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Information Technology and Entrepreneurship: Factors that Shape Investment Support for Innovation

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ABSTRACT

The evolution of innovative products has continued to move business and society into an ever more complex, and digital, world. Researchers have sought to understand how to best support innovation and how decisions are made regarding funding for entrepreneurs seeking to bring their products to market. Funding by investors can shape the direction of an innovation, especially for advances in information technology. The funding can be obtained from multiple sources, ranging from the more traditional angel and venture capitalists to newer, technology-enabled online structures such as crowdsourced funding sites. This monograph seeks to identify the factors that are important for information technology investment decisions, particularly considering the availability of newer funding methods. It starts by reviewing the literature on investment funding and decision making. Then a content analysis is performed, from which six dominant factors emerge: entrepreneur, product, market, proposal, management team, and financial considerations. Each of these factors has multiple dimensions, which are abstracted

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and categorized into a set of representative characteristics. Implications are provided for research and practice, and directions proposed for future work.

Keywords: information technology; entrepreneurship; technological investments; angel investor; funding; startup; entrepreneur; product; market; proposal; management team; financial; digital innovation; funding; crowd-sourced sites.

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Introduction

Tasks and processes within business and society are increasingly being digitized. Examples include online bookings, feedback mechanisms, healthcare records, and personal transactions. Innovative applications (apps) support daily activities; for example, calendar reminders, fitness monitors, delivery notifications, and baggage tracking. The evolution of innovative products, both digital and physical, has been the focus of much research over the past two decades. Researchers have sought to better understand how innovation can be developed and supported, and how funding decisions are made for entrepreneurs seeking to bring their products to market (e.g., Baron and Markman, 2000, Chen *et al.*, 2009). This is especially true for innovative information technology products that continue to evolve in new and interesting ways.

The constant evolution of new technologies has led to an interest in how information technology impacts entrepreneurship, for both the development of new technology and support for funding mechanisms, such as new platforms for investment. Crowdfunding sites, for example, have dramatically changed the manner in which capital can be raised for new technologies, disrupting traditional forms of investing (Mollick, 2014). Entrepreneurs can now "cast a very wide net" to share their

Introduction

ideas with thousands of investors, positioning themselves to more easily launch their products, receive formal and informal feedback, and access seed money, for their endeavors.

Rapid innovation and the overlap of information technology and entrepreneurship have been the subject of much research, including how they impact each other. Even though the market for entrepreneurial capital is "large and active" (Hochberg *et al.*, 2018), it is not completely clear what factors best support the evolution and advancement of entrepreneurs and the innovative technologies they bring to market.

This monograph first reviews research on investment funding to extract and classify the factors that have traditionally impacted investment decisions, and to identify emerging investment issues. The result is a set of six factors, each of which has multiple dimensions and characteristics that are described. Suggestions are provided for future work to investigate funding opportunities for supporting entrepreneurs who wish to advance their innovative information technology products.

This monograph proceeds as follows. Section 2 examines the role that information technology plays in entrepreneurship and provides an overview of the method used to perform the literature search and extract the main factors. Section 3 describes each factor and its general characteristics to progress our understanding of the factors themselves and their impact on investment decisions and technological innovations. Section 4 proposes areas of future research. Section 5 summarizes and concludes the monograph. The set of appendices lists, for each factor, the detailed characteristics that appeared in the literature and were clustered and abstracted to those presented in this monograph.

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