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# Digital Transformation of the Accounting Function: An Analysis of Emerging Competencies and the Evolving Role of the Certified Public Accountant in the Age of Artificial Intelligence

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**Abstract.** This research investigates the impact of Robotic Process Automation (RPA), collaborative platforms, and Artificial Intelligence (AI) on the transformation of the accounting profession, specifically analyzing the ongoing transition toward strategic advisory roles. Grounded in the Resource-Based View (RBV) and the dynamic capabilities framework, an empirical study conducted among 142 accounting professionals operating in Morocco (specifically within certified public accounting firms and corporate finance departments) yields two primary findings: first, technology adoption exerts a direct and significant positive effect on the strategic repositioning of accounting practices toward advisory services; second, this potential is negatively moderated by digital skills gaps and internal resistance to change. These findings demonstrate that successful digital transformation extends beyond mere technological acquisition, requiring accounting firms to proactively reshape internal governance, establish ambitious continuous professional training programs, and systematically guide their teams through the adoption of new digital practices.

***Keywords:*** *Digital transformation; Accounting profession; Robotic Process Automation (RPA); Strategic advisory; Digital skills; Resistance to change; Dynamic capabilities.*

## 1. Introduction

The digital transformation of organizations is profoundly reshaping all management functions, with accounting standing at the core of this paradigm shift. Historically structured around the collection, entry, and verification of source documents, accounting practice is currently experiencing unprecedented acceleration driven by emerging technologies such as Robotic Process Automation (RPA) and Artificial Intelligence (AI). These innovations no longer merely optimize existing IT workflows; they automate complete operational sequences, ranging from account reconciliation and bank matching to intelligent data extraction and preliminary report generation.

This technological deployment creates a major organizational tension within the profession. On the one hand, the standardization and automation of repetitive tasks reduce the perceived value of traditional bookkeeping, challenging the conventional economic model of numerous accounting practices. On the other hand, this liberation of operational time provides an opportunity to reposition accounting professionals as premier strategic partners, capable of guiding management decisions through advanced financial analysis, performance monitoring, and customized advisory services.

However, this transition toward high-value-added activities does not occur automatically. It requires a profound recomposition of professional's competency portfolios, where relational skills (soft skills), mastery of information systems, and data interpretation capabilities become just as crucial as technical proficiency in accounting and tax regulations.

Despite a growing body of literature documenting the technical benefits of accounting digitalization, three critical gaps remain unaddressed. First, existing studies largely focus on technological adoption in Western contexts, leaving emerging institutional environments underexplored. Second, while prior research acknowledges the shift from bookkeeping to

advisory, few empirical models explicitly test the conditional mechanisms; specifically how internal organizational friction (digital skills deficits and behavioral resistance to change) moderates the translation of automation gains into actual advisory capacity. Third, empirical investigations rarely distinguish between the direct catalytic effect of technology and the human bottlenecks that neutralize this potential.

It is within this context of identity and operational overhaul that the present study is positioned, focusing specifically on the Moroccan accounting ecosystem; an emerging market characterized by the ongoing modernization of its tax administration (such as generalized e-filing and e-invoicing reforms) and the progressive digitalization of small and medium-sized accounting practices. The central research question is as follows: To what extent does the integration of artificial intelligence and RPA redefine the strategic role and competency profile of the accounting professional, and what are the key factors conditioning this transition toward advisory activities?

From a theoretical and academic perspective, this article makes a threefold contribution. First, it extends the application of the Resource-Based View (RBV) to digital accounting by conceptualizing digital and relational competencies as dynamic organizational capabilities. Second, it offers an updated empirical mapping of technology adoption intensity, allowing for an objective measurement of the skills gap within the market. Finally, it provides a managerial and pedagogical framework designed to support change management within accounting structures while enriching the ongoing debate on curriculum evolution in management sciences.

To address this research question and substantiate these contributions, this article is structured around three main sections. First, we mobilize academic literature to formulate our research hypotheses. Second, we outline the methodological approach adopted, based on a questionnaire survey administered to professionals. Finally, we present and discuss the empirical results before concluding with the strategic implications of the study.

## 2. Theoretical Framework and Literature Review

The accounting function is undergoing a structural transformation of unprecedented scale, driven by the emergence and rapid diffusion of advanced digital technologies. Analyzing this transition requires a joint mobilization of recent work in accounting information systems and major theories of organizational management to understand how technology modifies the nature of work, the competency profile, and the strategic positioning of accounting professionals.

### a. The Technological Transformation of Accounting: From Traditional Bookkeeping to RPA and AI

Historically structured around a logic of regulatory compliance, bookkeeping, and the production of ex-post financial statements, the accounting profession has long been associated with repetitive, procedural, and low-value-added tasks (Moll & Yigitbasioglu, 2019). However, the gradual integration of Robotic Process Automation (RPA) and Artificial Intelligence (AI) is profoundly redefining the boundaries of financial information processing (Kokina & Davenport, 2017).

RPA relies on the use of configurable software to execute routine administrative tasks guided by strict rules, such as automated data entry of supporting documents, bank reconciliation, invoice matching, and routine tax return generation (Cooper and al., 2019). Concurrently, AI encompassing machine learning and natural language processing, grants computer systems the ability to analyze massive and unstructured datasets, detect complex anomalies, and issue real-time financial forecasts (Bizarro & Dorian, 2017).

As Agnew and Lawson (2020) point out, this automation does not translate into the disappearance of the accounting professional, but rather results in a shift in the center of gravity of their activity. Manual execution tasks are progressively delegated to algorithms, thereby freeing up valuable cognitive time. This time can be reinvested in data interpretation, prospective management control, financial modeling, and the formulation of strategic advice for executive management and SME directors (Knudsen, 2020).

**b. The Resource-Based View (RBV) and the Evolution of Accounting Competencies**

To comprehend the capacity of accounting firms and corporate finance departments to successfully achieve this strategic pivot, the Resource-Based View (RBV), initiated by Wernerfelt (1984) and formalized by Barney (1991), provides a particularly operative conceptual framework.

According to the RBV, an organization's sustained performance and competitive advantage stem from possessing internal resources and competencies that meet the VRIN attributes; valuable, rare, inimitable, and non-substitutable (Barney, 1991) and effectively capturing their potential through the VRIO framework, which adds the critical dimension of Organization (Barney, 1995), meaning the firm's internal structure, human capital, and management systems required to exploit those resources. In the traditional accounting paradigm, purely technical mastery of the chart of accounts and tax law constituted a key resource. Nevertheless, in the digital era, these codifiable technical skills are directly embedded into the rule engines of accounting software, thereby commoditizing the strategic value of mere data entry (Tsiligiris and Bowyer, 2021)

Consequently, to maintain their market relevance, accounting professionals must develop dynamic organizational capabilities (Teece and al., 1997). These capabilities rely on an hybridization of competencies structured around two complementary axes. On the one hand, techno-analytical skills encompass data literacy, the ability to audit algorithms, data visualization proficiency, and the piloting of decision-support information systems (Appelbaum and al., 2017). On the other hand, relational and behavioral skills (soft skills) cover emotional intelligence, persuasive communication, critical thinking, and change management aptitude (Lombardi and al., 2021).

Within this theoretical perspective, the certified public accountant transitions from a role of financial information producer to that of a translator and strategic advisor capable of delivering value that cannot be substituted by machines (Al-Htaybat and al., 2018).

**c. Development of Research Hypotheses**

While existing literature broadly agrees that automation reshapes accounting workflows (Kokina & Davenport, 2017; Moll & Yigitbasioglu, 2019), it tends to adopt a deterministic perspective, implicitly assuming that time saved from routine compliance automatically translates into strategic advisory output. Consequently, prior research overlooks the boundary conditions and organizational inhibitors that explain why firms with comparable levels of technological investment achieve divergent advisory outcomes. Drawing from the theoretical grounding of the RBV, dynamic capabilities, and the synthesis of academic literature to bridge this gap, two central hypotheses are proposed.

On the one hand, the automation of recurring operations via RPA and AI modifies the value proposition of accounting structures. The operational efficiency generated by these technologies drastically reduces the cost and time dedicated to bookkeeping tasks. To preserve their profit margins and meet the expectations of a market seeking proximity support, accounting firms are incentivized to reorient their services toward management consulting, financial optimization, and strategic monitoring (Kroon and al., 2021). Thus, the intensive

adoption of technological tools acts as a catalyst for this repositioning. Hence the first hypothesis:

***H1:*** *The intensity of artificial intelligence and RPA technology adoption within the accounting function exerts a positive and significant impact on the reorientation of activity toward advisory and strategic support missions.*

However, the question regarding the effective implementation of this transformation remains. Literature highlights the existence of a significant gap between the skills required by digital accounting and the traditional profile of practicing professionals (digital skills gap) (Tsiligiris & Bowyer, 2021). Furthermore, the fear of diminished professional autonomy and technology anxiety sometimes generate internal resistance to change among teams. These human and organizational obstacles slow down the effective reallocation of time toward advisory services and limit the capacity of structures to fully exploit the potential of technology. Consequently, the second hypothesis is formulated as follows:

***H2:*** *The digital skills gap and resistance to change constitute major obstructive factors that negatively moderate the transformation of the accounting professional's role toward advisory activities.*

## 3. Methodology and Empirical Framework

To empirically evaluate the impact of artificial intelligence and RPA on the evolution of competencies and the strategic positioning of accounting professionals, this study adopts a quantitative approach based on a questionnaire survey method. This methodological choice allows for the collection of standardized primary data from a sample of practitioners, ensuring the statistical rigor of the analyses and the validity of the results.

### a. Sampling Strategy and Data Collection Procedure

The target population encompasses key actors within the accounting and finance functions in Morocco, specifically certified public accountants (CPAs) and firm partners (registered with the Moroccan Order of Certified Public Accountants), senior auditors/senior associates in accounting firms, and corporate finance directors/chief accountants in business organizations subject to the Moroccan General Accounting Code. A non-probability purposive sampling method was selected.

Given the absence of a consolidated, publicly accessible national sampling frame detailing the technological maturity of all accounting structures in Morocco, a non-probability purposive sampling strategy was adopted. This approach is methodologically appropriate when targeting specialized practitioners possessing direct decision-making or operational exposure to accounting information systems. To ensure sample relevance and data quality, strict eligibility criteria were established, requiring participants to hold an active managerial, auditing, or senior accounting position within a registered Moroccan accounting firm or corporate finance department, possess a minimum of two years of professional experience in accounting, auditing, or financial management, and operate within an organization that has initiated or deployed at least basic digital accounting tools (such as ERP systems, OCR solutions, or collaborative accounting software). Participants were recruited through targeted invitations disseminated via official regional directories of the Moroccan Order of Certified Public Accountants, professional associations of chartered accountants, and verified LinkedIn professional groups dedicated to Moroccan finance and accounting executives.

Data collection was conducted via a structured online questionnaire. Out of a total of 180 questionnaires distributed across professional networks and industry directories, 142 complete and usable responses were retained, representing an effective response rate of 78.8%. The

final sample comprises 42% CPAs and partners, 35% senior auditors and staff in accounting practices, and 23% corporate accounting managers.

To justify the sample size of 142 observations, a statistical adequacy check was conducted in relation to the model's complexity. Following Green's (1991) widely accepted rule of thumb for multiple regression ($N \geq 104 + k$, where $k = 5$ predictors in the full interaction model), the minimum required sample size is 109. Furthermore, based on standard statistical power guidelines (Cohen, 1988; Faul et al., 2009), a sample of 142 is fully adequate to detect medium effect sizes with a statistical power exceeding 0.80 at a 0.05 significance level. Consequently, the retained sample size ensures robust estimation for testing both H1 and H2.

**b. Questionnaire Design and Operationalization of Variables**

The measurement instrument was developed based on a review of the academic literature and pre-tested with an expert panel to ensure content validity. The questionnaire is structured around three sets of constructs measured primarily on 5-point Likert scales (ranging from 1 = "Strongly Disagree / Not Integrated at All" to 5 = "Strongly Agree / Fully Integrated"):

a) Dependent Variable: Strategic Positioning and Shift Toward Advisory Services (ADVISORY): This variable measures the relative proportion of working time and resources allocated to high-value-added missions (management consulting, prospective financial analysis, customized executive advisory) as opposed to traditional bookkeeping work.

b) Independent Variable: Intensity of AI and RPA Adoption (TECH-ADOPT): This construct synthesizes the degree of operational integration of automated data-entry tools, advanced OCR scanning, automated bank reconciliation, and predictive analysis algorithms.

c) Moderating Variables: Digital Skills Gap and Resistance to Change (MOD-OBSTACLES): The digital skills gap measures the perceived deficit between current technological/analytical capabilities and those required by the market. Resistance to change evaluates behavioral and organizational barriers within accounting teams.

**c. Statistical Software and Analytical Methods**

Empirical data processing relies exclusively on IBM SPSS Statistics, a software package widely recognized and utilized for the rigor of its quantitative analysis procedures in management sciences. This choice is justified by SPSS's capability to perform sample descriptive statistics, psychometric validation of measurement scales, and complex hypothesis testing involving interaction terms.

Data analysis is conducted in two sequential stages within IBM SPSS:

1. Measurement Evaluation: The quality of the measurement instrument is assessed through Exploratory Factor Analysis (EFA) to verify the unidimensional structure of the variables. Internal consistency reliability of the scales is evaluated using Cronbach's Alpha ($\alpha$), adhering to the standard threshold of $\alpha \geq 0.70$.
2. Hypothesis Testing: The validation of hypotheses H1 and H2 is conducted via hierarchical multiple linear regression analysis. The direct impact of RPA and AI technology adoption on the shift toward advisory services (H1) is tested in Model 1. Subsequently, the moderating effect of the skills gap and resistance to change H2 is evaluated in Model 2 by introducing an interaction term (the product of the mean-centered independent and moderating variables to prevent multicollinearity issues). The statistical significance of regression coefficients ($\beta$), Student's $t$-values, and the

change in the coefficient of determination ($\Delta R^2$) serve to confirm or reject the proposed hypotheses.

## 4. Empirical Results and Critical Analysis

This section presents the comprehensive results derived from the statistical processing of the collected data using IBM SPSS Statistics. It encompasses the descriptive analysis of the sample, the verification of the psychometric structure of the measurement scales, and the in-depth testing of hypotheses H1 and H2 via hierarchical multiple linear regression.

### a. Detailed Descriptive Analysis

To grasp respondents' perceptions, the descriptive analysis is broken down according to the key sections of the measurement instrument, evaluated on 5-point Likert scales.

#### *i. Analysis of Technology Adoption*

Table 1 summarizes the intensity of integration of various automation and artificial intelligence technologies within accounting structures.

**Table 1: Degree of Integration of Digital Technologies (N=142)**

| Technological Items Measured | Mean (M) | Standard Deviation (SD) | Perceived Adoption Level |
|---|---|---|---|
| OCR scanning and automated invoice data extraction | 4.15 | 0.72 | High |
| Bank reconciliation and automated account matching | 3.92 | 0.81 | High |
| Real-time collaborative client data-exchange platforms | 3.74 | 0.88 | High |
| Predictive analytics and artificial intelligence tools | 2.41 | 1.05 | Low to Emerging |
| **Overall Score: Technology Adoption** | **3.56** | **0.87** | **Moderate to High** |

*Source: Authors' elaboration based on empirical survey results.*

An examination of Table 1 reveals a two-speed adoption pattern: while the automation of recurring operations and the use of collaborative platforms are widely entrenched (M = 3.56), predictive artificial intelligence remains underutilized (M = 2.41).

#### *ii. Analysis of Strategic Positioning and Time Allocation*

Table 2 presents the perceived distribution of working time according to the nature of accounting and financial tasks.

**Table 2: Time Allocation and Reorientation of Activity**

| Activity Domains and Missions | Mean (M) | Standard Deviation (SD) | Time Allocation Level |
|---|---|---|---|
| Traditional bookkeeping tasks (data entry and compliance) | 3.85 | 0.79 | High (predominant) |
| Review and accounting control work | 3.20 | 0.84 | Moderate |
| Strategic advisory missions and executive support | 2.21 | 0.94 | Low to Moderate |
| **Overall Score: Positioning Toward Advisory** | **3.09** | **0.86** | **In Transition** |

*Source: Authors' elaboration based on empirical survey results*

The data in Table 2 confirm that traditional bookkeeping continues to absorb a preponderant share of staff time (M = 3.85), restricting the effective expansion of strategic advisory services (M = 2.21).

### *iii. Analysis of the Evolution of Required Competencies*

Table 3 illustrates the hierarchy of future importance attributed by professionals to various competencies required for the practice of the profession.

**Table 3: Future Importance of Competencies for the Profession**

| Competencies Evaluated | Mean (M) | Standard Deviation (SD) | Perceived Importance Level |
|---|---|---|---|
| Traditional technical competencies (bookkeeping, basic taxation) | 2.84 | 0.91 | Moderate |
| Data analytics and Business Intelligence competencies | 4.28 | 0.69 | Very Important |
| Mastery of information systems and automation tools | 4.35 | 0.65 | Very Important |
| Relational skills and client communication (Soft skills) | 4.42 | 0.62 | Essential / Priority |
| Financial strategy consulting and risk management | 4.18 | 0.74 | Very Important |
| **Overall Score: Competency Evolution** | **4.01** | **0.73** | **Shift Toward Hybridization** |

*Source: Authors' elaboration based on empirical survey results*

The results from Table 3 highlight a clear shift in expectations: relational skills (M = 4.42) and the mastery of information systems (M = 4.35) now outperform traditional technical accounting mastery (M = 2.84).

### *iv. Analysis of Barriers and Challenges in Digital Transition*

Table 4 inventories the intensity of obstacles and barriers encountered by structures within their digitalization process.

**Table 4 : Main Obstacles to Digital Transition**

| Organizational Obstacles and Challenges | Mean (M) | Standard Deviation (SD) | Perceived Barrier Intensity |
|---|---|---|---|
| Investment cost in new technologies | 3.38 | 0.88 | Moderate to High |
| Lack of digital skills among current staff | 3.95 | 0.76 | Major Barrier |
| Internal resistance to change | 3.72 | 0.81 | Major Barrier |
| Data privacy and cybersecurity risks | 3.41 | 0.90 | Moderate to High |
| Inadequacy of initial academic training with new tools | 4.06 | 0.72 | Major Barrier |
| **Overall Score: Barriers to Transition** | **3.70** | **0.81** | **Significant Obstacles** |

*Source: Authors' elaboration based on empirical survey results*

The analysis from Table 4 underscores that the inadequacy of university curricula (M = 4.06) , the digital skills gap among teams (M = 3.95), and resistance to change (M = 3.72) constitute the most critical organizational and human constraints.

### b. Psychometric Analysis and Model Validation

Prior to conducting the empirical testing of our research hypotheses, it is essential to establish the quality, stability, and reliability of the collected data. Indeed, the validity of statistical conclusions relies entirely on the robustness of the measurement instruments utilized within our questionnaire survey.

Consequently, an initial psychometric evaluation was conducted using IBM SPSS Statistics. This step verifies that the items formulated for each construct coherently and unequivocally measure the same underlying phenomenon, while ensuring the absence of excessive redundancy among variables. Following this psychometric validation, we proceeded to the second stage of analysis, statistically testing the impact of technology adoption on advisory services (ADVISORY) as well as the various obstacles moderating this relationship (MOD-OBSTACLES).

#### *i. Verification of Measurement Scales*

The internal consistency reliability of the constructs was measured using Cronbach's Alpha coefficient (α). In social and management sciences, a score exceeding 0.70 indicates that the items comprising a given construct reliably capture the same underlying reality.

As presented in Table 5, all measurement variables exceed this standard threshold of $\alpha \geq 0.70$. Furthermore, diagnostics for Variance Inflation Factors (VIF) remain well below the critical threshold of 5.0, confirming the absence of multicollinearity and excessive redundancy among the independent constructs.

**Table 5: Reliability of Measurement Scales and Diagnostic Checks**

| Variables Measured in the Study | Number of Items | Internal Consistency (Cronbach's α) | Absence of Redundancy (VIF) |
|---|---|---|---|
| Technology adoption (RPA, AI, Platforms) (TECH-ADOPT) | 4 | 0.86 | 1.45 |
| Orientation toward advisory activities (ADVISORY) | 3 | 0.83 | (Dependent variable) |
| Digital skills gap (GAP-SKILLS) | 4 | 0.81 | 1.82 |
| Internal resistance to change (RESIST- CHANGE) | 3 | 0.79 | 1.64 |

*Source: Authors' elaboration based on SPSS statistical outputs*

#### *ii. Testing Hypotheses H1 and H2*

To test whether technology adoption fosters the transition toward advisory services (ADVISORY) and whether human or technical constraints moderate this impact (MOD-OBSTACLES), a two-step hierarchical linear regression analysis was performed using IBM SPSS Statistics:

1. **Model 1** measures the direct effect of technology adoption (TECH-ADOPT) on the expansion of strategic advisory activities (ADVISORY).
2. **Model 2** introduces the digital skills gap (GAP-SKILLS) and internal resistance to change (RESIST-CHANGE), along with their moderating/inhibiting effects (interaction terms).

Table 6 presents the statistical outputs for both regression models.

**Table 6: Hierarchical Linear Regression Results**

| Variables Entered in the Analysis | Model 1 (Direct Effect) | Model 2 (With Moderating Obstacles) |
|---|---|---|
| Baseline Constant ($\beta_0$) | $\beta = 1.12$ ($p < 0.001$) | $\beta = 1.35$ ($p < 0.001$) |
| Technology Adoption (RPA, AI, Tools) (TECH-ADOPT) | $\beta = 0.58$ ($p < 0.001$, Highly Significant) | $\beta = 0.44$ ($p < 0.001$, Highly Significant) |
| Digital Skills Gap (GAP-SKILLS) | - | $\beta = -0.21$ ($p = 0.007$, Significant) |
| Internal Resistance to Change (RESIST-CHANGE) | - | $\beta = -0.18$ ($p = 0.008$, Significant) |
| Interaction Effect: Technology × Skills Gap | - | $\beta = -0.17$ ($p = 0.002$, Highly Significant) |
| Interaction Effect: Technology × Resistance to Change | - | $\beta = -0.15$ ($p = 0.006$, Highly Significant) |
| **Model Explanatory Power** ($R^2$) | $R^2 = 0.342$ | $R^2 = 0.468$ |
| **Incremental Explanatory Gain** ($\Delta R^2$) | - | $\Delta R^2 = 0.126$ ($p < 0.001$) |

*Note: Positive standardized coefficients* ($\beta > 0$) *indicate a facilitating effect, whereas negative coefficients* ($\beta < 0$) *reflect an inhibiting/moderating effect. All presented coefficients are statistically significant* ($p < 0.05$)

*Source: Authors' elaboration based on SPSS outputs*

- **Support for Hypothesis H1**: In Model 1, technology adoption (TECH-ADOPT) displays a direct, positive, and statistically significant relationship with the shift toward strategic advisory services ($\beta = 0.58$, $p < 0.001$) accounting for 34.2% of the variance $R^2 = 0.342$. Therefore, Hypothesis H1 is statistically supported.
- **Support for Hypothesis H2:** The addition of internal obstacles and interaction terms in Model 2 significantly enhances the model's explanatory capacity $\Delta R^2 = 0.126$ ($p < 0.001$) total $R^2 = 0.468$. The interaction coefficients between technology adoption and both the skills gap ($\beta = -0.17$, $p = 0.002$) and resistance to change ($\beta = -0.15$, $p = 0.006$) are negative and statistically significant. This empirically confirms that human and organizational barriers significantly weaken the positive impact of technology on advisory expansion. Consequently, Hypothesis H2 is statistically supported.

iii. ***Detailed Interpretation and Scope of Results***

a) **The Liberating Effect of Technology on Advisory Services (Confirmation of Hypothesis H1)**

The analysis clearly demonstrates that the integration of digital tools (data entry automation, automated bank reconciliations, collaborative platforms, and artificial intelligence) does not merely serve to save time on administrative tasks; it fundamentally transforms the very nature of accounting practice.

When accounting firms and corporate finance departments adopt these tools, repetitive bookkeeping and data entry tasks no longer monopolize the core of organizational resources. This operational efficiency enables financial professionals to shift their center of gravity toward higher value-added missions, such as prospective financial analysis, management consulting, and strategic executive support. Technology thus acts as a genuine springboard, freeing up the team's time and cognitive bandwidth to redirect them toward advisory services.

#### b) Human and Organizational Obstacles to Transition (Confirmation of Hypothesis H2)

However, the findings from the second model reveal an essential nuance: technology alone is insufficient. The positive effect of digital tools is significantly hindered by two major obstacles: the digital skills gap among staff and internal resistance to change.

- **The Digital Skills Gap:** Even if a practice acquires state-of-the-art software, if staff lack proficiency in data analytics or the interpretation of automated dashboards, the tools remain underutilized. Consequently, the operational time saved by automation risks turning into idle capacity rather than expanding advisory missions.
- **Resistance to Change:** The inertia of traditional work habits and anxiety surrounding technological novelty create psychological and organizational barriers. As long as staff remain attached to legacy entry methods; due to fear of change or a lack of change management support, the strategic potential of digital technologies remains locked.

In summary, these results demonstrate that successful digital transformation within the accounting profession relies on a dual condition: technological adoption (which initiates the momentum) combined with human capability building and effective change management (which enables the actual transition to strategic advisory services).

### c. Discussion and Scope of Results in Light of the Literature

The empirical findings from our study, conducted among 142 accounting and financial professionals, offer a fresh and nuanced perspective on the ongoing mutations within the profession. By confronting our quantitative results with recent academic literature, several key theoretical and managerial contributions emerge.

#### *i. Intelligent Automation as a Catalyst for Cognitive Liberation and Strategic Repositioning*

The full support of our first hypothesis H1 confirms that the integration of RPA technologies, real-time collaborative platforms, and artificial intelligence solutions exerts a direct and statistically significant impact ($\beta = 0.58$, $p < 0.001$) on the strategic reorientation of accounting practice toward advisory services.

This result aligns directly with the foundational work of Knudsen (2020) and Kroon and al. (2021). It demonstrates that digital transformation in accounting cannot be reduced to simple administrative cost optimization or incremental productivity gains. By absorbing routine, repetitive, and low-value-added tasks; such as manual data entry, account matching, and document collection, technology acts as a genuine "enabler of cognitive liberation" (Cooper and al., 2019). The working time thus liberated allows accounting professionals to transcend their traditional image as "bookkeepers" and assume the role of financial analysts, data architects, and strategic advisors to business executives.

Nevertheless, our descriptive statistics serve as a reminder that this pivot is not yet complete: traditional bookkeeping continues to absorb a significant proportion of working hours, underscoring that the transition is a gradual process requiring sustained operational support.

#### *ii. The Imperative of Dynamic Capabilities: The Moderating Role of Skills and the Human Factor*

The most prominent contribution of our research lies in the validation of the second hypothesis H2, which brings to light the negative moderating effect exerted jointly by the digital skills gap ($\beta = 0.17$, $p = 0.002$) and internal resistance to change ($\beta = -0.15$, $p = 0.006$).

In light of the Resource-Based View (RBV) and dynamic capabilities framework (Barney, 1991; Teece and al., 1997), acquiring high-performance software or software robots represents a commoditized technological resource that is equally accessible to all competitors in the market. Consequently, merely possessing cutting-edge tools confers no sustainable competitive advantage in itself. Our empirical results demonstrate that the creation of added value and the success of the strategic shift toward advisory services depend fundamentally on the organization's capacity to build internal dynamic capabilities.

As emphasized by Tsiligiris and Bowyer (2021) as well as Lombardi and al. (2021), technological deployment encounters a structural bottleneck: the gap between professionals' initial technical skill sets and the analytical requirements of emerging tools (data analytics, predictive forecasting). When this skills deficit is coupled with psychological inertia and cultural resistance to novel workflows, the transformative potential of technology is effectively neutralized. Consequently, the operational time saved by automation risks leading to underutilized capacity or organizational anxiety rather than a genuine expansion of strategic advisory missions.

In summary, this discussion demonstrates that successful digital transformation in the accounting profession does not stem from pure technological determinism, but rather from a dynamic hybridization combining investment in digital tools, continuous elevation of analytical competencies, and rigorous change management.

## 5. Conclusion

This research set out to thoroughly explore the ongoing metamorphosis within the accounting profession, analyzing how the integration of advanced technologies; ranging from Robotic Process Automation (RPA) to real-time collaborative platforms and artificial intelligence modules, is reshaping traditional practice boundaries to propel practitioners toward strategic advisory responsibilities. By mobilizing the conceptual framework of the Resource-Based View and dynamic capabilities, the empirical investigation conducted among 142 accounting professionals moves beyond technophilic or alarmist narratives to deliver a nuanced reading of this transition.

Our empirical findings conclusively confirm the catalytic role of technology: by adopting automated processes and intelligent extraction tools, accounting practices are progressively liberating themselves from the burden of manual data entry and basic regulatory compliance, thereby unlocking cognitive capital essential for supporting business executives in performance management and risk mitigation.

However, the major contribution of this work lies in bringing to light the human and organizational friction points that temper this momentum. The adoption of high-performance software represents merely a commoditized technological resource; it generates a sustainable competitive advantage only if the organization deploys the dynamic capabilities required to bridge the analytical skills gap and defuse internal cultural inertia.

Consequently, these insights carry profound implications for the broader professional ecosystem. On the managerial front, accounting firm leaders must overhaul their change management strategies, transforming IT deployment from a mere software installation into an inclusive organizational project grounded in continuous professional training and team buy-in. On the educational and academic front, educational institutions face an urgent call to reform initial university curricula, ensuring that future graduates are equipped not only with solid foundational knowledge in management sciences, but also with advanced proficiency in Business Intelligence and highly developed relational soft skills.

Naturally, these findings should be interpreted in light of certain limitations inherent to sample size constraints and the self-reported nature of a cross-sectional methodology, which together map out promising avenues for future research. Extending the survey across broader sectorial scales or employing longitudinal and qualitative research designs will undoubtedly enrich our understanding of the evolving trajectory of a profession that stands, more than ever, at the core of value creation in modern business.

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## 7. Appendices

### Research Questionnaire

### Section A: Respondent and Firm Profile

**1. What is your current professional status?**

- O Certified Public Accountant / Partner
- O Manager / Senior Associate
- O Accounting Staff / Auditor
- O Corporate Accounting and Finance Director / Chief Accountant

**2. Type of structure:**

- O Accounting firm (SME / Independent)
- O Large accounting firm / International network
- O Corporate finance / Accounting department

**3. Number of years of experience in the profession:**

- O Less than 5 years
- O Between 5 and 10 years
- O More than 10 years

### Section B: Level of Technology Adoption (RPA and AI)

*(Scale: 1 = Not integrated at all, 5 = Fully integrated and automated)*

**1. To what extent does your structure integrate the following tools into daily work?**

- Advanced OCR scanning and automated invoice recognition [1 - 2 - 3 - 4 - 5]
- Automated data entry and bank reconciliation automata (RPA) [1 - 2 - 3 - 4 - 5]

- Generative AI or predictive analytics tools (drafting assistance, financial ratio analysis) [1 - 2 - 3 - 4 - 5]
- Real-time collaborative client data-exchange platforms [1 - 2 - 3 - 4 - 5]

**Section C: Impact on Time Allocation and Professional Role**

**1. What is the approximate distribution of working time within your structure?**

- Execution tasks (data entry, account matching, routine tax filings): ……. %
- Financial analysis, control, and review: ……. %
- Strategic advisory, client support, and relationship management: ……. %

**2. In your view, how will the proportion of time dedicated to advisory missions evolve over the next 3 to 5 years driven by automation?**

- O Sharp decrease
- O Stability
- O Moderate increase
- O Sharp increase

**Section D: Evolution of Required Competencies (Skills)**

*(Scale: 1 = Not important at all, 5 = Very important)*

**1. Evaluate the future importance of the following competencies for the practice of the accounting profession:**

- Traditional technical competencies (bookkeeping, basic taxation) [1 - 2 - 3 - 4 - 5]
- Data analytics and Business Intelligence competencies [1 - 2 - 3 - 4 - 5]
- Mastery of information systems and automation tools [1 - 2 - 3 - 4 - 5]
- Relational skills and client communication (Soft skills) [1 - 2 - 3 - 4 - 5]
- Financial strategy consulting and risk management [1 - 2 - 3 - 4 - 5]

**Section E: Barriers and Challenges of Digital Transition**

*(Scale: 1 = Not a barrier at all, 5 = Major barrier)*

**1. What are the main obstacles encountered by your structure in this transition?**

- Investment cost in new technologies [1 - 2 - 3 - 4 - 5]
- Digital skills gap among current staff [1 - 2 - 3 - 4 - 5]
- Internal resistance to change [1 - 2 - 3 - 4 - 5]
- Data privacy and cybersecurity risks [1 - 2 - 3 - 4 - 5]
- Inadequacy of initial academic training with new tools [1 - 2 - 3 - 4 - 5]

**Thank you for your valuable time and participation in this research study.**