Project Management within Start-Ups

Exploring Success Criteria and Critical Success Factors in Entrepreneurial Project Management

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Abstract

This study explores the concept of project success within the entrepreneurial and new venture creation area, specifically with regards to start-ups. The research’s purpose is twofold: i) explore and understand how project-based start-ups define and measure success criteria within their organization; and ii) understand the nature and relevance of critical success factors (CSFs) in project-based start-ups, which can be influenced so that their input leads to increased chances of project success. In order to gain an inclusive picture of project success within start-ups, the research question aims at identifying the two aforementioned components, success criteria and critical success factors.

“What success criteria and critical success factors are most relevant for project-based start-ups?”

The concept of project success has been studied throughout the years, but mainly within large scale companies which is why research pertaining to start-ups is scarce. The closest benchmark for comparison, are studies exploring project success within SMEs. In accordance, these studies and resulting findings and/or theories have been examined and used as a baseline for this research. This research takes the form of a qualitative study with an abductive approach to theory. It is a case study, wherein semi-structured interviews and interviewer-administered questionnaires were carried out with individuals at the decision making level of start-ups, mainly with founders, CEOs and/or executive directors. The selected respondents were chosen for the study due to their small size and young age, independence, proactive innovativeness as well as centralized decision making processes. That is, for their characteristics which are in line with start-up features outlined in the extant literature. Due to time constraints the research is cross-sectional while its exploratory nature, focusing mainly on start-ups in the Balkan countries of Bosnia and Herzegovina (BiH) and Kosovo, is a result of limited research in the field.

The use of project management practices, with the exception of communication and scheduling tools, were found to be limited in start-ups due to their rigidity, high costs and time-consuming nature. This presented the basis for why project management within entrepreneurial, new venture creation needs to be adapted through the development of a ‘lite’ version which will provide adequate management practices that contribute to achieving higher rates of project success in start-ups. In order for this to be done, projects success in s start-up must be defined in terms of the most relevant success criteria and CSFs. The findings of the study show that project success within start-ups is highly correlated to customer satisfaction. Competitive aggressiveness showed to be of little concern due to the lack of competition in the start-ups’ respective fields. A key success criteria among all, was development in terms of offering new services and building strong customer relationships which would result in long-term loyalty. In contrast to previous studies citing profit as a significant success criteria in start-ups, the results of this study show that the majority of start-ups are in fact less concerned with profits and more concerned with survival in terms of financial stability and breaking-even. Findings also indicate that a start-up’s operational process is characterized by the need for flexibility and adaptability, due to inherently high levels of uncertainty and risk. Subsequently, key CSFs for start-ups as extracted from the study include team morale and motivation, customer relationships and loyalty, and flexibility. The need for further research which will contribute to the development of Entrepreneurial Project Management is evident.

Keywords: Project management, Project Success Criteria, Critical Success Factors, Project Success, Start-ups, Entrepreneurial Project Management.
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List of Abbreviations

BiH     Bosnia and Herzegovina
CSF     Critical Success Factors
EPM     Entrepreneurial Project Management
HR      Human Resource/s
PM      Project Management
PMI     Project Management Institute
SME     Small and Medium Enterprise
SPM     Strategic Project Management
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1. INTRODUCTION

The introductory chapter outlines the background of the study, thus, familiarizing the reader with the concepts of critical success criteria and factors that could influence the project’s success within the start-up context. Further, the discussion follows with the practical and theoretical contribution of the findings, continuing to the formulation of the research question and objectives. Finally, relevant concepts will be defined and limitations of the study will be presented.

1.1 Background

The existence of projects can be traced back thousands of years to the foundations of the Great Pyramids of Giza (Packendorff, 1995, p. 319). Throughout history, projects have always played a crucial role in organizations, although their use was limited to certain industries, such as construction and engineering (Packendorff, 1995, p. 319; Turner, et al., 2010, p. 745). However, projects as a solidified concept did not receive any particular definition until the beginning of the 20th century when the field of PM [PMI] began to take root (Garel, 2013, p. 668). According to the PM Institute [PMI] (2013, p. 3), projects can be defined as a temporary endeavor undertaken to create a unique product or service. This means they have a defined beginning and ending, meaning they are also constrained in terms of the scope and resources. Considering this characterization, it may appear as if the success or failure of a project can easily be identified. This, however, is not the case as every project is unique making the success of a project a complex phenomenon. Complexity often leads to increased difficulties, which is why several problems often arise when trying to define and measure success in projects.

Extensive research has been conducted in defining project success within the literature of PM; however, the topic of project success in small scale companies, specifically in start-ups is scarce. In fact, there is a remaining ambiguity over what constitutes as project success, or failure, in start-ups. These challenges often occur due to the high subjectivity of the concept, considering that multiple aspects influence the process along the way (Morris & Pinto, 2007, p. 226). The attempts to measure project success have ultimately led to questioning and identifying measures which can be undertaken to increase the chances of success in a project (Morris & Pinto, 2007, p. 227). Similarly, attempts have been made in exploring what leads to project failure.

While ambiguity remains an attribute of success, academia and practitioners in the field have agreed upon the existence of two important concept; “project success criteria” and “CSFs” [CSF] (Ika, 2009, p. 8). Oftentimes, traditional PM literature views success criteria and success factors as synonymous concepts, however, a number of studies have drawn distinctions between the two concepts. On the one hand, project success criteria is defined as the dependent variable used to measure a project’s success or failure. Over time, project success has been measured against the iron triangle which includes: Time or schedule, cost or budget, and quality oftentimes referred to as scope (Atkinson, 1999, p. 337-338). The iron triangle has been a representative tool for measuring the success or failure in projects for years. The concept has even been incorporated in various definition of the PM literature (Atkinson, 1999, p. 338).

However, with the constantly changing environments and a shift in the nature of projects, the iron triangle has recently been subject to significant criticism. Particularly in terms of its inability to adequately measure against the unique and subjective characteristics of projects, which are becoming increasingly specialized. Jugdev and Muller (2005, p. 24)
argue that its limitations in time, cost and quality result in inadequate success measurements. One should note that while the criteria defined by the iron triangle is still relevant to project success, it is not the only criteria which should be taken into consideration (Pheng & Chuan, 2006, p. 24-25). Having a set of extended criteria would allow the measurement of project success against the project’s overall objectives. Yet, creating a transferable list of success criteria that are applicable to all organizational sizes and industries has proved to be challenging rendering the need for more specific frameworks.

On the other hand, CSFs have been defined as the independent criteria which influence the components of a project but do not determine the project’s success or failure (Lim & Mohamed, 1999, p. 244). Adequate management of the CSFs can increase the probability of project success, while the literature in the field stresses the fact that they are able to be influenced (Pinto & Slevin, 1987, p. 22). Considering their influential role, CSFs can be seen as an evaluation instrument that serves in increasing the effectiveness and efficiency of the project throughout its duration. Despite a general understanding of the definition of CSFs, a definitive list or framework applicable to any type of project has yet to be identified.

When it comes to the applicability of project success factors, it has been suggested that the context in terms of the size, age and industry of the organization, has an impact on the CSFs which influence project success (Turner, Ledwith & Kelly, 2012, p. 955). In accordance, Turner et al., (2012, p. 954) argue that practices differ among large companies when compared to less established companies such as such start-ups; therefore, that better results will be obtained if the PM procedures and structures are tailored to the nature and size of the project. Following this line of thought, the assumption in this study is that due to the very different organizational structures and practices in start-ups, success criteria and CSF are different from those applicable in companies which are better established and larger in size.

Start-ups represent the process of new venture creation through the cross-fertilization of innovation and entrepreneurship (Sahut & Peris-Ortiz, 2014, p. 665). Even though attempts have been made in defining the concept of start-ups, a consensus in its definition has not yet been reached. Nevertheless, throughout the extant literature, start-ups are viewed as small and young entities which have an informal system of communication (Lester et al, 2003, p. 11). Accumulation of new knowledge and a trial error style seem to portray a start-up. Miller and Fiesen (1984) stress the risk-taking element; thus, closely examining the effect of risk-taking with the degree of innovation displayed. In more recent studies, a project-based view has been adopted for start-ups, where the start-up phase of a new venture can be viewed as a temporary endeavor, or project. Regardless of their definition, start-ups play a crucial role in the economic development of a country, society and even larger firms (Ireland et al., 2001, p. 51), yet the efforts in researching PM and its applicability to start-ups is rather limited. Start-ups face many challenges in the process of establishing themselves as a company and moving beyond the start-up phase, leading to very low survival rates. Therefore, the need for improvement in developing PM methods is of paramount importance.

1.2 Practical and Theoretical Contribution

From the practical perspective, the concept of project success within the start-up context is of high relevance for internal stakeholders, such as founders, CEOs, managers and team members, but also for external stakeholders, such as incubators, accelerators and
consulting companies. The benefit in exploring project success lies in understanding how start-ups define and measure success. In order to gain a complete picture of the process, it is of major importance to recognize the nature of the CSFs which can be influenced so that their input leads to increased chances of success. This study lays the groundwork and serves as a guideline for individuals aiming to establish a start-up, letting them know where to place focus.

From the theoretical perspective, the field of Entrepreneurial Project Management (EPM) is a relatively new concept, therefore, still in need of studies which would contribute to the extant research. On the one hand, the concept of project success has been studied throughout the years, but mostly within the context of large scale companies. On the other hand, research is scarce when it comes to the exploration of project success and CSFs within start-ups. This study aims to fill this gap by providing answers to how start-ups define project success and through what means they measure it. Furthermore, based on empirical findings the study will identify and present the most common outlined success criteria and CSFs which influence the success of the start-up. To the best of our knowledge, there is no study that illustrates the co-existence and interaction of both concepts in the process of achieving start-up success. As a result, this study combines literature streams from the field of PM and entrepreneurship. Last but not least, the findings will provide a good basis for researches who are aiming to develop and suggest new frameworks for “lite” versions of PM which could be used by start-ups.

1.3 Research Questions

Although extensive research has been conducted when it comes to the applicability of PM and its role in large scale companies, the role of PM within start-ups has not been researched sufficiently. Consequently, the study aims to define project success within the entrepreneurial ecosystem, namely within start-ups. In order to gain an inclusive picture of project success within the setup of start-ups, the research question aims at identifying two main components of project success: critical success criteria and CSFs. Identifying the aforementioned criteria will lead to the creation of a conceptual framework which will serve as a baseline in increasing project success in start-ups. At the same time, the findings will contribute to the theories of project success. On the basis of the highlighted practical and theoretical motivations, this study seeks to answer the following research question:

“What success criteria and critical success factors are most relevant for project-based start-ups?”

In order to provide a full answer, the analysis of the question has been divided into two blocks. The first set deals solely with the CSFs, whereas, the second looks into detail the set of success criteria.

1.4 Research Objective

The rising tide of start-ups throughout the world is resulting in the re-imagination of every single industry (Startupmanifesto, 2012, p. 1). Accordingly, the potential contribution of new venture creation and start-ups to the economy has solidified their importance as an economic actor, but it has also led to the conclusion that start-ups need to increase their quality. The increase in quality and improvements in start-up operation have been identified as necessary in combatting the high failure rates of start-ups (Turner et al., 2009, p. 283). Thereupon, this study has been undertaken to identify success criteria and CSFs which are most relevant for start-ups when a project based view is taken. The output of the study will contribute to opposing the challenges typically faced by start-ups.
Furthermore, the findings will enhance and broaden the knowledge on how start-ups function internally, by looking at their formality and decision-making process. A framework which encompasses the most relevant success criteria contributing to the short and long term success, as well as the most relevant CSFs which translate operational activities into strategic concepts will be developed. The framework will serve as an illustration of how all the concepts co-exist and interact in the process of achieving start-up success.

The study will elaborate on the existing research and theories related to project success in overall terms since the research which looks specifically at project success in start-ups is scarce. The closest field that one can use as a benchmark for comparison is project success within SMEs (Thibault, 2012, p. 4). As such, the study aims at contributing to the extant research by presenting the framework, inclusive of both elements, success criteria and CSFs. The success criteria and CSFs will be developed through empirical research conducted within the entrepreneurial ecosystem. One should note that even though the current state of literature is heavily based on studies carried in larger organizations, it will serve as a baseline for comparisons in the process of assessing project success and factors in young companies.

**In brief, the following objectives can be defined as:**

1. Identify most relevant CSFs for start-ups when a project based view is taken;
2. Identify most relevant project success criteria for start-ups when a project based view is taken;
3. Develop a framework which encompasses the most relevant success criteria which contribute to the short and long term success, as well as the most relevant CSFs which translate operational activities into strategic concepts will be developed
4. Provide recommendations for start-ups on how to increase project success through the applicability of the presented conceptual framework.

**1.5 Relevant Concepts**

The following chapter provides an overview of the relevant concepts which are repeatedly referenced throughout the study. For further reference, please note that a thorough interpretation of each concept is provided under the theoretical background chapter.

**Project** – “A project is a temporary endeavor undertaken to create a unique product, service or result by progressive elaboration”. Among others, a project is temporary considering that it has a defined beginning and ending, and therefore it is defined in terms of the scope and resources (PM Institute, 2013, p. 3).

**Project Management (abbrev. PM)** – “The application of knowledge, skills, tools and techniques to project activities to meet project requirements”. PM in its own terms systematically integrates technical, human, and financial resources to achieve goals and objectives. PM processes fall into five groups: initiating, planning, executing, monitoring and controlling and closing (PM Institute, 2013, p. 5).

**Strategic Project Management (abbrev. SPM)** – SPM provides an overview of the bigger picture whereby the project serves to deliver the strategy of the organization (Green, 2005, p. 61; Kenny, 2003, p. 43). The concept of strategic PM calls for strategic alignment between the project and organization objectives.

**Project Success Criteria** - Project success criteria is defined as the dependent variables used to measure a project’s success or failure (Muller & Jugdev, 2012, p. 758). Numerous
difficulties have been encountered in providing an inclusive definition for the criteria used to measure project success. Its definition is subjective, highly depending on the way how it is conceptualized in literature and the scope within which the researcher/manager opts to consider it.

**Critical Success Factor (abbrev. CSF)** - CSFs can be defined as the independent variables which can be influenced so that their input leads to increases chances of success. Their influence can be direct or indirect (Cooke-Davies, 2002, p. 185; Muller & Jugdev, 2012, p. 758).

**Entrepreneurship** – The field of entrepreneurship has been defined as a study of opportunities; processes of discovery, evaluation and exploitation of opportunities (Shane & Venkataraman, 2000, p. 218). Following this line of thought, the concept provides an inclusive perspective by taking into considering the human factor. In this interpretation three important factors are elaborated: i) the existence, discovery and exploitation of opportunities; ii) influence of human factor; and iii) entrepreneurship is broader than just the creation of the firm.

**Start-up** – “Creation of a new enterprise which did not formerly exist in the form of an organization”. Key to the process of new organization creation is the accumulation of knowledge through collaborative activities (Keeble and Nachum, 2001, p. 17). Throughout time, criteria such as: independence, informal and risk taking have been added as the main characteristics of start-ups.

### 1.6 Research Disposition Outline

In order to provide the reader with a better understanding on the content of the study, an outline of the disposition of the study is given in the following section.

**Chapter 1: Introduction** – This chapter aims to familiarize the reader with the main concepts elaborated throughout the study. It provides an introduction on the general concept of EPM, specifically looking at the critical success criteria and factors which could lead to the success of a start-up. Furthermore, it specifies the research questions and objectives of the study.

**Chapter 2: Theoretical Methodology** – This chapter provides an explanation on the choices of literature as well as the philosophical stances in terms of ontology, epistemology, and axiology. Further on, a detailed reasoning on the research approach, preconceptions, researcher’s motivation and literature selection approach is presented.

**Chapter 3: Theoretical Background** – The theoretical background tends to demonstrate the understanding of the researcher on the theories and concepts relevant to research topic. For the purpose of this study, theory was reviewed based on its appropriateness and explanatory power. First the concept of projects was explored, simultaneously providing insights on the development of PM as a field throughout time and SPM as a concept. Furthermore, the current state of research and developed frameworks is discussed in terms of critical success criteria and CSFs which could lead to the success of a project in overall terms; thus, determining the relationship between the two. In order to fully answer our research question, the concepts of entrepreneurship as a field and start-ups as entities were introduced and elaborated. Finally, PM in entrepreneurship, specifically the development of EPM was coined and discussed. The compilation of the theory led to the formation of our own framework of the concept for this study.
Chapter 4: Research Methodology - This chapter outlines the chosen research strategy, including the selected qualitative research method and the data collection process. Simultaneously, all the corresponding interview methods, case selection criteria and interview guides are discussed. Furthermore, the value of the thesis in terms of the truth, objectivity, trustworthiness and authenticity are justified. Last but not least, principles on ethical considerations are highlighted.

Chapter 5: Empirical Findings – This chapter presents the empirical findings derived from the case studies, namely semi-structured interviews and questionnaires. In accordance with the structure of our study, characteristics of the start-up are discussed first, followed by project success criteria and CSFs.

Chapter 6: Discussion and Analysis – This chapter provides a discussion and analysis of the empirical findings presented in chapter five. The results are discussed and analyzed in accordance to the existing theories and context of the study; therefore, serving as a baseline for conclusions.

Chapter 7: Conclusion – The final chapter summons the concluding remarks. Conclusions on the project success criteria and CSFs portrayed through the interviewed companies are drawn. The study’s theoretical and practical significance and contributions are discussed, followed by implications of the study and suggestions for further research.
2. THEORETICAL METHODOLOGY

The following chapter provides a thorough analysis of the research methodology by explaining and justifying the choices of the literature as well as the philosophical stances in terms of ontology, epistemology and axiology. The discussion also focuses on the research approach, preconceptions, researchers’ motivation and literature selection approach.

2.1 Research Philosophy

Research philosophy provides an understanding on how the researchers view the world and knowledge (Bryman & Bell, 2011, p. 24; Saunders et al., 2012, p. 107). The adopted research philosophies determine crucial assumptions, thus, underpinning the choices in terms of research approach and strategy (Saunders et al., 2012, p. 108). Moreover, they vastly influence research design and data collection techniques. Many academics argue that one method or stance should not be mixed with different lines of thought and strategies; however, Saunders et al., (2012, p. 109) and Bryman & Bell (2011, p. 126) argue that in practical terms one may hold i.e. interpretivist views yet apply quantitative methods and strategies. Reed (1985) and Bunchanan and Bryman (2007, cited in Bryman & Bell, 2011, p. 26) highlight that one cannot fall within a single philosophical framework since this would minimize the chances of the development of interesting theories. At this stage, no method is considered right or wrong and no method has a competitive advantage over the other (Malterud, 2001, p. 483).

2.1.1 Ontological Considerations

Ontology is concerned with the nature of the reality; thus, questioning the beliefs and assumptions that researchers have with regard to the social setting they belong. In other terms ontology is concerned with ‘what is out there’ (Bryman & Bell, 2011, p. 32; Long et al., 2000, p. 190; Saunders et al., 2012, p. 110). Ontology is categorized into two perspectives: i) Objectivism and ii) Constructivism (Bryman & Bell, 2011, p. 26; Saunders et al., 2012, p. 110). On the one hand, objectivism portrays the social reality as external from the phenomena; thus, indicating that the social actors do not have a say in constructing the reality in which they live (Saunders et al., 2012, p. 110). This stance places a special emphasis on the structural aspect of management; thus, sensing a robust environment in the organizational setting. On the other hand, constructivism views reality as a changing environment that is highly independent on the interrelated actors (Saunders et al., 2012, p. 111). Under the umbrella of constructivism, social actors play a key role in building and influencing the phenomena at hand through the process of social interaction. In general, constructivism views the world as a continuously changing environment rather than a set of procedures (Bryman & Bell, 2011, p. 28).

EPM, specifically the application of PM practices within the setting of entrepreneurial start-ups requires a deep understanding of the topic at hand; ergo, the employment of various research strategies in order to gain rich data on the issue. For the purpose of this study we view the reality within the concept of constructivism considering that EPM is a highly subjective concept depending on the different social actors involved in the process. Our study is based on the perceptions of the practitioners within the field; thus, mirroring opinions and perspectives on how to further develop EPM. Furthermore, entrepreneurship is perceived as a socially shaped field, constantly constructed and re-constructed as changes are made through the development of new theories, and through practitioners themselves who launch new ventures (Lindgren & Packendorff, 2011, p. 48).
2.1.2 Epistemological Considerations

Epistemology is concerned with what is considered acceptable knowledge in a particular field (Saunders et al., 2012, p. 27). In other terms, epistemology observers whether researchers are a component of the research, or whether they are seen as external to it. Bryman and Bell (2011, p. 15) critically argue that the social setting cannot be seen and studied with the same procedures and measures as the natural sciences. The three main epistemological stances that the academia and practitioners have agreed upon include: i) Positivism, ii) Realism, and iii) Interpretivism (Saunders et al., 2012, p. 113).

Researchers who follow positivist stances believe that knowledge can be obtained by studying observable phenomena and employing tools and techniques used by natural scientists (Bryman & Bell, 2011, p. 15). Positivists metaphorically view the world as a machine which follows and complies with the procedures, rules and regulations (Long et al., 2000, p.191). Positivism is highly associated with objectivism since the researcher distances him/herself in order to avoid any biases which may be caused if researchers’ share their perspectives. As a result, the positivist researcher conducts value-free research, where the researcher does not take a personal stance on the issue. It is mainly used to test hypothesis [i.e. accept or reject the underpinned hypothesis]. Similarly to positivism, the epistemological position of realism is related to the scientific enquiry (Saunders et al., 2012, p. 114). This philosophical position highlights that objects are independent from the human mind; therefore, arguing that reality is what our senses show us to be true (Saunders et al., 2012, p. 599).

On the contrary, interpretivism is considered to be a more flexible method where the researcher deems it necessary to know the cause of the problem, or the phenomena at hand, in order to understand the context (Goldkhul, 2012, p. 138). The researcher is directly involved in the setting being studied. Interpretivism emphasize that there are differences between studying objects and human beings, indicating that characteristics and complexities of the field of business can be lost when applying natural science methods (Bryman & Bell, 2011, p. 16; Saunders et al., 2012, p. 137). The interpretivist stance is usually used at times when the research attempts to build a theory; therefore, it starts from the observations which along the way lead to the theory itself. Considering that this research is heavily contingent on the reflections and viewpoints of the interrelated entrepreneurs and start-up founder [project managers], one might argue that interpretivism is the appropriate epistemological stance. The authors can best interpret the subjective meaning of the concept of EPM if the units of analysis are able to express their reflections which will be extracted mainly through interviews (Lindgren & Packendorff, 2011, p.50).

2.1.3 Axiological Considerations

Axiology, also referred to as the ‘theory of values’, studies judgments about values (Saunders., 2012, p. 116). Oftentimes axiology is related to ethics and includes questions of interpersonal conduct. The authors accept that awareness and responsibility is required, as they view themselves as co-constructors of entrepreneurial processes and notions within the field of entrepreneurship (Lindgren & Packendorff, 2011, p.50). In addition, the authors believe that the findings of the study will provide a theoretical and practical contribution to the current state of affairs in terms of increasing the success rate of entrepreneurial ventures through the identification of project success criteria and CSFs as a result of applying a project-based view to the management of the start-up. A great importance on the data collection strategies and methods has been placed in order to
answer the research question; ergo, to fully fulfil the research objectives, case studies in the form of semi-structured interviews will be carried out. The choices of philosophical approach and demonstrated data collection methods clearly suggest that the authors are value-bounded with the topic itself.

2.2 Research Approach

The research approach is concerned with the use of theory in a particular field of research. It serves as a crucial building block for the research and is viewed as something that develops after collection and analysis of the data (Bryman & Bell, 2011, p. 23). The definition of theory in the early stages of research raises important questions concerning the design of the research project (Saunders et al., 2012, p. 124). Various ways that the research can relate theory with the empirical data are: deduction, induction and abduction (Patel & Davidson, 2011, p. 23). However, while Bryman and Bell (2011, p. 13) do not recognize abduction as an approach in itself, they admit that it is becoming popular and widely used among the research community.

Deduction can be defined as the process of theory generation through data or otherwise known as the process which leads from ‘general to specific’ (Bryman & Bell, 2011, p. 23). Similarly, Mason (2002, p. 16) phrases deduction as the process which allows theoretical assumptions to lead. On the basis of what is known within a particular field, the researcher following the deductive path deduces a hypothesis which will be subject to empirical study (Bryman & Bell, 2011, p. 23). Deduction is highly associated with scientific research considering that it involves the development of the theory which is subject to rigorous tests and procedures (Saunders et al., 2012, p. 124). Under the theory of deduction it is very important to employ a highly structured methodology; thus, explaining and justifying how the data will be collected in relation to concepts which make up the hypothesis. The entire process allows replication and ensures reliability. Last but not least, important concepts within deduction need to be translated into operationalized terms in order to enable quantitative measuring of the facts (Saunders et al., 2012, p. 125).

Contrary to deduction, research that is conducted inductively follows a bottom-up approach, thus, seeing the theory as the outcome of the research (Saunders et al., 2012, p. 126). The process of induction involves drawing generalizable interferences out of the carried observations. Throughout the years, the followers of induction have heavily opposed and criticized the structured and rigorous system imposed by deduction. One has to bear in mind that the research which follows an inductive approach is particularly concerned with the context that the phenomena at hand takes place but also the surrounding system which influences the occurrence of such events. According to Saunders et al (2012, p. 144), the purpose of data collection within the inductive framework is to identify themes and patterns which arise from observations, which subsequently present a new conceptual framework.

Last but not least, the abductive approach involves the combination of induction and deduction in overall terms (Mason, 2002, p. 16). Abduction has a twofold purpose: being sensible and scientific, but also reaching a deep understanding and insights into new knowledge (Bryant & Charmaz, 2007, p. 19). The process of abduction is intended to help social research in general by easing the path toward new discoveries in a very structured and logical methodological order. Our research will incorporate both inductive and deductive approaches, albeit at different times. The starting point of theory is going to be the existing literature mainly by looking for theories on project success and CSFs within
the field of PM. In order to create an overview on how to fully answer our research question, extensive research will also be carried within the field of entrepreneurship. Initially an inductive approach will be taken whereby a set of steps and procedures will be consistently followed to generate a list of success criteria and CSFs within the literature of PM. The research process will go through the deductive phase whereby the categories of success criteria and CSFs formulated during the inductive phase will be tested across in start-ups. Patterns and themes will be identified via qualitative data collection. Therefore, they will be compared with the existing theories on project success criteria and CSFs to see if they are valid or new characteristics have been mentioned. The nature of the research and findings may lead to new contributions in theory and practices; therefore, leading to theory formulation or modification (Saunders et al, 2012, p. 126). Once taking the abduction approach, one has to bear in mind the risk of not finding emerging patterns from the collected data (Saunders et al., 2012, p. 127).

2.3 Preconceptions

Despite attempts at ensuring objectivity throughout the study, one has to bear in mind that the research process is never value-free (Bryman & Bell, 2011, p. 30). The researchers always carry certain opinions on the topic being investigated. According to Malterud (2001, p. 484), reflexivity begins by identifying preconceptions of the researchers; thus, presenting personal and professional experiences, beliefs and opinions. Additionally, preconceptions influence the researcher’s choice on the topic and the chosen methodology to address the research question. Furthermore, the interpretation of data and conclusions always tend to be considered subjective and influenced by preconceptions. During the entire research process and stages, the effect of the researcher should be constantly evaluated. The continual assessment allows the inclusion of these effects within the study in terms of discussing the limitations, strengths, and weaknesses of the study. This process will also aid transferability and confirm the reliability of the findings (Malterud, 2001, p. 484).

Currently, the authors are pursuing a Master’s degree in Strategic Project Management, at the Umea University in Umea, Sweden. The program is also conducted in association with Heriot Watt University in Edinburgh, UK and Politecnico di Milano in Milan, Italy, where the students have also completed a semester each. Under overall terms, the programmer has armed the researchers with knowledge on relevant concepts which are compliant with this study such as: Project management, strategic change, business models and risk management. Both researchers come from a very similar geographical backgrounds, both being of Balkan origin. Yet their professional and academic histories vary. One of the researchers has dedicated her career and research to exploring economic development and inclusion in developing countries, with international work experience in Europe and the Americas. She has a dual-degree MSc in Islamic Economics, Finance and Banking from the University of Bolton in the UK and the University of Sarajevo in Bosnia and Herzegovina (BiH), and is a certified Project Manager through IPMA. The second researcher has graduated from the Rochester Institute of Technology (RIT) in Management, Public Policy and Legal Studies and attended the Dartmouth Entrepreneurial Programme in New Hampshire, United States of America. Professionally, she has worked in various fields from business to human rights.

Indeed, the researchers are aware of the potential biases which may be caused due to their professional and academic backgrounds; however, they expect them not to have a significant influence over the results of the study.
2.4 Motivation for Research

We identified the topic of EPM as a rather new and interesting alternative when compared to the traditional form of PM adopted and practiced by large firms. With the concept being relatively new, extensive research has not been carried out on all the aspects of EPM, especially concerned with the success criteria and CSFs which will lead to the success or failure of a start-up. Due to the lack of sufficient research, success criteria and CSFs are still concepts which are open for interpretation; therefore, we want to explore the success criteria and CSFs that are relevant for the success of the start-ups. At this point, one has to bear in mind that a project-based view is taken with regards to the start-ups’ management.

Complementary to this, we found the topic very interesting as it increases our understanding and gives insights into what should be undertaken when merging the field of PM and entrepreneurship. On the one hand, the traditional form of PM highlights the use of extensive tools and techniques, bureaucratic procedures and regulations, but also a clear division of roles and responsibilities among the operating team. On the other hand the concept of EPM is meant to empower the development of a ‘lite’ version of PM which is cost-effective but also suitable for the needs of start-ups.

The researchers believe that the knowledge and findings resulting from the data derived throughout the study will provide a contribution within the field of PM and entrepreneurship. Furthermore, as the end of the programmer is approaching, the researchers are working on establishing a makerspace within the Balkan region, therefore, this study will help them in understanding the most important success criteria and CSFs that will lead to the success of the makerspace.

2.5 Approach to Literature Selection

A literature review is carried out to not only increase the theoretical level of the thesis but to also ensure a thorough understanding of the topic and identify potential areas of research within the field. Furthermore, a literature review will aid the process of understanding similar work done in the past and identifying knowledge gaps which determine further investigation. However one should note that it is highly important to include a broad range of ideas; thus, not only selecting literature which is similar to the investigated topic, but also including literature which contradicts the underpinning assumptions within the field being researched. It is highly important to provide an inclusive range of ideas in order to ensure internal validity of the research, but also challenge the researcher’s mindset (Eisendardt, 1989, p. 544). Good structuring and proper use of terminology is essential so that it provides the reader with a comprehensive background on the topic (Cronin et al., 2008, p. 38). The process of a literature review in general is decisive in identifying relevant theories on the chosen topic, thus, a systematic approach should be taken throughout the entirety of the phases (Ghauri & Gronhaug, 2010, p. 51). This thesis combines concepts of both PM and entrepreneurship, therefore, literature and theories pertinent to both fields were taken into consideration in order to provide a comprehensive overview on the topic. On the one hand, a great deal of literature was found on the project success criteria and CSFs within the field PM, both in the print and electronic databases. On the other hand, sources that researchers considered important within the field of entrepreneurship could not be found, neither within online databases or printed literature. Also, one should note that entrepreneurship as an academic field is relatively new; therefore, the lack of research within the field is limited, particularly where the role of PM, i.e. a project-based view, in entrepreneurial ventures is concerned.
For the purpose of this study, scientific, peer–reviewed papers, books, viewpoints and editorials within the field of PM were taken into consideration. However, the lack of scientific literature on start-ups and practical cases forced the inclusion of studies from i.e. Innovation Centers, which were found online. In order to begin conducting research on the relationship between PM and entrepreneurship under general terms, two preliminary key words were identified; PM and Entrepreneurship. In general, keywords ease the process of refining the search process in a certain field (Cronin et al., 2008, p. 40; Harvard, 2007, p. 33). To further refine the scope of the research, other keywords were generated separately for PM and Entrepreneurship. On the one hand PM was followed with list of the following keywords: traditional PM, CSFs, project success criteria, project success, and failure. On the other hand, for Entrepreneurship the following keywords were generated: start-ups, flexible, informal system, project-based view, success criteria, success, and failure. The literature was primarily extracted from the following identified databases: EBSCO, Emerald Insight, Science Direct, Google Scholars, Umea University Library and Research Gate. Bibliography of each source which derived from the initial stage of research was used as a reference for further specific search of the literature; however, the researchers tried to avoid using secondary referencing since a concept may lose its original meaning when extracted from its original purpose. However, in cases where the original source could not be accessed due to high costs or credentials, secondary referencing was applied albeit still kept to a minimum. Last but not least, sources which did not specifically center on the idea of EPM but looked at the terms separately were taken into consideration in order to provide a comprehensive view on the topic.

While the concepts of project success criteria and CSFs have been exhausted within the PM literature, it is worth mentioning that sources are scarce when it comes to entrepreneurship. Based on an extensive literature review, it was deemed necessary to investigate the impact that project success criteria and CSFs may have in the success of start-ups and which are the criteria that start-ups consider important in fulfilling their goals but are not mentioned within the field of traditional PM.
3. THEORETICAL BACKGROUND

3.1 Projects and the Development of Project Management

A discussion on PM primarily requires a basic understanding of projects. According to the PMI (2013, p. 3) PMBOK Guide, a project can be defined as a temporary endeavor which is carried out with the intent to achieve a desired outcome. The concept of a project and its existence can be traced back thousands of years, whereby mankind’s participation has resulted in significant developments; from the construction of the Pyramids in Egypt, to the discovery of the Americas (Packendorff, 1995, p. 319).

However, project activity did not receive a particular status until the beginning of the 20th century when the field of PM began to develop (Garel, 2013, p. 668). Arising from a need to standardize work and business practices, it emerged as a method for initiating change in the existing production systems (Kreiner, 1992, p. 46), and was widely supported by contractors for its ability to justify their work (Garel, 2013, p. 668). With the emergence of large projects such as the Manhattan project (Hodgson & Cicmil, 2006, p. 3) its popularity grew, more so in the late 1980s (Lindgren & Packendorff, 2011, p. 51; Garel, 2013, p. 663). Although PM was most widely used in engineering, it has since grown to be accepted as a multi-disciplinary field (Winch, 1996, p. 129), no doubt as a result of projects’ applicability across all sectors and industries (Lindgren & Packendorff, 2011, p. 51). Therefore, the overwhelming acceptance of PM today can be directly tied to the concept of the project itself and its recognition as an essential approach to organizing work (Hodgson & Cicmil, 2006, p. 4).

Multiple reasons exist for the significance of project use in businesses today. Considering that society is changing and transforming at an increasing pace, there is a resulting need for modern solutions to modern issues that arise with the changes. Greater development begets complexity, and projects are invaluable in solving critical multifaceted tasks (Kreiner, 1992, p. 44). However, they can also effectively deal with simple tasks as well. Projects offer a cohesive process for achieving desired results despite the existent turbulent environments, and as such help organizations effectively manage change (Clarke, 1999, p. 139). They also provide more flexibility than more traditional organizational structures which are often slow in dealing with changes (Lindgren & Packendorff, 2011, p. 52). This is likely why projects have come to be viewed as the alternative to standardized bureaucratic approaches, characterized by rigidity and repetition, since projects emphasize uniqueness and change through goal-focused temporary processes (Cicmil et al., 2009, p. 80).

PM can thus be defined as encompassing all the relevant processes necessary for ensuring the adequate execution of projects. The PMI (2013, p. 5) offers a definition of PM which describes it at being the application of all relevant knowledge, skills and techniques required for the effective and efficient application of projects. In essence, PM is essential for implementing projects and ensuring their success (Tan, 2004 in Alias et al., 2012, p. 109). However, contemporary studies have produced empirical evidence of the ineffective application of PM in practice, from cost overruns to delays in scheduling and under-performance (Williams, 1999, p. 269; Atkinson, 1999, p. 341; Morris et al., 2000, p. 155-156). The resulting paradoxical situation is that PM has become just as bureaucratic and rigid as the forms of organizational work it was meant to provide alternatives against (Cicmil et al., 2009, p. 84-85). Despite the emerging criticism against projects and PM, they are still accepted as being indispensable (Hodgson & Cicmil, 2006, p. 3). Albeit, developments in the theoretical base of PM are recommended to ensure its
continued applicability to theory and practice (Hodgson & Cicmil, 2008, p. 142-145; Engwall, 2002).

3.1.1 Strategic Project Management

In recent years, both literature and practice have become increasingly interested in the concept of strategic project management [SPM]. SPM is a less rigid approach to PM which allows for the development of competencies and capabilities often been defined as residing in the soft side of PM, such as innovation (Stalk et al., 1992, p. 58). However, like PM itself, providing a single all-encompassing definition for SPM is not necessarily an easy feat. Nonetheless, certain characteristics are agreed upon by most researchers and practitioners. Firstly, SPM involves considering the bigger picture whereby the project serves to deliver the strategy of the organization (Green, 2005, p. 61; Kenny, 2003, p. 43). This calls for strategic alignment between the project and organization objectives, so that strategic intent is perpetuated. Strategic intent refers to a defined course that a project expects on taking over a given period of time, in order to help the organization establish and maintain a leading role in the market (Campbell & Yeung, 1991, p. 145). Strategic intent should be consistent but also exert flexibility in order to allow the organization to take advantage of new opportunities that arise, incorporating both short and long-term goals which inspire innovative approaches (Hamel & Prahald, 2005, p. 148). Secondly, SPM also serves to extend PM beyond its traditional success measures (Green, 2005, p. 2). Again, it requires that the project is viewed within context of the organization and its needs, whereby the success of the former helps ensure the success of the latter, or in other words both short and long-term success are considered. In that respect, SPM bridges the gap between strategic management and operational management (Grundy, 2000, p. 102) by viewing the project as the organization and vice-versa.

3.2 Project Success

One of the most complex yet pertinent concepts within PM is arguably that of project success. Naturally, one of the ultimate goals of PM is to achieve project success by ensuring that the desired outcomes of a project are reached effectively and efficiently (Tan, 2004 in Alias et al., 2012, p. 109) through its management. However, defining what constitutes success in projects proves challenging. These challenges often arise due to the high subjectivity related to defining success, since multiple aspects potentially influence the process (Morris & Pinto, 2007, p. 226). In that respect, considering a different set of objectives can produce varying definitions of success (Rolstadas, 2008, p. 38-40); in one case allowing for a project to be classified as successful and in another, as a failure.

Difficulties in defining success ultimately lead to questions on the ability to measure success and whether doing so has a purpose (de Wit, 1988, p. 164). Considering the high failure rate of projects, however, it becomes necessary to attempt to investigate what measures can be undertaken in order to increase the chances of a project’s success (Morris & Pinto, 2007, p. 226). Subsequently, significant research in PM has emerged attempting to better understand what constitutes projects success, or alternatively what leads to project failure. Soderlund (2011, p. 167) refers to this tradition of research in PM as the factor school, which is primarily concerned with identifying what determines project success in terms of success factors and project performance outcomes, or criteria. Therefore, following this tradition of research on project success, it is pertinent to introduce and define two significant concepts which arise in the literature and constitute the components of project success (Muller & Jugdev, 2012, p. 758). Namely:
15

i. Project Success Criteria

ii. Project Success Factors

3.2.1 The Development and Definition of Project Success Criteria

Muller and Jugdev (2012, p. 758) define project success criteria as the dependent variables used to measure a project’s success or failure. As mentioned, there are numerous difficulties in providing an all-encompassing definition for the criteria used to measure project success. Much of this can be attributed to the way in which success is conceptualized in the literature, and the scope within which researchers opt to consider it. Namely, whether they regard project success as synonymous with PM success, or if they view the two exclusively. Traditionally, the former approach is taken whereby project success and PM success are mutually inclusive. In that respect, project (management) success is measured against traditional performance measures often defined by the ‘iron triangle’ [Figure 1]: schedule or time, budgeting or cost, and quality which is sometimes inclusive of scope (Atkinson, 1999, p. 337-338; Rolstadas et al., 2014, p. 639). The iron triangle is meant to represent the constraints of the project, whereby the pre-defined project goals are balanced against them. The influence of the iron triangle, and its role as the foremost measurement criteria of success in projects is evident through its incorporation in various definitions of PM (Atkinson, 1999, p.338). Similarly, its prevalence in research solidified its position as a standard for the assessment of project success (Soderund, 2011, p. 160).

![Figure 1: The Iron Triangle of Project Success (adapted Atkinson, 1999, p. 338)](image)

However, over time criticism over the use of the iron triangle emerged due to its limitations in scope, resulting in inadequate success measurements (Atkinson, 1999, p. 338-339; Jugdev & Muller, 2005, p. 24; Toor & Ogunlana, 2010, p. 229; Soderlund, 2011, p. 160-161). Many scholars and practitioners point to practical examples of projects which do not fit into the iron triangle definition of success, but nonetheless succeed in fulfilling their purpose. de Wit (1988, p. 165) argued that limiting project success to the three elements of the iron triangle was overly simplified, and its applicability in practice was also often proven insignificant in comparison to other more crucial factors. Consider the Boston Big Dig, one of the most pricey highway projects undertaken in the USA in 2007, characterized by a 190 percent cost overrun, years of delay, corruption and other flaws (Rolstadas et al., 2014, p. 639). In other words, it did not meet any of the iron triangle constraints of cost, time or quality. By all means it was considered a failure, yet a 2010 article in the Boston Globe reported that the project had met its goals in the end by contributing to traffic improvements and increased property values (Gelinas, 2010). Therefore, the project succeeded in meeting its objectives despite poor management. This
points to a distinction between project success and PM success. In his paper, de Wit (1988, p. 165) makes similar claims by writing that a project could be successful even when PM had failed, and the opposite would likewise hold true.

Subsequently, the need for a differentiation between project success and PM success becomes apparent in the literature (de Wit, 1988, p. 164-165; Shenhar, 1997, p. 10; Cooke-Davies, 2002, p. 185). Traditionally PM success has been restricted to the project implementation. This is indicative of a short-term perception bias towards project success in the literature, where the project’s outcome in the long run is not considered (Munns & Bjeirmi, 1996, p. 82). In other words, only the internal dimension of the project is considered when measuring success while external dimensions that attribute to success, such as the project’s perceived value, are disregarded (Pinto & Prescott, 1988, p. 13-15). Lim and Mohamed (1999) therefore argue for a separate view of the two concepts since project success is broader than PM success. They suggest that project success could be measured from a micro and macro perspective, whereby the former concerns the project’s management while the latter refers to its value-adding contributions (Lim & Mohamed, 1999, p. 244-245).

However, it should be noted that while the iron triangle has been subject to extensive criticism, the concepts that encompases and their acceptability as project success criteria has not (White & Fortune, 2002, p. 6). This is why cost, time and quality are still relevant success criteria, however, they are not the only criteria by which a project should be judged (Pheng & Chuan 2006, p. 24-25), as there is a need to consider softer dimensions as well. Subsequently, this will generate a more holistic view of project success. Therefore, project success should be measured against the project’s overall objectives (Cooke-Davies, 2002, p. 185; Rolstadas et al., 2014, p. 639).

By limiting project success to cost, time and quality, it does not consider the way objectives differ across projects (de Wit, 1988, p. 166). Alternatively, it assumes that complex projects have the same objectives as simple ones, or that construction projects share the same objectives as those in theatre, for example. This could be attributed to the fact that most studies on project success criteria are limited to industries that are generally classified as “hard” (Ika, 2009, p. 14), such as engineering. However, it has been argued that project success criteria are subjective which is to say they change based on each project (Shenhar & Dvir, 2007, p. 35). Research suggests that project success criteria are dictated by various contexts, such as the type of project in terms of size and/or industry (Hyvari, 2006, p. 33). This has led to a need for more interpretivist views on project success in light of the already dominant positivist and normative research being conducted (Ika, 2009, p. 13-14; Muller & Jugdev, 2012, p. 769).

Similarly, Winter et al. (2006, p. 700) point out that there is an increased interest in researching projects from a value-adding-perspective where long-term effects and subjective viewpoints are considered when measuring project success. While traditionally much of this research has defined success in terms of efficiency through the iron triangle (Soderlund, 2011, p. 160), developments have led to increased attention being placed on other factors such as value creation or the building of capabilities (Shenhar, 2001, p.714-716). Therefore understanding the subjective factors which lead to project success in specific contexts is required of project success research.

Shenhar and Dvir (2007, p. 12) developed a framework for project success criteria that took into consideration the strategic and tactical aspects of project success, so both the short-term and long-term. They define five metrics of success criteria which are
applicable to all projects, but allow for a workable framework that can be changed to meet the specific needs of a project. This means that different sub-measures can exist for each of the metrics, and the metrics themselves can be increased or decreased to meet the specific needs of the organization. The groups of measures, or metrics, include:

1. Project efficiency – Iron triangle; time and budget goals
2. Impact on the Customer – Customer satisfaction
3. Impact on the team – Human Resources [HR] factors
4. Business results – Bottom line and finances
5. Preparation for the future – Growth

3.2.2 The Development and Definition of CSFs

While traditionally project success literature oftentimes views success criteria and success factors synonymously, there have been multiple studies drawing a distinction between the two. In their study, Lim and Mohamed (1999, p. 244) define project criteria as a set of conditions which provide the sufficient input needed to determine whether a desired result was achieved or not, that is to determine project success or failure. Alternatively, they identify success factors as those which influence the criteria but do not determine the project’s success or failure (Lim & Mohamed, 1999, p. 244). This distinction has also been encouraged by other authors who, in criticism of the iron triangle and its limited factors, encouraged the search for alternate factors (Rolstadas et al., 2014, p. 641). As a result, the concept of success has evolved from a list of success criteria to the development of CSFs [CSF] (Jugdev & Muller, 2005, p. 23).

Success factors can then be defined as the independent variables that can be influenced so that their input leads to increased chances of success, either directly or indirectly (Cooke-Davies, 2002, p. 185; Muller & Jugdev, 2012, p. 758). CSFs are then the project inputs considered to be the most crucial in influencing the probability of project success (Jugdev & Muller, 2005, p. 24). What is important to note is that definitions of CSFs in the literature unanimously stress the fact that they are able to be influenced (Pinto & Slevin, 1987, p. 22; Milosevic & Patanakul, 2005, p. 184; Muller & Turner, 2007, p. 299; Alias et al., 2014, p. 61). In other words, their adequate management increases the probability of project success. Viewing project success from the perspective of CSFs can, therefore, offer a more dynamic approach to the effectiveness of project delivery (Alias et al., 2014, p. 62). Many studies have been undertaken on CSFs, therefore, resulting in multiple lists of factors. These includes the development of the Project Implementation Profile by Pinto & Slevin (1987), who identified a list of ten [10] CSFs which remains one of the most influential and cited frameworks within the body of project success research today [Table 2].
The research can be more or less divided into two types, that which looked to produce general lists applicable to all projects, and that which focused on producing lists for specific contexts. Yet, despite the abundance of studies, definitive CSFs applicable to any project have yet to be identified. Subsequently research began to take a new focus, namely attempting to link CSFs with success criteria (Ika, 2009) or attempting to determine the influence of subjective factors on project success (Dyrhaug, 2002; Hyvari, 2006; Morris & Pinto, 2007).

### 3.2.3 Linking Success Criteria with CSFs

Yet, there still appears to be a gap in the literature concerning connections between success criteria and success factors (Ika, 2009, p. 12). Ika (2009, p. 14) argues that research on CSFs has produced inconclusive results, where the bulk of it simply provides lists of factors as oppose to logical frameworks (Jugdev & Muller, 2005, p. 24). Only identifying factors which affect success is not necessarily useful for measuring success (de Wit, 1988, p. 164), which is why success criteria is needed to help judge whether a project has succeeded or failed. First the success criteria needs to be defined in terms of the project’s objectives and constraints, then the success factors necessary for the delivery of the criteria can be identified (Wateridge, 1998, p. 63). In accordance, success criteria and success factors should not be viewed in isolation.

Freund (1988, p. 20) claimed that CSFs should be viewed as the things which need to be done while success criteria are what needs to be achieved, or the final point in a process towards achieving success which requires both concepts [Figure 2]. In that sense, by establishing a project’s most CSFs, the most critical causes for failure are determined which help instigate improvement in the project’s implementation (Soderlund, 2011, p. 159) therefore, fulfilling the required criteria. Dyrhaug (2002, p. 48) refers to CSFs as the “vehicle of communication”; they translate the success criteria into operational terms, defining what application of skills and tools would be most adequate for achieving success. In that respect, defining the former provides a set of responsibilities which allows

<table>
<thead>
<tr>
<th>CRITICAL SUCCESS FACTORS</th>
<th>Project Mission</th>
<th>Initial defined goals and general directions</th>
</tr>
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<tbody>
<tr>
<td>Network Support</td>
<td>Willingness to provide resources and power for project success</td>
<td></td>
</tr>
<tr>
<td>Project Schedule/Plans</td>
<td>Detailed specification for each step of project implementation</td>
<td></td>
</tr>
<tr>
<td>Client Consultation</td>
<td>Client involved in the process; consulted</td>
<td></td>
</tr>
<tr>
<td>Personnel</td>
<td>Recruiting, selecting and training adequate people for project team</td>
<td></td>
</tr>
<tr>
<td>Technical Task</td>
<td>Availability of tech and expertise needed to accomplish technical steps</td>
<td></td>
</tr>
<tr>
<td>Client Acceptance</td>
<td>“Selling” final product to intended user/s</td>
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<tr>
<td>Monitoring and Feedback</td>
<td>Process controlled, and performance compared to initial project plan</td>
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<tr>
<td>Communication</td>
<td>Providing appropriate communication channels between relevant parties</td>
<td></td>
</tr>
<tr>
<td>Trouble-Shooting</td>
<td>Ability to handle unexpected crises or deviations from plan</td>
<td></td>
</tr>
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Table 2: The Project Implementation Profile [PIP] (adapted Pinto & Slevin, 1987, p. 174)
for the appropriate selection and application of the latter in order to fulfil these responsibilities (Alias et al., 2014, p. 61).

Figure 2: The Relationship between Success Criteria and CSFs

With this link established, there is a need to examine success within context, so in terms of the project itself (Wateridge, 1998, p. 61). Modern literature on project success has been concerned with the development of success frameworks that consider the subjectivity of projects (Shenhar et al., 2001, p. 702). Belassi and Tukel (1996, p. 144) argue that while a project’s characteristics are one of the essential dimensions of its overall performance, a general list cannot be applied to all projects but rather a flexible framework. Similarly Shenhar et al., (2001, p. 704) advocate for a more project-specific approach whereby the subjectivist perspective is adopted since evidence points to the inadequacy of a ‘one-size-fits-all’ methodology. However, they also stress the need for strategic alignment since project success is linked to the success of an organization in the long run (Shenhar et al., 2001, p. 700).

From a strategic PM perspective, the dimensions of project success go beyond the project itself and have beneficial implications on the future of the organization as well, namely in terms of innovation and the development of core competencies (Jugdev & Muller, 2005, p. 28). Therefore, CSFs have a relationship with both the organization, which is internal, and one with the external environment. They also require commitment from the organization’s management to ensure that the project aligns with the strategy of the organization (Jugdev & Muller, 2005, p. 28; Fortune and White, 2006). Therefore project success is directly related to an organization’s ability to accept PM as a strategic asset (Shenhar et al., 2001, p. 669; Jugdev & Muller, 2005, p. 28).

In terms of start-ups, very little research on project success has been conducted, and there is no framework or list of CSF which exist in the literature. In that respect, a general framework can be applied however it will not take into consideration the subjective context of the project, which is of particular significance to start-ups that can be viewed as both the project and the organization. From this perspective, the implications of PM as a strategic tool in the project success of start-ups becomes of great interest. It requires, however, the development of a theoretical background on project success specifically for start-ups.

3.3 Entrepreneurship and New Venture Creation

3.3.1 The Development of Entrepreneurship in Academia

To date, the phenomenon of entrepreneurship lacks an adequate definition in terms of defining it as an independent field and creating a conceptual framework (Shane & Venkataraman, 2000, p. 218). According to Venkataraman (1997) the main problem lies
in the inclusion of two phenomena into one joint framework: the presence of opportunities and the presence of enterprising individuals. Defining the field of entrepreneurship by simply making references to the individual who undertakes the activity, and searching for the characteristics that define an entrepreneur, is deemed unfruitful and insufficient (Gartner, 1988, p. 21). A shift in viewing entrepreneurship as a study of personality traits to one of how organizations emerge is considered more than necessary in order to give the field a direction of its own. From the viewpoint of McKenzie et al. (2007, p 23), previous research has led to confusions with regard to the acceptance of entrepreneurship as an independent field and has called for a consensus among the academia and practitioners on the functional definition of entrepreneurship.

In this attempt to provide the field of entrepreneurship with a new direction and perception, Gartner (1988, p. 26) proposed the following definition; “Entrepreneurship is the creation of new organizations”. However, Gartner’s definition has been criticized for narrowing and restricting the concept itself (Katz, 1992, p. 31). In light of the aforementioned criticism, Shane & Venkataraman (2000, p. 218) define the field of entrepreneurship as a study of opportunities, processes of discovery, evaluation and exploitation of opportunities. In their definition, the authors take an inclusive perspective by considering the human factor in the form of a set of individuals who discover, evaluate and exploit opportunities. Contrary to the previously presented definitions of entrepreneurship, the concept presented by Shane & Venkataraman (2000, p. 218) takes into consideration three important factors:

i. The existence, discovery and exploitation of opportunities;
ii. Influence of the individuals as the main actors who play a crucial role in the process of exploiting opportunities, rather than looking at the environmental circumstances; and
iii. Entrepreneurship is broader than just the creation of the firm.

In support of this definition, a growing consensus has been reached among the academia and practitioners of a new perspective and definition of entrepreneurship. Namely that entrepreneurship is the process through which individuals identify and exploit new business opportunities, oftentimes done through the creation of new business ventures (Aldrich & Cliff, 2003, p. 575).

3.3.2 New Venture Creation and Start-Ups

Multiple studies have attempted to create frameworks which depict the new venture creation process (Gartner, 1985; Katz & Gartner, 1988). One of the earliest attempts was Gartner (1985, p. 698) who provided a framework to describe new venture creation consisting of four factors:

- Characteristics of the entrepreneur
- Characteristics of the Firm/Organization
- Environment
- Process of creation

Much of the literature that followed focused on the first factor; researching the influence of an entrepreneur’s attributes on the new venture creation process (Shaver & Scott, 1991; Gatewood et al., 1995; Jo & Lee, 1996; Brandstatter, 1997; Ciavarella et al, 2004). However, the research approach was met with much debate particularly due to its focus on the entrepreneurial traits, which were unable to establish a comprehensive framework for success in the new venture creation process (Carter et al., 1996, p. 154). This shifted
focus from the ‘who’, the entrepreneur, to the ‘what’, the activities or process, in new venture creation.

Start-ups represent the process of new organization creation through the fusion of innovation and entrepreneurship (Sahut & Peris-Ortiz, 2014, p. 665), and are arguably the best example of new venture creation. However, there still appears to be a lack of consensus on how to define start-ups, creating an external validity problem. There have been several attempts to outline and identify start-ups in terms of their general characteristics; however, the definitions and concepts have been dispersed making it difficult to reach a unified definition (Luger & Koo, 2005, p. 17; 24). Nevertheless, there appears to be three different criteria for identifying start-ups prevalent in the literature; ‘new’, ‘active’ and ‘independent’ (Luger & Koo, 2005, p. 17). According to Keeble and Nachum (2001, p. 17) the underpinning definition relies on the creation of new enterprises which did not formerly exist in the form of an organization. Accumulation of new knowledge through collaborative activities is considered to be at the core of the creation of these new entities. Yet, identifying start-ups as just new entities without considering their status in terms of their activities and operations has reached a high level of criticism, requiring a clear distinction among ‘newly’ created entities and ‘newly and active’ start-ups (Winkler & Hadden, 1977, p. 94). Johnson & Cathcart (1979, p. 272), take it one step further by adding independence as a criterion; a firm should not only be newly created and active, but also autonomous to be considered a start-up.

Lester et al. (2003) characterize start-ups as small and young ventures with a simple organizational structure and informal communication. The start-up is centered on the owner who is also the ultimate decision maker, portraying a trial and error style to everyday business choices. Ferreira et al. (2011) describe start-ups in much the same way, adding that they are often high in innovation and risk taking and that their decision making styles, while informal and based on trial-and-error, often prove inaccurate. Miller and Friesen (1984) also stress the risk-taking feature of start-ups and describe them as proactive, which is easily made possible by the fact that there is usually one or few owners. While most authors do not focus on the age of the venture, simply referring to it as new, KPMG states that a start-up should be less than 10 years old. However, KPMG also claims that a start-up should be concerned with growth within those 10 years, primarily in terms of profit or employment. The European Commission (1996, cited in Savlovscchi & Robu 2011, p. 277) presents the definition of micro firms, or start-ups, based on two different criteria: the total number of employees in the enterprise; and turnover or balance sheet total, where the former is less than 10 employees and the latter is less than or equal to 2 million euros. By synthesizing the various characterizations of a start-up found in the literature, a summary of start-up features can be established and agreed upon for the purpose of this study. This is reflected in Table 2 below.
Regardless of how start-ups are defined, these entrepreneurial entities play a crucial role with significant impact on the economy, society and larger firms (Ireland et al., 2001, p. 51; Turner et al., 2009, p. 282). SMEs are considered to be the backbone of Europe’s economy and according to the European Commission (2015), they represent 99% of all business within the European Union. Within the last five years, they have contributed to the creation of around 85% new jobs. Subsequently, the European Commission considers SMEs and entrepreneurship as key factors in ensuring economic growth, innovation, creation of new jobs and social integrity. Start-ups have a considerable impact in terms of creativity and innovation that they present in the surrounding environment; thus, providing new solutions for the market and consumers (Barringer & Ireland, 2012, p. 47). The rising tide of start-ups around the world is resulting in the re-imagination of every single industry, but also promising the creation of new jobs and wealth (Startupmanifesto, 2012, p. 1). Accordingly, the potential contribution of new venture creation and start-ups to the economy has solidified their importance as an economic actor, but it has also led to the conclusion that start-ups need to increase their quality and improve the way they operate in order to match or exceed the competition on the market (Turner et al., 2009, p. 283). Considering the high failure rates of start-ups, this has become of increasing importance.

### 3.3.3 Success in New Ventures/Start-Ups

Despite the evolving body of knowledge and research advocating for an increase in entrepreneurial capacity as a method for enabling economic growth (Acs and Storey, 2004; Acs, Desai and Hessels, 2008; Wennekers et al., 2005), many entrepreneurial ventures fail prematurely. In fact, entrepreneurial companies are subject to higher failure rate than older companies (Cressy, 2006, p. 103). In 2013 it was reported that 80% of

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**Table 1: Features of a Start-Up**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>Small</td>
</tr>
<tr>
<td></td>
<td>&gt; 30 employees</td>
</tr>
<tr>
<td>Age</td>
<td>&gt; 10 years</td>
</tr>
<tr>
<td><strong>Structural Form; Information Processing</strong></td>
<td>Simple, Informal Owner/Founder Centralized</td>
</tr>
<tr>
<td><strong>Decision Making Process</strong></td>
<td>Trial and Error, Risk Taking, Informal Owner/Founder Centralized</td>
</tr>
<tr>
<td><strong>Risk Taking</strong></td>
<td>High</td>
</tr>
<tr>
<td><strong>Innovation</strong></td>
<td>High</td>
</tr>
<tr>
<td><strong>Autonomy</strong></td>
<td>Independent</td>
</tr>
<tr>
<td><strong>Growth</strong></td>
<td>Profit Increase, Employment Increase</td>
</tr>
</tbody>
</table>
entrepreneurs fail within the first 18 months (Wagner, 2013) a value which increased to 90% within just two years (Patel, 2015). While there are many explanations for why new ventures companies fail, it appears that a predominant reason is the misallocation and waste of resources, including time and money, in building a product without any real conception of what it should be (Eisenmann et al., 2011, p. 1276). This is in line with the perspective of the entrepreneurial founder, who views a start-up as an entity driven to solve a problem with no clear guidelines on its path, and where success is not guaranteed.

Carter et al. (1996, p. 166-165) found that the type, quantity and sequence of activities undertaken influences the probability of success in new venture creation. Similarly, Lichtenstein et al. (2007, p. 257) argue that new venture creation requires system-wide dynamic processes which provide a more holistic perspective to what drives new venture success. Nevertheless, research on what leads to higher success rates for new venture creation is still inconclusive (Gruber, 2007, p. 784). This necessitates a paradigm shift in the current understanding of entrepreneurship which will help develop theory and lead to higher success rates in new venture creation (Lichtenstein et al., 2006, p. 171). Perhaps it is best to revert back to Drucker’s initial understandings of entrepreneurship.

Drucker (1993) argued that entrepreneurship is not a state of being but rather a practice or a means to an end. Considering this perspective, it goes to reason that new venture creation can then be viewed as the process which employs entrepreneurial practice. Carter et al. (1996, p. 152) made similar claims by referring to new venture creation as the process which leads to the creation of a new organization and is inclusive of all the factors which influence this process. Similarly Lichtenstein et al. (2006, p. 155) argued that new venture creation is characterized by multiple types of interdependent, overlapping activities, which can span over a long period of time. In other words, new venture creation involves emergent activities of a fragmented and spontaneous nature (Mueller et al., 2012, p. 996).

In terms of success criteria and CSFs in new ventures, little research has been done on the topics within the field. However, one study conducted by Kakati (2003) attempted to identify the most pertinent success criteria for a new venture. The study surveyed twenty-seven [27] new venture companies which had experienced both success and failure with their ventures, asking them to rate the most relevant success criteria based on a given thirty-eight [38] criteria organized into six [6] groups. The criteria groups included:

1. Entrepreneur Quality
2. Resource-Based Capability
3. Competitive Strategy
4. Product Characteristics
5. Market Characteristics
6. Financial Criteria

The results of the study found that the most pertinent clusters of criteria for a new venture’s success were found under the first three groups. Each group also contains sub-criteria.

Considering the magnitude of new venture creation, it becomes apparent that it requires work and entrepreneurial practices need to be managed (Drucker 1993, p. 150). However, it is pertinent to note that new venture creation leads to the pursuit of different objectives than those defined by most organizations (Mueller et al., 2012, p. 996). Therefore, new venture creation as the process which employs entrepreneurial practices, necessitates a flexible management perspective in order to increase success (Jo & Lee, 1996, 169;
Ciavarella et al., 2004, p. 466). In that respect, new ventures present an opportunity for the development of best practices in entrepreneurship which will help assure entrepreneurial success in both the short and long term, but research is required in order to enhance the current body of knowledge (Chea, 2008, p. 49). The new venture creation process would benefit immensely from the adoption of broader theoretical models that go beyond what is currently considered entrepreneurship (Steier, 2007, p. 1106). Considering the high failure rate, it is evident that the current process lacks the appropriate methodology (Drucker, 1993, p. 29) and new conceptualizations are required.

3.4 Project Management in Entrepreneurship

3.4.1 A Project-Based View of Entrepreneurship

Entrepreneurship and PM may seem like very differing fields but they share much more in common than initially believed. As academic fields, both have similar histories, significance in academia, nature and a similar theoretical and professional status (Kuura et al., 2014, p. 219). Yet, they have developed apart from one another with little to no interaction between the fields. The clear fragmentation of entrepreneurship and PM occurs both in theory and practice. Today, academic research emphasizes publishing in niche journals (Kuura et al., 2014, p. 220) which has contributed to the separation. Similarly, in academia there appears to be a preference for gap spotting over problematization, despite the latter leading to more interesting research and new theory development (Sandberg and Alvesson, 2011, p. 40), which is necessary for the emergence of research on entrepreneurship and PM. There is also a segregation between the two fields in practice resulting from a tendency to rely on ‘experts’ or ‘consultants’, and practice specialties (Kuura et al., 2014, p. 220). However, when it comes to emergent PM approaches there is a tendency for practice to lag behind theory (Bryde, 2003, p. 791). This is especially true for EPM which emphasizes the use of PM concepts, methods and applications for fostering innovation and creativity, which present significant practical difficulties (Bryde, 2003, p. 782). Despite the division, there are several benefits to theory and practice that can result from considering the links between entrepreneurship and PM. Subsequently, some research has attempted to look into this.

In their paper titled ‘Studying Entrepreneurial Project’, Asquin et al. (2011), call for project research within the domain of entrepreneurship in order to initiate a paradigm shift which would be of great benefit for the field. They argue that the entrepreneurial project exceeds all of the existing entrepreneurship paradigms without contradicting them, and in that way acts as a language that allows for the exchange of knowledge between the entrepreneurial paradigms (Asquin et al., 2011, p. 5). They found that methodological deficiencies in research pertaining to entrepreneurial projects has not only limited but impoverished knowledge in the field of entrepreneurship (Asquin et al., 2011, p. 8). This suggests that developing research that converges the two domains would be mutually beneficial. For entrepreneurship it allows for developments in the academic field that contribute to practical implications related to the success of entrepreneurial ventures; and for PM it presents a potential growth in its practical application, considering the use of PM in small and medium enterprises [SMEs] and start-ups (Kuura, 2011, p. 160). Consider, the biggest hindrance in linking entrepreneurship and PM appears to be the fact that the former is viewed as a permanent endeavor while the latter as a temporary one, by definition. However, Kuura (2011) argues that this should not be a problem since most start-ups, or entrepreneurial ventures, have high failure rates and short life-cycles that hardly makes it logical to consider them as permanent endeavors. In that respect, it actually seems more appropriate to view them as projects.
Lindgren and Packendorff (2003) were one of the first to propose the idea of a project-based view of entrepreneurship. In their paper by the same name, they argued for a paradigm shift in the traditional perspective on entrepreneurship theory by considering viewing entrepreneurial acts as socially constructed events as oppose to acts done by individuals called ‘entrepreneurs’ (Lindgren & Packendorff, 2003, p. 87). By focusing on the act itself rather than the individual, entrepreneurship can be viewed as a project and not just a characteristic (Lindgren & Packendorff, 2003, p. 99). They went on to further develop this idea in their 2011 paper, by arguing that a project-based view of entrepreneurship required seeing the entrepreneurial process as a temporary one which is considered complete once the entrepreneurial act has been accepted and is no longer viewed as an anomaly (Lindgren & Packendorff, 2011, p. 52-54). This is not dissimilar to research conducted by Kuura in 2011 which also stressed the need for convergences between the fields on a purely theoretical basis. However unlike Lindgren and Packendorff’s research, Kuura’s paper was able to identify potential streams for integration. Particularly, this was done by arguing that a connection between the two could best be established based on their mutual relationship with innovation (Kuura, 2011). In later research Kuura et al. (2014, p 226) argue this point further by stating that while mutual learning can be made possible by taking a number of routes, one of the most apparent linkage streams between the two fields appears to be innovation. They call this the mainstream view and claim attempts to link the two fields primarily through innovation leads to the creation of entrepreneurial projects (Kuura, Blackburk and Lundin, 2014, p. 226).

**3.4.2 Developing Entrepreneurial Project Management**

The traditional form of PM has its genesis in the management of engineering and construction projects carried by large scale companies (Turner, et al., 2010, p. 745). A common consensus has been reached by leading authors and certified bodies that the traditional form of PM is a set of tools, techniques, and methodologies used to effectively manage projects and achieve the desired project requirements in terms of objectives, time, scope, and budget (APM, 2012). Research has shown that the traditional form of PM is aligned with the hard paradigm in terms of the tendencies to lean toward positivist philosophies; viewing organizations as very mechanistic, focused on structure and centralized control (Pollack, 2007, p. 268). The research findings drawn by Pollack, reinforce previous assumptions on the main underlying principles of PM and their relation to the hard paradigm. However, the author pinpoints that the traditional form of PM is being questioned everyday by practitioners in terms of the nature of its application, particularly in new venture creation.

Although extensive research had been conducted when it comes to the application of PM and its role in large scale companies; the role of PM within start-ups, or EPM, has not been researched sufficiently. The closest field that one can use as a benchmark for comparison is PM within SMEs (Thibault, 2012, p. 4). Discussions in the literature and practice tend to view SMEs and start-ups as settings with common characteristics centered around limited resources, greater risks, higher flexibility, informal controls and involvement of founders themselves on daily operations (Larson et al., 1991, p. 17). Accordingly, Ghobadian and Gallear (1997, p. 125) suggest that the traditional form of PM fails SMEs and start-ups in terms of processes which are too bureaucratic, procedures that reflect formal decision making, structure where traditional PM limits innovation, and people where traditional PM is system oriented rather than people focused. Turner et al.,
(2012, p. 950) reconfirms this by arguing that better results will be obtained if the PM procedures and structures are tailored to the nature and size of the project.

Not surprisingly, the application of formal PM within start-ups has not been extensive. Not only is it too formal, thus slowing the decision making process and limiting the involvement of the team on certain aspects, but it also often becomes very costly which, considering the limitations that start-ups face when it comes to human and monetary resources, make it less practical. Instead, an “On the go” approach is mainly applied by start-ups since it provides a high degree of flexibility when compared to traditional approaches of PM (Thibault, 2012, p. 10). A high degree of flexibility allows start-ups to respond to the changing environment especially at the front-end phase, when the level of information is very low and the risk associated with the decision making process is very high. But this does not mean that the current practices are the best, especially considering the high failure rates of new ventures. In fact, Larson et al., (1991, p. 30) claim that that small firms do not actually prefer informal systems of management. This goes to reason that new ventures, therefore, require something in between, or as presented, a lite version of PM which offers just enough structure to ensure adequate management but also flexibility to support innovation. White and Fortune (2002, p. 6) conducted an anonymous questionnaire with 995 project managers who also reaffirmed the need for a “lite” version of PM, one that would provide them with enough flexibility to be creative in hostile environments.

From the perspective of the start-up practitioners in the field, even though the influence of the soft paradigm is much less when compared to the hard paradigm, it does appear that its application would be beneficial for increasing the probability of success. This would, however, require the development of a working framework for EPM, since no research to date has been able to establish one. In doing so, it would be pertinent to define what the success criteria and critical factors are before attempting to define a process for achieving them. As mentioned, the literature on project success places far too much emphasis on the iron triangle, without considering other criteria and critical factors. The development of EPM, would require a new perspective on project success, one which considers the innovative and flexible nature of new venture creation. In terms of success criteria, Table 3 shows the success criteria for start-up or new venture which combines those presented in frameworks by Shenhar and Dvir (2007) and Kakati (2003), the former who provided success criteria for projects and the latter whose research focused on the success criteria of new ventures. Therefore, the two sets are combined and adapted to create a set of success criteria specifically for EPM.
Table 2: Success Criteria for EPM (adapted Shenhar & Dvir, 2007; Kakati, 2003)

<table>
<thead>
<tr>
<th>Efficiency &amp; Capability</th>
<th>Impact on Entrepreneur &amp; Team</th>
<th>Impact on Customer/Client</th>
<th>Business and Direct Success</th>
<th>Preparation for Future – Competitive Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meeting schedule</td>
<td>Size of venture team</td>
<td>Meeting requirements and specifications</td>
<td>Profits</td>
<td>New technology</td>
</tr>
<tr>
<td>Meeting budget</td>
<td>Creativity</td>
<td>Benefit to customer/client</td>
<td>Market Share</td>
<td>New market</td>
</tr>
<tr>
<td>Managerial capability</td>
<td>Morale and Satisfaction</td>
<td>Extent of use</td>
<td>ROI</td>
<td>Quality strategy</td>
</tr>
<tr>
<td>Technical capability</td>
<td>Skill development and growth opportunities</td>
<td>Customer/Client satisfaction and loyalty</td>
<td>Cash Flow</td>
<td>Cost strategy</td>
</tr>
<tr>
<td>Familiarity with the target market</td>
<td>Brand recognition</td>
<td>Innovation strategy</td>
<td></td>
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</table>

In that respect, entrepreneurship adds to the existing PM repertoire by forcing the creation of tools and techniques that go beyond managing just cost, time and quality, by considering learning and innovation (Frederiksen & Davies, 2008, p. 488). By defining what needs to be done, it becomes easier to discuss the how; EPM in the form of ‘lite’ PM tools and techniques that increase the chances of success by leaning towards less formalized managing systems. In that respect, a two way exchange between the fields can be established.

3.5 Conceptual Framework

The aim is to develop a framework for project success for start-ups with a project-based view. The framework encompasses the most relevant success criteria that contribute to success in the short and long-term (PM success and project success), as well as the most relevant CSFs which translate operational activities into strategic concepts. The framework essentially represents all the crucial concepts which need to be considered when a project-based view is applied to a start-up and is meant to illustrate how all the concepts co-exist and interact in the process of achieving start-up success.

Throughout the study, a project-based view is applied to the start-up whereby it is both a project and organization. With this perspective, we want to explore the nature of project success in start-ups, particularly in terms of identifying the most relevant success criteria and CSFs which can most contribute to start-up success in the short-term [PM success] and the long-term [project success]. It is important to understand how start-ups determine and define their most relevant success criteria because these are the variables by which the start-up measures its desired success. In the start-up which acts both as project and organization, the objectives of the two are the same, thus making strategic alignment easier. However it also means that the success of the project is directly related to the success of the organization, i.e. if the project fails, the start-up will fail. Therefore, the use of PM is important to facilitate short-term success which will contribute to long-term success. This is accomplished through CSFs which are the independent variables that can be influenced to increase the chances of success. Understanding which CSFs are most relevant for start-ups then becomes significant as well, since this helps understand what CSFs are most pertinent for contributing to a start-up’s strategic intent. This is because CSFs serve as a communication liaison between operational activities and strategic intent,
they dictate what needs to be done to fulfill the success criteria. In that respect they directly influence PM success and indirectly influence project success. By establishing a framework for the project success of start-ups, we can also better understand the nature of EPM which can eventually contribute to the development of lite PM tools and techniques catered to the needs of start-ups.

The conceptual framework, Figure 3, represents a theoretical view of how project success can be explored in a project-based start-up. We expect that this framework holds true for all start-ups or new ventures with a project-based view, therefore representing transferability and generalizability since it considers the independent contributions of success criteria and CSF, the differentiation between project success and PM success [short vs. long-term success], and strategic alignment.

![Conceptual Framework for Project Success in EPM](image)

**Figure 3: Conceptual Framework for Project Success in EPM**

Figure 4 represents an extended view of the conceptual framework in terms of the success criteria and CSFs. This framework combines the dimensions of the PIP Profile for project CSFs presented earlier in Table 2, and the adapted success criteria for entrepreneurial projects presented in Table 3.
Figure 4: Conceptual Framework for Project Success Criteria and CSFs in EPM
4. RESEARCH METHODOLOGY

The following chapter provides an inclusive overview of the practical approach taken towards the research methodology. The practical approach compliments the theoretical methodology presented in chapter 2. This chapter addresses the research strategy and design, including the approach to data collection and analysis. Justifications for the trustworthiness and authenticity of the data and its ability to meet quality requirements for the study are also discussed. Finally, ethical considerations are presented at the end of this chapter.

4.1 Research Strategy

Research strategy refers to the process of how research will go about answering the research question (Saunders et al., 2012, p. 680). It involves the choice of qualitative or quantitative data collection, or a combination of the two (Bryman & Bell, 2007, p. 28). As mentioned in chapter 2, the ontological perspective is constructivist whereby reality is considered subjective and cognitively constructed by every individual (Long et al., 2000, p. 190). The epistemological perspective is interpretivism, whereby knowledge is also perceived as subjective which requires that the research strategy revolves around understanding the subjective nature and meaning of social actions (Bryman & Bell, 2007, p. 728).

4.1.1 Qualitative Research vs. Quantitative Research

Following the constructivist and interpretivism stances taken, and in compliance with the mainstream approaches emphasized within the research methodology literature, the most appropriate choice of method for the purpose of this study is of a qualitative nature (Bryman & Bell, 2007, p. 400; Saunders et al., 2012, p. 151; Long et al., 2000, p. 191; Morgan & Smircich, 1980, p. 497). Qualitative research is equivalent to data collection techniques which produce non-numerical data (Saunders et al., 2012, p. 151). Qualitative research methods focus on creating an understanding of experiences, perspectives and thoughts on the subject of research (Harwell, 2011, p. 148). When drawing a comparison with the quantitative research methods, it can be seen that instead of the research itself acting as the main driving force, the perspectives of the participants are the main factors driving the research in qualitative methods (Bryman & Bell, 2007, p. 425). In this case, the quantitative approach would not be able to completely fulfil the objectives of the research and the subjectivity of the topic. In general, qualitative research aims at providing rich insight into human behavior; albeit, clarifying imbalances by offering contextual information (Guba & Lincoln, 1994, p. 106).

The theory of EPM is still in its emerging phase and therefore remains relatively underdeveloped. Alternatively, research in PM is far more established when compared to the state of entrepreneurial theories. Subsequently, researchers believe that the current situation in the field justifies the use of qualitative data which will help explore the phenomena in order to later establish law-like generalizations (Golafshani, 2003, p. 600). Therefore, for the purpose of this study an abductive approach to theory is applied resulting in the use of qualitative methods. This will allow for the adequate exploration and understanding of the subjectivity of EPM by identifying patterns pertaining to the concepts of project success criteria and CSF in start-ups.
4.1.2 Exploratory Nature of Research

This study seeks to explore the relevance of both concepts, project success criteria and CSFs, within the context of project management in new venture creation, or project-based start-ups. Therefore, the nature of the research strategy can be described as exploratory. According to Saunders et al., (2012, p. 139) exploratory case studies are valuable when the researcher is aiming to clarify and understand the research problem. In general, exploratory research aims to provide new insights into the problem being investigated, ask questions and assess the topic in a new light. A key factor in the decision to use exploratory research was the flexibility of the method and its adaptability to change. In an exploratory study the direction of the research may change as a result of new data that appears during the process (Saunders et al., 2012, p. 140; Harwell, 2013, p. 153). Harwell (2013, p. 154) pinpoints that exploratory research is especially useful when the researchers strive to achieve generalizability, which may or may not be guided by a theoretical perspective. For the purpose of this study, exploratory qualitative research is deemed appropriate considering limited knowledge and research on EPM in the literature (Harwell, 2012, p. 154).

Last but not least, in order to explore the nature of the success criteria and CSFs which could lead to the success of the start-up in general terms, the study looks to interview the min decision makers of start-ups. Thus, the exploratory research design is deemed appropriate and in compliance with the nature of the research. Descriptive research has been avoided as it aims to depict an accurate profile of events or situations, which is not the nature of this study. Furthermore, the study has been delimited from the use of explanatory research which aims to establish casual relationships between variables, which is also beyond the scope of this study (Saunders et al., 2012, p. 140).

4.2. Research Design

Research design refers to the framework for data collection and analysis used to not only answer the research question but also meet the research objectives (Bryman & Bell, 2007, p. 39). On the one hand, Bryman and Bell (2007, p. 40), define the research design process as a framework for the collection and analysis of data. Among a number of research designs identified, Bryman and Bell (2007, p. 41) highlight five prominent designs, which are: experimental design, cross-sectional design, longitudinal design, case-study design and comparative design. On the other hand, Saunders et al. (2012, p. 141) provide a slightly different framework for research design which include the following: experiments, surveys, case studies, action research, grounded theory, ethnography, and archival research. Within this framework, cross-sectional and longitudinal designs are presented simply as a distinction between two different time-horizons (Saunders et al., 2012, p. 155). For the purpose of this study, the categorization provided by Saunders et al. (2012, p. 141) will be used consistently throughout.

4.2.1 Case Study

Case studies are used as a means of data collection when the researcher aims to understand the reality of the context and the processes being enacted (Saunders et al, 2011, p. 146). Case studies provide a unique perspective into the phenomenon since the investigation process is carried out from various angles. During recent years, the applicability of case studies in the field of research has increased in overall terms. Its use is even being supported by many researchers due to its multiple advantages which are further elaborated.
According to Yin (2003, p. 15) there are several types of case studies; i) exploratory case studies, which are used as a mean of gaining a deep understanding of an unclear phenomena or setting; ii) descriptive case studies, when a description of the reality is provided from particular views; and c) explanatory case studies, which tend to explain the reasons and reach conclusions on the occurrence of the phenomena. Furthermore, Yin (2003, p. 20) categorizes cases into intrinsic case studies which aim to explore a phenomena in detail due to the personal interests of the researcher/s. When using intrinsic case studies, one should be wary, since the findings from intrinsic case studies are not necessarily generalizable considering that a particular phenomenon is looked at from a particular perspective. Among these categories, Yin (2003, p. 23) identifies instrumental case studies which are used as a mean of reaching a deeper understanding on a particular event; ergo, suggesting that its findings can be generalized when it comes to its applicability in practice.

Many researchers, especially those who apply quantitative methods, argue against the use of case studies for their inability to provide generalization. It is highly believed that findings of case studies are not generalizable since the sampling methods are questionable and considered bias due to the employment of non-probability sampling (Flyvbjerg, 2006, p. 3). Furthermore, it is suggested that case studies look only at one perspective while ignoring the surrounding environment, therefore, it is very difficult to test its validity and reliability within the framework of assessment criteria (Saunders et al., 2012, p. 147). To this day, many researchers avoiding using case studies for these very reasons.

However, there are researchers and experts in the field who argue the opposite and state that precisely this type of research strategy lead to adequate generalizations, considering the fact that case studies in general lead to a deeper understanding of the phenomena being studied and its surrounding environment (Lukka & Kasanen, 1995, p. 80). The researcher may carry out the investigation through the use of single case studies or multi-case studies (Bryman & Bell, 2011, p. 59; Saunders et al, 2011, p. 146). On the one hand, single-case studies exploit the phenomena under special circumstances (Yin, 2003, p. 34); thus, they are chosen because they are unusual, revelatory and rare (Yin, 2003, p. 33). On the other hand, multiple-case studies provide the ground for better, more accurate and generalizable results. Scholars argue that theories which are built from cases, oftentimes are regarded as the most interesting research (Bartunek et al, 2006, p. 10). Some suggest that theory building from multiple cases yields more robust, generalizable and testable results when compared to single-case research (Eisenhard & Graebner, 2007, p. 30). Through multi-case studies, researchers are able to compare and contrast the findings. Sampling is not predetermined beforehand considering that usually the purpose of the research is to develop theory rather than test it. In such cases, theoretical sampling is considered appropriate; ergo, allowing the selection of the cases in accordance to their importance and context (Bryman & Bell, 2011, p. 50; Gray, 2013 p. 37). The process is repetitive until sampling saturation is reached (Eisenhard & Graebner, 2007, p. 27). Case studies can be applied through the use of quantitative and qualitative methods, or a combination of both. Indeed, care must be taken when choosing the type of case study for the study; however, the generalizability of the findings cannot be questioned when they are carried and applied in accordance with the compliant procedures and methods.

This study seeks to develop a framework for project success within the entrepreneurial ecosystem with a project-based view. The framework presents the relevant success criteria which contribute to the short and long term success as well as most relevant CSFs presented under the strategic umbrella. The co-existence and interaction of both concepts
in the process of achieving success is highly subjective; therefore, elaborating and understanding the meaning of each concept within practical terms is of great importance.

4.2.2 Time Horizons - Cross Sectional Design

While emphasizing that the time horizons to research design are independent when compared to the research strategy and choice of method, one should be able to distinguish the difference between cross-sectional and longitudinal studies. The main difference between the two time horizons is in the time given to complete the study (Saunders et al., 2012, p. 155). The limited time available to complete the study restricted the use of a longitudinal design even though the process enables the researcher to understand a special setting on more than one occasion during a longer period of time (Bryman & Bell, 2011, p. 58). Alternatively, cross-sectional studies investigate a particular phenomenon at a given point in time (Saunders at al., 2012, p. 155); thus gathering data through multiple cases by involving various individuals and organizations at the same time (Bryman & Bell, 2007, p. 57).

This study can be defined as cross-sectional considering that the data will be gathered simultaneously over a short period of time. In order to gain a deep understanding of the phenomena, more than one case is examined. The variation of the start-ups interviewed allows the exploration of patterns and the relevance of project success criteria and CSFs deemed important by the start-ups themselves. In this study, data will be collected from start-up decision makers across different organizations and countries (BiH and Kosovo).

It should be noted that when a cross-sectional time horizon approach is applied, usually it is associated with the use of quantitative or quantifiable data (Bryman & Bell, 2007, p. 55). However, cross-sectional studies may also employ qualitative methods generally based on unstructured or semi-structured interviews conducted over a short period of time (Bryman & Bell, 2007, p. 59; Saunders et al., 2012, p. 155). The latter situation is applied in this study.

4.3 Data Collection

4.3.1 Data Collection Method

In research, data collection methods need to be in line with the defined research philosophy, approach and strategy. Therefore considering the aforementioned, the data collection methods used for this study have been chosen accordingly. Considering that the research philosophy is interpretive, it is appropriate to use qualitative research for data collection as it is more dynamic, non-standardized and interactive (Saunders et al., 2012, p. 162-163). This is reflected in the research strategy, which focuses on the use of qualitative research [see section 2.1]. One of the most popular data collection techniques in qualitative research is the interview (Silverman, 2011, p. 161). The use of interviews fits best with the constructivist ontology and interpretivist epistemology (Mason, 2002, p. 63). Interviews are used to gain greater understanding on an issue through the exploration of meaning and perception, contributing to existing conceptual and theoretical bodies of knowledge (DiCicco-Bloom & Crabtree, 2006, p. 314). Interviews range in form, namely in terms of their formality, structure, question formation, and the way in which they are conducted in terms of technology use (Cooper & Schindler, 2011, p. 169). They are often classified as structured, unstructured or semi-structured (Saunders et al., 2012, p. 374), where structured interviews generally produce data of a quantitative nature while the latter two produce more qualitative data (DiCicco-Bloom & Crabtree, 2006, p. 314).
Semi-structured interviews are characterized by a set of predetermined questions or topics that are open-ended so that other questions can emerge from the dialogue between the interviewer and respondent (DiCicco-Bloom & Crabtree, 2006, p. 315). Semi-structured interviews are most commonly conducted with a single individual, however group interviews are possible. Individual interviews are more in-depth allowing the interviewer to better understand the experiences of the respondent (DiCicco-Bloom & Crabtree, 2006, p. 315). The decision to use in-depth individual interviews is heavily based on the subjective nature of this research, as the method allows for the investigation of social meanings (Long et al., 2000, p. 195). It results in a first-person account of how the respondent perceives their social reality, or the world around them (Schultze & Avital, 2011, p. 3). But the researcher is also involved in the process through their role as interviewer; it is an interactive dialogue between the interviewer and respondent (Mason, 2012, p. 62). The interviewer and respondent are able to co-create meaning together by recreating experiences and perceptions of events that occurred (DiCicco-Bloom & Crabtree, 2006, p. 316) so that the latter provides insight which the former attempts to understand and find meaning in. This precedents the derivation of rich data that focuses on the topic of the research and the research question/s (Schultze & Avital, 2011, p. 3). Subsequently, the research question/s can also be included in the semi-structured interview with follow up questions that encourage detailed descriptions (DiCicco-Bloom & Crabtree, 2006, p. 316).

It is important that the interviewer be flexible and prepared to stray from the original planned interview itinerary since digressions present an opportunity to maintain the respondent’s interest and gain more significant knowledge for greater contribution (DiCicco-Bloom & Crabtree, 2006, p. 316). This is also one of the main advantages of the semi-structured interview, it is far more flexible than structured interviews (Bryman & Bell, 2007, p. 473) allowing the interviewer to be more reactive (Cooper & Schindler, 2011, p. 249). However flexibility means that there is a risk that the information gathered will not be comparable since digressions or unintended turns in the interview may interfere with desired data collection (Saunders et al., 2012, p. 375). Having a well formed interview guide, which incorporates the pre-determined questions and topics, will help ensure that the interview does not digress too far from the defined research question/s while still allowing for enough flexibility to provide rich data (Bryman, 2008, p. 438).

To better answer the research questions and generate a more holistic understanding of the research topic, the data collection will also make use of interviewer-completed questionnaires (Saunders et al., 2012, p. 167; 419). This is akin to a structured interview whereby the respondents are given a set of fixed questions and required to choose from a fixed range of answers (Bryman, 2008, p. 193). The use of questionnaires allows for a better understanding of the respondents’ opinions, which can be measured through scales (Saunders et al., 2012, p. 439). The Likert scale is one of the most used techniques in opinion research, where it measures a trait through a set of items and each item is represented using a declarative statement (Harpe, 2015, p. 839). The statements are responded to by choosing an option ranging from low, strongly disagree, to high, strongly agree (Bryman, 2008, p. 146). Traditionally, a 5 point scale is used, where a neutral option is also available (Hartley, 2013, p. 84). It is important to note that the item, or declarative statement, is not the Likert scale itself but rather the set of all items (Harpe, 2015, p. 839). This means that the aggregated ratings represent the respondent’s opinion on the trait being measured by the Likert scale and its inclusive items. In this research, the Likert scales are used to evaluate the perceived success of a start-up, which encompasses the success criteria and CSFs. Since the questionnaire is administered during the semi-
structured interview, the interviewer will also ask questions based on the responses [ratings] in order to better understand the phenomena and receive clarity. In that respect, a multi-method interview approach will be applied, making use of both closed and open-ended questions which has been proven beneficial to research (Fenwick et al., 2000, p. 301)

4.3.2 Interview Guide

The semi-structured, in-depth individual interviews will be conducted according to the interview guide, which can be found in Appendix 1. They will preferably be face-to-face interview, however, due to geographical restrictions they may be conducted over Skype instead. The video call feature will be used to allow for the interpretation of body language and facial expression or gestures on the part of the respondents. All interviews will be conducted in English, however if for the sake of clarification the respondent requires something explained and/or asked in their native tongue, the request may be accommodated. The researchers are native speakers of the languages spoken in the countries where research is being conducted, therefore the risk of misinterpretation or misunderstanding due to language barriers is not a great concern. Similarly, it limits the advantage native English speakers may have over non-native English speakers in terms of understanding the moderately complex terminology being used. The interviews are to begin with a brief introduction of the researcher/s, the topic of study and the concise description of the research’s purpose and aim. The interview structure is broken into four [4] parts, each designed to collect data related to a specific area significant for this research. Questions or topics are provided to give a general idea of what needs to be covered and to provide a sort of itinerary, however flexibility is encouraged in terms of follow up questions to encourage deeper understanding of the phenomena being researched. The first part is designed to determine the characteristics of the start-up/new venture in terms of background information on the project, the respondent and his/her role in the project. The second part of the interview refers to the current PM practices in the start-up and their implications on its progress and/or organization. This part is essential for identifying what aspects of PM are already existent in the start-up, whether intentionally or not, and contributes to the field EPM as mentioned in section 3.4.

The third part of the interview is meant to gather information regarding success criteria in a start-up. Firstly, a definition of project success criteria is provided so that the respondent is able to accurately identify the success criteria of its start-up in accordance with this definition. Upon doing so, a questionnaire on project success criteria is administered where the respondent is asked to rate the most relevant criteria on a 5 point Likert scale, based on their perception. This questionnaire has been developed by combining and adapting the framework on project success criteria by Shenhar and Dvir (2007) and the study conducted on project success criteria in new ventures by Kakati (2003). Upon completing the questionnaire, a set of follow-up questions/topics are provided to help assess the answers given, namely in terms of understanding the importance of the aforementioned criteria in a start-up scenario. This provides the respondent with the opportunity to clarify any interesting rating given in the questionnaire, particularly those that may contradict the theory and/or practice. Due to time constraints, only the most divergent and significant criteria will be focused on.

The fourth and final part of the interview is meant to gather information regarding CSFs in a start-up. Again, a definition of CSFs is provided and the respondent is encouraged to identify the CSFs of its start-up in accordance with this definition. Upon doing so, a questionnaire on CSFs is administered where the respondent is asked to rate the most
relevant CSF on a 5 point Likert scale, based on their perception. The questionnaire has been developed using the PIP framework discussed in section 3.2.2, since it is one of the most cited frameworks CSFs. As in the third part, a set of follow-up questions/topics are provided upon completion of the questionnaire to help assess the answers. The aim is to gain a deeper understanding of the respondent’s perception on the most relevant CSFs. Again, due to time constraint, only the most divergent and significant CSFs should be focused on for clarification.

4.3.3 Respondent Selection

Since the data collection method will be semi-structured, in-depth individual interviews, the respondents will be selected using purposive sampling. This means the research units are selected based on given objectives for answering questions (Teddlie & Yu, 2007, p. 77). Basically, purposive sampling is used to maximize the richness of the data so that the research question can be answered more adequately (DiCicco-Bloom & Crabtree, 2006, p. 317). Researchers can therefore limit the risk of not gathering the needed data through the selection of a sample which is most suitable and informative (Bryman & Bell, 2007, p. 499). Purposive sampling is also very feasible when conducting a multiple case study (Creswell, 2013, p. 100), as this research aims to do. The sample size is not pre-determined since the aim is to conduct as many interviews as feasible in order to reach theoretical saturation (Bryman & Bell, 2007, p. 460). Considering that the main aim of the research is to investigate project success in new ventures, or start-ups, the sample consists of entrepreneurs who have started a new venture and applied a project-based approach to its development.

The study focuses on start-ups in two countries: Kosovo and BiH. These countries were chosen primarily for having developing or transition economies, where the importance of entrepreneurship and entrepreneurial success has significant implication to economic success. Therefore the need to increase the success rate of new ventures is arguably more significant. While this is the practical significance of the geographical choice, the implications for academia are also relevant since very little research considers the developing economy. Even less research is concerned with new ventures in Kosovo and/or BiH despite the heavy presence of entrepreneurship in these countries, where in the latter a reported eight [8] out of every one hundred [100] individuals engages in start-ups (Global Entrepreneurial Monitor, 2014, p. 9). However, it is not the aim of the study to conduct a comparison between the countries but rather to be of an exploratory nature where the countries are viewed as being of the same profile. This is both a result of time constraints and feasibility.

Choosing which start-ups to contact was based first and foremost on time restrictions and secondly on interviewing convenience. Considering these factors, business contacts and incubators were contacted first since the researchers had previously established relationships with the aforementioned in the target countries. A list of start-ups and contacts within these new ventures were provided, and based on these start-ups were asked if they wanted to participate in the research. In some cases, further start-ups were identified through willing participants. The main criteria for selection was that the respondent needed to fit the profile of a start-up as mentioned in section 3.3.2, and that it was an actively operating entity.

4.3.4 Respondent Description

As mentioned, the interviews were conducted with start-ups in Kosovo and BiH. 17 start-ups were contacted, of which 10 agreed to participate in the study making the response
rate just under 58 percent. Every interview was conducted over Skype using the video call feature. After a few interviews a trend began to form and each subsequent interview produced similar results. Therefore, it became apparent that there was no need to search for more respondents, and the data gathered was enough for analysis and was comparable in other start-ups.

Table 4 provides an overview of each respondent and a description of the ventures start-up characteristics. Each start-up has a designated code in order to maintain anonymity for the respondents, however the country is identified through the inclusion of KS for Kosovo and BH for BiH.

Table 3: Description of Interviewed Start-Ups (Respondents)

<table>
<thead>
<tr>
<th>Start-Up Code</th>
<th>Age (years)</th>
<th># Employees</th>
<th>Start-Up Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BH1</td>
<td>&gt; 1</td>
<td>1</td>
<td>Online interior design portal; Consultancy</td>
</tr>
<tr>
<td>BH2</td>
<td>6</td>
<td>3</td>
<td>Organic food and goods doorstep delivery service</td>
</tr>
<tr>
<td>BH3</td>
<td>1.5</td>
<td>5</td>
<td>Fashion</td>
</tr>
<tr>
<td>BH4</td>
<td>1</td>
<td>8</td>
<td>Entertainment; Music production and event management</td>
</tr>
<tr>
<td>KS1</td>
<td>1</td>
<td>17</td>
<td>Online search engine</td>
</tr>
<tr>
<td>KS2</td>
<td>2</td>
<td>5</td>
<td>Creative services industry; digital and multi-media</td>
</tr>
<tr>
<td>KS3</td>
<td>8</td>
<td>22</td>
<td>ICT; Software development and system integration</td>
</tr>
<tr>
<td>KS4</td>
<td>10</td>
<td>30</td>
<td>Communications agency; Marketing &amp; digital and multi-media</td>
</tr>
<tr>
<td>KS5</td>
<td>2.5</td>
<td>9</td>
<td>Mobile application development</td>
</tr>
<tr>
<td>KS6</td>
<td>1</td>
<td>9</td>
<td>Education, Technology incubation</td>
</tr>
</tbody>
</table>

4.4 Data Analysis

There are multiple procedures which can be used in data processing for qualitative analysis, which include summarizing, categorizing and structuring meanings through deductive or inductive techniques (Saunders et al., 2012, p. 490-491). Since the main objective of the data analysis in this research is to identify patterns, coding is the desired approach taken in order to produce thematic content for analysis (Edmondson & McManus, 2007, p. 1160). Relying on the major themes of the theoretical framework, data categories are created in order to organize and direct the data analysis (Saunders et al., 2012, p. 489). Subsequently, this will also help formulate clear connections between the theoretical framework and the empirical results produced by the semi-structured interviews and the structured interviews in the form of interview-administered questionnaires. Oral data and personal notes can often be difficult to analyze or process, due to the sheer amount of data they produce. This is why it is important to choose the appropriate technique for enhancing the usability of such data in terms of preparing the data for analysis and then actually analyzing it (Saunders et al., 2012, p. 556-557).
4.4.1 Transcribing Interviews

In terms of preparing qualitative data for analysis, particularly when it is derived from interviews, recording and transcribing interviews is often necessary and useful. Recording and taking notes during the interview is crucial for content analysis, as it allows for the reflection and interpretation of the findings (Bryman & Bell, 2011, p. 482). This takes into consideration not only what was said but how it was said, which is significant for qualitative data of a social nature. Transcribing interviews will be done upon completion of each interview, by listening to what was recorded and manually typing it out. This process is important for minimizing the workload, contributing to better analysis later, and helping improve the interview process as it moves along (Saunders et al., 2012, p. 550). Transcriptions remain private and are not shared due to ethical consideration discussed later in section 2.6.

4.4.2 Categorizing Data

Upon transcribing all the interviews, it is crucial to categorize and rearrange the data into predominant and relevant themes which will help better understand and derive meaning from the findings. As mentioned, the categorization will start with the developed theoretical frameworks, which also contribute to the formation of a framework for analysis (Saunders et al., 2012, p. 488). This aids in identifying the relevant patterns within the themes that make the analytical process easier.

Using the framework for categorization is akin to template analysis, which follows the abductive nature of the study combining both deductive and inductive approaches to qualitative analysis (Saunders et al., 2012, p. 572). There is also flexibility since relevant themes can be added when they appear and occur in the data, allowing for revision and review throughout the data coding and analysis phase.

As a result of the template, analysis of the data was able to be divided into four main categories: Project based Start-up characteristics, PM in Start-Ups, Project Success Criteria, and CSFs. These categories were better defined and sub-categorized by consulting the literature, or the theoretical framework. Successively, a deductive approach was used to collect and verify the data using the developed categorization. Therefore, the data is primarily presented and analyzed in terms of start-up characteristics and how a project-based view is applied in terms of project practices. Then the PM practices and principles within start-ups is outline. Next, project success criteria and CSFs are discussed using the ratings produced from the Likert scale and the answers from follow-up questions. This helps understand the importance of the criteria and CSFs, and why certain ones are more significant than others.

4.5 Assessing the Research Quality

For the purpose of assessing business research, the following three criteria have to be taken into consideration: i) Reliability; ii) Replication; and iii) validity (Bryman & Bell, 2011, p. 41; Saunders et al., 2012, p. 156). Joppe (2000, cited in Golafshani 2003, p. 598) defines reliability as the extent to which the findings of a study are consistent throughout time and sees it as a benchmarking factor in defining whether these results can be reproduced under similar methodology at a different point in time. Similarly, Saunders et al. (2012, p. 156) defines reliability as the degree to which data collection techniques yield consistent results. Replication is denoted as the extent to which a research study can be replicated by other researchers (Bryman & Bell, 2011, p. 41). One should note that in order to allow replication of the study, all the procedures in terms of
data collection techniques should be clearly stated. On the other hand, validity is seen as the most important criteria among the three. It determines whether the research truly measures what it has intended to measure and how truthful the results are (Saunders et al., 2012, p. 157). Bryman and Bell (2011, pp. 42-43) assert that validity consists of; i) measurement validity which questions whether the findings of the study reflect the concept that it is supposed to be denoting; ii) internal validity which measures the causality among variables; iii) external validity that is concerned with the factor of generalizability of the findings, thus, questioning whether the results of a study can be generalized beyond the specific context; and last but not least, iv) ecological validity dealing with the question of whether or not social scientific findings are applicable to the everyday setting people live in. However, insofar the concepts of reliability, replicability and validity are strongly criticized and viewed as inadequate by the practitioners of qualitative research (Golafshani, 2003, p. 599). Lincoln and Guba (1985, p. 219) coined two alternative criteria for evaluating qualitative research: i) trustworthiness, and ii) authenticity. For the purpose of this study, the approach presented by Lincoln and Guba (1985) will be evaluated in terms of trustworthiness and authenticity.

4.5.1 Trustworthiness

Criteria for judging the worthiness of naturalistic inquiries under the rubric of trustworthiness have been categorized into several classes: i) Credibility, ii) Transferability, iii) Dependability, and iv) Conformability (Lincoln & Guba, 1988, p. 2).

Credibility evaluates the trustworthiness of the research by determining the feasibility of the findings. It deals with the question of how congruent are the findings with the reality (Lincoln & Guba, 1985, p. 293). In general, it observes the compliance of the empirical observations and theoretical philosophies presented in the study (Bryman & Bell, 2007, p. 410). When comparisons are drawn with quantitative research, credibility is proportionate with internal validity which is a measure for casualty (Bryman & Bell, 2007, p. 411). In order to promote confidence and increase credibility throughout the study, the researcher has to ensure an early familiarity with the culture of the individuals and environment being studied (Shenton, 2004, p. 65). While studying the concept of EPM, we aim to increase credibility by ensuring that the research is conducted in accordance with the rules and procedures, or the so called “canons of good practice” (Bryman & Bell, 2007, p. 411; Shenton, 2004, pp. 64-69).

The second criterion coined by Lincoln and Guba (1985, p. 295) is concerned with the transferability of the results or otherwise referred to as the possibility of generalizing the information gained from the conducted study. It parallels the criterion of external validity when considered from the quantitative perspective (Bryman & Bell, 2011, p. 43). The generalizability factor can be of a particular worry if the researchers are employing case study research in one organization or a small number of organizations (Saunders et al., 2009, p. 158). Furthermore, in such cases the purpose of the research focuses on simply explaining what is going on with that particular phenomenon. Lukka and Kasanen (1995, p. 86) observe that the generalizability of the findings derived from qualitative research is higher considering that in such situations the researcher tries to understand the context of the setting being studied but also accumulates a sound knowledge from prior studies. However, in all situations it should be remembered that, both, qualitative and quantitative research methods deal with challenges when it comes to the generalizability of findings (Lukka & Kasanen, 1995, p. 86).
In this particular study, we have decided to interview a particular group of companies [start-ups] from different industries which are deemed as appropriate sample to be used for empirical evidence. Although one may argue that the sample size of the study limits the generalizability of the results, in overall term the findings provide robust information which can be categorized under analytic generalization (Yin, 2009, pp. 38-39). Analytic generalization demands the identification of the existing data in the literature; ergo, referring to the provision of a solid theoretical framework (Saunders et al., 2009, pp. 333–336). Prior to the data collection phase, we have carried out rigorous research for the theoretical framework but also already had a solid background on the culture and context of the organizations analyzed, since we come from BiH and Kosovo.

Dependability is tightly related to the criterion of reliability; ergo, deciphering whether the findings of a study are repeatable (Bryman & Bell, 2011, p. 398). In addressing dependability, the researcher aims to understand that if the work was to be repeated, within the same context, with the same methods employed and same participants, as in the original study, would similar results be obtained (Shenton, 2004, p. 71). However, in reality this is much harder to achieve considering that the social setting is constantly changing; therefore, it cannot be isolated from the external influencing phenomena just for study purposes. Dependability is oftentimes seen as an auditing approach where complete records of all research phases including notes, memos, interviews, and transcribed data should be available if requested (Bryman & Bell, 2011, p. 399). Given this view of dependability, the issue can be addressed through regular consultations with the supervisor, who to a certain degree is viewed as a third external party involved.

Last but not least, conformability entails that the researcher has carried the study out in good faith (Bryman & Bell, 2011, p. 398). This criterion emphasizes the importance of ensuring that the findings are a result of experiences and ideas of the participants, rather than the preferences and stances of the researcher/s (Shenton, 2004, p. 72). As from the beginning of this study, the researchers acknowledged the fact that complete objectivity cannot be achieved, however, throughout the authors have attempted not to let personal values and theoretical implications affect the process so that conformability of the findings is achieved.

4.5.2 Authenticity

Several assessing criteria relevant to constructivist research have been suggested; however, the authenticity criteria suggested by Lincoln and Guba (1985, p. 219) appears to be most applicable. Authenticity criteria, oftentimes referred to as intrinsic criteria, include: fairness, ontological authenticity, educative authenticity, catalytic authenticity, and tactical authenticity (Morrow, 2005, p. 252). On the one hand, fairness is reached by taking into consideration various theories elaborated in the PM and entrepreneurship literature but also the viewpoints expressed by individuals who were the subject of research (Bryman & Bell, 2011, p. 398). On the other hand, tactical authenticity is achieved by conducting open-ended questioning which give the respondents sufficient control over the interview and topics they want to cover.

In essence, as demonstrated this study fulfils the criteria of trustworthiness and authenticity. Yet, it should be noted that when employing qualitative research, objectivity and replicability is hardly maintained due to the constant changing environment that surrounds the social setting being studied. Nonetheless, thorough attention has been given to all stages of the research; therefore, aiming to provide a theoretical and practical contribution within the field of EPM.
4.6 Ethical Considerations

It is imperative to consider ethical principles when conducting research, especially within the social sciences. Throughout the entire research process, researchers need to understand these ethical considerations and their importance (Bryman & Bell, 2011, p. 128). Following the criteria set out by the Umeå School of Business and Economics in the Thesis Manual (USBE, 2014, p.6), the ethical considerations adhered to are four common principles generally referred to by most authors. Namely, informed consent, confidentiality and privacy, avoidance of deception, and avoidance of harm to participants (Bryman & Bell, 2007, p. 128).

The first step was to inform the interviewees about the nature of the study via email, focusing on their potential role in the process. When needed, clarifications were provided to eradicate any doubts that may have existed. Respondents were notified that they would remain anonymous to everyone except the researchers, and that findings could be shared with them upon request in the spirit of full transparency. However, transcriptions of interviews were not published with the thesis nor were they made available publically elsewhere except for use by the researchers/authors of the thesis. In this respect, informed consent was given, confidentiality and privacy assured, and transparency established.

The interview process required particular focus on the fourth ethical consideration, whereby harm to participants would be avoided. Individual in-depth interviews require that the interviewer establish rapport almost immediately. That is to say, the interviewer needs to build a positive relationship with the respondent in a relatively short period of time in order to gain their trust and show that the information they share is respected. This will help establish a safe environment whereby the respondent feels comfortable sharing their personal experiences (DiCicco-Bloom & Crabtree, 2006, p. 316). Building rapport usually means initial hesitation from the respondent, requiring encouragement to talk (Spradley, 1979, p. 45). Throughout the interview, the interviewers were encouraged to listen attentively and pay attention to non-verbal forms of communication as well, in order to build trust. Considering the culturally diverse nature of the respondents, trust building was also crucial for recruiting participants and retaining respondents as well (Burkett & Morris, 2014, p. 108-109). This is even more significant in a geographical region ridden with distrust due to years of conflict and ongoing political tension. Regardless, building trust in general leads to richer data and allows for a deeper understanding of the research field, contributing to more robust findings and results.
5. EMPIRICAL FINDINGS AND ANALYSIS

This chapter represents the results in a manner which reflects the contents of the theoretical background in chapter 2, on which the data collection was also based. Namely, the characteristics of the start-up are discussed first, moving on to PM in start-ups and ending with project success criteria and CSFs. The findings presented in this chapter are inclusive of quotes provided by participants during their interview. These do not make up the complete data set collected in this study and analyzed in this chapter but rather the most pertinent and interesting results extracted. Nevertheless, all data on which the empirical findings are based is available in transcribed documents and summary reports.

5.1 Characteristics of a Start-Up

Participants were first asked to provide a concise description of the start-up and their role in the organization. They were then asked to describe specific aspects of their start-up based on the features of a new venture discussed in the theoretical background. Namely, to discuss the degree of innovation their venture entails, their target market and/or groups, competitive strategy, risk profile, growth strategy, organization structure, and resource allocation. The findings from this aspect of the data collection is primarily to ensure that the organizations which participated in the research encompass the basic features and characteristics of a start-up, based on the literature, which render their experience relevant to the study. The detailed findings for start-up characteristics can be found in Appendix 2 while a more general presentation and analysis follows.

Certain characteristic of a new venture, or start-up, were recognized by all the respondents. Namely, all the start-ups exhibited smallness in terms of size and age that matched the literature on new ventures. Albeit, one start-up was on the borderline, operating with 30 employees and for 10 years to date (KS4). Similarly, all but one of the start-ups claimed to operate under a simple organizational structure, describing it as informal and flexible where information processing is devoid of a set hierarchy. In terms of decision-making, it too was described as informal and owner centralized, where founders had the final say. BH2 described decision-making as a trial and error learning process, where mistakes are lessons a start-up needs to learn from. The one outlier (KS4) who described a less simplistic organization structure, stated that the information processing and decision-making processes in the start-up had recently shifted to a more decentralized structure, where departments were given more responsibility.

When asked about risk, the term ‘normal’ was often used to describe risk taking in start-ups, with some respondents agreeing that their risk strategy was that of high risk (BH2, KS2, KS4, KS6). All respondents, however, appeared to agree that a start-up in a Balkan country was risky in itself. Many described the environment and market as risky, whether or not risk-taking was part of their agenda.

(BH2): “… the market is so volatile and unpredictable, almost every decision turns into a risk”.

The topic of innovation was also similarly answered by all respondents. When asked about how innovative their start-ups were most agreed that the idea of their start-up was not very innovative, that it was available in other countries and sometimes quite common. Some claimed that in terms of innovation, the word should instead be used to describe their approach, where multiple respondents claimed their start-up was the first to develop and provide their service/product on the respective market (that is, in BiH or Kosovo). In
that respect, all the respondents claimed they were proactive towards innovation, where the process of constantly redefining themselves and learning was highly important.

KS2: “Innovation is the experimental learning process, the idea doesn’t need to be innovative”

Innovation and investment in technology were identified as key factors in developing a competitive strategy (BH2, KS3, KS6). However, most start-ups showed little concern for competition or developing a competitive strategy, with one respondent claiming they did not worry about it at all (BH1). While some recognized limited resources as a reason for not challenging competitors, others simply stated it was not a priority. In most cases, the possibility to disregard competitors stems from the fact that most of the start-ups are the only ones on the market with their specialized offering. Only those start-ups with international customers mentioned having a competitive strategy for this market, whereby the main strategy was lower prices than their international competitors (KS2, KS3, KS5).

KS5 “We are distinguished among the competition based on the price.”

Profit was often described as being a secondary goal, particularly when compared to innovation (BH2). Most of the start-ups expressed wanting to grow in terms of their offering and market penetration, citing a desire to enter international markets whether in terms of outsourcing opportunities (KS2, KS3, KS4, KS5) or reaching diaspora (BH1, KS1, KS6). Only one of the respondents mentioned employee growth, however explicitly in terms of experience and education and not in size (KS2).

KS2: “… we do not want to have a bigger team … we view growth more in terms of investing in our team through education and training”

5.2 Project-Management Practices in Start-Ups

Respondents were also asked a set of PM oriented questions concerning the founder’s experience with projects prior to founding the start-up, as well as the nature of their start-up and its PM. A summary of these responses can be found in Appendix 3, but are discussed in detail below.

In terms of PM experience, only some respondents claimed to have had experience on projects of any kind prior to founding their respective start-up. These experiences range from a few to 11 years of PM involvement, where four of the respondents claimed they had worked on large and complex projects (KS-, KS3, KS4, KS6). None of the respondents mentioned having an education explicitly in PM.

When asked if they applied a project-based view to their start-up, almost all of the respondents appeared to have the same answer, initially stating no but then claiming that the majority of their activities were run using PM – coming to the self-realization that they in fact did apply a project-based view to their start-up. Two respondents claimed they did not want to associate their start-up with termination, like in projects, but added that considering the manner in which it is run can be conducive of PM.

KS3: “No, because a project has a beginning and an ending ... I do not want to associate my company with ... an ending. However, we have milestones ... and [our activities] are run as small project.”

KS2: “Well a project has a start and an end ... I do not want to associate my start-up with an ending phase – like closing down. However, yes it is a big whole project because
it is always about achieving a milestone at a certain point in time, until the final objectives are reached and we are where we envision to be.”

BH2: “when I think about it, yeah because every job should be viewed as a project no matter how small.”

One respondent (KS6) claimed the start-up was run as a project but as it grows and moves out of the start-up phase, the project-based view is also becoming less relevant. Other respondents provided evidence of running their project as a start-up despite claiming they did not. One respondent claimed that considering the size of the start-up it was not a project in itself but a group of projects, like a portfolio. Two other respondents who initially also claimed not to have a project-based view, later described using SCRUM or agile PM in their start-up.

KS1: “... we utilize SCRUM a lot ... we have sprint cycles in a two week time-frame however tasks change very fast depending on the need and requirements.”

KS5: “[we] apply SCRUM methodology.”

All but one of the respondents claimed to apply PM practices habitually in their start-up. Aside from applying SCRUM techniques, others claimed they used scheduling and communication techniques from PM practice (BH2, KS3, KS5). Gant charts were mentioned on two occasions (KS2, KS6), while one respondent claimed they used multiple PM tools but was unable to provide examples or details (KS4).

When asked about the difficulties in applying PM to start-ups, all respondents were unanimous in claiming the rigidity of the tools and techniques often limited its applicability to start-ups which required immense flexibility and agility. Many also mentioned the political and economic instability of their countries as reasons for why flexibility was even more crucial to their start-up which often made applying scheduling and planning practices difficult (BH2, KS1, KS2, KS3, KS5). Particularly those who attempted to use more complex PM tools, such as the Gant chart, admitted they were too formal and often met with resistance. High costs and a time-consuming nature were other commonly cited limitations (BH2, KS2, KS3, KS5, KS6).

KS5: “... time consuming but also too costly.”

BH2: “… there needs to be a lot more flexibility.”

KS3: “the time needed.”

KS2: “Formality, time consuming, and high cost.”

The difficulty in finding adequate personnel was also mentioned by a few respondents (BH2, KS1), one of which commented that it was better to hire inexperienced individuals that could be molded into ideal employees.

In terms of the main PM tasks focused on by start-ups, many respondents claimed they spent most of their time on communication with their staff and clients, while others claimed execution was the task most focused on. Only two respondent cited planning as a main task (KS4, KS6), while another completely disagreed, once again, citing the need for flexibility as a main reason.

KS2: “Planning does not work; you have to go with the flow.”
Sources of project uncertainty were unanimous among all respondents, who claimed that the biggest factor was novelty in the start-up’s offering. Two respondents also cited the importance of the speed of development (BH1, KS2) while another two mentioned technological development in general (KS3, KS6).

5.3 Project Success Criteria in Start-Ups

During the interview, respondents were presented with project success criteria and asked to rate the relevance of each with regards to their start-up. Organized according to criteria groupings discussed earlier, the subsequent ratings are presented in tables where the numbers are based on a Likert evaluation scale whereby 1 equates to ‘not relevant at all’ and 5 equates to ‘extremely relevant’. The significance of these findings is also discussed in detail.

5.3.1 Efficiency and Capabilities

In terms of the success criteria grouped under ‘Efficiency and Capabilities’, respondents were presented with four criteria, which they were also asked to rate. Table 5 presents these criteria and their subsequent ratings.

Table 4: Success Criteria for Project Efficiency and Capabilities

<table>
<thead>
<tr>
<th>Criteria</th>
<th>BH1</th>
<th>BH2</th>
<th>BH3</th>
<th>BH4</th>
<th>KS1</th>
<th>KS2</th>
<th>KS3</th>
<th>KS4</th>
<th>KS5</th>
<th>KS6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staying on schedule</td>
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<td>5</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Staying within budget</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managerial capability</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Technical capability</td>
<td></td>
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</tr>
</tbody>
</table>

Staying on Schedule

For almost all of the respondents, staying on schedule was a very important criteria for project success. Professionalism and creating a reliable image for the start-up were cited as reasons for ensuring project deliverables followed a set schedule. However, while most of the start-ups recognized the importance of staying on schedule and its role in contributing to the start-up’s image, they were also very accepting of flexibility. One respondent claimed that schedule goals were determined by the strategic decision making process of the start-up:

KS1: “Sometimes you might delay or hurry a project; it all depends on strategic decisions.”

In line with this was the mindset that customer expectations dictated the extent of schedule flexibility. One respondent mentioned that delays in project deliverables are sometime unavoidable, because it is the customer who decides they want changes and accept the disruption in scheduling as a consequence (KS5). Other respondents also agreed that the relationship with the customer was a huge determinant to whether a project met its schedule goals, but that they were not bothered by the delays in so much as their final expectations were met (KS3, KS6, BH3).
BH3: “If more time is needed in order to complete a project we will gladly extend the schedule and not risk quality.”

Similarly, BH2 mirrored the inevitability of delays, with a focus on the mentality of the country:

BH2: “Schedule is important, but here we can afford flexibility. In Bosnia, you don’t get the degree of professionalism form your partners that will allow you to stay on schedule.”

One respondent claimed that schedule was not as important due to the nature of their start-up (BH4), while another claimed that schedule goals were completely irrelevant:

BH1: “We are a web portal so most of our projects are internal, letting us maintain a high degree of flexibility. As long as we put out content often enough, it really isn’t important to have a set schedule.”

Staying within Budget

Maintaining the budget was almost unanimously considered a significant success criteria. Sustainability was also mentioned, whereby going over-budget would often require the use of personal funds or risk failure (KS3, KS4, BH3, KS6). BH4 echoed these claims.

BH4: “Our primary goal is that we don’t run a financial deficit ... all while strengthening our brand and gaining more followers.”

Budget was particularly important for start-ups which had an international reach in terms of offering outsourced services to companies outside the country of their operation. These start-ups stressed that budget was important for ensuring they maintained low prices which would make them competitive against other international companies (KS2, KS3, KS5). However, two respondents (KS1, BH2) referred to a flexibility in project budgets whereby it is necessary to ensure goals are met and customers are satisfied.

KS1: “If needed you may go over the budget to reach the targeted goal.”

Managerial Capability

Managerial capability as a criteria was rated at 5 by every respondent except for one, who gave it a rating of 4. Managerial capability was referred to as a leader’s ability to ensure a strong workplace culture. The most cited reason for such high ratings was that managerial capability in ensuring a strong culture led to employee satisfaction and productivity, affecting the overall success of the start-up (KS1, KS4, KS5, KS1). The leader was also often associated with being the visionary (BH2, BH3, BH4), who’s ability to ensure everyone was on the same track most affected success. KS6 stressed this:

KS6: “Having the right skills to lead ... is very important [so that] an entire team can aim for the same goal and have common interest for the start-up”

Multiple respondents claimed that the project leader’s abilities were directly tied to employee happiness and subsequently productivity, all of which affected project success significantly. KS1 highlighted this specifically.

KS1: “The company is just as strong as the weakest link.”

Technical Capability

Technical capability, referring to a start-up’s access to skills and resources required for the completion of technical tasks, was also considered a relevant criteria for success. The
effectiveness of work done was cited as being directly tied to a start-up’s technical capabilities by four respondents (KS4, KS3, BH2, KS5). One respondent cited technical capabilities as the determinant of novelty among start-ups.

KS6: “Technical skills I believe to be one of the distinguishing elements that differentiate start-ups between each other.”

Another respondent stressed that while technical capabilities were relevant to have, they could be achieved over time, albeit not that quickly.

KS1: “Things can be learned along the way ... [but] things cannot be learned that quickly.”

Almost all of the respondents agreed that regardless of the technical capabilities of a start-up, they need to be fostered and developed throughout the project in order to grow.

5.3.2 Impact on the Team

In terms of the success criteria grouped under ‘Impact on the Team’, respondents were presented with four criteria, which they were also asked to rate. Table 6 presents these criteria and their subsequent ratings.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>BH1</th>
<th>BH2</th>
<th>BH3</th>
<th>BH4</th>
<th>KS1</th>
<th>KS2</th>
<th>KS3</th>
<th>KS4</th>
<th>KS5</th>
<th>KS6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creativity</td>
<td>5</td>
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<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
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<td>3</td>
<td>4</td>
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<td>Morale and satisfaction</td>
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<td>5</td>
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<td>5</td>
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<td>5</td>
<td>5</td>
<td>4</td>
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<td>Skill development opportunity</td>
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<td>5</td>
<td>4</td>
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<tr>
<td>Familiarity with target market</td>
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<td>4</td>
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<td>4</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

Creativity

Creativity received very high ratings in terms of its relevance as a project success criteria. Of those respondents that gave creativity a rating of 5, their reasoning ranged with arguments for its relevance including that creativity is essential for problem solving, developing new ideas and helping penetrate new markets. Some respondents claimed that fostering creativity is a central part of their business in terms of being part of their brand and image (BH2, BH3, KS3). However, of those two respondents who gave creativity a lower rating, one referred to is as a “refreshment” (KS5) and not necessarily a measure of project success. While the second claimed it was more project based, and while some projects did require creativity, others could not allow for it:

KS6: “Sometimes we have to follow strict requirements defined by our clients therefore there is no place for creativity whatsoever.”

Morale and Satisfaction

The morale and satisfaction of the team members was rated high by all respondents, receiving a 5 from almost every one. All respondents were unanimous in citing employee performance as the reason for the relevance of team morale and satisfaction. They agreed that a happy team was a more productive team, and that team members were more likely
to contribute with fresh ideas if they felt part of something bigger. Some respondents even mentioned having implemented certain team building tactics in their everyday activities in order to boost team spirit (BH2, BH3, KS5), where BH2 making a bold statement:

BH2: “An unhappy team is just as troublesome as no team.”

None of the respondents believed stress to be an issue. In fact, some agreed that having a job in a country with high unemployment meant employees were less likely to complain about stressful work (BH2, KS5, BH4).

Skill Development Opportunity

Skill development opportunity was almost unanimously considered a relevant criteria for success, but not necessarily viewed as a responsibility of the start-up. While most respondents believed the professional and personal growth of team members had an impact on the project’s success, many did not feel the need to invest in it. In fact, two respondents even referred to it as moderately relevant that should be considered a personal initiative (KS1, KS2, KS5).

KS5: “We expect from our team to take initiative and pursue personal and professional development on their own.”

However, for those who believed it was necessary to develop the team within the start-up often referred to employees as the business, where they claimed the two were synonymous because the success of one was reflected in the other (BH3, BH4, KS3, KS4)

KS3: “Investing in staff is investing in the company.”
KS4: “Growth opportunities tend to represent the reputation of the company.”

Only one respondent mentioned investing in team members by sending them to out-of-house trainings (KS6).

Familiarity with Target Market

The teams’, or even entrepreneur’s, familiarity with the target market received conflicting results. Some argued that knowing the market meant knowing your own business, in terms of identifying the desire and need for your offering.

KS5: “Knowing the target market means analyzing their needs and being able provide a solution tailored to those needs.”

Similarly, others argued that knowing your target market meant minimizing the risk of failure, again because you could identify what they wanted and cater to this demand (KS4, KS6). KS3 went one step further by arguing that familiarity with your target market was a pre-requisite for any start-up.

KS3: “If you do not know the market you better not start the company ... in the first place.”

However, the two respondents who gave this criteria its lowest ratings [2 and 3] argued that the target market did not necessarily need to be known or understood beforehand (BH2, KS1).

KS1: “You do not necessarily have to know your target market; ... we understand them along the way and [throughout the] process.”
5.3.3 Impact on the Customer

In terms of the success criteria grouped under ‘Impact on the Customer’, respondents were presented with four criteria, which they were also asked to rate. Table 7 presents these criteria and their subsequent ratings.

Table 6: Success Criteria for Project’s Impact on the Customer

<table>
<thead>
<tr>
<th>Criteria</th>
<th>BH1</th>
<th>BH2</th>
<th>BH3</th>
<th>BH4</th>
<th>KS1</th>
<th>KS2</th>
<th>KS3</th>
<th>KS4</th>
<th>KS5</th>
<th>KS6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefit to customer</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Extent of use</td>
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<td>4</td>
<td>5</td>
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<td>5</td>
<td>2</td>
</tr>
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<td>Customer satisfaction and loyalty</td>
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<td>4</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

Benefit to Customer and Extent of Use

Most respondents viewed benefit to customer and the extent of use as related criteria, both with their relative importance. Namely because the more a product or service solved a customer’s problem, the more likely it would be used often and the more beneficial it would be to them. KS3 claimed that it was necessary to solve an existing problem in order to ensure the customer’s need for the product or service. Multiple respondents also claimed a start-up mainly existed in order to provide customers with offerings that benefit them and which they could use often (BH3, BH1).

BH2: “Your customer is your business, you are there because of them.”

However, some respondents did point out that sometimes the nature of their start-up made one or both of the criteria less relevant. For KS6, the extent of use was not relevant because they focused on providing a service that would benefit the customer, and they would be successful even if the customer did not make use of their service often. KS4 made similar claims, but the other way around, where the product did not need to benefit the customer but that the extent of use had to be high and would be regardless of the benefit, since other factors determine this.

Customer Satisfaction and Loyalty

Customer satisfaction and loyalty was the most highly rated dimension in this group of success criteria. Almost all respondents were unanimous in identifying its relevance, particularly in terms of the start-up’s survival,

BH3: “Without clients the start-up would not exist.”

KS4: “Companies operate based upon the demand of their clients. Therefore, in order for the company to be successful, it has to maintain its customers.”

All of the respondent also commented on the link between customer satisfaction and loyalty, whereby the former influenced the latter. Some claimed that ensuring a customer was satisfied was most important for customer retention and recurring business (KS6, KS5, KS1).

BH2: “[Customers] ... are always right even when they aren’t.”
In that respect, all of the respondents agreed that their main approach towards customers was the assumption that they would be able to develop long-term relationships. However, two respondents did mention that sometimes certain customers needed to be prioritized due to their already shown loyalty to the organization (BH2, KS5).

**Brand Recognition**

Brand creation and development was another criteria of high importance for all respondents. The main reason for focusing on brand was because of the belief that it was reflective of the organization’s core competencies. Namely in terms of representing a strong reputation (KS4), positive company culture or high quality (KS5). Brand name was also viewed as a business-enhancing characteristic, tied to start-up survival (KS6, BH4) and growth in the long-term (BH2).

KS6: “Brand awareness sets a long-term position.”

This was stressed by start-ups with international reach who had ambitions towards growth (KS2, KS3, KS5). However, while none of the respondents seemed uninterested or unconcerned with developing their brand, not all of them thought it should be actively developed. Citing the benefits of a strong brand, BH1 described it as something which is created as a consequence of successful business rather than something which is developed on its own.

**5.3.4 Business and Financial Success**

In terms of the success criteria grouped under ‘Business and Financial Success’, respondents were presented with three criteria, which they were also asked to rate. Table 8 presents these criteria and their subsequent ratings.

**Table 7: Business and Financial Success Criteria**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>BH1</th>
<th>BH2</th>
<th>BH3</th>
<th>BH4</th>
<th>KS1</th>
<th>KS2</th>
<th>KS3</th>
<th>KS4</th>
<th>KS5</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Market Share</td>
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<tr>
<td>ROI</td>
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<td>Cash flow</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

**Market Share**

Increasing market share was a priority for most of the respondents, while a few seemed less concerned with the matter. It appeared that most of the start-ups preferred organic growth (BH3, BH1, BH2, BH4, KS2) by doing good work and increasing brand recognition.

BH4: “We want our [product] to get more hype [on the market] ... but we don’t really have a plan for how to do this. We only work hard on developing our strong and recognizable identity ... Hopefully this will cause a natural growth as oppose to a planned one, if that makes sense.”

For some, gaining market share was essential for start-up long-term survival and business expansion (KS3, KS5, KS6). Two respondents even mentioned incorporating increased market share as a company goal, which was actively worked towards achieving (KS5, KS6). Those who were not concerned with increased market share, one reason cited was lack of competition rendering them in an advantageous position.
KS1: “We are not really concerned with gaining market share since we currently have no competitors in the field.”

BH1: “We pretty much have no competition, so focusing on increasing market share is not a priority.”

Return on Investment

In most cases, return on investment was synonymous with return on equity since most of the start-ups were personal investments on the part of the founder. Generally, this latter group of respondents seemed amused by the question. Some of them claimed it was futile to open a business in the Balkans if you expected a massive return on investment, where survival and sustainability was more of a concern (BH4, BH1, KS3). BH2 even mentioned how start-ups require so much more than financial investment, and that looking only at the financial return was not enough to determine a start-up’s success.

BH2: “It’s not all about the money ... Unless I sell this start-up for 2 million euros today, I doubt I will ever get the economic return for my physical and mental input. So why measure success in that way?”

Others recognized the importance of positive returns on investments, but considered their organizations too small and young to be concerned with it momentarily.

BH3: “Financial gain in general is important, but it is not the top priority of our business [right now].”

BH4: “It’s all about remaining financially sustainable, return on profit is a future goal.”

Some believed it was important when considering growth and long-term development (KS1, KS4). Again, only two respondents claimed to actively work towards ensuring a significant return on investment in terms of making it a company goal (KS5, KS6).

Cash Flow

Most respondents felt cash flow was important for funding the start-up’s core business (BH1, BH2, BH3, BH4, KS4, KS5, KS6). Particularly because most of the start-ups were self-financed, they relied on a constant cash flow to be able to continue with operations and maintain customer satisfaction (BH2, BH3). KS3 addressed cash flow directly in their comment:

KS3: “Without cash, we have no inventory. Without inventory, no customers.”

BH1 claimed there was only one situation where they would not be concerned with cash flow,

BH1: “If I had an investor, I would be less worried about cash flow and more worried about, let’s say, return on investment.”

5.3.5 Competitive Strategy

In terms of the success criteria grouped under ‘Competitive Strategy’, respondents were presented with four criteria, which they were also asked to rate. Table 9 presents these criteria and their subsequent ratings.
Table 8: Success Criteria for Competitive Strategy

<table>
<thead>
<tr>
<th>Criteria</th>
<th>BH1</th>
<th>BH2</th>
<th>BH3</th>
<th>BH4</th>
<th>KS1</th>
<th>KS2</th>
<th>KS3</th>
<th>KS4</th>
<th>KS5</th>
<th>KS6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establishing a new market</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Establishing quality strategy</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>-</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Establishing cost strategy</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>-</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Establishing innovation strategy</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Establishing a New Market

The desire to grow was important and considered strategically beneficial for certain start-ups. Some respondents were more concerned with establishing a strong foothold on their local markets first (BH2, BH3), where some of them maintained competitive advantages due to limited or non-existent competition (BH1, BH2, KS2). Almost all of these respondents expressed a desire to become the leading provider of their specialized brand and/or service before competitors were able to enter the market. Three respondents also claimed that the speed of development, in terms of consistently offering something new before others had the chance, was important for strengthening the hold on the market and would help in later expansion (BH1, BH4, KS2). Others considered expansion a future goal (BH4, KS1, KS2) which would benefit their start-up in the long-run. However, for some, the establishment of foreign markets seemed to be an immediate priority (KS1, KS3, KS4, KS5).

KS1: “Establishing a new market is extremely important for our ... long-term goals and [in establishing] where we want to be in the future.”

Establishing a Quality Strategy

Many respondents mentioned the need for quality standards and maintaining customer expectations prior to being asked this question, showing they were concerned with having a strategy for quality. In terms of quality as a competitive strategy, two respondents agreed it impacted all aspects of their start-up’s operation and therefore needed to be defined (KS4, KS5). Other respondent claimed quality differentiated one start-up from another, which would help gain and retain new markets (BH2, BH3, KS2, KS6). Two respondents expressed a desire to invest in new technology in order to increase the quality of their offering (KS3, KS6). Nonetheless, one respondent admitted that while having a quality strategy was important, it was not a priority. Instead it was a secondary goal to survival, which could be considered only after the start-up was fully established (BH2).

Establishing a Cost Strategy

Much like the establishment of a quality strategy, cost strategy was considered a secondary goal to start-up survival (BH1, BH2, BH4, KS6). However, for start-ups wishing to penetrate international markets and gain foreign partners, cost strategies were particularly important (KS2, KS3, KS5)

KS5: “The prices that we offer are much cheaper when compared to international companies for the same quality, therefore, we use this as a [competitive] strategy.”
Similarly, one respondent claimed that establishing cost strategies would allow a start-up full use of all its capacities (KS4). While another claimed it would help the start-up determine the extent of their current growth potential (KS5).

**Establishing an Innovation Strategy**

The establishment of an innovation strategy was a criteria considered most relevant by the majority of interviewed start-up, particularly those with local market expansion goals. They claimed it was the best way of ensuring their start-up become the leader in local markets (KS1, BH1, BH2, BH3, BH4, KS6). The need for constant innovation in order to maintain fresh and interesting was mentioned by BH2. Diversification was also mentioned by KS4 who claimed that being different was sometimes the most important thing in the Balkans.

Only two respondents claimed that an innovation strategy was not a priority (KS1, KS5). KS1 justified this claim with a clear statement:

KS1: "We are the only ones on the market, so why worry about innovation when there is nothing to differentiate or diversify yourself from."

Nonetheless, every single respondent agreed that novelty, or the lack thereof, was the greatest uncertainty in a project.

**5.4 CSFs in Start-Ups**

During the interview, CSFs were discussed in two parts. First, respondents were given a definition of CSFs based on the literature review, and asked to come up with a list of factors most critical for their start-up. This part was exploratory and is presented below in Table 10. The second part was more structured, whereby respondents were provided with a list of CSFs based on the PIP discussed in the theoretical framework and asked to rate those on a Likert evaluation scale from 1 to 5, just like the success criteria. They were then asked to explain their reasoning behind the ratings. While the majority of the criteria identified by respondents in the exploratory part was concurrent with the PIP factors, a few new criteria were identified. All of the factors are discussed below, whereby those which differ from the PIP are discussed at the end as additional CSF.
## Table 9: CSFs based on Exploratory Research

<table>
<thead>
<tr>
<th>CSF</th>
<th>BH1</th>
<th>BH2</th>
<th>BH3</th>
<th>BH4</th>
<th>KS1</th>
<th>KS2</th>
<th>KS3</th>
<th>KS4</th>
<th>KS5</th>
<th>KS6</th>
<th>∑</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start-Up Mission</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Support from networks</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Strong, detailed schedule</td>
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<td></td>
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<td>0</td>
</tr>
<tr>
<td>Consulting customer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
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<td></td>
<td>3</td>
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<tr>
<td>Quality of team</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>4</td>
</tr>
<tr>
<td>Availability of skills and technology</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>2</td>
</tr>
<tr>
<td>Acceptance from customer</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
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<tr>
<td>Monitoring and feedback</td>
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<td></td>
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<td>X</td>
<td>1</td>
</tr>
<tr>
<td>Communication</td>
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<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Efficient problem solving</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td>X</td>
<td>1</td>
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<tr>
<td>Sufficient Financial Resources</td>
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<td>X</td>
<td>X</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Morale and Motivation</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
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<tr>
<td>Flexibility</td>
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<td>X</td>
<td>X</td>
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<td>5</td>
</tr>
</tbody>
</table>

### 5.4.1 The PIP Factors

**Project Start-Up Mission**

### Table 10: CSF Ratings for Project Start-Up Mission

<table>
<thead>
<tr>
<th>PIP</th>
<th>BH1</th>
<th>BH2</th>
<th>BH3</th>
<th>BH4</th>
<th>KS1</th>
<th>KS2</th>
<th>KS3</th>
<th>KS4</th>
<th>KS5</th>
<th>KS6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start-Up Mission</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>3</td>
</tr>
</tbody>
</table>

Project mission as a CSF received quite polarized results, with three respondents rating it as absolutely relevant and three considering its relevance as moderate, or less. It also was not mentioned at all when respondents were asked to provide CSFs in the exploratory part of the study. Those who rated project mission highly claimed it was important for identifying goals and setting the path for long-term success which could be easily understood by all those involved in the start-up (KS3, KS4, KS6). KS3 expressed this view strongly:
KS3: “A clear mission and defined objectives serve as a roadmap in achieving long term goals.”

However, others recognized the need for flexibility in the mission, which was likely to change along the course of the start-ups development. The role of the market, in terms of customer demands, was cited as a major determinant in changing the mission (BH2, KS5), as was the influence of personnel (KS2). The impact of customer desires was also mentioned by KS1, who gave this CSF the lowest rating:

KS1: “Our mission is whatever the customer tells us, yeah we have goal but if we aren’t flexible with our mission we won’t survive.”

Support from Networks

Table 11: CSF Ratings for Support from Networks

<table>
<thead>
<tr>
<th>PIP</th>
<th>BH1</th>
<th>BH2</th>
<th>BH3</th>
<th>BH4</th>
<th>KS1</th>
<th>KS2</th>
<th>KS3</th>
<th>KS4</th>
<th>KS5</th>
<th>KS6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support from networks</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Support from formal or informal networks was only mentioned by two respondents in the exploratory section. It also was not rated very high by most respondents, including those who mentioned it before, one even rating it as mediocre (BH4). Multiple respondents mentioned the difficulty in receiving any form of support for start-ups in their countries of operation, which is why they believed success had to be achieved despite them (BH1, BH2, KS3, KS4). BH2 stated:

BH2: “We don’t get much support from formal networks here. Informal networks may be helpful, but even they are limited. You need to be prepared to go it alone.”

Of those who claimed support from networks was relevant, rating it with a 4 or higher, they had all received support from organizations such as NGOs or incubators, and often in the form of financing for their new venture (KS2, KS5, KS6).

KS6: “It is becoming increasingly difficult to gain access to necessary resources, so support from networks can always open a door.”

Schedule and Planning

Table 12: CSF Ratings for Schedule and Planning

<table>
<thead>
<tr>
<th>PIP</th>
<th>BH1</th>
<th>BH2</th>
<th>BH3</th>
<th>BH4</th>
<th>KS1</th>
<th>KS2</th>
<th>KS3</th>
<th>KS4</th>
<th>KS5</th>
<th>KS6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong, detailed schedule</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>

Much like project start-up mission, none of the respondents identified schedule and planning as a relevant CSF in the exploratory phase. Still, the ratings were generally quite high for these factors when the list was provided. Most respondents agreed that a strong plan helped focus company goals and set a path for growth (BH1, BH3, KS6), as well as contributing to increasing the productivity of the team (KS3, KS4). One respondent, however, argued that rigid schedules and overt planning would actually lead a start-up to disregard what is really important for their success.
BH2: “In a start-up, so much is unpredictable that if you rely too much on inflexible schedules, you will lose sight of more critical factors.”

KS5 echoed these claims by arguing that there is no place for structure in a start-up, while KS2 agreed by stating:

KS2: “If you really know what you are doing, you are not a start-up. It is important to have realistic goals and plans but you need to be able to go with the flow.”

KS3, seemed to embrace both perspectives. Understanding that scheduling provided a degree of rigidity that most start-ups were not used it, it was normal to expect resistance to planning. However, in the long run the benefits were apparent.

KS3: ”When we started talking about using daily scheduling tools [it] did not go that well because people were [resisting] change ... however, today everyone is happy with it because it makes our jobs easier.”

Consulting Customers

Table 13: CSF Ratings for Customer Consultation

<table>
<thead>
<tr>
<th>PIP</th>
<th>BH1</th>
<th>BH2</th>
<th>BH3</th>
<th>BH4</th>
<th>KS1</th>
<th>KS2</th>
<th>KS3</th>
<th>KS4</th>
<th>KS5</th>
<th>KS6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consulting customer</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Three respondents mentioned consulting customers as factors for success prior to being provided the list of CSFs. But again, the factor had diverging results whereby some start-ups believed it to be extremely relevant while others did not.

It was mentioned that consulting the customer would help better understand the demands of the market and aid in the product or service creation process (KS2, BH2, KS3). The customer could provide insight which would benefit project implementation, helping mitigate risks as well. However, one respondent mentioned that while getting customer feedback was beneficial, it often was not worth it if the customer lacked the knowledge or understanding (KS6). This is particularly true of novelty or specialized offering where the customer does not know what they want because they do not know what is possible. For two respondents this was the reason why customers did not need to be involved (KS4, BH4).

BH4: “What we do is creative and new. The customer either appreciates the art and innovation behind the finished products or they don’t. But there is always someone there who likes what you do. As the Latin saying goes, ‘In matters of taste, there can be o disputes’.”

Quality of Personnel

Table 14: CSF Ratings for Quality of Personnel

<table>
<thead>
<tr>
<th>PIP</th>
<th>BH1</th>
<th>BH2</th>
<th>BH3</th>
<th>BH4</th>
<th>KS1</th>
<th>KS2</th>
<th>KS3</th>
<th>KS4</th>
<th>KS5</th>
<th>KS6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of team</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
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<td>5</td>
</tr>
</tbody>
</table>

A total of four respondents mentioned the quality of start-up personnel as a critical factor for success, and the generally high ratings after the list was administered echo this. The
criticality of the quality of the team was viewed not only in terms of the project and its final product (BH1, KS6), but for the company on a whole (KS4, KS6). The quality of the brand was viewed as directly related to the quality of the team working within the start-up. One respondent even mentioned how the incompetence of individuals could make it difficult for everyone else, bringing down the process.

KS2: “You cannot work with people who do not possess the right qualities and skills, your productivity declines because you need to pick up after them.”

However, multiple respondents stressed the difficulty in finding adequate personnel, particularly for the specialized projects their ventures dealt with (BH1, BH2, KS1).

Access to Skills and Technology

Table 15: CSF Ratings for Access to Skills and Technology

<table>
<thead>
<tr>
<th>PIP</th>
<th>BH1</th>
<th>BH2</th>
<th>BH3</th>
<th>BH4</th>
<th>KS1</th>
<th>KS2</th>
<th>KS3</th>
<th>KS4</th>
<th>KS5</th>
<th>KS6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability of skills and technology</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>3</td>
</tr>
</tbody>
</table>

Only two respondents cited this as a critical factor, but ratings were high for all respondents when the PIP list was administered. While it was recognized that a deficit in technology could be made up for in other ways, such as creativity (KS2), generally it was important for start-ups to ensure they were up to date. Two respondents mentioned regularly updating their technology because of its influence on the quality of the final deliverable (KS5) and its role in keeping them competitive on the market (KS4). Others mentioned investing in skill development for personnel as a company priority (BH3, BH4, KS3, KS4) which they actively pursued. Only KS6 who gave it the lowest rating claimed that the major deterrent for the importance of skill and technology availability was financial constraints.

KS6: “Our access to skills and technology is directly related to our available funds, so really the latter is more critical than the first.”

Acceptance from Customer

Table 16: CSF Ratings for Acceptance from Customer

<table>
<thead>
<tr>
<th>PIP</th>
<th>BH1</th>
<th>BH2</th>
<th>BH3</th>
<th>BH4</th>
<th>KS1</th>
<th>KS2</th>
<th>KS3</th>
<th>KS4</th>
<th>KS5</th>
<th>KS6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptance from customer</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

Acceptance from the customer was mentioned by three respondent prior to administering the list, but many rated it as strongly relevant. It was clear that most respondents viewed it different than customer consultation whereby start-ups that felt customer consultation was irrelevant agreed that customer acceptance was not (BH4, KS4). Almost all respondents agreed that in the end customer satisfaction was tied to customer acceptance, which subsequently differentiated successful projects from unsuccessful ones (KS3, KS6, BH2).

KS5: “In the end, it all comes down to the customer.”
Monitoring and Feedback

Table 17: CSF Ratings for Monitoring and Feedback

<table>
<thead>
<tr>
<th>PIP</th>
<th>BH1</th>
<th>BH2</th>
<th>BH3</th>
<th>BH4</th>
<th>KS1</th>
<th>KS2</th>
<th>KS3</th>
<th>KS4</th>
<th>KS5</th>
<th>KS6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitoring and feedback</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

Only one respondent identified monitoring and feedback as a critical factor in the exploratory part of the interview. However, almost all of the respondents agreed it was very relevant. Monitoring and feedback was viewed as significant in order to ensure a project remained on course and in control (KS3, BH3). Also, two respondents mentioned its role in enhancing the offering by contributing additional input for improvements (KS4, KS6). Two respondents, however, claimed it was only necessary sometimes and highly depended on the nature of the project (BH4, KS2, KS5). Monitoring and feedback was often tied to communication.

Communication

Table 18: CSF Ratings for Communication

<table>
<thead>
<tr>
<th>PIP</th>
<th>BH1</th>
<th>BH2</th>
<th>BH3</th>
<th>BH4</th>
<th>KS1</th>
<th>KS2</th>
<th>KS3</th>
<th>KS4</th>
<th>KS5</th>
<th>KS6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>3</td>
</tr>
</tbody>
</table>

Communication was brought up by four respondents and was one of the highest rated CSFs, with seven out of ten respondents giving it the highest rating of 5. Reasons for the importance of communication included its influence on productivity, in terms of minimizing misunderstandings and increasing learning opportunities. Multiple respondents claimed to have informal, open-door policies where team members were free to communicate ideas as this was important for fostering creativity (BH3, BH4). But communication within the company was not the only form of information processing mentioned, as multiple respondents declared the need to communicate with clients. Even those who claimed consulting with clients was not critical agreed that communication was. When asked to explain the difference, respondents claimed that consultation involved input from the customer on the process and final deliverable even when they lacked the knowledge while communication was more concerned with educating the client (BH4, KS4).

Efficient Problem Solving

Table 19: CSF Ratings for Efficient Problem Solving

<table>
<thead>
<tr>
<th>PIP</th>
<th>BH1</th>
<th>BH2</th>
<th>BH3</th>
<th>BH4</th>
<th>KS1</th>
<th>KS2</th>
<th>KS3</th>
<th>KS4</th>
<th>KS5</th>
<th>KS6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficient problem solving</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>3</td>
</tr>
</tbody>
</table>

In the exploratory part of the interview, only one respondent mentioned efficient problem solving as a CSF. Yet again, the ratings were overall positive with seven of the ten respondents giving it the highest rating. Reasons included the need to avoid misallocation of resources and funding, ensuring the end deliverables were not of a lesser quality and upholding the company’s reputation. Avoiding problems was seen as directly related to project failure.
BH3: “Efficiently solving problems means you are quickly able to deal with obstacles, without letting them fester and grow into something that cannot be dealt with – something that will cause long-term damage.”

Two respondents related efficient problem solving with learning, and subsequently growth, where problems can present a learning opportunity when dealt with appropriately (BH2, KS6).

BH2: “Problems are obstacles from which we learn, so they can actually be a positive experience leading to innovation development.”

5.4.2 Other CSFs

Prior to administering the list of PIP factors, participants were asked to provide their own CSFs based on the definition provided to them. Many of the CSFs mentioned are already included in the PIP list and therefore discussed above. However, additional CSFs were identified during this part of the interview, which are discussed in detail in this section.

Sufficient Financial Resources

Only two respondents mentioned the necessity for sufficient financial resources as a CSF. When asked if this referred to resources in general, both asserted that it was in regard to financial factors only (BH4, KS1). Their reasoning was that access to sufficient finances meant that a project was more likely to ensure access to other factors which are critical for success.

BH4: “We need to have enough funds to develop our offering and produce a deliverable we are proud of. If you don’t have the money to do it right, why do it at all?”

Morale and Motivation

Three respondents mentioned the morale and motivation of personnel as important for their start-up success. They perceived it as influential over quality, which resulted from increased productivity (BH2, KS2). BH3 in particular mentioned that many of the members in their start-up often worked on projects without financial compensation, but they were motivated by other factors like skill development and creative support.

BH3: “Contributions are sometimes pro-bono, but we are motivated by our love for the art. We push one another to be better and grow creatively.”

Flexibility

Flexibility was mentioned by half of the respondents, more than any other CSF including those mentioned in the PIP factors framework. Throughout the interviews, and even when discussing other CSFs, all respondents mentioned the need for flexibility in start-ups at least once. Flexibility was mentioned as a reason for minimal planning (BH2), informal organizational structures (BH1, BH3), and product development (KS1, KS6).
6. DISCUSSION

The following chapter provides a discussion of the empirical findings presented in the previous chapter. It scrutinizes the results in relation to the theoretical framework and context of the study. The discussion is presented in the same manner as the empirical findings in chapter 5.

6.1 Characteristics of a Start-Up

Many of the start-up features discussed in the theoretical background were present among nearly all of the interviewed start-ups. Namely in terms of informal organizational and informational structures (Lester et. al, 2003), small size and age, and independence (Luger & Koo, 2005), as well as owner centralized decision-making processes marked by high risk and proactive innovativeness (Miller & Friesen, 1984; Lester et. al, 2003; Ferreira et. al, 2012). However, one outlier appeared to question the feature of simplicity in terms of its organizational structure which was the only one described as based on hierarchy and decentralization. Albeit, the implementation of a complex structure was described as being new and a result of the start-ups growth, the latter of which is apparent from it just barely meeting the small and new criteria. It becomes clear, that regardless of the industry in which a start-up finds itself, considering the varying fields the respondents worked in, the features of a start-up are more or less universal.

Risk taking appeared to be a given for most of the respondents, who pointed out that operating in Balkan countries carries a risk in itself due to political and economic instability. In that respect, risk is inherent in every decision and an entrepreneur in the region does not need to be asked if high-risk is a characteristic of their start-up since this appears to be an axiom. Unwilling risk-taking was therefore described as normal by most respondents which is more indicative of the environment in which the start-ups exist, rather than the nature of the start-ups themselves. Therefore, the geo-political and economic profiles of the countries where the respondents have initiated their start-ups undoubtedly have an influence on the success criteria and CSFs which they will perceive as most relevant. Innovation also rendered interesting results, where respondents associated innovation with new, never before seen ideas. Almost all respondents stated that their start-up ideas were not innovative in terms of originality since similar organizations existed around the world. However, since they were the first and/or only organization to be providing the product/service in their country or region, and they were applying a novel approach to it, they would consider innovation extremely important and were proactive towards being more innovative in their offering. Evidently, innovation for developing economies is more concerned with creating a paradigm shift in the traditional approaches towards doing things rather than providing a never before seen idea on a global scale. Albeit, in that respect the start-up does present a new idea to the local market, regardless of whether it exists elsewhere or not. Therefore, it goes to reason that, in the Balkans and perhaps countries with similar political and economic profiles, start-ups perceive risk and innovation differently. Risk is an inherent characteristic of the organization which has become normalized and therefore mitigation as oppose to alleviation is likely the accepted approach. While innovation pertains less to the novelty of the idea itself, and more to the novelty of the organization’s approach relative to the current market offering.

Competitive aggressiveness appeared to be of little to no concern for most of the respondents. In fact, most claimed their start-up was the first or only one of its kind in terms of specialization, and that direct competition was non-existent or, at worst, very
scarce. Considering the smallness of niche markets in developing economies, this disregard for competitive strategy and concern should come as no surprise. However, some respondents did mention indirect competition which essentially referred to organizations that relied on traditional approaches. While these were not direct competitors in terms of providing the same specialized offerings as the respondents’ start-ups, they catered to a customer’s comfort zone by providing them with the accustomed way of doing things. Changing the mentality of the people, therefore, was cited as one of the greatest requirements for not only gaining a competitive advantage but also for growth. Similarly, those start-ups which also had an international clientele mentioned developing a competitive price strategy in order to compete with international companies. Since developing economies pay lower wages, they can offer cheaper prices for similar or equal quality and outsourcing becomes a very real option. In that case, the main competitive strategy is clearly the price of their service. Competition in developing economies can therefore be viewed as less rigorous, where the main difficulties for local markets are, again, concerned with creating paradigm shifts in mentality, while the international market is generally only penetrable through offering low-cost outsourcing services.

Development was very important for all start-ups who wanted to see their organizations grow in offering and market reach. Most of the respondents cited a desire to overtake the domestic market then penetrate international markets, using innovation from the former and price strategies for the latter. Considering that these start-ups operate in Balkan countries, where labor is much cheaper, many of them claimed that price strategies would allow them to offer their services to international companies wishing to save money through outsourcing. While much of the literature on start-ups describe a growth strategy focused on profit and employee increases, the empirical findings showed different results (KPMG). Profit was only mentioned by one respondent and even then as being a secondary goal of the organization. Mostly, respondents expressed a desire to increase their reach in order to gain experience and recognition, which would ultimately lead to financial success. Even in terms of employee increase, this was shot down by one respondent who claimed that their start-up had a desire to grow in size but not employees since they rather focus on educating and training the current staff. Growth, therefore, appears to be viewed more in terms of quality than quantity.

In terms of basic start-up features, all the respondents satisfied the criteria and confirmed the expectations of the literature. However, the findings show slight but interesting contradictions with the literature as well. It appears that start-ups in developing economies are far more concerned with surviving [breaking even] and learning from the experience than they are with overtaking markets, increasing the bottom line and such. Yet these features were consistent among all the start-ups, showing a specific characterization among start-ups in developing economies which inspires potential further research. Nonetheless, considering all respondents met the overall feature, they qualified as start-ups and were adequate subjects for the study.

6.2 Project-Management in Start-Ups

The empirical findings related to the PM of start-ups was interesting and provided a unique perspective of how projects are managed in Balkan start-ups, which can easily be translated to other countries with similar political and economic profiles. Firstly, the experience of the start-up founders with projects prior to the founding of their start-up ranged, which was evident in their understanding of PM theory and practices. It is apparent that PM education is not a very developed or popular field of study in Balkan
institutions or organizations, considering none of the respondents mentioned receiving formal education in the field. Even those who had academic backgrounds in management, did not specifically name project management as a field of previous study. Yet, despite no formal education, multiple respondents had experience in projects of various sizes which is to be expected considering the numerous number of projects run in BiH and Kosovo by international organizations such as the EU, USAID, Red Cross and so forth. Foreign aid is not uncommon in countries such as these, therefore it becomes apparent that any project experience gained comes from outside the country and indicates a need for more formal education and training, a factor which can undoubtable influence project success and again presents an area of interest for future research.

This also likely affected why multiple respondents initially claimed not to apply a project-based view to their start-up, citing that the temporary characteristic of a project was a feature they did not want to associate with their project. A limited view of projects and PM in terms of ‘something that comes to an end’ shows why many start-ups may be hesitant towards applying a project-based view to their organization. However, upon further discussion with respondents it became apparent that every one of the start-ups applied PM to their organization in one way or another, oftentimes causing the respondent themselves to realize they did in fact apply a project-based view. This comes as little surprise, considering one of the biggest issues entrepreneurs have in assuming a project-based view of a start-up is the concept of termination. The literature has discussed and debated this in detail, whereby the basis of EPM is not viewing an organization as one with a termination date, but by viewing the start-up phase as temporary and therefore applying a project-based view to this phase alone (Lindgren & Packendorff, 2003; Lindgren & Packendorff, 2011; Kuura, Blackburk and Lundin, 2014).

Interestingly enough one respondent confirmed this perspective, mentioning that their start-up was in fact run as a project. However as the organization grows and subsequently moves out of the start-up phase the project-based view is less relevant since operational activities become more normalized. Only one respondent maintained that they did not apply a project-based view despite adding that they run their start-up as an agile project, applying the methodology as well. Since agile PM is a subset of the PM body of knowledge, it is clear that they too apply a project-based view even if they are not aware of it. However once again, the respondent’s limited education in PM can attribute to the confusion and misunderstanding. Therefore, it becomes clear that the need for PM education is high and international PM organizations should take more initiatives towards developing trainings that will specifically target new ventures. Not to mention the need for EPM development and more research in the field in general.

Evidently, all of the respondents apply PM practices in their start-up where the most commonly used practices are related to communication. However, the limitations of PM practices to start-ups was apparent in the respondent’s complaints of high costs, time-consuming feature and especially their rigidity. Start-ups in general, and those in the Balkans in particular, require significant flexibility to their organization which render it difficult to apply PM practices. This is in line with previous studies by Larson et al. (1991) and White and Fortune (2002) who found that most new ventures seek liter versions of PM to replace informal organization structure. Particularly in terms of scheduling and planning, where many respondents claimed they found it hard or useless to plan since the volatility of the markets in which they operated require flexibility to foster innovation.

As expected, the geo-political and economic profiles of the countries in which these start-ups operate also affected their answers and reasoning. Considering the instability of these
nations, flexibility was stressed even more. This is perchance why most of the start-ups claimed to focus most on communication and execution, with only one respondent claiming planning as a major task. Communication helps provide up to date feedback and information flow throughout the start-up. Since some respondents highlighted that competitive advantage and start-up growth was tied to informing the market about the benefits of their offering, and therefore creating a shift in the traditional way of life, it is clear why communication is an important task. Similarly, execution helps ensure the start-up pushes their product and/or service onto the market quickly and efficiently to gain the attention of the target market. Focusing on this task is important precisely because it often involves changing the market’s mentality and perception, but also because the market’s volatility requires quick action before things change. Planning, would in that case be less important since time is of the essence and it cannot be spent over schedules and plans, costing the start-up dearly. The results seem appropriate for entrepreneurial start-ups, offering particular insight into the nature of those operating within developing economies. Countries with developing economies in general require far more flexibility, considering the higher-risk markets in which they operate. The need for PM practices which accommodate new ventures, therefore the development of EPM methodologies, tools and techniques, is evidently significant. Additionally, there is a need for EPM that caters to the specific nature of start-ups in developing economies; which is to say a methodology that considers higher risk, greater volatility ergo a greater need for flexibility and multi-factor planning, and lower resource requirements. Similarly, considering the importance of communication, EPM for new ventures in developing economies, which considering the greater influence start-ups have on economic development in such countries, should also place greater significance on tools and techniques tied to communication.

6.3 Project Success Criteria in Start-Ups

6.3.1 Efficiency and Capabilities

Success criteria grouped under efficiency and capabilities included four project success criteria dimensions. Two of these are associated with traditional measures of success, including schedule and budget, while the other two refer to managerial and technical capabilities. Staying on schedule was more or less accepted as a relevant criteria for project success, but not to such a degree as staying within budget. Most respondents were willing to accept flexibility in terms of scheduling, extending deadlines to meet quality goals, customer requests and similar. The overarching reasoning was that schedules should be flexible enough to change according to strategic decisions, often tied to customer relations, loyalty and satisfaction. Subsequently, quality was also mentioned numerous times, where the need to maintain quality was more important than meeting a deadline. Being late was viewed as less of an issue than providing an inadequate product or service. Some respondents also explained that project schedule overruns were a consequence of the nature of the start-up’s operations, where specialization and novelty often led to alterations in scheduling. Similarly, some agreed that while it may portray a less professional image of the start-up, it is to be expected in a country where professionalism is defined differently and punctuality is not a priority. In that respect, even start-up’s partners do not respect deadlines, rendering schedule overrun an unfortunate norm. This is somewhat contradictory to the literature which stresses the need to stay on schedule in order to increase chances of success (Karlsen et al., 2006, p. 535). Yet it provides interesting insight into the traditional view of project success criteria, where scheduling and meeting deadlines is significantly stressed. Yet, it appears to be of little consequence to start-ups, and even less so to those in developing economies. Quality
and customer satisfaction are instead viewed as far more important, and should be explored as significant success criteria for project-based start-ups rather than scheduling.

Two apparent themes emerge from the answers pertaining to the importance of maintaining the budget as a criteria for project success; start-up survival and competitive advantage. While almost none of the start-ups seemed concerned with profits and increasing the bottom-line, they were very keen on at least breaking even and not operating with a financial deficit. Similarly, maintaining a budget was particularly associated with maintaining lower costs. For those start-ups which offered outsourcing services to foreign companies, they had to ensure they maintained lower prices to retain customers and compete with companies on the international market. This is more or less in line with the literature which states that while financial criteria are often not a top priority survival is (Kakati, 2003), particularly when considering the high failure rate of new ventures (Wagner, 2013). Budget, therefore can be maintained as a very important criteria for project success in a start-up.

In terms of capabilities, managerial capabilities were overall considered much more relevant than technical ones. Referring to the ability to ensure a strong workplace culture, managerial capabilities was almost unanimously considered the most important criteria for project success. Many respondents associated workplace culture with employee satisfaction and productivity, citing that the ability to ensure the participation of all members was a relevant factor in how successful a project was. Considering that almost all of the start-ups interviewed were owner-centralized, and the owner represents the managerial capabilities, it comes as no surprise that this criteria would be viewed as significant. It is also in line with previous studies conducted on new venture success, whereby respondents rated entrepreneur quality as one of the most relevant clusters of criteria success (Kakati, 2003). Interestingly enough, the second cluster of success criteria cited in the Kakati (2003) study as important was resource-based capability, which is essentially technical capabilities. However, technical capabilities were arguably rated as the least relevant in the efficiency and capabilities group of success criteria. This is not to say that they were not deemed relevant, particularly in terms of qualified human resources which multiple respondents claimed were hard to find but essential to the project’s success. The location of the start-ups, being in Balkan countries with high levels of youth migration and subsequently low levels of qualified human resources available, makes the rating more understandable. Some respondents highlighted this point by claiming they often have to work with what they have, and have become accustomed to dealing with limited resources and technical capabilities; consider how one respondent claimed their start-up preferred hiring inexperienced staff so that they could mold them into what was needed.

In terms of new ventures, which reflect features of smallness in size and age, often lack resources and are in usually owner-centralized anyway. In that sense, it is understandable that the managerial or entrepreneurial abilities of the owner are far more significant than the technical capabilities. Creativity and innovation are stressed and often expected to make up for the lack of technical capabilities. Especially in countries with developing economies, technical capabilities are lacking even in larger organizations so start-ups expect these limitations from the get-go focusing more on what they have rather than what they do not.
6.3.2 Impact on the Team

In terms of the success criteria grouped under ‘Impact on the Team’, the majority of the dimensions were rated high and therefore considered significant. Among the most relevant were creativity, which was expressed as essential for problem solving, new idea generation and development, and market expansion. Considering start-ups are defined by their ability to provide creativity to the market in terms of their offering and solutions (Barringer & Ireland, 2012), it is clear why start-ups are concerned with fostering creativity in their own organization. In order to benefit organization processes and overall success, team members should be encouraged to express their creativity. Some respondents were even keen on supporting creativity by implementing it into their brand development processes. This is in line with studies which found that fostering innovation and creativity is a crucial aspect of managing projects in start-ups (Bryde, 2003). Also considering the limited resources and technical capabilities of start-ups discussed earlier, creativity carries a greater weight in being able to make up for these limitations. Yet some respondents were not convinced of the influence of creativity, claiming it was a subjective feature that depended on the project in question, especially when customer requirements stifled any possibility of creativity. One respondent even belittled the role of creativity by referring to it as a refreshing addition, but by no means necessary. Interestingly enough, this respondent’s start-up was the oldest of those interviewed, almost completely out of the start-up phase, and had already begun to move towards a more rigid organizational structure concerned with the bottom line. This might even strengthen the argument as to why creativity in a team is important for project-based start-ups in the new venture phase. It should also be noted that at times, some respondents used creativity synonymously with innovation.

While creativity was highly rated, employee morale and satisfaction received the highest ratings by the interviewed start-ups. The main reason for this was that morale and satisfaction was tied to employee productivity, which would subsequently lead to more successful projects. Most of the respondents spoke of free environments which fostered creativity and innovation, and referred to their team as family. The awareness of many of the start-up founders about the benefits of investing in their team was astonishing, but most believed this was tied to managerial capability. Not only did they recognize that dissatisfied team members were the equivalent of a non-existent team members, but they also often mentioned prioritizing employees over customers. It was widely believed that the satisfaction of employees would lead to the satisfaction of customers, rendering the former an asset. BiH and Kosovo have historically been considered socialist countries and were a part of the Ex Socialist Republic of Yugoslavia. Therefore, the idea of satisfied employees likely stems from traditional mentalities. It also explains why many of the respondents also claimed investing in the skill development of their employees in terms of in-house and out-of-house trainings, which they claimed to be synonymous with investing in their company.

What is most interesting is that these results contradict much of the literature, where employee appreciation is less emphasized (White & Fortune, 2002, p. 6; Turner et. al, 2009, p. 291). While some start-ups interviewed did believe skill development was subject to personal initiative, and subsequently did not invest in it, they recognized the degree of influence it had on the project success. Albeit one of those respondents did prioritize profits over employee growth, which is in line with findings from a study conducted by Midler and Silberzahn (2008, p. 484). Nonetheless, this was only one respondent and the overwhelming majority still emphasized employee appreciation.
Subsequently, more studies should focus on these criteria’s and their implications on start-up project success.

6.3.3 Impact on the Customer

In terms of the success criteria grouped under ‘Impact on the Customer’, these results were more or less consistent. Almost all respondents were unanimous in claiming the importance of the customer impact on success criteria. This is consistent with Greiner’s (1998, p.6) claim that new ventures tend to act on the basis of customer’s reactions. Considering multiple respondents mentioned making strategic decisions based on the needs of customers, this is even more fitting. Above all, satisfying customers and obtaining their loyalty in their form of long-term relationships, was considered the most relevant of these criteria. Multiple start-ups recognized the economic instability of the countries within which they locally operated, and that oftentimes their target market was anyone with the financial stability to afford their specialized services. In that respect, the market is smaller and therefore quickly saturated, emphasizing the necessity for loyal customers who will provide return business. Karlsen et al. (2006, p. 535) note the same need to prioritize customer satisfaction in small organizations. Shenhar and Dvir (2007, p. 69) mention the benefits of customer loyalty and strong, lasting relationships to brand building, which successively established market leadership. Most of the respondents portrayed awareness for these benefits by expressing their own tendency towards brand building, namely in terms of establishing and fulfilling long-term goals. In that respect the findings are consistent with the literature and the impact on the customer is viewed as a relevant criteria for project success in start-ups.

6.3.4 Business and Financial Success

In terms of the success criteria grouped under ‘Business and Financial Success’, the results were quite interesting in the sense that economic goals were not prioritized in these new ventures. Many start-ups were adamant in declaring profits irrelevant, or secondary to other measures of success such as fostering innovation, team morale and brand development. Quality and employee satisfaction were specifically considered very important features, whereby respondents stressed the significance of human factors in the process; both in terms of relationships with customers and with employees. Multiple respondents stressed that financial successes would follow in so much as a start-up was successful in terms of satisfying the people involved. In that respect, start-ups with a project based view measure success more in terms of non-financial criteria rather than financial ones.

Nonetheless, respondents were unanimous in underlining the need for financial and economic security. That is, to avoid running a financial deficit and maintaining sustainability where the start-up’s operations were able to generate enough cash flow for its continued operation. Still, the larger a start-up was, the more concerned the founder seemed to be with financial criteria’s of project success. Smaller and younger start-ups, seemed more concerned with survival and remaining sustainable than turning a large profit. In most of those cases, the start-up was also personally financed so breaking-even in order not to experience significant loss was a priority. Financial criteria, as a measure of project success in start-ups, should be more reflective of break-even indicators, a.k.a survival, as oppose to bottom-line results. That is to say, budgeting mentioned earlier is more indicative of startup success in so much as it ensures the venture does not operate with a financial deficit.
This is likely why cash flow was by far the most highly rated project success criteria within this group. Considering most of the companies are personally financed, founders expressed concern for disruptions in cash flow that would require further investments on their part. Since further investment would be required for covering current operations and not growth, that was indicative of loss and therefore more of an indicator of failure. In that respect, cash flow was a far more relevant criteria for measuring project success in a start-up than the other business or financial criteria.

Previous studies have produced opposite results, whereby commercial success was prioritized (White & Fortune, 2002, p. 6). It then appears that, based on previous research, the start-ups interviewed in this study have diverging perspectives of project success. This is perhaps an indication of the need for further studies on project success in start-ups originating in developing economies, such as those of the Balkans. Nevertheless, it also shows that financial success is viewed differently in new ventures than in larger organizations, and is definitely governed by a varying perspective based on the country of operation.

6.3.5 Competitive Strategy

Establishing and developing a new market was considered important for start-ups with international growth strategies, namely those who offered outsourcing services to foreign companies. They recognized the role of new market establishment in achieving long-term goals and ensuring future success for their start-ups. However, start-ups with no international ambitions expressed a desire to maintain the markets they already had. Much of this was a result of limited competition in their niche markets, allowing them to concentrate efforts on developing specialized competences and capabilities. Almost every start-up expressed a desire to grow in offering, regardless of whether or not they wanted to penetrate new markets.

Competitive strategies in terms of quality, cost and innovation were met with varying perspectives, where some start-ups focused more on one than the other while others embraced all three. Quality was considered pertinent for ensuring customer satisfaction and important for developing a strong brand. Start-ups operating in local markets stressed the role of quality in differentiating them from other competitors, even if they did not exist. The reasoning was that quality would establish a brand which would help offset the risks of potential future competitors. In general, quality strategies were cited as important for remaining competitive and developing local markets, while cost strategies were cited as important for the same but on international markets. Start-ups currently operating on international markets, or those with a desire to expand beyond their local markets, were concerned with cost strategies far more than those wishing to remain local, i.e. within their current country of operation. Most of these start-ups recognized that they could not provide a higher level of quality or novelty than international competitors, but they could offer a competitive quality with significantly lower prices making them a more desirable option. Innovation strategies presented the least polarized results where the majority of start-ups agreed it was relevant for remaining competitive and preparing for the future in general.

Shenhar et al. (2007, p. 69) suggest that new market creation and establishing a steady position on the market are normal priorities of projects based on novelty. Similarly, Atkinson (1999) has also suggested the important of preparation for the future through the development of competitive strategies as a relevant project success criteria. Therefore, the results do not greatly diverge from previous studies. What is significant, however, is
that start-ups seem to prioritize one strategy over the other considering their strategic goals. In terms of remaining competitive on domestic markets, quality is stressed, while international market competitiveness is more concerned with cost strategies. This is heavily influenced by the fact that the Balkans have become a key economic player in terms of providing outsourcing services, that is to say cheaper labor. Therefore, it comes as no surprise that those start-ups which are also working in international markets are offering the same and therefore view their cost strategy as a far greater measure of project success than the others.

6.4 CSFs in Start-Ups

The results for CSFs in start-ups show that, when provided with the list of PIP factors, almost every factor is viewed as important or very important by the majority of respondents. This is regardless of whether or not the CSF was identified by the respondent in the exploratory part of the interview. The significance of the CSF ratings is discussed in the following section, where the PIP factors refer to those CSFs presented in the adapted PIP framework by Pinto and Slevin (1987) earlier in the theoretical framework. Alongside the PIP factors, additional factors identified by respondents in the exploratory part of the interview will also be discussed in this section.

6.4.1 The PIP Factors

Project Start-Up Mission

Project start-up mission was either strongly supported or basically ignored by respondents. It seemed that while they understood the importance of having goals and plans to lead their start-up, flexibility was far more important for many respondents. This is in line with claims by Shenhar and Dvir (2007) that new ventures are often characterized by ambiguous goals and riddled numerous uncertainties during project implementation, rendering flexibility more of a concern than defining a mission.

Support from Networks

Support from networks, whether formal or informal also received polarized results with slightly less significance being placed on it than other CSFs. Considering the countries in which these start-ups are founded, i.e. developing economies, it comes as no surprise that support from networks seems useless, as it is often non-existent. In terms of formal networks, governments often provide little to no funding or other support to start-ups, generally focusing on larger companies or SMEs at best. Even incubators are generally limited in their offering. Similarly, informal networks are hard to find in countries where disposable income is low and investing in ventures is generally a personal feat rather than a group effort. It is not surprising that those with strong network support then rated it as very important, while those start-ups which did not receive support from networks felt they were irrelevant. Interestingly, even those who received some sort of aid from organizations or institutions were well aware of the difficulties in getting support, citing that access to support from networks involved strong connections. Additionally, these connections were often based on nepotism or achieved through some form of corruption. It therefore appears that the biggest factor in determining the relevance of network support as a CSF in project-based start-ups was whether or not the organization had access to this exclusive group. It is also indicative of the environment of the countries in which these start-ups operate, and again how much of an influence the political and economic situation has on project success in general [i.e. how much external factors affect project success criteria and CSFs in start-ups].
Research on the influence of network support in start-up project success is very limited, and lacking for start-ups in developing economies. Although it would appear that start-ups in developing countries could benefit most from networks, there are many obstacles in their way. Most studies are instead concerned with top-management support projects (Jugdev & Muller, 2005), but this is not relevant for start-ups.

**Scheduling and Planning**

The relevance of scheduling and planning as a CSF appeared to be heavily contingent on the mentality of the start-up founder. Generally, it was either viewed as a tool for making work easier and therefore more productive, or as a hindrance in the form of overtly structured and bureaucratic processes that were more of a nuisance than a help. One respondent even expressed both perspectives, whereby it was articulated that most start-ups reject scheduling and planning due to it representing less flexible forms of business practice, often relying on trial-and-error go with the flow techniques instead. But, once these perspectives were eradicating and overcome, the benefits of scheduling and planning to overall project start-up success were evident. Resistance to scheduling appears to be more of a rite of passage for start-ups than a strategic tactic. In that sense, the results conflict with research which states that strong and detailed plans are pertinent to success (Fortune & White, 2006, p. 55). Nonetheless, this is line with the results on project success criteria presented earlier which enforced the idea that planning and maintaining strict schedules was not necessary for success in start-ups. It also further indicates the need for more lite versions of PM in the form of EPM concerned with offering flexibility in planning and scheduling, making it more accessible and, therefore, more relevant to start-up success even in the volatile markets of developing economies.

**Consulting Customers**

Consulting the customer was considered relevant by some start-ups who stressed its role in easing product/service development and implementation. Customer satisfaction was also tied to customer consultation, mirroring Greiner’s (1998, p. 6) view that new ventures base their operations on the demands of customers. However, many respondents recognized that the novelty of their start-up didn’t allow for significant customer consultation because oftentimes customers lacked the knowledge and understanding needed to be of any help. In that respect, customer acceptance of the final product was far more critical. Whether or not the customer was able to consult on the project meant nothing if they accepted the final deliverable and were satisfied. It was clear that these organizations were not keen on dismissing the role or influence of the customer in the process, since they still aimed to satisfy their consumer. Instead, they simply recognized the customer’s limitations when it came to the specialized nature of their product, and that this often meant consultation was not an option. Therefore, consulting a customer is not necessary a relevant CSF for project success in a start-up.

**Quality of Personnel**

The quality of team members was considered very critical for success by almost all of the respondents. It was recognized that skilled personnel meant more productivity and better results. However, it was clear that finding the proper personnel was difficult for most start-ups considering the limited quality of human resources on local job markets. Bearing in mind that the startups interviewed come from developing economies with high ‘brain drains’, i.e. high migration of tertiary-educated and skilled individuals, this is not a surprise. This was further stressed by respondents when asked about access to skills and technology, where most felt it was very critical to start-up success. In terms of personnel
skill, it was evident that multiple start-ups were actively concerned with the development of their team because of the influence it would have on the final deliverable. This is in line with studies by Fortune and White (2006, p. 55).

Access to Skills and Technology

Similarly, access to technology was of particular importance to companies dealing with IT specialized services. In general novelty based companies require greater skills and technology than other companies. However, financial constraints was mentioned as a far more critical factor to success considering it also limited a start-up’s access to skills and technology. Again, this may be more of a country profile specific result whereby access to skills and technology is generally limited, so start-ups tend to believe their success would be enhanced if they had them. Considering the generally less favorable results this CSF produced in the study conducted by Fortune and White (2006, p.55), this reasoning seems more likely. Nonetheless, access to skills and technology appears to be a relatively relevant CSF for project success in start-ups.

Acceptance from Customer

While a few respondents viewed acceptance from the customer synonymously with client consultation, some did not. Respondents that earlier claimed to consider consultation with customers a less relevant CSF, said the opposite for acceptance from the customer. This is because they viewed the latter more in terms of customer satisfaction with the final deliverable, while the former was more about the client’s involvement in the process. While they recognized that being involved in the process could help ensure a more favorable outcome in terms of satisfaction with the deliverable, they also recognized the complexity of the process due to the skill and knowledge required to understand it. In that sense, while for their specialized offering the client did not need to be consulted, they definitely needed to accept the final product in order to ensure success. While Fortune and White (2006, p. 55) also seem to combine the two concepts under one, it appears that for start-ups working in niche markets, the two concepts need to be viewed as mutually exclusive. In that respect, acceptance form the customer is viewed as a very relevant CSF in start-up project success while customer consultation less so.

Monitoring and Feedback

Monitoring and feedback was tied with information processing, where the majority of the interviewed start-ups associated it with enhancing processes or final deliverables. Although none of them thought of it before being administered the list, nor could many of the start-ups provide concrete justifications for their reasoning. It seemed as if they had heard of the concept before and been told it was important, rather than ever actually having considered its role in the success of their new ventures.

Communication

Communication was unanimously accepted as a critical factor for project success, both in terms of internal communication with team members and external communication with clients. Some respondents’ claims that communication with customers was important conflicted with their initial claims that customer consultation was not critical. However, when asked to explain the difference it was clear that consultation was viewed as the process of seeking advice from customers while communication was more about educating the client. In terms of novelty based ventures, the latter appears to be far more important since innovation requires educating the customer about why they need the specialized service as oppose to asking them to be creative. It is also directly tied with
changing customer mentality. Developing economies tend to have less ‘modern’ offerings meaning traditional approaches are usually preferred. Penetrating the market with a new approach means change, and resistance is to be expected. Therefore, a large responsibility of any start-up is to counter traditional approaches and educate the market on their new, innovative and creative offering. This is undoubtedly why communication is a CSF for any start-up’s success.

**Efficient Problem Solving**

Efficient problem solving was again one of the criteria which was not mentioned before the list was administered, but which received high ratings. Most apparent was that multiple respondents seemed to view problem solving as a great opportunity for learning and growth if it was taken advantage of and properly handled on time. Additionally, respondents recognized the negative repercussions of not dealing with problems speedily and effectively, particularly in terms of financial loss which is a major concern for most start-ups. In that sense, while start-ups can learn a great deal from an efficient problem solving approach, they can lose even more without one. Fortune and White (2006) also present efficient problem solving as an important factor for project success, and therefore the findings are in line with this where efficient problem solving is a relevant CSF for project success in a start-up.

**6.4.2 Other CSFs**

The other CSFs identified by the respondents in the exploratory part included sufficient financial resources, morale and motivation, and flexibility. Interestingly, when asked if sufficient financial resources could also be extended to resources in general, both respondents who had identified this CSF claimed that it could not. They argued that while other resources could easily be made up for in creative ways, the mind could not compensate for insufficient funding.

Morale and motivation were mentioned by three respondents who claimed the state of their team was one of the most critical factors for success in a start-up. It was mentioned by one respondent that the work team members sometimes put into the start-up was not financially compensated, proof enough that oftentimes start-ups were run based on other forms of motivation. This also echoes multiple studies and claims by entrepreneurs that start-ups are not all about profit.

While flexibility is not mentioned in studies by Pinto and Slevin (1987) or Fortune and White (2006), it was still mentioned multiple times by respondents throughout the interview and not just when asked about CSFs. It was also mentioned by half of the respondents explicitly in the exploratory part of the CSF questioning. This indicates the need for further research on flexibility and adaptability in start-up success.

Thus, other CSFs for project success in start-ups should include access to sufficient financial resources, team morale and motivation and flexibility. Particularly the latter, which most studies and currently distant frameworks seems to disregard. However, the extent to which it is emphasized by start-up founders in this study, show that it plays a very crucial role in start-up success.
7. CONCLUSION

The following chapter provides concluding remarks that can be made based on the findings. The conclusion will also answer the research question. Theoretical and practical contributions will also be presented at the end.

The purpose of the study is to identify how start-ups view success, therefore attempting to understand how they measure success once the project has been implemented. Two main factors have been taken into consideration: critical success criteria and CSFs. The role of start-ups, with their specific organizational characteristics has been taken into account throughout the study. Based on a thorough analysis of the extant literature and the presented framework, the empirical study concerned with start-ups aimed at answering the following research question:

“What success criteria and critical success factors are most relevant for project-based start-ups?”

The findings of the empirical research, which were based on semi-structured discussion with individuals at the decision – making level of start-ups, including founders, CEOs and executive directors, led to fruitful insights into project success within start-ups when a project based view is taken. The output of the study has led to sufficient valid information in answering to the overall research question.

The interviews mainly identified with typical start-up features and characteristics, indicative of project novelty as well. The organizational situation of start-ups is clearly quite dynamic and calls for greater exploration. Similarly, the application of a project-based view to start-ups makes for very interesting research considering the apparent difficulties in applying PM perspectives to new ventures despite the significant potential benefits. Nonetheless, when PM is applied to start-ups there are several success criteria are considered relevant. Highly innovative start-ups are often associated with high uncertainty and as such view planning as less important, and scheduling or meeting deadlines as a matter which can be approached with significant flexibility. Instead, attaining the goals set by customers is far more relevant since start-ups needs to create benefits for their customers and deliverables which will be accepted by the market. This is also why scheduling can be viewed with flexibility, since customers are willing to sacrifice time for quality. Not to mention, that the specific economic profiles of the countries within which the respondents’ start-ups operated perceived punctuation and scheduling nonchalantly, rendering them less important and planning relatively insignificant. The same environments, also present limited markets which are quickly saturated making customer relationships very important for start-ups. Customer loyalty is very important especially for maintaining the strategic goals of the organization. This is also strongly linked to team satisfaction and morale, where the efficiency of team members is directly linked to customer satisfaction. Team development is also important in project-based start-ups where team members are expected to bring high levels of innovation and creativity and work within flexible organizational structures. Considering the volatility of the environment and customer needs, team members are expected to consistently learn new capabilities to meet the requirements. Oftentimes, they are not compensated heavily or at all but considering the high unemployment rates of the countries within which the start-ups operate, members seem to be happy for the opportunity to expand their skill set and apply themselves. Still, maintaining satisfied
team members by offering other benefits is a priority. In fact, it appears that the employee comes before the customer since the founder believes it is their job to prioritize employees, and the employees’ job to prioritize customers. The nature of the start-up projects, both in terms of internal uncertainties and external ones, shows that most economic success factors are viewed cautiously by the start-ups. Creating strong relationships that beget customer loyalty and breaking even in terms of reaching economic stability is far more important measures of success than profit.

Short-term goals are generally viewed as more important than long-term ones when working on individual projects. However, their alignment with the start-ups strategy is necessary for ensuring long-term success. Nevertheless, at times when financial survival is in question, long-term strategy plays second fiddle to sort-term survival needs. In general, survival is more important than the bottom line. Especially for those with personal funding and investment on the line, generating profits in order to have a positive return on equity in terms of breaking even is salient. Considering the limited access to formal or informal networks, this is even more of a noticeable success criteria, as well as why maintaining strong customer relationships through various strategies becomes pertinent to project success.

The external environment in terms of the geo-political and economic situation of the country seemed to have an outstanding influence on the project success of start-ups. At least in terms of their prioritization of criteria. Limited competition made competitive strategies less important, same with access to networks or planning. In terms of existing literature and former studies on success criteria, the main success criteria seem to be similar in this study’s findings. However, there are key contrasts where the emphasis placed on the project team as an asset is far greater, as well as the need for significant flexibility in all aspects of the project management. While identifying single criteria for success in a project-based start-up is difficult, the results show clear indications of where start-up priorities lie. Namely, customer satisfaction, team satisfaction and flexibility are the three priorities which affect whether criteria is relevant to success or not.

In terms of CSFs, respondents greatly identified with the majority of the PIP factors presented. This may lead to assumptions that start-up PM does not differ greatly from PM in larger organizations. However, this is not the case since limitations in the PIP factors were identified. Primarily, there was significant confusion and misunderstandings on the meaning of the individual CSFs where multiple perspectives and interpretations arose. The literature is also confusing on this subject, since it does not draw boundaries between the individual factors leading to subsequent confusion.

Respondents often grouped factors together or viewed them as synonymous, unable to identify or understand how they differed. In that respect, multiple factors were viewed through the interrelationships they had with other factors, likely leading to the generally high ratings given to all CSFs, i.e. why respondents claimed every factors was critical. Still, despite difficulties in specifying the importance of single CSFs, themes began to emerge representing important factors themselves in line with the rest of the findings from this study.

Again, the most eminent themes upon which the start-ups built their PM included: flexibility, communication, the team. PM in a start-up is a very dynamic process, which
is difficult to identify in a single framework or by a given set of factors since it requires a significant amount of flexibility. In that sense, start-ups work with ad-hoc PM, where flexibility is the foundation of their approach. This further proves the need for liter versions of PM particularly forms which cater to the uncertainty and unpredictability of project-based start-ups. Therefore, more research is needed in developing EPM complete with methodologies, tools and techniques that are applicable to the specific characteristics of new ventures. Such a field will recognize that project success criteria and CSFs are characterized by the necessity to be flexible and the ability to adapt due to the environment in which start-ups find themselves, like this research has shown. The study also found that CSFs focus more on the implementation of projects, which is why tension between long and short-term goals is not present. However, polarization is much more evident in project success criteria where instant economic goals need to be sacrificed for future preparations.

7.2 Implications of the Study

7.2.1 Theoretical Implications

This research led to the creation of frameworks suitable for studying the case start-ups, but many of them show indications of being applicable and transferable to other organizations within a start-up or even new venture context. Namely, Figure 3 and Figure 4, which can be used and tested in potential future studies discussed in detail below. As mentioned, previous research on project success have greatly neglected the organizational context of new ventures, or start-ups, which this research therefore aims to study. With that, this research has significantly clarified the view of the start-up decision maker, i.e. owner and/or CEO, in providing further understanding of their perspective. The empirical findings also provided insight into PM within a start-up specifically concerned with project success, but also the role and need for EPM in general, which despite not being the aim or purpose of the research, was still uncovered and could be built upon in future research. Adding to the literature, this study also provided input on the ‘how’ and ‘why’ project success criteria and CSFs were specifically relevant in the start-up context.

The empirical findings of this study have also shown that the traditional use of the ‘Iron Triangle’ alone is not the most appropriate option for the respondent organizations. This suggests that as a tool for assessing project success, it is outdated and inadequate on its own. In fact, the respondents identified with the framework developed in this study [Figure 4], again showing its relevance for future studies within a similar context.

The findings also show that the emphasis placed on the project team in previous research has been undervalued, suggesting that future research needs to steer focus in a new direction which could have significant implications in the theoretical field of study. The research also indicated the need for far more flexibility in the PM applied within start-ups, in order to be more effective and face less resistance by founders and team members alike. This suggests the need for further developments within the theoretical study of EPM. Similarly, the role of networks in start-ups appears to be very different than previously suggested by research, likely due to the geographic and cultural context of the respondents. This provides the foundations for future theory development concerned with project success in organizations operating in developing economies. Very developed countries generally benefit from the bulk of theoretical research concerned with more or less ideal conditions that subsequently cannot be replicated in most countries which have
very different conditions. This research therefore opens the door for more theoretical work in developing economies, who arguably could benefit from it more.

7.2.2 Practical Implications

While this study is limited in that the results may not be influential for every start-up, there are parts from the findings which can be extremely beneficial to practice. Primarily, that a project-based perspective is very relevant to new ventures such as start-ups and can be applied even if the fundamental difference is in the temporary attribute of projects. In fact, in nearly every case the project-based view was already implemented whether or not this was intentional on the part of the main decision maker. Similarly, start-ups show an affinity towards PM albeit there is a need for more flexibility in PM, which can be provided through the development of EPM practices, methodologies, tools and techniques. Focus should also be placed on aspects of PM which contribute to creating long-term relationships with end users and aid in increasing team motivation and development. This is primarily because it appears that start-ups generally associate long-term goals with customer satisfaction and loyalty, as well as team efficiency and survival.

The empirical results can, therefore, be used as prioritization guidelines for upcoming entrepreneurs commencing a new project-based venture. It can even be transferrable to personnel in larger organizations undertaking entrepreneurial endeavors, or those interested in assisting the successful development of start-ups. The findings clearly indicate the key areas where support and resources should be placed in order to increase the chances of project success in terms of achieving success criteria and influencing CSFs. This research can even be used by governments of developing economy countries as well, where the role of entrepreneurs and start-up or new ventures is far greater with regards to helping initiate economic development and contributing to growth. The success of such ventures is much more of a concern of such authorities, and in their interest to support the successful completion of these projects.

7.3 Limitations and Suggestions for Future Research

This study is conducted based on the selection of start-ups located in different cities of BiH and Kosovo. Although the countries have very similar economic and political profiles, namely in terms of their business environment and the way in which companies operate, there are still significant differences when it comes to the culture context. This study does not take into consideration or explore these cultural factors or national differences which potentially affect the operation of start-ups or their perception of project success. Additionally, the sample was not based within a specific industry despite the fact that results could vary with context-specific research looking at a single industry or even a single incubator. Therefore, future research pertaining to start-ups would benefit from focusing on both the influence of national difference, as well as similarities in specific contexts. A context-specific study in terms of industry or even incubator within which start-ups operate, could potentially lead to a better understanding of the definition of project success in terms of criteria and CSFs relevant to the industry or incubator in particular.

The sample size in this particular study is rather small [i.e. 10 interviewed start-ups], therefore, making it difficult to easily draw generalizations. We have decided to interview this particular group of start-ups operating within different industries in BiH and Kosovo because their characteristics comply with the definition of a start-up outlined in the theoretical background. However, even though one may argue that the sample size of the
study limits the generalizability of the results, in overall term the findings provide robust information which can be categorized under analytic generalization (Yin, 2009, pp. 38-39). The findings of the study are generalizable for start-ups operating under similar contexts in terms of country profile, namely countries with similar economic situations or a past history of transitioning from one system to another. For future study, investigating a higher number of start-ups could lead to a more complete picture; thus, a higher tendency towards drawing generalizations from the findings.

The entire study is also conducted from the viewpoint of the decision-makers within the start-up; thus, from the perspective of the founders, owners and/or executive directors. Due to the limited time span given to complete the study, the researchers could not take into consideration the viewpoints of other related stakeholders which are affiliated to the company i.e. team members. The views of other partners, managers or employees belonging to different levels of hierarchy [where existent] could have led to different results and provided a more inclusive overview of the topic.

As from the beginning, the goal of the study was to concentrate on companies which according to the definition fall under the category of the start-up. However, it would be highly beneficial if the scope of the study is extended and comparisons are drawn with other organizations of varying size, such as SMEs, or in different phases of their development. Conduction a longitudinal study across companies, not just start-ups, would provide further insights when defining project success within an organization. Similarly, the focus of the research on project success criteria and CSF’s lies at the organizational level, and not in relation to any specific project within the start-up. Projects differ depending on the size, type, and industry, therefore, it would be interesting to explore success criteria and CSF’s within certain types of projects that the start-up is implementing. In such cases, a larger sample of start-ups would be required in order to lead to interesting results.

The study is concentrated on defining project success and CSFs which could lead to the success of a start-up; therefore, leading to a creation of a generic basic framework. However, due to limited studies conducted in the field of EPM, namely within the start-up context, different types of studies which are related to the context of PM and entrepreneurship should be conducted. A good starting point for further research would be the applicability of traditional PM tools and techniques in start-ups. This could lead to the identification of PM tools and techniques which are more efficient in a start-up context, therefore contributing to higher project success rates.

A rich set of data was obtained through the interviews conducted, even though a limited time span was given to complete the study. A longer amount of time would have boosted the quantity of the interviews through further contacts. As such, further insights on the project success criteria and CSF’s would have been explored. Additionally, if a longitudinal time horizon is applied, looking at the project success criteria and CSF’s differently depending on the project life cycle could be done.

Qualitative interviews tend to be viewed as very subjective, therefore, drawbacks can be visible in the interpretation of the data. In this type of study, it would be more effective if the interviews were conducted personally rather than over Skype, which is how most of the interviews were conducted. In such a setting, the researchers were not able to assess the environment in which the start-up operates and also observe the interviewee better. Similarly, employing more data collection methods alongside interviews and interview-
administered questionnaires would have potentially provided a more complete idea on the definition of project success and CSF’s within a start-up context.

Last but not least, interpretive biases from the perspective of the researchers may have been caused due to language barriers and previous knowledge on the existing theories. There were cases when interviews were conducted in Albanian or Bosnian upon request by the respondent, therefore, the proper translation of the terms might change in slight nuances.
REFERENCES


APPENDIX 1: GUIDE FOR IN-DEPTH INDIVIDUAL INTERVIEW

1. Description of Start-Up

1.1 Name of Start-up:

1.2 Name of Interviewee and position (title) at start-up:

1.3 Location of operation (country):

1.4 Industry in which start-up operates:

1.5 Number of employees (if any):

1.6 Age of start-up:

1.7 Description of what your start-up wants to achieve – product/service:
   1.7.1 Describe your start-up’s degree of innovation
   1.7.2 Describe your start-up’s target market and group

1.8 What is your market position – in comparison to your competitors?
   1.8.1 Describe your competitive strategy
   1.8.2 Describe you risk taking strategy
   1.8.3 Describe your growth strategy

1.9 Describe your organizational structure – formality; information processing; decision making?

1.10 How is the start-up being financed? Where and/or how do you get access to required resources?

2. Project Management Practices and Implications in a New Venture

2.1 Do you have experience working on projects/project management? If yes, describe the nature of these projects; type, size …

2.2 Is the start-up run as a project? If yes, to what degree?

2.3 What are some project management practices you have incorporated in your start-up (if any)?

2.4 What are the difficulties in applying project management practices and concepts to your start up?

2.5 What tasks do you spend most time on when running your project-based start-up?

2.6 What are your start-ups greatest limitations (uncertainties)?

2.7 How would you define your start-up’s/project’s main objectives?

3. Success Criteria

Success criteria can be defined as the dependent variables used to measure a project’s success; or what needs to be achieved.
3.1 With this definition in mind, what would you consider to be the most relevant success criteria your start-up uses to measure its success? What are the measures you use, or what is it your start-up needs to achieve in order to be considered a success?

3.2 Rating the Relevance of Success Criteria

Using the rating scale below (1 to 5), please rate the relevance of the given success criteria according to their importance for start-ups, in your opinion.

<table>
<thead>
<tr>
<th>Rating Scale</th>
<th>1 – Not relevant at all</th>
<th>2 – Somewhat relevant</th>
<th>3 – Moderately relevant</th>
<th>4 – Very relevant</th>
<th>5 – Extremely relevant</th>
</tr>
</thead>
</table>

### 1. Efficiency & Capability

<table>
<thead>
<tr>
<th>#</th>
<th>Criteria</th>
<th>Rating (1-5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Staying on schedule</td>
<td></td>
</tr>
<tr>
<td>1.2</td>
<td>Staying in budget</td>
<td></td>
</tr>
<tr>
<td>1.3</td>
<td>Managerial capability; Ability to create strong workplace culture</td>
<td></td>
</tr>
<tr>
<td>1.4</td>
<td>Technical capability; Access to skills and resources to complete technical tasks</td>
<td></td>
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</tbody>
</table>

### 2. Impact on the Team

<table>
<thead>
<tr>
<th>#</th>
<th>Criteria</th>
<th>Rating (1-5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Creativity</td>
<td></td>
</tr>
<tr>
<td>2.2</td>
<td>Morale and Satisfaction; team is positive and happy</td>
<td></td>
</tr>
<tr>
<td>2.3</td>
<td>Skill development opportunity; growth opportunities both personal and professional</td>
<td></td>
</tr>
<tr>
<td>2.4</td>
<td>Familiarity with the target market</td>
<td></td>
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</tbody>
</table>

### 3. Impact on Customer/Client

<table>
<thead>
<tr>
<th>#</th>
<th>Criteria</th>
<th>Rating (1-5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Benefit to customer/client</td>
<td></td>
</tr>
<tr>
<td>3.2</td>
<td>Extent of use; able to solve a customer’s/client’s problem so they are using it.</td>
<td></td>
</tr>
<tr>
<td>3.3</td>
<td>Customer/Client satisfaction and loyalty</td>
<td></td>
</tr>
<tr>
<td>3.4</td>
<td>Brand recognition</td>
<td></td>
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</table>

### 4. Business and Financial Success

<table>
<thead>
<tr>
<th>#</th>
<th>Criteria</th>
<th>Rating (1-5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>Market Share</td>
<td></td>
</tr>
<tr>
<td>4.2</td>
<td>ROI</td>
<td></td>
</tr>
<tr>
<td>4.3</td>
<td>Cash Flow</td>
<td></td>
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</tbody>
</table>

### 5. Competitive Strategy

<table>
<thead>
<tr>
<th>#</th>
<th>Criteria</th>
<th>Rating</th>
</tr>
</thead>
</table>


<p>| | |</p>
<table>
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<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>5.1</td>
<td>Establishing a new market</td>
</tr>
<tr>
<td>5.2</td>
<td>Establishing quality strategy</td>
</tr>
<tr>
<td>5.3</td>
<td>Establishing cost strategy</td>
</tr>
<tr>
<td>5.4</td>
<td>Establishing innovation strategy</td>
</tr>
</tbody>
</table>

3.2 Rating the Relevance of Success Criteria – Follow up Questions

*Efficiency and Capability:*

What makes the higher factor more important than lower (5 more relevant than 1?)

In a project-based start-up, are short-term or long-term goals more important? Why?

*Impact on Team:*

What makes the higher factor more important than lower (5 more relevant than 1?)

Which is most important for start-up success: The entrepreneur (project manager) or team? Why?

Is the success of a start-up contingent on the people involved, or is the process and idea behind it more relevant?

*Impact on Customer/Client*

What makes the higher factor more important than lower (5 more relevant than 1?)

How to customers or clients influence the start-up?

*Business and Financial Success*

What makes the higher factor more important than lower (5 more relevant than 1?)

Despite the importance for creativity and innovation often associated with start-ups and new ventures, why is it important to consider economic measures?

Nevertheless, when can economic measures be disregarded in favor of other measures?

*Competitive Strategy*

What makes the higher factor more important than lower (5 more relevant than 1?)

Start-ups often worry more about surviving the initial phase and do not consider the future beyond start-up, is this the right move or should more focus be placed on the long-term as much as it is placed on the short-term?

What is the role of innovation in the long-term success of start-ups?

How do you prioritize short-term and long-term goals in your organization?

4. Critical Success Factors

*Before administering questionnaire, question guidelines:*

*Critical success factors can be defined as the independent variables that can be influenced to increase the chances of success; or what needs to be done in order to fulfil success criteria.*
With this definition in mind, what would you consider to be the most relevant critical success factors for your start-up? What are the things your start-up needs to do in order achieve its success criteria?

4.1 Rating the Relevance of Critical Success Factors

Using the rating scale below (1 to 5), please rate the relevance of the given critical success factors according to their importance for start-ups, in your opinion.

<table>
<thead>
<tr>
<th>#</th>
<th>CSF - Description</th>
<th>Rating (1-5)</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Project or Start-Up Mission (Clearly defined objectives)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Support from (formal and/or informal) networks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>A strong detailed schedule and/or plans which are kept up to date and realistic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Consulting with your customer/client and involving them in the process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>The quality of the people involved in the Start-Up</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Availability of skills and technology</td>
<td></td>
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<tr>
<td>7</td>
<td>Acceptance from the customer/client</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Monitoring and feedback throughout the process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Communication</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Efficient problem solving throughout the process</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.2 Rating the Relevance of Critical Success Factors – Follow up Questions

What makes the higher factor more important than lower (5 more relevant than 1?)

What do these CSF’s affect in your start-up?
# APPENDIX 2: RESULTS FOR CHARACTERISTICS OF A START-UP

<table>
<thead>
<tr>
<th>Element</th>
<th>BH1</th>
<th>BH2</th>
<th>BH3</th>
<th>BH4</th>
<th>KS1</th>
<th>KS2</th>
<th>KS3</th>
<th>KS4</th>
<th>KS5</th>
<th>KS6</th>
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</thead>
<tbody>
<tr>
<td><strong>Size (number of employees)</strong></td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>8</td>
<td>17</td>
<td>5</td>
<td>22</td>
<td>30</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td><strong>Age (years)</strong></td>
<td>1</td>
<td>6</td>
<td>1.5</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>8</td>
<td>10</td>
<td>2.5</td>
<td>1</td>
</tr>
<tr>
<td><strong>Organizational Structure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Information Processing;</strong></td>
<td>Owner centralized; Informal</td>
<td>Owner centralized; Informal</td>
<td>Owner centralized; Informal</td>
<td>Owner centralized; Informal</td>
<td>Informal Flexible; Agile</td>
<td>Flexible &amp; informal; Owner centralized</td>
<td>Decentralized; Department</td>
<td>Owner centralized; Informal</td>
<td>Owner centralized; Informal</td>
<td></td>
</tr>
<tr>
<td><strong>Decision Making</strong></td>
<td>Owner</td>
<td>Owner Trial &amp; Error: Learn from mistakes</td>
<td>Owner Informal and No set hierarchy</td>
<td>Owner Informal</td>
<td>Informal No set hierarchy</td>
<td>Informal</td>
<td>Owner</td>
<td>Decentralized; department</td>
<td>Informal No set hierarchy</td>
<td>Owner</td>
</tr>
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<td><strong>Risk-Taking Strategy</strong></td>
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<tr>
<td><strong>Degree of Innovation</strong></td>
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### Notes
- **Element:** BH1, BH2, BH3, BH4, KS1, KS2, KS3, KS4, KS5, KS6
- **Size (# employees):** Various numbers for BH1 to KS6.
- **Age (years):** Ranges from 1 to 10.
- **Organizational Structure:** Details on the structure from Owner centralized to Informal.
- **Information Processing:** Different structures and processes from centralized to flexible.
- **Decision Making:** Owner, Owner Trial & Error, etc.
- **Risk-Taking Strategy:** High risk, High Risk; Arts in BiH, etc.
- **Degree of Innovation:** We are first to offer this, High; brand based on degree of.

### Detailed Notes
- **Size:** Numbers range from 1 to 30 employees.
- **Age:** Years range from 1 to 10.
- **Organizational Structure:** Various structures from centralized to informal.
- **Information Processing:** Different structures and processes.
- **Decision Making:** Different decision-making approaches.
- **Risk-Taking Strategy:** Risk assessment and strategies.
- **Degree of Innovation:** Innovation levels and strategies.
<table>
<thead>
<tr>
<th><strong>Growth Strategy</strong></th>
<th>in BiH, but provided elsewhere; very important in terms of content</th>
<th>But exists elsewhere. Also we need to be innovative in product and service offering</th>
<th>innovation and ability to differentiate on market</th>
<th>But process are innovative, albeit creativity is more important</th>
<th>elsewhere just not in Albanian speaking world</th>
<th>learning process – idea doesn’t need to be innovative, what you offer does</th>
<th>First of its kind in Kosovo</th>
<th>tailored; standard procedures through</th>
<th>high tech and ideas to attract new groups; ex. kits for kids</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Competitive Strategy</strong></td>
<td>Don’t worry too much about it</td>
<td>We try to be innovative in our offering and marketing in order to convince people to switch</td>
<td>Creativity and innovation, but not too concerned; not 1st priority</td>
<td>Developing an innovative and creative visual design (brand)</td>
<td>Penetrating a new market; being the first to provide Google and Bing services to Albanian</td>
<td>Offer better quality to compete on local; offer cheaper prices for high quality on international</td>
<td>Invest in technology</td>
<td>Create new products through investment in R&amp;D</td>
<td>Cost strategy – cheaper for</td>
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<tr>
<td></td>
<td>Want to grow in size and offering</td>
<td>Constantly offer new products and services by staying ahead of the game and being innovative. Profit = 2nd place</td>
<td>Want to grow in size and offering on local market</td>
<td>Want to grow in size and offering</td>
<td>Want to become #1 for Albanian speaking population</td>
<td>Do not really want a bigger team, because want to maintain current environment. But want team to grow; more experience and education to provide better services</td>
<td>Grow in size and offering</td>
<td>International growth; Opened office in Germany and New York</td>
<td>Grow in size</td>
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<tr>
<td><strong>Market Position/Competitors</strong></td>
<td>None</td>
<td>Only ones offering this service, but compete with markets in terms of product offering</td>
<td>Limited competition on market</td>
<td>1 of only online music companies in Balkans; Huge competition on international market</td>
<td>Only ones on the market</td>
<td>Limited in local market; more in international</td>
<td>Only one in Kosovo Competition in region from Albania &amp; Serbia</td>
<td>First on market so able to solidify leader position early</td>
<td>Many competitors, but they are known for quality (local) and price (international)</td>
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<tr>
<td><strong>Financing and Resource Allocation</strong></td>
<td>Began with informal networks (self-finance) Now sustainable - through operation activities</td>
<td>Began with informal networks (self-finance) Now sustainable - through operation activities</td>
<td>Personal funding and through operation activities</td>
<td>Sustainable through operation activities</td>
<td>Began with informal networks, moved to formal networks</td>
<td>Sustainable - through operation activities</td>
<td>Sustainable - through operation activities</td>
<td>Formal networks in the start; embassies</td>
<td>Formal networks; incubator</td>
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</tbody>
</table>
## APPENDIX 3: RESULTS FOR PROJECT MANAGEMENT PRACTICES AND IMPLICATIONS IN START-UPS

<table>
<thead>
<tr>
<th>Criteria</th>
<th>BH1</th>
<th>BH2</th>
<th>BH3</th>
<th>BH4</th>
<th>KS1</th>
<th>KS2</th>
<th>KS3</th>
<th>KS4</th>
<th>KS5</th>
<th>KS6</th>
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</thead>
<tbody>
<tr>
<td>PM Experience (beyond this Start-Up)</td>
<td>No</td>
<td>No before, After founding yes</td>
<td>No</td>
<td>No</td>
<td>Yes; Big projects</td>
<td>Yes; Small short-term projects</td>
<td>Yes; Big projects</td>
<td>Yes; 11 years</td>
<td>Before no; Yes after founding start-up</td>
<td>Yes; Bigger project</td>
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<tr>
<td>Start-Up run as Project?</td>
<td>No</td>
<td>Yes; as a portfolio of projects where every job we do is a project, no matter how small (project oriented)</td>
<td>Yes; most of our activities are run as projects</td>
<td>Yes; everything we do is a project</td>
<td>No, do not view it as a project but run it as an agile project</td>
<td>Yes; don’t like to view start-up as having an ending, but in terms of achieving milestones</td>
<td>Does not want to associate start-up with project b/c projects end. But, has milestones and all work in start-up run as projects</td>
<td>No, because every activity is run as a project instead</td>
<td>Uses SCRUM</td>
<td>Yes but as we move out of the start-up phase, move away from project-based view</td>
</tr>
<tr>
<td>Projects in Start-Up (What kinds, internal/external)</td>
<td>External</td>
<td>Mainly external; Few Internal</td>
<td>Internal</td>
<td>External and Internal</td>
<td>Mainly external Internal development projects</td>
<td>External</td>
<td>External</td>
<td>External</td>
<td>External</td>
<td>Internal</td>
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<tr>
<td>PM tools &amp; practices used habitually</td>
<td>None</td>
<td>Project specific scheduling and feedback (monitoring, Scheduling and communication, monitoring and feedback)</td>
<td>Project specific scheduling and communication</td>
<td>Agile PM and Scrum methodologie s</td>
<td>Tried Gant Charts, but were too rigid</td>
<td>Scheduling tools</td>
<td>Said that apply multiple tools, but unable to</td>
<td>Agile PM and Scrum Scheduling tools</td>
<td>Gant Chart, WBS, Reporting, Risk assessment</td>
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<tr>
<td>Limitations in PM for Start-Up</td>
<td>Evaluation) practices</td>
<td>on (feedback from market)</td>
<td>provide detail</td>
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<td>Too rigid; Hard to plan time and budget in volatile markets (esp. BiH)</td>
<td>Rigid and sometimes smother creativity because too formal</td>
<td>Too rigid; need flexibility to foster creativity</td>
<td>Too rigid and formal; need flexibility in planning</td>
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<td>Hard to change the minds of customers; to communicate with them</td>
<td>Hard to find adequate HR</td>
<td>Limited Finances</td>
<td>Too rigid and formal</td>
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<td>Hard to find adequate HR</td>
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<td>Time consuming</td>
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<td>Costly</td>
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<thead>
<tr>
<th>Main PM tasks in Start-Up</th>
<th>Communicating with readers</th>
<th>Feedback, i.e. communicating with clients</th>
<th>Execution and communication</th>
<th>Execution and communication with target market</th>
<th>Communicating with target market</th>
<th>Execution</th>
<th>Execution Planning; communicating with target market</th>
<th>Execution</th>
<th>Planning and Execution</th>
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<tbody>
<tr>
<td>Novelty and speed of development; Novelty; need to keep offering</td>
<td>Novelty</td>
<td>Novelty</td>
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<thead>
<tr>
<th>Sources of Project Uncertainty</th>
<th>Novelty and speed of development; Novelty; need to keep offering</th>
<th>Novelty</th>
<th>Novelty and speed of development</th>
<th>Novelty; the idea needs to be innovative</th>
<th>Novelty</th>
<th>Novelty; High tech development</th>
<th>Novelty</th>
<th>Novelty; so can penetrate</th>
<th>Novelty; High tech</th>
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</thead>
<tbody>
<tr>
<td>need to provide new &amp; interesting content before others</td>
<td>something new and interesting</td>
<td>be new to market</td>
<td>Speed of development</td>
<td>new market</td>
<td>development</td>
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