

## **Dissertation title: Three essays on seed accelerator dynamics**

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Entrepreneurship support organizations play a crucial role in the growth and survival of startups. Among the various forms of organizational support for entrepreneurship, accelerators have garnered significant scholarly attention. Prior studies have shown that accelerators support the rapid growth of startups and that accelerated startups benefit from entrepreneurship education and networking opportunities, evidenced by data from a few early accelerators.

As accelerator researchers expand their scope to include more accelerators in different contexts, however, they find significant variation in the outcomes of accelerators. Additionally, recent studies suggest that there is heterogeneity with regard to the founding and sponsoring backgrounds of accelerators. While such heterogeneity can be the source of new research, a lack of understanding of the drivers of such heterogeneity may harm theoretical development, as well as the relevance of research. In this vein, I conduct a systematic review of accelerator research to critically assess whether the accelerator literature has accumulated enough knowledge to understand such heterogeneity across accelerators—as the first chapter of my dissertation. By employing a novel analysis tool, which maps accelerator studies onto a conceptual space defined by a matrix of the levels of core factors in each study (e.g., core explanatory and dependent variables), I identify critical research gaps in the roles of people who constitute accelerators.

Based on the gaps in the people who establish and run accelerators, identified by the systematic literature review, I explore the way peers in the same accelerator cohort and managing directors affect the outcomes of accelerated startups in the two empirical chapters through the lens of organizational learning theories. To be more specific, in the first empirical chapter, I study what types of cohort diversity determine the outcomes of accelerated startups, using a variety of measures for cohort diversity. Machine-learning-based text similarity tools (e.g., cosine distance calculated based on sentence-BERT), as well as traditional diversity measures (e.g., standard deviation approach and Blau's index), are used to capture cohort diversity with regard to current business items, former work experiences, educational backgrounds, job types, and gender. In addition, to test causal relationships between the constructs, I employ an event study research design based on a machine-learning-based matching method. Preliminary analyses show that startups in cohorts composed of peers with diverse business items and educational backgrounds are likely to benefit more from accelerators, which implies that the social learning outcomes are amplified in diverse circumstances.

For the second empirical chapter, I attend to the program directors of accelerators, with a focus on how they select startups, react to feedback from returns on their prior investments, and manage relationships with their sponsors and employers. This study will be a mixed-method descriptive paper that incorporates both qualitative in-depth interviews with program directors and quantitative analyses of their investment outcomes. This study is still in its infancy, requiring further progress in terms of theories and research design. I look forward to receiving precious advice and guidance for this study from renowned experts at the DRUID Academy 2024.

I believe my research has great potential to contribute to the theoretical development of entrepreneurship and innovation research. My dissertation will be able to contribute to the development of the entrepreneurship support organization and organizational learning literature by elucidating how organizational support for entrepreneurship is endogenously formed based on the participation of various ecosystem stakeholders, including accelerated startups and program directors. Policy and managerial implications derived from my research will also be fruitful for policymakers and managers as well.