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RESEARCH ARTICLE

Learning from success and failure: implications for entrepreneurs, SMEs, and policy

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Abstract Despite the valuable contributions of earlier learning studies, the specific analysis of how entrepreneurs and small- and medium-sized enterprises (SMEs) learn has been sidelined in the literature. Significant research opportunities remain open in various unexplored realms. By adopting a multidisciplinary perspective that combines a variety of frameworks (i.e., organizational, economic, and innovation management), the collection of 11 studies of this special issue dedicated to learning delivers valuable insights into how entrepreneurs and SMEs capitalize on learning processes, while identifying how these processes are affected by the type of experience (i.e., success and failure). This paper first overviews the contributions of the 11 papers included in the special issue. Next, we discuss a number of yet unresolved topics that deserve academic attention, paying special attention to entrepreneurs' direct and indirect experiences, knowledge obsolescence caused by technology upgrading, and the role of digital technologies—i.e., Internet-of-things and artificial intelligence—in the learning processes.

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Plain English Summary From the literature on learning, which has mostly evaluated organizational learning, an evident gap emerges, that of the analysis of how entrepreneurs and SMEs learn from different types of experiences. The 11 studies included in this special issue bring together research that addresses various aspects related to learning from the entrepreneur and SME levels. This special issue advances our knowledge by providing clear nuances of how both entrepreneurs and SMEs can learn and generate different benefits from both successful and failure experiences. After examining the papers in this special issue, promising future research should focus on the analysis of entrepreneurs' direct and indirect experience, knowledge obsolescence caused by technology upgrading, and the role of Internet-of-things (IoT) and artificial intelligence (AI) in enabling learning processes.

Keywords Entrepreneurship · Learning · Learning from success · Learning from failure · SMEs

JEL Classification D2 · D83 · L26 · M1 · M2

1 Introduction

Understanding organizational learning has been a focal point in academia since the landmark works of Cyert and March (1963), Levitt and March (1988), and March (1991). Spanning economics, operation

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management, organization theory, and strategic management research, earlier studies enriched our comprehension of how learning at organizational and individual levels unfolds and influences different outcomes, offering valuable insights into the nuances of learning and the factors that affect it across different units of analysis. Thus, studies highlight factors that affect the effectiveness of learning processes, including the nature of knowledge, prior experiences, tools that facilitate knowledge generation and management, and incentives that nurture a learning culture (Argote et al., 2021). Remarkably, scholars suggest that converting experience into knowledge, whether generated internally or acquired from external sources, reshapes future organizational performance (Argote, 2013).

Alongside this discussion, we noticed an emerging interest in how organizations and individuals learn from experiences, both from success and failure. Notably, it is argued that failures encourage members of an organization to re-evaluate established routines and take corrective action (Dahlin et al., 2018), being catalysts for learning, with major failures offering richer learning opportunities (Baum & Dahlin, 2007; Desai, 2015). Yet, despite the earlier valuable contributions, significant opportunities remain open to extend our understanding of learning within various unexplored realms.

From the literature dealing with learning an evident gap emerges, that of the analysis of how entrepreneurs and SMEs learn from different types of experiences (see, e.g., the reviews by Argote et al. (2021) and Dahlin et al. (2018)). This gap motivated us to develop this special issue. The primary objective of our effort was to advocate for multidisciplinary research to advance knowledge on learning processes, specifically within entrepreneurship, small and medium-sized enterprises (SMEs), and policy realms. With this end goal at the heart of our priorities, we expect to advance our understanding of the connection between learning processes—their antecedents, strategies, and evolution—and their outcomes.

At this point, what is the positioning of this special issue within the small business and the learning literature? Based on prior learning work and after synthesizing and assessing the papers in this special issue, we believe these studies advance our knowledge by providing clear nuances in at least two interrelated directions.

The first central point relates to the analysis of learning across analytical units largely sidelined in prior research—i.e., entrepreneurs and teams—in different organizational contexts, including shared working spaces, teams not sharing the same physical space but pursuing a common goal, and entrepreneurs developing their business endeavors in digital platforms. The research by Vaillant et al. (2024), Espinoza-Benavides and Guerrero (2024), and Sewaid et al. (2024) go beyond performance comparisons and the analysis of both entrepreneurial and industry-specific experiences that mostly dominate serial entrepreneurship research (e.g., Lafontaine & Shaw, 2016; Lafuente et al., 2019; Westhead et al., 2005). These studies, therefore, increase our understanding of the learning trajectory of (serial) entrepreneurs and how this process impacts the performance of their subsequent ventures. Following Argote et al. (2021), individual- and group-level learnings are intertwined as individual features and team properties jointly determine teams' learning. The studies by Wesemann et al. (2024), Alegre et al. (2024), and Tao et al. (2024) provide valuable insights into how teams' design, common goals, diversity, membership stability, and power and status affect knowledge creation and, subsequently, learning.

The second central point deals with the analysis of learning generated by different types of experience—i.e., success and failure—at different levels of analysis. The studies by Sallán and Lordan (2024)—who study two learning curves that simultaneously occur in the context of universities—and Vendrell-Herrero et al. (2024)—who use a large international database to analyze if market conditions explain SMEs' learning opportunities—constitute relevant contributions to the learning literature on the temporal dimension of experience (timing and pace). Other papers extend the relatively unexplored research stream on the value of tools supporting knowledge creation and learning (Dahlin et al., 2018). Specifically, by analyzing the role of tools specifically designed to protocolize work tasks, collect and store data, and issue recommendations, the studies by Anokhin et al. (2024), Koporcic et al. (2024), and Lafuente (2024) offer novel evidence in line with the call made by Dahlin et al. (2018) for more work on how tools contribute to learning in contexts with marked operational differences (e.g., highly automated, knowledge-intensive, and labor intensive industries).

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Our journey started in November 2021 with the intention of satisfying our academic curiosity, which motivated us to encourage contributors to produce research that challenges canonical approaches and adopts a critical angle that sheds valuable insights on learning from the entrepreneurs' and SMEs' perspectives. Indeed, the call received tremendous support from scholars in the field and the journal's editorial team. Obviously, all our efforts simply would not have been possible without the support and nurturing of the journal's Editor-in-Chief, Christina Guenther, and Managing Editor, Adam Lederer, to whom we express our deepest gratitude.

As a result of our joint efforts, the collection of papers included in this special issue brings together studies that address various aspects related to learning from the entrepreneur and SME levels, which until now had remained largely unaddressed. In our view, this special issue advances our knowledge by providing clear nuances of how both entrepreneurs and SMEs can learn and generate different types of benefits while identifying how these processes are affected by the type of experience, in terms of successful and failure experiences.

The present introduction to the special issue is organized as follows. Section 2 overviews the 11 papers included in this special issue, their contribution and connection to prior work. Next, based on the analysis of the selected papers, Sect. 3 concludes by discussing promising future research avenues, paying special attention to the role of direct and indirect experience, knowledge obsolescence caused by technology upgrading and digital technologies—i.e., Internet-of-things (IoT) and artificial intelligence (AI)—in the learning processes.

2 The contributions of this special issue

After an exhaustive peer review process, this special issue includes 11 articles that significantly advance the analysis of the antecedents and outcomes of learning among entrepreneurs and SMEs.

By analyzing the approaches adopted by the selected papers, we observe that learning can be researched from multiple angles and that the unit of analysis varies from the entrepreneur (three studies) to teams (three studies) and to the organization (five studies). Note that part of the value of the papers included in this special issue is the capacity to bring together theoretical premises from different fields, including organizational approaches and arguments closer to operations management. The richness of these papers also becomes evident in their methodological diversity—which spans from qualitative and case study approaches (two studies) to quantitative studies using different estimation methods (nine studies)—and in the geographic variety of the analyzed settings, covering different European countries (five studies), the USA (two studies), Latin America (two studies), China (one study), and businesses from multiple countries (one study).

By using multiple analytical methods on data produced by interviews (two studies) as well as cross-sectional (five studies) and longitudinal (four studies) datasets, the selected papers contribute to identifying the different patterns that characterize learning processes as well as their outcomes at the entrepreneurial and organizational level.

The diversity of the selected papers is consistent with and further reinforces the logic underlying this special issue, which emphasizes the need to analyze the antecedents and impacts of learning from diverse types of experience. Concretely, six studies address how entrepreneurs and SMEs learn from successful experiences, whereas five studies evaluate learning from failure experiences.

Overall, the collection of studies presented within this special issue was dedicated to learning delivers valuable insights into how entrepreneurs and SMEs capitalize on these processes from organizational, economic, and innovation management perspectives. As such, their contributions confirm that entrepreneurs and SMEs can learn through different mechanisms and from various types of experiences. Also, the selected papers verify that learning outcomes go beyond economic figures (Argote et al., 2021).

Table 1 briefly summarizes the contributions of the articles composing the special issue. For enhanced appreciation of their contributions, in what follows, we analyze the selected papers according to the chosen unit of analysis, that is, the entrepreneur, teams, and the organization.

2.1 Analysis of entrepreneurs' learning

Three studies deal with the analysis of *how entrepreneurs learn*.

Motivated by the need for more research on "post learning curve" knowledge retention (Argote et al.,

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Table 1 Scope and methodology of the articles included in the special issue

Unit of analysis	Type of experience (success or failure) and methodological aspects	
	Learning from success	Learning from failure
Entrepreneur	1) Vaillant, Mora-Esquivel, and Alvarado - Sample: 518 Costa Rican entrepreneurs - Method: zero-inflated Poisson regression	2) Sewaid, Silaghi, and García-Cestona - Sample: 116,981 failed crowdfunding attempts (kickstarter) - Method: Probit regression (Heckman probit model with selection) 3) Espinoza-Benavides and Guerrero - Sample: 20 entrepreneurs - Method: qualitative research (case study)
Team	4) Wesemann, Sirén, He, Grichnik, and Wincent - Sample: 77 technology SMEs (77 teams and 241 team members) - Method: hierarchical regression model 5) Alegre, Berbegal-Mirabent, and Martín-Sánchez - Sample: 88 research consortia from 18 EU countries (159 projects) - Method: panel data models	6) Tao, Wang, Robson, and Hughes - Sample: 152 teams (398 team members) - Method: linear regression model
Organization	9) Vendrell-Herrero, Gomes, Darko, and Lehman - Sample: 1171 SMEs from 21 countries - Method: propensity score matching and Heckman selection model 10) Sallán and Lordan - Sample: 44 Spanish public universities - Method: two-stage least square regression (IV model) 11) Anokhin, Hess, and Wincent - Sample: 163 firms - Method: panel data models	7) Lafuente - Sample: 108 Spanish SMEs - Method: panel data models 8) Koporcic, Sjödin, Kohtamäki, and Parida - Sample: 2 Finish SMEs and 1 Swedish SME (42 interviews) - Method: qualitative research (case study)

2021), the research by Vaillant et al. (2024) evaluates the presence of a forgetting curve for serial entrepreneurs and seeks to determine whether the decay of the learning benefits of past entrepreneurial experience can be halted after a serial entrepreneur's re-entry into entrepreneurship. From the analysis of 518 Costa Rican entrepreneurs during 2016–2019, the study's results corroborate the presence of a forgetting curve that decays the performance benefits that past accumulated entrepreneurial experience brings to serial entrepreneurs' subsequent firms over time. The authors also found that the reported decay is halted with re-entry into entrepreneurship. The contribution of this study primarily comes from introducing the concept of the forgetting curve to the study of learning and the cognitive benefits of entrepreneurial experience.

By employing data for 116,981 failed crowdfunding attempts available from a leading crowdfunding platform (Kickstarter), Sewaid et al. (2024) analyze how narcissism affects the entrepreneur's probability of pursuing a second project following a first failed attempt. For serial entrepreneurs, the authors also evaluate the changes adopted in the subsequent attempt to explore how much entrepreneurs have learned from their previous failure experience and test for potential performance improvements in entrepreneurs' subsequent ventures conditional on relaunching. The results of the analysis show that the positive relationship between narcissism and the probability of relaunching is negatively moderated by the degree of failure (in terms of the percentage distance between capital raised and the campaign's goal). The authors also found that narcissistic entrepreneurs are less likely to relaunch following a high-degree failure due to their ego-defensive behaviors and create underperforming subsequent ventures. The relevance of this study relies on identifying reduced learning rates among a particular type of serial entrepreneur (i.e., narcissist) who develops her venture in a digital environment. Also, by corroborating the poor performance level of narcissist entrepreneurs'

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subsequent attempts, the authors propose relevant implications for platform managers and campaign backers (i.e., incentives and penalties) to cope with failure in digital contexts.

Espinoza-Benavides and Guerrero's (2024) study proposes a framework to understand how entrepreneurs in an emerging economy capitalize on their previous experience with business failure to deal with adverse external scenarios. Using grounded theory and a multiple case study approach that includes interviews with 20 entrepreneurs (ten with previous business failure experience and ten without such past negative experience), the authors found that re-entrepreneurs with past negative business experience show greater resilience and prioritize re-building social capital as part of their crisis management strategy, a result that is in sharp contrast with that observed for those entrepreneurs who do not have past failure experience. The study offers a valuable conceptual framework that helps re-entrepreneurs learn from previous failure experiences to build resilience and strategically manage crises caused by exogenous events (e.g., social movements and the COVID-19 pandemic).

2.2 Analysis of teams' learning

The second group of three papers analyzes *learning in different types of teams*.

The study by Wesemann et al. (2024) focuses on how learning diversity (regarding information search) conditions teams' learning patterns. Concretely, by using a survey-based dataset of 77 Finish technology SMEs (77 teams and 241 team members) between 2012 and 2016, the authors explore how learning diversity of top management teams (TMT) affects SMEs' innovation strategy and how the presence of a powerful CEO (in terms of structural and prestige power) conditions this relationship. The study results show a nuanced inverted U-shape effect of TMT learning diversity on SMEs' innovation strategy. Furthermore, CEO structural power nullifies the informational benefits of learning diversity, whereas CEO prestige power mitigates its relational drawbacks. The reported inverted U-shaped relationship between learning diversity and innovation becomes predominantly negative under structurally powerful CEOs and predominantly positive under prestigious CEOs. The relevance of this study comes from the analysis of differences in teams' learning behavior (within and between teams), which contributes to opening the 'black box' of organizational structures and scrutinizing the information search and processing behaviors of managers. The paper also extends social hierarchy research by evaluating how power structures affect learning (Bunderson & Reagans, 2011), which ultimately helps better grasp the diversity-related mechanisms that drive team learning and how power facilitates or stifles innovation.

By employing panel data models on a rich dataset of research projects funded by the European Union (FP7 and H2020 frameworks) between 2014 and 2020, the paper by Alegre et al. (2024) analyzed the effects of team experience with previous projects and consortium diversity (in terms of composition, e.g., higher education institutions, public research organizations, SMEs, larger corporations, non-profit entities, industry associations, and other eligible stakeholders) on consortia's research performance. The analysis of 88 research consortia from 18 EU countries (159 projects) reveals that, although EU-funded research projects aim to facilitate innovation and collaboration between public and private actors, consortia with organizational homogeneity tend to be more favored and achieve higher research outcomes. Leading a research consortium requires developing different managerial skills that take time to cultivate (Grimpe et al., 2022). In this sense, the results suggest that when establishing a new consortium, experience with research consortia confers an advantage to the coordinating organization. This research contributes to the literature by investigating collaborative team dynamics and the implications of organizational learning on research performance in the context of EU-funded research projects. The study also offers pertinent policy implications aimed at aiding in designing better-informed policies that help enhance the EU's research budget and the research performance of participating consortia.

Using a dataset collected in 2018 for 152 new product development (NPD) teams working for high-tech Chinese SMEs (152 teams and 398 team members), Tao et al. (2024) adopt a learning from failure approach to evaluate the teams' learning patterns. Concretely, the authors analyze how the past (experiential and vicarious) negative experience with NPD teams' product development projects and collective efficacy affect new product performance in terms

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of speed to market and innovativeness. The authors found that experiential and vicarious learning from failure enhances new product performance (i.e., speed to market and innovativeness). The results also suggest the double-edged effect of collective efficacy. Whereas the positive effect of experiential learning from failure on speed to market is strengthened as collective efficacy increases, the positive effect of vicarious learning from failure on product innovativeness is reduced for NPD teams with high levels of collective efficacy. This study contributes to knowledge on learning from failure by elaborating on the heterogeneous effects of both past negative experiences with new product development and collective efficacy on new product performance among NPD teams, an overshadowed unit. SMEs have been sidelined in research on learning from failure. Given that SMEs and larger firms often follow different innovation strategies and learning behaviors (Manez et al., 2015), the findings of this study also contribute to advancing our knowledge of the learning process in SMEs by shedding light on NPD teams' learning from failure.

2.3 Analysis of organizational learning

Finally, the last group includes five studies that analyze *learning in organizations*.

The study by Lafuente (2024) investigates the learning patterns of SMEs from heterogeneous work accidents (i.e., minor, and severe and fatal). The longitudinal analysis on a sample of 108 Spanish SMEs during 2006–2009 reveals that SMEs learn to modify safety practices, and that accumulated experience with both minor and severe and fatal accidents impacts learning outcomes—in terms of the unit accident cost—through different mechanisms. The author found that cumulative experience with past work accidents supports exploitative learning, but this effect only holds for minor work accidents. Also, the adoption of safety-enhancing tools (i.e., OHSAS 18001) does not affect learning; however, SMEs can generate effective learning from an ambidextrous strategy: SMEs adopting the OHSAS 18001 learn more from severe and fatal accidents than from minor accidents by triggering drastic modifications in their safety practices. For the learning literature, the proposed analysis of SMEs' learning from different types of failures (i.e., work accidents) increases the understanding of learning from failure beyond the focus on cumulative experience. It further develops the small business literature (Dahlin et al., 2018). By showing that SMEs learn from frequent and rare accidents through different mechanisms, the study also helps to unveil the conditions under which SMEs might capitalize on the knowledge generated by different types of failure (Argote et al., 2021).

Building on a case study that includes 42 in-depth interviews with managers of three knowledge-intensive SMEs (two from Finland and one from Sweden), Koporcic et al. (2024) investigate how the selected SMEs learn from failures through organizational learning processes. The authors conceptualize the learning from failure process, drawing on insights from the literature (e.g., Argote et al., 2021). From the analysis of the selected cases, the authors offer a process framework that sheds light on how SMEs can systematically embrace "fail fast and learn fast" as a catalyst for learning and improvement. From the analysis of the selected cases, the authors identified, examined, and illustrated the three phases of SMEs' learning from failure process: failure recognition, interactive sensemaking, and organization reconfiguration. For the small business and the learning literature, the value of the study relies on proposing a conceptual processual framework that portrays a way of understanding learning from failures in SMEs.

Vendrell-Herrero et al. (2024) examine when learning by exporting occurs. The empirical exercise uses an international dataset made available by the World Bank (World Bank Enterprise Survey, WBES), which includes information between 2006 and 2017 for 1171 SMEs from 21 countries in Latin America, Europe, Africa, and Asia. The experience of exporting does not typically materialize in an episodic manner, and the results of the propensity score matching and the Heckman selection model suggest that opportunities for learning from exporting exist before and after exporting occurs. The authors reported that SMEs in more developed home markets enjoy greater opportunities for learning before exporting, a result that the authors link to divergence in productivity among firms due to lower levels of uncertainty and ambiguity and higher levels of causal determinacy in the domestic market. On the contrary, SMEs in less developed home markets tend to learn more after exporting, which might reflect productivity convergence over time among firms operating in home

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markets with higher uncertainty levels and lower internationalization levels. The study contributes to the small business literature by offering a solid analysis of how SMEs across the spectrum of economic development learn by exporting through different processes, which addresses multiple calls for scholars to research the internationalization performance of SMEs operating in different socio-economic contexts (Child et al., 2022). The research also fuels the ongoing debate about global divergence versus convergence (Pomeranz, 2021) by pointing to exporting as one possible pathway for economic convergence.

The research by Sallán and Lordan (2024) analyzes how two distinct (interrelated) learning curves affect the technology transfer outcomes (i.e., spinoffs and licenses) of 44 Spanish public universities between 2006 and 2011. Concretely, the authors evaluate the relationship between accumulated experience with spinoffs and licenses and the generation of technology transfer outcomes, in a model that considers discovery disclosures the outcome of an endogenous process driven by its own experiential learning process. Universities are instrumental actors within today's entrepreneurial ecosystem with the potential to channel knowledge and fuel the market with new firms (Cunningham et al., 2022). The results of the IV regression models support that the creation of spinoffs and licenses results from different technology transfer processes that require diverse inputs. Experiential learning is vital for discovery disclosures and technology transfer outcomes among Spanish universities. It was also found that the output of universities' scientific research, measured by the number of discovery disclosures, is a critical antecedent of technology transfer outcomes. This research contributes to the learning literature by analyzing universities' learning patterns in a model incorporating two learning curves that take place simultaneously. In today's societies, universities are much more than graduate factories. For the entrepreneurship literature, the study provides insights to help universities continue to incubate and channel their technology transfer outputs to the local economy which, in turn, contributes to propelling the local entrepreneurial ecosystem.

Finally, inspired by the importance and growing popularity of corporate venture capital (CVC)—i.e., equity investments by incumbent firms in entrepreneurial ventures—Anokhin, Wincent, and Hess (2024) investigated the effects of technology sourcing ambidexterity (i.e., the simultaneous pursuit of internal and external sources of innovative ideas) on corporate patenting and realized innovation. Using a sample of 163 firms, the results of the longitudinal models indicate the presence of the inverted U-shaped relationship between technology sourcing ambidexterity and innovation. This finding suggests that, beyond a certain threshold, increases in ambidexterity are detrimental to organizational learning and corporate innovation because boundary conditions to experimentation as a critical learning element arise. The authors also found that such restrictions to learning and innovation might be alleviated through organizational slack, which enhances abilities to orchestrate resources and take calculated risks to go beyond existing internal competencies. This study adds new evidence to the small business literature dealing with corporate venture capital (Braune et al., 2021) by analyzing ambidexterity as the balance between internal and external sources of technological ideas. The alignment between the two sources of innovative ideas is a careful balancing act, and the implications for strategy makers are clear. While limited engagement in distant search via external sources of innovative ideas is beneficial, for firms with limited resource management capabilities, further investments to increase ambidexterity and overreliance on such ideas might be detrimental to corporate innovation and result in failed attempts to stimulate learning.

3 Toward future research

To conclude, building on the review of the 11 studies included in this special issue, we believe that the authors' efforts have contributed to untangling and articulating the discussion on learning among entrepreneurs and SMEs. Moving forward, the debate is open, and there are still promising topics that should be added to scholars' research agendas.

The first topic that we consider worth researching relates to analyzing the role of direct and indirect experience on learning. When analyzing whether units of analysis learn more from their own experience (i.e., direct) or from others' experience (i.e., indirect), they show mixed results (Argote et al., 2021). Although the study by Alegre et al. (2024) indirectly deals with this issue, the papers included in this special issue evaluate how entrepreneurs, teams,

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and SMEs learn from their own experience. Understanding how learning processes driven by direct and indirect experience complement or substitute for each other is a promising topic that would increase our knowledge on how entrepreneurs build the organizational memory of their ventures, how teams' properties (e.g., members' stability, degree of heterogeneity, and social identity) affect the interpretation of experience and condition knowledge transfer, and what practices (e.g., personnel transfer and interactions) and tools (e.g., checklists and digital communication platforms) might help SMEs to best capitalize on these types of experience.

A second interesting topic is the analysis of knowledge obsolescence rates caused by technology upgrading or fast-changing environments. For example, research has found that knowledge depreciation or "forgetting" reduces business inertia and improvisation capacities (Jain, 2020). In this special issue, the papers by Alegre et al. (2024), Lafuente (2024), Sallán and Lordan (2024), and Vaillant et al. (2024) introduce knowledge depreciation—a form of forgetting—in their learning analyses. Further work is needed to understand better if technological and environmental factors accelerate knowledge depreciation and to comprehend what knowledge should be retained and upgraded (or removed) if the renewal and/or development of competitive advantage is the desired goal. We also consider relevant exploring other methods and tools that could be used to increase learning opportunities in general and which methods and tools might be more effective in fast- and slow-learning environments. This is especially relevant in evolving contexts, for example, industries where technology updating is the norm (e.g., knowledge-intensive services and neuroscience), teams whose composition drastically changes over time (Reagans et al., 2005), and the case of entrepreneurs that change industries between ventures (Eggers & Song, 2015).

Finally, Internet-of-things (IoT) and artificial intelligence (AI) technologies are increasingly playing a decisive role in enabling the development of digitalized business models (Hansen & Bøgh, 2021). The IoT has the potential to create large datasets by connecting virtual and physical objects globally to facilitate their remote monitoring across network infrastructures, whereas AI supports the development of techniques by means of algorithms that require intelligent action to manage the data produced by IoT and solve complex problems more efficiently and rapidly (i.e., descriptive, diagnostic, and prescriptive) (Berente et al., 2021). The properties of these technologies add a new dimension to strategy makers and open opportunities for learning. Future work should scrutinize the learning outcomes of interactions between these technologies and individuals. It would also be worthwhile to study the conditions under which information generated by organization members and information processed by AI can be efficiently integrated into the organization for enhanced learning.

We are hopeful that this special issue will advance our understanding of learning and will add an impulse to increase theoretical and empirical research on this topic. Such research is relevant and necessary if academics are to learn how entrepreneurs and SMEs, with different degrees of complexity, can introduce, adapt, and learn from learning processes and various types of experiences to enhance their competitive edge in the long term.

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