, 2018, p. 57). Some research indicates leveraging technology through practices such as crowdfunding may ease this barrier to entry by making funding more accessible (Borello et al., 2015; Saviotti & Pyka, 2011). Crowdfunding has also allowed new products to be introduced to the market, circumventing traditional methods such as venture capitalists (Belleflamme et al., 2013; Rossi, 2014; Wierzbicka, 2018). As traditional methods of financing are circumvented, the complexity of barriers to entry in the marketplace is also being circumvented (Spulber, 2003). There has been, however, little attempt to create a conceptual framework linking crowdfunding to market entry barriers. Jim Euchner (2015) posited crowdfunding may ease four specific barriers to entry: (a) economies of scale, (b) access to capital, (c) access to distribution, and (d) incumbency advantages (cost disadvantages independent of scale). This article attempts to merge Euchner’s speculation with the technology acceptance model (TAM) to create a conceptual framework for strategically using crowdfunding as a tool to lower the access to capital thus easing this barrier to entry. The primary research question is, “What factors impact entrepreneurs’ propensity to use crowdfunding in order to raise capital for new ventures?”

Literature Review

Porter (1980) outlined the five forces framework to identify degree of competition and resulting attractiveness of an industry: barriers to entry, power of suppliers, power of buyers, substitute products, and intense rivalry. The five forces framework is best when applied to for-profit industries (Oviatt & Miller, 1989). All five forces are typically in play at one time, and it is difficult to discuss one force without mentioning all five; however, the authors will attempt to focus primarily on access to capital as a barrier to entry.

Porter (1980) identified seven main barriers to entry: economies of scale, access to capital, access to distribution, and incumbency advantages, switching costs, government policy, and network effects. Euchner (2015) argued that the digital revolution may be responsible for eroding the first four of these. To narrow the scope of the article even more, the authors will focus primarily on access to capital as an eroding barrier to entry.

Microeconomic theory states new competitors enter an industry because they believe profit can be made (Bain, 1956; Das, Roberts, & Tybout, 2001). Furthermore, profit for new entrants can be depleted over time if new competitors continue to enter the market leading to the need to create higher barriers to entry to protect new entrants’ position in the market. Depending on the industry, substantial investment of capital may or may not be necessary to enter a market. In addition to time and foregone earnings of previous employment,
entrepreneurs may find significant expenses related to creating a business. These significant expenses are typically the first barrier to entry an entrepreneur encounters (Bruton, Khavul, Siegel, & Wright, 2015).

**Economies of Scale**

Bain (1956) found entry barriers vary with industry. Klapper, Laeven, and Rajan (2006) suggested entry barriers may negate the disciplining effect of competitors in countries with high entry barriers. Bain (1956) termed two types of entry barriers: strategic and structural. Structural barriers are not created by a firm, while a strategic barrier is an intentional effort by a firm to protect its position in the industry. Structural barriers may create an environment where a new entrant without existing capital would not be able to achieve a minimum efficient scale (Lofstrom, Bates, & Parker, 2014, p. 234).

Startups choosing a cost leadership strategy may find their potential competitors have the ability to achieve a minimum efficient scale therefore creating a high capital requirement (Lofstrom et al., 2014). Startups may choose to not enter a market due to competitors being able to decrease costs over the long run. Competitors intentionally develop a low cost strategy to raise barriers of entry.

**Access to Capital**

Capital requirements were once thought of as one of the biggest hurdles for an entrepreneur (Dahlqvist, Davidson & Wiklund, 2000; Voelker & McGlashan, 2013). Entry is eased when bank and trade credit are available (Klapper et al., 2006). Deloitte Touche Tohmatsu Limited estimated more than $3 billion was raised through crowdfunding in 2013 (Sholeh & Mackey, 2015). Access to capital comes in one of three ways: (a) borrowing, (b) trade credit, and (c) personal wealth (Disney & Gathergood, 2009; Fairlie & Krashinsky, 2012; Klapper et al, 2006). Entrepreneurs with personal wealth enter high-barrier industries more easily (Lofstrom et al., 2014).

**Access to Distribution and Incumbency Advantages**

Existing competitors have experience and relationships that startups do not. In addition, competitors may have already established preferred access to raw materials. The incumbent is a known organization with a potentially dedicated customer. Startups must overcome customer loyalty and the experience of their competition (Dahlqvist et al., 2000). This barrier to market entry can be overcome with large sums of available money if a small business or entrepreneur can overcome the access to capital.

**Crowdfunding**

Crowdfunding, or crowdsourced fundraising, is an extension of the broader concept of crowdsourcing (Poetz & Schreier 2012; Thurlow & Yue 2012; Yeoh, 2014). Whereas crowdsourcing involves using a network of individuals to develop creative solutions, crowdfunding entails using a network of individuals to develop funding (Gerber & Hui, 2013). Using the power of the Internet and social networks, crowdfunding provides startups and small and medium enterprises (Wroldsen, 2013). The significance is that small and medium enterprises typically to struggle to obtain capital via limited traditional funding channels and typically rely on nonbanking finance (O'Toole, Lawless & Lambert, 2015)—with an efficient, cost-effective opportunity to secure funds from countless investors around the world (Bradford, 2012; Colgren, 2014).

While terminology and definitions of types of crowdfunding vary across the literature, four types are generally discussed: donation-based, rewards-based, lending-based, and equity-based (Bouncken, Komorek, & Kraus, 2015; Colgren, 2014; Hollas, 2013). All of these are part of a growing technology process that is disrupting the capital market space (Beaulieu, Sarker & Sarker, 2015).
Donation-based crowdfunding projects
These types of projects offer the investor no tangible reward in exchange for financial support and are less commonly funded than rewards-, lending-, and equity-based crowdfunding projects (Belleflamme et al., 2013). Donation-based campaigns around the world received an average of $3,363 in 2014 (Boslet, 2015). Donating funds through sites such as GoFundMe.com and Indiegogo.com, funders support social causes, creative projects, humanitarian aid, and other efforts.

Rewards-based crowdfunding is another form of crowding funding
In exchange for financial support, those who fund rewards-based crowdfunding campaigns via platforms such as Kickstarter receive a tangible reward of some type, such as a memento of gratitude (t-shirt, decal) or first receipt of the product once ready for distribution. Rewards vary according to level of contribution in tiered campaigns. In 2014, reward-based crowdfunding grew 84% and the average campaign yielded $3,189 (Boslet, 2015).

Lending-based crowdfunding
This a form of investment crowdfunding that is sometimes referenced as marketplace lending, peer-to-peer lending, debt-based crowdfunding, or credit-based crowdfunding. Lending-based crowdfunding campaigns allow investors to earn interest on the money they lend to the project. Lending and borrowing is completed online via platforms such as Prosper and Lending Club without the involvement of a financial institution or use of an escrow system. These types of campaigns represent the largest segment of the industry, with 2015 funding expected to total $25.1 billion (“Global crowdfunding market,” n.d.). Easily fulfilling the role of a bank and offering a more efficient opportunity for expansion, this form of crowdfunding poses the most significant threat to traditional finance (Hollas, 2013). Lending-based crowdfunding, however, is also high risk for investors due to information asymmetry, anonymity, lack of control, and potential opportunism (Chen, Lai & Lin, 2014).

Equity-based crowdfunding
Equity-based crowdfunding is also a form of investment crowdfunding, allows investors to receive compensation in the form of shares or a percentage of sales and provides businesses that might otherwise seek—but not necessarily obtain—funding from angel investors and venture capitalists with an opportunity to gain access to necessary capital (Manchanda & Muralidharan, 2014). Nonfinancial motives typically play little to no role in the decision to invest in these campaigns (Cholakova & Clarysse, 2015; Cummings et al., 2013), which are made available via sites such as Crowdfunder.com, AngelList.com, and Localstake.com. The majority of businesses engaging in equity-based crowdfunding are startups (Borello et al., 2015). Equity-based crowdfunding totals were projected to reach $2.56 billion in 2015 (“Global Crowdfunding Market,” n.d.). Compared to donation-, rewards-, and debt-based crowdfunding, funds raised via equity-based crowdfunding represent the smallest portion of the industry. The reasons for such a small representation are due to legal restrictions on how funding needs may be advertised and which consumers are allowed to invest (Yeoh, 2014).

Technology Acceptance Model
As the gap between supply and demand for entrepreneurial funding grew in the wake of the 2009 financial crisis, crowdfunding gained popularity (Bruton et al., 2015; Yeoh, 2014). Growth has continued for this alternative form of financing, with global crowdfunding totals growing from $6.1 billion in 2013 to an expected $34.4 billion in 2015 (“Global Crowdfunding Market,” n.d.). One reason for the significant growth in crowdfunding was the change in Title II of the U.S. Jumpstart Our Business Startups Act. This change went into effect in September 2013. It removed “the ban on general solicitation, allowing startups to raise funds through new social media networks,” (“TABB Says,” 2014).

The rapid rate of adoption among both campaign creators and funders can also be explained in part by the TAM, which is a model commonly used to predict and explain user adoption or rejection of computer-based
technology and information systems (Davis et al., 1989; Ma & Liu, 2004; Yousafzai et al., 2010). An extension of the theory of reasoned action, the TAM identifies two determinants of intended behaviors: attitudes and subjective norms (Davis, 1986). According to TAM, user acceptance is determined by the user’s perceptions of a technology’s ease of use (perceptions that using the system will require no effort) and usefulness (perceptions that using the system will enhance job performance; Davis, 1989).

**Findings**

The use of crowdfunding by entrepreneurs and small startups is dependent upon two factors, effectiveness of crowdfunding and individual attitudes related to crowdfunding (Lacan & Desmet, 2017). The latter variable, attitudes, is a latent variable that may be measured through two observable variables, perceived ease of use, and intention to use. Figure 1 illustrates the relationships between these latent and observed variables.

![Crowdfunding Conceptual Model](image)

**Figure 1. Crowdfunding Conceptual Model**

**Crowdfunding Effectiveness**

The effectiveness of crowdfunding varies across campaigns and platforms. Small projects requiring less capital are easier to fund than projects requiring relatively large amounts of capital (Mollick, 2014). Further, nonprofit projects have a higher success rate than for-profit projects (Belleflamme et al., 2013). Finally, trust in borrowers and trust in crowdfunding platforms impact lenders’ lending intentions, making it important for borrowers to provide high-quality information concerning loan requests and to choose crowdfunding platforms that offer outstanding services and ample security (Chen et al., 2014).

Promotion plays a critical role in crowdfunding campaign success, as publicity efforts—or lack thereof—are considered a major contributor to project failure (Hui, Gerber, et al., 2014). Web-based crowdfunding campaigns are easily shared via social networking sites, which provide a low- or no-cost opportunity to tap into a seemingly endless network of friends, family, and colleagues. Per social network theory, campaign creators can think of each social networking site user as a node connected to many other nodes via a range of relationships, including friendship and professional affiliation (Marin & Wellman, 2010). A campaign creator sharing an investment opportunity with those in his online social network opens door for supporters to invest in the project through both financial investment and sharing the opportunity with their respective social networks.
Promotion of crowdfunding campaigns via social media is easy and low cost; however, Hui, Gerber, et al. (2014) posited that campaign creators generally struggle to maximize the potential of social media. The reasons are that campaign creators struggle to understand network size and ability to give, effectively ask for support, and develop a reputation/fan base before launching the crowdfunding campaign (Hui, Gerber, et al., 2014). Hui, Gerber, et al. concluded that entrepreneurs can maximize utility of social media in promoting crowdfunding campaigns by measuring the size of the support network, identifying those likely to support, and identifying reputation-building opportunities.

Perceived ease of use plays an important role in the acceptance of technology (Erasmus et al., 2015). Industry growth continues as entrepreneurs opt to pursue the speedier course of lesser resistance. Whether seeking funding for a creative project or a business venture, campaign creators complete similar easy-to-navigate, straightforward tasks via crowdfunding platforms. Processes and fees for establishing a crowdfunding campaign vary by platform and campaign type; however, setting up the campaign generally includes creation of the project title and video, identification of fund use and goal, establishment of campaign duration, and identification of reward details (Hui, Greenberg, et al., 2014). In the case of investment crowdfunding, which includes both debt-based and equity-based crowdfunding campaigns—processes typically include the additional step of verifying participants’ identity, income, and assets.

The nearly ubiquitous adoption of the Internet, social networking sites, and mobile computing devices undoubtedly increases the ease with which businesses may pursue and promote—and with which investors may learn about and support—crowdfunding campaigns. According to Pew Research Center, 84% of American adults use the Internet (Perrin & Duggan, 2015). The organization further reports 65% of adult Americans use social networking sites, with usage more likely in high-income households and among those with at least some college education (Perrin, 2015). Further, 80% of U.S. mobile subscribers have smartphones (Nielsen, 2015).

**Discussion**

Barriers to entry for small startups can be a deterrent for entrepreneurship and small business. For minorities, women, and entrepreneurs from lesser developed countries, these barriers can be even more difficult to overcome. Tools such as crowdfunding may ease the barrier of access to capital. Crowdfunding is a viable alternative to traditional sources of funding such as venture capitalists and banks for small start-up companies. A shift in perceptions about crowdfunding and the effectiveness of crowdfunding will lead to an increase use of crowdfunding. The crowdfunding market is growing every year. Wierzbicka (2018) found that this market is the fastest growing market in the United States. “According to the Beauhurst report on the U.K. capital investment market in 2015 estimated at £4.9 billion, the number of transactions increased by 26% compared to the previous year,” (Wierzbicka, 2018, p. 65). Share crowdfunding was the majority of these transactions and the dominant investment form for early stage development companies (Wierzbicka, 2018).

Despite this tremendous growth in the use of crowdfunding, there are still many late adopters of this technology. Understanding what factors influence the use of crowdfunding can help entrepreneurs gain access to capital through this market and ease barriers to entry. The conceptual model presented in this article is a starting point for exploring the use of crowdfunding further. Future research will include testing the validity of this model and the exploration of crowdfunding’s impact on three of the other barriers—economies of scale, access to distribution, and incumbency advantages (cost disadvantages independent of scale).
References


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The International Journal of Applied Management and Technology (IJAMT), sponsored by Walden University’s College of Management and Technology, is a peer-reviewed, online journal that addresses contemporary national and international issues related to management and technology.