



Management and Business
Research Quarterly



Management and Business Research Quarterly

2021(18)1–15



Digital Entrepreneurship Dimensions and Strategies: Crowdsourcing and Digital Financing

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Received 14 March 2020

Accepted 15 June 2020

ABSTRACT

This paper aims to investigate an agile, knowledge-based, innovative, and integrated solution for businesses, i.e., “Digital entrepreneurship”, which means creating new ventures and transforming existing businesses by developing novel digital technologies and novel usage of such technologies. On the one hand, financing the projects is unaffordable for the companies, and a crowdsourcing platform is a good way to mitigate the burden of expenditure. The Digital Entrepreneurship process is a multidisciplinary field: developing software is rooted in information systems (IS), conceptualising business models, and formulating strategy. In addition to that, digital entrepreneurship is located at the junction of knowledge, business, and institutional entrepreneurship. This complicated nature of digital entrepreneurship requires a strategy. The type of opportunities they pursue characterises the strategy of formation and sustainability for a new venture; therefore, the entrepreneurs need to select strategies to make the best position according to their resources or the attainable resources through crowdsourcing. We shed light on the importance of crowdsourcing to have a successful state-of-the-art business after reviewing the background of digital entrepreneurship, crowdsourcing, and the digital entrepreneurship strategy.

Keywords: *Entrepreneurship, Business Model, Crowdsourcing, Digital Entrepreneurship Strategy, Digital Technology, Digital Platform*

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doi:10.32038/mbrq.2021.18.01



Introduction

New inventions in science laboratories worldwide are rapidly developing, and their applications in people's daily lives resulted in new living trends. New daily routines and newfound ways of social and vocational life have built new vocabulary and young culture, which sometimes is unaccustomed and requires a transformation in thinking basis. Digital technology is one of those transforming forces in the modern new world. Digital technology, which is borne in conjunction with information technology and communication technology, deals with creating and applying digital devices or methods in all other sciences and technologies. The penetration of digital technology in all aspects of our life is undeniable and fast expanding. This comprehensive influence of digital technologies is making macro trends and changing our usual world.

Digital trends such as social media, Big Data, mobile services, cloud computing, the Internet of things, and robotics have changed the ways of collaborating, organising resources, designing products, matching complex demands and supplies, standards, and procedures (Markus & Loebbecke, 2013). Such fast-growing development has deeply transformed the highly competitive environment and business perspective. The new environment creates new opportunities and redesigned traditional business strategies, business models, and even new financing processes like crowdsourcing (Bharadwaj et al., 2013) and organisation structures. Due to this comprehensive effect, digital technologies (Von Briel et al., 2018) make new generations of digital goods or services and digital alliances (Zhang et al., 2021; Lyytinen et al., 2016), digital platforms (Tiwana et al., 2010), digital means or infrastructure (Aldrich, 2014), digital artefacts (Ekbria, 2009), or Internet-based service innovations (Kuester et al., 2018).

In addition, digital technologies have promoted the generation of the latest contexts where a constellation of actors with a wide variety of goals and stimuli interact dynamically to embark on business and innovation processes (e.g. LinkedIn). The dispersion of digital technologies has also created new routes for the outgrowth of entrepreneurial projects by balancing collaboration and collective intelligence (Bell, 2014). According to digital technologies, the new method of value creation and new sources of opportunities shape a new scope of research by the name of Digital entrepreneurship (Elia et al., 2020).

The concept of digital entrepreneurship was introduced to advert to the creation of new ventures and the transformation of existing businesses by expanding new digital technologies or applying a novel treatment of the same (Zhao & Collier, 2016; Shen et al., 2018). It is also known as cyber-entrepreneurship since it associates using Internet and technology platforms to govern and accomplish the business operations with customers, intermediaries, or partners (Shabbir et al., 2016; Ismail et al., 2012) to sell digital products and services across electronic networks. New ventures rely on fast-growing, lower-priced, and more customised marketing in such an extraordinary digital era. Using AI in digital marketing activities, entrepreneurs can benefit from a high valuable response from the target audience and earn better outcomes. Entrepreneurs are empowered to use cloud computing, storage, and modern machine learning as a service on-demand with pre-trained machine learning patterns. Elegant CRM tools assist sales in promoting as well as marketing automation and customer service. These digital implements

will continue to add value to historical and emerging data, help optimise commercial timing, increase resources, and diminish waste with well-informed decisions. In this field, digital business models, digital entrepreneurship process, platform strategies, crowdsourcing, and social digital entrepreneurship are topics to be more investigated (Hamburg et al., 2019).

What is Digital Entrepreneurship?

Based on Schumpeter's definition of entrepreneurship, Entrepreneurship is the process of developing new products or services in a new market by capturing new resources or using new processes (Tülüce & Yurtkur, 2015). This definition is the basis of another version of entrepreneurship that is technology entrepreneurship. Commercialising all the breakthroughs and science-based inventions are samples of technology entrepreneurship. Digital Technology Entrepreneurship results from using a combination of information and communication technology in value creation methods or value proposition. Using ICT as a part of the entrepreneurship process is the key difference between digital technology entrepreneurship and technology entrepreneurship. Smartphones are the famous samples of digital technology entrepreneurship. However, digital entrepreneurship is more than using ICT in the process. The whole concept is based on digital technology, and the business model is constructed by digital elements with a digital mindset and culture. The business is based on the Internet, using the cloud, AI, AR, Big Data, or running in digital platforms. Snapchat is one sample of this kind of entrepreneurship.

The idea of digital technologies was illustrated as the consequence of three separate but embedded elements, i.e. digital artefacts, digital platforms, and digital infrastructures (Nambisan, 2017). From Nambisan's point of view, the digital artefact is an element, application, or media content existing as a stand-alone good or service or a part of a platform. The digital platform is considered a set of participated digital services to host supplementary offerings, including artefacts and digital infrastructure, as digital technology instruments and systems that promote entrepreneurship (Elia et al., 2020; Ekbia, 2009; Kallinikos et al., 2013). Applications and software which you may download from App stores, health programs on your smartwatch, and even financial software which enables us to pay our bills are examples of digital artefacts.

A digital artefact prolongs physical products to support innovation, like those companies that use social networking sites to expand social capital and trial sharing economy models (Sigfusson & Chetty, 2013), or distinguish new business opportunities (Richter et al., 2017). Other prevalent examples of artefacts are websites available on the world wide web, smartphone applications, the Internet of Things (IoT) connected devices, such as robots, gadgets, home automation devices, and smart kitchen appliances (Von Briel et al., 2018). Digital infrastructure collects digital technology equipment and systems that present collaboration, communication, and computing capacities. Samples of infrastructure are cloud computing resources such as Amazon Web Services, 3D printing, social media, artificial intelligence, and web data analytics (Rippa & Secundo, 2019).

These tools make venture creation easier and faster. Entrepreneurs could use these digital infrastructures to capture, evaluate or customise more entrepreneurial Ideas, opportunities, or even funds. Rely on these aspects of digitals; they have more reliable tools to support end-to-end entrepreneurial activities (Nambisan, 2017). Crowdfunding and other crowdsourcing systems are digital gifts for entrepreneurs, which open their hands and improve their potentials (Parker et al., 2016; Tiwana et al., 2010). They can be considered software-based platforms made by the extendable codebase of a software-based system that equips the pivotal functionality shared by the units, and junctions with its interoperate (e.g., Apple's iOS and Mozilla's Firefox browser). Services of digital platforms emphasise real-time matching between multivariate requests and extremely personalised offerings (Parker et al., 2016) and fulfilling activities that need digital input but may associate with both physical and digital possessions (Sussan & Acs, 2017) like Uber and Airbnb. Digital platforms have strengthened an affiliate industry transformation and created new cornerstones for industry leadership and ecosystem innovation (Gawer & Cusumano, 2014). Examples of platforms are Apple iOS, Android, or Atlassian developer ecosystems. Digital platforms are fruitful for entrepreneurs to share their potentials and cover their week points using others' power and resources collaboratively. Ecosystem-based digital platforms allow entrepreneurs to work in a richer environment and offer newer and more diverse resources. Based on interactional platforms, new markets, new resources, and new business models are developed.

Digital Entrepreneurship in Entrepreneurship Theories

DE is a multidisciplinary approach: creating new ventures is rooted in entrepreneurship while developing software as a building block in the entrepreneurial process or as an innovative outcome is rooted in information systems while conceptualising business models and formulating strategy are housed in management. Consequently, researchers in this field have determined digital entrepreneurship with different terms, including (i) information systems (Du et al., 2018), (ii) innovation (Nambisan et al., 2017) and (iii) management, business (Berger et al., 2015), (Sahut et al., 2019), (iv) policy (Nambisan et al., 2019), and (v) strategy (Autio et al., 2011). This variety resulted in diverse theories and different points of view.

DE with IS Lens

Due to information technology literature, IT has four major roles in entrepreneurial operations: first, as a mediator for new venture operations; second, as a facilitator, making the operations of new ventures easier; third, as an outcome of entrepreneurial actions; and finally as a ubiquity, turning into the business model itself. According to leverage these IT roles, a set of definitions are developed for clearing up definition uncertainties surrounding IT new ventures such as digital new ventures and digital business models (Steininger, 2019). Considering these four roles, the last one, which is about new IT-based business models, has absorbed more attention. For example, in a digital business model, optimum ways of capturing digital opportunities based on entrepreneurial capabilities resulted in valuing creation for customers and investors.

The popularity of digital entrepreneurship has flourished many research opportunities for Information System (IS) scholars. Digital entrepreneurship is a multidimensional phenomenon and should be investigated across multiple levels, from individuals to firms to communities, although more studies have primarily focused on firm-level characteristics (Del Giudice & Straub, 2011). For example, based on a study case of eHarmony, Davidson and Vaast survey how digital new ventures conduct socio-material practices to earn entrepreneurial opportunities (Davidson & Vaast, 2010). Sambamurthy brings up how organisations combine entrepreneurial awareness and IT with building organisational agility (Sambamurthy, 2003). On the opposite, researches that adopt a community perspective are limited.

DE Trajectories Theory

Entrepreneurial trajectories are operationalised in terms of new venture creation adopted models from Bakker and Shepherd, containing three process phases called prospecting, developing, and exploiting (Bakker & Shepherd, 2017). Based on this, there is a conceptualisation of how and when various digital technologies (e.g., 3D printing and electronic development platforms) empower the approval and formation of entrepreneurial trajectories in the IT hardware industry. Some researchers have recognised two conceptual dimensions that specify digital technologies and their capability to form entrepreneurial trajectories across the forenamed phases in this context rationality and specificity. While rationality describes a set of given relationships by digital technology can establish and leverage to facilitate its functionality, specificity refers to the degree to which digital technologies determine what kind of resources can serve as inputs for a given digital technology. In addition, how these inputs are transformed into outputs? In analysing the routes of digital entrepreneurship, drawing concepts of specificity and rationality can help to disentangle the digital component and its potential influence on entrepreneurial trajectories (Von Briel et al., 2018).

Business Model

In the digitalisation era, firms are obliged to change their BM along two key dimensions: (i) the first dimension relates to the customer needs understanding as digital technologies potentially unveil customers' intrinsic motivations in the world (Pariser, 2012) and (ii) the second dimension implies changing from a controlled value chain orientation to a network orientation based on a web of relationships. These dimensions form areas of development for the next generation of businesses and entrepreneurs contributing to entrepreneurship literature, show that the dynamic boundaries of innovation have given entrepreneurial processes fewer bounds than in the traditional economy (Nambisan, 2017). Consequently, entrepreneurial processes emit incremental and nonlinear paths facilitated by platforms and digital artefacts.

Digitalisation has helped to collapse the boundaries among the different phases of the entrepreneurial process and has remarkably favoured reducing the invention to innovation obstacles (Bell, 2014; Steininger, 2019). Under this condition, entrepreneurs can make their ideas scalable according to lasting business criteria while leveraging digital technologies to

favour opportunity assessment, ideation, ideas proving and testing, and design of effective business models. Specifically, there are three conditional mechanisms for underpinning rapid scaling: (i) data-driven operation, (ii) urgent release, and (iii) prompt transformation and describe how these mechanisms are linked to the rapid scaling of digital ventures (Huang et al., 2017). According to that, Srinivasan and Venkatraman demonstrate that entrepreneurship success is complexly connected to the actions of other entrepreneurs and coordinated within and across platforms (Srinivasan & Venkatraman, 2018). These outcomes want to find a solution for how digital entrepreneurs can coordinate strategic moves to conduct the intricate digital landscape and how their selection can affect the entrepreneurial process and success (Le Dinh et al., 2018).

DE, Trajectories and Innovative Business Model

The business model concept supplies an alternative for operationalising an emerging digital entrepreneurial firm's directions and shifts. Predominantly speaking, a business model mentions an organisation's mode of business accomplishment (Zott et al., 2011) and consists of several interrelated building blocks that light on central organisational design elements (Casadesus-Masanell & Ricart, 2010; Jaap et al., 2005). This includes, for instance, value proposition, customer segments, resources and capabilities, networks, and partnerships (Al-Debei & Avison, 2010; Jaap et al., 2005; Wirtz et al., 2016). Furthermore, while following a trajectory, entrepreneurial companies seek a measurable and repeatable business model by clarifying the design mentioned above elements (Blank, 2013). As a result, the business model concept can serve as a sensitising device for operationalising emerging digital entrepreneurial enterprises' trajectories and shifts. More specifically, the business model concept in terms of the aforementioned organisational design elements (Osterwalder & Pigneur, 2010; Wirtz et al., 2016) 1) provides a framework for obtaining and displaying emerging digital entrepreneurial firms' trajectories and 2) allows pursuing the development of directions and shifts thereof over periods. Respectively, this enables the detection of the mechanisms by shaping entrepreneurial trajectories via digital technologies.

Crowdsourcing

Crowdsourcing is a model that focuses on problem-solving and task realisation. About the origin of crowdsourcing, it stems from information and communication technologies (Chanal & Caron, 2008), more specifically from the Web 2.0 and Web 3.0 developments (the phenomena has led to emerging new models for business, learning, communication, and personal ties) and it is related to business and innovation (Garrigos et al., 2015). By the use of the Web 2.0 collaborative nature, and the use of the technological advances brought with the Web 3.0 (semantic web), and lastly with the development of Big Data related technologies and the ubiquitous web, crowdsourcing allows a person, institution, or company to make a benefit from the work, ideas, or wisdom of the crowd of the Internet. This crowd has heterogeneous nature, can be formed by ranging from amateurs to professionals. Therefore, it can conclude that the crowd does not belong to a particular user community (Brabham, 2012). Indeed, the principle rationale is collective intelligence, which helps leverage the "wisdom of crowds" to have aggregate

evaluations rather than an individual evaluation (Mannes et al., 2012; Klein & Garcia 2015; Blohm et al., 2016). Surprisingly enough, it informs decision-makers to create new ideas through multiple sources to resolve a problem (Dellermann et al., 2017; Garrigós et al., 2016).

The Use of Crowdsourcing in New Business Model Invention

The crowdsourcing process has expanded since the 1990s with the ever-rising growth of the Internet, which played a pivotal role in emerging new forms of cooperation between consumers (or other agents) and firms in the production process and service provision. In this point of view, customers are considered co-workers, while other agents can provide new ideas, innovations or solutions not previously considered by the firms. In line with this approach, “crowdsourcing” is defined as opening an organisation’s innovation process to integrate countless and prevalent outside expertise via web facilities. These professions can be creative people, engineers, or open-source communities (Chanal & Caron, 2008).

Undoubtedly, the idea of using proven outside knowledge and competencies is appealing to organisations to invest in. Therefore, there is an absolute need for implementing strategic use of Crowdsourcing in innovation processes. At this stage, the organisations need challenges in their business model. It is difficult to explain the moderated business model to potential investors and convince them of crowdsourcing potential value creation. However, the vision is completely obvious and has been defined as the value-sharing model for the different contributors of the community. To increase the publicity of utilising crowdsourcing in new ventures, social networks greatly make this process practical (Geiger et al., 2011).

Social media has emerged as a new effective platform for digital marketing. Supporting the resource view of the organisations, crowdsourcing is a powerful ground for social media marketing. Crowdsourcing on social media for marketing reinforces companies in mitigating marketing expenditure, fueling their growing speed, and promoting organisational learning, collaboration, and performance. There is a triple relationship between social media, crowdsourcing, and marketing. It is clear cut that the strong network helps the company to improve, innovate, and cultivate crowdsourced wisdom. Everything that determines the future of social media, crowdsourcing, and marketing is, companies change for the sake of stakeholders, business, and processes (Inder, 2021). Crowdsourcing is critical in the new marketing era, pivoting from Digital Marketing 4.0 till Marketing 5.0, which incorporates the new Big Data relative technological improvements and the human size. This is essential as Marketing 5.0 “is build upon the human-centricity of Marketing 3.0 and the technological prowess of marketing 4.0 (Kotler et al., 2021). However, there are other varieties of crowdsourcing processes, including instance crowdvoting, creative crowdsourcing, micro-work, crowdsource workforce management, or even crowdfunding, which are extensively used to finance diverse ventures or projects (Galdon et al., 2016; Garrigos et al., 2014, 2017a,b), as we will explain later.

Digital Ecosystem

The success of a digital new venture relies not only on internal operations but also on its surrounding community (Autio & Fu, 2015). Thus, as the Aspen Network of Development Entrepreneurs claims in 2013, the first step to entrepreneurship simulation is mapping and measuring the existing entrepreneurial ecosystem. Merging of ideas from two well-designed concepts, the digital ecosystem (Li et al., 2012) and the entrepreneurial ecosystem, pursue companies to provide a perceptual framework to help to conceptualise DE according to major structural components including governance infrastructure, digital marketplace, digital citizenship, and digital entrepreneurship (Sussan & Acs, 2017). An entrepreneurial ecosystem comprises entrepreneurs by creating digital enterprises and innovating products for many users and agents in the global economy. The digital ecosystem is defined as a self-regulate, measurable and sustainable system of incoherent digital natures, and their interrelations focus on interactions among entities for raising system utility, earning benefits, promoting information sharing, cooperating, and system innovating (Li et al., 2012).

There is a principle based on the integration of entrepreneurial ecosystem (institutions and agents) and digital ecosystem (users, digital infrastructure) to fill the gap in entrepreneurship understanding in the digital age, which means it involves the interactions of agents and users incorporation in the consumers' vision as the main point of analysis (Sussan & Acs, 2017). After the publication of this model, many articles concentrated on this type of ecosystem. (i) Consumers on the demand-side or producers on the supply-side; (ii) digital technology entrepreneurship that integrates all agents in production based on to the platform; and (iii) a multi-side digital platform as intermediation of transaction. This has brought a progressive ground for empirical researches. Its digital dimension enriches the latest-published framework; it contributes new literature for research centred on geographic context or industrial clusters (Sahut et al., 2019).

Digital Entrepreneurship Strategy

Digital entrepreneurship presents a guarantee for people who want to use the capabilities of new ICTs. Key elements in entrepreneurship exploit and identify special opportunities that lead to profits (Shane & Venkataraman, 2000). The main strategy that an entrepreneur has to choose is about the amount of digital in the business. How the business is dominated by digital technology is bonded to the nature of business and value creation strategies. In this way, Entrepreneurs choose how to form the entrepreneurial business framed in three different types, as Hull referred to in 2007. The first type is named "mild digital entrepreneurship". This type includes venturing into the digital economy as a "traditional venues supplement", which means importing one digital module in a traditional business (Hull et al., 2007). There are many samples in business ecosystems that use digital technologies in their financial unit or marketing department. The second one is "moderate digital entrepreneurship", which requires a considerable focus on digital delivery, digital products, or other digital components in business (Shane & Venkataraman, 2000).

This kind of digital entrepreneurship needs to be with its digital infrastructure. The third is “extreme digital entrepreneurship”, which means that the entire venture is digital, including production, distribution, advertisement, and customers. Digital-focused business models in these kinds of entrepreneurship and capturing the opportunities made by the digital world are obvious elements of these businesses. By these definitions, digital entrepreneurship is characterised as entrepreneurship in which a few or the majority of the entrepreneurial venture happens digitally rather than traditionally (Hull et al., 2007). As a result, in an entrepreneurial venture, the workplace, the products, the distribution, and the other factors can transform into a digital form. Such ventures can confront various opportunities and challenges, so companies have to act in new ways. According to ICT Literature, digital strategy is about choosing which technology should be imported into the value creation process. Business strategy is the organisation’s way of profit-making and value-creating. Entrepreneurship strategy means how to convert an opportunity to value and profit in an innovative approach. Merging these three concepts to make a profit in the digital era with its unique opportunities and challenges makes a new, more comprehensive concept called “Digital Entrepreneurship Strategy”. Strategy formation and content of strategy in an entrepreneurial and digital business could not be like traditional businesses. The strategy for new digital business should be quick and lean. The speed of transforming in the digital era is fast and furious, and new businesses could not wait for long strategy-making processes. It is the reason for the popularity of innovative business models instead of innovative strategies in entrepreneurship.

The sort of opportunities they follow distinguishes strategies of formation and sustainability for the new ventures, and the entrepreneurs need to opt for strategies that make ample use of the opportunities and resources they have or can gain. Likewise, the strategy can characterise the digital entrepreneurship intensity, which determines the amount of digital technology in processes and outcomes. In other words, entrepreneurs can select the scope, scale, speed, and resource for digitalising entrepreneurship under strategy recognition. Despite the importance of digital entrepreneurship strategy in different new venture life cycle levels, it is still a research-demanding field. A digital strategy can be a growth engine for a business rather than just a functional tactic combined with a business strategy. This definition of digital business strategy is ‘that of the organisational strategy formulated and accomplished by leveraging digital resources to make differential value’. They identify four themes in digital strategy: the scope of digital business strategy, the speed of digital business strategy, the scale of digital business strategy, and the sources of business value creation and obtain in digital business strategy (Bharadwaj et al., 2013). To make a profit, a vast number of companies employ multilateral business models. These companies allocate some products or services to take the value to another level.

A good instance of this is Google’s entry into mobile phones that gives the software free but makes money through controlling advertising. Value creation in the digital world may extend to coordination through a wide variety of companies, a form of co-creation. Infrastructure can be combined and present-shared value. It is argued that business processes will have been structured as comprehensive modules that align with other modules, which has vivid implications for

business model improvement. When modularisation occurs, the entrepreneur will find a situation in the business model modules coordination, which will be the key skill (Pagani, 2013). Digital entrepreneurship is in some way different from the traditional conceptualisation of brick-and-mortar entrepreneurship (Chesbrough, 2010). Digital entrepreneurs consider imaginary business models part of the opportunity identification phase in starting a new venture. Digital entrepreneurs are good at explaining how they recognised an opportunity but not as obvious at explaining business model components. Instead, digital entrepreneurs concentrate on three key business model components that are fine in their simplicity.

There is a focus area for digital entrepreneurs that are driven by three components as transacting/matching, marketing, and back-office. Entrepreneurs are struggling with digital technology in enterprises to react to heightened societal and business digitalisation (Hansen, 2019). Digital strategies are guidelines for entrepreneurs who either improve existing business models or create new ones to prioritise their efforts to find out how digital technologies can assist business processes and create value in implementation processes. There is also an extreme interest when entrepreneurs are “competing in the digital era with unique opportunities and challenges”(Hull et al., 2007). Researchers have examined personality traits related to situations such as taking a risk, controlling or achieving successful entrepreneurship, and emergence. Industries with a lot of resources and opportunities have more chances to start. On an institutional level, factors such as culture, political turbulence, and media influence can be considered rates of organisational emergence (Mercer, 1999).

New ventures develop a cognitive schedule of cause and effect relationships between particular processes and their outcomes and an understanding of the timing and selecting of specific proceedings to use them holistically in combination with others in response to internal and external forces. They found that new ventures typically developed their organising policies by creating a harmonised set of processes and understanding of what and when they can spread these processes as their environmental adoption (Autio et al., 2011). A methodology that promotes ‘lean start-up’ has prepared momentum due to the high rates of traditional planning and start-up approach failures; a lean approach centres on experimentation rather than detailed planning, customer feedback, and repetitive design. The concept also consists of the ‘minimum viable product’ idea and ‘pivoting’ away from not working things (Blank, 2013).

A strategic path in digital entrepreneurship is using digital platforms in new ventures. Digital platforms have attention to collaborating and knowledge sharing among users, companies, and other agents thanks to leveraging network effects (Fisher, 2012); while platforms can be digital and non-digital, the concept has been highly engrossed in its digital instantiation. DE related research on digital platforms spans from more systemic analysis of platforms in terms of structure and governance down to the firm level, and by focusing on how digital entrepreneurs can strategise to earn the benefits and limiting the damage of linking their business with platforms (Srinivasan & Venkatraman, 2018). In addition, cooperating between upstream and downstream enterprises can boost the development of new products (Nambisan et al., 2019; Yetis-Larsson et al., 2015). For example, a firm can employ digital technologies as feedback to

the given problem (open innovation, open-source, crowdsourcing, co-innovation) and design or customise an offering (personalisation, mass customisation, or co-design), and even increase it (crowdsourcing advertising campaigns or soliciting opinion leaders) from upstream of its offer (Abbes & Troudy, 2017).

Downstream of its offer, a firm may use digital technologies simultaneously to produce its service (self-service technology), to understand the value attributed to its offer and digital presence (user-generated content), or to provide information to increase quality (online discussion at the after-sales service level). Another use of platforms is crowdfunding (Mollick, 2014), making it possible to absorb capital from a vast public through specialised internet platforms designed to host financing campaigns and agencies for entrepreneurial projects. The direct relationship between project accelerators and inexperienced investors shows many problems because of information asymmetry escalation (Cumming & Johan, 2008). Crowdfunding platforms and social networks can also be a way for investors to exchange information and better-evaluated projects to finance.

Conclusion

Digital entrepreneurship is defined as creating new innovative ventures based on digital opportunities, using digital technologies in value creation, or having digital parts in their outcomes. Digital Entrepreneurship strategy is about the nature and amount of digital technologies in value creation; it is also about the innovative business models adapted to the digital ecosystem and its players. Scope of using digital technologies in new venture creation, the scale of digital penetration in business, speed of digital transformation in all aspects of business, and type of resources in digital businesses are strategic decisions, which entrepreneurs have to make. Lean strategy and platform strategy are two samples of digital strategies, which are favourable for entrepreneurs. For a long time, enterprises limited by lack of credit information or insufficient assurance suffered from banks' financial services. Although governments and international organisations have tried to provide various policies like incentives and financing support, the point is that high service cost and some of the finance from official sources for innovations remain to be intensively challenging. Therefore, alternative models for funding such as impact investment, venture capital, and crowdsourcing need to be considered.

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Acknowledgements

Not applicable.

Funding

Not applicable.

Conflict of Interests

No, there are no conflicting interests.

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