

6-18-2022

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Recommended Citation

Pätzmann, Lena-Marie; Bitzer, Michael; and Back, Andrea, "ORGANIZATIONAL READINESS FOR DIGITAL INTRAPRENEURSHIP: TOWARDS THE DESIGN OF AN ASSESSMENT TOOL" (2022). *ECIS 2022 Research-in-Progress Papers*. 42.

https://aisel.aisnet.org/ecis2022_rip/42

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ORGANIZATIONAL READINESS FOR DIGITAL INTRAPRENEURSHIP: TOWARDS THE DESIGN OF AN ASSESSMENT TOOL

Research in Progress

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Abstract

In today's hyper-dynamic business environment, the capability to foster innovation is critical. Many organizations recognize their employees as an unresolved source for innovation during digital transformation. Consequently, intrapreneurship has become of strategic importance, and initiatives, such as digital intrapreneurship platforms, arise. However, many initiatives do not provide aspired outcomes due to the lack of organizational readiness. We follow the action design research method to design a multi-dimensional framework that measures organizational readiness for digital intrapreneurship. Hitherto, we identify 27 factors that contribute to an organization's readiness for the successful implementation and usage of digital intrapreneurship platforms. Ultimately, we strive to provide a digital intrapreneurship readiness tool that helps innovation managers to detect and remove hindering factors before implementing solutions.

Keywords: Digital Intrapreneurship Platform, Organizational Readiness Assessment, Digital Transformation, Action Design Research.

1 Introduction

Digital Transformation is one of the significant concerns of organizations across different industries (Vial, 2019). Multiple contributions show that digital transformation is less about the sole implementation of digital technologies but more about realizing a holistic business strategy (Kane et al., 2015) that fosters and cultivates entrepreneurial thinking (Bitzer et al., 2021). This entails creating a culture in which employees are encouraged to raise ideas (Berger et al., 2020; Drechsler et al., 2019; Hansen et al., 2011; Reibenspiess et al., 2018), building an environment where people are motivated to experiment (Guinan et al., 2019) and establishing a sense of responsibility to leverage the multitude of opportunities to innovate (Garmann-Johnsen et al., 2020). Thus, to profit from the potential of digitalization beyond lighthouse projects driven by dedicated departments, organizations need to leverage the know-how of all their employees (Drechsler et al., 2019). Consequently, intrapreneurship has taken on strategic importance (Blanka, 2019; Lages et al., 2017; Opland et al., 2022; Pinchot and Soltanifar, 2021), and organizations implement dedicated intrapreneurship programs to achieve business impact and cultural transformation (Benbya and Leidner, 2018; Reibenspiess et al., 2020). A famous example of such a program is Google's side project approach, whereby employees are encouraged to spend 20% of their time working on new ideas regardless of their day-to-day job. Successful outputs of this program are Google News, Gmail, and AdSense (D'Onfro, 2015).

Advances in digitalization now open up organizations' opportunities to foster intrapreneurship (Reibenspiess et al., 2020). To facilitate the management of the idea submission (Benbya and Leidner, 2018; Ciriello et al., 2019) and enhance the development of innovations through digital collaboration, prototyping, and consumer testing functionalities (Ciriello et al., 2014; Viberg et al., 2020; Zimmerling et al., 2016), organizations increasingly implement *digital intrapreneurship platforms* (DIPs). As two-sided platforms, DIPs provide benefits to both innovation managers (administering ideas) and intrapreneurs (submitting and developing ideas) (Reibenspiess et al., 2020). Recent findings show that DIPs promise higher employee motivation to participate and lower costs than non-digital programs (Sandström and Björk, 2010; Benbya and Leidner, 2018; Reibenspiess et al., 2020). Accordingly, Allianz UK recognized an annualized benefit of more than \$28.3 million since introducing a DIP (Benbya and Leidner, 2018). Despite the benefits of DIPs, many negative examples exist where such platforms have not (yet) achieved the desired effect (Feyzbakhsh et al., 2008; Onetti, 2021). Studies show that intrapreneurship does not function similarly well in every organizational setting (Feyzbakhsh et al., 2008; Hornsby et al., 2009; Ireland et al., 2009). Instead, specific organizational factors drive or inhibit the success of DIPs. Additionally, research shows that despite the accessibility and modernity of digital technologies (Harris et al., 2012; Lokuge et al., 2019), innovation with digital technologies demands numerous changes in resources, staffing, culture, decision-making, communication, and reward systems (Bitzer et al., 2021; Lokuge et al., 2018; Lokuge et al., 2019; Nylén and Holmström, 2015; Nambisan and Sawhney, 2011; Sirmon et al., 2011). Therefore, it is arguable that the performance of intrapreneurship with DIPs relies on the organization's capability to create favorable environments, structures, and processes to foster intrapreneurial behavior.

Various scholars propose readiness assessments to enhance the chances of such endeavors (e.g., Lokuge et al., 2019). Thus, intrapreneurship assessments support innovation managers to investigate whether a DIP will reach the desired effect, preventing the organization from wasting its investment due to its missing readiness in using the DIP. Accordingly, the assessment users would be the decision-makers in the organization that want to apply a DIP and organizations that develop DIPs for others and have an incentive that the offered DIP reaches its full potential at their customers.

So far, existing research (e.g., Kuratko et al., 2014; Neessen et al., 2019) provides an essential foundation for understanding critical success factors for intrapreneurship readiness. However, the current literature does not consider the capabilities of digital technologies and how they are changing collaboration in today's and tomorrow's organizations. Consequently, existing assessments are either outdated (e.g., Kuratko et al., 1990) or do not consider digital components of intrapreneurship and their implications (e.g., Kuratko et al., 2014). Thus, there is no evidence on which characteristics determine whether an organization is ready to introduce and leverage a DIP successfully. Against this backdrop, we address the following research question:

What are the factors in evaluating an organization's readiness for the introduction of a digital intrapreneurship platform?

We follow action design research (ADR) to develop a digital intrapreneurship readiness tool (DIRT) as an artifact to answer our research question. We conduct several interviews and workshops during the development process to identify the factors that determine an organization's digital intrapreneurship readiness. Hitherto, our framework comprises six dimensions and 27 factors. The framework builds the conceptual basis for the DIRT design, which we will present in the future. We expect our findings to help detect hindering factors before implementing solutions that cannot thrive under prevailing conditions. We aim to help providers of digital intrapreneurship platforms develop novel offerings that address existing challenges. Further, we expand the digital intrapreneurship literature, which has focused on developing platforms and offerings to enable intrapreneurial behavior (e.g., Reibenspiess et al., 2020) and neglected challenges during the launch that limit chances for successful implementation. Our contribution might be insightful for researchers who want to support intrapreneurship and employee-driven innovation within organizations. Lastly, our results might be insightful for researchers who aim to effectuate digital transformation through digital innovation, e.g., fostering digital bottom-up innovations (Berghaus and Back, 2017).

2 Theoretical background

2.1 Digital Intrapreneurship

Intrapreneurship represents an in-house form of entrepreneurship whereby employees take the initiative in developing innovations within and for their organizations (Vassilakopoulou and Grisot, 2020; Pätzmann, 2021). *Digital* intrapreneurship is a form of intrapreneurship that involves digital technologies as a critical component of innovation (Pinchot and Soltanifar, 2021). The innovation can form a new digital product or service, such as Google's mail service, or digital technologies can *enable* innovation, such as collaboration or computing tools. Consequently, digital technologies can either act as *output* in a new product or as an *enabler* during entrepreneurial activities (von Briel et al., 2018; Nzembayie et al., 2019). This paper focuses on digital technologies (e.g., DIPs) as an *enabler* of intrapreneurship. DIPs support, foster, and accelerate employee-driven innovations so that all employees can participate and intrapreneurial activities can be managed across national borders and departments. Recent research shows that DIPs can increase employees' motivation to engage in intrapreneurial activities (Benbya and Leidner, 2018; Reibenspiess et al., 2020). Further, DIPs can be more cost-efficient as non-digital intrapreneurship programs (Sandström and Björk, 2010; Benbya and Leidner, 2018; Reibenspiess et al., 2020). Based on the definitions by Reibenspiess et al., (2020) and Nambisan (2017), we define a *DIP* as a digital platform encompassing technical elements and associated processes that guide, host, and support intrapreneurial initiatives in organizations. In line with Vassilakopoulou and Grisot (2020), we define *digital intrapreneurship* as the pursuit of entrepreneurial activities within corporate structures *enabled* by digital technologies (e.g., DIPs).

2.2 Intrapreneurship Readiness Assessments

Organizational readiness has gained attention in various disciplines, such as management (Jones et al., 2005; Weeks et al., 2004), healthcare (Fuller et al., 2007; Saldana et al., 2007), and IS (Lokuge et al., 2019; Robey et al., 2008). The concept of *readiness* can be understood through four characteristics: First, readiness is a *state* reached before initiating a particular action can happen effectively (Helfrich et al., 2011; Lokuge et al., 2019). Second, readiness is not a dichotomous ("ready" or "not ready") but a continuous variable (Lokuge et al., 2019). Third, readiness addresses psychological, behavioral, and structural components (Helfrich et al., 2011) and can be witnessed from different perspectives, e.g., the individual, team, or organizational level (Grover et al., 1999; Lokuge et al., 2019, Molla et al., 2009). This study analyzes digital intrapreneurship readiness on an organizational level.

The terms *readiness* and *innovation* have been analyzed and reviewed under two main perspectives in literature (Uzkurt et al., 2013), i.e., an organization's readiness to withstand external innovations of competitors and an organization's readiness to deliver innovation (Lokuge et al., 2019). This paper focuses on evaluating an organization's readiness to enable innovation through DIPs.

The first research paper on assessing an organization's intrapreneurial environment originates from Kuratko et al. (1990). The authors develop an intrapreneurship assessment instrument (IAI) to measure the effectiveness of an environment for the initiation of intrapreneurship. The IAI represents a questionnaire with 28 items that address three dimensions, i.e., *management support for intrapreneurship*, *organizational structure*, and *reward and research availability*. More recently, Hornsby et al., (2002, 2009, 2013) and Kuratko et al., (2014) modified and refined the instrument, now called the corporate entrepreneurship assessment instrument (CEAI). The CEAI from Kuratko et al., (2014) consists of 48 questions addressing five dimensions, i.e., *management support for corporate entrepreneurship*, *work discretion*, *rewards and reinforcements*, *time availability*, and *organizational boundaries*. Although both the IAI and CEAI help understand critical success factors for intrapreneurship, they do not consider the logic and opportunities of digital technologies and how they change collaboration in today's and future organizations. Accordingly, numerous studies on the success of mastering the digital transformation through innovation (Berghaus and Back, 2017; Vial, 2019) have shown that not only the modernity of the digital platforms but also (IT) decision-makers

and organizational culture play a substantial role (Lokuge et al., 2019; Nylén and Holmström, 2015; Swanson and Ramiller, 2004; Weill and Vitale, 2008). However, there has been no empirical investigation of the factors that define an organization's readiness for *digital* intrapreneurship. While we acknowledge that the IAI and its successor help evaluate an organization's readiness for intrapreneurship, we argue that additional dimensions and factors need to be considered for the sustainable usage of DIPs. Therefore, we aim to investigate the factors that define an organization's readiness for digital intrapreneurship and develop a measurement tool that facilitates evaluating whether an organization is ready for the effective adoption, implementation, and exploitation of a DIP.

3 Methodology

3.1 Research Design

General Description of ADR – ADR is a design science methodology for immersive industry-based projects (Mullarkey and Hevner, 2019). Sein et al.'s (2011) ADR model distinguishes between three mutually influential stakeholder groups, i.e., *researcher*, *practitioner*, and *end-user*, thus enabling knowledge transfer from practice to research and vice versa. The model also points out that every stakeholder receives individual contributions from the designed artifact when going through the four stages, i.e., *problem formulation*, *building*, *intervention and evaluation*, *reflection and learning*, and *formalization of learning*. Mullarkey and Hevner (2019) propose an ADR framework, which is a process model based on four stages: *diagnosis*, *design*, *implementation*, and *evolution*. Each stage consists of intervention cycles that go through distinct phases: problem formulation/action planning (P), artifact creation (A), evaluation (E), reflection (R), and formalization of learning (L). Thus, an evaluated artifact as output can be expected after each intervention cycle.

Methodology Selection – We chose ADR for three major reasons: Firstly, ADR is specifically designed to combine researchers and practitioners in the development process of artifacts. Since we draw on theoretical, technical, and practical expertise from practice and researchers and develop the artifact cooperatively, ADR proposes a good fit. Secondly, we address the issue of unsuccessful implementations and usage of DIPs in organizations due to hindering organizational factors, thus covering a real-world problem for the case organization (DIP provider) and other organizations that aim to implement DIPs. ADR follows principles to solve such real-world problems (Reibenspiess et al., 2020; Sein et al., 2011). Thirdly, the case organization's assessment instrument aims to effectuate internal change in organizations that use and implement the assessment. This objective is in line with the interventionist nature of ADR. (Reibenspiess et al., 2020).

Methodology Selection – Firstly, ADR is specifically designed to combine researchers and practitioners in the development process of artifacts. Since theoretical, technical, and practical expertise from practice and researchers guide our research project, and we develop the artifact cooperatively, the ADR methodology proposes a good fit. Secondly, ADR follows principles to solve real-world problems that innovation managers encounter in their day-to-day job (Reibenspiess et al., 2020; Sein et al., 2011). We address the unsuccessful usage of DIPs in organizations due to hindering organizational factors, thus covering a real-world problem for the case organization (DIP provider) and other organizations that aim to implement DIPs. Thirdly, the case organization's assessment instrument aims to effectuate internal change in organizations that use and implement the assessment. This objective is in line with the interventionist nature of ADR (Reibenspiess et al., 2020).

Our approach – To develop our DIRT, we converge the frameworks by Sein et al., (2011) and Mullarkey and Hevner (2019) (Figure 1). We plan to execute seven intervention cycles along the four stages by Mullarkey and Hevner (2019) and aim to integrate the knowledge of researchers, practitioners, and end-users as described by Sein et al., (2011). We expect to develop multiple sub-artifacts as *output* for our research. The *diagnosis* stage seeks to analyze the importance of the problem domain and the relevance of the artifact solution to research and practice (Mullarkey and Hevner, 2015, 2019). Further, we identify the factors that constitute an organization's readiness for

digital intrapreneurship, which builds the foundation for the remaining cycles. This paper presents the artifact of our *diagnosis* stage, i.e., the Digital Intrapreneurship Readiness Framework.

Case Description – Within this project, our *research team*, three researchers from two different universities, cooperates with an organization (*IntraOrg*) that offers DIPs. IntraOrg was established as an innovation team within a large telecommunication company in Switzerland to develop an in-house DIP. Since the platform's launch in 2015, the company has successfully mastered its intrapreneurship journey, gathered over 500 ideas, and launched 17 ventures. The innovation team started offering their DIP to other organizations in the following. In 2021, the innovation team became a spin-off of the telecommunication company and now autonomously works as a company providing business innovation software and solutions. The research team primarily cooperates with IntraOrg's Chief Operating Officer (COO), who has also voiced the initial problem domain, i.e., the unsuccessful implementation and usage of DIPs at their customers due to the lack of organizational readiness. Besides the COO, the *practitioners'* team comprises two sales managers, two customer success managers, the chief product officer (CPO), and a software developer. We expect to address two end-users, i.e., IntraOrg's sales team and any organization aiming to implement a DIP. Due to its pioneering position within the intrapreneurship-platform community, IntraOrg qualifies for providing valuable insights. Moreover, IntraOrg has a valuable network of customers from diverse industries and sizes, which all face the explicated problem in different intensities, ensuring the generalizability of the results. After over eight years of application, experience shows that organizational factors and not technical aspects are responsible for failed platform implementations.

ADR Stages	Interventions	Researchers	Practitioners	End-users	Applied Methods	Output	
DIAGNOSIS	Cycle 1	↔	↔		Literature Search	Workshop-Sessions	<ul style="list-style-type: none"> ✓ Problem and solution domain ✓ Research gap ✓ Research questions
	Cycle 2				Semi-Structured Interviews	Document Analysis	<ul style="list-style-type: none"> ✓ Conceptualization of organizational factors ✓ Digital Intrapreneurship Readiness Framework
DESIGN	Cycle 3	↔	↔		Literature Analysis		<ul style="list-style-type: none"> • Definition of measurement metrics • Definition of technical requirements
	Cycle 4				Semi-Structured Interviews	Analytic Hierarchy Process (AHP)	• Alpha version of the artifact
	Cycle 5						• Revised conceptual and technical requirements
IMPLEMENTATION	Cycle 6	↔	↔		Online Questionnaires	Semi-Structured Interviews	• Revised emergence of artifact: beta version
	Cycle 7						<ul style="list-style-type: none"> • Design principles • Managerial policies for the tool use
EVOLUTION	Contribution:	<i>Design knowledge</i>	<i>Contribution to the specific artifact being designed</i>	<i>Utility for self-assessment</i>	Legend: = Intervention Cycle (P, A, E, R, L); = Digital Intrapreneurship Readiness Tool (DIRT)		

Figure 1. Our research design adapted from Sein et al., (2011) and Mullarkey and Hevner (2019).

3.2 Data Collection & Data Analysis

Data Collection – We chose an explorative research approach for the diagnosis phase. The first intervention cycle started in February 2021 with two meetings where we defined the project's goals. Then, we structured the problem, defined the research design, and elaborated on the research gap. During this stage, we built upon the literature review of Pätzmann (2021) and additional literature search on intrapreneurship readiness assessments (e.g., Hornsby et al., 2009; Kuratko et al., 2014). In June 2021, we conducted a workshop with the COO and CPO to specify the problem, derive design objectives for the solution, and discuss potential user groups and their needs. The first intervention cycle ended when the research and practitioners' team agreed on the research question. Within the second intervention cycle, we conducted four semi-structured interviews and three workshops (Table 1) with the practitioner's team to identify organizational factors that hinder or enable the successful

implementation of their DIP. For the interviews, we used open-ended questions. By default, both researchers were present during the interviews, whereby one researcher led the interview, and the other researcher took additional notes. Overall, the interviews and workshops took 29 to 65 minutes, resulting in 415 minutes of data and 107 pages of transcripts. After the material's transcription, coding, and analysis, we conducted two evaluation workshops to reach a consensus upon the relevant factors and their impact, i.e., "must-have" and "nice-to-have" factors for the assessment. Additionally, we discussed the dimensions that the research team derived during the data analysis and assigned the factors to the dimensions. To enhance our results, we also analyzed internal documents of IntraOrg (e.g., briefing material), communication between customers (e.g., slack channel), and the DIP.

Data Analysis – Firstly, we followed the open-coding process of Corbin and Strauss (2015) and used in-vivo codes. For example, we coded the passage "from my experience, c-level support is the most relevant success factor for intrapreneurship" as the *importance of c-level support*. Secondly, we clustered the codes into first-order concepts (Gioia et al., 2013). To reach a consensus with the practitioners, we discussed the first-order concepts with the COO and labeled the factors as having a positive or negative effect on intrapreneurship. Thirdly, we applied axial coding to draw connections between the first-order concepts and derive second-order themes (Gioia et al., 2013). We consulted existing intrapreneurship literature to improve our framework by reclassifying and renaming the themes (Flick et al., 2004). Fourthly, we allocated the second-order themes, i.e., the hindering factors, to emerging dimensions triangulated from literature. We repeated cycles three and four after the evaluation workshops with the sales and customer success managers. Nevertheless, our data collection and analysis process is not free from limitations: Since we conducted an interview-based evaluation with both the board members and employees, employees might report socially desirable answers (Podsakoff et al., 2003; Reibenspiess et al., 2020). Moreover, the project is conducted with the same DIP. Thus, the involved experience and knowledge are limited to the specific context of the platform.

#	Interaction Type	# Participants	Length (min.)	Job Title of Participants
1	Workshop	2	58	COO, CPO
2	Interview	1	50	Customer Success Manager
3	Interview	1	65	Customer Success Manager
4	Interview	1	44	Sales Manager
5	Workshop	1	64	COO
6	Interview	1	53	Head of Sales
7	Workshop	2	52	Sales Manager, Head of Sales
8	Workshop	3	29	Customer Success Manager

Table 1. Overview of the Data Collection.

4 Preliminary Results

Our *digital intrapreneurship readiness framework* (illustrated in Figure 2) contains six dimensions and 27 factors. We first describe existing factors from previous research and link them to respective references in the following. Then, we describe those factors in detail that extend existing literature.

The *Intrapreneurial Culture* describes the extent to which an organization's culture supports intrapreneurship, such as an *experimentation mindset* (Kuratko et al., 2014), so that employees are not sanctioned for failures, a *transformation attitude* (Kuratko et al., 2014), which enables employees to take calculated risks, and *deliberate collaboration* (Kuratko et al., 2014), which enables knowledge exchange. Compared to earlier assessments, we discovered two new factors: Firstly, a *growth mindset* supports employees in trying new things, seeing challenges as opportunities for development and fostering life-long learning. This factor has become increasingly important in today's digitalized world as employees need to interact and learn with new technologies and shorter product lifecycles. Secondly, employees' *organizational identification* raises employees' likelihood to invest their time and effort. This factor has gained importance due to the trend of continuous job changes.

To ensure success, the intrapreneurship program management has increased in importance. This team is responsible for integrating and marketing the DIP, managing the idea submission process, coaching intrapreneurs, overseeing strategic partners (e.g., top-level management), and motivating employees to participate. Therefore, an intense (time) commitment and high *motivation* of the team members are required. In addition, a solid *internal network*, e.g., to top management or contributors, is essential as it ensures more successful dissemination of the DIP. The *autonomy* to make independent financial decisions ensures better coaching and meaningful allocation of funds to projects. The *team set-up*, i.e., its size and diversity in terms of gender, age, and geographic, departmental, and academic background, plays a substantial role in the program's commitment and success. Further, existing *know-how on intrapreneurship* enables a better coaching process and communication of the program's goals.

With the emergence of DIPs, an organization's Digital Maturity rises as a crucial factor for measuring an organization's readiness for DIPs. This involves the *platform integrability*, i.e., the organization's capability to integrate a DIP into the organization-wide infrastructure. Further, employees' *access to participation* through mobile phones or laptops enables employees to partake in the intrapreneurship program. *Digital communication channels* are vital to reaching all employees across departments, national borders, and, nowadays, home offices. This is essential to communicate the strategy and purpose of intrapreneurship, clarify management's approval, motivate employee participation, and foster communication among employees themselves. *Technology access* describes how an organization makes innovative technologies available to its employees to inspire innovation.

5 Expected Contribution and Future Work

We identify 27 factors contributing to an organization's readiness to implement and use DIPs. We cluster them into six dimensions that build our *digital intrapreneurship readiness framework*. Compared to existing assessments, such as the CEAI (Kuratko et al., 2014), our results emphasize the importance of organization's digital maturity and the role of a team that fosters intrapreneurship within an organization. Additionally, our research reveals that intrapreneurship requires employees' intrinsic motivation. Accordingly, our results suggest that financial rewards might be counterproductive. In contrast, financial and time resources and trust in employees promote intrapreneurship. Our preliminary results complement existing research on developing DIPs (e.g., Reibenspiess et al., 2020) that neglected challenges during the launch. In the future, along with our seven-step research approach, we will continue to develop the DIRT. We will dive into the design and implementation stages and derive the *conceptual* and *technical* requirements. The former includes measuring metrics, such as the evaluation scale, prioritization of factors, number of questions, and readiness score calculation. The latter consists of defining an interface for initiating the assessment in corporate environments, developing a benchmark feature with other companies, implementing the appropriate data visualization, and creating recommended actions for improving the readiness score. Therefore, we conduct a literature analysis, semi-structured interviews, an analytic hierarchy process, and online questionnaires. Our results will provide practitioners with a tool to assess their current digital intrapreneurship readiness, identify hindering factors, and derive potential actions before implementing a DIP. Thereby, we provide practitioners and researchers with insights on what is necessary to leverage DIPs. Future research should build upon our results to integrate our findings within the development and implementation of DIPs to address potential issues before or during the initial usage. Further, while intrapreneurship as one form of bottom-up innovation might support organization's digital transformation (Berghaus and Back, 2017), our factors that describe organization's readiness for DIPs include several aspects that organizations (should) address during their digital transformation (Bitzer et al., 2021). Therefore, we recommend further research on the interplay between (digital) intrapreneurship and digital transformation.

References

- Benbya, H. and Leidner, D. (2018). 'How Allianz UK used an Idea Management Platform to Harness Employee Innovation', *MIS Quarterly Executive*, 17(2), pp. 141–157.
- Berghaus, S. and Back, A. (2017). 'Disentangling the fuzzy front end of digital transformation: activities and approaches', *International Conference of Information Systems, Seoul, South Korea*.
- Berger, S., Bitzer, M., Häckel, B. and Voit, C. (2020). 'Approaching Digital Transformation - Development of a Multi-Dimensional Maturity Model', *ECIS 2020 Proceedings*, (June), pp. 1–18.
- Blanka, C. (2019). 'An individual-level perspective on intrapreneurship: a review and ways forward', *Rev Manag Sci* 13, pp. 919–961.
- Bitzer, M., Hinsén, S., Jöhnk, J. and Urbach, N. (2021). 'Everything Is IT, but IT Is Not Everything – What Incumbents Do to Manage Digital Transformation Towards Continuous Change', *ICIS 2021 Proceedings*, pp. 1–17.
- von Briel, F., Davidsson, P. and Recker, J. (2018). 'Digital Technologies as External Enablers of New Venture Creation in the IT Hardware Sector', *Entrepreneurship: Theory and Practice*, 42(1), pp. 47–69.
- Chebbi, H., Yahiaoui, D., Sellami, M., Papisolomou, I. and Melanthiou, Y. (2020). 'Focusing on Internal Stakeholders to Enable the Implementation of Organizational Change Towards Corporate Entrepreneurship: A Case Study from France', *Journal of Business Research* (119), pp. 209–217.
- Ciriello, R. F., Aschoff, R. Dolata, M. and A. Richter. (2014). 'Communicating ideas purposefully – toward a design theory of innovation artifacts', *22nd European Conference on Information Systems*, Tel Aviv, Israel.
- Ciriello, R. F. and Richter, A. (2019). 'Scenario-based design theorizing', *Business & Information Systems Engineering*, 61(1), pp. 31–50
- Corbin, J. and Strauss, A. (2015). 'Basics of Qualitative Research'. 4th edn. *SAGE Publications*.
- D'Onfro, J. (2015). *The Truth about Google's Famous '20% Time' Policy*, Insider. URL: <https://www.businessinsider.com/google-20-percent-time-policy-2015-4?r=US&IR=T> (visited on 10 November 2021).
- Drechsler, K., Reibenspiess, V., Eckhardt, A. and Wagner, H-T. (2019). 'The Changing Roles of Innovation Actors and Organizational Antecedents in the Digital Age', *Wirtschaftsinformatik Proceedings 2019*, pp. 802–816.
- Feyzbakhsh, Alireza, S., Sadeghi, R. and Shoraka, S. (2008). 'A Case Study of Intrapreneurship Obstacles: The RAJA Passenger Train Company', *Journal of Small Business and Entrepreneurship*, 21(2), pp. 171–180.
- Flick, U., von Kardoff, E. and Steinke, I. (2004). 'A Companion to Qualitative Research'. *SAGE*.
- Fuller, B.E., Rieckmann, T., Nunes, E.V., Miller, M., Arfken, C., Edmundson, E. and McCarty, D. (2007). 'Organizational readiness for change and opinions toward treatment innovations', *J. Subst. Abuse Treat.* 33(2), pp. 183–192.
- Garmann-Johnsen, N. F., Helmersen, M. and Eikebrokk, T. R. (2020) 'Employee-Driven Digitalization in Healthcare: Codesigning Services that Deliver', *Health Policy and Technology*, 9(2), pp. 247–254.
- Gioia, D. A., Corley, K. G. and Hamilton, A. L. (2013). 'Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology', *Organizational Research Methods*, 16(1), pp. 15–31.
- Globocnik, D., and Salomo, S. (2015). 'Do Formal Management Practices Impact the Emergence of Bootlegging Behavior?,' *Journal of Product Innovation Management* (32:4), pp. 505–521.
- Grover, V., Fiedler, K. D. and Teng, J. T. (1999). 'The role of organizational and information technology antecedents in reengineering initiation behavior', *Decis. Sci.* 30(3), pp. 749–781.
- Guinan, P. J., Parise, S. and Langowitz, N. (2019). 'Creating an Innovative Digital Project Team: Levers to Enable Digital Transformation', *Business Horizons*, 62(6), pp. 717–727.

- Hansen, A. M., Kraemmergaard, P. and Mathiassen, L. (2011). 'Rapid Adaption in Digital Transformation: a Participatory Process for Engaging IS and Business Leaders', *MIS Quarterly Executive*, 10(4).
- Harris, J., Ives, B. and Junglas, I. (2012). 'IT consumerization: when gadgets turn into enterprise IT tools', *MIS Q. Exec.* 11 (3), pp. 99–112.
- Helfrich, C. D., Blevins, D., Smith, J. L., Kelly, P. A., Hogan, T. P., Hagedorn, H., Dubbert, P. M. and Sales, A. E. (2011). 'Predicting Implementation from Organizational Readiness for Change: A Study Protocol', *Implementation Science*, 6(1).
- Hornsby, J., Kurakto, D. and Zahra, S. (2002). 'Middle Managers' Perception of the Internal Environment for Corporate Entrepreneurship: Assessing a Measurement Scale', *Journal of Business Venturing*, 9(2), pp. 253–273.
- Hornsby, J. S., Kuratko, D. F., Shepherd, D. A. and Bott, J. P. (2009). 'Managers' Corporate Entrepreneurial Actions: Examining Perception and Position', *Journal of Business Venturing*, 24(3), pp. 236–247.
- Hornsby, J. S., Kuratko, D. F., Holt, D. T. and Wales, W. J. (2013). 'Assessing a Measurement of Organizational Preparedness for Corporate Entrepreneurship', *Journal of Product Innovation Management*, 30(5), pp. 937–955.
- Ireland, R. D., Covin, J. G. and Kuratko, D. F. (2009). 'Conceptualizing Corporate Entrepreneurship Strategy', *Entrepreneurship: Theory and Practice*, 33(1), pp. 19–46.
- Jones, R.A., Jimmieson, N.L. and Griffiths, A. (2005). 'The impact of organizational culture and reshaping capabilities on change implementation Success: the mediating role of readiness for change', *J. Manage. Stud.* 42(2), pp. 361–386.
- Kane, G. C., Palmer, D., Phillips, A. N., Kiron, D. and Buckley, N. (2015). 'Strategy, not Technology, Drives Digital Transformation', MIT Sloan Management Review, pp. 1–27. URL: https://www2.deloitte.com/content/dam/Deloitte/fr/Documents/strategy/dup_strategy-not-technology-drives-digital-transformation.pdf (visited on 10 November 2021).
- Kuratko, D. F., Hornsby, J. S. and Covin, J. G. (2014). 'Diagnosing a Firm's Internal Environment for Corporate Entrepreneurship', *Business Horizons*, 57(1), pp. 37–47.
- Kuratko, D. F., Montagno, R. V. and Hornsby, J. S. (1990). 'Developing an Intrapreneurial Assessment Instrument for an Effective Corporate Entrepreneurial Environment', *Strategic Management Journal*, 11, pp. 49–58.
- Lages, M., Marques, C.S., Ferreira, J.J.M. and Ferreira F.A.F. (2017). 'Intrapreneurship and firm entrepreneurial orientation: insights from the health care service industry', *Int Entrep Manag J* 13, pp. 837–854.
- Lokuge, S., Sedera, D. and Perera, M. (2018). 'The Clash of the Leaders: The intermix of leadership styles for resource bundling', PACIS 2018 Proceedings.
- Lokuge, S., Sedera, D., Grover, V. and Xu, D. (2019). 'Organizational Readiness for Digital Innovation: Development and Empirical Calibration of a Construct', *Information and Management*, 56(3), pp. 445–461.
- Mullarkey M.T. and Hevner A.R. (2015). 'Entering Action Design Research', in: Donnellan B., Helfert M., Kenneally J., VanderMeer D., Rothenberger M., Winter R. (eds) *New Horizons in Design Science: Broadening the Research Agenda. DESRIST 2015. Lecture Notes in Computer Science*, vol 9073. Springer, Cham.
- Mullarkey, M. T. and Hevner, A. R. (2019). 'An Elaborated Action Design Research Process Model', *European Journal of Information Systems*, 28(1), pp. 6–20.
- Menzel, H.C., Aaltio, I. and Ulijn, J. M. (2007). 'On the Way to Creativity: Engineers as Intrapreneurs in Organizations', *Technovation* 27(12), pp. 732-743.
- Molla, A., Cooper, V.A. and Pittayachawan, S. (2009). 'IT and eco-sustainability: developing and validating a green IT readiness model', *International Conference on Information Systems, Seoul, Korea: AIS*, p. 141.
- Nambisan, S. (2017). 'Digital Entrepreneurship: Toward a Digital Technology Perspective of Entrepreneurship', *Entrepreneurship: Theory and Practice*, 41(6), pp. 1029–1055.

- Nambisan, S. and Sawhney, M. (2011). 'Orchestration processes in network-centric innovation: evidence from the field', *Acad. Manage. Perspect.* 25 (3), pp. 40–57.
- Neessen, P. C. M., Caniëls, M. C. J., Vos, B. and de Jong, J. P. (2019). 'The Intrapreneurial Employee: Toward an Integrated Model of Intrapreneurship and Research Agenda', *International Entrepreneurship and Management Journal* (15), pp. 545-571.
- Nylén, D. and Holmström, J. (2015). 'Digital Innovation Strategy: A Framework for Diagnosing and Improving Digital Product and Service Innovation', *Business Horizons*, 58(1), pp. 57–67.
- Nzembayie, K. F., Buckley, A. P. and Cooney, T. (2019). 'Researching Pure Digital Entrepreneurship – A Multimethod Insider Action Research approach', *Journal of Business Venturing Insights*, 11.
- Onetti, A. (2021). *Why most intrapreneurship programmes fail*, Sifted. URL: <https://sifted.eu/articles/why-intrapreneurship-programmes-fail/> (visited on 10 November 2021).
- Opland, L. E., Pappas, I. O., Engesmo, J. and Jaccheri, L. (2022). Employee-driven digital innovation: A systematic review and a research agenda, *Journal of Business Research*, 143, pp. 255-271.
- Pätzmann, L.-M. (2021). 'Enabling Factors of Digital Intrapreneurship: A Socio-Technical Perspective', Twenty-Seventh Americas Conference on Information Systems (AMCIS), pp. 1–10.
- Pinchot, G. and Soltanifar, M. (2021). 'Digital Intrapreneurship: The Corporate Solution to a Rapid Digitalization', in: Soltanifar M., Hughes M., Göcke L. (eds) *Digital Entrepreneurship. Future of Business and Finance*. Springer, Cham.
- Podsakoff, P., MacKenzie, S., Lee, J. and Podsakoff, N. (2003). 'Common method biases in behavioral research: a critical review of the literature and recommended remedies', *J. Appl. Psychol.* 88, pp. 879–903.
- Reibenspiess, V., Drechsler, K., Eckhardt, A. and Wagner, H-T. (2018). 'Enabling Innovation Champions in Organizations - Results of a Systematic Literature Analysis', *Proceedings of the 51st Hawaii International Conference on System Sciences*.
- Reibenspiess, V., Drechsler, K., Eckhardt, A. and Wagner, H-T. (2020). 'Tapping into the Wealth of Employees' Ideas: Design Principles for a Digital Intrapreneurship Platform', *Information and Management*, 103287.
- Reibenspiess, V. A., Drechsler, K. and Eckhardt, A. (2019). 'A Work Model for Employee-Driven Innovation in Public Organizations', *Proceedings of the 27th European Conference on Information Systems (ECIS)*, pp. 1–15.
- Robey, D., Im, G. and Wareham, J. (2008). 'Theoretical foundations of empirical research on interorganizational systems: assessing past contributions and guiding future directions', *J. Assoc. Inf. Syst.* 9(9), pp. 497–518.
- Saldana, L., Chapman, J.E., Henggeler, S.W. and Rowland, M.D. (2007). 'The organizational readiness for change scale in adolescent programs: criterion validity', *J. Subst. Abuse Treat.* 33(2), pp. 159–169.
- Sandström, C. and Björk, J. (2010). 'Idea Management Systems for a Changing Innovation Landscape', *International Journal of Product Development*, 11(3–4), pp. 310–324.
- Sein, M. K., Henfridsson, O. and Rossi, M. (2011). 'Action Design Research', *MIS Quarterly*, 35(1), pp. 37–56.
- Sirmon, D. G., Hitt, M. A., Ireland, R. D. and Gilbert, B.A. (2011). 'Resource orchestration to create competitive advantage breadth, depth, and life cycle effects', *J. Manage.* 37 (5), pp. 1390–1412.
- Swanson, E. B. and Ramiller, N. C. (2004). 'Innovating Mindfully with Information Technology', *Management Information Systems*, 28(4), pp. 553–583.
- Urban, B. and Wood, E. (2015). 'The importance of opportunity recognition behaviour and motivators of employees when engaged in corporate entrepreneurship'. *Journal of Business Economics and Management*, 16(5), pp. 980–994.
- Urbano, D. and Turró, A. (2013). 'Conditioning Factors for Corporate Entrepreneurship: An in(ex)ternal Approach', *International Entrepreneurship and Management Journal* (9:3), pp. 379-396.
- Uzkurt, C., Kumar, R. and Ensari, N. (2013). 'Assessing Organizational Readiness for Innovation: An Exploratory Study on Organizational Characteristics of Innovativeness', *International Journal of Innovation and Technology Management*, 10(4).

- Vassilakopoulou, P. and Grisot, M. (2020). 'Effectual Tactics in Digital Intrapreneurship: A Process Model', *Journal of Strategic Information Systems*. 29(3), 101617.
- Viberg, O., Khalil, M. and Lioliopoulos, A. (2020). 'Facilitating Ideation and Knowledge Sharing in Workplaces: The design and Use of Gamification in Virtual Platforms.' In: Zaphiris P., Ioannou A. (eds). Learning and Collaboration Technologies. *Human and Technology Ecosystems. HCII 2020. Lecture Notes in Computer Science*, vol 12206. Berlin: Springer.
- Vial, G. (2019). 'Understanding digital transformation: A Review and a Research Agenda', *Journal of Strategic Information Systems*. 28(2), pp. 118–144.
- Weeks, W.A., Roberts, J., Chonko, L.B. and Jones, E. (2004). 'Organizational readiness for change, individual fear of change, and sales manager performance: an empirical investigation', *J. Pers. Sell. Sales Manage.* 24(1), pp. 7–17.
- Weill, P. and Vitale, M. (2008). 'What IT Infrastructure Capabilities are Needed to Implement E-Business Models?', *MIS Quarterly Executive*, 1(1).
- Zimmerling, E., Hoflinger, P. J., Sandner, P. and Welpe, I. M. (2016). 'Increasing the creative output at the fuzzy front end of innovation – A concept for a gamified internal enterprise ideation platform'. *Proceedings of the 49th Hawaii International Conference on System Sciences*.