

# Abstract

Technology-Based Startups (TBSs) are newly emerged entrepreneurial ventures typically launched by a team with the purpose of bringing innovative products or services to market and achieving the scalability of their business models. Today, it is widely recognized that TBSs play a very important role in the economy as a source of disruptive and radical innovations and creation of new jobs. However, most TBSs face significant challenges associated with conflicts among team members and with changes in the environment, which affect their innovation performance and survival. In fact, despite the potential novelty of their products and services, many TBSs fail and even disappear together with their innovations.

In this thesis we propose the concept "Team Collaboration Capabilities" (TCCs) referred to the interaction among TBS team members as an essential organizational condition to allow the construction of new strategic dynamic capabilities. In particular, the thesis focuses on the relationships between TCCs, operational capabilities and innovation performance.

We consider four elements as the main dimensions of TCCs: trust, communication, problem solving and team efficacy. Firstly, team trust, which allow team members to be open to sharing their ideas, be confident and expressing their feelings and constructive feed-back. Secondly, team communication that encourages open sharing of ideas about information that favors the commitment between members and benefit the projects and the organization. Thirdly, team problem-solving encouraging the establishment of protocols that give solutions to the disagreements that may arise in the daily basis. Fourthly, team efficacy in achieving teams' goals, solving difficult tasks through joint efforts, manage together unexpected problems, be competent and increase the self-efficacy to perform the tasks and the efficient management of resources.

The empirical study is based on a survey of TBSs based in Spain, aimed to the analysis of TCCs and their relationships with the operational capabilities and the TBS innovation performance. We draw on 45 valid responses of TBSs. Most of the companies in our sample were participants in accelerator programs such as STARTUPV, EIT Climate KIC Valencia Accelerator Program, Fundación Repsol Entrepreneurs Fund, Social NEST and Scientific Park of Madrid. The sample covers TBSs with activities focused on the development of products and services in a wide range of sectors, including environment, renewable energies, clean technologies, transport, consulting, industrial management services, art, leisure and entertainment.

Given the particular conditions of our sample and the type of data collected through the survey, we use structural equation modeling (SEM). This method allows a component-based estimation for cause-effect modeling with latent variables. The model has been estimated using Smart PLS 3 software.

The findings suggest that the development of TCCs in TBSs contribute to building new operational capabilities that result in greater innovation performance. We also propose future lines of research for the role of TCCs in external collaborations. For example, to assess public initiatives that take into account the critical phases of TBSs development, the promotion of talent attraction and the furtherance of compensation schemes that retain it. Finally, it would be interesting to study the collaboration between the TBSs and other external agents in open innovation projects. We believe that these collaborations would favor their survival and competitiveness.