

Can a software engineer be a successful entrepreneur? A conceptual framework model

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INTRODUCTION

The software engineering body of knowledge provides generally accepted knowledge for the software engineering profession. Because of the focus of the innovator's entrepreneur will be to improve the business processes as well as study the business practice to learn the concealed requirements of the customer, therefore, the software engineering provides generally accepted knowledge for the innovators. Entrepreneurship has been growing rapidly in the past 20 years. It was strengthened by the increasing number of the young generation who choose to be an entrepreneur instead of working on other people or companies. Design/Methodology: The framework was instantiated and developed through four case studies with public and private higher education institutions located in Portugal and Brazil. Findings: The degree of maturity of a higher education institution in entrepreneurial education can be assessed in a similar way to maturity models in software engineering, in which entrepreneurial teaching practices can be organized considering their scope, relevance, and impact on the development of an entrepreneurial ecosystem. Conclusion: Academic entrepreneurship is part of the strategic plan of the most successful universities in the world. It is fundamental for those universities to develop their third mission and promote an entrepreneurial environment that stimulates academic entrepreneurship. In this sense, the formulated conceptual framework can constitute a fundamental element for higher education institutions to evaluate their degree of maturity in entrepreneurial education. Startups are an effective way of promoting innovation in the software industry. This paper extends the theoretical and practical understanding of the key elements and factors that promote the growth of a successful software startup ecosystem in a certain region, by presenting a conceptual framework, delineating the major forces leading to a fruitful environment for digital entrepreneurship. The framework is systematically derived from a meticulous qualitative research carried out in Israel, which hosts one of the most fruitful software startup ecosystems in the world. Data collection was based on semistructured interviews, observations, and a questionnaire. The data analysis led to findings related to sociocultural, institutional, technological, methodological, and educational aspects of entrepreneurship, startups, and their ecosystem. Finally, this paper proposes a generalized version of the framework by eliminating aspects that are specific to Israel, so that the methodology and the conceptual framework can be used as a basis for future research in other regions of the world. Start-up companies have become an important supplier of innovation and software-intensive products. The flexibility and reactivity of startups enables fast development and launch of innovative products. A review of entrepreneurship literature suggests that entrepreneurial activities are the most important drivers for economic growth and

corporate success, regardless of size, age or industry. Nevertheless, so far, only a few studies, if any, have considered entrepreneurship as a success factor for construction enterprises, although the importance of the construction industry to the nation's economic growth is significant. This paper reports a conceptual framework for formulating the success and survival factors of entrepreneurs in the construction industry. It also integrates four major perspectives in entrepreneurship: entrepreneurial orientation, entrepreneurial organization, entrepreneurial competencies and entrepreneurial environment. Resulting from the digital revolution of the last decades, multiple startup hubs flourished across the globe in the past 10 years. Finally, we developed a maturity model for startup ecosystems, which helps us understand their evolution and dynamics. Therefore, the study identifies and explores scattered BMI insights and deduces them into an integrative framework to enhance our understanding about this phenomenon and to present a helpful guidance for researchers and practitioners. Design/Methodology/Approach: The study identifies BMI insights through a literature-based investigation and consolidates them into an integrative BMI framework that presents the key elements and dimensions of BMI as well as their presumed relationships. Findings: The study enhances our understanding about the key elements and dimensions of BMI, presents further conceptual insights into the BMI phenomenon, supplies implications for science and management, and may serve as a helpful guidance for future research. Practical Implications: The presented framework provides managers with a tool to identify critical BMI issues and can serve as a conceptual BMI guideline. Research limitations: Given the vast amount of academic journals, it is unlikely that every applicable scientific publication is included in the analysis. The illustrative examples are descriptive in nature, and thus do not provide empirical validity. Several implications for future research are provided. Originality/Value: The study's main contribution lies in the unifying approach of the dispersed BMI knowledge. Since our understanding of BMI is still limited, this study should provide the necessary insights and conceptual assistance to further develop the concept and guide its practical application. Explores the difference between entrepreneurship education (EE) and entrepreneurship training (ET) and proposes a Conceptual Framework for analysis. Broadly speaking, both EE and ET programs aim to stimulate entrepreneurship, but they differ in their variety of program objectives. While differing from program to program, academic EE programs tend to focus on building knowledge and skills about or for the purpose of entrepreneurship, while ET programs tend to focus on building knowledge and skills explicitly in preparation for starting or operating an enterprise. While conceptually distinct, in practice the characteristics of EE and ET often overlap or combine into a single program.