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Managing in the Middle with AI:

A Qualitative Study of How Middle Managers Perceive the Integration of Generative AI in Their Work

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Abstract

The rapid integration of generative AI into organizational life is reshaping how tasks are performed, decisions are made, and managerial roles are enacted. While prior research has theorized AI's transformative potential, little empirical work has examined how these developments are perceived by middle managers, key actors responsible for translating strategy into practice and facilitating technology adoption. This study explores how middle managers perceive the impact of generative AI tools, such as ChatGPT and Microsoft Copilot, on their responsibilities, decision-making, and communication. Based on 22 qualitative interviews across technology, IT consulting, and manufacturing sectors. The study adopts a relational perspective on AI (Anthony et al., 2023; Bailey et al., 2022), viewing AI as an embedded actor in organizational systems. Findings show that while managers do not view their roles as fundamentally changed, they describe significant shifts in practice, from producing to reviewing content, from consulting colleagues to using AI, and from fixed responsibilities to broader areas of responsibility. AI is seen as a supportive assistant that enhances productivity and knowledge access. However, we argue that AI may reduce spontaneous collaboration, raising questions about evolving relational dynamics and the future of managerial expertise.

Keywords: Middle Management, Generative AI, Relational Perspective, Managerial Roles, Organizational Change, Digital Transformation

1. Introduction

The relationship between organizations and technology has long been central to organization studies, but the rapid advancement of digital technologies has reshaped roles, decision-making, and organizational structure (Bailey et al., 2022). From industrial mechanization to digital platforms, each technological leap has profoundly reshaped how organizations structure work, expertise, and control (Imran et al., 2021; Vial 2019). A key driver of the digital change today is the emergence of learning algorithms, which can automate cognitive tasks and influence decision-making processes (Faraj et al., 2018, Akter et al, 2022). These algorithms, particularly in the form of generative AI, are no longer passive tools used to support human activity, they actively shape organizational practices and interactions. Rather than viewing AI as a neutral instrument, recent research suggests that it should be understood through a relational lens, where AI systems are seen as actors that participate in shaping decisions, workflows, and social dynamics within organizations (Anthony, Bechky, & Fayard, 2023). In this study, we focus specifically on generative AI systems such as ChatGPT, Microsoft Copilot, and Gemini, that are increasingly integrated into knowledge work and managerial routines. These technologies automate cognitive tasks like writing, summarizing, interpreting information, and even contributing to decision-making processes.

Although generative AI is becoming a routine part of work in many organizations, we still know relatively little about how it is reshaping roles within them. So far, how managers interact with AI has largely been overlooked by management scholars (Raisch & Krakowski, 2021). Middle managers have received, comparatively to managers and knowledge workers, even less attention. A search on Scopus using the keywords “AI and Knowledge Work” yields over 3,000 results, whereas a search for “AI and Middle Management” returns only 13. Suggesting that this is an overlooked area. Yet middle managers are often the ones expected to implement new technologies, mediate between organizational layers, and manage shifting expectations (Balogun, 2003). Understanding their experiences is therefore essential for capturing how AI is transforming not only tasks, but also the structure and meaning of managerial work.

The work of middle managers has been described and defined in various ways. Often, it is seen as a role caught in the middle, characterized by navigating the expectations of top management's decisions while simultaneously addressing the operational realities of the organization. Some perspectives instead emphasize the processes they undertake and the practices inherent to their position (Tengblad & Vie, 2012; Dille, 2023). Others focus on how middle managers are psychologically affected by organizational changes and how they adapt to and cope with these shifts (Newell & Dopson, 1996; Dille, 2023). What emerges is a clear understanding that the work of middle managers is inherently ambiguous and varies across organizations. However, one consistent theme is that middle managers often feel squeezed between the demands of top management and operational responsibilities (Tengblad & Vie, 2012; Van Rensburg et al., 2014). As learning algorithms reshape expertise, control, and coordination (Faraj et al., 2018), middle

managers are likely to experience these shifts most directly. While AI can help middle managers handle tasks more efficiently, it may also affect how their roles are defined and understood. As AI takes on more responsibilities, what it means to manage and where human judgment is most needed may begin to shift.

Middle managers have traditionally played a key role in enabling communication, coordinating teams, and translating strategic goals into operational action (Rouleau & Balogun, 2011; Tengblad & Vie, 2012). Their work often involves navigating ambiguity, managing expectations, and adapting to shifting situations, areas now increasingly influenced by AI tools that can summarize documents, interpret information, draft communications, and support decision-making. As these technologies become part of everyday routines, they may begin to subtly alter how middle managers approach their responsibilities and how their roles are perceived within the organization. Research by Faraj et al. (2018) outlines several consequences of learning algorithms for work and organizational structure, including the transformation of expertise and the redefinition of occupational boundaries. However, these insights remain largely theoretical, and there is a lack of empirical research on how such transformations are experienced by those directly affected. Understanding how this transformation affects middle managers is important because they play a central role in translating strategic decisions into practice, coordinating teams, and maintaining organizational continuity, functions that could be increasingly mediated by AI (Rouleau & Balogun, 2011: Faraj et al. 2018). At the same time, Anthony et al. (2023) call for more grounded studies of how AI becomes entangled in social and organizational processes, especially how it interacts with human actors in shaping roles, expectations, and control.

The purpose of this study responds to those calls by examining how middle managers themselves experience the influence of AI in their everyday work. Yet it is precisely in this middle layer that many of the tensions and contradictions of AI adoption are likely to surface. By focusing on this group, the study draws on a relational view of AI (Anthony et al., 2023; Bailey et al, 2022), which understands AI not merely as a tool, but as an actor that co-shapes organizational practices, power structures, and roles. This perspective allows us to move beyond simplistic narratives of efficiency and automation and examine how AI becomes embedded in everyday managerial work. In doing so, the study also engages with Faraj et al.´s (2018) theorized consequences of learning algorithms, particularly the transformation of expertise and the reshaping of occupational boundaries, assessing how these play out in practice. Through the lens of middle managers, we want to gain a unique insight into how AI is not only changing what work is done, but how it is experienced and made sense of within organizations.

Research Question:
How do middle-managers perceive how AI technology has changed their role?

2. Literature Review

2.1 Middle manager

As generative AI reshapes organizational dynamics, it becomes increasingly important to examine the role of middle managers, who serve as key intermediaries between strategic objectives and operational practices. The literature on middle managers is highly divided regarding their definition and what a middle manager actually does. These differences can be grouped into categories based on how their roles are described. Some literature focuses on middle managers' roles in communication and coordination, yet even within these categories, the definitions vary significantly. For example, Rouleau and Balogun (2011) view middle managers as critical communicators and coordinators who bridge organizational levels by crafting meaningful messages and fostering collaboration to drive strategic change. Similarly, Johansen and Hawes (2016) emphasize the importance of communication, noting that it helps middle managers align stakeholders, address goal ambiguity, and manage organizational boundaries. However, their study highlights that the effectiveness of communication may depend on the context and how it is integrated with other managerial tasks.

At the same time, Balogun (2003) describes middle managers as playing an active role in shaping and implementing strategies. Through the process of sensemaking, middle managers interpret the strategic intentions of top management and adapt them to create actionable frameworks that work within the organization. The varying descriptions of what middle managers do whether it is communicating and coordinating, managing resources, or asserting strategic influence underscore that they play a critical role in organizations (Rouleau & Balogun, 2011; Johansen & Hawes, 2016; Balogun, 2003). However, the specific nature of their role is influenced by their context and the organizational structures in which they operate.

This evolving understanding of the middle management role highlights the importance of considering how technological change interacts with organizational structures and human actors. As new technologies such as generative AI become more embedded in everyday work, it is not only the tasks that change, but also the way roles are shaped through new relations. Hinds and von Krogh (2024) argue that a relational view is crucial for understanding the connection between technology and the social world. Rather than seeing technology as a separate object, they suggest it should be understood through the relations it creates and transforms. With the interactive nature of generative AI, this perspective becomes increasingly relevant. As organizations adopt generative AI, they argue that a process of progressive encapsulation takes place where AI gradually influences coordination and decision-making. Over time, this could lead to a shift where employees evolve into either super-generalists or super-specialists, depending on how the technology is implemented.

2.2 AI and changing work roles

Recent advancements in digital technology have significantly transformed how tasks are performed within organizations and are considered among the most impactful developments in the digital era (Akter, 2022; Fanti et al., 2022). One of the most prominent examples is generative AI, which is trained on large datasets and uses patterns and algorithms to recognize user requests and search for information to complete them (Brown et al., 2020). As generative AI begins to enter organizations, its data extraction capabilities are expected to reshape business operations, in fact, three-quarters of executives believe it will have a major impact on how business is conducted (Rai, 2020). This technological shift is already underway across multiple sectors. AI has begun to be integrated into a range of industries, including biology, education, engineering, finance, healthcare, and marketing. AI and machine learning have been implemented to assist humans in performing tasks more effectively or in managing large sets of information (Akter et al, 2022; Huang & Rust, 2018; Rust, 2020). In marketing, AI has enabled firms to create individualized campaigns by analyzing specific customer data (Ma & Sun, 2020). In business intelligence, AI is used in systems such as Customer Relationship Management (CRM) and Enterprise Resource Planning (Côrte-Real, Ruivo & Oliveira, 2014). In the banking sector, AI is employed to conduct various forms of predictive analysis (Moro, Cortez & Rita, 2015).

Generative AI has started to enter the workplace in different forms, affecting both how work is done and the consequences it brings. One example of AI implementation is at the Los Angeles Police Department, where algorithms are used to support decision-making by predicting crime locations. However, this adoption of AI and big data analysis also changed internal processes at the LAPD (Brayne, 2017). Research by Allen et al. (2022) shows that professionals with more experience tend to trust AI less, feeling a stronger sense of accountability for their decisions. Yet their experience also enables them to use AI more effectively as a complement to their work. Thus, while AI has changed the speed and efficiency of processes, it has not reorganized work to the extent Autor (2015) predicted, rather, it continues to act as a complement to human judgment (Brayne, 2017; Allen et al., 2022). It is clear that society stands once again at a technological crossroads. However, there are likely limits to what AI can achieve. Pakarinen and Huising (2023) show that professional expertise is not merely about possessing knowledge but is relationally generated, applied, and recognized through dynamic interactions with people, tools, and institutions. As artificial intelligence systems increasingly take over specialized tasks, human professionals are shifting toward broader, more generalist roles focused on relational work that is coordinating across actors, interpreting AI outputs, and managing uncertainty (Faraj et al, 2018; Pakarinen & Huising, 2023). Expertise becomes a matter of building trust, adapting to different contexts, and making ethically informed decisions, capacities that AI alone cannot replicate. Thus, AI will not replace professional expertise but will instead be integrated as one more participant within the broader relational networks of human work.

2.3 Technology in the relational perspective

Recent research has increasingly adopted relational and sociomaterial perspectives to understand the changing role of technology in work. These approaches derive from the concept of Actor-Network Theory (ANT), particularly the work of Latour (2005) and Callon (2017), which challenged human-centered models by conceptualizing materiality and technology as active participants in networks of relations. This theoretical shift laid the groundwork for sociomaterial perspectives that reject dualisms between humans and technology. Building on this, Orlikowski (2007) argues that the social and material are constitutively entangled, meaning that agency is not located in either humans or technologies alone, but enacted through their interaction. In contrast, Leonardi (2011) maintains an analytical distinction between human and material agency, introducing the concept of imbrication to explain how the two become interwoven over time. His framework highlights how actors perceive and respond to the affordances and constraints of technologies, shaping organizational routines through these interactions. Extending these ideas, Bailey et al. (2022) advocate for a relational ontology of technology, suggesting that technologies should be understood as constellations of evolving relations among actors, tools, and institutional contexts. Rather than viewing technology as a fixed object, they emphasize how it becomes meaningful and functional through situated enactments. A similar relational shift is seen in Rodríguez-Lluesma et al. (2021), who, drawing on relational sociology, argue that digital transformation alters work not only structurally but also in terms of cultural meaning and human agency. They reconceptualize work as a social relation capable of producing relational goods, such as trust and mutual recognition, underscoring the ethical and interpersonal dimensions of how digital technologies reshape organizations.

To guide our analysis, we draw on the relational perspectives of Anthony et al. (2023) and Bailey et al. (2022), as they specifically focus on the relationship between technology and human actors. These approaches move beyond static views of technology and can emphasize how AI is embedded in and co-constructs social and organizational dynamics. This makes them particularly well-suited for understanding how middle managers perceive and make sense of AI, not just as a tool, but as an active participant in shaping their roles, practices, and organizational dynamics.

3. Theoretical framework

3.1 AI as a Relational Actor

Anthony, Bechky, and Fayard (2023) argue for a relational perspective on AI, challenging the dominant view of AI as merely a tool. They critique what they term the material view, which sees AI as a technical object or medium used to support human activity. While this view provides a clear and simplified understanding of AI, it fails to capture the full extent of how AI transforms organizational life. In particular, treating AI as a static tool ignores how some of its operations are black-boxed, hidden from users and how it increasingly functions invisibly across systems.

As a result, the material view overlooks AI's broader implications for organizational structures, workflows, and roles. Anthony et al. (2023) also explore the medium view, which goes a step further by examining how AI supports coordination, knowledge sharing, and collaboration. However, this view still positions AI as a passive instrument, rather than an active participant in shaping organizational dynamics. It fails to account for the power relations and structural changes that emerge when AI becomes embedded in everyday work practices.

To address these limitations, Anthony et al. (2023) propose a relational view of AI. This perspective recognizes AI as an actor that is deeply embedded within social systems, capable of shaping and being shaped by human interactions. AI is thus not external to organizational processes but co-constructs them, influencing power, expertise, communication, and decision-making. From this standpoint, AI is part of a dynamic network of human and non-human actors. This relational perspective is particularly useful for understanding the evolving role of middle managers. As prior research has emphasized, middle managers play a key role in organizational coordination and sensemaking, especially during times of change (Rouleau & Balogun, 2011; Johansen & Hawes, 2016). Part of their function is to interpret strategic shifts and help employees make sense of them (Balogun, 2003). Increasingly, however, AI systems are taking on similar interpretive functions for example, by analyzing documents, generating reports, or facilitating communication (Anthony et al., 2023). This shift suggests that AI may not only support middle managers but potentially transform or even replace parts of their role depending on the relation with AI.

Bailey et al. (2022) explain how entities acquire function through their concept of relational functionality, where entities in a relation offer one or more functions, the different functions explained as interchangeability. Entities can be either human or technological. According to Bailey et al. (2022), function emerges through the relation between two entities. These relations, in turn, exist within a broader constellation of interconnected relations. Such constellations are constantly evolving as new relations form or existing ones shift. Through this notion of constellations, Bailey et al. (2022) aim to highlight the highly dynamic and fluid nature of technological and organizational environments.

To fully grasp the implications of AI for middle management, it is therefore necessary to adopt a relational lens, one that accounts for how AI is entangled in social structures and organizational change. While there is still limited research on how AI directly affects middle managers, Faraj et al. (2018) provide a valuable theoretical prediction for analyzing AI's broader impact on work and organizations. Referring to AI as learning algorithms, they identify four characteristics that describe the nature of the technology, and four consequences that relate to organizational change. This combined approach provides a theoretical foundation for understanding how AI influences middle managers' roles in today's organizations and how middle managers themselves perceive and make sense of AI as it becomes embedded in their daily work.

3.2 AI:s Impact on Organizations

As previously established, technology significantly impacts how work is organized and how organizations perform and allocate tasks (Faraj et al., 2018; Leonardi & Bailey, 2008). New technologies will continue to emerge, reshaping the way we conduct and structure our work. One such technology, already beginning to influence us today, is generative AI, exemplified by tools like ChatGPT, Gemini, or Microsoft Copilot. While it remains uncertain exactly how these new technologies will impact us, some speculation exists. Faraj et al. (2018) introduce the concept of learning algorithms, defining them as:

"*an emergent family of technologies that build on machine learning, computation, and statistical techniques, as well as rely on large data sets to generate responses, classifications, or dynamic predictions that resemble those of a knowledge worker."* (Faraj et al, 2018, p. 1)

The authors identify four key characteristics of learning algorithms:

- Black-boxed performance - Users cannot easily understand how outputs are produced due to the complexity and evolving nature of the algorithms.
- Comprehensive digitization - As work becomes increasingly digitized, behavioral data is continuously collected and used to enhance algorithmic accuracy.
- Anticipatory quantification - Data is used not just to describe the present but to predict future behavior, despite limitations in data quality and algorithm design.
- Hidden politics - Algorithms embed the biases of their creators and datasets, making them inherently political and ideological.

These characteristics have several implications for organizational practices, as AI not only automates tasks but also reconfigures how work is understood, distributed, and governed. The consequences can be summarized as follows:

- Transforming expertise:
  Learning algorithms increasingly take over tasks involving tacit knowledge, shifting professionals from doing to overseeing. This may erode opportunities for developing expertise and redefine what it means to be skilled.
- Reshaping occupational boundaries:
  As AI enters domains traditionally governed by professionals, roles are reconfigured. Workers become interpreters and overseers of algorithmic output, prompting shifts in identity and responsibility.
- Providing new forms of control:
  AI systems enable detailed performance monitoring through opaque metrics, potentially constraining autonomy and provoking resistance or strategic adaptation by workers.
- Augmenting coordination:
  By optimizing task distribution AI enhances coordination, but risks limiting exposure to

diverse knowledge, which may hinder innovation and cross-disciplinary thinking. AI could be used to split tasks and compose teams based on statistics and expertise that are collected through their work.

In this thesis, we consider both the technological characteristics of learning algorithms and their organizational consequences. However, to maintain analytical focus and align with the purpose of our study, we concentrate on two of the four identified consequences. These are transforming expertise and reshaping occupational boundaries. These areas are particularly relevant for understanding how AI impacts the roles, knowledge practices, and professional identities of middle managers.

4. Method

4.1. Research Design and Approach

To explore how AI impacts middle managers' perception of their work, this study adopts a qualitative research design grounded in semi-structured interviews. This approach is designed to gain deeper insights into middle managers' thought processes concerning AI technology. Semi-structured interviews offer the necessary flexibility to adapt to participants' responses and delve further into relevant topics as needed (Silverman, 2022).

By employing this method, the study aims to capture not only factual information but also the subjective thoughts, impressions, and emotional reactions of middle managers toward AI. Given the complex and multifaceted nature of middle management, which varies significantly across organizations, a flexible interview format is essential for exploring individual roles and experiences. Furthermore, as the use of AI can differ substantially depending on the organizational context, the ability to ask tailored follow-up questions is critical.

4.2. Participant Selection and Sampling

This study focuses on organizations with at least 50 employees to ensure that a defined middle management structure exists. Middle managers are defined, as described in the introduction, as individuals who report to at least one manager and supervise two or more team members. This definition provides a clear framework for identifying participants who occupy a middle-tier leadership position within organizational hierarchies. The selection criteria also require that participants have some degree of regular interaction with AI technologies in their daily work, either directly or through their teams.

The study includes participants from three sectors, technology companies, IT consulting firms, and manufacturing companies. These sectors were selected based on their differing relationships to AI implementation and organizational workflows. Technology companies were chosen because they often operate at the forefront of technology development, offering insights into

environments where technology such as AI is deeply integrated into both products and internal operations. IT consulting firms, on the other hand, provide a valuable intermediary perspective, as their middle managers often act as facilitators of AI adoption for clients across industries. Finally, manufacturing companies represent a more traditional sector, where AI adoption tends to focus on automation and efficiency (Kim et al., 2022). Including this sector allows for exploration of how middle managers experience AI in settings that are gradually adopting digital technologies.

By incorporating these three sectors, the study captures a wide range of managerial experiences with AI, from highly digital to more conventional settings. This sectoral diversity enhances the richness of the data and allows for the identification of both sector-specific and cross-sectoral patterns in how AI influences middle management work and how it is perceived by those in these roles. Although the industry itself is not the primary focus. Instead, the study emphasizes the organizational role of middle managers and how they interact with AI, regardless of sector.

Alias	**Industry**
Participant 1	IT-consult
Participant 2	Manufacturing
Participant 3	IT-consult
Participant 4	IT-consult
Participant 5	IT-consult
Participant 6	Manufacturing
Participant 7	IT-consult
Participant 8	IT-consult
Participant 9	IT company
Participant 10	Manufacturing
Participant 11	Manufacturing
Participant 12	IT company
Participant 13	IT-consult
Participant 14	IT-consult
Participant 15	IT-consult
Participant 16	Manufacturing
Participant 17	IT-consult

Alias	Industry
Participant 1	IT-consult
Participant 2	Manufacturing
Participant 3	IT-consult
Participant 4	IT-consult
Participant 5	IT-consult
Participant 18	IT-consult
Participant 19	Manufacturing
Participant 20	IT company
Participant 21	IT company
Participant 22	IT company

Table 1: Interviewed middle managers and their industry

4.3. Data Collection Process

This study is based on 22 semi-structured interviews with middle managers across various sectors, including IT consulting, manufacturing, and related industries. Each interview lasted between 30 and 45 minutes and was conducted virtually on Teams. While access to middle managers was generally attainable, openness regarding AI implementation varied and was sometimes constrained by internal corporate policies. To encourage open conversations, the study followed strict ethical guidelines. Participants were assured of full anonymity, and all data were de-identified to protect both individuals and organizations. Informed consent was obtained, and participants were made aware that their contributions would be handled with strict confidentiality.

4.4. Data Analysis and Thematic Development

To analyze the findings from the interviews, a grounded theory method will be used to identify and develop common themes in the responses (Charmaz, 2008). Because the study does not aim to have a complete objective comparison of the interview data, it seeks to uncover what middle managers perceive as important, drawing conclusions from shared patterns in their answers. The methodology surrounding grounded theory has been debated over the years (Charmaz, 2008; Silverman, 2022), and this study adopts a constructivist approach. This approach builds on the idea that grounded theory is flexible and evolving, while also recognizing that researchers bring their own experiences and backgrounds into the process (Charmaz, 2008).. When coding our interviews, we applied the Gioia Methodology (Gioia, Corley, & Hamilton, 2013) to structure the analytical process. This method allowed us to systematically move from raw data to conceptual

abstraction. In practice, we began by identifying first-order concepts based on the participants' own words and expressions. These were then grouped into second-order themes that reflected our interpretive understanding of underlying patterns and meanings. Finally, we organized these into broader aggregate dimensions, which serve as the foundation for our theoretical insights.

As the study progressed, several themes organically emerged from the interview material, offering valuable insights into how AI influences middle managers' day-to-day experiences and organizational roles. The analysis identified four key themes that were consistently discussed across participant interviews:

1. Efficiency - capturing how middle managers perceive AI as a tool for increasing efficiency, streamlining processes, and improving task performance.
2. Shifting Managerial Roles - addressing how AI reshapes traditional managerial responsibilities, task allocation, and the perceived purpose of the middle management function.
3. AI in Decision-Making - focusing on how managers incorporate AI into decision-making processes and the extent to which they trust or question algorithmic input.
4. Communication and Cooperation - examining how AI affects internal communication, collaboration with teams, and the dynamics between different layers of the organization.

Using the Gioia method helped us maintain transparency in our coding process and ensured that participants' voices were preserved throughout the analysis. At the same time, it provided a clear analytical structure that aligns well with the inductive goals of grounded theory. The resulting data structure is composed of first-order concepts, second-order themes, and aggregate dimensions which offers a visual and conceptual map of how middle managers perceive and experience the influence of AI in their work.

1st Order Concept	*2nd Order Themes*	*Aggregated Dimension*
- AI is consulted before expert input - AI changes the structure and composition of - writing - AI improves the clarity and quality of writing - AI increasingly acts as an expert advisor in daily work.	AI as a Mediator of Communication Practices	Communication
- Users are unaware of shifts in communication style	Shifting Interpersonal	

- AI reduces interactions with senior colleagues	Communication Patterns	
- AI increases overall work efficiency - Enables focus on more value-creating tasks - Simplifies work tasks - Improves quality of written outputs - Expanded use of AI in research-related tasks	AI-Driven Efficiency and Value Creation	Efficiency
- Faster outcomes, but with negative implications for the business model	Efficiency Gains with Strategic Trade-offs	
- Reduces the cognitive burden prior to making a decision - AI is used as input in the decision-making process - Minimal influence on decision-making - No impact on final decisions	AI as a Supportive Tool in Decision-Making	AI & Decision making
- Greater trust placed in human judgment - Final decisions are made by humans	Preservation of Human Authority in Decision Processes	
- Shifts focus from production to supervision - AI has altered the sequence of tasks within managerial processes - Role remains the same, but tasks have changed - AI expands the scope of the middle manager's role	Transformation of Managerial Responsibilities and Workflow	Shifting Managerial Roles
- No fear of being replaced by AI - Reduced risk of full automation due to continued need for manual input	Perceived Stability and Adaptation in Managerial Identity	

Table 2: Thematic analysis of interactions (following the Gioia method (2013))

4.5. Limitations and Ethical Considerations

As with any qualitative study, this research has limitations that should be acknowledged. One of the main theoretical challenges relates to the ambiguous nature of the middle management role. Across the academic literature, middle management is defined and understood in various ways,

depending on organizational structure, industry, and cultural context. This lack of a clear and consistent definition makes it difficult to develop a universally applicable framework. As a result, the findings of this study may not be generalizable to all interpretations of middle management, but are instead most relevant within the specific definitions and contexts used here.

From a methodological perspective, the use of semi-structured interviews, while offering valuable flexibility and depth, also introduces certain limitations. Because this interview style allows conversations to follow participants' unique experiences, the data collected can vary in scope and focus. This variability may lead to minor inconsistencies across interviews, especially when different interviewers are involved or when participants have very different levels of experience with AI. Additionally, the relatively small sample size, a common feature in qualitative research, means that this study prioritizes depth over breadth. While this allows for rich insights, it may also limit the range of perspectives represented, particularly across different industries or organizational levels. A further limitation is related to time constraints, which prevented the inclusion of other key voices in the organizational structure, specifically the subordinates of the middle managers interviewed. These individuals could have provided important insights into how the role of their manager has changed in practice and whether AI has influenced leadership, communication, or decision-making from a bottom-up perspective. Including these perspectives would have enriched the analysis by offering a more holistic understanding of the organizational dynamics at play. However, this aspect was beyond the scope of the current study and is identified as a valuable direction for future research.

Another limitation of the study relates to our initial ambition to interview multiple middle managers within the same organization. The idea behind this was to gain a more nuanced understanding of how AI is experienced across different individuals in the same organizational context, which could have provided valuable insight into internal consistency or variation in perception. However, we quickly discovered that this was difficult to achieve in practice. Many of the participants were either the only middle manager in their specific function or were unsure whether any of their colleagues would be willing or available to participate in the study. As a result, most interviews were conducted with one individual per organization. While these conversations still offered rich and detailed insights, this limitation means that we were unable to explore differences and similarities in AI perceptions within organizations, something that could have added another layer to the analysis.

Participants will provide informed consent, ensuring they understand the study’s purpose and their rights to confidentiality and withdrawal. Anonymity will be maintained by de-identifying data and securely storing research materials. Care will be taken to present findings sensitively, avoiding harm to individuals or organizations. Ensuring anonymity and a good handling of the data also limits the social harm that can be caused to a participant. The social harm can in this case be that a middle manager is using AI in a workplace that does not allow the use of AI.

4.6. Use of Generative AI Tools in the Writing Process

During the writing phase of this thesis, generative AI tools were used to improve clarity, grammar, and overall readability. All AI-generated suggestions were carefully reviewed and accepted only when they aligned with the intended meaning and academic tone of the text. The intellectual contributions remain entirely those of the authors.

5. Empirical Findings

5.1 Efficiency

5.1.1 Enhancing Daily Work: Efficiency, Learning, and Meetings

AI is stated almost unanimously to make work more efficient. The efficiency gains span several areas, from information retrieval and text summarization to content generation and communication. While some interviewees note that the efficiency boost is not always significant, the general perception is that AI has streamlined daily tasks and made employees more productive. One of the most frequently mentioned ways in which AI enhances efficiency is through improved information retrieval. Generative AI tools such as ChatGPT, Gemini, or Microsoft Copilot are often seen as more useful than traditional search engines, as they offer quick, structured, and relevant responses: "No, I use Google extremely less now. This is when these or the LLMs, they are as you would have wished Google to be" (Participant 3). Rather than manually reviewing multiple sources to get a holistic understanding, employees can now obtain synthesized and targeted information in seconds. This is especially valuable in situations where the interviewees have been required to quickly gain knowledge about unfamiliar areas.

One participant describes how AI has enabled them to upskill in new areas of responsibility after being promoted, helping them navigate technical domains where they lack prior expertise:

> My own is probably limited to services such as chat GPT for example, to smoothly find information about, may be new customer areas or it may be that now that I have moved up in rising position, I need to take responsibility for areas that I have not been a specialist in myself so it can be a smooth way to take level and find out things in electronics that were not my area really as an engineer. Different concepts, different terms, different trends and so on - Participant 12

This illustrates a key benefit of AI, it functions not only as a tool for answering questions but as a learning companion that supports continuous competence development. Instead of attending training sessions or relying on colleagues, employees can now independently acquire knowledge in real time, enabling quicker onboarding into new roles or tasks.

AI is also perceived to enhance efficiency in meetings and collaborative settings. When employees lack deep expertise in a subject area, AI can provide on-the-spot explanations and context, enabling them to contribute meaningfully and remain active in conversations. In this way, AI acts as a "copilot", bridging gaps in knowledge as they emerge.

> Yes, if you're sitting in a meeting in a field you're not specialized in and then you hear things you don't really know. It's very easy to have such an AI as a co-pilot. It provides information almost in real time about what is happening, can control a meeting and find out things that I did not know before and then I also use some to clean up some text formatting and so on in English. If you are unsure - Participant 12

This ability to access relevant knowledge in real time transforms how meetings are conducted. Rather than disrupting the flow of conversation to look up terms or consult documents, employees can remain engaged, confident, and present: "As a manager, I sit in meetings from eight to five in the afternoon [...] Yes, you can sort of jump into meetings a little late and ask AI and like what has been said? Has this issue been raised?" (Participant 17). In scenarios like this, AI acts as a personal assistant during meetings, helping employees quickly grasp the context and stay actively involved, even when they join late or are unfamiliar with the topic.

Another common use case is summarizing large texts such as technical reports or lengthy documents. Managers report using AI to identify key takeaways without having to read everything in full. However, participants also emphasize that while AI-generated outputs are useful, they often require final human refinement. The technology is not always plug-and-play.

> AI has generally been good at producing drafts and has worked a little with it from time to time and I still think this is the case. It's rare that you can get a completely 100% finished thing from AI. But if you used to get to 80% of something and had to add 20% yourself, we are now maybe at 90, 95%. There is less and less manual work you need to do at the end to get it right - Participant 15

This evolution moving from 80% to 95% readiness, signals a maturing trust and reliance on AI, where the role of the user is shifting from creator to editor. The perceived increase in quality of AI outputs also means that employees spend less time on the final polish, freeing up cognitive resources for more strategic tasks.

5.1.2 Challenges and Organizational Implications

While AI is widely viewed as a helpful tool, a recurring concern is data sensitivity. Participants point out that confidentiality, particularly regarding customer information and internal documents still limits how and when AI can be used. At the same time, some employees note that becoming efficient with AI takes time and effort. Integrating AI into one's workflow

requires prioritization, exploration, and learning. This investment may be challenging in already time-constrained roles, such as middle managers:

> I always have to prioritize, because there are always things to do and there are always things that you have to prioritize away from doing. That's kind of the manager's big dilemma really, no matter what level, there is never enough working time, but always have to prioritize. And it's probably the same here. I haven't made it a priority to familiarize myself with this and learn enough about it - Participant 14

This quote reflects a tension, while AI promises efficiency, obtaining its full benefits demands time something that many professionals feel they lack. Learning to work with AI is not passive, it requires initiative and a willingness to experiment, which not all employees have had the capacity to pursue. For those who have invested the time, however, the impact is clear. After initial adaptation, several participants describe noticeable improvements in both speed and output quality, particularly in tasks that previously required significant quality assurance.

> Six months later, I feel now, now I'm definitely faster, I know above all a lot of quality assurance that takes quite a lot of time, I think, if you write longer texts in English I misspell sometimes grammatically is not so good, I spent quite a lot of time on quality assurance things. I wrote before, I think it's just like write the text roughly as you want it so ask the AI to rewrite this in good English so it fits here so you get it and it's like, it will be good - Participant 15

This demonstrates how, over time, AI can fundamentally shift how individuals approach knowledge work, especially when it comes to drafting, editing, and improving textual content. It makes writing easier and more efficient by turning it into a back-and-forth process between human and AI.

This shown efficiency gain has made the interviewees working as consultants rethink how their pricing model works. Finally, the increased efficiency brought by AI has economic implications. In businesses with hourly billing models, faster work completion can pose challenges to profitability: "However, we may have to review the hourly rate, because I mean if we do it with AI in half the time." (Participant 1). Some interviewees note that while they are now able to complete tasks in a fraction of the time, this doesn’t always translate into organizational benefits, especially in sectors where income is tied to time rather than value. This challenge appears particularly pressing for consulting firms that operate on billable hours. However, the picture looks different in other industries. For example, one participant from a manufacturing company highlights how AI-driven efficiency is viewed more positively in their context:

> Yes, and we are still a manufacturing company. We don't sell services like that, but we sell products, and we can certainly make those products faster, more efficient, better with the help of both AI technology and product development work. Yes, I

> think this company only sees yippee, while consulting firms are probably sitting and crying blood. How should we do something? - Participant 11

This contrast underlines how the impact of AI on profitability is highly dependent on the underlying business model. While service-based firms may need to rethink how they price and deliver value, product-based and IT-companies often see AI as an unambiguous opportunity for improved productivity and innovation. Despite these concerns, the main message is clear. For those who use it actively, AI is a powerful tool that boosts productivity, learning, and efficiency, though it takes some time and effort to get started.

5.2 Shifting Managerial Roles

5.2.1 Broadening Responsibilities: Exploring New Domains with AI

Many middle managers find that efficiency gains in their work have freed up time, enabling them to take on new types of responsibilities, not only in unfamiliar domains but also in what they consider the most valuable part of their role which is connecting with people. Several describe their work as a constant flow of responsibilities and administrative tasks, but by automating or accelerating certain processes with AI, they now have time to engage more directly with employees and customers. One manager reflects on how this shift allows for more human presence in an otherwise hectic workday:

> I think you reformulate what you have to do during the day and have the opportunity to spend time on what is more important. So I have done one thing but twice as fast perhaps in the best case and then there is the opportunity to do more things. Or have time for that personal meeting with someone that you might not normally have had time for - Participant 5

This shift is perceived positively by many managers, but they emphasize that it does not necessarily mean their roles have fundamentally changed. AI is described not as something that redefines their responsibilities, but as a tool that enhances their ability to carry them out more efficiently: “It is clear that AI as a tool has changed my work and the work of others because it becomes another tool. But it has not significantly changed our work situation.” (Participant 12). At the same time, the interviews reveal a recurring pattern of role expansion where managers begin to engage in tasks that previously fell outside their expertise. A recurring theme among interviewees is that AI enables managers to handle tasks that used to fall outside of their core responsibilities. This includes areas where they previously lacked either expertise or confidence such as HR issues, legal questions, or even creative planning: "Why should a lawyer sit and read through a document and charge 3500 SEK per hour? When you can get an AI and do it much faster? Probably much better too." (Participant 4). Instead of always turning to HR or legal departments, managers now use AI as a first step to explore a problem or draft a response:

> AI also as a counterpart and discuss things, that is, before tough negotiations or tough situations with employees, provides some input here but what does it actually say? What does the legislation say about working hours or vacations or something like that? How, if employees have these views? How could I deal with it in a good way and get some coaching from AI? - Participant 17

These reflections show that AI is becoming a situational advisor and a resource that managers consult to navigate unfamiliar areas before turning to human expertise. What used to require specialist involvement or internal support can now be explored independently, lowering the threshold for engaging with new domains. Interestingly, most middle managers are quick to say that their role has not fundamentally changed. They describe AI as just another tool in their toolbox, something that helps them carry out existing tasks more efficiently. Yet at the same time, they provide concrete examples of taking on responsibilities they previously would not have handled themselves. This reveals a subtle but important shift in practice, even if the role is not perceived as different, the way managers act within it is expanding.

Another manager reflects on how AI lowers the threshold for engaging with areas outside their formal responsibilities, such as legal or strategic communication. While they do not claim that their role has changed significantly, they note that AI makes it easier to approach unfamiliar tasks if they would choose to:

> I think it's pretty much unchanged, but potentially that I feel. It's easier for me to. That the bar is lower to get to more parts of the organization if you want to kind of. Like taking on some legal hobby level or understanding certain types of documents, writing certain types of communication so that like had I felt like I wanted to go in some direction then it's very powerful tool to get started quickly with - Participant 8

This illustrates that while the formal role may not have changed, AI has lowered the barrier to entry into more specialized tasks, allowing managers to explore legal, communicative, or procedural domains that previously felt out of reach. In this way, AI contributes to a subtle but significant broadening of the managerial role, where curiosity and initiative are more easily translated into action. It doesn’t replace expert judgment, but equips managers with a powerful starting point for independent reasoning and decision-preparation.

Managers also use AI for strategic brainstorming which can generate proposals for business plans, internal events, or process improvements. For example, one describes how AI became a creative partner when planning a large internal conference:

> Yes, but it can be if I want. Yes, but for example now. We're planning a big conference and how we can bring out, for example, the team feeling on stage or some quick activity on stage. So then yes, I write it in copilot, for example, I have used. Yes, but I usually use it to get ideas for different events - Participant 13

Through this, AI becomes a tool for creative thinking and inspiration not only in operational work but also in visionary or forward-looking parts of the managerial role.

5.2.2 Changing Work Practices: From Producers to Evaluators

While the first pattern highlights how managers are taking on new kinds of tasks and responsibilities, the second concerns a change in how existing tasks are performed. A recurring theme in several interviews is a shift in how the managerial role is enacted, from production to control. Managers no longer have to produce everything from scratch, as AI assists with drafting documents, generating presentations, summarizing texts, and preparing reports. One manager described this shift in terms of role transformation: “It's more that you move the human aspect to more control instead of constantly producing everything.” (Participant 2). Rather than investing time in creating, the manager now focuses on evaluating, adjusting, and validating what AI proposes. This can also change the way managers think during work, they now can spend less time coming up with ideas and more time reviewing and improving what AI suggests.

Managers often emphasize the practicality of this change. They describe using AI to quality-check their own outputs, especially in written communication: “I use AI quite a lot for quality assurance things, things that I write and hand off translate and quality assurance. I use quite a lot for research now and then use a lot of ChatGPT.” (Participant 15). In these cases, AI functions like a personal assistant and helps them stay on track, avoid mistakes, and work faster without compromising quality. At the same time, some managers express ambivalence or discomfort about how visible this shift is or should be. There’s a tension between using AI to work more efficiently and the fear of becoming less valuable in the eyes of others:

> So, it feels like you have a bit of a secret. Or at least not display it, because it feels like you. But then what do you do, then you have no value yourself. So if you're like this. Yes, I solve everything with AI, but what should we make of it? Or then, like, why do you need this salary? Then anyone can do it - Participant 1

This quote can reveal how professional identity is being renegotiated. While AI gives managers more capability and independence, it also raises questions about what expertise means in an AI-enhanced workplace and how much of that expertise is still perceived as their own.

In sum, AI is not replacing the role of the middle manager but it is reshaping it in important ways. Managers are taking on broader responsibilities, thanks to AI’s ability to support tasks they would not have done before. At the same time, their way of working is changing, from creating and solving everything manually to reviewing, structuring, and validating. These shifts are subtle and reflect a more autonomous, dynamic, and AI integrated managerial role, one where AI serves as both a practical assistant and a quiet force of transformation.

5.3 AI in Decision-Making

5.3.1 AI as Decision Support: Preparing, Structuring, and Exploring

It is evident that middle managers' trust in AI influences how they value and interpret its input. Many describe AI as a reasoning tool, something they use to test ideas, explore possibilities, and structure their thoughts before reaching conclusions. For some, AI has become an integral part of their daily workflow, especially in analytical and decision-heavy roles. However, the way AI is used in the decision-making process varies, and its role is often nuanced.

A common theme is that AI is more often used to prepare for decisions rather than to make them. Several interviewees highlight how AI helps generate foundational knowledge, gather insights, and create materials that can later be used to support strategic choices. One participant describes how AI is valuable in the early phases, helping build market understanding and decision materials but not in drawing final conclusions:

> No, I may not do that so far, but AI may come in much earlier strategies, processes where you kind of want to build a foundation and build market understanding and you kind of build a foundation for developing strategies and AI plays a much bigger role when it comes to drawing conclusions and things like that. That, at least I do not work so much with, but I do not work with AI as much as in decision making support but more maybe build a basis for decisions - Participant 15

This indicates a clear boundary between AI as a preparatory tool and human-led analysis or judgment. The quote reflects how AI can enhance the quality and efficiency of the input to decision-making, but not replace the human responsibility for making sense of it.

In some organizations, AI is actively used to aggregate and present data about market activity, business performance, or customer behavior. These insights can then be brought into team discussions. One manager explains how AI is helpful in providing a "big picture," which then serves as a foundation for dialogue, rather than a replacement for it:

> It was great to be able to use AI to aggregate data, but then we use it as a basis for discussion [...] making important decisions is also a lot about anchoring it in groups and just pushing everything in and AI thinks we should do this. Then you kind of lose a little bit of a pretty important part of discussing and getting everyone to agree and kind of land important decisions. So in a business development process, these discussions about priorities and choices are quite important and to try to get AI and take one. There are certain parts there that are important to do in leading teams - Participant 15

Here, AI is not just a tool for individual use, it also supports the organization as a whole by helping teams access and understand complex data. This shows that decision-making is often a collaborative process, where AI helps create a common understanding and provides a basis for discussion across different roles and departments.

Yet, not all managers turn to AI in their decision-making. One reason is concern about data sensitivity, several participants noted that they avoid using AI for decisions involving confidential or sensitive information. In addition, some feel confident in their own experience and reasoning and simply don't see a need to involve AI. Others express skepticism about AI's ability to understand context, which they feel is essential for good judgment:

> Because I would still not have gone to AI and asked for advice or decisions or anything like that. Yes, no, I don't feel that's right. It's something I don't want to ask AI, because it feels like AI doesn't know the complete picture anyway, so it's difficult to get a good decision there - Participant 13

These comments reveal how human confidence, domain expertise, and the belief in contextual awareness shape whether and how AI is used. Managers are cautious about relying on a system that they feel lacks the lived experience or nuanced understanding required in their work. Still, many describe a middle ground, where AI is used more like a colleague to bounce ideas off. It's not about delegating decisions to AI, but about expanding one's perspective:

> I've played around with AI when I'm making decisions, so I would say that actually. It's a small tool, like asking someone later, and then maybe I don't base my decision on it anyway, but. But it's still good. Just like having a person to chat with - Participant 18

In this sense, AI is viewed as a conversational partner, a tool that offers suggestions or alternatives, but not a source of absolute truth: "So, that's my number one go-to." (Participant 9). Managers still interpret, filter, and reflect on the output themselves. With that said, managers also recognize that AI can be helpful for idea generation, especially when facing complex or creative challenges. One manager described how AI helped generate ideas for strategic initiatives, with some of the results turning out to be surprisingly relevant:

> Yes, but it simplifies things because we will work on developing a new business plan […] We have these budget choices, give me some suggestions of initiatives we should do for the year, maybe get 20 yes, but three of them are super useful as well - Participant 18

This showcases how AI can support individual creativity by generating a range of suggestions that serve as a starting point for human reflection and refinement. In this way, AI is not replacing

creative thinking, but expanding the ideation space managers can draw from. Again, the human role is not diminished but augmented.

5.3.2 The Limits of AI: Context, Intuition, and Human Judgment

Many managers find AI helpful for exploring ideas and structuring decisions. However, most interviewees emphasize the importance of not trusting AI blindly. Even when it seems helpful, managers stress the need for human review and judgment:

> Yes, but it's dangerous when you trust them too much. And if you just do things with your left hand and don't look at the end result? Then you'll quickly find faults in it, [...] you still have to look at what actually comes out - Participant 5

This reflects a cautious trust, where AI is seen as a useful starting point, but not a reliable decision-maker on its own. The risk of errors or misleading outputs means that human oversight remains essential. Finally, many managers still view gut feeling and intuition as central to leadership, especially in high-stakes or ambiguous situations. While some are open to the idea that AI can help by providing facts and evidence to inform their instincts, they are not ready to replace those instincts:

> Gut feeling is something that we leaders have relied on for years and days, but the gut feeling may sometimes need to be based on facts and whether an AI can come up with facts and research-based as well as an opinion on a decision or the like - Participant 3

These reflections underscore the idea that intuition remains a trusted compass for decision-makers, particularly when navigating complexity or uncertainty. Managers acknowledge that AI can play a role in supporting their judgment by surfacing data, highlighting blind spots, or confirming assumptions, but they still see the final decision as something rooted in personal experience, professional judgment, and contextual awareness: “And decisions are intuition, right? Yes, there will be intuitions, but my own experience is that it will be on the gut feeling I have myself absolutely.” (Participant 6). Rather than displacing intuition, AI is framed as a complementary input that can help strengthen and inform it. This balance between data-driven support and human sensibility reflects a broader tendency among managers to see AI not as a replacement for leadership, but as one of many tools that can enhance it.

5.4 Communication and Cooperation

5.4.1 Enhancing Written Communication: Coaching, Clarity, and Tone

Communication is reported to have changed in two distinct ways with the integration of AI. First, in how written communication is produced, both internally and externally and second, in

how employees collaborate, ask questions, and seek feedback. Even if these changes aren't always obvious in formal communication, they can clearly influence how people work and interact in their day-to-day routines.

Many middle managers describe how AI has become an integral part of their communication, particularly in producing emails, presentations, and internal documents. What used to take significant time and mental effort such as writing clearly, politely, and professionally is now supported by generative AI that helps with phrasing, tone, and structure. One manager reflects on how this has made email communication more efficient and polished:

> Yes, I think that at least in my section we try to use AI quite a lot and you can also get some coaching when writing emails and so on. And then, like shaping the email that becomes a little more normal or maybe a little more clear or like this, so I've tried to use that sometimes, like getting some feedback on the email so that it becomes right - Participant 17

This quote illustrates how AI can work as a language coach, helping employees formulate messages that are easier to understand, more precise, or more suitable for their audience. For some, AI provides feedback not just on language, but on the underlying tone to ensure the message is received in the right way: "It is a potent tool for getting good communication as well. So if you know that you have difficulty communicating in writing and so on, you can actually use AI to make the message a little friendlier or something." (Participant 17) In other words, AI is not just accelerating how messages are written but it's also enhancing the quality and relational aspects of communication, especially for those who might not feel confident in written form. For these individuals, AI acts almost like a communication coach and helping them strike the right tone, avoid misunderstandings, and express themselves more clearly. This can be especially important in sensitive situations, such as giving feedback or addressing conflicts, where wording matters not just for clarity but also for maintaining trust and professionalism.

5.4.2 Quiet Shifts in Collaboration: From Colleagues to Copilots

While AI is improving writing and message delivery, a second, more subtle shift is occurring in how people seek input and collaborate. Many managers describe how AI has become a first-line sounding board, a tool they turn to before involving a colleague, mentor, or expert. This change is not always visible in communication patterns, but it reshapes when and how people reach out to others: "Instead of brainstorming with another senior leader, I brainstorm with AI instead." (Participant 18). Here, AI replaces what would have previously been a short chat, a quick Teams message, or a hallway conversation. It doesn't remove collaboration altogether, but can delay or reduce it, meaning that the manager feels more prepared before reaching out, or sometimes no longer feels the need to ask at all.

This “pre-bounce” with AI leads to a higher level of self-reliance. One manager explains how AI allows them to approach senior colleagues with more confidence, having already reasoned through the basics:

> No, but I still like to talk to our industry experts or domain experts. So I can use AI to get an idea of something, but I still go and discuss things with our domain experts on different occasions. It's not that AI is replacing them. However, I might do some work first, before I talk to them. I take myself to a slightly higher level - Participant 15

This suggests a shift in how input from experts is approached. The manager emphasizes that they still value discussions with domain experts, but that AI helps them prepare and form a basic understanding beforehand. Rather than replacing expert dialogue, AI appears to raise the threshold for when it becomes necessary, allowing managers to enter those conversations with more clarity and confidence. While this can lead to more structured and productive exchanges, it may also mean that spontaneous or exploratory discussions become less frequent. Another manager describes AI as a tool to help test their thinking: “So, it's more to see if you're on the right track or not, instead of calling someone else, you use AI to ask the questions.” (Participant 16). In this case, AI acts as a way to test one’s reasoning, offering quick and accessible feedback. The quote shows how employees use AI to clarify uncertainties independently, rather than involving others right away.

Several participants noted that while this shift makes them more efficient, it may also come at the cost of reduced social interaction:

> I think everyone who has it and uses it will probably just work a little more efficiently and so I think and can get more inspiration. I think it will be this with asking a colleague if you get stuck. It feels like yes, but AI can be part of that and that you can ask and move on. Which can, of course, have its pros and cons because then you may not be as social - Participant 13

This quote points to a tension. On one hand, employees are empowered to solve problems independently. On the other hand, learning-by-asking, mentoring, and informal peer support may gradually be reduced as AI increasingly fills that space.

The shift is also visible in how managers experience questioning behavior in teams. One manager describes that while people still ask questions, they tend to be fewer and more thoughtful, because simpler ones are handled independently with AI: “In general, it has made me a little more efficient, and perhaps I ask a few less questions of my own. Yes, other project managers and the like or when those questions come, they are a little better.” (Participant 3). This might indicate that while the use of AI may contribute to more well-developed questions and greater efficiency, it might also mean that fewer questions are being asked overall. As a result,

some of the informal, back-and-forth learning, particularly common among less experienced colleagues may occur less frequently than before.

Although not all managers feel that communication has been directly transformed by AI, the interviews reveal that the practices surrounding communication are shifting in subtle ways. AI is not replacing conversations or cooperation, however, it can change when and how they happen. Employees write faster, ask fewer questions, and work more independently. The result is a communication landscape where AI becomes an invisible actor that is helping to polish, formulate, advise, and correct, but also potentially reducing the frequency of human-to-human interaction in certain parts of the workflow. While this improves individual productivity, several participants reflect on what this might mean for cooperation, learning, and social connection particularly as AI becomes the first place employees turn, rather than their colleagues.

6. Discussion

Our empirical data shows that AI technology enhances productivity, learning, and efficiency, although there is a learning curve and industry-specific challenges remain. Regarding managerial roles, middle managers do not perceive their role as fundamentally changed by AI, though their tasks have shifted, from producing to reviewing, and occasionally stepping into areas outside their expertise. In decision-making, AI functions primarily as a reasoning tool that supports but does not make decisions, with intuition and gut feeling still considered essential for the middle manager. Communication patterns have also changed, written communication has improved both internally and externally, yet employee collaboration has decreased, and fewer questions are being asked between colleagues. A tension emerges as greater efficiency gives middle managers more time for conversations, but the actual need for these conversations may have declined.

6.1 AI Enhances Efficiency and Learning

Firstly, our empirical findings indicate that middle managers perceive AI primarily as a tool for enhancing their own productivity and learning. This aligns with one of the consequences outlined by Faraj et al. (2018), namely the transformation of expertise. We observe that AI has begun to assist middle managers with routine cognitive tasks, such as composing emails and content summarization. However, our findings suggest that middle managers do not yet believe AI is capable of fully taking over these routine tasks. The key distinction between our findings and Faraj et al.'s (2018) notion of transforming expertise lies in the degree of autonomy because AI does not yet independently execute routine cognitive tasks. Instead, our study shows that middle managers continue to perform these tasks themselves, though with support from AI. Looking at this through a relational perspective (Anthony et al, 2023), it becomes clear that this is not just about improving efficiency or automating simple work. Rather than AI replacing the human effort, managers and AI now work together. Managers describe how they rely on AI to generate ideas or drafts, which they then review, correct, and adapt. In this way, AI supports their thinking but does not replace their judgment. Through the lens of Bailey et al (2022) AI, in this case,

functions as a support assistant in the relationship between the middle manager and AI. We do not suggest that AI will remain a support function indefinitely, as Bailey et al. (2022) emphasize that constellations of relations are constantly evolving. As these relations shift or technologies develop, the functions between entities, such as the relational function between AI and the middle manager can also change.

An additional pattern emerged during the interviews is that middle managers were more inclined to acknowledge the potential of AI to take over routine cognitive tasks when discussing roles other than their own. When referring to positions such as those in HR or legal departments, they expressed a belief that these roles might be reduced or replaced by AI. However, this perception changed when they considered their own roles. This observation supports Faraj et al.'s (2018) argument that when learning algorithms threaten the legitimacy of professional expertise, they are likely to be resisted by members of the affected occupation. The coexistence of AI and human professionals may result in conflicts over whose expertise is valued more. In this context, while AI is perceived as capable of replacing other roles, middle managers view their own roles as too complex for AI to replicate. This difference in how AI is seen as replaceable in some roles but not in others, raises important questions about how people protect the value of their own work. Anthony et al., (2023) emphasize that understanding AI as a counterpart means paying attention to how different actors position themselves in relation to it. In our case, middle managers uphold the value of their own roles by framing them as requiring complex, context-sensitive judgment, something middle managers perceive AI cannot replicate. Meanwhile, they perceive roles in HR or legal as more standardized and thus more easily "outsourced" to AI. This supports the idea that AI adoption is shaped not just by technical capability, but by ongoing negotiations over whose expertise counts, and what forms of work are seen as legitimate in a system that now includes intelligent machines. However, our study reflects only the perspective of middle managers, individuals who do not directly operate within HR or legal departments. As such, the constellation of relations is shaped by their specific position in the organization. Following Bailey et al. (2022), who argue that function is not fixed but emerges through relational configurations, it is likely that professionals in HR or legal would describe a different perception on AI based on their own situated experiences. This highlights that what AI is understood to do depends on the relationships and context through which it is enacted.

Our findings also highlight industry-specific differences. The consultants we interviewed described concerns about needing to adjust their pricing models or being cautious about how much they disclose to clients regarding their use of AI. In contrast, representatives from manufacturing and IT companies perceived AI as a welcome development that enhances productivity and results. Thus, the efficiency gains associated with AI are perceived both positively and negatively, depending on the industry context. For consultants, who charge by the hour, increased efficiency may not be financially beneficial, as faster completion of tasks could reduce billable hours. Our findings suggest that AI implementation is context-dependent, an

aspect not fully addressed by Faraj et al. (2018). Here we can see that AI represents different functions in different relational constellations for different industries which can explain why AI is perceived differently. These industry-specific differences can be understood through the concept of relational functionality, which says that technologies take on meaning and function through the roles they play in specific relational contexts (Bailey et al., 2022). In consulting, for example, AI enters a work environment where time is billed by the hour and trust in human expertise is central. In that context, AI may be seen as a threat because it could reduce billable hours through its given increase in efficiency or raise questions about whether the consultant is really doing the work. So even if AI makes tasks more efficient, it can challenge how value is created and communicated. In manufacturing and IT companies, on the other hand, AI fits more easily into a system that already values speed, automation, and efficiency. Here, AI is seen as a useful tool that supports productivity goals. In other words function is not fixed, but relational and thus the perception from middle managers in different sectors can vary. The same technology may support productivity in one relational setting while undermining legitimacy in another.

6.2 Shifting Tasks and Evolving Managerial Roles

Middle managers do not perceive their roles as fundamentally altered by AI. However, our findings suggest that their tasks have indeed shifted from producing content to reviewing it, and occasionally extend into domains outside their core expertise. While middle managers describe their roles as unchanged, a closer analysis of their actual work practices tells a different story. When reflecting on how their responsibilities have evolved since the introduction of generative AI, it becomes apparent that their roles have transitioned from that of producers to that of reviewers.

This shift can be understood through a relational perspective, wherein individuals are not merely occupying fixed roles, but are simultaneously shaped by and shaping the work they perform (Anthony et al, 2023). This perspective aligns with the consequence identified by Faraj et al. (2018), reshaping of occupational work and boundaries. Our empirical data supports this interpretation, indicating that middle managers are now primarily engaged in evaluating AI-generated outputs rather than producing content themselves. This change represents a reconfiguration of human judgment. As Faraj et al. (2018) argue, while human judgment will remain essential, its application is evolving. In this case, it has shifted from content creation to the evaluation and interpretation of AI-generated material. The consequence is that with the support of AI, middle managers now have tools that assist them in developing ideas from the beginning. Looking at this through the lens of Bailey et al. (2022), the relational function between AI and middle managers acts more as support, like an assistant. Faraj et al. (2018) predict that AI would increasingly take over work, reshaping which tasks are performed. However, the function AI currently holds in relation to middle managers is primarily supportive and not one of independently taking over responsibility or performing work. AI assists middle managers on their request, rather than acting autonomously. In this sense, our findings contrast

with Faraj et al.'s (2018) prediction, as AI has not yet assumed a more active or independent role in managerial work.

Additionally, AI has enabled them to better comprehend subjects beyond their traditional areas of expertise. Many interviewees reported using AI to interpret unfamiliar content, tasks that would previously have required consultation with colleagues possessing relevant domain knowledge. This development can be seen as an expansion of what middle managers can do enabled by AI. However, this expansion does not occur in isolation. This reflects a reconfiguration of the relational constellation in which middle managers are embedded. Drawing on Bailey et al.'s (2022) concept of constellations of relations, we argue that the introduction of generative AI reshapes this constellation by modifying existing relations (e.g., between managers and team members), and redistributing functions (e.g., content generation, interpretation of data). Where middle managers once relied on team members or peers for input and sensemaking, they now increasingly interact with AI to obtain support, feedback, and even inspiration. As AI modifies the constellation of relations it enables middle managers to perform a broader set of tasks than before, going into areas such as legal or HR because of the position AI takes in the constellation.

What is particularly noteworthy is the misalignment between middle managers' perceptions and their actual practices. While they believe that their roles have remained stable and that the significance of human judgment is unchanged, our findings suggest otherwise. Although human judgment continues to be crucial, its function has transformed. As mentioned, previously human judgement was exercised in the process of creating and producing outputs while now, it is primarily applied in reviewing and validating AI-generated material. Thus, the value of human judgment endures, but the manner in which it is enacted has evolved. This change in practice reflects a broader reconfiguration of roles, one that resonates with Anthony et al.'s (2023) view of AI as a counterpart in a system of work. Rather than seeing AI as simply replacing tasks, they argue that we need to examine how AI interacts with human roles over time. In our case, AI has not removed middle managers' judgment but has shifted where and how it is applied. The shift in the role highlights how AI becomes embedded in relational constellations where tasks, roles, and responsibilities are continuously reconfigured (Bailey et al, 2022). As a result, work is no longer defined by fixed functions but by ongoing interactions between humans and AI.

6.3 Decision-Making and the Endurance of Human Judgment

AI is perceived as a reasoning tool that supports, but does not replace, human decision-making. Therefore, the function of the relationship between the middle manager and AI is seen as that of a support mechanism. Intuition and gut feeling continue to be regarded as essential components in managerial work. This aligns with Anthony et al.'s (2023) view of AI as a counterpart in a broader system of work, where AI does not act autonomously, but in interaction with human judgment, norms, and values. From this perspective, decision-making is not only a cognitive task but also a relational and ethical one, something middle managers perceive that AI struggles to

engage with. Our findings indicate that human judgment plays a central role in determining both how AI is used and for what purposes. Contrary to the perspective presented by Faraj et al. (2018), AI has not achieved autonomy in decision-making. This is largely due to issues of accountability, as middle managers do not feel they can fully rely on AI in all contexts. AI therefore serves the function of presenting options or materials to middle managers. However, it is the role of the middle manager, in relation to the organization, to interpret and integrate this input, along with other sources of information, in order to determine the most appropriate decision.

The 'black-box' nature of AI systems influences the degree of trust placed in AI (Faraj et al, 2018). Similar to this it was explained by several middle managers, the need to review AI outputs affects who is ultimately responsible for decisions based on those outputs. Our findings show that middle managers still feel personally accountable for outcomes, and they struggle to envision a future in which this accountability would shift to AI. This is because middle managers do not fully understand how AI systems arrive at their conclusions. Furthermore, our data reveals that middle managers perceive AI as lacking contextual understanding of both the organization and its employees. This perceived inability to comprehend relational and organizational nuance is a significant barrier to trust AI. In addition, many middle managers continue to rely on their own intuition and gut feeling when making decisions. Middle managers place high value in their personal judgment, often prioritizing it over the analytical output provided by AI. Nonetheless, AI is acknowledged as a valuable tool for improving the information that decisions are based on. Middle managers maintain the view that their own professional expertise remains a vital component of the decision-making process. This perspective reflects the fact that AI, in this context, assumes a relational function as support rather than authority. Rather than being an autonomous actor in the decision-making constellation, AI is positioned as a tool that contributes insights but does not bear responsibility. As Bailey et al. (2022) emphasize, what an entity is depends on what it does in relation to others. Here, AI's function is enacted as an advisory aid, embedded in a relation where human judgment continues to anchor final decisions. Its value lies in supplementing, not substituting managerial sensemaking, and this relational positioning helps explain why trust, accountability, and professional intuition remain central.

6.4 AI and the Changing Nature of Communication and Collaboration

Our findings indicate that AI is reshaping workplace communication in subtle but important ways. We observed two key shifts which is that written messages are increasingly generated by AI, and in several cases, interaction appears to have decreased, as employees sometimes turn to AI instead of colleagues or managers. This creates a tension, middle managers now have more time and a desire for informal conversations, but their coworkers may no longer feel the same need to connect, as AI already answers many of their questions. In these cases, AI serves a support function, helping users shape language and tone of their message rather than fostering dialogue.

Middle managers have been defined as a role that is communicative (Rouleau & Balogun, 2011; Johansen & Hawes, 2016; Balogun, 2003). Our findings suggest that some of these communicative tasks are now being delegated to or replaced by AI. Using Baileys et al (2022) reasoning of relational functionality interchangeability, AI is not only as previously argued support, but can have a function as a senior colleague. Helping junior employees with developing their early skills. Though, when employees use AI to seek answers instead of turning to their manager or a senior colleague, the workplace risks becoming more fragmented and less collaborative. In certain situations, AI appears to be taking the place of a coworker or even a senior colleague. A consequence that appears when new relations in the constellation of relations change relational functions (Bailey et al., 2022). In this case, AI assumes an advisory function, allowing employees to ask questions they might previously have directed to human colleagues. As a result, communication touchpoints that once connected coworkers are being replaced. While employees still require support to carry out their work, they increasingly turn to their new "colleague" AI.

As previously discussed, the role and expertise of middle managers lies in coordinating work, providing guidance, and creating shared meaning (Rouleau & Balogun, 2011; Johansen & Hawes, 2016; Balogun, 2003). The possibility that AI could alter or even reduce the communicative dimension of this role raises questions about how the role may evolve. Scholars like Autor (2015) have debated whether AI will lead to job loss, and our findings show that communication which is central to the middle manager's role is already being impacted. It is therefore likely that the role of middle managers will continue to change in ways we do not yet fully understand. As Pakarininen and Huising (2023) argues that expertise is relational, middle managers expertise and role will evolve to something else. An argument could be made that middle managers will need to become super-generalists, as AI increasingly takes on the communicative and advisory functions. Rather than turning to colleagues for consultation, managers now interact with AI systems to receive input, guidance, and feedback. Middle managers can struggle to validate the information provided by AI, especially due to its algorithmic opacity and hidden political assumptions (Faraj et al., 2018). This complicates their role as interpreters of knowledge. Furthermore, the super-generalist expectation assumes that managers can assess AI-generated content across domains they lack expertise in. Research by Allen et al. (2022) shows that individuals with more domain-specific knowledge tend to trust AI less than those with limited or moderate knowledge, raising questions about how middle managers can filter and use AI-generated insights in areas where they themselves are not experts.

We observe a tension in how middle managers experience communication in an AI-influenced workplace. On one hand, AI helps them complete tasks more efficiently, potentially freeing up time for interpersonal engagement. On the other hand, employees may no longer seek out

interaction, as many of their information needs are now met by AI. This means that even if middle managers wish to engage more informally with colleagues, the opportunities for such interaction may be shrinking. Balogun (2003) describes how middle managers are "caught in the middle" between upper and lower levels of the organization, an experience echoed by our interviewees. We argue that maintaining interpersonal relationships will increasingly require a conscious effort. While AI may create the conditions for more informal communication, it will only happen if middle managers actively prioritize it and if coworkers still see value in human dialogue.

In sum, throughout our findings, AI acts as a supportive assistant in relation to middle managers, something that helps streamline tasks, generate content, or provide inspiration. It has a supportive function that enhances, but does not replace, their role. However, when looking across our themes, it becomes clear that AI's influence extends beyond individual tasks. What managers perceive as simple support in one domain gradually reshapes the conditions of their work across many others. AI's influence is not isolated to specific domains like productivity, decision-making, task execution, or communication, these areas are interdependent. The shift from producing to reviewing content changes how human judgment is applied, which in turn affects how decisions are made, and reshapes the perceived value of expertise. Similarly, changes in communication have broader effects, as AI supports employees with routine tasks, fewer informal questions are directed to colleagues or managers. This reduces opportunities for spontaneous collaboration and peer interaction, and gradually reshapes the manager's role as a coordinator, mentor, and everyday point of guidance in the organization. These interdependencies point to a broader reconfiguration of managerial work. The manager-AI relationship reshapes manager-employee relationships, which then influences how decisions are distributed, how authority is perceived, and how organizational knowledge flows. What may appear as small shifts, such as delegating writing or problem-solving to AI can accumulate over time, leading to a more fundamental redefinition of what it means to manage. Together, these patterns highlight a key insight, AI is not a neutral tool applied to fixed roles. It is a relational actor, one that subtly, but persistently, reshapes how work is organized, how responsibilities are shared, and how meaning is made within the system of management itself.

7. Conclusion

This study set out to explore how middle managers perceive the integration of generative AI in their work. Drawing on qualitative interview data, our findings reveal a nuanced picture, while middle managers do not perceive their roles as fundamentally altered, their tasks, interactions, and practices have undergone subtle yet meaningful changes. AI is not replacing the managerial role, but it is quietly reshaping it by enhancing productivity, broadening access to new knowledge domains, and subtly shifting how communication and decision-making unfold. Our results underscore the value of a relational perspective when studying AI in organizations. Rather than treating AI as a static tool or autonomous actor, we show how AI becomes entangled in

dynamic work systems supporting, influencing, and at times, transforming how managers enact their roles. Human judgment remains central, but its application is migrating from creation to critique. Collaboration still exists, but it is changing. AI is now often the first place people turn for input, which means colleagues interact with each other less often and in less spontaneous ways.

One of our managerial implications indicates that communication is increasingly directed toward AI rather than colleagues. This reduction in colleague-to-colleague interaction may have significant implications for how collaboration functions within organizations. If left unaddressed, these shifts may fragment collaboration, diminish informal learning, and erode the relations. Over time, this could lead to weakened team cohesion, reduced opportunities for mentoring, and a diminished sensemaking role for managers as employees increasingly turn to AI for answers. As such, our research highlights the importance of middle managers being aware of these changes and the potential consequences they may bring. Middle managers must take an active role in fostering collaboration and sustaining meaningful communication where employees feel seen, heard, and socially connected, while also navigating the evolving constellation of relations in which AI is increasingly embedded. Another managerial implication indicates that because you can go to AI to get answers to your questions we have seen that middle managers now can take on more tasks. Now middle managers can ask AI for legal issues or HR issues instead of going to that department. Through AI middle managers can therefore decrease their reliability on other departments by increasing their collaboration with AI. To manage this, they need to develop critical judgment around when to rely on AI and when to seek human expertise.

Future research should further examine how these shifts unfold over time, particularly as generative AI systems become more deeply embedded in organizational routines and decision-making infrastructures. In parallel, it will be important to explore how AI integration affects interpersonal collaboration and informal interaction in organizations. As our findings suggest, when AI becomes the first point of reference, spontaneous exchanges and peer-to-peer dialogue may decline. While this may increase efficiency, it could also have unintended consequences for social learning, team cohesion, and the relational aspects of leadership.

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