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Completed Research

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Abstract

Companies' increasing reliance on information technology (IT) requires IT service management teams to ensure smooth, efficient, and reliable IT service delivery while learning and experimenting with innovative IT at the same time. These disparate demands create tensions for IT service management teams that are challenging to handle. In our study, we present one approach to effectively managing these tensions. By conducting a single-case study of a high-performance IT service management team responsible for 16,000 end-users in Latin America, we identified crucial activities and prerequisites that help deal with these tensions. In particular, we provide an overview of ten multi-level prerequisites and show that dealing with disparate demands on the team level also depends on organizational- and individual-level prerequisites. By answering several calls for studying the management of different demands at the team level, we contribute to the scarce research on team ambidexterity.

Keywords

Ambidexterity, Team Ambidexterity, Prerequisites, Exploitation, Exploration, Antecedents

Introduction

Managing IT service delivery has become increasingly challenging given the growing reliance of firms on information technology (IT). On the one hand, internal clients expect a smooth, efficient, and reliable IT use in their daily operations (Haffke et al. 2017; Winkler and Wulf 2019). These expectations also involve the fast resolution of technical problems. The permanent pursuit of efficiency and reliability consequently calls for improving IT service delivery continuously. On the other hand, unforeseen and fickle business demands emphasize the necessity to constantly learn and experiment with innovative IT (Engesmo and Panteli 2021). These demands can create tensions since they need different resources, mindsets, cognitive abilities, and systems (Birkinshaw and Gupta 2013). Since managing the IT service delivery is frequently team-based (Jia and Reich 2013), teams need to find ways of coping with these tensions.

Managing disparate demands and tensions is the focus of ambidexterity research (Birkinshaw and Gupta 2013). Gupta et al. (2006, p. 693) define ambidexterity as "the synchronous pursuit of both exploration and exploitation". While exploitation refers to activities that encompass efficiency and execution, exploration is about learning through experimenting and innovating (March 1991).

Although ambidexterity as a nested phenomenon occurs at multiple levels (Gupta et al. 2006; March 1991), most publications have focused on the organizational level, neglecting lower levels such as teams or

individuals (Han et al. 2021). Werder and Heckmann (2019) correspondingly found in their literature review on ambidexterity in the information systems (IS) domain that only three publications address the team level. Several scholars consequently call for more research to better understand how teams manage different tensions concurrently and the requirements for effectively coping with those (Han et al. 2021; Jørgensen and Becker 2017; Werder and Heckmann 2019).

Although publications on team ambidexterity coming from the general management literature may help inform IS scholars on how to pursue team ambidexterity, they mostly revolve around new product development or top-management teams (Heavey and Simsek 2017; Jansen et al. 2016). However, these findings may be of limited value given the specific context of an IT service management team involving a different ratio of innovation and efficiency than a new development team. Furthermore, IT service management teams consist of employees lower than top management level and may face different problems when dealing with the pursuit of ambidexterity (Kauppila and Tempelaar 2016). Given these research gaps, we state the following research questions (RQ):

RQ 1: What exploration and exploitation activities does an IT service management team execute to pursue ambidexterity?

RQ 2: What are potential prerequisites for pursuing ambidexterity in an IT service management team?

To answer the research questions, we conducted a single-case study of an IT service management team that is considered a benchmark for other teams within the IT organization of a multinational health care company. This IT service management team manages end-user services of 16,000 employees in Mexico, Central America, Colombia, Peru, and Ecuador. Our study identifies the exploratory and exploitative activities executed by this high-performance IT service management team. Through an iterative process of analyzing the interview data and existing literature on team ambidexterity, we further identify ten prerequisites supporting the IT service management team in its pursuit of ambidexterity. Although the unit of analysis is an IT service management team, we show that organizational- and individual-level prerequisites influence team ambidexterity.

The remainder of the paper is as follows. Firstly, we clarify the notions of team ambidexterity, followed by describing the research method. We then present the findings of our case study. Finally, we discuss the implications of our findings for research and practice and elaborate on the limitations in the conclusion.

Theoretical Background

Introducing Team Ambidexterity and Prerequisites

In line with several scholars (e.g., Huang et al. 2015; Jørgensen and Becker 2017) we determine ambidexterity as our theoretical basis. Ambidexterity refers to the simultaneous pursuit of the disparate demands of exploration and exploitation (Birkinshaw and Gupta 2013; Raisch and Birkinshaw 2008). Exploration encompasses activities linked to experimentation and innovation, while exploitation refers to the activities related to efficiency and execution (March 1991). The ambidexterity literature on the organizational level mainly considers two approaches to pursue exploration and exploitation concurrently – structural and contextual ambidexterity. Structural ambidexterity proposes organizations divide exploratory and exploitative activities into different units (Birkinshaw and Gupta 2013). Contextual ambidexterity entails that managers design a behavioral context enabling organizational members to divide their time between exploratory and exploitative activities (Gibson and Birkinshaw 2004). Ambidexterity occurs at different organizational levels (Gupta et al. 2006). While most research on ambidexterity has considered the organizational level, researchers paid less attention to the project, unit, individual or team level (Werder and Heckmann 2019). Teams are omnipresent in organizations because of their link to increased task efficiency and effectiveness (Lin and McDonough 2014), which is why research needs to pay greater heed to how ambidexterity manifests at the team level. To substantiate why research on team ambidexterity is essential, we take a closer look at our research context, IT service management teams. IT service management teams engage in routines like managing the solution of technical incidents and supervising the service provider's fulfillment of the contractual duties (Winkler and Wulf 2019). These routines aim to respond to current user needs and ensure a smooth user experience. Team members are also required to reflect on the continuous improvement of the service delivery. They further need to

constantly learn and experiment with new tools to enhance the user experience and keep up with technological advancements. These disparate demands can lead to self-reinforcing tendencies (Levinthal and March 1993). When the IT service management team does not have enough time and space to engage in different activities, it may emphasize one demand over another (Jansen et al. 2016). This overemphasis can have negative performance effects for the IT service management team and end-users. In this regard, an overemphasis on supervising the service provider's fulfillment can prevent the team from activities that revolve around continuous improvement and experimentation. In line with Jansen et al. (2016, p. 941), we define exploratory activities that "facilitate a team to search for, experiment with, and develop new ideas and task-related capabilities" and exploitative activities that "help a team to refine, recombine and implement existing knowledge and skills", respectively.

Extant literature has identified different influencing factors for team ambidexterity, such as team cohesion (Jansen et al. 2016) and team efficacy (Edmondson 1999; Jansen et al. 2016). *Team Cohesion* is operationalized in the literature in terms of helping and getting along with team members and being ready to defend team members to outsiders (Jansen et al. 2016). Additionally, a great deal of trust and dependence on each member (Podsakoff et al. 1993) and a willingness to associate with team members outside of the work context (Lee and Farh 2004) is highlighted. Jansen et al. (2016) relate team cohesion to ambidexterity in saying that the resulting feeling of belonging provides flexibility and the necessary trust to engage in creative thinking and problem-solving. The result is a team environment that allows for the motivation of team members to exchange and act upon complex information freely, and collectively work together to achieve challenging learning goals due to increased commitment. *Team efficacy* is the team's conviction of their collective capabilities to perform well on their designated tasks (Jansen et al. 2016). It is operationalized in the literature as collective confidence within the group and the perception of being known as a high-performing team (Gibson et al. 2000). Efficacious teams are more likely to trust their competencies regarding emerging opportunities and are thus more likely to act upon them (Jansen et al. 2016). Additionally, the collective poise enables the team to cope with the disparate demands posed by ambidexterity. *Team leadership* has been recognized in the literature as another important influencing factor for team ambidexterity (Han et al. 2021; Jansen et al. 2016). A supportive team leader provides feedback, mediates dissent and conflict, and encourages harmonious intra-team relationships. Han et al. (2021) identified a leader's role in creating a context in which the team members feel confident to take risks, thus, connecting to team exploration. In contrast, Jansen et al. (2016) have found leadership to have a moderating role on the effects of team efficacy and cohesion. It impacts additional prerequisites for ambidexterity and can be utilized to moderate their effects. The present studies have examined differing influencing factors for team effectiveness and ambidexterity. These factors are considered prerequisites that might foster ambidexterity. Such prerequisites have garnered less attention at the team level than at any other level (Werder and Heckmann 2019). Thus, in answering our research questions, we aim to examine prerequisites to team-level ambidexterity in a more comprehensive manner in the context of an IT service management team.

Method

Research Setting and Case Selection

Given the context-dependency of the ambidexterity phenomenon (Raisch and Birkinshaw 2008), we adopted a case study approach to examine the complexity of ambidexterity within its natural context (Cao et al. 2009; Garaus et al. 2016). We employed a single-case study that helped gain in-depth insights into the manifestation of ambidexterity in a particular IT service management team (Siggelkow 2007). A single case serves well to study a concept as it is immersed in a specific context since it is concerned with discrete events and happenings. Thus, we emphasize a particular context in which ambidexterity occurs as called for by Raisch and Birkinshaw (2008) and elaborated upon by Jørgensen and Becker (2017). The selected case focuses on an IT service management team operating as part of a large multinational company in the health manufacturing sector. To uphold the anonymity of the company and interview partners, the organization is hereafter referred to as Pharmavax. We chose to study this IT service management team for two reasons. First, we wanted to understand how an IT service management team manages the different demands of exploration and exploitation. Tackling this challenge is of central importance for such teams, as illustrated in the theoretical background. Second, since the team constantly excels at satisfying their

customers, it is seen as a benchmark within Pharmavax's IT organization. Team members frequently present their improvements and solutions to other Pharmavax teams.

Case Description

The IT service management team investigated is responsible for delivering IT services in Mexico, Central America, Colombia, Peru, and Ecuador. In some cases, their reach expands to contribute expertise to the southern regions such as Uruguay, Paraguay, Brazil, Argentina, and Chile. The team ensures the proper functionality of the IT infrastructure and services, comprising both soft- and hardware, for approximately 16,000 employees in the northern Latin American region. Their task portfolio includes supervising the resolution of tickets, digitizing pharma events, organizing trainings, monitoring the migration of IT infrastructure parts to the cloud, introducing collaboration tools needed in the pandemic, and organizing the replacement of PCs. The team does not develop any solutions themselves. Instead, the tasks are accomplished by cooperating with different internal and external IT service providers, such as Atos, Ricoh, Xerox, or Gci. When, for instance, one end-user faces a technical problem, (s)he creates a ticket via the ticket system "IRIS". The IT service management team subsequently gauges whether one of the internal IT service departments or external IT service providers is responsible for solving this ticket. The IT service management team then assigns the ticket to the provider in charge and supervises its progress until it is solved. The team consists of six members: one manager, Julio, four service delivery leads, Ester, Juan, Vera, and Luca, and one operational analyst, Gustavo. Each of the four service delivery leads is responsible for a respective business segment: global services, pharmaceutical, medical equipment, or consumer goods. Global services refer to all shared and centralized services that affect the three previous business sectors (e.g., human resources, finance, and call centers). In contrast, Julio and Gustavo work across all of the business segments. The employment duration of the team members in the service management team ranges from 1.5 to 6 years. The team members are spread out over multiple countries, with Ester, Juan, and Julio located in Colombia, Vera and Luca in Mexico, and Gustavo in Guatemala.

Data Collection and Analysis

The data collection was facilitated by one of the authors who used to work at Pharmavax. Due to personal relations with some of the team members, we could connect with the IT service management team of the Latin American northern region to conduct interviews for this research paper. The personal relationship with the team members created trust and helped the interviewees feel safe in disclosing personal information (Myers and Newman 2007). To start the interviewing process, we conducted an introductory workshop with all six team members on July 8th, 2021, where the interviewers introduced themselves to the team and explained the study's objective. Interviews were held with each team member following a semi-structured approach to structure the open-ended questions while still providing the flexibility to facilitate a smooth flow of conversation (Myers and Newman 2007). The interview guideline addressed three groups of questions. First, we collected general information about the interviewee and their career development and history. Second, we interviewed them on the team's exploratory and exploitative activities. Third, we asked them to identify prerequisites that foster team ambidexterity. Our theoretical foundation to create questions about the exploratory and exploitative activities were, e.g., Jansen et al. (2016) and March (1991). To craft questions concerning the prerequisites of team ambidexterity, we draw on, e.g., Jansen et al. (2016) and Kostopoulos and Bozionelos (2011). Nevertheless, we remained open to exploring new topics and themes during data collection (Eisenhardt 1989). The interviews were conducted in the interviewees' natural language, Spanish, to foster an open and informal conversation (Myers and Newman 2007). They were held in July 2021, lasted from 45 to 65 minutes, and were recorded and transcribed. The subsequent analysis was done in English and Spanish because two of the four authors do not speak Spanish. To minimize any translation errors that might have occurred, we jointly discussed the essential interview passages. We analyzed the interview transcripts using the software "MAXQDA", which helped us analyze, categorize and conceptually organize the interview data (Kuckartz 2014) by providing a means to code and review the transcripts iteratively. As proposed by Miles and Huberman (2009), we constructed a preliminary, tentative starting list of codes, informed by academic publications on defining exploration and exploitation and the prerequisites of ambidexterity (Miles and Huberman 2009). During the analysis, we allowed for new insights to emerge and adjusted and extended our codes accordingly (Walsham 1995). We iteratively consulted the literature to reflect any adjustments. To understand the exploratory and exploitative activities of the IT service management team, we looked for how interviewees described their

day-to-day activities and the different demands they have to satisfy as individuals and a team. We compared and contrasted the activities to group them into the categories *exploratory and exploitative activities*. We additionally analyzed the prerequisites given for conducting the exploratory and exploitative activities. After noticing that prerequisites not only pertained to the *team level*, we added the categories *organizational-level* and *individual-level prerequisites*. This analysis led to the description of exploratory and exploitative activities and the prerequisites of team ambidexterity.
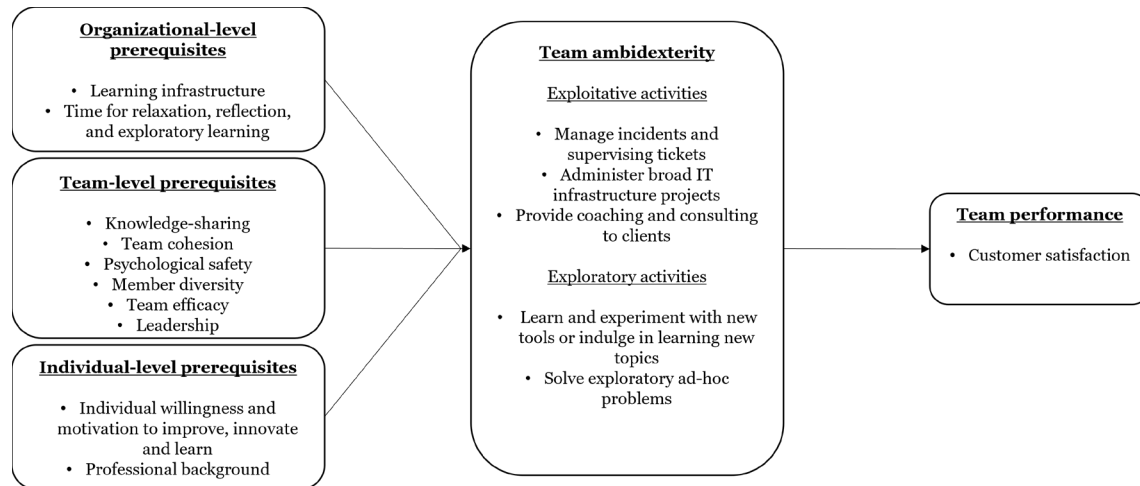
Results

Manifestation of Ambidexterity in an IT service management team

The following sub-chapters shed light on the exploitative and exploratory activities that the IT service management team under investigation executes. While the team's exploitative activities ensure that Pharmavax employees' problems are solved as fast as possible, the exploratory activities aim to improve customers' technological ability. First, we will describe the exploitative activities followed by illustrating the exploratory activities. The IT service management team links Pharmavax's employees and the internal and external IT service providers. As the first contact persons for Pharmavax's employees, one of the central exploitative tasks revolves around *managing incidents and supervising tickets* via the ticket system IRIS. Whenever an employee creates a ticket, team members look for an adequate external support group to solve the incident. Managing the tickets may also include supporting internal customers in creating such tickets. While monitoring the fulfillment of the tickets, the team members are also responsible for escalating the incident to higher managerial levels when support teams do not fulfill their duties. At the center of this task lies the check of whether the service provider complies with the agreed service level agreements (SLAs). It is important to mention that the IT service management team is not responsible for solving the technical issue but bringing the ticket to a successful closure. Another key exploitative task is *administering broad IT infrastructure projects*. One example of such a broad IT infrastructure project is the replacement of PCs and printers, also called "PC refresh". Team members plan, prioritize, supervise the replacement, and coordinate the involved support groups. The continuous technological advancements facilitate the improvement of operational processes but also require the IT service management team to constantly engage in *coaching and consulting* by providing training to internal customers or creating audio manuals for the usage of new tools. At the outset of the pandemic, this involved showing internal customers how to use Microsoft Teams or Zoom. Although the training is not part of the official task role, the team members consider it a decisive task of managing change and IT adoption.

The team also undertakes some exploratory activities that involve experimenting and innovating to keep up with technological progress. The team leader Julio emphasizes the great importance of learning by constantly absorbing new knowledge since what they learn today may be irrelevant or inadequate in one year. Team members dedicate specific time to *learn and experiment with new tools or indulge in learning new topics*. This space for experimenting with new tools helps provide guidance when Pharmavax employees seek counsel regarding which tool improves their operations. This experimentation also builds the foundation for the trainings the team members provide. This orientation towards exploring new knowledge and ways also plays a rather strategic role in answering how the team can support the business more effectively in the future. The interviewees also underscore a second way of exploration, which results from the plethora of distinctive customer necessities that vary considerably and are challenging to prepare for. Hence, team members constantly face situations in which they *solve exploratory ad-hoc problems* but in a way that requires a greater level of learning and experimenting. One example of such ad-hoc exploration was the outset of the COVID-19 pandemic and the conversion to mainly online operations, including working from home. In less than three months, the team members managed to supervise and implement the necessary tools to ensure the continuation of operations for 16,000 customers. While the first type of exploration involves a particular long-term orientation and does not necessarily imply solving a current problem, the latter focuses on the immediate resolution of an ad-hoc issue. The interviews show that balancing exploitative and exploratory tasks is central to their customer-focused orientation. The combination of exploitative and exploratory tasks consequently strives to fulfill and increase customer satisfaction. One interviewee emphasizes this orientation by saying that "we have to ensure that each user can do their job in the best possible way" (Juan).

Prerequisites of Team Ambidexterity

The analysis of the interviews has revealed prerequisites of team ambidexterity on the organizational, team, and individual levels. We subsequently provide more details on the prerequisites on the distinctive levels. Figure 1 depicts a summary of the findings.

```
┌─────────────────────────┐
│ Organizational-level    │
│ prerequisites           │
│ • Learning infrastructure│
│ • Time for relaxation,  │
│   reflection, and       │
│   exploratory learning  │
└─────────────────────────┘

┌─────────────────────────┐
│ Team-level prerequisites │
│ • Knowledge-sharing      │
│ • Team cohesion          │
│ • Psychological safety   │
│ • Member diversity       │
│ • Team efficacy          │
│ • Leadership             │
└─────────────────────────┘

┌─────────────────────────┐
│ Individual-level         │
│ prerequisites            │
│ • Individual willingness │
│   and motivation to      │
│   improve, innovate      │
│   and learn              │
│ • Professional background│
└─────────────────────────┘
```

Team ambidexterity

Exploitative activities

- Manage incidents and supervising tickets
- Administer broad IT infrastructure projects
- Provide coaching and consulting to clients

Exploratory activities

- Learn and experiment with new tools or indulge in learning new topics
- Solve exploratory ad-hoc problems

Team performance

- Customer satisfaction

Figure 1 Summary of results

Organizational-level Prerequisites

The interviews show that some prerequisites on the organizational level foster the pursuit of team ambidexterity. Pharmavax *provides a learning infrastructure* which encompasses, for instance, a platform with various self-study courses to learn new topics such as specific soft skills and Excel functionalities or the active encouragement of taking opportunities for professional and personal growth. Interviewees highlight that the platform contains courses that are free to choose from, and others, in turn, are mandatory. The offer of compulsory courses also shows that Pharmavax encourages its employees to learn continuously. Pharmavax also *provides time for relaxation, reflection, and exploratory learning*. Once a month, there is a meeting-free Friday. On that day, employees are instructed to avoid scheduling any meetings. This allows every Pharmavax employee, including the team members, to detach from the exertions of day-to-day tasks. One interviewee states that he usually has so many meetings that sometimes he does not even have time to go to lunch. Therefore, the meeting-free Friday constitutes enjoying a moment's rest (Juan). The interviews show that team members use this time differently. Some team members dedicate this time to organizing and prioritizing their work packages or processing the flood of unread e-mails in their inboxes. The organization and prioritization entail a level of focus that team members do not have when they are in the bustle of daily operations. These tasks manifest a somewhat exploitative character. In contrast, other team members specifically take advantage of this meeting-free Friday to accumulate new knowledge by reading, for instance, Harvard Business Review articles or taking a course offered on Pharmavax's learning platforms or LinkedIn Learning. This exploratory orientation also includes learning new tools and analyzing how they work and support Pharmavax employees in their daily operations.

Team-level Prerequisites:

In our case study, one crucial aspect that drives team ambidexterity is active *knowledge-sharing* through different channels. First, team members share problems and lessons learned from previous experiences in formal meetings. Sharing problems aims at thinking in the group of how to solve current issues. Our interviews show that this problem solving is more about managing operational tasks and focuses on exploitation rather than exploration. The same applies in the case of sharing lessons learned. Second, team members reach out to specific team peers when problems in their operational tasks occur. This informal problem solving has a rather ad-hoc character as it was not planned before and is mainly oriented towards exploitation. Third, the IT service management team harnesses digital channels provided by, e.g., MS Teams to share knowledge. Here, the interviews stress that knowledge sharing targets both exploitation and exploration. While team members use MS Teams channels to ask for help when facing problems with

current tasks, interesting learning materials such as courses that have a more explorative character are shared. MS Teams also serves here as a repository for exploitative and exploratory knowledge. Another prerequisite for team ambidexterity is strong *team cohesion*. Various interviewees underpin the importance of the team to grow as a unit and not only as individuals to achieve higher goals (Julio; Ester; Juan). In this regard, one interviewee illustrates the high level of team cohesion by describing the IT service management team as a motor consisting of different pieces which work best together (Gustavo). The strong identification with the team is also displayed through the comment that it is a pleasure to work in this IT service management team that helps each other when necessary and looks for the best for everybody (Juan; Ester). Gustavo further explains that the team spirit is grounded in a particular "social warmth", which is not only present in client relationships but also among themselves. This strong relish of working together reinforces a culture of mutual support and complementarity to solve issues related to both exploitative and exploratory tasks. A further trait of the IT service management team refers to the concept of *psychological safety*, defined as "a shared belief that the team is safe for interpersonal risk-taking" (Edmondson 1999, p. 354). Interviewees mention that controversial opinions on how to conduct work are desired and respected by every member. These controversies help to question and consequently improve current ways of service delivery and discuss new ideas. However, Luca emphasizes that it took the team members some time to feel psychologically safe. Psychological safety is also reflected in the team members' perception that mistakes and feedback constitute learning possibilities instead of adverse personal criticism (Ester). Although the interviews reveal a certain level of psychological safety in general, Vera, for instance, states that she opens up to some team members more than others.

The interviewees further underpin that the team's *member diversity* plays a crucial role in their daily problem-solving and creation of new ideas of how to improve their delivery processes and actual service offerings (Gustavo; Juan, Vera; Julio). Member diversity manifests in multiple aspects. Some team members have a long history of working for Pharmavax and bring in-depth know-how of internal processes and a close network of internal and external stakeholders. Other team members used to work in different industries or distinctive organizations within Pharmavax's market and bring in fresh ideas and best practices from other sites to enhance the team's processes. Another aspect of diversity that interviewees deem an advantage is the multiplicity of team members' professions. For instance, three team members studied and worked in fields outside IT such as journalism, law, and business administration. This professional variety helps to see problems from different angles, supports divergent thinking and results in wide-ranging expertise that other team members can draw on when respective knowledge is required. Luca, a technical engineer, appreciates this diversity in professional backgrounds since this may raise questions similar to those of their customers. These questions make him also aware of issues to which he is not sensitized or even blind. For example, the importance of divergent expertise comes into play when conceptualizing and conducting a workshop for a new tool or managing the complexity of SLAs. In these scenarios, the team members frequently rely on Vera's expert journalism knowledge in conveying messages and ask Gustavo for legal counseling. Another characteristic that the team displays is that of *team efficacy*. The team shows this proliferation for trust in their combined performance capability on multiple occasions. Gustavo remarked that they maintain a similar level of quality in their services as a Michelin star restaurant. In addition to the belief in their quality and capabilities, the interviews showed that the team is widely recognized for its successes and known for its high-quality services. Juan, in this instance, reports on the degree of visibility they have achieved and that other regions are looking at them for high-quality solutions to be implemented in the broader scope of the organization. In this regard, Julio and Juan also state that the team is somewhat of a benchmark for IT service delivery at Pharmavax. According to Juan, this recognition and benchmark status as a high-performing team has helped them innovate by striving to meet the expectations placed on them. In contrast, the operative tasks cement the team's belief in their capabilities, as, according to Juan, their customer service is acknowledged and revered by their internal customers. Thus, a cycle ensues where their optimization of operative tasks increases the team's efficacy, which, in turn, helps them in their innovation endeavors.

The interviewees uniformly stress *leadership* as a central prerequisite for pursuing team ambidexterity. The reasons for this high relevance lie in the team leader's moderating role for the other team-level and individual prerequisites. Our interviewees state that the team leader, Julio, creates an open space that allows for a critical discussion of issues and problems and induces a high level of psychological safety. Julio also shows a significant level of trust and encourages empowerment accompanied by an open mind that facilitates team members to be creative and innovative in their daily problem solving and equips them with

great responsibility. Luca states that they never fall on deaf ears with Julio and are encouraged to explore, which has helped the team a lot. On the other hand, Julio provides regular meetings for monitoring the progress of projects and individual growth, which enables a continuous quality assessment and averts situations of missing control or disarray. Furthermore, as the team leader, Julio has a more strategic role by translating Pharmavax's vision into work packages. With the vision in mind and a close relationship with the business leaders, he transforms ideas into projects that aim to challenge the IT service management team members in their professional growth and increase individual and team efficacy. In this regard, Julio emphasizes his expectations that the team members need to actively look for daily challenges to flourish professionally and prepare for superior positions in the future. Ester's comment also shows Julio's importance for backing team efficacy by sharing the IT service management team's good results and best practices with other Pharmavax teams. Consequently, the IT service management team feels that it can contribute to Pharmavax's overall effectiveness, strengthening its efficacy. Ester also ascribes the quality of creating an environment of togetherness and comfortableness to Julio. Finally, since Julio is responsible for the composition of his staff, he essentially contributes to the diversity of the IT service management team. Given the high level of diversity, it does not come as a surprise that Ester underlines Julio's capability of bringing together the two worlds of IT and business.

Individual-level Prerequisites:

In addition to the organizational- and team-level prerequisites, the interviews show that aspects on the individual level also play an important role in pursuing team ambidexterity. Even when the context for conducting exploratory and exploitative activities is provided at higher levels, Julio stresses the significance of *the employee's individual willingness and motivation to improve, innovate and learn* constantly. He continues stating that it is up to the team members to use the meeting-free Fridays or create a plan when the schedule allows for time slots to learn and reflect on potentials for improvement and then execute it. Juan assumes that the team members have a certain intrinsic motivation to learn and mentions that the individual orientation towards satisfying the client urges the members to engage in constant learning. In contrast to other departments, such as HR and marketing, he states that in the area of IT in Pharmavax, motivation practices to engage in learning and innovating are not really in place, which increasingly requires individual team members to motivate themselves. While member diversity has shown to be helpful on the team level, divergent *professional backgrounds* cause difficulties for some team members to solve tickets efficiently while experimenting with new tools. Vera and Ester, whose professional backgrounds do not revolve around IT, particularly need to catch up on fundamental IT topics. This constant struggle to learn the foundations of IT service delivery prevents them from conducting exploratory activities, including reflecting about potential areas of improvement or ways to innovate IT services by acquiring new knowledge outside the team. Vera and Ester additionally underline that this expectation to permanently strive for exploratory learning and experimenting while maintaining a high-efficiency level engenders stress and frustration. The consequence of the divergent professional background and resulting feelings is a decreased belief in their capacities to address the disparate demands of exploitation and exploration. Vera comments that she sometimes hesitates to contribute to team discussions since she does not consider herself an IT expert.

Discussion and conclusion

In this paper, we engaged with the questions of how and through which prerequisites ambidexterity manifests in the context of an IT service management team. To answer these research questions, we studied an IT service management team which is considered a benchmark within a multinational health care company. Our study provides an illustrative example of a team whose contextual prerequisites allow its members to cope with the tensions of ensuring an efficient IT service delivery while simultaneously engaging in learning and innovating. We thereby contribute to the IS literature and practice in several ways. First, by identifying a multi-level repertoire of 10 prerequisites, our findings add to the team ambidexterity research, which has mainly focused on one level alone (e.g., Han et al. 2021; Jansen et al. 2016; Jørgensen and Becker 2017). We address Hirst et al.'s (2018) comment that analyzing either individual or team characteristics in isolation does not do justice to the complexity of teamwork. An interesting example in this regard is the divergence between the perception of the team's efficacy and the individual efficacy (Guzzo et al. 1993). While our interviewees generally perceived the IT service management team as successful in performing disparate tasks, individual members such as Vera and Ester considered themselves less

effective. Future research may investigate how an individual's professional background may influence one's own efficacy and how the difference between team and individual efficacy relates to each other and impacts the pursuit of team ambidexterity. Second, whereas previous research has already provided a list of organizational ambidexterity (e.g., Raisch and Birkinshaw 2008) and individual ambidexterity (e.g., Schnellbächer et al. 2019) prerequisites, we offer an initial list of prerequisites that support team ambidexterity. Third, previous IS literature on ambidexterity mainly focused on the role of the IT artefact, supportive organizational structures, or governance mechanisms. We broaden this body of knowledge by introducing socio-psychological aspects (e.g., psychological safety, team cohesion, and team efficacy), team diversity, and leadership aspects. By doing so, we extend the discussion on ambidexterity prerequisites and answer several calls to include additional contextual factors of ambidexterity (Werder and Heckmann 2019). Our study also has important implications for team managers. When pursuing team ambidexterity, our findings show that team managers constitute a crucial role as they significantly influence whether certain team traits and conditions are in place. As such, team managers need to be mindful of human factors and socio-psychological attributes for supporting ambidexterity on the team level. However, the findings also show that managers need to be sensitized that too much diversity may hinder individuals from coping with disparate demands, provoking stress and frustration. Hence, it is vital for team managers to not only consider individual learning and innovating as tasks that hinge on an individual's willingness but also to assume certain responsibilities to provide a proper context, assert control and consider the individual's cognitive ability to switch between exploration and exploitation (Tempelaar and Rosenkranz 2019). Our study does not come without limitations. First, we only researched one IT service management team in one organization which calls for future studies encompassing a larger data sample to facilitate comparing and contrasting. In so doing, future research can identify additional requirements or even detail whether some of the requirements depend on the team type, team size or team context such as company type, industry, or country culture (Edmondson 1999). Second, this case study is about an IT service management team whose context supports members to balance exploratory and exploitative activities (contextual ambidexterity). Future research can shed light on whether and how the requirements may change when teams use a different approach, such as structural and temporal ambidexterity, to manage the tensions of exploration and exploitation. Finally, even though we interviewed multiple team members to reduce single-respondent bias, a longitudinal study design would be even stronger in uncovering how prerequisites change and impact team ambidexterity over time (Marks et al. 2001).

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