

Association for Information Systems

AIS Electronic Library (AISeL)

AIS EIF Program Working Papers

AIS Special Interest Groups

6-19-2023

All or Nothing - How the Nexus of Different Corporate Innovation Vehicles Fosters Digital Transformation (Research in Progress)

Ferdinand ferdinand.mittermeier@uni-bamberg.de

Axel Hund

Daniel Beimborn

Follow this and additional works at: <https://aisel.aisnet.org/aiseifprogram>

This material is brought to you by the AIS Special Interest Groups at AIS Electronic Library (AISeL). It has been accepted for inclusion in AIS EIF Program Working Papers by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

All or Nothing - How the Nexus of Different Corporate Innovation Vehicles Fosters Digital Transformation (Research in Progress)

Ferdinand Mittermeier
University of Bamberg
Ferdinand.mittermeier@uni-bamberg.de

Axel Hund
Neu-Ulm University of Applied
Sciences
axel.hund@hnu.de

Daniel Beimborn
University of Bamberg
Daniel.beimborn@uni-bamberg.de

Abstract

The ongoing convergence and rapid development of digital technologies are putting pressure on incumbents not only to digitize their operations, but also to continuously challenge their business models. To respond to such environmental changes, drive organizational renewal, and produce novel value-adding digital solutions, incumbents are currently experimenting with various corporate innovation vehicles. In the context of digitalization, however, there is little integration regarding their exact nature as well as their roles and goals for the core organization, making it increasingly difficult for incumbents to choose the right vehicle, organize it, and govern it properly. Hence, by adopting a multiple case study design with 50 interviews across five digital innovation labs, five corporate accelerators, and eight corporate venture builders, we aim to answer the questions of what the goals of different corporate innovation vehicles are and how they pursue them.

1. Introduction

“Organizations that fail to innovate become disrupted by those that do” (Arvidsson & Mønsted, 2018, p. 369). The increasing pace of change in the context of digitalization makes this principle even more important. Therefore, to remain competitive in such a volatile environment, incumbents must strive to be even more efficient and productive in their entrepreneurial activities (Urbano et al., 2022).

Research shows that corporate entrepreneurship (CE), i.e. entrepreneurial pursuits within an established organization, can facilitate the renewal of the organizational logic through various innovation-based approaches and consequently affect the organization’s longevity and competitiveness (Corbett et al., 2013). Moreover, it can be observed that the extent of an incumbent’s orientation towards entrepreneurship is closely related to its level of digitalization and overall performance (Niemand et al., 2017). Therefore, and especially concerning digital

technology-based responses of a corporate to environmental change, CE plays an important role in enabling and fostering the ongoing digital transformation (Nadkarni & Prügl, 2021). To perform CE, incumbents currently experiment with various *corporate innovation vehicles* (or vehicles for short) (Fernandez-Vidal et al., 2022) that can be distinguished along the continuum between the two dominant domains of CE: Strategic Entrepreneurship and Corporate Venturing. The former deals with the transformation of an organization’s core (i.e., strategy, product offerings, served markets, internal organization, or business model) to *renew its competitive advantage*. Hence, it focuses on the extent to which a corporate is changing compared to its initial situation or competitors. In contrast, corporate venturing usually results in creating completely new internal or external ventures through investment or active venture creation to *diversify the degree of its competitive advantage* (Urbaniec & Žur, 2021). Thus, the focus is on expanding the corporate’s portfolio by leveraging its core competencies in new markets and testing other business areas and resource combinations using internal or external means (Ireland et al., 2009). These remarks indicate that these two expressions are separate, independent phenomena.

However, recent studies suggest that emerging, digital-oriented innovation vehicles may blur the lines between these two domains of CE (Weiss & Kanbach, 2021). For instance, traditional corporate venturing approaches are replaced or complemented by new vehicles such as Corporate Accelerators (CAs) (Shankar & Shepherd, 2019) and Corporate Venture Builders (CVBs) (Mittermeier et al., 2022) which do not necessarily result in new ventures but challenge the key logic the organization is built on (Weiss & Kanbach, 2021). Initial research results further indicate that such vehicles may affect the strategic renewal of the parent company on an intrapersonal, interpersonal, organizational, and project level (Selig et al., 2019) and contribute to the development of dynamic capabilities (Enkel & Sagmeister, 2020), in

general, and innovation capabilities (Schmidt et al., 2019), in particular. Consequently, diversity does not only exist in the *design* of such vehicles but also in the *objectives* they pursue, ranging from new business creation and capability development to access to new technologies and attracting new talents (Selig et al., 2019). This circumstance makes the selection of a particular vehicle and its management increasingly difficult for incumbents. Studying such interrelated forms of corporate venturing and strategic entrepreneurship could enrich not only the concept of CE itself, but also its role in organizational change phenomena such as digital transformation (Weiss & Kanbach, 2021). Thus, to better understand the different vehicles and their role in enabling organizational transformation, we examine how, if at all, different types of vehicles support an incumbent's digital transformation. To do so, we take, in a first step, a closer look at the explicit and implicit objectives of each type of vehicle to delineate differences in purpose and intention and how they are related to digital transformation efforts. We focus on the relatively new and digitally focused vehicle types, i.e., DILs, CAs, and CVBs, as we see those capable of covering the entire spectrum of CE. Our first research question is, therefore:

RQ1: How, if at all, do different types of corporate innovation vehicles (DILs, CAs, CVBs) differ in terms of their objectives related to digital transformation?

After delineating and understanding the differences in objectives (*what*) and intentions (*why*), we turn to the various approaches intended to achieve these objectives (*how*). Since all three types of vehicles have different but not mutually exclusive goals, a better understanding of the differences and similarities regarding their approaches applied is crucial. Our second research question is, therefore:

RQ2: How do different types of corporate innovation vehicles pursue their objectives related to digital transformation?

2. Theoretical background

Corporate Entrepreneurship. CE is considered essential for leveraging a company's current competitive advantages as well as identifying new opportunities (Urbano et al., 2022). Consequently, incumbents started to adopt entrepreneurial behavior and implement entrepreneurial structures making CE a major organizational strategy (Ireland et al., 2009), especially in times of digitalization (Selig et al., 2019). As mentioned above, CE traditionally delivers innovation outcomes through strategic entrepreneurship and corporate venturing. Both strategies are initiated either bottom-up by an

entrepreneurial employee (i.e., intrapreneurship) or top-down by management decision (Urbano et al., 2022) and are used to drive organizational renewal either through new ways of operating or by venturing into a new business. These efforts to improve existing structures and find new ways to innovate through digital technologies are also known as "digital transformation" (Vial, 2019). However, there is a lack of empirical evidence in the literature supporting the relationship between CE and organizational renewal in the context of digitalization (Joshi et al., 2019). Hence, we are looking at certain digitally oriented innovation vehicles and their role in incumbents' digital transformation. Such 'digital units' represent approaches to drive digital transformation through innovation and exploration activities (Fuchs et al., 2019), with a multitude of labels and terms used in both the scientific and practitioner literature. Some refer to them as digital labs while also incorporating incubators, accelerators, venture builders, and innovation labs (Velten et al., 2016). Due to their exclusive internal focus, others distinguish digital innovation units from incubators, accelerators, and venture builders (Raabe et al., 2020). However, since all these entities aim to generate corporate innovation in the long term, we refer to them as *corporate innovation vehicles*. Under this umbrella term, we seek to offer a portfolio approach on how to sustain, renew, or build a competitive advantage in the digital age by considering three different types of such vehicles.

Digital Innovation Labs are structurally separated, semi-autonomous, and specialized agile organizational units responsible for exploring digital innovations (Hund et al., 2019). They are also known as digital innovation units (Haskamp et al., 2021), innovation hubs (Svahn et al., 2017), or digital transformation initiatives (Jöhnk et al., 2020). Recent literature has researched this phenomenon in the context of ambidexterity (Göbeler et al., 2020), knowledge recombination (Hund et al., 2019), and dynamic capabilities (Hellmich et al., 2021). Raabe et al. (2020) differentiate two types of DILs. While the supportive coaching & screening type mainly drives innovation discovery through skill development (e.g., design-thinking) or the promotion of an agile mindset, the center of excellence type really implements digital products and services into the core organization. However, evidence from scientific and practitioners' studies reveals that many of these projects fail and do not result in innovation (Ahuja, 2019). Göbeler et al. (2020) further note that there is a limited understanding of how incumbents use DILs.

Corporate Accelerators are timely restricted, internally or externally managed start-up engagement programs that facilitate the relationship between

incumbents and new start-ups (Kohler, 2016). It differs from internal corporate venturing as the start-ups are accelerated *outside* the organization's boundaries. It is also not a purely external approach, as CAs rarely take equity stakes, do not create new ventures but accelerate existing ones, and do not work towards a pre-determined and common goal (between the company and the start-up) (Shankar & Shepherd, 2019). With such vehicles, corporates seek to explore new technologies or exploit its current competencies to improve start-up development (Kohler, 2016). Shankar and Shepherd (2019) note that CAs aim to either nurture innovation or foster the ecosystem. Hence, such vehicles "accelerate strategic fit" between the start-up and one of the incumbent's business units or "accelerate venture emergence," making start-ups investor-ready. However, despite the initial research results regarding the innovation generation potential, recent studies lament the lack of a common understanding regarding the motives and effects of CAs, especially in the digital context (Urbaniec & Žur, 2021). Moreover, while there is an agreement in the literature that corporates can benefit from collaborating with start-ups, it is unclear how to incorporate these "lessons learned" and "best practices" (Nadkarni & Prügl, 2021).

Corporate Venture Builders are a distinct form of incubation that aims at launching new digital ventures by combining the innovative capacity of founders with the experience of serial entrepreneurs and the execution strengths of incumbents (Mittermeier et al., 2022). Consequently, such vehicles do not only nurture start-ups but actively build them from scratch (Köhler & Baumann, 2015). The managerial literature distinguishes between in-house venture builders, where the incumbent owns the highest stake and charges no service fee from the start-ups, and corporate venture builders, where external entities sell their venture building services to the incumbent (García-Luengo, 2017). There are initial research attempts to unravel their organizational design (Köhler & Baumann, 2015) and first indications that these vehicles are forming innovation capabilities within their newly created ventures (Schmidt et al., 2019). However, current literature lacks a holistic overview of the phenomenon and a clear understanding of its inner workings, especially in a corporate setting (Köhler & Baumann, 2015).

3. Method

Since we sought to explore the goals of the vehicles as well as the *how* and the *why* underlying their endeavors and actions in the context of an incumbent's digital transformation, we employed a

qualitative research design, i.e., a multiple case study (Yin, 2018). We performed theoretical sampling (Eisenhardt, 2021) by only considering vehicles with a digital-first focus. Consequently, we excluded non-profit incubators, independent venture builders, and technology parks. Within each case selected, we only included key informants particularly relevant for our research setting, i.e., corporate entrepreneurs that drive the setup of such vehicles, management and operational staff of the vehicles, as well as leading personnel of the emerged ventures. In this way, we focused on capturing the phenomenon (the vehicles) very broadly while uncovering similarities and differences within and across the different vehicles.

We predominantly conducted semi-structured interviews to collect data and enriched our primary data with secondary data sources whenever possible. Particularly, in cases where we could not gain access to all of the desired interview candidates, we used public interviews. We further triangulated the data with additional company material that we received from the respondents or obtained via publicly available sources (e.g., company websites or white papers). In total, we included 45 own and five external interviews, ranging from a minimum of two per case up to five per case, depending on how many interviews were required to fully understand the respective case.

We began our data analysis by creating detailed descriptions of the 18 cases. We reviewed the transcripts and labeled every statement that shed light on *what* that particular case does. This is similar to what Strauss and Corbin (1998) refer to as identifying the phenomenon. Based on that, we described distinct projects and the overall outcome (what) for every case. The first author further summarized the outcomes per vehicle to aggregate them into one overarching scope for every vehicle. Descriptions and derived scopes were discussed between the first and the second author to ensure a correct understanding of the projects and their outcomes. After creating an initial understanding of each vehicle, we started with the actual inductive analysis (Gioia et al., 2013) on an individual basis (within-case analysis). In particular, we engaged in four steps of analysis.

Step 1. We did the first-order analysis to understand the respondent's statements regarding the vehicle's actions and intentions. This is similar to the open coding procedure of Strauss and Corbin (1998) and results in a number of 'first-order concepts'.

Step 2. During the consequent axial coding, we searched for similarities and differences between these concepts to identify interrelationships and potential subcategories. To do so, we focused on causal conditions (why) and derived strategies (how) that underlie the phenomenon in the context of digital

transformation. Since this step is iterative in nature, we shifted back and forth between the concepts and the emerged themes as well as between the data and extant literature to refine the grouping of the first-order concepts and seek theoretical interpretations for the emerged second-order themes. At this stage, the research was “transitioning from inductive to a form of abductive research, in that data and existing theory are now considered in tandem” (Gioia et al., 2013, p. 21), which may lead to aggregated dimensions.

Step 3. While the data structure shows how we arrived at the final dimensions from the raw data, it only represents the initial step in qualitative research (Gioia et al., 2013). In order to ‘set everything in motion’ and to make the relations between the emerged themes and aggregated dimensions as well as the ‘data-to-theory’ connections more transparent, we further developed a process model for every vehicle.

Step 4. Shifting from a predominantly within-case analysis to a cross-case analysis, we are now at the point of theorizing about the overall impact of these vehicles on the digital transformation of incumbents. Thereby, we seek to unravel the relationships between themes and dimensions not only within one vehicle but also across all three types of vehicles.

4. Preliminary results

To get an initial understanding of the different vehicles, in this part, we provide our results regarding the ‘what’, i.e., the main goal or output (scope), and give first indications regarding the *why* while neglecting *how* they operate in a certain way¹.

In its purest form, we observed that a DIL represents a vehicle that aims to *develop digital prototypes* by combining internal ideas with new digital technologies. With this, it seeks to promote innovative actions within the corporate and supports it with decision-making aids regarding core business improvements. It experiments with ideas, validates them, and sets the basis for their smooth integration into the operational business. The actual implementation of the new solution, however, must be carried out by the respective business unit.

“We provide them with product ideas, concepts, and quick, tangible decision options on topics that were unclear, that they would have liked to work on, but that didn’t fit as is” (Head of Vehicle, DIL_bank).

“The emphasis is that we go to the MVP at most, which is then handed back to the line or business unit” (Project Lead, DIL_airfreight).

CAs, on the other hand, are vehicles that mainly aim to *collaborate with or integrate digital start-ups*. With this, such vehicles seek to achieve new deals and technology ownership for a corporate. They scout second-stage start-ups and match them with the respective business units, standardize the incubation process and facilitate the integration. As such, they act like a project manager until contracts are signed but do not interfere with the operational business.

“What kind of start-ups can bring added value to the group? Start-ups that already have a product that is beyond MVP, i.e., that you can already incorporate somewhere in the value chain” (CEO, CA_Tele).

“They drove not only the selection but also the implementation and the contracting processes. Therefore, they were the project managers of the whole process, not just of the start-up incubation part” (CEO & Founder of Venture, CA_bank).

Finally, a CVB aims to *develop completely new digital ventures or business models* (new to the corporate) outside or close to the corporate core business. This is not primarily about innovation but about creating value quickly by leveraging the company's particular assets (e.g., technology). Even the in-house type operates completely separate from the corporate and builds, invests, and sells its ventures.

“We do not innovate; we are not an innovation unit of the corporate. We do only topics that can generate a scalable venture worth financing. We also do not work for corporate customers. We try to build value and create disruption in and outside the organization through minority investments in totally externalized start-ups to get a return on investment.” (Head of Vehicle, CVB_8).

References

- Ahuja, S. B. (2019). *Why Innovation Labs Fail, and How to Ensure Yours Doesn't*. Harvard Business Review. <https://hbr.org/2019/07/why-innovation-labs-fail-and-how-to-ensure-yours-doesnt>
- Arvidsson, V., & Mønsted, T. (2018). Generating Innovation Potential: How Digital Entrepreneurs Conceal, Sequence, Anchor, and Propagate new Technology. *J. Strateg. Inf. Syst.*, 27(4), 369–383.
- Corbett, A. C., Covin, J. G., O'Connor, G. C., & Tucci, C. L. (2013). Corporate Entrepreneurship: State-of-the-Art Research and a Future Research Agenda. *J. Prod. Innov. Manag.*, 30(5), 812–820.
- Eisenhardt, K. M. (2021). What is the Eisenhardt Method, really? *Strateg. Organ.*, 19(1), 147–160.
- Enkel, E., & Sagemester, V. (2020). External corporate venturing modes as new way to develop dynamic capabilities. *Technovation*, 96-97, 102–128.

¹ The corresponding tabular overview regarding the vehicle's scopes could not be included in the paper due to page limitation,

but will of course be included for the DC. The same applies to the process models of the vehicles mentioned in Step 3.

- Fernandez-Vidal, J., Gonzalez, R., Gasco, J., & Llopis, J. (2022). Digitalization and corporate transformation: The case of European oil & gas firms. *Technol. Forecast. Soc. Change*, *174*, 1–13.
- Fuchs, C., Barthel, P., Herberg, I., Berger, M., & Hess, T. (2019). Characterizing Approaches to Digital Transformation: Development of a Taxonomy of Digital Units. *Proceedings of the 14th International Conference on Wirtschaftsinformatik (WI)*, Siegen, Germany, 632–646.
- García-Luengo, J. (2017). *Venture Building, a new model for entrepreneurship and innovation*. <https://medium.com/@jorgegarcialuengo/venture-building-a-new-model-for-entrepreneurship-and-innovation-79001751d0c6>
- Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking Qualitative Rigor in Inductive Research. *Organ. Res. Methods*, *16*(1), 15–31.
- Göbeler, L., Schaar, D., & Hukal, P. (2020). Initiating Ambidexterity through Digital Innovation Labs. *Proceedings of the 28th European Conference on Information Systems (ECIS), an Online AIS Conference*.
- Haskamp, T., Lorson, A., de Paula, D., & Uebernickel, F. (2021). Bridging the Gap - An Analysis of Requirements for Performance Measurement Systems in Digital Innovation Units. *Proceedings of the 16th International Conference on Wirtschaftsinformatik (WI)*, Essen, Germany.
- Hellmich, J., Raabe, J.-P., & Schirmer, I. (2021). Towards a Foundational and Extensional Dynamic Capability Perspective on Digital Innovation Units. *Proceedings of the 27th Americas Conference on Information Systems (AMCIS)*, Montreal, US, 1–11.
- Hund, A., Holotiuk, F., Wagner, H.-T., & Beimbom, D. (2019). Knowledge Management in the Digital Era: How Digital Innovation Labs Facilitate Knowledge Recombination. *Proceedings of the 27th European Conference on Information Systems (ECIS)*, Stockholm & Uppsala, Sweden.
- Ireland, R. D., Covin, J. G., & Kuratko, D. F. (2009). Conceptualizing Corporate Entrepreneurship Strategy. *Entrep. Theory Pract.*, *33*(1), 19–46.
- Jöhnk, J., Ollig, P., Oesterle, S., & Riedel, L.-N. (2020). The Complexity of Digital Transformation – Conceptualizing Multiple Concurrent Initiatives. *Proceedings of the 15th International Conference on Wirtschaftsinformatik (WI)*, Potsdam, Germany.
- Joshi, M. P., Kathuria, R., & Das, S. (2019). Corporate Entrepreneurship in the Digital Era: The Cascading Effect through Operations. *J. Entrepreneurship*, *28*(1), 4–34.
- Kohler, T. (2016). Corporate accelerators: Building bridges between corporations and startups. *Business Horizons*, *59*(3), 347–357.
- Köhler, R., & Baumann, O. (2015). Organizing for Factory-like Venture Creation: The Case of Company Builder Incubators. *Acad. Manag. Proc.*(1), 1–39.
- Mittermeier, F., Hund, A., & Beimbom, D. (2022). Entrepreneurial Support Systems in the Digital Era: A Taxonomy of Digital Company Builders. *Proceedings of the 28th Americas Conference on Information Systems (AMCIS)*, Minneapolis.
- Nadkarni, S., & Prügl, R. (2021). Digital transformation: a review, synthesis and opportunities for future research. *Manag. Rev. Q.*, *71*(2), 233–341.
- Niemand, T., Rigtering, C., Kallmünzer, A., Kraus, S., & Matijas, S. (2017). Entrepreneurial Orientation and Digitalization in the Financial Service Industry: a Contingency Approach. *Proceedings of the 25th European Conference on Information Systems (ECIS)*, Guimarães.
- Raabe, J.-P., Horlach, B., Schirmer, I., & Drews, P. (2020). Digital Innovation Units: Exploring Types, Linking Mechanisms and Evolution Strategies in Bimodal IT Setups. *Proceedings of the 15th International Conference on Wirtschaftsinformatik (WI)*, Potsdam, Germany, 844–858.
- Schmidt, T., Braun, T., & Sydow, J. (2019). Copying Routines for New Venture Creation: How Replication Can Support Entrepreneurial Innovation. *Res. Sociol. Organ.*, *61*, 55–78.
- Selig, C. J., Gasser, T., & Baltes, G. H. (2019). Effects of Internal Corporate Venturing on the Transformation of Established Companies: Tackling the Digitalization Challenge. In R. Baierl, J. Behrens, & A. Brem (Eds.), *Digital entrepreneurship: Interfaces between digital technologies and entrepreneurship* (pp. 159–183). Springer. https://doi.org/10.1007/978-3-030-20138-8_7
- Shankar, R. K., & Shepherd, D. A. (2019). Accelerating strategic fit or venture emergence: Different paths adopted by corporate accelerators. *J. Bus. Ventur.*, *34*(5), 1–19.
- Strauss, A. L., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Sage Publications, Inc.
- Svahn, F., Mathiassen, L., & Lindgren, R. (2017). Embracing Digital Innovation in Incumbent Firms: How Volvo Cars Managed Competing Concerns. *MIS Quarterly*, *41*(1), 239–253.
- Urbaniec, M., & Žur, A. (2021). Business model innovation in corporate entrepreneurship: Exploratory insights from corporate accelerators. *Int. Entrep. Manag. J.*, *17*(2), 865–888.
- Urbano, D., Turro, A., Wright, M., & Zahra, S. (2022). Corporate entrepreneurship: a systematic literature review and future research agenda. *Small Business Economics*.
- Velten, C., Michel, J., & Özdem, A. (2016). Digital Labs – How to build, how to run. *Crisp Research*.
- Vial, G. (2019). Understanding Digital Transformation: A Review and a Research Agenda. *J. Strateg. Inf. Syst.*, *28*(2), 118–144.
- Weiss, L., & Kanbach, D. K. (2021). Toward an integrated framework of corporate venturing for organizational ambidexterity as a dynamic capability. *Manag. Rev. Q.*, 1–42.
- Yin, R. K. (2018). *Case study research and applications: Design and methods* (Sixth edition). SAGE.