

# Meaningful work as shaped by employee work practices in human-AI collaborative environments: a qualitative exploration through ideal types

European Journal  
of Innovation  
Management

5001

Received 19 November 2024  
Revised 26 February 2025  
9 June 2025  
Accepted 10 July 2025

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## Abstract

**Purpose** – This study aimed to investigate how employees perceive meaningful work in tasks co-generated by Microsoft 365 Copilot, an AI-powered workplace assistant. Specifically, it explored how its adoption influences work practices, autonomy and decision-making, identifying patterns of user experiences that shape attitudes toward AI integration in professional settings. This offered an opportunity to further theorise the notion of meaningful work as it is constructed and reconfigured through emerging patterns of human–AI collaborative environments.

**Design/methodology/approach** – Data were collected through a survey administered to 802 employees of a multinational company who were given a Microsoft 365 Copilot licence to test this AI-powered assistive tool in their daily tasks, yielding 357 responses. The survey included both multiple-choice and open-ended questions, with this study focusing on the qualitative empirical data. Specifically, we applied the qualitative ideal-type analysis method to identify typologies of user adoption practices with the artificial intelligence (AI)-powered assistive Microsoft 365 Copilot tool.

**Findings** – Three Ideal Types were identified: Ideal Type [1] – the Efficiency-Seeking Type – perceives Microsoft 365 Copilot as a straightforward task-assistance tool, Ideal Type (2) – the Pragmatic Integrator Type – views it as a smarter assistant, and Ideal Type (3) – the Collaborative Optimiser Type – considers it an expert-like teammate. The results indicate that meaningful work is not a static construct; rather, it evolves through the dynamic interplay between objective dimensions of meaningful work in human-AI collaborative environments – such as task discretion and organisational structures – and subjective experiences, including users' perceived role and expertise. Additionally, we underscore how cognitive prompts and metacognitive prompting become not only a technical competence to effectively interact with technology, but a reflective and interpretive practice through which workers negotiate relevance, value and purpose in their tasks.

**Practical implications** – Understanding diverse employee perspectives through ideal-type analysis enables tailored strategies for reskilling and upskilling, supporting individual needs and fostering adaptive work practices. It also informs the design of personalised development programmes and awareness initiatives that highlight human expertise, ensuring meaningful work and engagement in human-AI collaborative environments.

**Originality/value** – This article advances the discourse on meaningful work within human–AI environments by examining the factors that support or constrain employees' capacity to find significance and fulfilment in their roles, as influenced by the interplay between individual agency – reflected in users' decision-making, engagement and role adaptation – and organisational contexts, including technological integration, workplace structures, and human-AI collaborative practices. The use of Ideal Types in the qualitative approach strategy helps maintain the uniqueness of users' perspectives, capturing diverse experiences and patterns of AI adoption while preserving individual meanings and interpretations of meaningful work.

**Keywords** Meaningful work, Qualitative ideal-type analysis, Human-AI collaboration, Generative AI workplace tools, Cognitive prompts, Metacognitive prompting, Industry 5.0

**Paper type** Research article



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European Journal of Innovation  
Management  
Vol. 28 No. 10, 2025  
pp. 5001-5027  
Emerald Publishing Limited  
e-ISSN: 1758-7115  
p-ISSN: 1460-1060  
DOI 10.1108/EJIM-11-2024-1339

## 1. Introduction

Contemporary markets face significant challenges in reshaping economic and social paradigms, driven by financial instability, organisational downsizing, labour market deregulation, outsourcing, and the transformative yet uncertain impact of artificial intelligence (AI) and robotics (Jetha *et al.*, 2021; Scully-Russ and Torraco, 2019). These dynamics heighten the precariousness of work and call into question traditional understandings of labour's role in fostering human flourishing and societal progress, particularly amidst the ongoing fourth industrial revolution (Industry 4.0) (Luo and Zahra, 2023; Ozkan-Ozen and Kazancoglu, 2022; Sony *et al.*, 2021). As smart technologies are reshaping the *social fabric of work* (Selenko *et al.*, 2022), addressing these changes becomes as both a *moral imperative* (Gordon and Gunkel, 2024; Michaelson, 2021; Santoni de Sio *et al.*, 2024) and a *pragmatic concern* (Callari *et al.*, 2025a; Pieczka and Miszczyński, 2024), emphasising the need for a more inclusive and equitable society that tackles the challenges and opportunities posed by these advancements.

In response, paradigms such as Industry 5.0 and Society 5.0 emerge as potential frameworks for addressing these transformations (EC, 2020). Industry 5.0 envisions a human-centric approach to innovation, integrating advanced technologies like AI and robotics with human creativity and well-being (Conti *et al.*, 2022; He and Chand, 2024). Society 5.0 expands this perspective, advocating for a super-smart society that aligns economic progress with prioritising humanity within technological advancements (Huang *et al.*, 2022; Köktürk *et al.*, 2022). Together, these paradigms underscore the necessity of redefining work by emphasising meaningful engagement, inclusivity, and sustainable development as core principles for future progress (Troisi *et al.*, 2024). This is especially crucial as AI-enabled technologies increasingly mediate workplace relations, decision-making and productivity (Vicsek, 2021).

While these advancements promise efficiency and innovation, they also raise critical questions about the role of the human workforce in the future: *What will remain uniquely human in work? How will professionals and workers find purpose in increasingly automated environments? And how can organisations ensure that technological integration enhances rather than erodes meaningful human engagement in the workplace?* This focus emerges in response to concerns about the potential diminishing autonomy and agency of human workers in more complex tasks. As AI technologies take on tasks that once defined human expertise, such as data analysis or creative problem-solving (Corvello, 2025), questions about motivation, fulfilment, and long-term engagement remain increasingly salient, prompting researchers and industry leaders to explore strategies that preserve *work as meaningful* within *human-AI environments* (Laaser and Karlsson, 2021).

In the literature, terms such as *meaning* and *meaningfulness* of work have been extensively debated, with scholars emphasising their complexity and multidimensional nature (Bailey *et al.*, 2018; Yeoman, 2014). These concepts have been the subject of numerous definitions, often emphasising either the subjective experiences that grant primary agency to individuals – framing it as inherently tied to personal perceptions and a sense of purpose, ultimately contributing to self-realisation (e.g. (Lepisto and Pratt, 2017; Pratt and Ashforth, 2003)) – or its role as a key element of job significance, as captured in the job characteristics model (JCM) proposed by Hackman and Oldham (Hackman and Oldham, 1975, 1976).

*Human-AI environments* refer to workplaces, systems, or contexts where humans and AI-enabled technologies interact, collaborate, or co-exist to achieve specific goals or enhance productivity. Within this context, Microsoft 365 Copilot (hereinafter referred to as “M365 Copilot”) – leveraging large language models to generate text, analyse data, create presentations and deliver responses to user prompts – represents a new form of interactive AI-powered aid in the workplace (Khan, 2024). Indeed, M365 Copilot can assist employees in drafting reports, summarising lengthy documents, generating insights from raw data or even providing contextual recommendations – tasks that previously relied on human cognitive effort and decision-making. Interestingly, as M365 Copilot functions as an aid rather than a threat to office tasks, it presents a unique opportunity to examine how its adoption transforms and reshapes work practices and processes. This includes understanding how employees perceive

the significance of activities within M365 Copilot-enabled features, voicing which tasks are retained due to their perceived value, which are delegated, and how these choices shape overall attitudes toward its integration. Critically, a deeper comprehension of these dynamics can inform the design of targeted interventions to enhance and facilitate the adoption and acceptance of similar AI-powered tools in the workplace.

In line with the above, we conducted a study within a multinational company that distributed M365 Copilot testing licences to a selected group of 802 employees worldwide. This allowed us to capture the organic, unstructured adoption process, revealing how employees independently navigated, integrated and made sense of this AI-powered assistant in their daily work. Furthermore, it provided insights into how they perceived the impact of this technology on the significance of their work and expertise. As such, the research questions guiding this study were:

- (1) **How do employees perceive meaningful work in tasks and activities co-generated by M365 Copilot applications?**
- (2) **What patterns of employee practices emerge based on shared perceptions and experiences of M365 Copilot adoption in relation to meaningful work?**

To address these research questions, a survey was conducted among licenced M365 Copilot users, incorporating validated scales measuring key constructs of technology use and acceptance, such as task-technology fit (Goodhue and Thompson, 1995), the unified theory of acceptance and use of technology (Venkatesh, 2022; Venkatesh *et al.*, 2003) and the technology acceptance model (Dishaw and Strong, 1999). The survey also included open-ended questions, with this study specifically focusing only on the qualitative data derived from these responses. In analysing the rich empiric material, we aimed to derive detailed descriptions of user types, clustered based on similar perceptions and experiences of adoption. And therefore:

- (1) **What typologies can be constructed to capture similarities and differences within these patterns (i.e. perceptions and experiences of M365 Copilot adoption in relation to meaningful work) across the dataset?**

The structure of the article is as follows. We begin by outlining the study's foundation, providing an overview of its epistemological, theoretical, and methodological underpinnings. This is followed by the research design section, which offers a transparent account of the analytical process used to derive typologies of employee practices with M365 Copilot, and reflections in relation to meaningful work. The results section presents a detailed description of the identified Ideal Types, highlighting their features across four analytical themes: "AI-enabled Work Practices and Adaptation", "Human Agency, Autonomy, and Decision-Making in AI-enabled Work", "Teamwork in Human-AI Environments", "Organisational Support". Finally, the discussion and conclusion sections offer theoretical insights and practical implications for organisations and technology integration strategies.

## 2. Study underpinnings

### 2.1 Epistemological stance

The increasing integration of AI-powered productivity tools into workplace environments necessitates a theoretical framework that can simultaneously account for organisational conditions shaping technology adoption and the ways in which technology mediates human experience. To address this, the present study is positioned within a Critical Realist epistemology. Critical Realism (Bhaskar, 1975) asserts that reality consists of three distinct levels – the empirical (what is experienced), the actual (what happens) and the real (the underlying structures and mechanisms that shape phenomena). While our analysis focused on the contents of empirical data, we also examined how the employees' narratives are constructed through language and interconnected patterns of experiences and work practices – focusing on the extent to which technology mediates and reconfigures human agency,

influencing how workers engage with M365 Copilot, reflect on potential changes in the nature of work at both individual and organisational levels, verbally articulate their role and expertise as meaningful (Verbeek, 2005). Knowledge is generated by interpreting the meanings and actions of these accounts, with results being co-constructed by the researcher through this making-sense process (Berger, 2013).

## 2.2 Theoretical lenses

As AI-enabled tools become integrated into workplace practices, they raise essential questions about how employees perceive their role, expertise and sense of purpose. This section introduces the theoretical debate on meaningful work in the context of AI-driven transformations in the workplace.

**2.2.1 Meaningful work.** Scholars have extensively debated the *meaning* and *meaningfulness* of work, highlighting its complexity and multidimensional nature (Rosso *et al.*, 2010). The literature highlights distinctions between the concepts of “meaning of work” and “meaning in work”, emphasising that the former pertains to the broader purpose and amount of significance (meaningfulness) that work holds in an individual’s life (Rosso *et al.*, 2010), while the latter focuses on the subjective experience of finding purpose and fulfilment within life and work alike (Schnell and Hoffmann, 2020; Schnell *et al.*, 2016). Additionally, meaning can be constructed individually, rooted in self-actualisation, socially, derived from norms or shared perceptions, or as a combination of both (Michaelson, 2021; Rosso *et al.*, 2010).

The self-actualisation perspective grants primary agency to individuals, and emphasises the personal significance of work, where the individual perceives their work as meaningful because it matters to them, irrespective of external validation (e.g. (Lepisto and Pratt, 2017; Pratt and Ashforth, 2003)). This approach regards meaningful work as inherently subjective, tied to the individual’s experience and their sense of purpose, ultimately contributing to the realisation of the self. The other perspective presents meaning of work as a socially constructed concept, where its significance is defined by shared perceptions and deemed socially worthwhile and valuable in the eyes of those who appraise it (e.g. (Pratt and Ashforth, 2003; Rosso *et al.*, 2010)). A prominent aspect of this socially oriented perspective focuses on work that is considered “good” because it is driven by the intention to benefit others, emphasising its altruistic and societal impact (Michaelson, 2021). Finally, meaning can be influenced by the work context in which it is performed (Laaser and Karlsson, 2021; Rosso *et al.*, 2010) and its role as a core component of job significance, as outlined in the JCM by Hackman and Oldham (Hackman and Oldham, 1975, 1976). According to the JCM, meaningful work emerges when roles are designed to include high levels of task significance, task identity, and skill variety. These characteristics foster psychological states that enhance employees’ sense of purpose, responsibility and awareness of the outcomes of their work (Hackman *et al.*, 2015).

Recognising the call to contextualise meaningful work beyond the individual level (Lysova *et al.*, 2019), Laaser and Karlsson (2021) have proposed a sociological framework that examines its creation and experience as enacted through individual agency while being simultaneously shaped, constrained, or denied by broader organisational and societal dynamics. According to the authors, organisations are instrumental in shaping meaningful work by structuring the interplay of both the *objective* and *subjective dimensions* of autonomy, dignity and recognition that contribute to employees’ experiences in the workplace. Among the objective dimensions, task discretion, opportunities to independently exercise skill and judgement in various aspects of work, the quality of organisational and management practices, horizontal relationships, equitable policies, and opportunities for workers to participate in planning and decision-making (Callari *et al.*, 2024; Yeoman, 2014) – all contribute to creating formal conditions that support autonomy, dignity and recognition. Subjective dimensions emerge through informal practices, such as fostering solidarity, mutual respect and collective identity among employees (Laaser and Karlsson, 2021). Therefore, meaningful work (or its

absence) is shaped by the interplay of mechanisms across the six key dimensions: objective and subjective autonomy, dignity and recognition (Laaser and Karlsson, 2021).

In this study, we build on Laaser and Karlsson's (2021) approach since it provides a framework for analysing how both organisational structures and individual experiences shape meaningful work. This perspective is particularly relevant for understanding AI-powered tools' impact on autonomy, dignity and recognition, as these technologies are embedded in workplace practices that simultaneously enable, constrain, or redefine employees' roles and experiences.

*2.2.2 Human-AI collaborative environments.* The integration of AI-powered assistive tools in the workplace can be understood in light of, at the micro-level, direct user interactions with AI and, and at meso- and macro levels, the broader organisational and systemic implications. To achieve this, we draw on two complementary frameworks: human-AI collaboration and sociotechnical systems (STS).

The Human-AI Collaboration framework emphasises the co-agency between humans and AI. It can occur through two primary models: *AI in the loop of human intelligence*, where AI enhances human decision-making, such as in medical diagnoses (Corvello, 2025; Möllers et al., 2024), and *human intelligence in the loop of AI*, where humans refine AI systems through tasks like data annotation, reinforcement learning, and interpretability (Dellermann et al., 2019). AI as a digital *teammate* can shape workplace knowledge, trust, and work (Seeber et al., 2020), with the potential to redefine work practices by acting as proactive and intelligent partners rather than passive tools (Bankins and Formosa, 2023).

Greater transparency and explainability in AI systems enhance user trust and acceptance, as users rely on both heuristic, experience-based evaluations and systematic, logic-driven assessments to interpret AI decisions (Shin, 2021). Trust emerges as a critical mediator between explainability and AI adoption, shaping perceptions of AI performance and influencing users' willingness to engage with AI-driven recommendations (Shin, 2021). This transformation extends to socialisation patterns and knowledge exchange, as AI can influence how employees interact, collaborate, and integrate into teams, potentially enhancing or disrupting informal knowledge-sharing processes and organisational cohesion (Callari and Puppione, 2025).

From a meso-level perspective, STS theory (Trist, 1981) provides a framework for describing and explaining the complex interdependent relationships occurring between people, technologies and organisational structures, where changes in one component can influence the entire system (Baxter and Sommerville, 2011). In the case of AI-powered productivity tools, their adoption and impact are not solely dictated by the technology itself but are shaped by factors such as work design, managerial practices, social norms and institutional policies (Baptista et al., 2020; Leonardi and Treem, 2020; Orlikowski and Scott, 2008). Within this perspective, technology, work and organisation are inherently intertwined – technology is not merely introduced into workplace environments but is socially constructed and enacted within them (Orlikowski and Scott, 2008). It is deeply embedded in and co-constitutive of organisational practices and social structures, meaning that its integration both influences and is influenced by the broader workplace context in which it operates.

Indeed, technology and human agency continuously shape and redefine each other in an ongoing, dynamic process (Orlikowski and Scott, 2008). This means that work practices evolve in response to technological affordances and constraints (Orlikowski, 2007), while human agency simultaneously influences how technology is developed, adopted and integrated into the workplace (Leonardi and Barley, 2010). Employees actively shape their interactions with technology, adapting and repurposing tools in ways that reflect their needs, expertise, and workplace cultures (Mariani and Dwivedi, 2024; Orlikowski, 2010). Therefore, the specific properties of a technology – such as M365 Copilot's ability to generate text, analyse data and provide contextual recommendations – directly influence how work is organised and how employees engage with their tasks.

Finally, considerations regarding their design and integration into collaborative environments are crucial, as their impact – both beneficial and harmful – may extend beyond organisational structures to broader societal implications (Rezaei *et al.*, 2024; Seeber *et al.*, 2020).

### 2.3 Methodological foundations

In this study, we employed the methodological approach of typologies through ideal-type analysis to develop detailed descriptions of user types clustered around shared practices of adopting M365 Copilot. Ideal Types are rooted in the thinking of sociologist Max Weber, who argued that “*an ideal type is formed by the one-sided accentuation of one or more points of view*” according to which “*concrete individual phenomena . . . are arranged into a unified analytical construct*” (Weber, 1904).

Ideal types are not intended to replicate reality. In the Weberian sense, an ideal type represents a mental construct of the phenomenal world, developed through the abstraction of empirical observations into analytically distinct typologies. These typologies do not encompass every feature of the phenomena they represent; instead, they highlight specific attributes that resemble the Ideal Type (McIntosh, 1977; Stapley *et al.*, 2022). Later, Uta Gerhardt (1994) expanded on Weber’s original methodology developing Ideal-Type Analysis as a qualitative research method. She advocated for the importance of preserving the richness and authenticity of individual narratives, viewing them as “*quasi-absolute evidence of covert meaning spheres*” (p. 94) in the process of generalising across cases.

Since then, typologies through ideal-type analysis have been employed as methods in the social sciences to describe and to make predictions about social phenomena across a broad spectrum of disciplines, such as psychology, to help describe and encapsulate the essential characteristics of a set of behaviours (e.g. (Leung and Cohen, 2011; O’Neill *et al.*, 2021)); political science, to classify political institutions and processes (e.g. (Osborne *et al.*, 2016); economics, through the construction of abstract models of market behaviour (e.g. (Perren and Kozinets, 2018)); organisational studies, to examine structures and dynamics within organisations (e.g. (Baden-Fuller and Morgan, 2010; Ebrahim *et al.*, 2014)).

Typologies constitute an ordered set of categories that classify individuals or objects based on similarities and differences, offering structure to complex social phenomena while maintaining the nuances of individual cases (Lehnert, 2007). Typologies provide a framework to “*identify, organise, and systematically describe naturally occurring behavioural patterns of people in a way that retains their wholeness*” (Mandara, 2003, p. 132), balancing *specificity with generalisation*. In essence, typologies help “*shape and structure*” (Stapley *et al.*, 2021, p. 4) the understanding of diverse experiences.

A typology emerges through a grouping process, categorising individuals based on common features that distinguish them from others while preserving case-specific distinctiveness (Kluge, 2000). Ideal-type analysis facilitates both within-case analysis – highlighting individual variation – and cross-case analysis, which compares and contrasts different groups (Stapley *et al.*, 2021, 2022). Ideal-type analysis typically requires a large, heterogeneous sample as it provides extensive scope to develop diverse typologies within the dataset. To this end, we analysed responses from 357 employees, which enabled us to develop robust Ideal Types, each reflecting distinct perspectives and experiences with M365 Copilot, as it is explained in the next Section 3-Research design.

## 3. Research design

This study involved a survey with both multiple-choice and open-ended questions to examine the impact of M365 Copilot on employees’ daily tasks. Analytically, it employed and further expanded upon the ideal-type analysis method as proposed by Stapley *et al.* (2021, 2022), as illustrated in Figure 1 and described in detail in the following sections. All analytical and

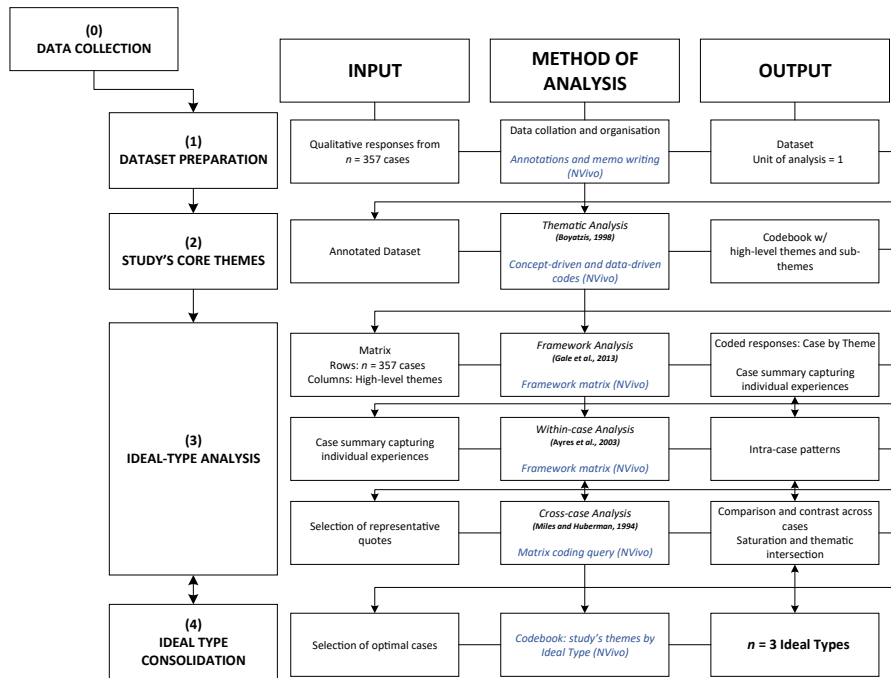


Figure 1. The process of the study's analytical stages. (Source: Authors' own work)

interpretive strategies employed to support the ideal-type analysis and to derive the study's Ideal Types were supported through the tools provided by NVivo (©Lumivero), a computer-assisted qualitative data analysis software (CAQDAS).

### 3.1 Data collection

The data collection was conducted through M365 Forms. During July and August 2024, the survey was distributed to a population of 802 licensed M365 Copilot users, yielding 357 responses. The survey incorporated several established scales to assess various dimensions of user experience with M365 Copilot, and open-ended questions to capture employees' perceptions and experiences of interacting with M365 Copilot in their daily tasks (Braun et al., 2021). Qualitative questions prompted employees to reflect on the adoption of this AI-powered assistive tool in their job and the influence it has on their work practices. This study reports exclusively on the open-ended responses.

### 3.2 Dataset preparation and organisation

Data familiarisation began with an analysis of respondents' socio-demographic and expertise characteristics. Table 1 presents an overview of these attributes. Additionally, basic descriptive statistics of the survey scales were conducted to gain an initial understanding of the trends in employees' responses. Finally, our focus shifted exclusively to the qualitative responses. The qualitative empirical dataset was uploaded to NVivo.

Initially, we collated all qualitative responses, organising them as a single unit of analysis to establish a comprehensive understanding of contextual patterns. Leveraging NVivo's features, we utilised annotations and memo notes to document ideas, preliminary observations and insights directly grounded in the data. This approach facilitated a structured yet flexible way to capture nuanced interpretations and guide the development of themes for subsequent analysis.

**Table 1.** Sample characteristics

Characteristics	Frequency	(%)
<i>Gender</i>		
Male	240	(67.2)
Female	100	(30.8)
Prefer not to say	7	(2.0)
<i>Age</i>		
<25	1	(0.3)
25–34	42	(11.8)
35–44	134	(37.5)
45–54	134	(37.5)
55–64	44	(12.3)
>64	2	(0.6)
<i>Higher Education</i>		
Bachelor's degree (or lower)	137	(38.4)
Master's degree	177	(49.6)
MBA	25	(7.0)
PhD	18	(5.0)
<i>Position</i>		
Consultant	16	(4.5)
Individual	317	(88.8)
Manager of people/teams	24	(6.7)
<i>Remote working</i>		
0%	63	(17.6)
20% (1 day per week)	114	(31.9)
40% (2 day per week)	105	(29.4)
60% (3 day per week)	33	(9.2)
80% (4 day per week)	21	(5.9)
100%	21	(5.9)

**Source(s):** Authors' own work

### 3.3 Theme development

We followed Boyatzis' approach (Boyatzis, 1998) to theme development. While the study's theoretical lenses formed the background knowledge shaping our analytical perspective, we remained open to data-driven insights, incorporating them into the study's thematic codebook (Table 2), which subsequently served as the foundation for our analysis.

### 3.4 Ideal-type analysis

At this stage, the analysis returned to focusing on each participant's responses, treating them as individual "cases", with each case now forming the unit of analysis. Using the identified themes in the codebook as a conceptual framework, the qualitative responses of all respondents were coded according to these themes. Intra-coder stability was assessed following Schreier's (2012) recommendations: the lead researcher re-analysed the data after a 14-day interval from the initial coding. This process supported an iterative cycle of comparison, reflection and refinement that helped validate the thematic structure, confirm the coherence of emerging patterns and assess the saturation of coded content across the dataset.

NVivo's Framework Matrix feature was then employed to facilitate a framework analysis (Gale et al., 2013) with cross-tabulation of individual cases (respondents) against the identified themes. This approach enabled a structured and visual representation of the dataset, with each cell containing the participant's qualitative responses coded to preserve the richness of their narrative contributions. This process started by constructing detailed summaries and

**Table 2.** Codebook description

High-level theme	Sub-theme	Theme description
<i>AI-enabled Work Practices and Adaptation</i>	<i>Work practices with integration of M365 Copilot</i> <i>Prompting</i> <i>Perception on efficiency/productivity</i> <i>Workload distribution</i>	This theme examines how employees integrate AI-powered tools into their daily work tasks, and reflects perceptions of utility and improvements in efficiency/productivity
<i>Human Agency, Autonomy and Decision-Making in AI-enabled Work</i>	<i>Autonomy and control over work processes</i> <i>Negotiation of Human-AI agency</i> <i>AI-enabled decision-making</i> <i>Perceived risks (e.g. over-reliance)</i>	This theme explores how M365 Copilot reconfigures human agency, autonomy, and the nature of decision-making in the workplace, highlighting employee attitude of resistance vs. acceptance of the AI's evolving role in the workplace
<i>Teamwork in Human-AI Environments</i>	<i>Human-Human collaboration</i> <i>Human-AI collaboration</i>	This theme investigates M365 Copilot's impact on team dynamics. Considers whether it facilitates collaboration or disrupts traditional social interactions among colleagues
<i>Organisational Support</i>	<i>Organisational culture</i> <i>Management and leadership practices</i>	This theme investigates to what extent its adoption is perceived as supported at organisational level

**Source(s):** Authors' own work

memos for each case – displayed in red font within the Framework Matrix cells – to contextualise the coded data and trace the individual experiences and practices with MS365 Copilot.

To this end, each case's responses coded within the study's themes were compared to and contrasted with all cases' responses to highlight convergences and variations in participant experiences and practices across the dataset. Moreover, the analysis allowed us to capture the situational nuances that influenced each participant's interactions, thereby deepening our understanding of the underlying dynamics at play. Using a within-case analysis (Ayres *et al.*, 2003; Miles and Huberman, 1994), we aimed to uncovering similar features that could explain how various aspects of each participant's experience intersected (Møller and Skaaning, 2015), moving beyond isolating discrete *units of meaning* within each case. Through this iterative process, three Ideal Types began to take shape, outlining distinct patterns of engagement with M365 Copilot.

To support the process of the definition of Ideal Types, representative quotes [1] were carefully selected. These quotes were chosen to underscore the defining characteristics of each Ideal Type and to capture the essence of respondents' unique perspectives (Stapley *et al.*, 2022). Serving as vivid, authentic examples, these quotes grounded the typology in the participants' own words, ensuring the analysis remained closely tied to their lived experiences.

Further analytical activities focused on examining both similarities and differences across cases (Miles and Huberman, 1994), deepening the understanding of how respondents conceptualised M365 Copilot's role in their work (Møller and Skaaning, 2015). To consolidate the distinct features of the three Ideal Types, a new codebook was developed to incorporate the participant responses within the identified three Ideal Types across the four study's high-level themes (Table 2). This process aimed to assess the level of coded text's saturation. To achieve this, we employed a Matrix Coding Query in NVivo to examine the intersections between the Ideal Types and the themes (Table 3).

**Table 3.** Theme saturation

	Ideal type [1]: a straightforward task-assistance tool	Ideal type [2]: a smarter assistant	Ideal type [3]: an expert-like teammate
<i>AI-enabled Work Practices and Adaptation</i>	681	253	98
<i>Human Agency, Autonomy, and Decision-Making in AI-enabled Work</i>	202	144	58
<i>Teamwork in Human-AI Environments</i>	116	79	29
<i>Organisational Support</i>	52	34	16

**Source(s):** Authors' own work

### 3.5 Ideal type consolidation

To further clarify and exemplify each Ideal Type, an “*optimal case*” (Stapley *et al.*, 2022, p. 5) was selected and described to encapsulate the key traits of the emerging ideal types. Optimal cases are those that best exemplify the shared characteristics of similar cases within each group, and serve as anchor points, providing a clear reference for understanding the nuances within each type (Stapley *et al.*, 2022). This analytical process culminated in the refinement and consolidation of the resulting three Ideal Types, reflecting the different stages employees conceptualise and engage with M365 Copilot – as a straightforward task-assistance tool, a smarter assistant and an expert-like teammate. Comparison of all other cases within each group to their respective optimal case enabled the assessment of how well participants’ experiences aligned with their assigned Ideal Type. Table 4 presents an overview of the key analytical features and attributes of each typology across the identified themes.

Together, these Ideal Types capture the diverse ways in which M365 Copilot shapes and supports employees’ work practices and contributes to their sense of meaningful work.

## 4. Results

The results highlighted the diversity in respondents’ expectations and experiences, showcasing how M365 Copilot is viewed differently depending on individual needs, agency and role expectation. Importantly, these insights reveal how M365 Copilot’s integration into the workplace influences perceptions of meaningful work, shaping how employees find significance, purpose and personal value in their roles.

### 4.1 Ideal type [1] – the Efficiency-Seeking Type: “to me copilot is just a tool”

Within this Ideal Type, respondents identified M365 Copilot as a useful tool for automating routine and mundane tasks, particularly in administrative areas. Indeed, most employees mentioned M365 Copilot’s support in administrative functions, such as taking meeting minutes, summarising discussions, and proofreading emails. These features allow respondents to reduce the manual effort involved in repetitive tasks, enhancing the speed and accuracy of their workflows and creating a smoother operational process. Therefore, respondents confirmed that these automated tasks generally demand little mental effort and minimal oversight beyond the initial setup and occasional review of outputs. These outputs seamlessly integrate with familiar workflows, further reducing the cognitive load associated with manually performing these tasks.

I think Copilot does well with very simple tasks such as summarising meetings.

**Table 4.** Ideal Types’ analytical core features, within case similarities and cross-case comparison

	Ideal type [1]: <i>Efficiency-seeking type</i> M365 copilot is just a “tool” that supports tasks executions and efficiency	Ideal type [2]: <i>Pragmatic integrator type</i> M365 copilot can be a smarter assistant	Ideal type [3]: <i>Collaborative Optimiser Type</i> M365 copilot is a digital, expert-like teammate
<i>AI-enabled Work Practices and Task Adaptation</i>	<p>M365 Copilot is seen as</p> <ul style="list-style-type: none"> <li>■ a tool that helps with automating routine and mundane tasks</li> <li>■ increasing efficiency in basic operations and processes</li> <li>■ requiring little mental effort beyond setting up and (little, if not at all) reviewing the outputs</li> <li>■ cognitively undemanding</li> </ul>	<p>M365 Copilot is seen as</p> <ul style="list-style-type: none"> <li>■ an aid in initiating and stimulating creativity, serving as a catalyst for generating and/or brainstorming ideas</li> <li>■ enhancing productivity by allowing users to learn and address tasks they might not have the expertise/time for, while still relying on [others] for more complex decisions</li> <li>■ requiring some degree of mental effort</li> <li>■ <i>prompting</i> reflects a new way of working and interacting</li> </ul>	<p>M365 Copilot is seen as</p> <ul style="list-style-type: none"> <li>■ a more advanced agent, providing support for complex and strategic issues</li> <li>■ requiring a certain level of expertise in crafting effective prompts</li> <li>■ Requiring heightened cognitive effort for effective interaction</li> </ul>
<i>Human Agency, Autonomy, and Decision-Making in AI-enabled Work</i>	<ul style="list-style-type: none"> <li>■ Need to preserve full autonomy in decision-making and avoid over-dependence on technology</li> </ul>	<ul style="list-style-type: none"> <li>■ Support and guidance on complex topics, boosting confidence in decision-making</li> <li>■ Feeling of assurance in approaching challenging tasks</li> </ul>	<ul style="list-style-type: none"> <li>■ Boosting human decision-making without undermining users’ roles – ultimately, the authority and expertise remain firmly in their hands</li> </ul>
<i>Teamwork in Human-AI Environments</i>	<ul style="list-style-type: none"> <li>■ M365 Copilot viewed as a support mechanism not a threat</li> </ul>	<ul style="list-style-type: none"> <li>■ Collaboration with work colleagues may be impacted – a shift that aligns with the broader changes to workplace dynamics accelerated by the Covid-19 pandemic</li> </ul>	<ul style="list-style-type: none"> <li>■ A collaborative teammate that can both support and challenge users’ expertise</li> </ul>
<i>Organisational support</i>	<ul style="list-style-type: none"> <li>■ Trust on the company’s ethical standards</li> <li>■ emphasis for clear guidelines on responsible usage, particularly regarding data security</li> </ul>	<ul style="list-style-type: none"> <li>■ Alignment with the company’s learning-oriented culture</li> <li>■ Need for structured training and support systems to ensure responsible adoption</li> </ul>	<ul style="list-style-type: none"> <li>■ Welcome the company’s forward-thinking approach</li> <li>■ However, concerns about job security and the evolving nature of expertise</li> </ul>

**Source(s):** Authors’ own work

However, respondents highlighted that effectively prompting M365 Copilot necessitates a foundational level of understanding and is perceived as cognitively demanding. Crucially, these tools require users to construct prompts (e.g. specifying the desired output format, tone or level of detail) to guide the M365 Copilot in generating responses that are accurate, relevant and aligned with task requirements. Within this Ideal Type, respondents expressed frustration with prompting M365 Copilot, feeling that their efforts were not adequately rewarded; in their view, M365 Copilot does not consistently yield high-quality results and often fails to meet expectations for accuracy or relevance.

Copilot is a tool. Is not performing any task without the right prompt or the right setup. I do not see it as compared to a human user.

This unpredictability in M365 Copilot's responses to varied prompts introduces an additional challenge, leading respondents to favour simpler tasks that require minimal prompting. Additionally, as the second quote seem to infer, these ideal-type users seem to favour a well-curated repository of examples, allowing them to directly apply suggested prompts without the need for extensive trial and error.

While employees acknowledged that M365 Copilot can be beneficial for generating preliminary insights and assisting with basic tasks, they expressed a strong desire to retain control over their work, underscoring the importance of exercising independent judgement. Within this Ideal Type, employees highlighted the tool's lack of nuanced understanding and contextual awareness – qualities inherent to human expertise and deemed essential for tasks requiring deeper insights and informed decision-making. Critically, respondents' emphasis on retaining their independence and control further reflects their understanding of meaningful work as the ability to make autonomous, informed choices without external influence, which is integral to their professional identity. This cautious attitude toward the tool reflects respondents' commitment to preserving their autonomy in decision-making and avoiding excessive reliance on M365 Copilot's outputs. Additionally, it underscores their desire to maintain an active role in their tasks, ensuring that they are not overly dependent on M365 Copilot and can apply their own judgement where it is most critical.

[...] but I am concerned it might limit my autonomy and reduce the need for certain skills. While this technology can increase efficiency, there's a risk of feeling less connected to the strategic aspects of my role, and concerns about job security remain if automation replaces critical functions.

Efficiency emerged as a dominant theme here, with respondents underscoring the critical importance of time in their work and their choice for requiring support by M365 Copilot – in automating basic tasks, employees perceive that can shift their focus to more complex, strategic responsibilities. Many respondents viewed this reallocation of time as essential, positioning M365 Copilot not only as a task automation tool but also as a valuable support for more effective time management and prioritisation in their daily activities.

I feel like Copilot has helped me to be more efficient and save time with tasks not nice to do but important such as meeting minutes as example.

Within this Ideal Type, respondents' perspectives appear to converge on viewing M365 Copilot not as a threat to teamwork in the workplace, but rather as a tool that can facilitate more purposeful and meaningful interactions among work colleagues. Previously, employees might have relied on colleagues for assistance with simple tasks; now, they can delegate these tasks to M365 Copilot. As a result, M365 Copilot enables employees to channel their energy into activities that genuinely benefit from human engagement and expertise. In the long run, this shift can foster a work environment characterised by increased productivity and mutual respect, where social interactions become more rewarding and relevant.

I think team collaboration and social interactions will not be reduced. Using Copilot does not reduce teamwork or collaboration; it enhances them by allowing for more strategic interactions with the team and avoiding bothering colleagues with operational tasks.

Finally, respondents were clear in their view: while M365 Copilot is an increasingly advanced and "intelligent" tool, it cannot replace human expertise and teamwork, particularly in areas requiring nuanced understanding or creativity – qualities that rely on the unique capabilities of human collaboration and insight. In this regard, they trust the company's ethical standards but emphasise the need for clear guidelines on responsible usage, particularly regarding data security.

As long as Copilot is a tool that supports a user, colleagues will discuss about it and share on ideas and ways of using it. I don't experience negative drawbacks (yet). If we always have in mind that, it cannot replace the human actions/contacts etc ... even in some cases could. I see it as just a benefit. A complement to existing relationships.

#### 4.2 Ideal type [2] – the Pragmatic Integrator Type: “I see copilot as my competent assistant”

In this Ideal Type, respondents perceived M365 Copilot as a competent assistant, valued for its ability to generate ideas, offer insights, and support the early stages of decision-making. Employees found that M365 Copilot provides foundational information or preliminary suggestions, which they refine and enhance through their own expertise and judgement. Notably, work remains meaningful as employees appreciate the chance to consider alternative perspectives, with decision-making further enhanced through M365 Copilot's input. While reviewing and adjusting M365 Copilot's outputs requires some mental effort, respondents generally described this as manageable, especially compared to the more extensive work involved in initiating tasks from scratch.

Output of Copilot has to be seen as an input to my work, where I need to ensure that the data is correct and that I take the conclusions.

Additionally, M365 Copilot was noted as a useful tool for fostering creativity, often acting as a catalyst for brainstorming and idea exploration. For example, employees employ M365 Copilot in preparing for meetings, where it helps structure thoughts and gather insights, laying a productive foundation for further collaborative discussions.

It's another way to work, more iterative. It helps a lot with getting the creative process started.

Respondents observed that M365 Copilot is particularly effective in familiar domains or for routine tasks, where its outputs reliably align with user expectations. In these cases, M365 Copilot's suggestions serve as a useful starting point, allowing users to build upon an initial framework rather than creating content from scratch. This approach saves time and provides a foundation on which employees can apply their judgement, reinforcing M365 Copilot's role as a supportive assistant rather than a replacement for their work. However, respondents acknowledged that M365 Copilot's performance can be less reliable with specialised or unfamiliar content, where inaccuracies may arise. In such cases, employees emphasised the importance of human expertise in reviewing and adjusting outputs to ensure they meet the specific context and maintain accuracy.

Within this Ideal Type, the shift from a focus on efficiency in the previous typology to an emphasis on *productivity* was prominent. Respondents highlighted that M365 Copilot enhances productivity by enabling them to tackle tasks they might not have the time or expertise for, while still relying on colleagues or experts for more complex, nuanced decisions. For these employees, M365 Copilot serves not only to accelerate routine processes but also to extend their capabilities, allowing them to engage in a broader scope of work and accomplish more.

My productivity is enhanced and the time spent on routine tasks is reduced. Copilot provides me also opportunity to innovate for example in content creation.

This Ideal Type also highlighted a change in prompting, with employees describing it as a skill in its own right and a new approach to working. Prompting is seen as an iterative process – a learning curve for both the user, who becomes increasingly adept at crafting effective prompts, and for M365 Copilot, which is refined through machine learning over time. Employees described this stage as manageable, though they noted that at this early phase, workflows can

occasionally be slowed by the need to rephrase or adjust prompts multiple times to obtain accurate and relevant responses. Despite these adjustments, respondents indicated a growing confidence in this skill, viewing it as part of their evolving work practices and integral to a collaborative dynamic between human and machine.

An additional shift in views from the previous Ideal Type is the perception of M365 Copilot as a learning platform – a supportive “assistant” – like a “*second brain*” – that suggests and provides diverse insights. This characterisation highlights the way M365 Copilot is considered as an auxiliary resource, extending users’ capabilities without diminishing their role or agency.

I am using Copilot for insights and predictive analysis, supporting decision making and meeting preparations.

Respondents also noted that M365 Copilot offers valuable guidance on complex or unfamiliar topics, which can boost their confidence in decision-making. By ensuring that important aspects are considered, M365 Copilot allows users to approach challenging tasks with a sense of assurance, similar to seeking a second opinion to gain a broader perspective on the matter at hand. This reassurance fosters a deeper understanding of topics, as employees feel supported in considering alternative angles and verifying critical details, making M365 Copilot a trusted resource in navigating multifaceted issues.

In this Ideal Type, employees appreciate the company’s progressive stance on AI adoption but stress the importance of structured training and clear guidelines to maximise M365 Copilot’s potential while ensuring responsible usage. Furthermore, they generally acknowledge that as reliance on AI-assistive tools increases for queries and general knowledge, this can negatively affect traditional collaboration with human peers. While respondents expect that strategic meetings or discussions will still occur between work colleagues, they noted a subtle shift towards consulting AI-enabled tools like Copilot overreaching out to colleagues, particularly for information-gathering or problem-solving tasks. Respondents expressed concern that excessive dependence on AI assistants for decision-making, without the collaborative input of human colleagues, could pose a risk. Some viewed this trend as a potential danger, as M365 Copilot’s increasing capability to address complex queries might inadvertently reduce the incentive to seek human insight and feedback. This shift, respondents worry, could gradually impact the frequency and quality of interpersonal collaboration, altering the dynamics of teamwork and mutual human support in the workplace.

As long as the questions are issues require [organisation] specific knowledge/ experience I still rely on colleagues, but for more general knowledge I turn to the Copilot –also because it’s always “available” while colleague may be absent or in meetings ...

#### 4.3 Ideal type [3] – the collaborative optimiser Type: “It’s like having 1,000 Einsteins in your basement”

In this Ideal Type, respondents expressed a desire for Copilot to evolve beyond a task-execution tool or “junior assistant,” envisioning it as a collaborative digital “*sparring partner*”—akin to a trusted teammate. They were optimistic that, as M365 Copilot becomes more sophisticated, it could extend its support to more complex and strategic issues, enabling meaningful exchanges of ideas. The terminology itself underscores this shift, framing M365 Copilot as a “smart”, AI-powered expert capable of simulating a “back-and-forth” dialogue, offering alternative perspectives, challenging assumptions, and helping to identify potential areas for improvement and deeper understanding within the topic of interaction.

The possibility of having access to a 90–95% expert in all fields, as well as an excellent data miner, allows me to eliminate a lot of waiting time that I would otherwise spend waiting for answers.

Undoubtedly, these tasks require employees to apply mental effort when engaging with M365 Copilot. Respondents noted that achieving high-quality results relies on expertise in prompting, where carefully formulated questions elicit accurate and reliable outputs. Therefore, prompting is essential here, enabling employees to leverage M365 Copilot's potential for insightful data analysis and scenario comparison, thus supporting more informed and strategic decision-making. This is exemplified in the following quote, in which even the choice of terms reflects a shift towards describing the interaction with M365 Copilot in terms more commonly associated with human relationships. Words and phrases like "*asking the right questions*", "*getting to know each other*" and the analogy to early-stage relationship dynamics highlight an emerging perception of M365 Copilot as an AI teammate that requires learning, patience and adaptation. Further, this language seems to suggest that users view their engagement with M365 Copilot as an evolving relationship, much like getting to know a new colleague or friend.

I believe it's all about asking right questions (as always in life :) so sometimes it's frustrating a bit to find / learn how to formulate them to AI to get the output exactly you would like to have. But I think it will become better with more experience from my side talking to algorithms as well as with better and better AI questions understanding :) We are just getting to know each other.

Engaging with M365 Copilot as an interactive partner shifts traditional workflows, challenging and reshaping employees' approach to tasks through a back-and-forth dynamic that has become integral to their work practice. This evolving interaction highlights M365 Copilot's role in adding layers of insight, enriching professional routines and supporting more nuanced decision-making.

This vision goes a step further: envisioning M365 Copilot as a humanised teammate underscores employees' hopes for a more responsive interaction – an AI assistant capable of engaging in discussions, providing critical insights, challenging the user's comments, and enhancing strategic thinking. In this capacity, M365 Copilot would not simply perform tasks but would actively support the user's thought process, functioning almost as a collaborative teammate that mediates and refines their work.

Then I ask the AI to gain a better understanding of the topic, but most of the time it will mostly agree with what I say (even when my bias is wrong, or when I missed something). I would love that it was able to fight back more. Pointing out misunderstandings I have or things where my reasoning is flawed. Similarly, as if you were having a back and forth with an expert in the field.

The prevailing sentiment among respondents in this Ideal Type is, "*I am the expert, requiring a peer to challenge my knowledge*". This perspective underscores that, while they value M365 Copilot's potential to expand their understanding and refine their thinking, the ultimate authority and expertise remain firmly within their own hands. M365 Copilot's role here is not to dictate conclusions but to provoke thought, challenging users' ideas with mutual engagement. For these individuals, meaningful work is enhanced through this partnership, as they remain in control of decisions and rely on M365 Copilot to stimulate their critical thinking and deepen their analyses. This dynamic collaboration enables them to draw on M365 Copilot's insights while reinforcing their own expertise, blending human judgement with AI-generated perspectives in a way that is both enriching and empowering.

In this Ideal Type, employees welcome the company's forward-thinking approach to AI adoption but also express concerns about the evolving nature of expertise and job security. While they acknowledge the opportunities AI presents, they emphasise the importance of continuous learning and strategic workforce planning to adapt to changing skill requirements. Their perspective highlights the need for organisational transparency, clear objectives for AI integration, and support mechanisms that ensure employees remain actively engaged and empowered in human-AI collaborative environments.

It is important to keep teamwork for important decision-making process, as well as organisation and team meetings or events to maintain that sense of belonging and commitment to [organisation]'s purpose and strategy.

## 5. Discussion and conclusions

With this study, we examined how employees within a multinational company integrating M365 Copilot engage with tasks co-generated by the AI-powered technology and reflect on changes to their work practices in the context of emerging human–AI collaborative environments. These environments mark a significant transformation in the nature of work, where AI-powered tools are not merely external instruments used to accomplish tasks, but active co-agents that influence the process and shape the quality and outcomes of human work.

Through the use of qualitative ideal-type analysis, we identified three distinct user orientations towards M365 Copilot that capture coexisting patterns of interaction and engagement within the organisation: the *Efficiency-Seeking Type* (Ideal Type [1]), the *Pragmatic Integrator Type* (Ideal Type [2]) and the *Collaborative Optimiser Type* (Ideal Type [3]). While these Ideal Types can be interpreted as reflecting progressive levels of integration, they primarily represent a snapshot of the current adoption landscape – where the *Efficiency-Seeking Type* (Ideal Type [1]) remains the most widespread, possibly reflecting the early stage of the tool's implementation and employees' ongoing experimentation with its features in their daily work practices. Notably, the Ideal Types show contingent responses shaped by the organisational context and conditions of introduction, and offer a situated view of how meaning, value and employee practices take form in the early stages of human–AI collaboration, with the potential to evolve as individual and collective capabilities mature.

The analysis of the three Ideal Types have therefore enabled a deeper reflection on how an AI-powered assistive tool such as M365 Copilot shape the perception of meaningful work by transforming everyday work practices, task structures and decision-making processes, thereby prompting renewed questions about work significance, human autonomy, agency and recognition within redefined roles and hybrid distributed work arrangements. This has both theoretical and practical implications, as discussed in the following sections.

### 5.1 Theoretical implications

Employees, as framed through the lens of the three Ideal Types, engage with M365 Copilot with differing expectations and intentions, enacting meaningful work in distinct ways within hybrid workplace contexts (Table 5). While Laaser and Karlsson (2021) provide a foundational model that conceptualises meaningful work through the interplay of subjective and objective dimensions – structured around autonomy, dignity and recognition – our Ideal Types show how these very dimensions are being reconfigured in AI-augmented environments. Additionally, they reveal how employees engage with AI-powered tools through emerging practices that involve both cognitive prompts, guiding task execution and metacognitive prompting, encouraging reflection on strategies, judgement and evolving expertise within human–AI collaboration.

**5.1.1 Meaningful work in human-AI collaborative environments.** Within Ideal Type [1], AI-powered workplace tools are valued for enhancing efficiency by automating routine and mundane tasks, enabling employees to focus on those that require their specialised skills and contextual knowledge. These tools seem to be appreciated for streamlining processes while remaining subordinate to human judgement, thus safeguarding autonomy and avoiding over-dependence (Hackman *et al.*, 2015; Rosso *et al.*, 2010). For the *Efficiency-Seeking* employees, meaningful work is intrinsically tied to retaining full control over their tasks, ensuring that decision-making remains firmly rooted in their expertise (Yeoman, 2014). This aligns with Laaser and Karlsson's framework (2021), where meaningful work emerges from objective

**Table 5.** Subjective and theoretical contributions to the notion of meaningful work in human-AI environments

Subjective contribution	Empirical results (from ideal types)	Key-literature	Theoretical contribution
<i>Autonomy as bounded</i>	<u>Ideal Type [1]</u> : the <i>Efficiency-Seeking</i> employees impose boundaries on AI use to safeguard autonomy; AI is valued but kept subordinate	Raisch and Fomina (2024), Yeoman (2014), Laaser and Karlsson (2021)	<i>Extends Laaser and Karlsson's framework</i> by showing that autonomy is actively curated through cognitive containment
<i>Recognition and interpersonal relationships</i>	<u>Ideal Type [2]</u> : the <i>Pragmatic Integrator</i> employees appreciate AI assistance but fear loss of peer interaction and interpersonal validation	Bailey <i>et al.</i> (2019), Laaser and Karlsson (2021), O'Neill <i>et al.</i> (2020), Faulconbridge <i>et al.</i> (2025)	Reveals a <i>paradox of meaningfulness</i> where AI-enabled efficiency may erode dignity rooted in social recognition
<i>AI as co-creator in value construction</i>	<u>Ideal Type [3]</u> : the <i>Collaborative Optimiser</i> employees see AI as a partner; AI helps shape professional judgement and recognition	Orlikowski and Scott (2008), Baptista <i>et al.</i> (2020), Laaser and Karlsson (2021)	Challenges the <i>mediator role of AI</i> by showing it participates in value and expertise recognition
<i>Algorithmic mediation and new paradox of meaningfulness</i>	<u>Ideal Type [3]</u> : Despite high agency perception, system design and prompting shape decisions and recognition	Bailey <i>et al.</i> (2019), Laaser and Karlsson (2021), Raisch and Fomina (2024)	Suggest the <i>emergence of a new paradox</i> : perceived autonomy coexists with algorithmic constraint—meaningfulness is co-authored yet asymmetrically shaped
<i>Prompting as hybrid cognitive-relational labour</i>	<u>Ideal Type [3]</u> : Prompting becomes a dynamic process involving knowledge articulation, delegation, and identity shifts	Adam <i>et al.</i> (2024), Brown (2015), Orlikowski and Scott (2008)	Expand on the notion of <i>prompting as labour involving epistemic, metacognitive, and identity dimensions</i> —reframing how expertise is enacted

**Source(s):** Authors' own work

autonomy, as employees independently exercise judgement and skill within formal structures. However, our results refine this view by showing that autonomy is not simply preserved in the presence of AI but is actively negotiated by the *Efficiency-Seeking* employees who impose clear boundaries around what should and should not be delegated. This reflects a conscious strategy of cognitive containment – a means of resisting algorithmic influence in order to protect one's moral and professional agency (Shestakofsky, 2017).

Meaningful work, for the *Efficiency-Seeking* employees, is deeply connected to highlighting human expertise and reinforcing their sense of value and contribution – qualities that AI assistants cannot replicate (Yeoman, 2014). They maintain a clear distinction between human roles and AI contributions, positioning technology as a complementary rather than a substitute tool (Raisch and Fomina, 2024). To the *Efficiency-Seeking* users, work remains meaningful precisely because it is a uniquely human characteristic, anchored in autonomy, critical judgement and the ability to make impactful decisions that AI cannot replicate, further reinforcing their commitment to maintaining control over their tasks and safeguarding against over-reliance on AI-based technological assistance (LaGrandeur, 2021; Ullrich *et al.*, 2021). This reflects a subjective dimension of meaningful work, where individuals derive dignity and recognition through their agency in decision-making and expertise (Laaser and Karlsson, 2021).

However, in contrast to more integrated forms of human-AI collaboration, the *Efficiency-Seeking* Type upholds a normative ideal of bounded delegation, challenging Laaser and Karlsson's assumption (2021) that procedural fairness alone secures dignity in AI-mediated contexts.

Within Ideal Type [2], meaningful work is enacted in a balance between autonomy and collaboration, with the AI tool acting as a supportive assistant that enriches the employees' decision-making processes (Calvo *et al.*, 2020). For the *Pragmatic Integrator* employees, meaningful work includes a clear sense of ownership while benefiting from the tool's guidance, which allows them to refine their ideas and address complex tasks. However, this *Pragmatic Integrator* Type also highlights concerns about the impact of AI on team dynamics within human-AI collaborative environments (O'Neill *et al.*, 2020). Many respondents expressed apprehension that AI workplace assistants' increasing adoption could reduce opportunities for informal human interactions, weakening team bonds and eroding the collaborative culture that fosters meaningful relationships at work. While AI enhances human competence, it may simultaneously erode the affective ties that contribute to dignity. In line with Laaser and Karlsson (2021) framework, this tension reflects the subjective dimension of meaningful work, where dignity and recognition are tied to interpersonal solidarity and shared contributions. This perceived trade-off between efficiency and social cohesion illustrates what Bailey *et al.* (2019) describe as a central paradox of meaningful work – both self-fulfilling and dependent on interpersonal recognition.

To this end, AI systems (and their embedded algorithms) have the potential to influence what is recognised as productive but also what kinds of interactions are prioritised or de-emphasised in workplace settings (Kellogg *et al.*, 2019). In fact, our results suggest that AI is reshaping recognition not just socially but structurally, displacing peer validation with algorithmic validation. This asymmetry in recognition challenges Laaser and Karlsson's human-centric framework (2021) and calls for rethinking validation within hybrid systems (Faulconbridge *et al.*, 2025; Raisch and Fomina, 2024).

This concern is compounded by the broader shift toward remote work, which has already diminished in-person knowledge exchanges. Similar AI-powered workplace tools, while valuable in enhancing individual productivity, risk exacerbating these trends unless organisations proactively balance AI integration with strategies to sustain interpersonal relationships and teamwork. At the organisational level, this underscores the importance of designing work systems that foster both objective and subjective autonomy to sustain meaningful engagement within future human–AI collaborative environments (Lepisto and Pratt, 2017).

Within Ideal Type [3], meaningful work is experienced through a symbiotic relationship with AI, with the technology framed as a collaborative digital teammate. This framing reflects a sociomaterial configuration (Orlikowski and Scott, 2008), in which human and non-human agents are entangled in a co-constitutive dynamic that redefines what it means to work and to know. Rather than delegating only routine tasks, the *Collaborative Optimiser* employees engage with AI as a co-creator – “someone” that supports, challenges, and refines their professional judgement (Baptista *et al.*, 2020). This dynamic resonates with Laaser and Karlsson (2021) conception of dignity as something that arises through the structured interplay between formal systems and human agency – where recognition and purpose are mutually shaped. However, our results reveal the limits of this dialectical model: AI systems increasingly move beyond mere mediation to actively participate in the construction of value and the recognition of expertise.

This also introduces a critical nuance to Bailey *et al.*'s (2019) paradox of self-fulfilment versus system constraint: meaningfulness in this *Collaborative Optimiser* Type is co-authored with AI but asymmetrically shaped by system design and interaction. Here, the perception of agency remains high, yet the boundaries of possible actions and decisions are structured by the system itself. As Kellogg *et al.* (2019) argue, algorithmic control often redistributes decision-making power in subtle ways – guiding worker behaviour through embedded logic and

interface design while maintaining the appearance of choice. This produces a condition in which human autonomy and agency are experienced as intact, yet are in fact structured and constrained – a phenomenon that might be described as the *illusion of autonomy* (Formosa, 2021; Nowotny, 2021). This seems to reveal a new paradox in which the experience of meaningfulness is perceived as entirely human and autonomous, while in practice it is algorithmically mediated. As a result, dignity and expertise in this context are no longer solely co-produced through human–human or human–organisation relations, but also through the affective and epistemic entanglements between users and intelligent systems.

Finally, this *Collaborative Optimiser* Type illustrates a future-oriented optimism towards human-AI collaborative environments: respondents envision meaningful work as something that evolves in tandem with the technology – inviting continued learning, adaptation, and collaboration. Here, meaningful work bridges objective and subjective dimensions by integrating traditional markers of skill and agency with emerging, technologically mediated forms of recognition. This creates a reconfigured understanding of contribution and value in hybrid teams (Lyons *et al.*, 2021).

*5.1.2 The role of cognitive prompts and metacognitive prompting in human-AI collaboration.* Our analysis reveals a clear evolution in how *cognitive prompts* (i.e. task-oriented cues that direct users to perform specific activities with M365 Copilot) are perceived and enacted across the three Ideal Types. This progression also reflects the extent to which employees engage in *metacognitive prompting*, reasoning through their strategies, monitoring their own progress and reflecting on the quality and implications of their interactions with the AI.

In Ideal Type [1], prompting is largely resisted or dismissed as superfluous; the *Efficiency-Seeking* employees focus on maintaining efficiency by delegating routine tasks to the AI tool while preserving clear boundaries around decision-making. For the *Efficiency-Seeking* employees, prompting is viewed as an unnecessary complication – irrelevant to their goal of optimising workflow through tightly controlled human-led judgement (Tankelevitch *et al.*, 2023). This aligns with their broader view of AI as a subordinate tool and reflects a preference for cognitive autonomy grounded in expertise and control (Raisch and Fomina, 2024).

In Ideal Type [2], however, prompting starts to be recognised as a developing skill, reflecting a deeper inquiry, a broader exploration of perspectives and evaluation of AI responses. The *Pragmatic Integrator* employees begin to explore how formulating better prompts can enhance the quality and usefulness of AI outputs. While AI remains a supportive assistant (Raisch and Fomina, 2024), prompting here represents a functional adaptation (Faulconbridge *et al.*, 2025; Steyvers and Kumar, 2023) – a way of improving individual productivity without challenging traditional notions of expertise or ownership. Prompting is not yet viewed as constitutive of meaningful work, but it becomes integral to achieving performance goals in increasingly collaborative work settings (Zeithofer *et al.*, 2023).

By Ideal Type [3], prompting transforms into a central practice – no longer a tool for productivity alone, but a vehicle for meaning-making. The *Collaborative Optimiser* employees describe their engagement with AI as a form of co-authorship, where prompting becomes iterative, creative, and reflexive. The *Collaborative Optimiser* Type reflects a deep entanglement between human and machine cognition (Brown, 2015; Hollan *et al.*, 2000), in which users do not merely instruct the system but interact with it as a thinking companion and teammate. AI, within this Ideal Type, seems to become a co-constitutor of insight and direction. Here, prompting is perceived as enabling a dynamic, evolving partnership in which new forms of knowledge, judgement, and contribution emerge (Adam *et al.*, 2024).

This progression illustrates the extent to which prompts and prompting in human-AI collaborative environments emerge as a form of hybrid cognitive-relational labour. Users engage in *epistemic translation* (the articulation and structuring of tacit knowledge into promptable, system-readable input) (Hollan *et al.*, 2000; Nonaka, 1994), *metacognitive delegation* (the reflective judgement required to determine what knowledge, tasks or decisions should be handed over to the AI-powered technology) (Adam *et al.*, 2024; Faulconbridge

*et al.*, 2025; Steyvers and Kumar, 2023), *affective interface work* (the emotional and cognitive effort required to manage frustration, interpret ambiguous responses, and sustain trust in iterative prompts) (Lee and See, 2004; Wharton, 2009) and *identity negotiation* (the ongoing redefinition of what it means to be knowledgeable, skilled or expert in environments where machine suggestions actively shape output) (Brown, 2015; Orlikowski and Scott, 2008). Critically, across the three Ideal Types, work seems to develop into an iterative, co-creative endeavour, where meaning, expertise and outcome are dynamically constituted (Martela and Pessi, 2018).

This reconfiguration draws conceptual parallels to Lazzarato's (1996) notion of *immaterial labour*, in which communication and affect are central to value creation. However, the prompt practices observed here depart from human-centric frameworks in one important respect: meaning-making is increasingly co-determined by algorithmic logics, in that they are bounded by system design, interface affordances, and training data. As Kellogg *et al.* (2019) argue, algorithmic systems reassign decision rights in subtle ways, presenting users with a curated sense of agency while constraining the space of possible actions through invisible design choices. In this light, prompting appears expressive, yet remains structurally shaped by the architecture of the system itself. This calls for a recalibration of existing theoretical models of meaningful work to account for the non-neutral, co-productive role of AI in shaping not only what is done, but how work is felt, understood, and valued.

### 5.2 Practical implications

As AI-powered tools become embedded in knowledge work, organisations have a strategic opportunity to shape implementation practices that reinforce, rather than erode, meaningful work. The following recommendations outline how the insights from our Ideal Types can inform more effective organisational responses.

First, understanding how employees engage with AI-powered tools enables organisations to offer differentiated reskilling and upskilling pathways aligned to Ideal Types (Callari and Puppione, 2025). Notably, reskilling frameworks should allow employees to self-identify with a type and follow tailored pathways using modular learning resources (e.g. LinkedIn Learning), as adopted in the case organisation. This increases the relevance and impact of training investments while boosting confidence and ownership over career development (Gordon and Gunkel, 2024; Ugar, 2023). For the *Efficiency-Seeking* Type, organisations could focus on basic Copilot functionalities, digital confidence-building, and time-saving use cases. Training should emphasise low-effort automation and reinforce their need for autonomy in decision-making. For the *Pragmatic Integrator* Type, organisations could design intermediate programmes that blend technical skill development with decision-making exercises. This way, experimentation and use of AI in complex tasks (e.g. drafting reports, summarising information) could be encouraged. Finally, for the *Collaborative Optimiser* Type, organisations could provide advanced skill-building opportunities that support generative prompting, human-AI co-creation and knowledge leadership. These employees could also benefit from being involved in pilot initiatives or peer coaching roles. Such differentiated pathways not only accommodate current orientations but also enable developmental movement across types, allowing employees to progress in confidence, competence and strategic use of AI as their familiarity and needs evolve.

Moreover, each Ideal Type holds different expectations, concerns and interpretations of AI's value. Communication strategies in the workplace should reflect this diversity, with clear and inclusive initiatives about the purpose and boundaries of AI integration. In doing so, organisations can build trust and signal recognition of employee expertise across all orientations (Winfield and Jirotko, 2018). For those employees aligned with the *Efficiency-Seeking* Type, organisation could reassure that AI will not replace judgement or control over work. For the *Pragmatic Integrator* Type, organisation could share success stories and practical examples of AI use in mid-level complexity tasks to build credibility and uptake. For

the *Collaborative Optimiser* Type, organisations could engage them in co-design sessions, feedback loops and future visioning activities – to act as “ambassadors” for bottom-up change (Callari and Puppione, 2025).

While these strategies focus on employees, they must be supported by two additional categories of stakeholders: line managers and HR managers. Critically, managers and HR can strengthen a culture of trust and purpose in AI integration – ensuring that communication is not only top-down, but also ethically grounded and relationally responsive. From the one side, line managers play a critical role in interpreting and translating AI initiatives into everyday team practices. They are instrumental in building trust, providing psychological safety and inspiring confidence in change by modelling adaptive behaviours and recognising early successes. From the other, HR managers, in turn, are key to opening up ethical dialogue around AI adoption and socialisation in the workplace. They create space for reflection and inclusive consultation and can equip managers with the tools to support transparent and meaningful conversations with employees.

Finally, our study has underscored that meaningful work should be a guiding design principle for AI adoption – not just an outcome of human-AI integration (Santoni de Sio, 2024; Santoni de Sio *et al.*, 2024). The Ideal Types can therefore offer a concrete diagnostic to inform policies that protect employee autonomy and decision-making authority within AI-supported workflows, ensuring that the introduction of intelligent tools does not undermine human judgment or ownership. At the same time, they underscore the value of designing collaborative environments where AI complements rather than displaces interpersonal interaction, reinforcing opportunities for mutual recognition, shared learning and team-based contributions. Critically, our Ideal Types have challenged the *one-size-fits-all* approaches to technology adoption and socialisation (Callari and Puppione, 2025). Instead, they advocate for adaptive implementation strategies that are grounded in the users’ lived experiences, specific task demands, and evolving workplace roles. This approach aligns with the core principles of Industry 5.0 and ethical AI, enabling organisations to embed technological innovation within a broader commitment to human-centred values, inclusivity and sustainable workplace transformation.

### 5.3 Future directions

This study draws on qualitative material derived from open-ended survey responses rather than in-depth interviews. We acknowledge that this format has necessarily constrained the narrative and contextual depth of the data. Future research should consider employing more immersive qualitative methods – such as longitudinal interviews or ethnographic observation – to deepen understanding of how employees make sense of AI integration over time and across organisational contexts. Such approaches would also enable researchers to explore transitional or ambiguous user experiences, including shifts between Ideal Types and emerging tensions within types – such as increased productivity coupled with reduced peer collaboration – offering a more dynamic account of employee adaptation and resistance.

Additionally, AI implementation strategies must reflect the sector-specific meanings of work. In fields like finance, consulting, legal or the creative industries, where expertise and authorship are central, AI initiatives must be designed to support – not dilute – professional identity. Translating the Ideal Types framework into these contexts could help anticipate varied employee reactions and tailor interventions accordingly (Callari *et al.*, 2025b; Corvello, 2025). Therefore, future research could explore the broader application of AI-enabled tools across diverse organisational contexts, examining how patterns of technological adoption vary according to roles, industry domains and cultural settings.

### Note

1. These and other selected quotes are incorporated into the presentation of the results to strengthen and contextualise the interpretation of the empirical data (see Section 4-Results).

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