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Digital leadership when utilizing software-as-a-service for strategic planning and implementation

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Abstract

The emerging field of research on digital leadership has defined the constructs and features of digital leaders but lacks insights on how contemporary management can be enhanced through specific technologies. To ensure digital leaders capitalize on strategic opportunities, we employ virtual ethnography to analyze the effective use of software-as-a-service (SaaS) applications for strategic planning and implementation, i.e., Strategic Management SaaS. Our study explores how these Strategic Management SaaS can aid managers in shaping, visualizing, communicating, and implementing firm strategies. Using a critical realist lens on sociomateriality, we develop a framework illustrating that the utilization of Strategic Management SaaS affordances (actions with the SaaS) is multilayered and socially biased. To strategically leverage such software, managers should continuously reassess (1) the technical design and management philosophy behind SaaS, (2) its implemented features and user abilities within the firm, (3) users' perceptions and personal agendas, and (4) the SaaS providers' support abilities.

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1. Introduction

Technologies transform businesses by enhancing their management, influencing their strategies, and enabling new business opportunities (Ahi et al., 2022). Recently, for example, managers' attention has been focused on software-as-a-service (SaaS), a cloud-based digital technology that provides universal accessibility to an online service via the Internet (Cho & Chan, 2015), which has been significantly elevating corporate productivity, scalability, agility, and cost savings (Christ, 2021; Mero et al., 2022; Seethamraju, 2015). In the context of this ongoing digital transformation, digital leadership - the ability to navigate the digital transformation (Hensellek, 2022), i.e., leverage firm's digital resources and cutting-edge technologies strategically to fulfil corporate objectives (Wright & Ritter, 2023) - is becoming vital for every company in a rapidly changing business environment.

The scant and emerging literature on digital leadership has defined its differences from other kinds of leadership activities (Kane et al., 2019) and features of digital leaders (Hensellek, 2022; Oberer & Erkollar, 2018), but has focused less on theorizing about ways of performing digital leadership when utilizing specific technologies. While digital leadership and other management-related literature has often bundled technologies in its theorizing, empirical evidence suggests analysis of utilizing specific technology is likely to increase the quality of advice provided to practitioners and scholars (e.g., Ahi et al., 2022; Šilenskytė et al., 2023).

One such specific technology requiring exploration is SaaS for strategic planning and implementation, further referred to as Strategic Management SaaS. Such applications have been emerging rapidly, promising to enhance contemporary strategic management practices and support managers in shaping, visualizing, communicating, and implementing firms' strategies (e.g., G2.com, n.d.). However, scholarship has insufficiently explored how to use this technology, leaving many open questions about its effectiveness and actions to be taken when employing it with the aim of creating value for a firm.

Exploring the utility of Strategic Management SaaS when seeking to enable business goals requires different approaches from those linear, pre-planned methodologies advocated by various technology adoption frameworks. This is because, in general, all SaaS applications have unique features - they are agile and modifiable - resulting in non-linearity in their adoption and utilization (Mero et al., 2022). SaaS applications are massively scalable systems: they are provided by a centralized data center across a network (Venkatachalam et al., 2014) with multi-tenant architecture (i.e., SaaS can have large numbers of organizations (tenants) adopting it and thousands of users within each tenant) built upon a cloud infrastructure (Tsai et al., 2014). Despite the scale, SaaS has customizable architecture (Tsai et al., 2014) making its applications relatively easily amendable for the needs of the adopting organization. For example, within SaaS such as *Slack*, a specific user can make a number of modifications to personalize their workspace, and tenants can have different features tailored to their needs.

Strategic Management SaaS, in particular, brings different levels of complexity in management compared to other SaaS applications. For example, the level of complexity involved in strategy visualization and dissemination when using *Microsoft 365's* PowerPoint SaaS (Knight et al., 2018) is very different to that involved when using digital interactive visualization interfaces (Azad & Zablith, 2021), or Strategic Management SaaS applications, such as *Cascade*, *Align*, or *Fitbots OKRs*, used for interactively creating and disseminating

firms' mission, vision, and strategic goals across organizational levels in every company unit (G2.com, n.d.).

Because traditional approaches to technology adoption may not be entirely effective when utilizing Strategic Management SaaS, and with the literature on digital leadership lacking insights on successfully utilizing specific technology to enable strategic management of the firm, managers are left with little guidance and are therefore missing opportunities to enhance strategic decision making and strategy implementation in the context of digital transformation. Nevertheless, managers are expected to foresee the utility of and integrate digital technologies into firms' strategic management and daily operations (Hensellek, 2022; Kane et al., 2019; Wright & Ritter, 2023), ensuring that digital transformation is successful (Fitzgerald et al., 2014) and strengthens the firm's position in a constantly changing business environment. To provide the missing guidance, we explore and create a framework for navigating the multilayered process of utilizing Strategic Management SaaS applications and their affordances (planned, actual, and perceived actions with the SaaS), aiming to guide successful undertaking of digital leadership.

2. Conceptual foundations for understanding digital leadership when utilizing Strategic Management SaaS applications

SaaS applications are not a new phenomenon; foundations for their emergence were laid in the 1990s and opportunities for SaaS adoption to enhance core and non-core business operations have been discussed in the literature since the 2000s (Cho & Chan, 2015). Yet many companies have neither managed to entirely embrace this technological offering, nor completely realized its benefits and shortcomings (Christ, 2021). Nonetheless, the SaaS applications' industry has been constantly growing (ReportLinker, 2023), with large (e.g., Amazon, Google, Microsoft) and smaller (e.g., Winningtemp.com, Amplon.io) players suggesting that SaaS can bring numerous ways of creating value to the companies that adopt it.

Research has indicated that adoption of SaaS in organizations depends on a number of factors: (a) environmental pressures, particularly from competitors or partners, (b) technology readiness, which entails issues such as ease of using the technology, security concerns, and compatibility with and relative advantage over other technologies, and (c) organizational readiness, which comprise issues such as business needs, expertise, organizational size, and top management support (Fitzgerald et al., 2014; Kaplan, 2007; Seethamraju, 2015; Van De Weerd et al., 2016; Yang et al., 2015). However, emerging empirical work has demonstrated that the SaaS adoption and utilization process may not be defined by a specific set of constant and universal factors and may not be linear. Instead, it suggests that users' ability to perceive the possible actions to be taken when using SaaS and their ability to take those actions may not be realized when they first begin using SaaS and are likely to change over time, requiring multiple reconsiderations and learning via trial-and-error and by experience; moreover, it requires "a series of imbricated adaptations to both the technological features and the organizational routines based on perceived affordances and constraints" (Mero et al., 2022, p. 585). This is particularly true for SaaS applications oriented toward management

enhancement (Mero et al., 2022) that bring more complexity than simpler or widely familiar SaaS applications, such as *Microsoft 365*.

Strategic Management SaaS is an example of those more complex SaaS applications. Providers claim that such SaaS facilitate tracking of business mission statements, goal attainment plans, and strategic progress monitoring. These applications are presented as enabling managers to articulate and communicate company values, goals, and key performance indicators, essential for goal execution. Typically, they are utilized by company founders, C-level executives, strategists, and board members. They offer collaborative features and comprehensive dashboards for strategic oversight and this is essentially what makes them different from project and task management SaaS applications meant to enable day-to-day operations (G2.com, n.d.). Frequently, Strategic Management SaaS are not mere technological solutions, but adopt specific sets of managerial principles and/or philosophies, such as “Objectives and Key Results” (OKR) (e.g., *Jira*, *Quantive Results* (capterra.com, n.d.), Hoshin Kanri (*I-Nexus*, *Amplon* (Amplon.io, n.d.-b)), or Balanced Scorecard (e.g., *Cascade* (Cascade, n.d.)). Thus, utilization of Strategic Management SaaS simultaneously means utilization of a specific managerial approach for strategic planning and implementation. If a specific managerial approach has not been used before in a company aiming to adopt a specific Strategic Management SaaS, managers and employees will need to learn the approach in addition to learning how to use Strategic Management SaaS.

Therefore, to understand how managers can successfully navigate the utilization of Strategic Management SaaS, it is necessary to explore a multilayered process that involves both easy-to-observe organizational and technology factors, together with harder-to-observe individual perceptual and behavioral factors, and their interaction over time. The interplay of those factors have been captured in the field of management information systems (MIS) and specifically the research on sociomateriality (Leonardi, 2013) and technology affordances (Anderson & Robey, 2017; Fayard & Weeks, 2014; Strong et al., 2014), which we discuss in more depth in the following section.

2.1 Digital leadership when utilizing a specific technology: A critical realist perspective

The term ‘affordance’, whose simplified meaning relates to the potential uses of an object, has been understood and interpreted in many ways, from an entirely social constructivism point of view, in which the use of material objects is unidimensional and fully depends on human perceptions of their utility, to an integrative view recognizing the co-constitutive relations of social and material (Fayard & Weeks, 2014). Leonardi (2013) provides one of the most comprehensive overviews of sociomateriality perspectives, and advocates an alternative critical realist perspective, which recognizes that both social and material aspects of an object exist separately, but also in their interaction. The critical realist onto-epistemology and the concept of affordance grounded in it allows the explanation of *why* certain technology, such as Strategic Management SaaS, and its use appear to be as they are, while considering simultaneously the features of technology (the material), the company setting (the pre-existing structures), and social aspects (perceptions and behavioral aspects) related to the use of technology (Leonardi, 2013; Mingers et al., 2013).

Critical realist onto-epistemology suggests that, even when a certain object, e.g., technology, exists, it and its features may not necessarily be equally visible to all potential users, because human access to the existing world is “limited and always mediated by our perceptual and theoretical lenses” (Mingers et al., 2013, p. 1). In this regard, while technology is designed with the anticipation of certain affordances and the assumption that its user, who comes from a specific context, will have certain abilities and attitudes allowing them to realize the planned affordances, this, in fact, may not be the case (Anderson & Robey, 2017). The user may not necessarily have the needed ability and the company may implement the technology slightly differently to the anticipated manner (especially when technology, such as SaaS, provides easy possibilities for customization), thus affecting affordance potency: the degree to which the planned affordance can actually be realized (Anderson & Robey, 2017). The relationship between the possibility of realizing the technology (affordance potency) and the actual realization of the technology (actualization of affordances) will be further moderated by the user’s perceptions about the affordances of the technology as well as the user’s goals (Anderson & Robey, 2017) (see Figure 7.1).

Therefore, even if digital leaders have the needed attitudes and skills to proactively use and implement technology for firms’ benefit (Hensellek, 2022), according to the critical realist perspective that we employ, they may still not necessarily achieve the desired outcomes. This is because a chain of internal and external interacting issues may reduce digital leaders’ ability to utilize technology. Moreover, many factors are invisible or only partly visible to a digital leader and these factors’ visibility will change over time in a non-linear process (cf. Mero et al. (2022) illustrated this by studying the adoption and utilization of marketing automation SaaS). Figure 7.1 summarizes all the above assumptions by indicating that analysis, evaluation, and formulation of technology use, according to critical realism, will happen with the technology context barely visible to the manager performing digital leadership. In the process of technology utilization, over time, the visibility of the expected and actual contexts will increase, positively affecting digital leadership efforts.

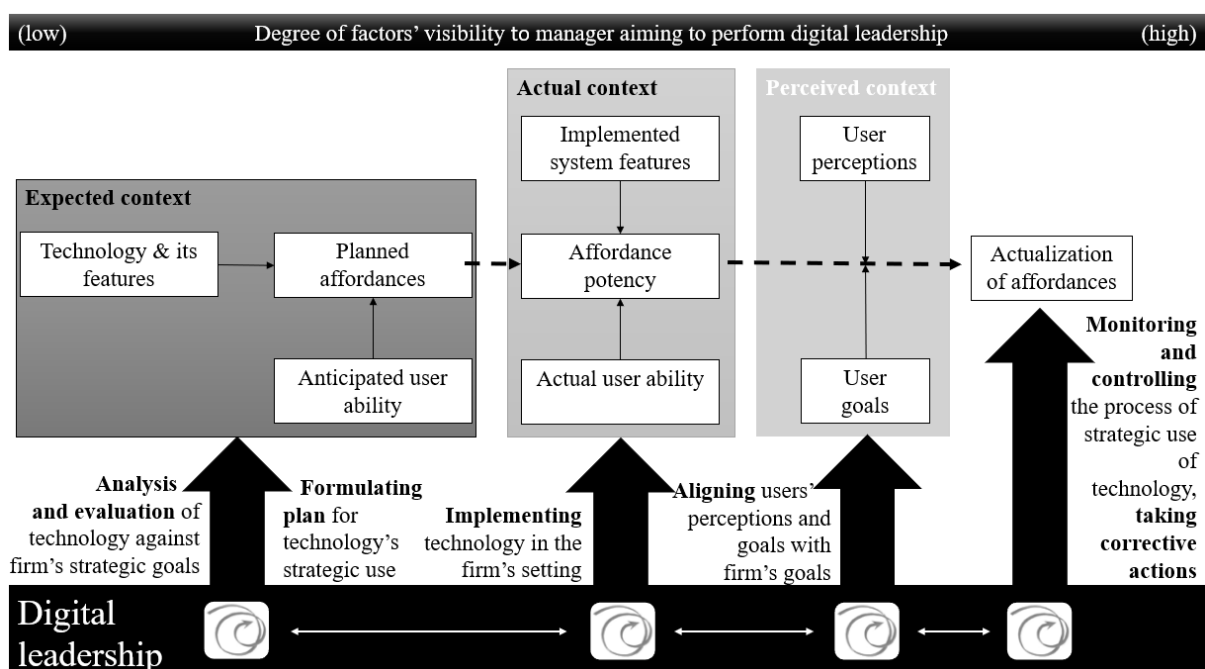


Figure 7.1. Heuristic framework for exploring digital leadership in the technology utilization process (authors' own elaboration, employing insights from Anderson & Robey (2017, p. 112), Mingers et al. (2013), and Mero et al. (2022))

With these assumptions in mind, we have conducted an empirical study to explore digital leadership when utilizing Strategic Management SaaS, asking how managers can navigate this multilayer process successfully.

3. Methodology

The study employed virtual ethnography - an immersion into virtual experiences and observations (Vesa & Vaara, 2014) meant to explore the development and adoption of a specific Strategic Management SaaS. Virtual ethnography was a suitable research method because this study started in January 2021, during the Covid19 pandemic, when SaaS providers operated almost entirely online, and lasted until December 2023, after the pandemic was over, but when SaaS providers were continuing their operations in a distance-working mode. The virtual ethnography was conducted by exploring a specific case - the utilization of a Strategic Management SaaS called Amplon.io (<https://amplon.io/>).

The SaaS Amplon.io has been in the market since 2020 and its utilization was selected as a representative case (Siggelkow, 2007) for several reasons. Amplon.io has all the features to qualify as a Strategic Management SaaS. It also employs a widely known strategic management philosophy - Hoshin Kanri (HK) - developed in Japan and popularized globally through Toyota's success in adopting it (Soliman, 2020). However, Amplon.io is unique since, in addition to offering a standard virtual interface for strategic management, it also integrates a generative artificial-intelligence-based coach to help SaaS users (Amplon.io, n.d.-a), which was expected to positively affect user ability and therefore affordance potency. Moreover, Amplon.io has adopted a very flexible approach to software development: the company has improved the SaaS application according to feedback it receives continuously from its users, supposedly ensuring a minimum gap between planned and implemented SaaS affordances in its utilization process.

To ensure a high quality of research, multiple primary and secondary data within and outside the case were gathered and triangulated (Nielsen et al., 2020). The primary data were obtained from (a) observations obtained from online meetings between Amplon.io potential users and Amplon.io representatives and (b) formal online interviews and informal Zoom/phone discussions with various informants from the Amplon.io utilizing organization and Amplon.io management. The secondary data, such as descriptions of various Strategic Management SaaS, comparisons of them, and user feedback available at g2.com, were also analyzed and compared with the primary data gathered via virtual ethnography. Table 7.1 provides more details of the data sources.

Table 7.1. Data sources and methods used in the virtual ethnography

Constructs within Figure 7.1 to be explored	Informants and data collection method	Further information
<i>Primary data</i>		
<p>Constructs within <i>Expected context</i> of technology. <i>Analysis, evaluation, and formulation of a plan</i> for using technology when performing digital leadership.</p>	<ul style="list-style-type: none"> - Formal virtual interview (1) and informal virtual Zoom/phone discussions (45) with the founder and CEO of Amplon.io; - Continuous testing of Amplon.io by the first author of this chapter, particularly in 2021-2022 at the early stage of its development; - Amplon.io and its business model reviews in virtual Amplon.io Advisory Board meetings (6). 	<p>https://amplon.io/</p>
<p>Constructs within <i>Expected and Perceived contexts</i>. <i>Analysis and evaluation</i> of using technology.</p>	<p>Virtual sales meetings between Amplon.io team and Amplon.io potential users (various firms):</p> <ul style="list-style-type: none"> - Case 1 (C1): International financial service provider (2); - C2: Global aviation service and aircraft provider (2); - C3: Global paper manufacturer (1); - C4: International wire harness manufacturer (2); - C5: Heavy machinery manufacturer (2); - C6: Global electrical appliance provider (3); - C7: International recycled glass product manufacturer (1). 	<p>Note: Further details of customer companies cannot be provided due to confidentiality agreements</p>
<p>Constructs within <i>Expected, Actual, and Perceived contexts</i>. All constructs of digital leadership.</p>	<p>Longitudinal virtual observations and interviews with C7 (international recycled glass product manufacturer), observing Amplon.io utilization in the firm - its headquarters in Finland and subsidiaries in Sweden and Norway:</p> <ul style="list-style-type: none"> - Virtual interviews with the top management team of C7 (14). One set of interviews was conducted at the start of Amplon.io utilization and the other set at a later stage; - Informal Zoom discussions (6) with the top manager from the C7 headquarters leading the international adoption of Amplon.io in the firm. 	
<i>Secondary data</i>		
<p>Constructs within <i>Expected, Actual, and Perceived contexts</i>. All constructs of digital leadership.</p>	<ul style="list-style-type: none"> - Descriptions and comparisons of Strategic Management SaaS available online; - Strategic Management SaaS user reviews available in the online comments under the specific Strategic Management SaaS's virtual description. 	<p>Data available at: https://www.g2.com/categories/strategic-planning-and-execution</p>

The data were analyzed in an abductive manner (Dubois & Gadde, 2002) through the mapping and contrasting of field observations with the heuristic framework indicated in Figure 7.1. The data analysis focused on (1) testing the process indicated in Figure 7.1 and developing it where needed in the context of Strategic Management SaaS utilization and (2) identifying the mechanism(s) (Wynn & Williams, 2012) of successfully performing digital leadership in this complex process of Strategic Management SaaS utilization. In other words, the goal was to answer the research question of *how* managers can successfully navigate the utilization of Strategic Management SaaS. The findings set out in this chapter are limited to those related to the latter research question.

4. Findings

4.1. Expected context of Amplon.io

As indicated in Figure 7.1, the *expected context* consists of technology features, planned affordances, and anticipated user ability. By creating Amplon.io, its founder aimed to reduce the asynchronous, burdensome use of PowerPoint and Excel when designing and implementing strategy, which would often result in inaccuracies when sharing data and communicating strategy, a waste of managers' time spent on manual reporting, and hardship in terms of effectively monitoring and managing the implementation process. Drawing on these challenges experienced when serving in several global top management positions within multinational corporations, the founder of Amplon.io left his successful corporate career to design a Strategic Management SaaS aimed at addressing the above-mentioned shortcomings of the digital tools being used for strategic management.

Thus, when designing Amplon.io, the founder developed features to enable synchronous, interactive, real-time strategic planning and implementation, assuming that the users would be eager to develop effective strategies and implement them efficiently in their firms. Figure 7.2 summarizes the major features of Amplon.io, the affordances for the user they were anticipated to create, and the user abilities that were expected.

Figure 7.2. Expected context of Amplon.io (Authors' own elaboration)

Features of Amplon.io	Planned affordances	Anticipated user ability
Goal-setting matrix (X-Matrix in HK)	Firm's focus on key priorities	Willingness to design and understanding of the components in corporate strategy
Structure to connect long- and short-term goals with strategic projects, their key performance indicators (KPIs), and the accountability of specific managers	Real-time, transparent analysis, evaluation, formulation, implementation, and monitoring of strategic goals and strategy implementation status across the entire firm	Ability to define mutually consistent strategic goals across the firm's products, geographies, and functional areas; willingness to follow up on on-going results
Template to connect strategic plans of all units and lower organizational levels of the firm	Alignment of the firm through easy cascading down of the objectives <i>and</i> enabling of bottom-up participation	Awareness of basics in strategy implementation process; ability to collaborate and communicate in strategy work
Project-planning and portfolio management tools integrated with higher-level strategic-planning tool	Possibility to follow the implementation of each goal when exploring strategic and operational views at the same time	Capacity to translate strategic longer-term goals into concrete short-term projects and coordinate across them; ability to set up a balanced portfolio of strategic projects in terms of shorter-vs-longer-term and mature-vs-innovative activities
Various functions for automatic reporting and strategy visualization	Easily extracting data and visuals for communicating strategy	Appreciation for transparency in strategic management
AI coach integrated in form of bot	Enhanced formulation of strategic goals	Proactiveness in using generative AI for enhancing management effectiveness

Overall, these features and intended affordances, except for the AI coach, are frequently observed in other Strategic Management SaaS (G2.com, n.d.). All of them also have typical SaaS features: immediate access through the web browser, quick updates, and lower initial adoption costs, among others (cf. Kaplan, 2007; Tsai et al., 2014). The major differences between the Strategic Management SaaS (cf. G2.com, n.d.) are related to the strategy-making and implementation philosophies adopted. Moreover, some Strategic Management SaaS target specific industries, either large or small and medium organizations, and others are suggested to be suitable for any context. Amplon.io targets industries in which managers are

willing and able to engage with longer (3-5 year) planning, as this is one of the key principles of HK, which the features were based on.

4.2. (In)visibility of expected context of Amplon.io that hampered actualization of planned affordances

The observations from virtual sales meetings between Amplon.io's team and potential users revealed that most of the technology features and planned affordances were largely invisible to the managers who were analyzing Amplon.io and evaluating the possibility of using it or other Strategic Management SaaS. This invisibility of the planned affordances was related to (1) the quality of the Amplon.io sales team's presentations and marketing materials, (2) the discrepancy between the anticipated and actual user ability, and (3) the fit between the potential users' goals and the perceived ability of Amplon.io to enable them.

Even in the meetings where the sales presentation was done well and the potential users were digital leaders with experience in digital transformation, willing to explore innovative technologies, Amplon.io's planned affordances were considered irrelevant by the top managers if they (a) did not intend to have a clear and transparent strategy implementation process in their firm (C1), (b) were still unsure about the newest strategic direction of the firm (C2), (c) did not want to change how strategic management was performed in the firm (C3), or (d) preferred a flexible and fluid, rather than specific, such as HK, strategic management philosophy (C4). Some top managers were cautious about transferring strategic-level insights to a cloud-based application (C2, C3), specifying that strategic information should ideally remain 'on paper' and accessible to top managers.

Amplon.io's planned affordances were more visible to the top managers who had a personal agenda and were searching for tools to push it forward in their firm or the unit they managed. C7 adopted Amplon.io in the entire group, because the management team wanted to develop a structured, globally shared management system to manage old and newly acquired country units in a consistent way. C5 adopted Amplon.io only at the top leadership team level, because it was perceived as beneficial for pushing the goal-oriented leadership the CEO was promoting. In C6, Amplon.io was adopted only in one country unit at the senior and middle manager levels, because the unit's manager envisioned the need for a tool that could formalize, visualize, and deliver strategy across organizational levels. Managers of other units within C6 did not see the need for such a strategic management tool and perceived Amplon.io's planned affordances as additional bureaucracy, preventing its further utilization across the group.

4.3. Actual context of Amplon.io and actualization of its affordances

Even in situations where all anticipated user abilities, an open mindset, and active engagement with the SaaS implementation were in place, planned affordances were not easily realized. In C7, top managers in two out of three units handling utilization of Amplon.io in the firm had all the anticipated user abilities: they knew the HK philosophy for strategic management and were skillful in using its non-digital version, were willing and able to design and implement corporate strategy, and engaged with Amplon.io actively through testing, utilizing all its features, and even actively co-creating further features through feedback to Amplon.io's development team. They were further supported by the AI coach integrated into Amplon.io, training provided by the Amplon.io team at the start of the adoption, and several

months of personalized coaching from Amplon.io's CEO. As mentioned in 4.2, Amplon.io also supported the C7 managers' agenda for the strategic management of the firm. Thus, the discrepancy between the expected and actual contexts of the SaaS utilization should have been minimal, resulting in a high degree of affordance potency and vast actualization of affordances.

Other factors occurred, however, hampering the realization of these expectations. The top management team and some middle managers had their own perceptions of how and why the Amplon.io application should be used (or not). Moreover, using Amplon.io required managers to work in a unified corporate language, English. While the corporate language change was more related to a post-merger integration process, it was strongly associated with the new way of working brought about by Amplon.io, and not all managers were comfortable with the change.

There were several other challenges that diminished the realization of the planned affordances. They were not only visible in C7, but also mentioned in comments made by other Strategic Management SaaS users (cf. G2.com, n.d.). These challenges primarily related to actual SaaS features (e.g., missing functionalities/features needed to perform desired activities when planning or implementing strategy; (lack of) functionality on portable devices and without Internet; user-(un)friendliness or (un)attractiveness of user interface; uncertainty about treatment of historical data fed into SaaS; obstacles to SaaS integration with databases and other applications firm was already using); and development of the abilities needed to actualize the affordances provided by the SaaS (e.g., need to learn strategy planning and implementation approach across all organizational levels). The latter was further influenced by the company setting (e.g., earlier strategic management practices, flexibility of management) and the Strategic Management SaaS provider's support (e.g., trainings and support available to managers and employees, material on using SaaS provided to the tenant).

4.4. Conditions for digital leadership when utilizing Strategic Management SaaS

Overall, we find that managers who have used Strategic Management SaaS tend to agree that it enables their work by simplifying it (one tool to handle all strategic data, analysis, and reporting; ready-made, communicative visuals to demonstrate progress on strategy work), integrates strategy planning and implementation processes, and promotes accountability by enforcing connections between goals, KPIs, projects, persons responsible, and explanations of rationales for strategic goals. This means that a great number of planned affordances have been realized often by SaaS users. However, the process of actualizing the mentioned affordances is complex.

We began the empirical study with a set of assumptions regarding the conditions within which digital leadership happens (see Figure 7.1) when using a specific technology. We found a number of additional factors and many of them are related to the SaaS users, Strategic Management SaaS provider and its ability to support the adopting firm, and the firm itself. As expected, the process of actualizing the affordances of Strategic Management SaaS is non-linear and affected by various related and unrelated, rational and irrational factors (see Figure 7.3).

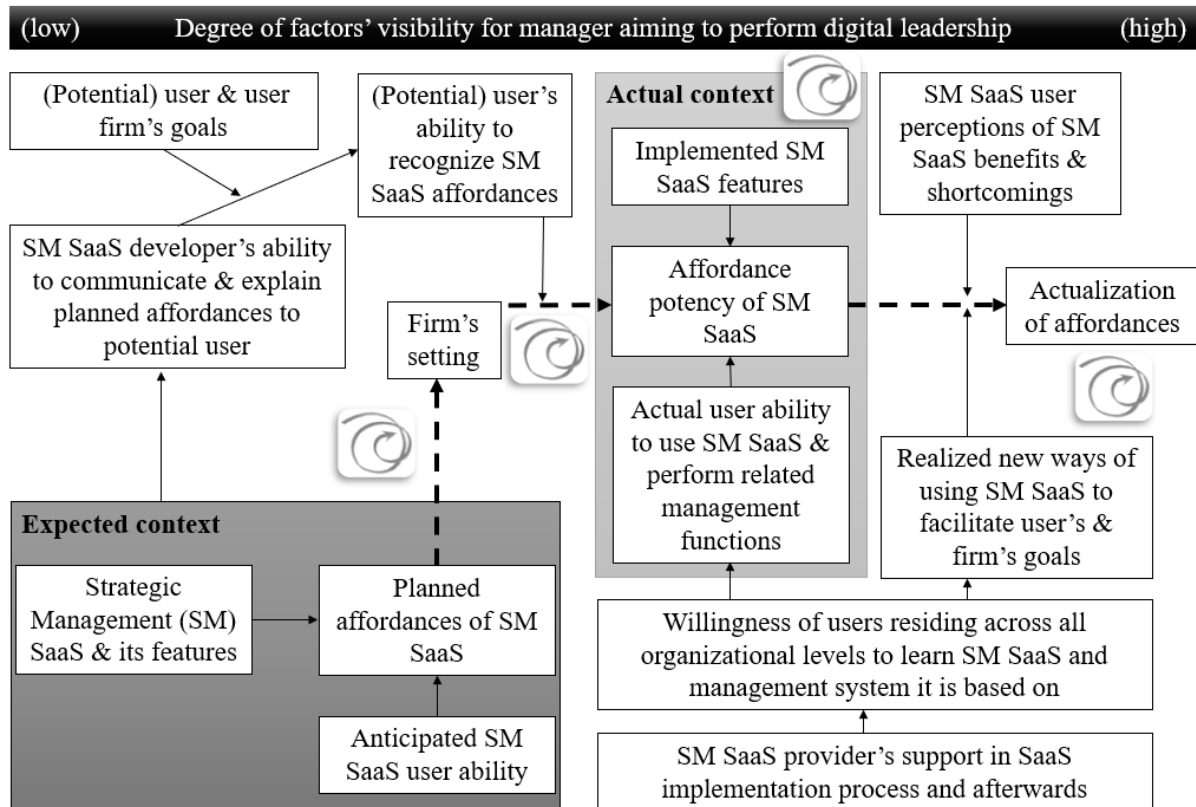


Figure 7.3. Conditions for digital leadership when utilizing Strategic Management SaaS

This has significant implications for digital leadership when utilizing Strategic Management SaaS, which we discuss in the following section.

5. Discussion

While all of the factors defining SaaS adoption indicated previously (Yang et al., 2015) are relevant, managers should realize that their (in)visibility may be different than expected, because the use, actual use, and learning about the use of SaaS is a socio-material process that depends on the interaction of the planned, actual, and perceived features of SaaS, and the abilities and perceptions of the managers, employees, and SaaS provider involved. The evaluation of the utility of Strategic Management SaaS is likely to be biased and therefore change over time. Managers who wish to successfully navigate the complex process of utilizing Strategic Management SaaS to achieve business goals should continuously, in a non-linear manner reconsider (1) SaaS technical design and the management philosophy behind it, (2) SaaS's actually implemented features and actual user ability embedded within the company's setting, (3) users' perceptions of SaaS and their goals and personal agendas when using it, and (4) SaaS providers' abilities to support the SaaS-adopting firm. Given the above, the steps of digital leadership when successfully utilizing Strategic Management SaaS can be summarized in the framework presented in Figure 7.4.

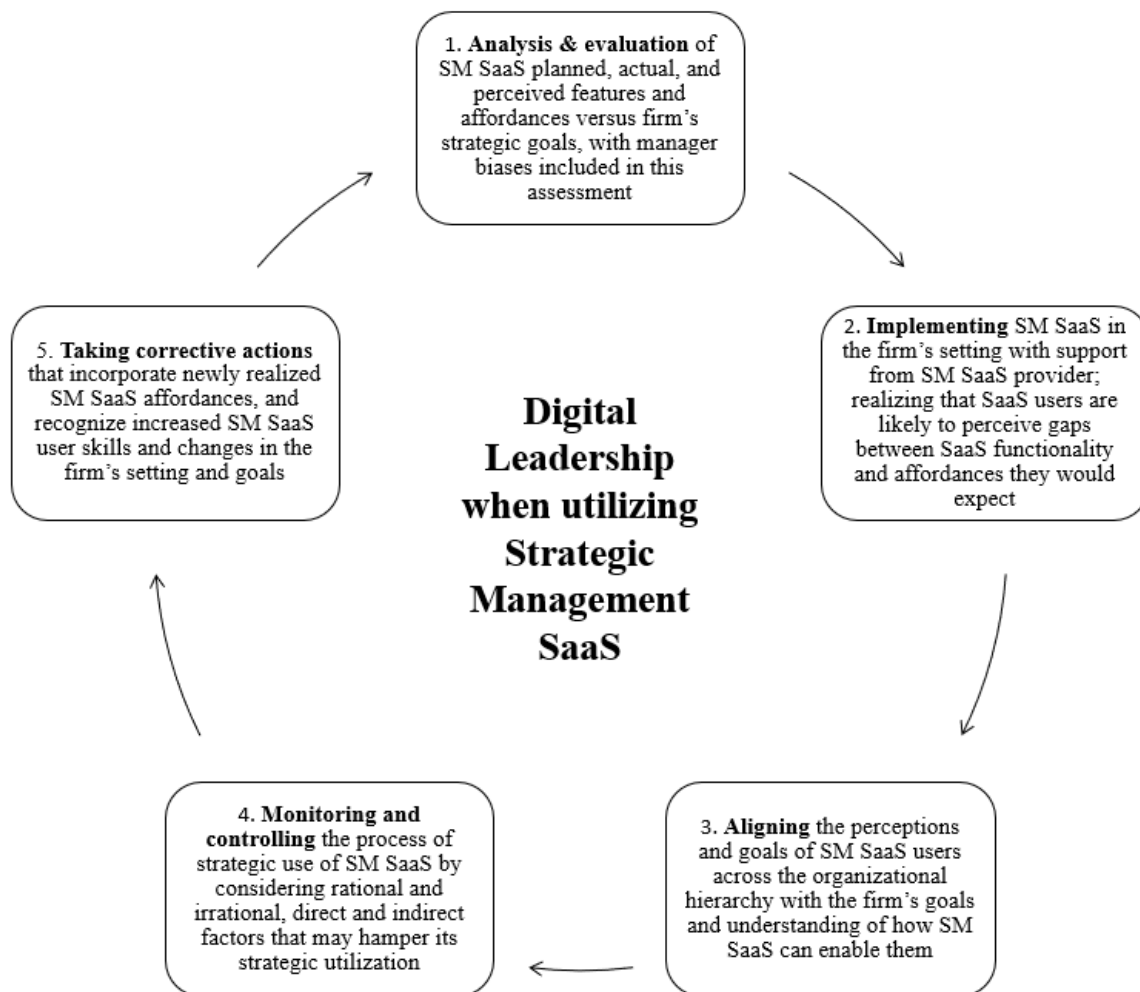


Figure 7.4. Framework of digital leadership when utilizing Strategic Management SaaS

In this regard, digital leaders should promote the continuous enhancement of digital literacy, an experimentation culture, and openness to technology across organizational levels (Kane et al., 2019; Mero et al., 2022), but also literacy, an experimentation culture, and openness to the managerial philosophy that comes with the specific Strategic Management SaaS, so that more of the planned affordances can be realized over time. Moreover, managers should continuously explore multiple perspectives and assumptions about the Strategic Management SaaS in the context of their own goals, their own and their SaaS provider's competencies, and the firm's setting.

Our study contributes to the literature in several ways. First, we contribute to the emerging stream of literature on digital leadership (Hensellek, 2022; Kane et al., 2019; Wright & Ritter, 2023) by elaborating on the undertheorized phenomenon of performing digital leadership when utilizing a specific technology - Strategic Management SaaS - advocated to support the making and implementation of the most important decisions in the firm. Second, our elaboration on the conceptual foundations for comprehending digital leadership and advanced

technology utilization expose the need for further exploration of the critical realist onto-epistemological assumptions that Leonardi (2013) proposes as a fruitful direction for uncovering mechanisms for the successful utilization of technology and Šilenskytė et al. (2022) suggest as a path to comprehending the complex processes involved in the firm's strategic management. Finally, we further advance the affordance actualization framework (Anderson & Robey, 2017; Strong et al., 2014) by recognizing that, in the context of Strategic Management SaaS utilization, the SaaS provider's abilities to present the SaaS and provide support during its adoption in the firm, and the strategic management philosophy behind the SaaS, strongly affect the process of the actualizing of affordances.

6. References

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