

Startup Competitions Decoded: Unpacking the Phenomenon's Dimensions

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Abstract: Drawing on a typological theorizing style (Cornelissen, 2017), this paper investigates and deconstructs the fuzzy nature of startup competitions (Cornelissen, Höllerer and Seidl, 2021). Despite the pivotal role that startup competitions play in promoting innovation and shaping policies related to business creation and welfare there exists a scarcity of comprehensive research that thoroughly investigates the organizational architecture and overall effects of these contests on entrepreneurial ecosystems' actors. Furthermore, the presence of conceptual fragmentation necessitates a process of synthesis to prevent the dispersion of scientific efforts and to enhance understanding of the essence and constituents of the phenomenon (Ferreira, Fernandes and Ratten, 2016; Howard and Crayne, 2019; Law, Wong and Mobley, 1998). The methodology utilized in this study is a validated approach that combines a systematic literature review with subsequent inductive analysis of the selected articles (Thomas and Tee, 2022). This article makes two distinct contributions to the existing body of literature. First, this study contributes to the startup competitions and entrepreneurship literature by providing a typological theoretical framework that examines the conceptual dimensions of this phenomenon. Additionally, this research seeks to identify the key actors involved in these competitions and emphasize the potential of utilizing such events as intervention tools at micro and macro-organizational levels. Furthermore, this study makes a valuable contribution to the existing body of literature that examines the intersection of entrepreneurship and organizational studies. This study presents a theoretical framework that focuses on the unique characteristics of organizational actors involved. It illustrates the potential design of multiple SUCs architectures based on the objectives and deliberate impacts that these actors aim to achieve. From the perspective of managerial implications, this work provides fuel for thought and a practical instrument for all organizations that intend to conduct a startup competition on purpose. This paper functions as an in-depth guide for all relevant stakeholders, including organizers, participants, accelerators, incubators, and other involved actors. This phenomenon illustrates how each actor is prompted to take action upon acquiring a specific scope.

Keywords: Startup competitions, new venture formation and growth, business support strategies and practice, typological theorizing, multidimensional perspective

1. Introduction

Entrepreneurial competitions among startups serve as organizational platforms where participants engage in the pursuit and advancement of innovative ideas (Stolz, 2020). Startup competitions (SUCs), also known as strategic entrepreneurial activities, have been conceptualized in two ways within the literature. Firstly, they are defined as discrete events (Stolz, 2022). Secondly, they are viewed as tools or mechanisms employed to accomplish organizational objectives (Schwartz et al, 2013; Tipu, 2019). Additionally, SUCs have been recognized as the principal means of establishing and fostering a network comprising multiple actors within an entrepreneurial ecosystem (Stolz, 2020). Furthermore, despite its centrality, the scholarly literature that examines the phenomenon in organizational settings is characterized by notable semantic and conceptual fragmentation.

Scholars have analyzed SUCs by examining the diversity in their linguistic roots and the range of outcomes they produce. The utilization of specialized terminology, such as *business plan competition* (Stolz, 2020; Tipu, 2019), *pitch contest* (Stolz, 2020), and *ideas* and *new venture competition* (Howell, 2021), highlights various modes of engagement, knowledge acquisition, and assessment, as well as diverse organizational contexts and developmental phases encountered during the early stages of these competitions. Furthermore, when examining the various types of SUCs, it is evident that the terms competition, cup, and award, merely to mention a few, provide limited insight into their organizational configurations. Moreover, alongside considerations of semantics and the utilization of multiple designations, this fragmentation also encompasses the definitional component that seeks to establish the theoretical essence of the concept.

From a micro-contextual standpoint, Contigiani and Young-Hyman (2021) have categorized SUCs as occurrences wherein teams generate and present an idea with the aim of securing the ultimate prize, as determined by a panel of judges who determine the most outstanding participant. The phenomenon's nature has been recognized by others from a macro-contextual standpoint, and it has been argued that SUCs can be viewed as

policy instruments for entrepreneurship, providing aspiring entrepreneurs with opportunities to grow their businesses (Schwartz et al, 2013). Scholars have conducted investigations on SUCs as mechanisms primarily intended for students (Kwong, Thompson and Cheung, 2012; Watson, McGowan and Smith, 2015). According to Li (2016), SUCs are competitive events that aim to inspire college students to develop business plans and present them to a panel of judges. In summary, the existence of ambiguity regarding SUCs can be attributed to the utilization of numerous interchangeable terminologies and fragmented definitions.

Furthermore and since these competitions are thought to be a tool that is responsible for awakening the entrepreneurial flame among aspiring entrepreneurs, all in the entrepreneurial ecosystem can get involved in them (Tipu, 2019). Entrepreneurial ecosystems, to put it briefly, are a collection of interrelated organizations and individuals in charge of how entrepreneurship functions in a particular region (Spigel and Stam, 2018). Moreover, SUCs, as a hub linking several actors, may depend on public and private organizations, including universities, research centers, coworking spaces, banks, consulting firms, chambers of trade and commerce, law firms, and venture capitalists (Der Foo, Kam Wong and Ong, 2005; Passaro, Quinto and Thomas, 2017; Stolz, 2020), as well as a combination of both. It is difficult to theoretically disentangle the phenomenon because of the variation that is seen in the SUCs' literature and the multiplicity of actors surrounding them (Stolz, 2022).

Despite the pivotal role that startup competitions play in promoting innovation and shaping policies related to business creation and welfare there exists a scarcity of comprehensive research that thoroughly investigates the organizational architecture and overall effects of these contests on entrepreneurial ecosystems actors. We pose the following research question. What are the conceptual foundations of SUCs? In order to address the inquiry at hand and align with the stated research objectives, this article employs a systematic literature review (Tranfield, Denyer and Smart, 2003), complemented by an inductive analysis of the selected sample (Thomas and Tee, 2022). The findings elucidate the inductive process employed in discerning the conceptual constituents that form the basis of SUCs. The primary contribution of this article is to analyze and elucidate the concept of SUCs by employing a typological approach to theorizing (Cornelissen, 2017; Law, Wong and Mobley, 1998). This approach involves the identification, decomposition, and recomposition of SUCs within a multidimensional and holistic framework, thereby shedding light on their conceptual essence.

2. Review method

The academic discourse surrounding SUCs is a relatively recent field of study, yet it is experiencing significant growth in terms of scholarly production (Dane et al, 2023). Furthermore, the presence of conceptual fragmentation necessitates a process of synthesis to prevent the dispersion of scientific efforts and to enhance understanding of the essence and constituents of the phenomenon (Ferreira, Fernandes and Ratten, 2016; Howard and Crayne, 2019; Law, Wong and Mobley, 1998). Given the aforementioned premises, the review process involves the analysis of the entirety by breaking it down into its constituent parts, with the aim of comprehending the overall coherence and integrity of the whole (Schwandt, 2007). Following Thomas and Tee (2022), our approach is both general and comprehensive. The methodology utilized in this study is a validated approach that combines a systematic literature review with subsequent inductive analysis of the selected articles (Thomas and Tee, 2022).

Specifically, the systematic nature of the review, in accordance with Tranfield, Denyer and Smart (2003), is essential for the rigorous extraction of a sample and the future potential for replication and transparency of the results (Denyer and Tranfield, 2009). In order to establish the inclusion criteria, we implemented various filters including database selection, language, type, and area of knowledge pertaining to the scientific publications being analyzed. The data were collected from Web of Science (ISI) that included SUCs and synonyms in their titles, abstracts, and keywords (n = 175). The selection of the database is driven by its recognition as a valid repository in the fields of organizational and entrepreneurship studies, and its ability to strike a suitable equilibrium between the quantity and relevance of the selected items (Crisan et al, 2019; Eveleens, Van-Rijnsoever and Niesten, 2017; Mian, Lamine and Fayolle, 2016). The scope of this study was limited to documents written exclusively in the English language. Furthermore, the focus was specifically on identifying articles and reviews that were considered relevant to the fields of business, management, and economics area. Ultimately, following a comprehensive review of the abstracts of the remaining articles, a total of 42 scientific contributions were chosen as the sample for subsequent analysis.

Complementarily (Thomas and Tee, 2022), the inductive technique is applied to the selected sample (n = 42) in order to extract from the literature conceptual facets of the phenomenon (Corbin and Strauss, 2008). The articles were coded using the qualitative data analysis software Nvivo. Initially, our coding was mainly driven by the

research question and the available data in our sample. Our analysis focused on the utilization of SUCs within the arguments presented in the articles, the nomenclature employed to refer to these competitions, and the theoretical framework to which they were associated (Nordin and Kowalkowski, 2010). Following Elo and Kyngäs (2008) we started coding without setting a framework in advance (Hsieh and Shannon, 2005). Then, we identified second-order themes thanks to axial coding (Corbin and Strauss, 2008).

3. Analysis and discussion

Figure 1 provides a comprehensive overview of the outcomes derived from the inductive analysis, illustrating the progression from a specific to a broader, more generalized conceptualization (Finfgeld-Connet, 2014).

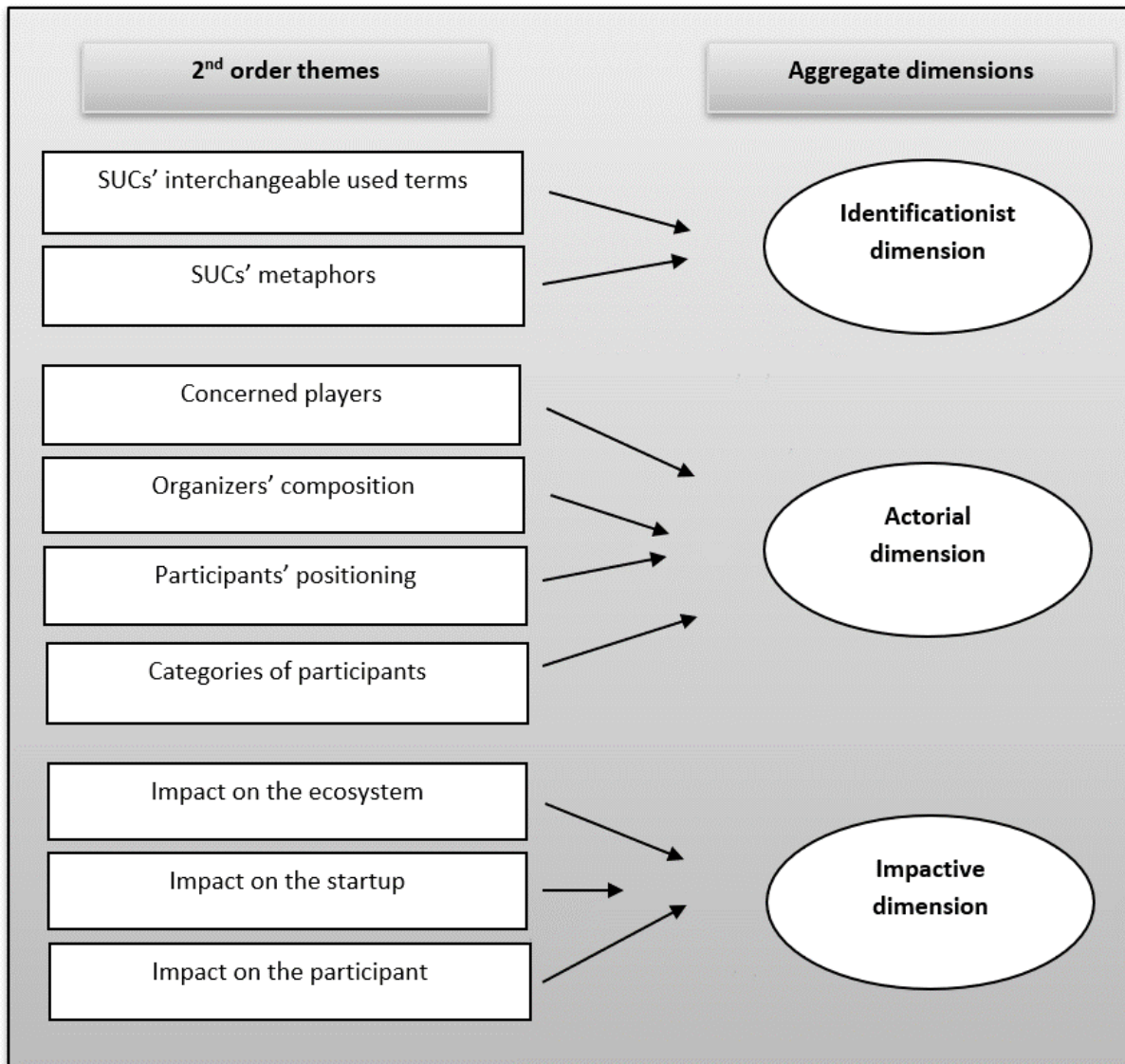


Figure 1: Data structure: aggregate dimensions

The subsequent paragraphs elucidate the process by which we established the linkage between the first-order themes and the subsequent second-order codes, ultimately leading to the identification of the three conceptual dimensions that encapsulate the phenomenon. The authors highlighted 50 first-order themes from the 42 selected articles. Moreover, 9 second-order themes arose from the primary authors' interpretations of the research (Corbin and Strauss, 2008). Some of them were identified in the literature and extended.

In summary, the findings indicate that the identificationist, actorial, and impactful dimensions are the conceptual factors that define SUCs. The identificationist dimension is the primary concept of focus. Scholars across various academic disciplines, each with their own specific objectives, have employed a range of terminology to denote these competitive events. Moreover, it was observed by the authors that scholars encountered difficulties in

establishing a clear definition for the term "SUCs" within the existing body of literature. Furthermore, the consideration of the actorial dimension played a pivotal role in delineating the characteristics of SUCs. This is primarily because the position of actors within the entrepreneurial ecosystem significantly influences the development and outcomes of competitions. The impactful dimension serves to clarify the distinct effects of SUCs on various organizational entities engaged in competitive activities, namely the ecosystems' organizations, startups, and participants.

3.1 Identificationist dimension

The identificationist dimension seeks to integrate the diverse conceptual fractures found in the literature regarding the terminology and metaphors. Specifically, it involves two second-order themes: the interchangeable used terms and the foremost used metaphors to address SUCs.

Semantic fragmentation holds significance in multiple ways. For instance, certain lines of analysis refer to the phenomenon as *business plan competitions*, while others highlight it as *pitch competitions*, thereby underscoring the varied outcomes that are anticipated or rewarded in such competitions. Alternative terminology includes *ideas competitions* as opposed to *SUCs* or *new venture competitions*. These terms emphasize contrasting perspectives, one emphasizing the embryonic nature of anticipated activities, while the other focuses on a more organized output in a novel business endeavor, which may or may not possess the attributes of an innovative startup. The terminology employed to characterize the notion of competition, such as contest, cup, or award, signifies the inherent sporting essence of this phenomenon. However, these terms do not encompass particular organizational designs. Moreover, there is a diverse range of metaphors associated with SUCs. They have been identified as either static, referred to as *anchoring events* or *windows*, which can facilitate connections among actors in the entrepreneurial ecosystem (Parente et al, 2015; Stolz, 2020), or dynamic, serving as *vehicles* for opportunities (Cant, 2018). In accordance with Schwartz et al (2013), SUCs are policy *tools* or *means* to assist aspiring entrepreneurs, while Watson, McGowan and Smith (2015) argue that they function as *causal mechanisms* for extracurricular entrepreneurship education, enabling individuals to experiment and evaluate their ideas within a simulated real-world environment. SUCs constitute a diversified pool from multiple perspectives as they were named differently and linked to heterogeneous organizational constructs (e.g., risks, conflicts, innovation, and diversity).

3.2 Actorial dimension

The actorial dimension specifies which players are engaged in SUCs, their organizational characteristics, and how they contribute to their creation, growth, and implementation. In fact, it englobes four second-order themes: the concerned players, organizers' composition, participant's positioning, and categories of participants. Building a SUC often requires all the combined efforts of entrepreneurial ecosystem players. However, anyone who wants to organize a SUC is called to consciously select the configuration of the actors involved on the basis of each one's characteristics. The composition of the actors of the SUCs is therefore made up of organizers and participants. The organizers can be public via entrepreneurship support programmes, private such as enterprises, financial organizations, and consulting offices, or a combination of both (Passaro, Quinto and Thomas, 2017; Stolz, 2020). Another distinction that exists among organizers is that they can be academic or not (Stolz, 2020; Tipu, 2019). The article's analysis displayed a long list of actors that intervene in the organization of SUCs, for instance, accelerators, coaches, consultants, coworking spaces, experienced entrepreneurs, investors, judges, sponsors, university staff and academics, venture capitalists, bankers, and financiers (Stolz, 2020; Stolz, 2022; Tipu, 2019). Having said that, this diversification is not limited to the organizers.

Participants are a crucial asset of SUCs and they are also diversified. The status of this actor is variant across teams within SUCs. The first distinction is that participants can be first-time entrepreneurs or repeat entrepreneurs (Botha and Robertson, 2014). Second, they can prefer self-employment over organizational employment, to be latent entrepreneurs or would-be entrepreneurs (Li, 2016). If SUCs' participants identify a business opportunity in the market, they become potential entrepreneurs. Then, they reach the status of intentional entrepreneurs when their experiences and skills push them to take the decision of being self-employed. Next, the nascent entrepreneurs are the ones that dedicate resources to establish the startups. Ideally, a SUC's participant is positioned in between the last two shades of entrepreneurs (Passaro, Quinto and Thomas, 2017). A startup can be launched by a lone entrepreneur (Der Foo, Kam Wong and Ong, 2005), even though the majority goes for the team's option (Tipu, 2019).

3.3 Impactive dimension

The impactful dimension clarifies how SUCs affect the social system at both the macro and micro levels, focusing on the entrepreneurial ecosystem, startups, and participants. Firstly, SUCs serve as a mechanism that sustains the entrepreneurial ecosystem. From this standpoint, the purpose of establishing these competitions is diverse. These tools are primarily utilized to aid in the mitigation of poverty. Indeed, it has been argued that nations have the potential to leverage SUCs as a means to stimulate economic well-being and generate employment opportunities. This can be achieved by fostering entrepreneurial endeavors among individuals, thereby contributing to the overall improvement of society (Cant, 2018). Additionally, Stolz (2020) highlights its significance as a focal point for regional development. Governments have the potential to allocate funds towards SUCs in order to facilitate the establishment of small-scale enterprises by local residents, thereby promoting self-reliance within rural and remote regions. In addition, there has been an increasing interest among authorities to provide support for the process of knowledge and technology transfer (Parente et al, 2015), recognizing its significance in fostering the growth of nations and scientific research. SUCs, therefore, have a significant impact on not only the entrepreneurial ecosystem but also on various other ecosystems. Thus far, the aforementioned impacts have resulted in a rise in the number of entrepreneurs operating within the ecosystem. Additionally, it has been observed that SUCs contribute to enhancing the caliber of these entrepreneurs and their respective startups (Schwartz et al, 2013).

SUCs impact also the microenvironment as they enhance the teamwork within the startup (Wen and Chen, 2007). These competitions lift the reputation of the business ideas (Schwartz et al, 2013; Tata and Niedworok, 2020). One of the most usual roles of SUCs is providing monetary support to business ideas (Park, Pulcrano and Leleux, 2020) by helping startups to attract co-founders and strategic partnerships (Tata and Niedworok, 2020) and offering other nature of rewards (Brentnall, Rodríguez and Culkín, 2018). To reach and convince investors, SUCs need to help participants in marketing their business ideas (Cant, 2018). SUCs stimulate business growth (Tipu, 2019) as they play the role of catalyzer for entrepreneurship. SUCs do not impact only startups, they present “an initial baptism of fire for participants” (Stolz, 2022). They are searching for knowledge and guidance to discover new ideas. These learning hubs are a panacea for skills’ development individually and collectively (Passaro, Quinto and Thomas, 2017). Another important facet of SUCs is rejuvenating networking (Watson, McGowan and Cunningham, 2018). This can be done horizontally by interchanging ideas among the team members and vertically thanks to the coaches and consultants at the disposal of the participants (Stolz, 2022). Finally, taking part in SUCs can be for the sake of testing and experiencing (Cant, 2018; Kwong, Thompson and Cheung, 2012). In brief, participants can be derived by several aimed impacts depending on their needs.

The impactful dimension of a SUC is a function of its actorial. Clearly, it is possible to have a combination of actors that have complementary aims. For example, the government aims to create new jobs for freshly-graduates who are seeking opportunities to gain skills that enable them to create their own projects. However, this is not always granted as it is possible that their ultimate goals can be not complementary.

4. Conclusion

Drawing on a typological theorizing style (Cornelissen, 2017), this paper investigates and deconstructs the fuzzy nature of startup competitions (Cornelissen, Höllerer and Seidl, 2021). In this vein, the present study has endeavored to put forth two distinct objectives. To begin with, this study aims to elucidate the fundamental tenets of SUCs by conducting an extensive review of relevant literature. This analysis is further enhanced by employing an inductive approach to interpret the findings derived from a carefully selected sample of 42 scientific articles. The authors utilized an inductive approach to analyze their data, resulting in the synthesis of 50 initial codes that were further grouped into 9 higher-level codes, and finally synthesized in three overarching dimensions. Second, the authors consolidated the various dimensions of SUCs by providing a comprehensive overview, thereby elucidating its conceptual essence over time.

This article makes two distinct contributions to the existing body of literature. First, this study contributes to the startup competitions and entrepreneurship literature by providing a comprehensive typological framework that examines the conceptual dimensions of this phenomenon. Additionally, this research seeks to identify the key actors involved in these competitions and emphasize the potential of utilizing such events as intervention tools at micro and macro-organizational levels. Furthermore, this study makes a valuable contribution to the existing body of literature that examines the intersection of entrepreneurship and organizational studies. This study presents a theoretical framework that focuses on the unique characteristics of organizational actors involved. It illustrates the potential design of multiple SUCs architectures based on the objectives and deliberate impacts

that these actors aim to achieve. From the perspective of managerial implications, this work provides fuel for thought and a practical instrument for all organizations that intend to conduct a startup competition on purpose.

This paper functions as an in-depth guide for all relevant stakeholders, including organizers, participants, accelerators, incubators, and other involved actors. This phenomenon illustrates how each actor is prompted to take action upon acquiring a specific scope. Finally, our study is not without any limitations. Methodologically, it relies on a unique database (ISI). Therefore, future research can analyze other samples extracted from other databases and presumably identify new conceptual dimensions.

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