



## Professional Meaning and Ethical Adaptation of Accountants in AI-Driven Accounting Systems

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### Article Info

#### Article history:

Received 28-10-2025

Revised 22-11-2025

Accepted 17-12-2025

#### Keyword:

Artificial Intelligence;  
Accounting Profession; Ethical  
Adaptation; Professional  
Identity; Digital  
Transformation; Lived  
Experience

### ABSTRACT

The integration of artificial intelligence (AI) into financial management and accounting practices has transformed the professional landscape, reshaping how accountants engage with technology, ethics, and professional judgment. Within this evolving digital ecosystem, understanding the subjective experiences of accountants adapting to AI-based systems has become an important yet underexplored area in accounting research. However, existing studies primarily emphasize system efficiency and adoption behavior, leaving unclear how professionals experience and interpret this technological transformation in their daily practice. Therefore, this study explicitly aims to examine how accountants make sense of AI integration, how they respond to emerging ethical complexities, and how these experiences influence their professional identity. This study employs an interpretative phenomenological approach (IPA) to explore how accountants construct meaning, navigate ethical challenges, and reconstruct professional identity in response to AI integration. Data were collected through in-depth semi-structured interviews with twelve accountants across public and private sectors who had direct experience with digital accounting technologies. The analysis revealed four major themes: emotional adaptation and professional displacement, redefinition of identity in digital contexts, ethical awareness in human–AI interaction, and cognitive transformation through learning resilience. These findings highlight that the adaptation process extends beyond technical competence it is an emotional, moral, and existential negotiation within the self. The study concludes that digital transformation in accounting should be understood as a human-centered experience that intertwines emotion, ethics, and cognition. The results provide theoretical and practical insights into how professionals sustain meaning and ethical integrity amid automation, offering a foundation for future cross-cultural and longitudinal research on human experience in digitally augmented accounting environments.



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## INTRODUCTION

The integration of artificial intelligence (AI) into financial management and accounting practices represents one of the most profound transformations in the modern professional landscape (Mukhlis, Suradi, et al., 2023; Mukhlis, 2025b). Across the global business ecosystem, automation and algorithmic processing have redefined how financial data are analyzed, interpreted, and reported. Accounting, traditionally viewed as a human-centered discipline rooted in ethical judgment and cognitive precision, is now evolving into a hybrid domain where human expertise coexists with machine intelligence (Michel-Villarreal et al., 2023). Instead of cataloging numerous technical developments, this study emphasizes the broader shift in how AI reshapes professional meaning and ethical responsibility.

In contemporary organizations, AI-driven accounting systems are increasingly deployed to enhance accuracy, efficiency, and predictive insight. However, this technological advancement extends beyond operational efficiency it disrupts established professional identities and alters the

meaning of human agency within financial decision-making processes (Wang & Zhang, 2025). Accountants who were once seen as the ultimate interpreters of financial truth now share this interpretive authority with intelligent systems capable of learning, reasoning, and suggesting optimal outcomes (Huang et al., 2024). Such a paradigm shift invites critical reflection on what it means to be a professional accountant in an age where decision-making is partially automated and where human judgment is mediated by algorithms.

From a socio-cultural perspective, this phenomenon carries significant implications for the moral, emotional, and existential dimensions of professional life. The rapid digitalization of financial work has generated ambivalent experiences ranging from empowerment and innovation to anxiety, alienation, and ethical uncertainty (Rouhi et al., 2024). These experiences are not merely organizational adjustments but deeply personal transitions that influence how individuals perceive their value, competence, and purpose within the evolving financial landscape. As emerging technologies increasingly blur the boundaries between human cognition and machine processing, the subjective experience of professionals navigating these changes becomes a critical area of inquiry.

Given the complexity and depth of this transformation, understanding the phenomenon solely through quantitative or efficiency-based frameworks is insufficient (Le et al., 2025). What is required is a phenomenological exploration one that captures the essence of accountants' lived experiences as they interpret, negotiate, and internalize their coexistence with AI. Such an approach allows for an examination of meaning beyond measurable outcomes, focusing instead on how individuals construct their realities in response to technological evolution (Vintilă et al., 2025). By delving into the experiential and interpretive dimensions of this shift, the study contributes to a richer and more human-centered understanding of digital transformation in accounting and finance.

Building upon the broader context of digital transformation in accounting, research into the subjective experiences of professionals within this evolving environment has emerged as a crucial domain of inquiry (Singh et al., 2020). Scholars have increasingly recognized that technological integration in finance cannot be fully understood through structural or quantitative analyses alone; it must also be examined through the lived experiences of those who engage directly with these technologies (Kim & Park, 2020). Studies have begun to explore how accountants experience the tension between automation and professional judgment, yet much of the existing literature remains conceptually fragmented and empirically limited in addressing the human dimension of this transformation.

One of the central methodological challenges in this field lies in capturing the depth and complexity of human experience associated with digital change. Quantitative and positivist approaches, while effective for measuring efficiency and adoption rates, often fail to reveal the emotional, ethical, and existential meanings that professionals ascribe to their work. Traditional surveys and performance metrics tend to reduce experience to numerical data, overlooking the nuanced reflections, uncertainties, and internal negotiations that accompany adaptation to AI-based systems (Lee et al., 2025). These limitations underscore the need for interpretive methodologies capable of illuminating the meaning-making process behind behavioral and cognitive shifts in accounting practice.

Furthermore, prior qualitative inquiries, though insightful, frequently emphasize organizational or technological outcomes rather than individual perception and sense-making. The experiential realities such as anxiety about professional displacement, redefinition of ethical responsibility, and evolving notions of competence remain underexplored (Yan et al., 2025). Consequently, much of the current understanding of AI adoption in accounting is surface-level, focusing on operational transition rather than the phenomenological essence of how professionals live and interpret this transformation in their daily practice.

This gap in methodological and conceptual depth positions phenomenology as an essential lens for advancing inquiry in this sub-area (Mukhlis, Arifin, Ridwan, & Zulfaidah, 2025; Mukhlis, Arifin, Ridwan, Zulfaidah, et al., 2025). By emphasizing first-person experiences, phenomenological research provides a pathway to uncovering the meanings embedded within professional adaptation how accountants internalize technological change, negotiate their sense of

self, and reconstruct the ethical foundations of their work (Hao et al., 2025). This approach not only enriches theoretical understanding but also offers practical insights for developing more human-centered frameworks in the management and implementation of digital transformation in accounting and finance.

Despite extensive advancements in financial technology research, current understanding of how accountants personally experience and interpret digital transformation remains limited (Omeish et al., 2025). Most studies addressing AI adoption in accounting have relied on practical or behavioral approaches, such as technology acceptance models (TAM) or unified theory of acceptance and use of technology (UTAUT), to explain system adoption and user behavior. While these models are effective for quantifying factors like usability, efficiency, and performance, they are inherently reductionist, offering little insight into the lived experiences, emotional responses, and evolving self-conceptions of professionals navigating technological change.

Such frameworks assume rational decision-making and organizational alignment but neglect the inner cognitive and ethical struggles that accompany automation in accounting work. Consequently, the human dimension the sense of uncertainty, the reconstruction of professional meaning, and the negotiation of moral responsibility in algorithmic contexts remains underexplored. This gap leads to a partial and surface-level understanding of digital transformation, one that measures adaptation without understanding how it is felt and interpreted by those undergoing it.

Furthermore, prior qualitative research often approaches this issue through thematic or case study analysis that focuses on institutional adaptation rather than individual meaning-making (Zhang et al., 2025). As a result, the deeper phenomenological essence of the experience the intersection between human consciousness and technological mediation has not been adequately captured. Existing studies rarely illuminate how professionals make sense of their roles, values, and identities when AI redefines the boundaries of human agency within financial decision-making.

This methodological and conceptual shortfall highlights the need for a phenomenological approach that privileges human experience as the central unit of analysis (Khan et al., 2023). By focusing on how accountants live through and assign meaning to technological transformation, phenomenology offers a pathway to uncovering the essence of professional identity reconstruction in the digital era. Such inquiry goes beyond observing behavioral adaptation; it seeks to understand the profound shifts in perception, ethics, and self-concept that occur when human expertise and artificial intelligence intersect.

Recent studies have examined how digital transformation influences accounting practice, emphasizing the integration of automation, big data analytics, and AI technologies in reshaping professional roles. Researchers such as (Zheng et al., 2024) have explored the psychological and ethical implications of automation in finance, revealing tensions between technological efficiency and human judgment. However, these studies often stop short of deeply examining the subjective experience how professionals interpret and emotionally navigate this change. The current body of literature highlights a growing awareness that digital transformation is not merely a technical transition but a profoundly human phenomenon requiring interpretive understanding. Therefore, this study builds upon these insights to examine the lived meanings of professional adaptation within the evolving digital ecosystem of accounting.

To address the limitations identified in previous research, this study applies an interpretative phenomenological approach (IPA). This method enables a detailed exploration of how accountants make sense of their interactions with AI and how such experiences reshape their professional identity and ethical self-conception (Mazzi, 2024). By engaging with the participants' narratives, the study reveals the essence of their adaptation process how they experience, understand, and assign meaning to the transformation of their work environment. The phenomenological lens provides a way to uncover the richness of experience that traditional behavioral or quantitative approaches fail to capture, thus offering a deeper and more holistic understanding of the human-technology relationship in financial management.

This article is structured as follows. The Introduction establishes the theoretical and contextual foundations of the study, followed by a Method section that outlines the interpretative phenomenological design, participant selection, data collection, and analytical procedures (Mukhlis et al., 2024; Mukhlis, Maryam, et al., 2023). The Results section presents emergent themes representing the participants' lived experiences, supported by direct quotations to preserve authenticity (Almarzouki et al., 2025). The Discussion interprets these findings in relation to existing literature and theoretical perspectives, highlighting implications for practice and future research. Finally, the Conclusion summarizes the essential meanings derived from the phenomenon and offers reflections on how digital transformation continues to redefine professional identity within accounting.

## **RESEARCH METHODS**

### **Study Design**

This study adopted an interpretative phenomenological approach (IPA) to explore the lived experiences of accountants adapting to artificial intelligence (AI)-driven accounting systems in the era of Industry 5.0. The phenomenological design was chosen because it emphasizes the exploration of subjective human experiences and allows for the identification of meanings ascribed by individuals to particular phenomena (Lutz & Knox, 2014; McNabb, 2015). IPA, as a branch of phenomenology, focuses on how individuals make sense of significant transitions in their professional and personal lives.

By applying this design, the study sought to uncover the essence of professional identity transformation, ethical awareness, and emotional adaptation that arise when human cognition interacts with intelligent technology. The interpretative nature of IPA made it particularly suitable for examining not only what participants experienced but also how they interpreted and contextualized those experiences within their socio-professional environments.

### **Participants**

Participants consisted of professional accountants working in both public and private sectors who had direct experience with digital and AI-based accounting systems (Hillman & Radel, 2018; Migdal, 2018). The inclusion criteria required participants to have at least five years of professional accounting experience and a minimum of one year using or interacting with AI or automation technologies in their work. Individuals who had no exposure to digital transformation processes or who held purely managerial roles without direct system engagement were excluded.

The selection followed a purposive sampling approach to ensure that participants could provide rich, experience-based insights relevant to the research focus. In total, twelve participants were included, representing a range of ages between 29 and 52 years (mean age 40.6). Both male and female participants were equally represented, reflecting gender balance within the accounting profession. Their diverse institutional backgrounds provided contextual depth, enabling the study to capture variations in adaptation experiences across different organizational environments.

Saturation was assessed iteratively during data collection and analysis. After approximately the tenth interview, no substantially new experiential themes emerged; the final two interviews served to confirm and refine existing patterns rather than introduce additional conceptual categories. This convergence of narratives was taken as an indication of thematic saturation within the defined inclusion criteria and justified retaining the sample size of twelve participants for detailed phenomenological interpretation.

### **Data Collection**

Data were collected through in-depth semi-structured interviews designed to elicit detailed accounts of participants' lived experiences (Carreiras & Castro, 2012; Iosifides, 2016). Interviews were guided by a flexible protocol that encouraged open-ended responses, allowing participants to describe their thoughts, emotions, and reflections freely. Each session lasted between 60 and 90

minutes and was conducted either face-to-face or via secure online video platforms, depending on participants' preferences and logistical convenience.

All interviews were audio-recorded and transcribed verbatim to preserve linguistic nuances and ensure interpretive accuracy. The data collection process emphasized creating a comfortable environment to facilitate honest and reflective responses. Privacy was maintained by ensuring that interviews took place in confidential settings, and participants were reminded that their identities would remain anonymous.

Where necessary, field notes were used to document non-verbal cues and contextual observations that contributed to a deeper understanding of meaning construction during the interviews.

### **Data Analysis**

The data were analyzed using Interpretative Phenomenological Analysis (IPA) as outlined by Smith, Flowers, and Larkin (2009). The process involved several systematic steps designed to move from detailed individual accounts toward the identification of shared experiential themes. Initially, transcripts were read multiple times to ensure immersion and familiarity with the text. Meaning units were then identified and annotated to capture emotionally charged or conceptually rich statements.

These units were clustered into emergent themes that reflected patterns of meaning across participants' narratives (Daly, 2007; Longhofer et al., 2012). The themes were subsequently integrated into higher-order conceptual categories that revealed the shared essence of the phenomenon under investigation. To assist in organizing and coding the data, NVivo 14 software was utilized; however, the interpretative engagement with the text remained central to the analytic process rather than dependent on the software itself.

Throughout the analysis, the focus remained on uncovering how participants made sense of their experiences rather than imposing predefined theoretical constructs (Fife, 2020; Kawamura, 2020). The final themes were refined through iterative reflection and comparison to ensure both internal coherence and representational accuracy.

## **RESULTS**

### **Emotional Adaptation and the Sense of Professional Displacement**

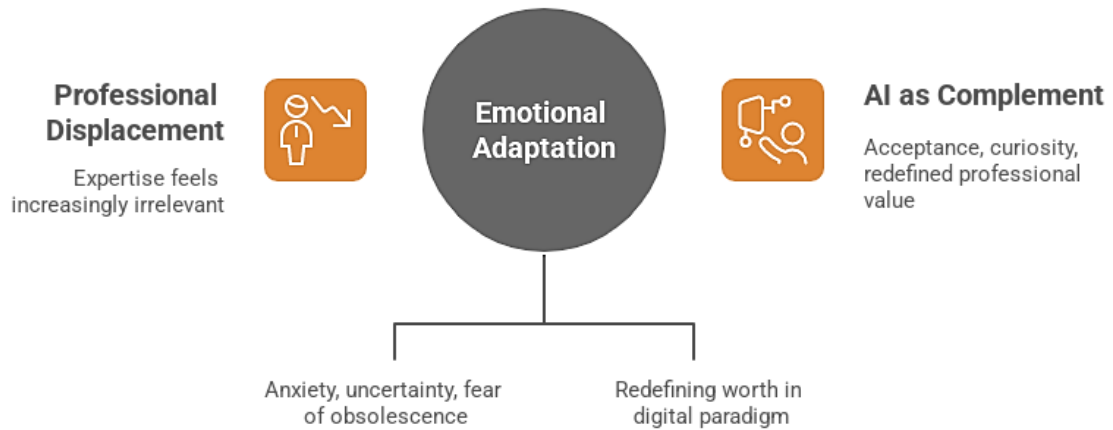
Participants described an initial phase of emotional turbulence marked by anxiety, uncertainty, and the fear of obsolescence. The rapid integration of AI-driven accounting tools created an environment where professional roles seemed to shift from active decision-making to system oversight.

One participant shared:

“I sometimes feel that my years of expertise no longer matter when the system performs the analysis faster and more accurately than I ever could.”

This sense of displacement was accompanied by a perceived erosion of professional value and identity. Yet, participants also acknowledged a growing curiosity and eventual acceptance of AI as a complement rather than a competitor. Emotional adaptation was thus a dynamic process, evolving from resistance to cautious engagement as they sought to redefine their sense of worth within the new digital paradigm.

### **Adapting to AI in Accounting**



### Redefining Professional Identity in a Digital Context

The transformation toward AI-based systems triggered profound reflections on the meaning of being an “accountant.” The participants emphasized a reorientation of their professional identity from manual processors of data to interpreters and ethical stewards of automated outputs.

As one respondent reflected:

“My role is no longer just about balancing numbers; it’s about ensuring that what AI produces aligns with ethical and professional standards.”

This theme reveals how digital transformation has compelled accountants to embrace new competencies, such as data literacy and technological fluency, while retaining the essence of human judgment and accountability. Participants expressed that maintaining ethical oversight provided them with renewed purpose and a sense of irreplaceable value in a digitized ecosystem.

### Ethical Awareness and the Human–AI Interface

A recurring theme across interviews was the ethical dimension of AI integration. Accountants expressed both optimism and caution about delegating financial decision-making to machines. They perceived themselves as moral gatekeepers who must ensure that automation does not compromise fairness, transparency, or professional integrity.

One participant remarked:

“AI may not have ethics; it only follows instructions. We are responsible for ensuring that its decisions are morally and professionally sound.”

This statement underscores an emergent consciousness that the human element remains central to ethical accountability. Participants felt a growing responsibility to critically engage with the algorithms that influence financial reporting, ensuring that the human conscience remains embedded within automated processes.

### Cognitive Transformation and Learning Resilience

Participants’ adaptation involved not only emotional and ethical shifts but also cognitive restructuring. Many described the need to “think differently” to coexist with technology. Continuous learning, experimentation, and self-education became essential survival strategies.

As one accountant explained:

“I had to learn to interpret data the way AI does seeing patterns, predicting outcomes, but still questioning the logic behind them.”

This intellectual engagement fostered a new kind of professional resilience characterized by openness to change and a reflective mindset. Participants reported that such transformation enhanced their analytical capacity and reaffirmed their commitment to lifelong learning as a foundation for professional relevance.

## **DISCUSSION**

The findings of this phenomenological inquiry revealed that accountants experience digital transformation as a profound personal and professional transition, marked by emotional adaptation, ethical reorientation, and cognitive renewal (Mukhlis, Janwari, et al., 2023; Mukhlis & Abdullah, 2025). The essence of the phenomenon lies in the reconstruction of professional identity how accountants reinterpret their roles and sense of value when working alongside artificial intelligence. These results respond directly to the central research question concerning how professionals make sense of AI-driven change within their daily practices and ethical frameworks.

The study's findings contribute to the research question by uncovering how emotional responses such as anxiety, displacement, and eventual acceptance shape the meaning of professional adaptation. Participants' narratives demonstrate that digital transformation is not merely an operational change but a reflexive process of meaning-making, in which individuals negotiate the coexistence of human intuition and machine logic. Through interpretative phenomenological analysis, the research provides insight into how accountants reframe their professional identity as both custodians of ethics and interpreters of automation (Chan & Wong, 2025). This human-centered understanding adds conceptual depth to digital transformation research by revealing that technology adoption is also an existential experience involving shifts in self-perception, moral accountability, and cognitive engagement.

These findings align partially with prior studies that have examined technological change in accounting but extend them by revealing the inner experiential dimension often overlooked in earlier work. For instance, Smith (2022) emphasized efficiency and performance adaptation, whereas this study illustrates that adaptation is also emotional and moral. Similarly, Rahman (2023) described the evolution of professional ethics in digital contexts but did not fully address how such ethics are personally internalized by practitioners (AlZaabi & Masters, 2025). The present findings therefore support and deepen these perspectives by situating them within an interpretive framework that prioritizes the human experience. They also challenge purely functionalist models, such as the technology acceptance framework, by showing that understanding digital transformation requires attention to how it feels not just how it functions.

By engaging phenomenology, this discussion bridges the gap between technological determinism and human agency, underscoring that the essence of digital transformation lies in lived experience. The findings reinforce the notion that accountants are not passive recipients of automation but active meaning-makers who reconstruct their professional purpose in response to it. This interpretive understanding invites a redefinition of digital transformation one that honors the interplay between cognition, emotion, and ethics in shaping the evolving identity of the modern accountant.

### **Implications of the Findings**

The findings of this study hold significant implications for both theory and practice within the fields of accounting, ethics, and organizational transformation (Mukhlis, 2025a; Mukhlis & Saidah, 2025). At a scientific level, the study deepens understanding of how professionals construct meaning in the face of technological disruption a topic that has often been treated as a purely structural or behavioral phenomenon. By revealing the emotional, ethical, and cognitive dimensions of adaptation, the research underscores that the integration of AI is not simply a technological process but a cultural and existential negotiation within the professional identity of accountants. This recognition challenges organizations and educators to consider not only the technical training required for digital competence but also the psychological and ethical preparedness of accounting professionals.

Practically, these insights can guide institutions in designing human-centered digital transformation strategies. Organizations can support accountants by creating reflective spaces that allow them to discuss and internalize the meaning of technological change rather than merely adapting behaviorally (Aldighrir & Asiri, 2025). The acknowledgment of emotional uncertainty and ethical tension as part of professional growth can help mitigate resistance and foster more authentic

engagement with AI tools. Moreover, policymakers and regulators in the accounting profession may use these findings to craft guidelines that preserve ethical integrity and professional autonomy in increasingly automated environments. In this sense, the lived experiences uncovered through phenomenological inquiry extend beyond the individual, illuminating broader social and cultural transformations in how professional value and expertise are understood in the digital age.

### **Limitations of the Study**

Despite its depth, this study is not without limitations. The interpretative phenomenological approach, while suitable for exploring subjective experience, inherently involves a limited number of participants and therefore does not aim for statistical generalization. The findings reflect the lived realities of a specific group of accountants within particular organizational and cultural contexts, and the meanings derived are shaped by those contexts. Furthermore, the reliance on self-reported narratives introduces the possibility of interpretive bias, as experiences are filtered through participants' reflective consciousness. While these boundaries are consistent with phenomenological philosophy, they suggest that the insights presented should be interpreted as contextually grounded meanings rather than universal truths. Nonetheless, these limitations serve to highlight the richness and specificity of human experience, reinforcing the value of qualitative depth over breadth.

### **Prospective Directions for Future Research**

Future research can build upon these findings by extending the exploration of lived experience across different cultural, institutional, and technological contexts. Comparative phenomenological studies could examine how accountants in varying regulatory or socio-economic environments construct their professional identities in response to digital transformation. Additionally, integrating phenomenology with complementary qualitative frameworks such as narrative inquiry or hermeneutic dialogue may yield even deeper insights into how meaning evolves over time as professionals continuously interact with intelligent systems. There is also potential for longitudinal phenomenological research to trace the temporal evolution of adaptation, exploring how early apprehension transforms into acceptance and mastery. Ultimately, future studies should continue to advance the discourse on the human meaning of automation, reinforcing that the progress of technology in accounting must always remain anchored to the experience, values, and ethical reasoning of the professionals who sustain it.

## **CONCLUSION**

This study explored the lived experiences of accountants adapting to AI-based accounting systems in the era of Industry 5.0, addressing the broader question of how digital transformation reshapes professional identity and ethical consciousness. The findings revealed that this transformation is not merely technological but deeply experiential, involving emotional adaptation, ethical reflection, and cognitive renewal. Through an interpretative phenomenological approach, the study illuminated how accountants reconstruct their sense of professional value while navigating uncertainty and redefining their relationship with automation. These insights fill a critical gap in previous research that often emphasized efficiency and adoption metrics without considering the human meaning of technological change. The study contributes to a richer understanding of digital transformation as a human-centered phenomenon that intertwines emotion, ethics, and expertise. Future research may expand these insights by examining cross-cultural experiences or longitudinal developments in how professionals sustain identity and meaning amid ongoing digital evolution.

## **CONFLICT OF INTEREST**

The authors declare no conflict of interest. The research was conducted independently, and the funding organization, the International Research Council for Financial Innovation and Digital Accounting (IRCFIDA), had no involvement in the study design, data collection, analysis, interpretation, or decision to publish the results.

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