

International Studies in Entrepreneurship

Giuseppina Passiante *Editor*

Innovative Entrepreneurship in Action

From High-Tech to Digital
Entrepreneurship



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Giuseppina Passiante

Editor

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Editor

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Chapter 1

Introduction



G. Passiante

Innovative entrepreneurship is considered in a broad range of scientific contributions (Audretsch et al. 2000; Oksanen and Hautamäki 2014) as a fundamental actor for a sustainable smart growth and as a regional advantage. Innovative entrepreneurship's central role in regional performances is mainly related to its strategic capacity to generate innovations, thus boosting its socioeconomic system (Urbano et al. 2019). These innovative activities allow capturing new technological knowledge and introducing new products and services based on this knowledge (Malerba and McKelvey 2019). As a consequence, healthy rates of both company startups and scale-up processes develop, generating broader economic health. These processes follow different pathways: some companies rely exclusively on organic growth. Others scale up through IPOs (initial public offerings) or through acquisitions of other firms. The organic growth route develops in different ways, since each innovation's pathway is unique to each company, but there are some common patterns and similarities across companies, mainly in the growth stages and in the strategies implemented. The companies' various phases usually follow three principal phases: "startup," "growing to scale," and "execution and innovation at scale," with a different set of challenges and milestones (MIT 2015) (Fig. 1.1).

In an IPO, a company sells its shares to institutional investors to raise new equity capital, monetize its investments in innovations, or enable easy trading of its innovative holdings or future capital.

Finally, firms can scale up through different transactions, such as mergers, acquisitions, consolidations, tender offers, asset purchases, and management acquisitions (MIT 2015).

Figure 1.2 shows the interactions between innovative companies that develop during their pathways of scale.

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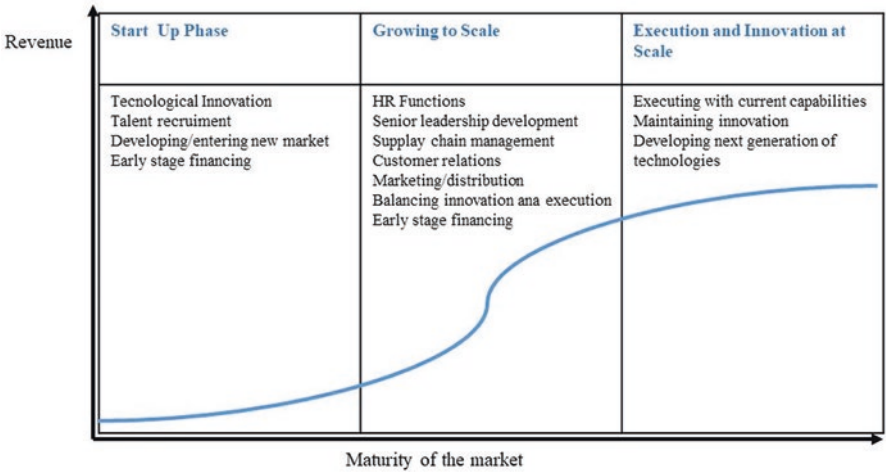


Fig. 1.1 Stylized stages of growth. (Source: MIT 2015)

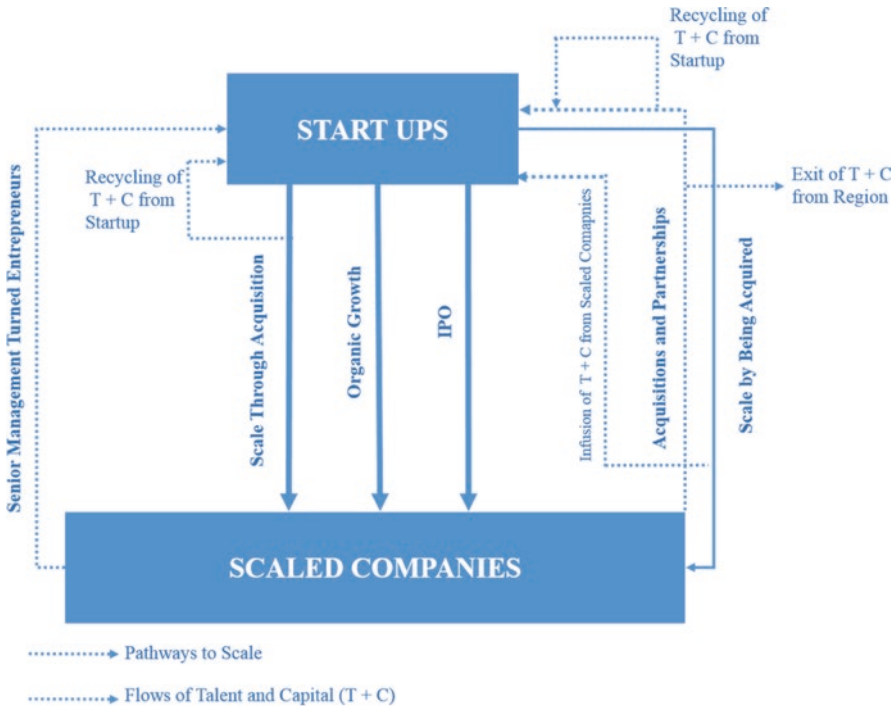


Fig. 1.2 Interactions between innovative companies for their scaling-up. (Source: Adapted from MIT 2015)

During their specific pathways of scale, companies develop interactions among themselves, creating a positive feedback loop that enhances the creation of innovation networks. These networks create a dynamic “interdependent innovation system,” attracting other emerging firms and technologies to locate near it (Yoffie and Cusumano 2015).

This book focuses on how to develop an “interdependent innovation system,” discussing:

1. At a microlevel, innovative entrepreneurs and innovative entrepreneurship strategies, organizational changes, and digital innovation, including both traditional industries and hi-tech sectors
2. At a meso- and macrolevel, innovative entrepreneurship facilitators; their research, innovation, and education processes; their socio-technical system; and their main performances in supporting entrepreneurs during the creation and scaling up of innovative startups

1.1 Innovative Entrepreneurs and Innovative Entrepreneurship Strategies, Organizational Changes, Digital Innovation, and Funding Processes, Including Both Traditional Industries and Hi-Tech Sectors

Chapter 2 aims to define the various connotations of digital entrepreneurship as well as the distinguishing features and “dimensions” of successful digital entrepreneurship. In particular, the final purpose is to derive the digital entrepreneurship “genome” as well as the key activities for its effective management. The idea underlying the digital entrepreneurship genome is to identify and classify the DNA of successful digital entrepreneurship by providing an initial reference framework useful for further theory and practitioner development. From a theoretical point of view, the study can be considered a knowledge platform for investigating the antecedents of digital entrepreneurship success. For practitioners, Chap. 2 provides a reference guide and management checklist to design and implement more effective initiatives aimed to facilitate, nurture, and develop successful entrepreneurial processes in digital contexts.

Chapter 3 shows how tradition may be effectively employed to face competition, allowing companies both to create and to appropriate value. More specifically, it proposes a new strategic approach based on a set of competencies, knowledge, values, and culture that characterize a specific firm, territory, and/or age. The chapter is structured as follows. At first, the strategic role of tradition is presented and investigated. Furthermore, three companies are analyzed, pointing out the mechanisms they employ to create and appropriate value by tradition. Finally, the cases are discussed, providing some provisional conclusions for adopting a tradition-based strategy.

Chapter 4 provides a set of empirical cases of common and different patterns that technological startups follow for innovating their business model by leveraging their intellectual capital assets, as well as the enabling conditions that may support and sustain the overall process. The study relies on an exploratory research based on the analysis of three case studies, with data gathered through personal interviews with the companies' founders.

Chapter 5 aims to explore the contribution of project management (PM) to business startups, presenting a PM-based interpretative framework predicated on the assumption that business startups can be interpreted as entrepreneurial projects. The framework combines the evolutionary path of the business startup life cycle with PM approaches and methodologies to support startupperes in addressing the uncertainty of the entrepreneurial process. Indeed, it highlights that the management of flourishing business startup projects can be supported by balancing traditional and agile project management methodologies according to the level of uncertainty and complexity of the different stages of their launch and development. Implications for practices include a framework as a roadmap to support nascent entrepreneurs in managing entrepreneurial projects.

Chapter 6 provides a picture of the different organizational innovations, with a particular focus on the exponential organization model and its distinguishing features. Moreover, the concept of crowd venturing is presented as a strategy and a process to facilitate exponential innovation and new venture development. Finally, the chapter presents the idea and the model of corporate "Excelerator," as a new strategy and tool which organizations must develop to leverage exponential innovation for their organizational and market excellence.

Chapter 7 provides an overview of the main instruments, processes, and actors that can support the development of an entrepreneurial idea and the growth of a startup during the different stages by describing exemplary cases and initiatives of 3Fs funds, public funding, business angels, crowdfunding, venture capital, initial public offerings, corporate venture capital, banks, incubators, and accelerators. In particular, it points out the relevance of a clear and valuable support to each phase of the startup creation (e.g., ideation, validation, build, launch, growth, and maturity), with a specific focus on the financial sources that can be used to implement each phase.

Chapter 8 is focused on the role of Innovation Laboratories (Innovation Labs) in supporting the development of organizations' innovation capacity. In the current competitive landscape, creativity and innovation have indeed become a strategic source of the organizations' competitiveness. However, innovation presents risks, uncertainty, and a number of barriers. The key challenge is then how to innovate successfully. This chapter aims to provide managers with a conceptual framework to understand, from a descriptive and a prescriptive viewpoint, how to set up their organizational units and initiatives for developing their innovation capacity.

Chapter 9 aims to contribute to the advancement of the debate on the meaning and implications of circular economy for innovative entrepreneurship by

presenting the results of a structured literature review and providing a theoretical conceptual framework for understanding the relevance of innovative entrepreneurship issues in the light of the circular economy. Moreover, the chapter discusses the main trends and scenarios of application of circular economy at the level of firms' business models and dynamics of value creation and capture, exploring its implications and meaning for the conception and execution of innovative entrepreneurship.

1.2 Supporting Innovative Entrepreneurship

Chapter 10 explores the strategic role of the Italian “Contamination Labs” (CLabs) created inside some public universities and financed by the MIUR (Italian Ministry of Education, University and Research). CLabs are innovative laboratories aimed at developing an entrepreneurial mindset, creativity, and innovation among the university students enrolled in the different degree programs. The chapter points out the central role of the CLabs' knowledge processes, where business ideas, open innovation challenges, workshops on specialized topics, enterprise projects, and business games allow the development of the future student entrepreneurs. Implications for practices are delineated in terms of general recommendations that universities should adopt.

Chapter 11 is focused on the role of business incubators and business accelerators as facilitators of innovative entrepreneurship. Indeed, business accelerators and incubators present some differences and communalities in supporting their incubated firms, where innovations are created and validated in collaborative, multi-contextual empirical real-world settings. Recently, hybrid facilitators are also playing an increasing role in supporting early-stage, growth-driven companies through education, mentorship, and financing. Chapter 11 presents TecnoPolis as a case study of hybrid facilitator. The chapter describes its strategies and organizational assets. Moreover, it debates in detail its research, innovation, and education processes, technical platform, and performances in supporting the entrepreneurs that face the challenges of innovative startups.

Chapter 12 describes the experience of IMAST, a technological district (TD) located in southern Italy, focused on the enabling technology of advanced material. This intermediate organization supports the development of links between the scientific and research institutions and national, small, medium, and large enterprises, by selecting contacts, fostering partnerships, providing resources and skills, and allowing an easier access to finance. The results obtained may be evaluated in terms of the innovation networks it has developed, such as structurally established collaboration networks for coproduction, or knowledge transfers among public and private research nodes and the fabric of companies.

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Chapter 2

The Genome of Digital Entrepreneurship: A Descriptive Framework



G. Elia, Luca Gatti, and A. Margherita

Abstract The study of entrepreneurship literature has highlighted the presence of a number of antecedents of successful initiatives at individual, organizational, and ecosystem level. Such conditions assume more peculiar meaning, relevance, and dynamics in the context of technology-based ventures. In them, the entrepreneurial process is conceived, designed, and undertaken in a landscape of digital platforms and multi-stakeholder communities that interact within digital ecosystems. In such an endeavor, the objective of the chapter is to define the multiple meanings of digital entrepreneurship as well as the distinguishing features and “dimensions” of successful digital entrepreneurship. Using theory and practical evidence, a set of key success factors and enabling or facilitating conditions are extracted and organized along a process-based view showing the different stages and steps of the entrepreneurial roadmap. The study is undertaken using a combined desk, premarket, and market view of the entrepreneurial process. The final purpose is to derive the digital entrepreneurship “genome” as well as the key activities for its effective management. While a genome is an organism’s complete set of DNA, including all of its genes, and contains all of the information needed to build and maintain that organism, the idea of the digital entrepreneurship genome is to identify and classify the DNA of successful digital entrepreneurship. This is done by providing an initial reference framework useful for further theory and practitioner development. In theory, the study can be a knowledge platform for investigating the antecedents for the success of digital entrepreneurship. Meanwhile, for practitioners, the chapter provides a reference guide and management checklist to design and implement more effective initiatives aimed to facilitate, nurture, and develop successful entrepreneurial processes in digital settings.

Keywords Digital · Ecosystem · Entrepreneurship · Framework · Genome · Process · Technology

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2.1 Introduction

The increasing convergence between entrepreneurship and digital technologies is generating a new type of entrepreneurs that exploit the potential of digital technologies along a twofold direction (European Commission 2015; Zhao and Collier 2016; Shen et al. 2018): on one hand, they create new ventures that transform the existing businesses by launching on the market a new digital-based offering. On the other hand, digital services and the Internet may be used to collect resources and perform activities required to accomplish the overall entrepreneurial process and launch a new venture.

The concept of *digital entrepreneurship* thus delineates the emergence of a new entrepreneurial paradigm, which can be characterized by two main features (Hosu and Iancu 2016): (i) it is strongly centered on the use and adoption of the Internet and digital technologies to support the execution of entrepreneurial activities as well as defining the entrepreneurial output; (ii) it leverages the innovation potential embedded into large web-based communities where individuals with heterogeneous background participate and cooperate to undertake an entrepreneurial activity.

Therefore, digital entrepreneurship can revitalize the technological innovation process within existing industries and can contribute to creating new sectors that leverage the adoption and use of digital technologies. Exemplary cases may refer to digital technologies such as social media, mobile apps, business analytics, Internet of things, big data, advanced manufacturing, blockchain, 3D printing, cloud computing, cybersecurity solutions, massive open online courses (MOOC), and artificial intelligence, which are reshaping markets, industries, and societies overall (European Commission 2017; Nambisan et al. 2017). Through such technologies, incumbents have the opportunity to undertake a digital transformation process and stay competitive in the market, while startups and spin-offs have the chance to design and produce a radical innovative offering that may open new market niches at global level. Both of them can also conceive new ideas and new configurations of business models that leverage digital technologies to collect resources and execute specific tasks by relying on crowdsourcing (Kohler and Chesbrough 2019; Standing and Mattsson 2018), virtual reality (Trakunsaranakom et al. 2018), virtual communities (Hafeez et al. 2019), online skill development (Vorbach et al. 2018), and digital manufacturing (Borangiu et al. 2019).

It is evident that digital technologies are enablers of entrepreneurial activity (von Briel et al. 2018) and are shaping a new profile of entrepreneur that leverages the Internet to execute most of the processes required to launch a new venture (Giones and Brem 2017); however, a significant gap exists in the definition of entrepreneurship in the digital age (Sussan and Acs 2017) and with a collaborative and collective spirit (Schaltegger et al. 2018; Rezazadeh and Nobari 2018; Ribeiro-Soriano and Urbano 2009).

In such view, it is interesting to consider all those elements and conditions that can enable and support digital entrepreneurship processes within organizations

and society. Some of these issues may refer to the individual dimension of the entrepreneurs and their team; others concern the organizational settings and networks, and some others refer to the system and institutional level.

Using a biological metaphor, we call these essential elements “genes,” and this chapter aims at identifying the successful genome of the digital entrepreneurship process.

In such a view, this chapter is organized into five sections: the next paragraph introduces and discusses the concept of digital entrepreneurship by indicating the main characteristics and elements, as well as the support it may provide to desk-stage, premarket, and market activities of the entrepreneurial process. Section 2.3 then illustrates a genomic view of the entrepreneurship process by presenting some cases and examples in the wide entrepreneurial domain. Section 2.4 illustrates the digital entrepreneurship genome with its genes at institutional, organizational, and individual (or team) level. Finally, Sect. 2.5 discusses the contribution briefly and concludes the chapter.

2.2 Digital Entrepreneurship

2.2.1 *The Meanings of Digital Entrepreneurship*

Entrepreneurship consists of identifying potential business opportunities and their exploitation by recombining existing resources or creating new ones, in the final aim to develop and commercialize new products and services within existing or new markets (Hitt et al. 2001).

Entrepreneurship is therefore associated with the initiative of individuals, organizations, or territories that are involved in recognizing and seizing opportunities, transforming these opportunities into marketable goods or services, assuming risk, and realizing rewards and may occur in a variety of settings, including new and old ventures, nonprofit institutions, and the public sector (Hull et al. 2007).

In such a process, the recent development of new digital technologies has transformed the nature of uncertainty inherent in entrepreneurial processes and outcomes, as well as the ways of dealing with such uncertainty (Nambisan 2017). Digital technologies are opening new spaces for conceiving new ideas, developing new archetypes, experimenting new products, developing new markets, and creating new value.

The virtuous combination of entrepreneurship with the digital technologies allows the arising of digital entrepreneurship, which is a relevant socioeconomic and technological phenomenon that leverages digital technologies as an input factor for accessing resources and supporting the execution of activities, with the final aim to design and create new products and services (Giones and Brem 2017). In such a way, digital entrepreneurship shifts the traditional mode of creating and doing business in the digital era (Cohen et al. 2017; Nambisan 2017; Nambisan et al. 2017).

Digital entrepreneurship introduces changes in how organizations commercialize their offering, in the product architecture (both goods and services), in the workplace where activities are performed, in the communication flows that involve individuals during the execution of a task, and in the relationships with the stakeholders (Hull et al. 2007). Thus, digital entrepreneurship may refer to digital marketing processes, digital sale and distribution channels, digital product configurations, digital operations, and digital stakeholder management (Hull et al. 2007). Depending on the technology's intensity and pervasiveness, digital entrepreneurship can be mild (e.g., venturing into the digital economy as a supplement or complementors), moderate (e.g., significant focus on digital products, digital delivery, or other digital components of the business), or extreme (e.g., the entire venture is digital, including production, offering, distribution, and customers) (Hull et al. 2007).

Digital entrepreneurship represents a critical pillar for digital economic development and underlines the need to pursue the opportunities based on digital media and technologies through a pivotal business model framework.

This new paradigm can be described as the result of three distinct but related elements, e.g., *digital artifacts*, *digital infrastructures*, and *digital platforms* (Nambisan 2016).

A *digital artifact* is a digital component, an application, or media content that is part of a new product or service and offers a specific functionality or value to the end user (Kallinikos et al. 2013; Ekbis 2009). Examples are Amazon Dash Button or Nike+ Sensor, which extend physical products or services to support and experiment innovation. Valuable examples of digital artifacts include the development of services and applications based on virtual reality or augmented reality in cultural industries and tourism, the development of a conversational agent supporting the commercial department of a company, or the implementation of a traceability system based on blockchain technology in agro-industry.

A *digital infrastructure* is the set of digital technology tools and systems that provide communication, collaboration, and computing capabilities. Examples are Amazon Web Services or Microsoft Azure that are specialized in the cloud computing industry. MIT Fab Central and Stanford FabLearn Labs are further cases of digital infrastructure for digital prototyping and mock-ups. Online communities like Eclipse or Quirky; crowdsourcing portals like Amazon Mechanical Turk, Upwork, or InnoCentive; and crowdfunding portals like Kickstarter or Indiegogo are further examples of digital infrastructures that enable entrepreneurs to interact with potential partners and suppliers, customers, and investors, to acquire resources and execute activities on a global scale (Kim and Hann 2013). Google TensorFlow or Microsoft Azure AI represents two further end-to-end digital infrastructures for machine learning, which offer a comprehensive and flexible ecosystem of tools, libraries, and resources that allows developers to build and deploy machine learning powered applications. Some examples also include the domain of Internet of things with digital infrastructures like Amazon Web Services IoT, Microsoft Azure IoT, or Google Cloud IoT, which connect hardware, devices, and sensors into an integrated data network that provides insights using backend applications, visualization tools, and device management suites.

A *digital platform* is a shared, common set of services and architectures that serve to host complementary offerings, including digital artifacts (Parker et al. 2016). They can be defined as software-based platforms created by the extensible codebase of a software-based system that provides the core functionality shared by the modules and interfaces with which it interoperates (e.g., Apple's iOS and Mozilla's Firefox browser) (Tiwana et al. 2010). Services of a digital platform support real-time matching between multivariate demands and highly personalized offerings and perform activities that need digital engagement for access to digital assets (e.g., Paypal, eBay) and physical assets (e.g., Uber and Airbnb) (Sussan and Acs 2017). Digital platforms have enabled a relevant industry transformation and created new foundations for industry leadership and ecosystem innovation (Gawer and Cusumano 2014). Further examples are the app development marketplaces (e.g., App Store, Google Play Store, Microsoft Store), proprietary big data applications based on social media content processing, or hybrid infrastructure based on cloud computing paradigm.

2.2.2 The Ecosystem Views of Digital Entrepreneurship

The success of a digital entrepreneurship project relies not only on the characteristics of the venture (idea and proponents) but also on the environment or *ecosystem* in which it is conceived, founded, developed, and nurtured (Auerswald 2014). The ecosystem dimension of digital entrepreneurship represents also a stream of research in such a domain, with the issues related to the business model, entrepreneurial process, platform strategies, entrepreneurship education, and social entrepreneurship (Kraus et al. 2019).

This ecosystem dimension may refer to the network of geographical relationships and connections among private, public, and institutional stakeholders, which interact with the players working in the research, education, and business domain to exploit the entrepreneurial potential of a digital technology (Brown and Mason 2017; Isenberg 2010; Cohen 2006; Elfring and Hulsink 2003). Successful cases of this interpretation are Silicon Valley, Beijing, Tel Aviv, Boston, and London regarding the domain of artificial intelligence. As for the blockchain applications, Silicon Valley, London, New York, Singapore, and Toronto-Waterloo register outstanding performances. In the cybersecurity domain, Austin, Boston, New York, Silicon Valley, and Washington are the most successful cases in the USA, while Estonia, Frankfurt, London, and Tel Aviv are those located in Europe and Middle East. Similar cases exist in other domains, such as fintech, edtech, adtech, and gaming (Startup Genome 2019; Kenney and Von Burgh 1999). All these ecosystems have a strong geographical focus, face-to-face relationships, and local networks of entrepreneurial actors that interact to conceptualize, develop, and launch novel digital products, solutions, and ventures.

An interesting evolution of this configuration is represented by the use of digital technologies to virtualize the relationships and collaboration that involve not only

people that already know each other but also globally dispersed individuals and crowds that provide their support (e.g., resources, competencies, assets, and relationships) and contribute to developing an entrepreneurial project. This represents a complementary view of digital entrepreneurship along the ecosystem dimension, which leverages the characteristics of digital technologies such as virtuality, immediacy, relational proximity, knowledge exchanges, and spatial-temporal independence (Elia et al. 2016; Tapscott 2014). Exemplary cases are F6S.COM, which offers online services to connect directly with accelerators and investors and search talents to complete the team; ANGEL.CO, which provides online support to form the entrepreneurial team and find potential investors; and STARTUPCOMPETE.CO, which is a global networking site that offers virtual spaces where aspiring entrepreneurs, mentors, and advisors can connect each other and bring potential business ideas to market through idea competitions, pitch competitions, business plan competitions, and other digital services and interactive tools enabling interactions, communications, collaboration, exchange of information and know-how, and transfer of resources. Another case is represented by IBRIDGENETWORK.ORG that provides a customized virtual community to support idea discovery, people connection and collaboration, the development of early-stage technological projects, broadcasting of technology needs, discovering matching technologies and partners, the connection to clients and investors, and gaining market insights.

2.2.3 *Digital Entrepreneurship Process Views*

In many other cases, digital technologies can make the difference in the execution of the overall entrepreneurial process. In fact, by considering the entrepreneurial process articulated at the desk stage (e.g., the preliminary and explorative steps to prepare the venture creation), premarket stage (e.g., the collection of resources to fund the company and develop the product/service), and market stage (e.g., the company's daily operations and its strategic growth), the activities characterizing each stage can benefit from the potential of digital technologies to share information, connect people, exchange knowledge, execute processes, organize resources, and coordinate tasks (Elia and Margherita 2016; Byers et al. 2010). Figure 2.1 shows the categories of digital technologies that may provide a valuable contribution to execute the different tasks of each stage. Of course, there is no one-to-one relationship between technologies and activities but a sort of relevance and functional proximity that link systems and digital tools to a specific activity.

Referring to desk-stage activities that represent the preliminary explorative steps aiming at preparing the venture creation, they can leverage access to specialized databases and reports on market technology and social trends to support the execution of scenario scanning and envisioning of new business opportunities. The use of virtual collaboration and participative tools may support the overall idea management process, from the collection of numerous proposals and insights to the selection of the most promising ones, from the enrichment of the business concept to the

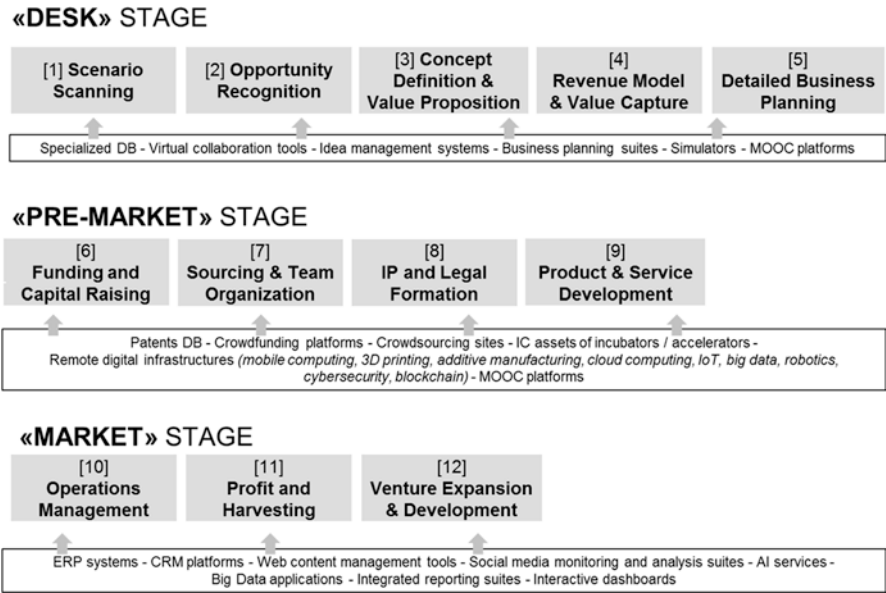


Fig. 2.1 How digital technologies may support the stages of the entrepreneurial process

definition of the value proposition and revenue model. Afterward, the use of purposeful software for business planning and interactive simulations complete the support provided to the desk-stage activities in the overall context of the entrepreneurial process, along with the access to MOOC system to guarantee a continuous learning process.

As for the premarket activities, entrepreneurs can rely on the access to national and international databases for searching patents to leverage crowdfunding platforms for collecting the required money, use crowdsourcing sites to outsource activities or complement competencies and team, or enlarge the network of partners. Also, by accessing and exploiting the incubator’s intellectual capital services, entrepreneurs can reserve and use internal knowledge-based facilities such as administration and legal (human capital), search for interested investors and partners (relational capital), or access to facilities and infrastructural assets for co-working (structural capital). Moreover, by accessing remote digital infrastructures and platforms (e.g., mobile computing, 3D printing, additive manufacturing, cloud computing, Internet of things, big data, robotics, cybersecurity, and blockchain), the new company can prototype products and services to meet the customers’ demand. They can experiment with new technological features, test the novelty and market potential of a business idea, and fine-tune the market offering. The access to MOOC platforms may also support the execution of premarket activities, thus allowing people to learn and know, thus making their actions more effective.

Finally, market activities consisting of the operational aspects that guarantee a new company’s real presence in the market can benefit from digital technologies to

support day-by-day operations and contribute to venture growth. Modern ERP systems and CRM platforms can provide the core services to support the execution of primary and supporting activities; web content management tools may ensure an updated presence on the web with e-commerce extensions; social media monitoring and analysis suites may provide a valuable support to marketing strategies; and artificial intelligence services and big data applications can extract insights to innovate the marketing offering and extend the market scope. Integrated reporting suites and interactive dashboards are revealed as crucial to organize all data coming from the abovementioned systems and transform them into valuable information, attracting the interest of potential investors in the final aim to create the right financial, organizational, and market conditions for the overall venture expansion but also to contact experts and professionals to receive a managerial support.

Digital technologies are definitely defining new ways of collaborating, collecting, and organizing resources, thus supporting the execution of activities to experiment with innovation and provide an end-to-end support to the entrepreneurial process.

2.3 A Genomic View of the Entrepreneurial Process

In biology, a gene is a sequence of nucleotides that codes for a molecule that has a function. Different genes determine the different characteristics or traits of an organism. A genome is composed of genes and provides all of the information the organism requires to function and live (Collins et al. 2003).

With such a mindset, a set of cases, initiatives, and projects are presented here to reflect on the possible applications of the genomic view to many socioeconomic domains. These include biology, to investigate specific aspects of a phenomenon and provide original insights, inspiring interpretations or innovative concepts that may generate a step forward. Such domains also include entrepreneurship, and this confirms the interest and relevance of scholars and practitioners toward the “codification” of the right sequence of components and conditions that determine the success of an entrepreneurial initiative. We start from these existing cases to catch the intents, comprehend the approach, be aware about the possible implications, and appreciate the innovative and farsighted purpose. Then, with such conceptual background, the next paragraph provides an attempt to codify the genome of digital entrepreneurship.

A first exemplary case is the *Human Genome Project* aimed at identifying and mapping all 23,688 genes in the human genome from both a physical and a functional viewpoint and sequencing its 3 billion nucleotide base pairs to store this information and develop the methods and tools for data analysis and exploitation in many fields, from molecular medicine to human evolution (Collins et al. 2003). The project was funded in 1990 by the US Department of Energy and the National Institutes of Health, as well as the Wellcome Trust in the UK, and included seven major public genome centers worldwide and one private research center.