

# **Extended abstract of International New Ventures in the Digital Age: The Case of a Big Data and Analytics Provider**

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Digital technologies are offering new opportunities of business for entrepreneurs who possess analytical skills. In fact, nowadays, new opportunities for new venture internationalization are arising in sectors related to Industry 4.0 digital technologies. However, when internationalization and digitalization merge, the dynamics of internationalization could change, opening a new area of research still little investigated. To contribute to fill this gap, we adopted a single case study aims at investigating the internationalization process of a Digital International New Venture, which offers services related to Big Data and Analytics (BDA). BDA represents one of the nine pillars of Industry 4.0 (Rüßmann, Lorenz, Gerbert, Waldner, Engel, & Harnisch, 2015) and, nowadays, is considered one of the most powerful digital technologies (La Valle et al., 2011). However, despite the general interest for BDA in management research, studies from an International Business perspective are rare (Sheng, Amankwah-Amoah, & Wang, 2018). Indeed, these techniques have huge potential impacts, but pose even challenges and problems to companies offering these services. There might be problems related to privacy security or lack of regulations defining the rules of the game in these sectors, or related to the use of these tools (Kleindienst & Ramsauer, 2015). All these problematic aspects could become obstacles to the development of new businesses and their internationalization abroad. For these reasons, it becomes important to analyze companies operating in these sectors and offering services related to these technologies, and to analyze their internationalization processes. We collected data through multiple in-depth interviews with the founder of the company in two different points of time: April and June 2019. Each interview lasted between 1 hour and 2 hours. In-depth interviews were fully recorded and transcribed, resulting in 25 pages of transcriptions. We also collected additional data from archival documents such as private documents and public ones, like national press and website. Preliminary findings highlighted factors influencing the growth process of this company, showing opportunities and challenges related to digitalization. Responding to recent calls (Romanello & Chiarvesio, 2019) this study mainly contributes to INV literature by investigating early internationalizing firms in relation to the Fourth Industrial Revolution.

Our results once again confirms the importance of international opportunities development among early internationalizing firms (Chandra, Styles, & Wilkinson, 2012). However, it also shows that the success of a start-up company depends on the possibility to place orders and grow up, overcoming the different growth phases. Unfortunately, home countries do not always represent the best environment to find opportunities for growth, such as in this case – where Italian customers were not ready and open to innovative services five years ago. In this case, the founders' global mindset allowed them to recognize and develop the international opportunities they encountered, on which they could basing the future prospects of growth of the firm. In this sense, individual and environmental variables are both highly relevant during the initial phases of growth of INVs, while we can underline that already during the turning point firm variables become more necessary to survive. Although this is an initial evidence, we can underline that it seems aligned with other studies on the determinants during the growth process of INVs (Gabrielsson, Kirpalani, Dimitratos, Solberg, & Zucchella, 2008; Efrat & Shoham, 2012).

This study offers some insights for future researches. Our results show, surprisingly, that the determinants of the internationalization process of BDA service INV, which can be considered an internationalizing digital firm, were similar to the determinants identified in the past, both in manufacturing and high tech contexts. More interestingly, our study confirms that drivers

change during the growth process of INV, even if the role of the founders and their individual knowledge and capabilities remained fundamental for the success of the firm along the three phases: pre-founding, entry-phase and turning point. In this sense, our research is aligned with past studies underlining the fundamental role of founders in the creation and growth process of INVs (Karra, Phillips, & Tracey, 2008; Romanello & Chiarvesio, 2019). Our results, thus, show that individual variables are more influential along the whole growth process of this internationalizing digital firm. However, future researches could be carried on longitudinally in order to detect whether influential variables change during the post-entry internationalization phase. Limitations of this study relate to the fact that this is a single case study. Although we carried on methodological measures such as recording interviews and analyzing transcripts in different points of time, still we underline that results could never be generalized to other cases or population. Future studies could identify other technologies that could be used to facilitate international activities, e.g. in the case of merger and acquisitions or to build new foreign market knowledge. Digital INVs related to Industry 4.0 could behave differently from other high-tech companies or maybe not. Still, more research is needed to clarify this point.

Keywords: International New Ventures, Big Data and Analytics, Industry 4.0, Internationalization Process

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