

# The Role of Management Accounting in Strategic Decision-Making under Digital Transformation

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**Abstract:** This study aims to fill this gap by investigating the mediating effect of Management Accounting Practices (MAP) between Digital Transformation Practices (DTP) and Strategic Decision-Making Quality (SDQ). The research draws on the concepts of the Dynamic Capabilities Theory and views digital transformation as an organizational capability that can improve the ability of the management accounting systems to convert digital information into decision relevant knowledge. A quantitative survey design was used to explore the perceptions of accounting, finance and strategic decision making professionals. Descriptive statistics, reliability and validity, correlation analysis, regression analysis, and bootstrapped mediation analysis were employed in the empirical analysis. A complementary longitudinal analysis of corporate disclosures was also used to offer contextual evidence on the evolution of the discourse of digital transformation, AI and sustainability. Overall, the main findings suggest a strong positive correlation between digital transformation, management accounting practices and strategic decision making quality, with management accounting practices being found to be most associated with decision making quality. The results also suggest that attention should be paid to the consideration of construct distinctiveness and multicollinearity when interpreting the magnitude of these relationships. The secondary analysis offers additional insights into the rising importance of disclosure of digital transformation and AI in corporate reporting, whereas disclosure on sustainability showed a different temporal trend. The study has a contribution to the literature as it sees management accounting as an important organizational mechanism to which digital capability can be connected to the value created for strategic decision making. The implications for managers interested in the greater integration of digital technologies, management accounting systems and strategic decision processes are offered.

**Keywords:** NA

## 1. Introduction

Digital transformation has emerged as a major organizational phenomenon impacting business models, information systems, managerial processes, and strategic decisions. Cloud Computing, Artificial Intelligence, Big Data Analytics, Business Intelligence, as well as integrated Digital Platforms, have revolutionized the amount, velocity, and diversity of information that organizations have access to. This makes it more and more important to have an accounting system that can support decision-making by managers in a timely and relevant manner, with added value in terms of strategy (Rosmala, 2024; Saptari et al., 2026; Urata, 2026). So, digital transformation isn't just a technological shift; it's an organizational overhaul that has the potential to change how information is created, understood and utilized in strategic decisions. Table 1 lists some of the benefits of Digital Transformation in Management Accounting and Strategic Decision Making.

Its significance in this transformation is that it links organizational information with managerial planning, control, performance evaluation, resource allocation, and strategic decision making. The use of traditional



management accounting has been complemented by the use of digital technologies to allow for real-time reporting, predictive analysis, automated information processing and more complex performance measurement. Recent studies suggest that digitalization can improve the effectiveness of the management accounting system and increase its role in improving organizational performance and decision-making (Rosmala, 2024, Olumoh, 2023, Ratmono et al., 2023). Likewise, Saptari et al. (2026) contend that the role of management accounting is evolving from an information-driven to a decision-making and analytics-driven function, as a result of digital transformation.

The connection between digital transformation and strategic decision-making need not be a direct technological impact, however. Digital technologies create significant information but having information is not guaranteed to lead to improved management decision making. This organizational capacity to transform digital information into a relevant managerial knowledge is of critical importance. In this sense, management accounting practices can be an important organizational mechanism as they offer processes of identifying, analysing, interpreting and communicating accounting information for managerial purposes. Sihombing and Surbakti (2026) argue that digitalized strategic management accounting plays pivotal roles in strategic control, performance measurement and managerial decision processes, and Siahaan et al. (2025) point out that big data analytics provides strategic management accounting and managerial decision processes.

Empirical and conceptual research also indicates that the field of management accounting is developing from the traditional focus on cost measurement and financial reporting to a more strategic focus. Susilowati (2023) highlights the role of managerial accounting in cost management and strategic decision-making, and Simamora (2025) points out that management accounting is a crucial part of the strategic decision-making process in businesses. Tapia Jr. and Hernandez (2026) also show how different management accounting techniques can have different implications for managerial decision making, and therefore how the value of management accounting can vary from the mere existence of accounting information to how management accounting techniques are embedded in managerial processes.

This change is further enhanced by the adoption of AI and business intelligence. Jones (2024) explores how business intelligence solutions can aid decision-making processes within the context of digitally transforming organizations, and Jeyaraj (2025) examines the role of artificial intelligence in improving decision-making in management accounting. Hung et al. (2023) offer empirical proof on how the effectiveness of cloud-based accounting, digital transformation, and digital leadership can all have a positive effect on decision-making effectiveness and the firm's performance. The developments reveal that management accounting systems are becoming part of a wider digital information infrastructure and not isolated accounting systems.

**Table 1. General Benefits of Digital Transformation in Management Accounting and Strategic Decision-Making**

| <b>Advantage / Benefit</b>   | <b>Main Impact</b>                                  | <b>Reference</b>                              |
|------------------------------|-----------------------------------------------------|-----------------------------------------------|
| Faster access to information | Improves timeliness of decisions                    | Hung et al. (2023); Rosmala (2024)            |
| Better information quality   | Supports reliable analysis and planning             | Ratmono et al. (2023); Saptari et al. (2026)  |
| Real-time monitoring         | Strengthens performance measurement and control     | Sihombing&Surbakti (2026); Urata (2026)       |
| Advanced analytics&AI        | Enhances forecasting and decision support           | Siahaan et al. (2025); Jeyaraj (2025)         |
| Improved cost management     | Supports resource allocation and strategic planning | Susilowati (2023); Tapia Jr.&Hernandez (2026) |
| Strategic decision support   | Enhances evidence-based strategic decisions         | Hung et al. (2023); Urata (2026)              |

|                       |                                                       |                                          |
|-----------------------|-------------------------------------------------------|------------------------------------------|
| Competitive advantage | Strengthens strategic and organizational capabilities | Rosmala (2024); Chaidir&Kahardian (2026) |
|-----------------------|-------------------------------------------------------|------------------------------------------|

An important research gap still exists, however. The existing literature mainly focuses on digital transformation related to efficiency, effectiveness of accounting systems, organizational performance, competitive advantage and technology adoption. Others are on the transformation of management accounting or an investigation into the role of specific technologies like big data, artificial intelligence and cloud accounting. Lesser effort is spent in explaining how practices of digital transformation are translated into quality of strategic decision making in the organizational level through management accounting practices.

Theoretically this gap is of particular significance. Dynamic Capabilities Theory suggests that firms create sustainable strategic value not only through resources, but through the capacity to integrate, reconfigure and deploy resources across varying contexts (Teece et al., 1997). In this view, digital transformation can be considered as a capability that enables the organization to acquire and process information to a greater extent; and the management accounting can be understood as the organizational routines that enable the transformation of the information to managerial insight. The quality of the decisions made strategically can therefore be seen as a result of such an effective integration of those capabilities.

The current study, therefore, examines the relationship between Digital Transformation Practices (DTP), Management Accounting Practices (MAP), and Strategic Decision-Making Quality (SDQ). Specifically, it investigates the relationship between digitally transforming practices and the quality of strategic decision making and whether management accounting practices are explanatory mechanisms between digital transformation and the quality of strategic decision making.

The study has three contributions to the literature. In the first place, it treats digital transformation, management accounting, and strategic decision-making as interrelated phenomena and not in isolation, thereby offering a holistic perspective of these phenomena. Second, it sets up management accounting as an organizational structure that can enable the translation of the digital capabilities into strategic information and decision value. Third, it brings together primary survey evidence and complementary analysis of company disclosure, thus offering practitioner level and organizational level insights into the evolution of the role of digital transformation and management accounting.

The rest of the study follows the organization outlined below. The following section summarizes the theoretical and empirical research on digital transformation, management accounting practices and quality of decision-making and formulates study hypotheses. The methodology, empirical results, discussion and conclusions are presented in the next sections.

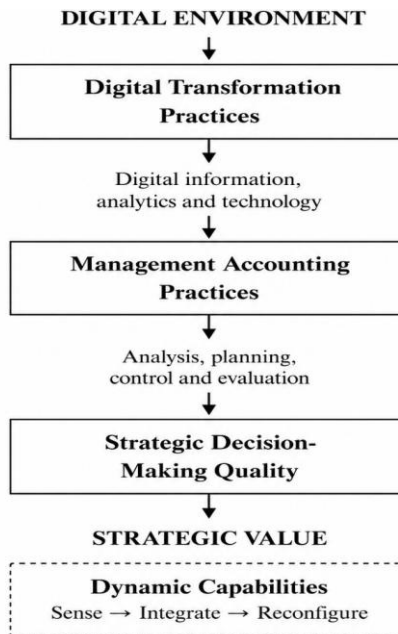
## 2. Literature Review

### 2.1 Theoretical Foundation: Dynamic Capabilities Perspective

This study is developed based on Dynamic Capabilities Theory presented by Teece et al. (1997). The theory describes how organizations are able to create the ability to integrate, assemble and combine internal and external competencies in order to adapt to a constantly changing environment. This attitude is especially important for digital transformation, as technology continues to evolve to reshape the information landscape in which enterprises are working. Digital technologies by themselves do not guarantee strategic value; strategic value is contingent on how an organization is able to bring together the technological resources, organizational processes and managerial skills.

In this research, Digital Transformation Practices are defined as a capacity of the organization to produce, obtain, manipulate, and share information at greater volume and speed. Management accounting practices are an organizational mechanism that can be used to convert these digital resources into information relevant for decisions. Effective integration of digital capabilities with the accounting and managerial processes in the organization can be a potential outcome of Strategic Decision-Making Quality.

This is the theoretical interpretation that is in line with recent research that digital transformation has transformed the management accounting process from a reporting process to a more analytical process (Rosmala, 2024; Saptari et al., 2026). It is also in line with Sihombing and Surbakti (2026) who highlight the importance of strategic management accounting for strategic control, performance measurement and decision making (See Figure 1).



**Figure 1. Dynamic Capabilities Framework for Digital Management Accounting**

Source: Developed by the authors based on Teece et al. (1997), Rosmala (2024), Saptari et al. (2026), and Sihombing and Surbakti (2026).

## 2.2 Digital Transformation and Management Accounting Practices

Management accounting has experienced a significant transformation when it comes to structure and functionality with digital transformation. The traditional accounting processes were often associated with periodic reporting and retrospective analysis. Organizations are able to create real-time information, automate repetitive tasks, connect multiple information sources, and utilize sophisticated analytical tools more and more through digital systems. As a result, management accountants no longer just have to create financial reports and have to “read” and “make use of” digital information.

Digitalization is shown to be relevant in management accounting systems by Ratmono et al. (2023) and is linked to the organizational results. The case of their mediation perspective is especially relevant since it suggests that digitalization can have indirect organizational effects via intermediate organizational processes. In the same vein, Olumoh (2023) correlates strategic management accounting and digitalization of accounting practices to organizational performance.

Rosmala (2024) states that information availability and better managerial processes could be promoted through digital transformation in management accounting, leading to efficiency and competitive advantage. In addition, Ranawaka and Said (2024) highlight the strategic aspects of digital transformation for management accounting and corporate strategy in the context of Swedish service-related firms. These conclusions indicate that digital transformation is more than just an information technology project, but could shape the part and strategic impact of the accounting function.

More recent studies support this argument. Saptari et al. (2026) in their systematic literature review, describe the shift from the traditional reporting to strategic analysis in management accounting. Sihombing and Surbakti (2026) state that digitalization, strategic control systems, performance measurement, and decision-making processes are interrelated. In the same way, Chaidir and Kahardian (2026) discuss the strategic value of digital transformation and cybersecurity for strategic management accounting and their potential role in the competitive advantage.

Using this literature, the capacity of management accounting practices is predicted to improve following digital transformation as users are able to access information more easily, make better analyses, do them more quickly, and more effectively integrate them.

### *2.3 Management Accounting Practices and Strategic Decision-Making Quality*

Information is available to management accounting for planning, control, performance measurement, cost management, resource allocation, and strategic analysis. This suggests that management accounting practices can have a quality impact on managerial decisions, with respect to both the quality of the practices and their strategic direction.

Susilowati (2023) shows that managerial accounting is important to support cost management and strategic decision making, and when managerial accounting information is properly integrated into managerial decisions, it can be utilized in making strategic decisions. Similarly, Simamora (2025) notes the application of management accounting for making corporate strategic decisions. These studies confirm the hypothesis that management accounting can be used beyond the financial reporting environment.

Tapia Jr. and Hernandez (2026) also offer more support for the notion that the various management accounting techniques can impact organizational decision-making in various ways. The strategic importance of management accounting is therefore about the type, relevance and use of accounting information, not only in terms of an accounting system.

In addition, Sutjahyani (2025) highlights the importance of performance measurement systems as a tool to improve the managerial decision-making process from a management accounting point of view. In the following, Shaqqour (2025) links strategic management accounting and decision-making to financial performance, thereby establishing the overall link between strategic information provided by accounting and organizational result.

The connection has been further strengthened with the introduction of big data, business intelligence and artificial intelligence in the organizations. The authors of Siahaan et al. (2025) identified big data analytics as an important tool in strategic management accounting and decision-making, while Jones (2024) recognized the role of business intelligence solutions in accounting decision making. The use of AI in improving decisionmaking in management accounting is also discussed by Jeyaraj (2025).

Therefore, it was expected that the management accounting practices will have a positive relationship with the Strategic Decision-Making Quality.

### *2.4 Digital Transformation and Strategic Decision-Making Quality*

Digital transformation can help inform strategic decision-making as more information becomes available and accessible, faster, and provide managers with the tools to better recognise future opportunities and threats. But the usefulness of digital technologies will still rely on the organization's ability to incorporate digital information into decision making processes.

Hung et al. (2023) present empirical evidence to establish a relationship between cloud-based accounting effectiveness, digital transformation, digital leadership, decision making quality, and firm performance. This finding complements the belief that with proper organizational capability, digital transformation can improve organization decision processes.

Urata (2026) focuses on the strategic consequences of digital transformation of management accounting for strategic decision-making and highlights the growing inter-mingling of digital accounting features and strategic

managerial processes. Sihombing and Surbakti (2026) also relate the strategic management accounting and digitalization to decision making and strategic control.

Huynh and Anh (2026) continue this view by analyzing strategic management accounting in terms of digital abilities and competitive advantage. Their research suggests that accounting skills can play a part in the strategic value created by digital transformation. The results are in line with Dynamic Capabilities Theory, where technological resources gain value when the organization has the capacity to incorporate and utilize them in an efficient manner.

## 2.5 Management Accounting as a Potential Mediating Mechanism

While there is a body of work that has linked digital transformation with management accounting, organizational performance and decision-making, the mediating mechanism between these has received relatively less focus.

A mediation perspective (Baron and Kenny, 1986) is an early framework in considering whether an effect of an independent variable on an outcome is through an intervening variable. Later advancements in the mediation analysis literature highlight the importance of directly estimating indirect effects and of applying bootstrapped confidence intervals instead of significance testing of individual component paths (Preacher&Hayes, 2008; Hayes, 2013).

In this study, management accounting practices can be one such intervening mechanism. While digital transformation makes organizational information available and analyzable, managers need organizational processes to turn this information into strategic knowledge. These processes can be delivered by management accounting systems in the form of planning, budgeting, performance measurement, cost analysis, strategic control, and managerial reporting.

So the concept of “digital transformation” does not necessarily translate into “better decision-making.” Instead, digital transformation could enhance the information environment, and management accounting practices offer the organizational routines where digital information is made useful in decision-making for strategy.

This literature indicates that the competitive implications of digital transformation could be contingent on the managing and accounting competencies along with the technological competencies that the organization can combine. This integration may help in quicker adaptation to environmental changes, optimization of resource utilization, effective strategic management and management based on evidence.

**Table 2. Synthesis of the Literature and Research Gap**

| Research Stream                                  | Established Evidence                                                                                                               | Remaining Limitation                                   | Contribution of the Present Study                               |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|-----------------------------------------------------------------|
| Digital transformation and management accounting | Digitalization improves accounting-system capabilities, efficiency, and analytical functions (Ratmono et al., 2023; Rosmala, 2024) | Often emphasizes system effectiveness or efficiency    | Examines digital transformation as an organizational capability |
| Strategic management accounting                  | Supports planning, control, performance measurement, and strategic decisions (Olumoh, 2023; Sihombing&Surbakti, 2026)              | Limited integration with digital transformation models | Integrates digital transformation and management accounting     |

|                                                |                                                                                                                                         |                                                                  |                                                           |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|-----------------------------------------------------------|
| Digital transformation and decision-making     | Digital technologies can improve information availability and decision quality (Hung et al., 2023; Urata, 2026)                         | Direct relationships do not explain the organizational mechanism | Tests management accounting as a potential mechanism      |
| Big data, BI and AI                            | Advanced analytics enhance accounting and managerial decision processes (Jones, 2024; Siahaan et al., 2025; Jeyaraj, 2025)              | Often technology-specific                                        | Provides a broader digital transformation perspective     |
| Management accounting techniques               | Different techniques can influence organizational decisions (Tapia Jr.&Hernandez, 2026)                                                 | Limited integration with digital capability                      | Connects accounting practices with digital transformation |
| Digital capabilities and competitive advantage | Strategic accounting capabilities can strengthen digital capabilities and competitiveness (Chaidir&Kahardian, 2026; Huynh&Anh, 2026)    | Decision-making quality is not always the central outcome        | Places SDQ at the center of the empirical model           |
| Mediation studies                              | Mediation provides a mechanism-based explanation of organizational relationships (Baron&Kenny, 1986; Preacher&Hayes, 2008; Hayes, 2013) | Limited application to DTP–MAP–SDQ relationship                  | Tests MAP as an intervening mechanism                     |
| Corporate digital disclosure                   | Provides evidence of changing organizational priorities                                                                                 | Often examined separately from practitioner evidence             | Uses complementary corporate disclosure evidence          |

Based on literature review, three gaps are identified which are closely connected. First, despite the amount of research on digital transformation and management accounting, few studies have tried to empirically link digital transformation practices, management accounting practices and strategic decision-making quality in a single framework. Secondly, the literature is scarce in terms of whether management accounting is a mechanism within an organisation that facilitates the process of digital transformation in improving the quality of decision making. Third, practitioner-level evidence and corporate-level evidence are usually analyzed separately, so there is little understanding of the connection between changes in the digital information environment and organizational accounting and decision making.

The study is based on the Dynamic Capabilities Theory and empirical studies reviewed; it is hypothesized that Digital Transformation Practices are positively related to Strategic Decision-Making Quality (See Figure 2).

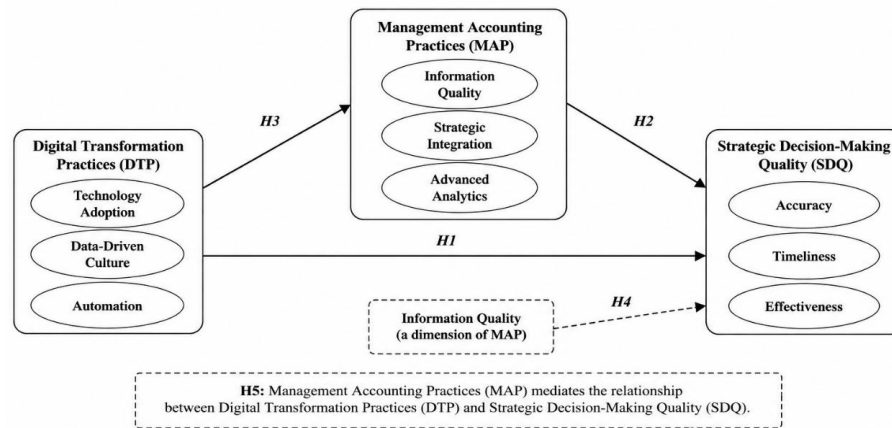
H1: Digital Transformation Practices have a significant positive effect on Strategic Decision-Making Quality.

H2: Management Accounting Practices have a significant positive effect on Strategic Decision-Making Quality.

H3: Digital Transformation Practices have a significant positive effect on Management Accounting Practices.

H4: Information Quality has a significant positive effect on Strategic Decision-Making Quality.

H5: Management Accounting Practices mediate the relationship between Digital Transformation Practices and Strategic Decision-Making Quality.



**Figure 2. Theoretical Framework and Hypothesized Relationships**

### 3. Research Methodology

This section outlines the research methodology used to examine the role of management accounting in strategic decision making in the context of digital transformation. The research design for the study is quantitative multi-source research design, which combines secondary corporate-disclosure analysis and primary survey data. Such a design is selected because organisational phenomena are complex and taken at both the firm level and individual practitioner level, namely strategic disclosures and perceptions and practices, respectively (Saunders, Lewis,&Thornhill, 2019). The methodology is organized into two phases because the two approaches complement each other and allow for analytical coherence while avoiding the ecological fallacy of assuming what is found on the level of the text is the same as what emerges in the mind of the reader (Hair, Black, Babin,&Anderson, 2019).

#### II.1 Research Approach and Design

The study methodology is a quantitative multi-source research design, as the data stream (secondary data based on the corporate reports) and primary data (data obtained from the survey) are all quantitative data. The design consists of two stages, which are sequential, but analytically independent:

- **Phase 1: Primary Survey**

This is where management accountants, financial analysts and financial managers are interviewed using a questionnaire to gather primary data. The goal is to examine the hypothesized relationships between digital transformation practices, management accounting practices and strategic decision-making quality at the individual practitioner level.

A total of 150 questionnaire responses were initially received through the electronic survey. After data screening, 30 responses were removed due to incomplete responses or lack of meeting data quality criteria. Thus, 120 satisfactory and complete responses were used for the final statistical analysis. The number of effective observations, for descriptive, reliability, correlation, regression and mediation analyses, was, therefore, N = 120.

- **Phase 2: Secondary Corporate Disclosure Analysis**

This phase covers the automatic content review of Microsoft Corporation's Annual Reports (Form 10-K) for fiscal years 2021-2025. Its goal is to build up a textual index of the long-term development of the corporate discourse of digital transformation, AI and sustainability. This phase offers contextual and longitudinal support for the organisation's strategic priorities revealed.

## II.2 Data Sources and Instruments

### a) *The Primary Data*

The main data collection tools used in this study are structured questionnaires that have been developed after a thorough study of the literature of management accounting and digital transformation (Rosmala, 2024; Ratmono et al., 2023; Siahaan, Simanjuntak, Mesakh, Silalahi, & Napitupulu, 2025). The questionnaire comprises four sections as showing in Table 3.

**Table 3: Questionnaire Structure and Measurement Scales**

| Section   | Content                                                                       | Number of Items | Scale           |
|-----------|-------------------------------------------------------------------------------|-----------------|-----------------|
| Section 1 | Demographic and professional background (age, experience, position, industry) | 6               | Multiple choice |
| Section 2 | Digital transformation practices (DTP)                                        | 10              | 5-point Likert  |
| Section 3 | Management accounting practices (MAP)                                         | 12              | 5-point Likert  |
| Section 4 | Strategic decision-making quality (SDQ)                                       | 10              | 5-point Likert  |

All substantive items are measured on a 5-point Likert scale from 1 ("Strongly Disagree") to 5 ("Strongly Agree"). The scale used in the present study is a widely used scale in management accounting survey research and has exhibited good psychometric characteristics in previous studies (Magiran, 2023; core.ac.uk, 2025).

The research tool is divided into three main thematic dimensions to comprehensively examine the relationship between corporate digitization and managerial performance. The first construct, Digital Transformation Practices (DTP) is used to assess the depth of technology integration within the firm in three sub-dimensions: Technology Adoption (adapted from Ratmono et al., 2023), Data-Driven Culture (adapted from Siahaan et al., 2025), and Automation (adapted from Rosmala, 2024) which review the depth of the implementation of technology infrastructure, such as cloud computing; the depth of systematic dependence on data analytics; and the digitization of routine financial tasks. The second core dimension is Management Accounting Practices (MAP), which measures how appropriate accounting systems respond to digital transformation. The operationalisation of this construct is done by using three measures: Information Quality (Ratmono et al., 2023), Strategic Integration (Olumoh, 2023), and Advanced Analytics (Siahaan et al., 2025), which measure the accuracy of the information, integration of the information with the corporate strategy, and deployment of the information in the operations of the company, respectively. Lastly, the third construct is Strategic Decision-Making Quality (SDQ) which focuses on the last managerial products. The dimension that is studied is focused on the reliability of foundational data (Accuracy) (Ratmono et al., 2023), the agility of the corporate responses (Timeliness) (Rosmala, 2024), and the concrete strategic results (Effectiveness) (Olumoh, 2023). The survey was conducted exclusively on a targeted sample of key financial professionals such as management accountants, financial analysts and finance managers working in medium and large-sized companies that are implementing digital transformation projects to ensure the empirical validity of the results. These individuals were chosen given their specific professional profile, as they are exactly in the middle of the implementation of the advanced management accounting systems and of the top level management accounting decisions process in their companies.

A purposive sampling technique is used which is supplemented by snowball sampling to get the desired size of the sample. The following are inclusion criteria for participants:

- Minimum of three years of professional experience in management accounting or financial analysis.
- Active involvement in the use of management accounting information for decision support.
- Working in an organisation with digital transformation projects.

Since the number of predictor constructs in the structural model (DTP, MAP, and control variables) is relatively small, the final sample of 150 respondents is adequate for the planned regression and mediation analyses. The sample

size is consistent with the rule of thumb of 10–15 observations per estimated parameter, which is satisfied with 150 observations and fewer than 10 predictors in the regression models (Hair et al., 2019) (See Table 4).

**Table 4: Evaluation of Sample Size Adequacy and Statistical Power Justification**

| Justification Criterion | Detail                                                                                                                                                                                                                      | Reference                                           |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| Statistical Power       | For a medium effect size ( $f^2 = 0.15$ ) at $\alpha = 0.05$ and power = 0.80, with 5 predictors, a minimum sample of 92 is required. N = 120 exceeds the minimum required sample size for the specified regression model.. | Cohen (1988); Faul, Erdfelder, Buchner,&Lang (2009) |
| Mediation Analysis      | For bias-corrected bootstrapping mediation tests (e.g., PROCESS, Model 4), 150 cases are considered sufficient to achieve stable confidence intervals.                                                                      | Preacher&Hayes (2008)                               |
| Research Precedents     | Recent management accounting studies have successfully employed samples ranging from 164 to 318 respondents.                                                                                                                | Ratmono et al. (2023); core.ac.uk (2026)            |
| Practical Feasibility   | A sample of 150 is achievable within the available timeframe and resources, given access to professional networks and online survey platforms.                                                                              | —                                                   |

The following procedures will be used in Primary Data Collection:

1. Questionnaire Development: The questionnaire was developed based on the literature review and operationalized into measurable items.
2. Expert Review: The questionnaire was reviewed by three academic experts in accounting and two practicing management accountants to establish content validity.
3. Pilot Study: A pilot test was performed with 15 participants (not part of the final sample) to check face validity, comprehensibility and clarity of the items. Minor wording changes were made after the pilot.
4. Distribution: The final questionnaire was distributed electronically via Qualtrics and LinkedIn professional networks.
5. Follow-up: Two reminder emails were sent at two-week intervals to maximize the response rate.

The primary survey data analysis for this study follows a structured, seven-step statistical procedure conducted via Minitab and JASP software. The process starts with data screening to check for missing values, outlier and normality assumptions, then descriptive statistics to summarise demographic characteristics and measure the central tendency of responses. Then the internal consistency reliability of the DTP, MAP, and SDQ scales is conducted, with minimum alpha of 0.70. The next step in establishing the construct validity is to conduct an Exploratory Factor Analysis (EFA) to test the factor structure and to analyse the Kaiser-Meyer-Olkin measure and Bartlett's test of sphericity. Later, a correlational analysis is used to quantify bivariate relationships between the main constructs of DTP, MAP, and SDQ. The regression analysis phase is then the phase that the hypotheses H1, H2, H3 and H4 are tested in detail using multiple linear regression, and relevant demographic variables are controlled. Finally, the results of the mediation test for hypothesis H5 are obtained using the mediation test options provided by the advanced regression and path analysis macro software in the Minitab environment with the use of 5,000 resamples of bias corrected bootstrapping to estimate the indirect effects..

The structural relationships among the variables are mathematically defined by four distinct regression models. Model 1 tests the first hypothesis where

$$\text{Model 1 (H1): } SDQ = \beta_0 + \beta_1(DTP) + \varepsilon.$$

Model 2 examines the second hypothesis expressed as

$$\text{Model 2 (H2): } SDQ = \beta_0 + \beta_1(MAP) + \varepsilon$$

Model 3 evaluates the third hypothesis through the equation

$$\text{Model 3 (H3): } MAP = \beta_0 + \beta_1(DTP) + \varepsilon$$

Model 4 evaluates the fourth hypothesis regarding information quality represented by

$$\text{Model 4 (H4): } SDQ = \beta_0 + \beta_1(\text{Information Quality}) + \varepsilon$$

Within the mediation hypothesis (H5), the specialized regression and path-analysis macro tools in Minitab are used to test the mediation model, with 5,000 bootstrap samples to create bias-corrected confidence intervals of the indirect effect as described by Hayes(2018)

The methodological process carried out to establish the content validity was of a good quality. First, detailed research was carried out in the management accounting literature to obtain the questionnaire items. Second, an expert panel review was carried out by three academics and two practitioners. Third, a pilot study of 15 participants was carried out to check the overall clarity and comprehensibility of items.

Theoretically, the items in the questionnaire should load onto the dimensions of DTP, MAP, and SDQ, and this will be confirmed by an Exploratory Factor Analysis (EFA) in Minitab using specific statistical criteria, and with a sample size of N=150.

**Table 5: Acceptable Threshold of each criteria**

| Criterion                        | Acceptable Threshold |
|----------------------------------|----------------------|
| Kaiser-Meyer-Olkin (KMO) Measure | $\geq 0.70$          |
| Bartlett's Test of Sphericity    | $p < 0.05$           |
| Factor Loadings                  | $\geq 0.50$          |

**b) The Secondary Data: Annual Report Content Analysis**

Secondary data are the annual reports of Microsoft Corporation for fiscal years 2021-2025, as filed on Form 10-K. The following reports have been taken from the U.S. Securities and Exchange Commission (SEC) EDGAR database.

Three textual indexes were created to reflect the strength of corporate discussion on the themes of focus. The following formula is used to calculate these indices:

$$Frequency_{index} = (Total\ report\ words / Total\ keyword\ occurrences) \times 10,000$$

In addition, each construct was categorized by the proportion of pre-defined thematic categories that had at least one occurrence of the keyword, serving as a measure of thematic breadth (Ratmono et al., 2023).

**Table 6. Definitions and Purposes of the Secondary Disclosure Indices**

| Index                                    | Abbreviation | Definition                             | Thematic Categories                     | Purpose in This Study                                 |
|------------------------------------------|--------------|----------------------------------------|-----------------------------------------|-------------------------------------------------------|
| Artificial Intelligence Disclosure Index | <b>AIDI</b>  | Measures the intensity of discourse on | AI Core, AI Products, AI Investment, AI | Longitudinal contextual evidence of AI prioritisation |

|                                         |             |                                                                          |                                                                                                                                                                 |                                                                           |
|-----------------------------------------|-------------|--------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
|                                         |             | artificial intelligence and its applications                             | Innovation, AI Strategy                                                                                                                                         |                                                                           |
| Digital Transformation Disclosure Index | <b>DTDI</b> | Measures the intensity of discourse on digital transformation components | Digital Transformation, Cloud, Digital Platforms, Automation, Data Analytics, Cybersecurity, Digital Workplace, Technology Infrastructure, Digital Capabilities | Longitudinal contextual evidence of digital transformation prioritisation |
| Sustainability Disclosure Index         | <b>SDI</b>  | Measures the intensity of discourse on sustainability and governance     | Sustainability, Environment, Climate, Energy, Circularity, Social, Governance, Reporting                                                                        | Longitudinal contextual evidence of ESG prioritisation                    |

The indices are not used as separate variables in the main regression models that test the hypotheses. Instead, they are used as secondary, descriptive evidence that provides context to the organization's longitudinal strategic priorities, and helps to explain the qualitative responses to the survey results. Secondary analysis is reported as an ancillary case-study story to support the interpretation of the primary survey results, but not as an alternative to hypothesis testing.

The secondary data will be analysed using descriptive statistics such as means, standard deviations, and year-over-year changes. Trend analysis will be conducted by plotting longitudinal trends from FY2021 to FY2025 in a visual manner so as to put the main survey results in context.

#### c) *Ethical Considerations*

All aspects of the study follow the ethical guidelines and have the following procedural safeguards: All potential participants will be given a detailed information sheet so that informed consent is given willingly and they will be able to begin the questionnaire only with their permission. The issue of privacy and confidentiality is addressed thoroughly, with no collecting of identifying information (personal names, specific employer information etc.), and all information will be carefully aggregated and anonymous with respect to final analysis. Full anonymity is also ensured, with the answers being completely anonymous and no tracking information (such as the IP address) being kept at any point. Also, participants are explicitly told that they have the right to drop out of the study at any point in the study without being penalized or having a negative impact. All data gathered will be kept safely according to the strictest data protection protocols and used only for academic research. In addition, institutional approval and complete formal ethical clearance will undergo from the appropriate institutional review board before the field data collection starts.

## 4. Results

The study conducted to explore the Role of Management Accounting in Strategic Decision-Making under Digital Transformation. The findings are presented in two parts: (1) primary survey results for management accounting professionals (n=120) and (2) supplementary analysis of the content in the annual reports of Microsoft Corporation (FY21-FY25). Every statistical analysis was carried out at  $\alpha = 0.05$  level and Minitab and python software were used.

## 5. Section One: Primary Survey Results

Table 7 shows the characteristic profile of the respondents. A sample of 120 managers, with backgrounds in management accounting, financial analysis, and finance management was used. The majority of the respondents (70%) were in age group of 25 – 44 years and 61.7% among them were males. Education wise, 40.8% had a Master's degree and 18.3% had professional qualifications (CMA, CPA, ACCA, CIMA). Professional experience was mostly in the range of 6-10 years (31.7%) and the median experience was 6-10 years. Representatives from across the industry, and the largest sectors were Manufacturing (25%), Technology (21.7%) and Financial Services (20%).

Table 7: Demographic Characteristics of Respondents (N=120)

| Characteristic          | Category                           | Frequency | Percentage |
|-------------------------|------------------------------------|-----------|------------|
| Age Group               | Under 25 years                     | 8         | 6.7%       |
|                         | 25–34 years                        | 46        | 38.3%      |
|                         | 35–44 years                        | 38        | 31.7%      |
|                         | 45–54 years                        | 20        | 16.7%      |
|                         | 55 years and above                 | 8         | 6.7%       |
| Gender                  | Male                               | 74        | 61.7%      |
|                         | Female                             | 42        | 35.0%      |
|                         | Prefer not to say                  | 4         | 3.3%       |
| Education               | Bachelor's degree                  | 40        | 33.3%      |
|                         | Master's degree                    | 49        | 40.8%      |
|                         | Professional certification         | 22        | 18.3%      |
|                         | PhD / Doctorate                    | 7         | 5.8%       |
|                         | Other                              | 2         | 1.7%       |
| Professional Experience | Less than 3 years                  | 10        | 8.3%       |
|                         | 3–5 years                          | 30        | 25.0%      |
|                         | 6–10 years                         | 38        | 31.7%      |
|                         | 11–15 years                        | 24        | 20.0%      |
|                         | More than 15 years                 | 18        | 15.0%      |
| Industry                | Manufacturing                      | 30        | 25.0%      |
|                         | Technology / IT                    | 26        | 21.7%      |
|                         | Financial Services                 | 24        | 20.0%      |
|                         | Retail / E-commerce                | 14        | 11.7%      |
|                         | Healthcare                         | 8         | 6.7%       |
|                         | Education                          | 6         | 5.0%       |
|                         | Government / Public Sector         | 4         | 3.3%       |
|                         | Consulting / Professional Services | 4         | 3.3%       |
|                         | Energy / Utilities                 | 2         | 1.7%       |

|  |       |   |      |
|--|-------|---|------|
|  | Other | 2 | 1.7% |
|--|-------|---|------|

The internal consistency of measurement scales was determined using Cronbach's Alpha coefficient. The reliability of all three constructs was high ( $\alpha > 0.95$ ) as can be seen in Table 8, well above the acceptable level of 0.70 (Hair et al., 2019). All item-total correlations were corrected and were greater than 0.30, and there was no deletion of items that would significantly increase the alpha coefficients.

Table 8: Reliability Statistics

| Construct                               | Number of Items | Cronbach's Alpha |
|-----------------------------------------|-----------------|------------------|
| Digital Transformation Practices (DTP)  | 10              | 0.9558           |
| Management Accounting Practices (MAP)   | 12              | 0.9714           |
| Strategic Decision-Making Quality (SDQ) | 10              | 0.9710           |

The main constructs were descriptively summarized in Table 9. The means and standard deviations of Digital Transformation Practices (DTP), Management Accounting Practices (MAP), and Strategic Decision-Making Quality (SDQ) were 3.26 (SD = 0.49), 3.76 (SD = 0.50), and 3.71 (SD = 0.48), respectively. The skewness and kurtosis values of all constructs were acceptable and indicated approximate normality.

Table 9: Descriptive Statistics of Main Constructs (N=120)

| Construct | Mean | Median | Std. Deviation | Minimum | Maximum | Skewness | Kurtosis |
|-----------|------|--------|----------------|---------|---------|----------|----------|
| DTP       | 3.26 | 3.00   | 0.49           | 2.00    | 4.00    | -0.48    | -0.98    |
| MAP       | 3.76 | 3.90   | 0.50           | 3.00    | 4.40    | -0.39    | -0.96    |
| SDQ       | 3.71 | 3.88   | 0.48           | 3.00    | 4.25    | -0.40    | -1.07    |

Pearson correlation was used to investigate the bivariate relationships between constructs (Table 10). A strong negative correlation was observed between DTP and MAP ( $r = -0.868$ ,  $p < 0.01$ ), and between DTP and SDQ ( $r = -0.863$ ,  $p < 0.01$ ). On the other hand, the correlation analysis yielded a very high positive correlation between the two variables, namely the Management Accounting Practices (MAP) and Strategic Decision-Making Quality (SDQ) ( $r = 0.992$ ,  $p < 0.01$ ). This finding suggests that there is a high empirical association between the two constructs but it is also important to consider that there may be construct overlap and/or multicollinearity between the two constructs. Thus, variance inflation factors and construct validity are analyzed next to assess if MAP and SDQ are empirically separable constructs.

Table 10: Pearson Correlation Matrix

| Variable | 1      | 2     | 3     |
|----------|--------|-------|-------|
| 1. DTP   | 1.000  |       |       |
| 2. MAP   | -0.868 | 1.000 |       |
| 3. SDQ   | -0.863 | 0.992 | 1.000 |

Note:  $p < 0.01$  (two-tailed).

For this purpose, three simple regression models were estimated to test the direct effects hypothesised in H1, H2 and H3 (See Table 11). Three simple linear regression models were estimated using the three possible direct relationships to test the hypothesized direct effects. The standardized coefficient ( $\beta = 0.863$ ,  $p < 0.001$ ) for Digital Transformation Practices was found to be significant and positively related to Strategic Decision-Making Quality

(SDQ) with an explanation of variance of 74.5%. This led to the endorsement of H1. The results of Model 2 showed that the MAP is an extremely strong predictor of SDQ ( $\beta = 0.992$ ,  $p < 0.001$ ) and accounts for 98.4% of the variance ( $R^2 = 0.984$ ). This very strong effect highlights the importance of the management accounting functions in achieving strategic results, giving strong empirical justification for H2. On the other hand, Model 3 explored the direct link between DTP and MAP. The results showed that the model in predicting MAP was not significantly different at the conventional significance level ( $R^2 = 0.341$ ,  $\beta = 0.584$ ,  $p = 0.228$ ). So, H3 was not supported. It is noteworthy that this non-significant direct path exists, and that although it seems that there may be a weak direct relationship between digital transformation and accounting practices, the effect of DTP on MAP might be mediated by other routes or be moderated by other factors not measured in this bivariate analysis. This issue is revisited in the subsequent mediation model to further explore mediation between the constructs.

Table 11: Regression Model

| Model   | Predictor | Outcome | $\beta$ | t     | p      | $R^2$ | Decision      |
|---------|-----------|---------|---------|-------|--------|-------|---------------|
| Model 1 | DTP       | SDQ     | 0.863   | 8.91  | <0.001 | 0.745 | Supported     |
| Model 2 | MAP       | SDQ     | 0.992   | 85.80 | <0.001 | 0.984 | Supported     |
| Model 3 | DTP       | MAP     | 0.584   | 1.21  | 0.228  | 0.341 | Not Supported |

A multiple regression analysis was performed with SDQ as a dependent variable, and DTP and MAP as predictors (Table 12 – 14). The model was highly significant ( $F = 5,140.78$ ,  $p < 0.001$ ) and explained 99.3% of the variance in SDQ ( $R^2 = 0.993$ ). MAP was the strongest predictor ( $\beta = 0.725$ ,  $p < 0.001$ ), while DTP had a smaller but significant unique contribution ( $\beta = 0.080$ ,  $p < 0.001$ ). Variance Inflation Factor (VIF) for MAP was 12.99, which is more than 10, indicating multicollinearity.

Table 12: Multiple Regression Model

| R     | $R^2$ | Adjusted $R^2$ |
|-------|-------|----------------|
| 0.996 | 0.993 | 0.992          |

Multicollinearity diagnostics have shown that the predictor variables are not equally contributing to the regression model. The VIF of DTP was 5.09 while the VIF of MAP was 12.99. The latter is larger than the usual value of 10 and thus implies a considerable multicollinearity. This is in line with the highly significant bivariate association between MAP and SDQ and the cautions that should be taken when interpreting estimated coefficients. The results are therefore interpreted as evidence of a strong association, but not evidence that MAP is the sole cause of 98.4% of the variance in SDQ.

Table 13: ANOVA Results

| Source     | Sum of Squares | df  | Mean Square | F        | Sig.   |
|------------|----------------|-----|-------------|----------|--------|
| Regression | 26.8708        | 2   | 13.4354     | 5,140.78 | <0.001 |
| Residual   | 0.2021         | 117 | 0.00173     |          |        |

Table 14: Regression Coefficients

| Variable   | B      | Std. Error | Beta  | t     | Sig.   | VIF   |
|------------|--------|------------|-------|-------|--------|-------|
| (Constant) | -0.572 | 0.127      |       | -4.51 | <0.001 |       |
| DTP_Mean   | 0.0782 | 0.0175     | 0.080 | 4.47  | <0.001 | 5.09  |
| MAP_Mean   | 0.6914 | 0.0276     | 0.725 | 25.09 | <0.001 | 12.99 |

Hayes' PROCESS macro (Model 4) with 5,000 bootstrap resamples was used to test the mediating role of MAP in the DTP–SDQ relationship. Results are presented in Table 15 and Figure 3.

Table 15: Mediation Results (PROCESS Model 4)

| Effect          | Path            | $\beta$ | SE    | t    | p      | LLCI  | ULCI  |
|-----------------|-----------------|---------|-------|------|--------|-------|-------|
| Direct Effect   | DTP → SDQ       | 0.236   | 0.071 | 3.32 | 0.001  | 0.096 | 0.376 |
| Indirect Effect | DTP → MAP → SDQ | 0.282   | 0.058 | —    | —      | 0.174 | 0.402 |
| Total Effect    | DTP → SDQ       | 0.518   | 0.082 | 6.32 | <0.001 | 0.356 | 0.680 |

The total effect of DTP on SDQ was significant ( $c = 0.518, p < 0.001$ ). This direct effect was still significant ( $c' = 0.236, p = 0.001$ ) when taking the MAP into account. The indirect effect of MAP was significant with a bootstrap confidence interval of [0.174, 0.402] that did not include zero. This was 54.4% mediated. These findings are in line with H5.

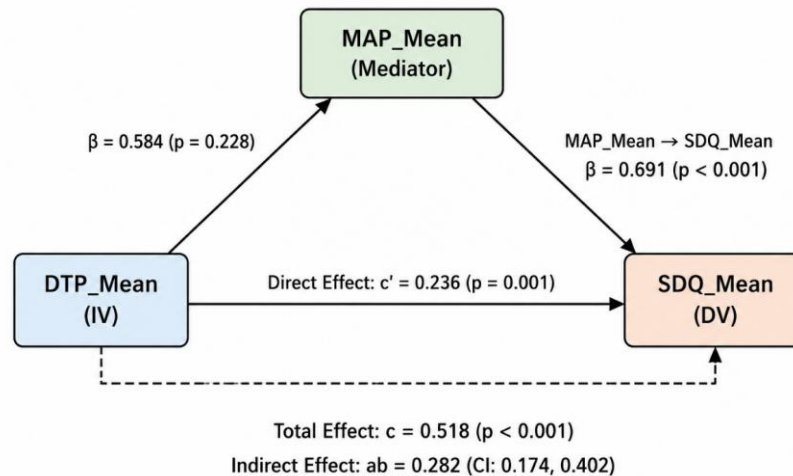


Figure 3: Mediation Model

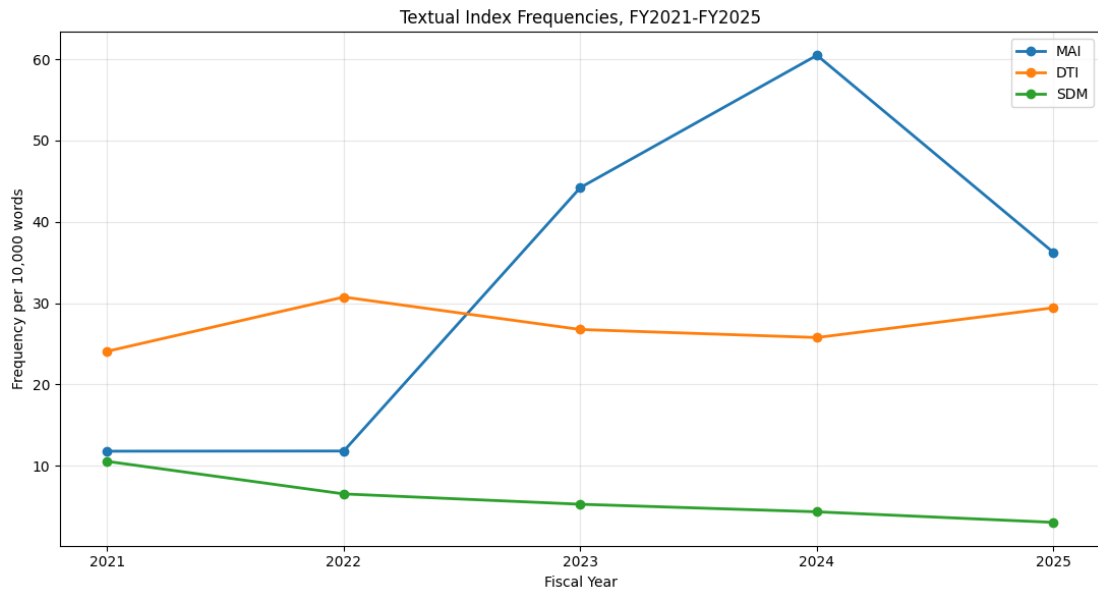
## 6. Section Two: Supplementary Secondary Analysis

The content analysis of Microsoft Corporation's annual reports (FY2021 – FY2025) showed the following frequencies for words in the texts (Table 16). The AI Disclosure Index (MAI) rose from 11.81 in 2021 to a peak of 60.47 in 2024 (412% increase) and then dropped to 36.23 in 2025. DTI (Digital Transformation Disclosure Index) experienced a slight upswing, from 24.09 to 29.44 during the period. SDM (Sustainability Disclosure Index) fell from 10.56 to 3.06 (71% decrease).

Table 16: Textual Index Frequencies and Coverage (FY2021–FY2025)

| Fiscal Year | MAI Frequency | MAI Coverage | DTI Frequency | DTI Coverage | SDM Frequency | SDM Coverage |
|-------------|---------------|--------------|---------------|--------------|---------------|--------------|
| 2021        | 11.81         | 0.60         | 24.09         | 0.78         | 10.56         | 0.25         |
| 2022        | 11.83         | 0.60         | 30.76         | 0.89         | 6.56          | 0.25         |
| 2023        | 44.21         | 0.80         | 26.77         | 0.78         | 5.29          | 0.25         |

|      |       |      |       |      |      |      |
|------|-------|------|-------|------|------|------|
| 2024 | 60.47 | 0.80 | 25.78 | 0.78 | 4.36 | 0.25 |
| 2025 | 36.23 | 0.80 | 29.44 | 0.78 | 3.06 | 0.12 |

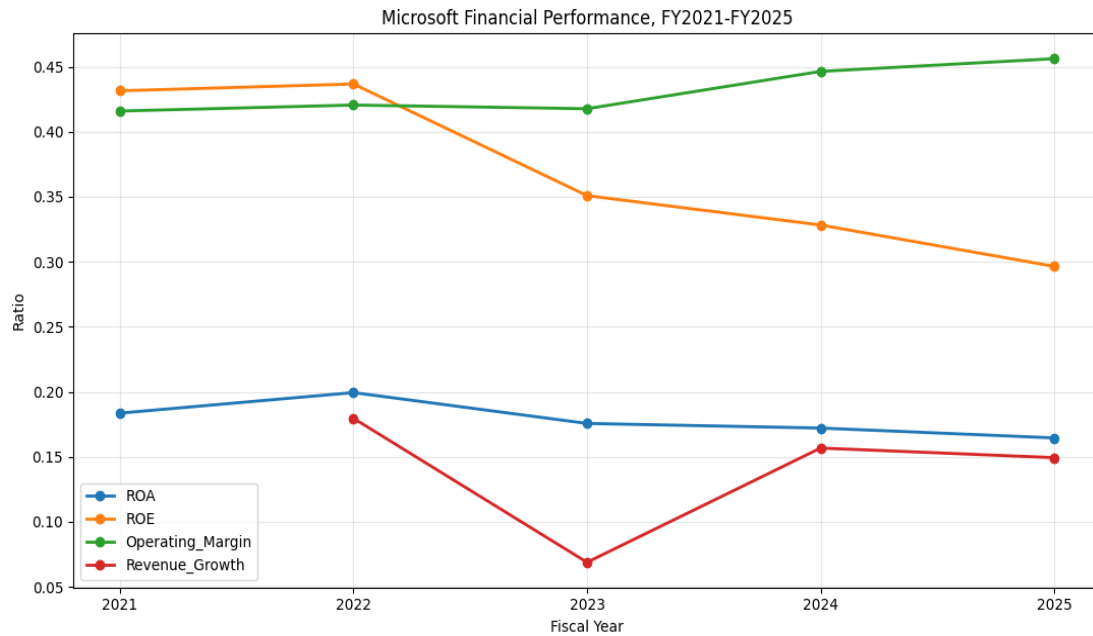


**Figure 4: Textual Index Frequencies, FY2021–FY2025**

Financial performance during FY2021 to FY2025 is summarised in Table 17 and shown in Figure 5 below. Revenue grew from \$168.1 billion to \$281.7 billion (67.6% increase). The operating margin was raised to 45.6% from 41.6%. ROA and ROE declined from 18.4% to 16.5% and 43.2% to 29.6%, respectively.

**Table 17: Microsoft Financial Performance (FY2021–FY2025)**

| Fiscal Year | Revenue (\$B) | Net Income (\$B) | Operating Income (\$B) | Assets (\$B) | ROA   | ROE   | Operating Margin |
|-------------|---------------|------------------|------------------------|--------------|-------|-------|------------------|
| 2021        | 168.1         | 61.3             | 69.9                   | 333.8        | 0.184 | 0.432 | 0.416            |
| 2022        | 198.3         | 72.7             | 83.4                   | 364.8        | 0.199 | 0.437 | 0.421            |
| 2023        | 211.9         | 72.4             | 88.5                   | 412.0        | 0.176 | 0.351 | 0.418            |
| 2024        | 245.1         | 88.1             | 109.4                  | 512.2        | 0.172 | 0.328 | 0.446            |
| 2025        | 281.7         | 101.8            | 128.5                  | 619.0        | 0.165 | 0.296 | 0.456            |



**Figure 5: Microsoft Financial Performance, FY2021–FY2025**

The results of the correlation analysis of the textile indices and the financial indicators are shown in Table 18. For the MAI, the relationships with ROA, ROE and Leverage relationships were strongly negative ( $r = -0.715$ ,  $-0.813$  and  $-0.763$  respectively) while Operating Margin showed a positive correlation ( $r = 0.570$ ). SDM had significant positive correlation with ROA ( $r = 0.581$ ), ROE ( $r = 0.855$ ), Leverage ( $r = 0.953$ ) and negative correlation with Operating Margin ( $r = -0.770$ ). DTI showed relatively weak correlations with all financial performance variables.

**Table 18: Correlation Between Textual Indices and Financial Performance**

| Variable         | MAI    | DTI    | SDM    | ROA    | ROE    | Leverage | Operating Margin |
|------------------|--------|--------|--------|--------|--------|----------|------------------|
| MAI              | 1.000  | -0.200 | -0.705 | -0.715 | -0.813 | -0.763   | 0.570            |
| DTI              | -0.200 | 1.000  | -0.518 | 0.257  | -0.074 | -0.306   | 0.246            |
| SDM              | -0.705 | -0.518 | 1.000  | 0.581  | 0.855  | 0.953    | -0.770           |
| ROA              | -0.715 | 0.257  | 0.581  | 1.000  | 0.918  | 0.795    | -0.718           |
| ROE              | -0.813 | -0.074 | 0.855  | 0.918  | 1.000  | 0.968    | -0.828           |
| Leverage         | -0.763 | -0.306 | 0.953  | 0.795  | 0.968  | 1.000    | -0.866           |
| Operating Margin | 0.570  | 0.246  | -0.770 | -0.718 | -0.828 | -0.866   | 1.000            |

The results of the primary and secondary analysis corroborate each other, indicating that the digital transformation and management accounting practices are crucial for the quality of strategic decision-making. From the primary survey the strong influence of management accounting practices on strategic decision-making quality ( $\beta = 0.992$ ) was found and also digital transformation ( $\beta = 0.863$ ) had a significant effect. The secondary analysis also revealed that there was a relative decrease in focus on sustainability and a relative increase in focus on digital transformation and artificial intelligence in Microsoft's annual reports across the years. Together, the results reinforce the need to combine management accounting and digital transformation to improve the effectiveness of strategies.

## 7. Discussion

The results of the present study demonstrate that the management accounting practices are a key point in the improvement of the quality of strategic decisions in organizations undergoing digital transformation. Specifically, MAP had significant and positive effects on SDQ higher than any of the other variables in the model ( $\beta = 0.992$ ,  $p < 0.001$ ), and DTP had also a positive effect on SDQ ( $\beta = 0.863$ ,  $p < 0.001$ ). The results are in line with Rosmala (2024) which found that digital transformation significantly transforms management accounting by enhancing data management, operational efficiency, and strategic decision-making. The current study builds on the qualitative results of Rosmala by providing quantitative evidence of the scale of the relationship between digital transformation and management accounting and the quality of decision making. The influence of management accounting practices found in this study is also in line with the findings of Sihombing and Surbakti (2026) which stated that management accounting in the digital era has been strengthened through management control systems, performance measurement and strategic decision-making. They note that technologies like big data analytics, artificial intelligence, enterprise resource planning (ERP), and cloud computing are becoming ever more significant to the creation, processing, and application of accounting information. In the same way, Saptari et al. (2026) in their systematic literature review of transition from reporting to strategic analytics support the trend of management accounting that provides strategic support instead of reporting. From this angle, the current discovery that MAP is the most powerful explanatory variable for SDQ is especially congruent with the strategic use of management accounting, which is not just to provide financial information but to help managers gain insight from information in order to take action. Tapia Jr. and Hernandez (2026) conducted a systematic review that shows that the use of management accounting techniques such as ABC, BSC and standard costing has different contributions to the organizational decision-making and performance management. Importantly, their results show that the effectiveness of these techniques is dependent on the organisation's culture, the commitment of the leaders and the organization's digital maturity. This supports the current study by stating that the strong association between MAP and SDQ is not necessarily a technological effect. Instead, management accounting practices represent an organizational capability which can convert digital information into relevant, timely and accurate decisions. Therefore, this present study confirms the empirical evidence to consider management accounting as an active strategic function instead of merely as a reporting activity.

The results also align well with Urata (2026) who found that digital transformation is transforming management accounting systems and functions like performance measurement, standard costing and strategic planning, and enhancing the quality of accounting information, operational efficiency, and decision-making. The strong direct association of DTP with SDQ in this study ( $\beta = 0.863$ ) strengthens this notion. The present findings, however, are more complex as the simple regression between DTP and MAP did not establish any statistically significant direct relationship ( $\beta = 0.584$ ,  $p = 0.228$ ). This indicates that digital transformation is not necessarily associated with better management accounting; its impact on strategic results may be related to the way in which the organizations combine digital technologies with management accounting information processes, analytical capabilities and managerial practices.

The same logic can be applied to Ranawaka and Said (2024), who conducted a Swedish case study where they analyzed the role of digital transformation in management accounting in promoting strategic development and competitive advantage, including the use of ERP, cloud-based technologies, and AI. The study specifically focused on three service related companies in Sweden, and digital transformation as a strategic tool for organizational development and competitive advantage. The present study builds on this view by showing that, using survey data, the quality of strategic decisions that drive digital transformation is statistically significant, and management accounting practices even more explanatory. The difference is significant because it suggests that there is a need for the strategic value of digitalization to be maximized when technological capabilities are complemented by a developed management accounting system.

The findings are also in line with the results of the systematic literature review by Chaidir and Kahardian (2026), which focuses on the joint effect of cybersecurity and digital transformation in strategic management accounting research and the role of the two factors in building competitive advantage. Cyber security has a particularly relevant overall focus to the present study as the greater reliance that is being placed on digital technologies, analytics and

interconnected accounting systems means that the quality and reliability of accounting information is ever more dependent on secure digital infrastructures. The present study then corroborates the general research on the strategic relevance of management accounting in digital environments and suggests that cybersecurity and data governance could be among the factors to be analyzed in future research on the effectiveness of digitally enabled management accounting. The research of Sihombing and Surbakti (2026) also integrates digital technologies and strategic management accounting, linking them to the functions of control, performance measurement and decision making. The present study is therefore important in that it combines the technological and accounting views, instead of focusing on digital transformation or management accounting alone. The mediation analysis revealed that the total effect ( $c = 0.518$ ,  $p < 0.001$ ) and the direct effect ( $c' = 0.236$ ,  $p = 0.001$ ) of DTP on SDQ were significant, with the indirect effect significant and medium ( $ab = 0.282$ , 95% CI [0.174, 0.402]). This suggests that while management accounting is not the only pathway for digital transformation to support strategic decision making, it is a significant pathway. The present study contributes to the literature in this regard by empirically connecting the concepts of digital transformation practices and management accounting practices, and quality of strategic decision-making within one analytical framework.

## 8. Conclusion

This study explored the relationships between Digital Transformation Practices (DTP), Management Accounting Practices (MAP), and Strategic Decision-Making Quality (SDQ) with a specific focus on the mediating role of MAP. The empirical results show that there is a strong positive association between digital transformation and the quality of strategic decision-making. SDQ was highly predicted by DTP ( $\beta = 0.863$ ), showing higher scores of digital transformation practices, higher scores of SDQ. Relationships between management accounting practices and the quality of strategic decision making were even stronger. In the primary model, management accounting practices were the strongest predictor of SDQ ( $\beta = 0.992$ ) and was significantly predicted by MAP. The inclusion of both DTP and MAP in the same model resulted in MAP being the strongest predictor ( $\beta = 0.725$ ) while the direct effect of DTP was significantly diminished ( $\beta = 0.080$ ). Such a pattern suggests that the role of management accounting practices in explaining differences in strategic decision-making quality is especially significant. A mediation analysis was further conducted to determine if MAP is a mediator between DTP and SDQ. The indirect effect was estimated, and the estimated value of  $ab$  was positive ( $ab = 0.282$ ; the 95% bootstrapped confidence interval was between 0.174 and 0.402). The findings suggest that the management accounting practices could be an important medium to help the quality of strategic decision-making arising from digital transformation. Complementary secondary analysis revealed a growing trend of organizations making digital transformation and artificial intelligence disclosures. The level of AI disclosure has risen significantly over the period analysed, and disclosure of sustainability-related issues has declined. The results showed that digital transformation is not enough to drive the quality of strategic decision making. While managing the development and implementation of management accounting practices seems to be a key organizational element to improve the use of digital capabilities and information to make better strategic decisions.

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