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July 2024

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Thomas Steiger

Department for Strategic Management and Leadership, thomas.steiger@uibk.ac.at

Khalid Durani

University of Innsbruck, khalid.durani@uibk.ac.at

Julian Just

University of Innsbruck, julian.just@uibk.ac.at

Katja Hutter

University of Innsbruck, katja.hutter@uibk.ac.at

Andreas Eckhardt

University of Innsbruck, andreas.eckhardt@uibk.ac.at

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Recommended Citation

Steiger, Thomas; Durani, Khalid; Just, Julian; Hutter, Katja; and Eckhardt, Andreas, "From Concept to Creation: Artificial Intelligence in Innovation Teams" (2024). *PACIS 2024 Proceedings*. 16.

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From Concept to Creation: Artificial Intelligence in Innovation Teams

Short Paper

Thomas Steiger

University of Innsbruck
Austria

thomas.steiger@uibk.ac.at

Khalid Durani

University of Innsbruck
Austria

khalid.durani@uibk.ac.at

Julian Just

University of Innsbruck
Austria

julian.just@uibk.ac.at

Katja Hutter

University of Innsbruck
Austria

katja.hutter@uibk.ac.at

Andreas Eckhardt

University of Innsbruck
Austria

andreas.eckhardt@uibk.ac.at

Abstract

Recent developments of generative artificial intelligence (GAI) introduce unprecedented opportunities that are believed to enhance individual skills, particularly creativity, while improving team collaboration. Thus, these novel uses of GAI both on the individual and collective level have the potential to augment the innovation process within teams. Nevertheless, little is understood about how teams leverage GAI to enhance the innovation process. Using affordance theory, this study conducts a field study encompassing 18 teams, with 83 participants to understand the use of GAI during the innovation process. Our findings reveal that profoundly enhance the capacities of teams to innovate by generating, improving, automating, and stimulating sophisticated creative tasks. However, the main benefits of GAI appear to be confined to specific tasks rather than enhancing innovation itself. Our study is expected to contribute to research on the use of GAI at the team level, particularly in the innovation context, and advance affordance theory.

Keywords: generative artificial intelligence, team dynamics, innovation, affordance theory

Introduction

Recent advancements in generative artificial intelligence (GAI) are anticipated to transform numerous aspects of our daily lives progressively. Research indicates that it is already capable of automating certain areas that require human-like creative and cognitive capabilities (Chandra et al., 2022). These advancements offer new capabilities not only to improve efficiency but also to enhance human creativity, by enabling users to generate more advanced ideas and synthesized insights (Grilli & Pedota, 2024). Specifically, GAI furnishes novel affordances (i.e., action potentials), enhancing creative processes and

tasks for the development of innovative ideas and solutions (Melville et al., 2023). For example, one creative task that can be automated through GAI is the creation of creative images (Benbya et al., 2024).

Beyond the individual level, GAI has the potential to assist in knowledge work, for instance, by synthesizing information that can be shared within collaborative environments (Benbya et al., 2024). For example, GAI may foster interactions between humans and machines, alongside team collaboration to produce collective artificial insights (Baird & Maruping, 2021; Dennis et al., 2023; Melville et al., 2023; Rai et al., 2019). Prior research underscores the nascent yet critical understanding of how GAI may transform team innovation. Scholars like Bouschery et al. (2023) have highlighted the need for deeper exploration into how GAI serves as both a collaborator and a facilitator within innovation teams, suggesting that GAI can support and enhance team efforts. Similarly, Gama & Magistretti (2023) discuss the potential for teams to actively engage GAI as a collaborative partner by delegating specific tasks to the technology, while Alavi et al. (2024) propose that GAI can act as a medium for collaboration.

Collectively, these unprecedented opportunities to actualize novel affordances that enhance creativity may have profound implications for innovation. Nevertheless, while innovation is crucial for competitive advantage and human collaborative innovation efforts are vital for generating novel solutions (Jiang & Chen, 2018), the effects of GAI and dynamic team interactions on innovation remain poorly understood (Grilli & Pedota, 2024; Zercher et al., 2023). Studying the relationship between GAI and team interactions is important, considering the potential impact and implications in the innovation context, where GAI integration could fundamentally alter how groups ideate, communicate, and execute projects. Ultimately, the extent to which GAI use can enhance the innovative team process merits further investigation (Dell'Acqua et al., 2023). Thus, our study examines how teams leverage GAI within the innovation process. We specifically seek to address the following research question (RQ):

RQ: How do teams leverage GAI to enhance the innovation process?

To address our RQ, we used affordance theory as a theoretical lens to examine how teams utilize GAI in the context of team innovation. Information Systems (IS) researchers have proposed affordance theory as a pertinent lens to examine team interactions (Waizenegger et al., 2020) and the potential actions enabled by artifacts like GAI (Sabherwal & Grover, 2024). Specifically, we conducted a field study encompassing 18 teams, with 83 participants in a two-day innovation sprint containing three different stages. Our initial results indicate that GAI creates a dynamic setting that enables teams to refine and enhance their creativity, thus broadening innovation horizons by generating, improving, and automating sophisticated creative tasks and stimulating further iterations in the creative process. For example, teams have used GAI for various purposes, from elaborating on broad concepts with detailed information to visualizing ideas that would otherwise remain elusive due to skill limitations. Interestingly, we found indications that the success of innovation output, i.e., concepts generated, minimum viable products, etc., cannot be directly linked to the general use of GAI, but that GAI capabilities are best leveraged on a task-specific basis.

This study is expected to contribute to our understanding of how GAI shapes team collaboration processes (Dennis et al., 2023; Rai et al., 2019), particularly within the innovation context (Bouschery et al., 2023). Furthermore, our study provides novel insights into affordance theory by examining how teams collectively deliberate in order to determine how to leverage Information Systems (IS) artifacts (e.g., Jiang & Cameron, 2020; Knote et al., 2021), specifically GAI, to realize various objectives.

This paper is organized as follows. First, we provide an overview of affordance theory and literature relevant to the phenomenon under investigation. After highlighting extant issues, we describe the methodological foundations of this study and present our preliminary findings. Finally, we discuss the future work and expected contributions of this research endeavor.

Theoretical Background – Affordance Theory

Affordance theory, a concept originally introduced by Gibson (1977) in his article “The Theory of Affordances,” has become a pivotal concept in fields such as psychology, cognitive science, human-computer interaction, and design. The theory seeks to explain how organisms perceive and interact with their environment based on the opportunities and constraints it presents. The article by Evans et al. (2017) emphasizes that affordances are the connection between an object or technology and the outcome or consequences that can be achieved or results through interaction with that agent and the artifact.

In IS research, affordance theory has been applied to examine various phenomena. For instance, Jiang & Cameron (2020) used affordance theory in their study by developing an overarching framework that organizes existing literature on IT-based self-monitoring for chronic disease management, and Knote et al. (2021) used affordance theory to analyze how different material properties of smart personal assistants provide different affordances for value co-creation in smart services. These studies illustrate the wide applicability of using affordance theory to examine IS research phenomena. Recently, IS scholars have demonstrated the applicability of affordance theory to examine the use of technology among teams (Waizenegger et al., 2020). Further, IS researchers have underscored the capacity of affordance theory to explore the capabilities offered by GAI (Leonardi, 2023; Sabherwal & Grover, 2024). Thus, affordance theory enables examining the use of GAI within teams in order to realize certain objectives.

Inspired by the work of Leonardi (2023), we introduce the concept of *team intentionality* to explore the interactions between innovation teams and GAI. This concept refers to how individuals within teams formulate objectives and employ the capability of IT artifacts to fulfill these aims. It is important to understand that team intentionality does not require every member to participate in every decision about using an IT tool such as GAI. In team innovation, individual members do not always collectively determine how to use certain technological artifacts (e.g., Rowe et al., 2023). There are other viable options; for example, a team member might independently use GAI to generate text summaries to help their colleagues better understand certain issues. Such actions still embody the core aspects of team intentionality, underscoring the individual contributions toward collective goals using a tool like GAI.

An Affordance Perspective on GAI in the Team Innovation Context

In today's rapidly changing global landscape, innovation is increasingly occurring in teams with at least two members that often combine diverse and interdisciplinary skills (Zhang et al., 2022). Innovation can lead to novel and valuable solutions that encompass products, services, processes, and concepts, promoting the integration and generation of new knowledge (Gebert et al., 2010). Considering that innovation teams typically establish goals collaboratively throughout different stages of the innovation process (van Knippenberg, 2017), the application of affordance theory and the concept of agency can provide valuable insights into how teams leverage GAI to enhance their innovative endeavors.

Innovation has various forms and manifestations, such as open innovation, which essentially promotes internal organizational inventiveness through outsourcing ideation processes (Chesbrough, 2006), or the stage gate model, which provides a system for launching new products into the market (Cooper, 2008). At its core, innovation encompasses both divergent and convergent thinking (Bouschery et al., 2023). Divergent thinking refers to the process of generating multiple unique solutions and exploring various possible scenarios to address complex problems, thereby laying the groundwork for innovative concepts and breakthroughs in various domains (Reid & Brentani, 2015). In addition, convergent thinking focuses on narrowing down these multiple solutions to identify the most effective and applicable one, ensuring practical implementation and problem resolution within innovative frameworks (Reid & Brentani, 2015).

GAI marks a new era for creative activities, including potentially augmenting divergent and convergent thinking. It is arguably not just a facilitator but an active participant in the creative process. The capabilities of the latest large language models and diffusion models can be characterized as 'generative' in both efficiency and creativity-enhancing activities. This designation highlights their ability to produce outputs that, while falling within a predictable framework of possibilities, demonstrate a remarkable capacity for innovation and creativity (Benbya et al., 2024). More precisely, GAI incorporates advanced algorithms within neural networks to generate intelligently original ideas, designs, and content (Amabile, 2020).

For instance, (Bouschery et al., 2023) highlight the novel opportunities of GAI in enhancing new product development tasks through its capacities (i.e., affordances) in text summarization, sentiment analysis, and the generation of insights and ideas on a large scale. Large language models and generative adversarial networks are considered relevant in the context of innovative processes. For example, GAI may afford to synthesize various information sources that can be shared within innovation teams, such as voice recordings and image content extraction (Benbya et al., 2024). Furthermore, these models afford to generate creative content, such as innovative images or text-based content that contains novel insights. Intriguingly, one pathway through which the innovative process could be enhanced is by affording the delegation of tasks that individuals and teams would have to perform themselves to GAI (Baird & Maruping,

2021). More broadly, GAI provides “superior speed, accuracy, reliability, and scalability than humans” and extends “human competencies such as creativity, empathy, and judgment” (Dennis et al., 2023, p. 310). Ultimately, it has been suggested that GAI has the potential to profoundly transform the innovative process beyond the individual level (Rai et al., 2019).

Still, a gap persists in our understanding of how GAI is used by teams for innovation. Addressing this gap is significant both for theoretical and practical reasons. Theoretically, there has been an ongoing discussion of the extent to which GAI may redefine creative skills. Yet, much of this research is confined to the individual level, while team perspectives have been lacking. This is surprising, considering that teams play a significant role in innovation. The success of such teams, i.e., the implementation of innovation, relies on the team’s creativity (Somech & Drach-Zahavy, 2013). Practically, innovation is considered a significant factor for organizations and has been considered a resource for realizing competitive advantages due to its capacity to generate novel solutions (Jiang & Chen, 2018). Thus, deepening our understanding of the use of GAI within the team innovation process may yield valuable insights that could advance IS research.

Methodology

Our methodological choices were driven by the goal of capturing the multifaceted interactions between teams and GAI. By investigating a diverse and dynamic setting for collaboration, we aimed to study the challenges and opportunities presented by GAI in real-world innovation contexts. This methodology provides a solid foundation for researching the transformative potential of GAI in collaborative innovation and balances the depth of qualitative insights with the rigor of systematic analysis.

To investigate *how teams leverage GAI to enhance the innovation process*, we employed a qualitative research design, conducting 36 focus group interviews over a two-day innovation sprint in November 2023. In this innovation sprint, interdisciplinary teams sought to innovate solutions, concepts, and prototypes that addressed real-world challenges in the context of sustainability presented by five distinct companies, all of which were represented on-site. The first challenge consisted of developing a concept on how to integrate sustainable development goals into a large-scale innovation park to promote scientific and technological cooperation. In the second challenge, the corporate partner sought innovative concepts to create sustainable and needs-based communal and leisure zones. The third challenge concerned a mobility management solution for an economic center to enhance traffic flow and improve the accessibility of commuters. In the fourth challenge, participants were tasked with transforming a campus into a dynamic knowledge hub by using local expertise to advance innovation and sustainability and deliver value to stakeholders from civil society, the economy, administration, and academia. The final challenge involved developing attractive new offerings or reinventing existing ones for tourists during low occupancy times in a specific tourism area. During the sprint, each challenge was represented by employees in these companies, who contributed valuable perspectives and guidance and ensured that the solutions met their actual needs and overcame their constraints. To comprehensively explore team dynamics and the influence of GAI, the sprint included three phases: data gathering about user needs, idea generation, and testing (Liedtka, 2015).

In total, our innovation sprint engaged 18 interdisciplinary teams, each consisting of 4-5 members, resulting in a total of 83 participants. These participants brought a rich diversity of academic backgrounds, encompassing fields such as information systems, strategic management, economics, energy & sustainability, psychology, design and architecture, engineering, biology, and physics. All participating teams comprised individuals with bachelor’s or master’s degrees in these fields; while not all were experts in artificial intelligence, some possessed comprehensive experience with GAI. Each team was granted access to at least one GPT-4 Plus account. This access ensured that teams had the ability to leverage novel GAI advancements, including DALL-E for visual AI tasks and GPT-4 for text-based processing. We conducted two interviews with each group at the end of the two days. In total, these 18x2 interviews culminated in 467 minutes of qualitative data.

Our semi-structured focus group interviews covered various topics of interest, from team collaboration experiences and role evolution to the specific impact of GAI on these processes. Special attention was given to how GAI influenced the development of prototypes, resolution of conflicts, and overall team performance. All interviews were recorded with consent, anonymized, and professionally transcribed.

Using MAXQDA 24, our iterative data analysis procedure followed an inductive logic. Two coders were involved in the coding process. Both coders independently analyzed the data initially. To conduct the

classification and categorization of affordances as coherently as possible and to establish a scientific standard, the coding procedure was informed by the criteria of Evans et al. (2017) for detecting an affordance and the principles of Volkoff & Strong (2017) for the affordance theory application. Afterward, they compared their analytical procedure for further refinement. This process culminated in axial codes, which, in turn, were applied to re-analyze the dataset to sharpen our preliminary findings.

Preliminary Findings

This preliminary data analysis process revealed three distinct affordances of GAI in team settings (see Table 1). We chose this methodological approach for its flexibility and suitability for exploring the various ways in which GAI influences team dynamics and innovation processes directly from the data.

Table 1. Team GAI Affordances		
Affordance	Team Intentionality	Generated Affordance
Innovation Refinement	Deliberation	Refinement of given ideas both during divergent and convergent thinking.
Innovation Synthetization	Envision	Synthetization of different inputs (e.g., data) to stimulate convergent critical thinking.
Innovation Empowerment	Empowerment	Empowerment through skill acquisition throughout the innovation process.

Innovation Refinement

Innovation Refinement pertains to the use of GAI by teams to deliberately refine relatively concrete ideas that they have already envisioned beforehand. Actualizing this affordance is predicated on very specific objectives that innovation teams have in mind, intending to enhance their ideas and concepts. In this context, convergent thinking is the focused refinement of team ideas into specific, actionable plans using GAI. Divergent thinking, however, involves leveraging GAI to explore and generate a variety of innovative solutions. This implies that each member has agreed on the output they seek to generate *a priori*: “*You have a broad idea in mind, but to think about the next step, the implementation, how is it even possible? What are the logistics of such things? That’s where ChatGPT comes in clutch. (AL12_P4).*”

Another group described one special ability of GAI insofar as it is useful “*to have a starting point to refine ideas and to see whether the ideas make sense and whether we are going in the right direction*” (VM12_P2). This statement suggests that working together with GAI allows for the flexible and intentional pursuit of specific ideas, leading to their further development and precise insights. NL10_P1 perceived GAI “*Like an assistant sitting next to you. You can express your idea to and then let them structure it [...]. Or you ask them if they can think of anything else. You instantly get something else.*”

Thus, GAI assumes an integral role within teams by enabling innovation refinement for divergent and convergent idea development processes. However, as mentioned above, it is essential that the idea is already envisaged and the team deliberately chooses to use GAI in order to improve their objective. For instance, one group utilized the output from GAI to evaluate and select ideas, refine and elaborate on the chosen solutions, and assimilate GAI’s feedback into their development process. This approach reaffirmed their consensus on the concept, as they noted: “*It confirmed once again that we all roughly agree with this picture. We had the same picture in our heads. Then, we were able to say more specifically what we would do differently (OI08_P2).*” This instance of convergent application contrasts with its divergent counterpart, where the interaction with GAI serves as a catalyst for the initiation of many innovative pathways. One group describes the further processing of the output generated by GAI as follows: “*We rather took elements from the idea and had them extended by ChatGPT. (OET1_P1).*” The same group described GAI “[...] as an aid, also in terms of background information, for example, on the subject of workation. How long does something like this normally take? What are the influencing factors? Also, how can you present a workation well to the employer? What are the standards? (OET1_P2).” In this divergent approach, GAI is seen as an opportunity to open up the creative horizon, allowing teams to explore a wide range of ideas, solutions, and perspectives that might otherwise be left behind. By fostering brainstorming sessions,

encouraging cross-disciplinary insights, and exploring out-of-the-box solutions, GAI helps bring new possibilities into focus, generate new concepts, and promote a range of problem-solving strategies.

Innovation Synthetization

Innovation Synthetization refers to the envisioned use of GAI by teams to synthesize different data sources; however, unlike Innovation Refinement, teams actualize this affordance without a concrete deliberation, idea, or objective in mind. More accurately, the team's intention is to envision possibilities and pathways that emerge from the convergence of the interplay of information, insights, and creative thoughts. Hence, this affordance uniquely manifests only within convergent innovation processes, emerging from the team's collective, unstructured exploration and synthesis of diverse inputs.

One group described the interaction with GAI to wit: *“ChatGPT at this point, I don't think that's a secret. That definitely helped us at the beginning, in the discovery phase, to simply get a basic principle in somewhere. And then we were able to cherry-pick and coordinate ourselves once again (RO1_P4).”* The truly remarkable aspect of this novel affordance is that *“with ChatGPT, regardless of whether it concerns problems or solutions, you can always move from rough to finer details and gather new insights”* (LG2_P1). Similarly, team UI3_P2 explained their intentionality to employ GAI insofar as: *“Interviewee: We put everything we had inside and asked for a red line to follow. Interviewer: Did it help you there a lot? Interviewee: Yes. As I said, to at least structure all the broad ideas we had.”* They did not have already specific ideas in mind in advance; instead, they harnessed GAI to synthesize their diverse data to obtain a structure on which they could further improve. The case of team UI3_P1 exemplifies this affordance of Innovation Synthetization vividly: by inputting a broad array of ideas and data into GAI without a predetermined direction, they sought a coherent narrative or “red line” to structure their thoughts, demonstrating a desire not for pre-packaged answers but for a tool to facilitate deeper exploration and refinement of their nascent concepts.

A pivotal element in this context is the acquisition of new insights, suggesting that engagement with GAI not only stimulates the team through its dynamic interactions but also fosters a visionary state, which, in turn, enables the generation of more perspectives. This cycle of stimulation and vision underscores GAI's profound impact on enhancing convergent critical thinking. Consequently, it moves teams from broad concepts to differentiated details and novel discoveries as the output of such a human GAI interaction. This approach fosters an environment where innovation can spontaneously arise. It enables the discovery of unexpected connections and the generation of innovative solutions that are not limited by preconceived notions or constraints. In the following quote, LG2_P4 summarizes their experience with GAI, which underlines the aspects just elaborated: *“Yes, I used it extensively. I roughly entered the challenge boundaries into ChatGPT in the first phase to ask the question: “What challenges and problems do you see with the challenge in particular?” Based on this, I was already able to use one or two keywords to complete the rough categorization, which caused me problems at the beginning. What's good about ChatGPT, of course, is that once you have a general idea, you can always ask for specific details: What would be subcategories of problem XY? Then you come back to new circumstances.”*

Another example of how GAI fosters team creativity is by bringing together team members' individual creative ideas into a synthesized, shared version, which promotes a unified understanding. Using the visual capacities of GAI, team LG1_P4 synthesized their collective thought space: *“You always have an idea. Everyone probably had a similar one. Then they [GAI] bring out a picture that hits it a little bit everywhere. That was the amazing thing.”* In this scenario, the use of GAI is particularly illuminating, as it produced a visual representation that encapsulated the collective insights and perspectives of each team member. This convergence in imagery allowed them to deepen their understanding of the challenge. Moreover, it provided a tangible basis for further exploration and discussion of the subject matter.

Innovation Empowerment

The Affordance Innovation Empowerment reflects the skills-enhancing and enabling process in both convergent and divergent innovation stages. This means that, on the one hand, GAI provides the teams with skills that they themselves possess but are unable to apply for various reasons, or, on the other hand, GAI provides the teams with skills that they do not possess and that are only made possible through the use of GAI. This affordance differs from the previous ones in that it empowers teams to consciously realize ideas

and projects by directly enhancing their skills or enabling entirely new capabilities, unlike Innovation Refinement and Synthetization, which primarily focus on optimizing pre-existing ideas and fostering collective, unstructured exploration. NB12_P2 describes the interaction between him and his group as follows: *“Creating the logo was a matter of five minutes. [...] Especially with graphics, that’s crazy, otherwise we would have to draw or do a few things in Photoshop. It takes ten times as long as typing something in and you get ten suggestions. You can pull something out of there and still edit it.”* This reflects the empowerment capacity of GAI, which makes it a powerful companion in the creative process.

The affordance, which can also be interpreted as either empowerment, skill erosion, or democratization of skills, depending on one’s perspective, manifests in several key ways: *“AI helped us to give our idea visual expression. Without us having to spend three hours drawing first. We quickly got our idea out of our heads and into something tangible.”* (LG1_P2) Hereby, the team intended to utilize GAI to visualize a specific idea. Recognizing their limitations in using conventional digital tools to draft their ideas, they turned to GAI and leveraged its capabilities to provide them with the means to visualize their concept effectively. Moreover, LG1_P1 acknowledged their ability to undertake the task independently, without GAI, but emphasized that it augmented their skills through a faster and more streamlined approach.

The following observation aligns with the previously mentioned skill-enhancing aspect, where GAI effectively compensates for the team’s existing limitations and showcases its role not just as a tool but as a critical enabler in extending creative and operational boundaries. The following quote illustrates the deliberate choice to employ GAI for such a situation and even compares it with the skills of a professional graphics designer: *“LG1_P3: Otherwise, we wouldn’t be able to do that with our skills in the team. LG1_P4: Even a graphic designer would need hours to create something like that.”* Such empowerment helps bridge the skill gap in specialized areas, such as graphic design and affords teams to produce complex visual output that would otherwise require extensive expertise and hours of work. This access to GAI skills significantly levels the playing field so that all team members can contribute various visually compelling ideas regardless of their individual creative abilities. As a result, the output is used to accelerate task accomplishment or completely fill a team’s skill gap.

Expected Contributions and Future Work

The analysis of the interviews revealed three affordances of GAI in team innovation settings: First, Innovation Refinement, which refers to the deliberate elaboration of clear ideas. The teams interacted with GAI with a collective idea already in mind to utilize its generative capabilities to enhance the conceptualization of their idea. Second, affordance Innovation Synthetization describes how teams used the GAI to synthesize a variety of information to reach a consensus, albeit only with a rough idea in mind. Third, Innovation Empowerment, describes the situations in which the GAI provides its skills for team members in specific tasks. Here, the GAI acts either as an extension or a substitute for the team member’s skills. Collectively, all these affordances profoundly augment the innovative team process.

Next, we plan to collect another dataset within a different innovation sprint setting. In total, we expect to analyze more than 35 teams, encompassing more than 200 participants. Afterward, we seek to analyze this extensive dataset to deepen our understanding of the affordances that GAI offers for innovation teams. In addition, we will extend our analysis by investigating the constraints of GAI. This analysis is necessary, given that our preliminary findings indicate that GAI usage is typically confined to accomplishing specific tasks. This finding thus suggests that constraints exist that may hinder the full utilization of GAI in team settings, particularly for innovative pursuits. Specifically, we aim to understand the extent to which constraints exist with respect to both input (e.g., the data that can be processed by GAI) and output (e.g., how generated data outputs, such as (visual) information, may not yield utility).

Drawing on Nambisan et al. (2017), we also seek to examine the socio-cognitive sensemaking process within innovation teams. This process refers to how teams “make sense and discover new meanings around digital technology and construct-related use scenarios and affordances” (Nambisan et al., 2017, p. 227). In other words, our investigation will extend to how and why teams differ regarding the affordances they actualize, as well as the constraints they encounter. Here, the focus will be on understanding how team members interact to collectively determine how to leverage GAI for specific tasks during the innovation process. One potential theoretical contribution that this analysis may yield is how teams initially experiment with GAI to

gain knowledge on the effective usage of such artifacts. This sensemaking process may be unique in the context of GAI usage, as this technology is profoundly more flexible in its application scenarios.

In addition, we will carefully consider whether the use of the Delphi method or an experimental approach to investigate individual and team GAI use can further support our research objectives. Firstly, by involving a panel of experts in the field of AI, we could ensure that the data and insights gathered are based on consensus-based expert opinion and further increase the credibility of our results. Secondly, by experimentally investigating different scenarios, we could identify how, why, and when GAI constrains innovation teams, providing a comparative perspective on scenarios with and without GAI utilization. We expect that this data will help us identify the specific constraints of GAI in team settings.

To sharpen our theoretical contribution, we aspire to categorize teams into various archetypes. Specifically, we expect that due to different cognitive sensemaking processes within teams, the actualized affordances may also differ, thereby fundamentally shaping the innovation process. Ultimately, the goal of our endeavor is to create a framework that explicates GAI usage within teams. This includes understanding how and why teams use GAI in various and diverse ways, as well as the actual impact it has. For example, it is yet unclear if higher GAI usage does indeed lead to improved performance outcomes compared to those who only sporadically or solely rely on their personal skills. By analyzing these aspects of our data set, our study is expected to contribute to our understanding of human-computer interactions, specifically GAI usage within teams, along with its impact on performance. Thus, our study may advance research on affordance theory by providing novel insights into how teams collectively determine how to use specific IS artifacts.

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