

# Digital Transformation of Accounting Information in the Educational Sector of the Upper East Region of Ghana

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## Abstract

Digital transformation employs digital technologies to develop novel business models, processes, and organisational frameworks. The Internet has rendered digital transformation essential since the 1990s. The objective of the study is to evaluate digital transformation in accounting information within the educational sector of Ghana's Upper East Region. Positivist, quantitative deductive study investigates the impact of digital transformation on accounting information within the education sector of Ghana's Upper East Region. A purposive sample of 300 accounting professionals is employed. To discover relationships affecting accounting system digital transformation, SPSS was used to analyse a Likert scale questionnaire comprising several statements. The research found that human, organisational, technological, and environmental factors cause accounting information digitalisation. Accounting data is digitalised by these reasons. Accounting Information Systems may reduce costs and enhance accounting data accuracy. Digital accounting transformation in education is poorly documented in Ghana's Upper East Region. Without considering education, previous research focused on big data analytics, accounting information systems, digital business transformation, and external audits. Limited sample size and regional concentration on Ghana's Upper East accounting personnel limit

generalisability. Research should include different locations and aspects to better understand the accounting digital shift.

**Keywords:** Accounting Information, Accounting Personnel, Digital Transformation, Factors, Technology

### Introduction

Digital transformation (DT) establishes novel business models, processes, and organisational frameworks through the utilisation of digital technologies. It gained popularity in the 1990s as a result of commoditisation and the Internet. Information Technology, entrepreneurship, strategic management, operations management, marketing, and organisational science have revitalised digital transformation throughout global crises such as COVID-19 (Plekhanov et al., 2023). Inability to adapt may result in "digital Darwinism," rendering digital transformation essential for global enterprises (Ismail et al., 2017). Technological advancements and widespread digitalisation are transforming universities globally. The use of Business Data (BD) is essential; nonetheless, numerous entities encounter difficulties in progressing beyond the initial phase (Lutfi et al., 2022).

Audit firms use advanced technology to deliver services and function effectively (Manita et al., 2020; Mosteanu & Faccia, 2020; Putra, 2019; Watty, 2016). Accrual accounting enhances the administration and decision-making of government agencies within the framework of New Public Management (NPM) reforms. Management assistance is essential for the adoption and maintenance of AIS (Nurhidayati et al., 2017). New institutionalism analyses the impact of societal decisions on business technology (Kucherenko et al., 2021; Schiavi et al., 2024). The absence of creativity in robots renders the digital revolution essential for enterprises, professionals, and students. Accounting is a prevalent information system; therefore, companies must adopt technology. The quality of accounting information systems is contingent upon human factors such as training and expertise (Trang et al., 2024). Human resource competencies are crucial for maintaining financial integrity, and proficiency in accounting information systems is required for software administration and enhancement of AIS (Syafaat et al., 2022).

Organisations require the endorsement of senior management to acquire accounting information and enhance their information systems (Syafaat et al., 2022). Comprehending computer systems, generating curiosity, and swaying judgements to attain objectives are essential. The quality of an accounting information system is contingent upon the support of top management. Organisational culture, leadership, and commitment influence the quality of accounting information systems (Carolina, 2015). Organisational commitment influences the quality of financial accounts. Accounting information systems (AIS) gather, document, preserve, and analyse data to deliver dependable, flexible, integrated, and easily accessible information for organisational performance and decision-making (Nguyen & Nguyen, 2020). Technological advancements, managerial roles, and accounting leadership competencies influence the effectiveness of accounting information systems. Economic growth and performance management necessitate precise and dependable data (Chong & Nizam, 2018). Accounting information systems deliver dependable, precise, and prompt information, facilitate strategic initiatives, enhance decision-making, promote efficiency, improve quality, reduce costs, increase productivity, and foster knowledge exchange. User satisfaction is

essential for successful adoption, as perceived usefulness and ease of use influence user acceptance and desire to utilise technology (MA et al., 2021).

In a competitive market, expanding businesses have obstacles in risk management and monitoring. Guidelines for accounting information systems (AIS) encompass both financial and non-financial management, rendering them crucial for internal control. Employee-centric initiatives enhance internal control (Alawaqleh, 2021). Organisations necessitate real-time information systems for competitive advantage (Látečková et al., 2016). Mimetic, coercive, and noematic influences impact AIS adoption. Strategic decisions, societal expectations, professional standards, and successful companies are significant (Alshirah et al., 2021).

The Upper East Region of Ghana is deficient in information regarding digital accounting reform in education. Previous studies on digital transformation have concentrated on elements influencing big data analytics adoption, the implementation of accounting information systems, digital business transformation and strategy, strategies in higher education, digital transformation in external audits and corporate governance, as well as digital systems and emerging challenges in financial management, while overlooking other domains. This study assesses the transformation of digital accounting information in the educational sector of Ghana's Upper East Region.

## **Literature Review**

### ***Theoretical Review***

#### *New Institutionalism*

New institutionalism analyses the impact of social decisions on digital technologies within enterprises. Theories of digital innovation and institutional transformation are essential for comprehending organisational models altered by digital technology (Schiavi et al., 2024). In the global financial and information market economy, accounting systems must be synchronised with corporate management to monitor and predict economic activities (Kucherenko et al., 2021).

#### *Diffusion of Innovations*

Assidi et al. (2025) examine the factors influencing AI acceptability and obstacles in accounting, including relative advantage, compatibility, complexity, trialability, and observability. The advantages of AI encompass improved accuracy, efficiency, and speed; yet, cultural resistance and complexity may hinder its deployment.

#### *Technology Acceptance Model (TAM)*

The Technology Acceptance Model (TAM) study elucidates human behaviour around technology utilisation. Attitudes are essential for comprehending actions and their influence on intentions and behaviour (Güngör et al., 2020; Jejeniwa, Mhlongo & Jejeniwa, 2024). The Diffusion of Innovations Theory, Technology Acceptance Model (TAM), and Unified Theory of Acceptance and Use of Technology (UTAUT) elucidate the digital transformation in financial services. TAM classifies consumers based on perceived value and usability, whereas UTAUT employs performance expectancy, effort expectancy, social impact, and facilitating conditions to delineate user intentions. These principles are crucial for the examination of mobile banking, digital payments, and fintech acceptance (Jejeniwa et al., 2024).

### *HOTE Model*

The HOTE model asserts that the adoption of AI is influenced by human, organisational, technological, and environmental factors. The overarching areas encompass the ingenuity of IT officers, the technological competency of employees, organisational readiness, management structure, perceived benefits of software, enabling conditions, competitive pressures, and governmental assistance. HOTE, which combines TOE and HOT-Fit, investigates the factors influencing the adoption of educational digital transformation (Mahama & Dahlan, 2022).

Not all of the above notions explicitly describe the human, organisational, technological, and environmental factors affecting digital transformation. New institutionalism examines how social decisions affect enterprise digital technologies. Accounting AI acceptability and issues depend on proportional advantage, compatibility, complexity, trialability, and observability, according to diffusion of innovation. Technology use is explained by TAM. However, HOTE examines human, organisational, technological, and environmental aspects in AIS adoption. Thus, HOTE underpins this investigation.

### **Empirical Literature**

#### *Extend of Use of Digital Technologies*

Global firms must undergo digital transformation to avert "digital Darwinism." Conventional technological advancements occasionally prioritise technology above strategic decision-making. Current study examines the obstacles, incentives, and shortcomings of digital transformation (Ismail et al., 2017). According to Mohamed Hashim et al. (2022), technological advancements and social trends favouring digitalisation are transforming universities globally, hence improving international education. This domain is nascent and expansive. Numerous enterprises perceive the adoption of business data (BD) as advantageous; yet, they encounter difficulties in progressing beyond the initial phase (Lutfi et al., 2022).

To offer digital solutions, audit firms need innovative technology (Manita et al., 2020). Artificial intelligence may speed up accounting and finance digitisation, improving employee safety. To thrive and change lives, universities need education. Tech advances and high-speed internet connectivity have made digital transformation initiatives more popular. For competitiveness, organisations must evaluate and improve value creation and appropriation strategies (Mosteanu & Faccia, 2020). Digital transformation boosts innovation, unites sectors, and benefits products and services. 66% to 84% of digital transformation programs fail, and planning and execution consistency is difficult. To boost public sector agility, innovative digital transformation solutions are being considered. The lack of administrative expertise, data accessibility, resource availability, technological competency, and environmental unpredictability must be addressed (AlNuaimi et al., 2022).

### **Factors Influencing Digital Technologies Adoption**

#### *Human Factors*

Because computers are faster but less creative, the digital revolution affects professionals and students. Businesspeople, graduates, and schools must adopt and use technology effectively (Kruskopf et al., 2020). Modern company is networked, making accounting and other information systems more important. Business accounting information

systems need technology. Accounting information systems need training and understanding. Understanding accounting information systems and human interaction drives organisational goals and innovation (Trang et al., 2024). HR manages financial statements for financial integrity. Financial accounting benefits from AIS. Data completeness, timeliness, and component integration affect accounting information quality. To manage and build information systems, accountants must understand them (Syafaat et al., 2022). Learning, training, and experience affect financial statement accuracy. Job requirements, education, training, and proficiency are assessed. Government performance requires ongoing HR development (Firdaus et al., 2020).

### *Organizational Factors*

Senior management must approve accurate accounting data. Users set progress goals and control the system. Accounting information systems benefit from top management support (Syafaat et al., 2022). Information systems need top-management support. Learning computer systems and being curious are crucial. Leaders must decide to succeed. Effective accounting information systems need senior management approval. Mokodompit and Wuriasih (2017) say senior management system design and control show quality help. Accounting Information Systems (AIS) adoption and maintenance benefit from management support (Alquhaif & Al-Mamary, 2025). Financial reporting requirements, system complexity, management commitment, data quality, employee attitudes, institutional accounting infrastructure, and organisational culture affect Accounting Information System success (Nurhidayati et al., 2017).

Transformational leadership, culture, and dedication affect accounting information system quality. Employee psychological engagement and system execution depend on organisational commitment. Encouragement, advice, and support boost commitment. System failure might result from charm and assertiveness deficits. Organisational structure, internal controls, and top management support affect system quality (Carolina, 2015). Business owners' psychological organisational commitment might affect financial performance. Organisational commitment improves financial statements and accounting information systems (Tambunan & Maksum, 2019). Accounting information systems (AIS) store and analyse data for decision-makers. People, hardware, software, protocols, databases, and networks are included. The reliability, flexibility, integration, and availability of financial and non-financial information in an AIS improve business performance and decision-making (Nguyen & Nguyen, 2020). Organisational commitment is an employee's dedication to business goals. Trust, devotion, and helping others succeed are crucial. Emotional support, ethics, and autonomy boost commitment (Firdaus et al., 2020).

### *Technological Factors*

Leadership in technology, management, and accounting enhances the accounting information system. Organisational success necessitates managerial assistance (Syafaat et al., 2022). Accounting software influences enterprises and economies. Performance management and economic development necessitate precise data. The quality of accounting software is significantly linked to business profitability, indicating that precise data enhances organisational effectiveness (Chong & Nizam, 2018). Accounting information systems enhance decision-making, efficiency, and cost reduction through precise, prompt data. According to Kesuma (2017), information technology and user satisfaction are crucial for the

successful deployment of AIS. Successful AIS implementation necessitates comprehension of perceived usefulness and ease of use, which influence technology acceptance, user intentions, and enhancements in organisational performance (MA et al., 2021).

### *Environmental Factors*

Expanding enterprises face competitive market risks. Financial and non-financial internal control require accounting information system (AIS) guidelines. Governance improves with employee solutions. Lack of internal controls has caused financial crises and organisational failures due to rapid expansion and market instability (Alawaqleh, 2021). Enterprises need real-time, improved data platforms to compete. Technology usually links to information and communication technologies. Látečková et al. (2016) found that implementing these systems enhances management and boosts competitiveness in domestic and global markets. Environmental mimicry, coercion, and noemetic factors strongly influence AIS adoption. MP represents unclear goals and misread technologies, forcing enterprises to copy successful rivals to survive. Companies think their competitors' success is strategic and copy them. Both formal and informal influences from other companies and cultural norms drive corporate compliance. Businesses copy competitors under mimetic pressure but collaborate on environmental projects under coercion. The NP eliminates professional standards and communities' effects on an organisation. IT/IS is essential for successful businesses (Alshirah et al., 2021). Figure 1 depicts a factor-derived conceptual framework.

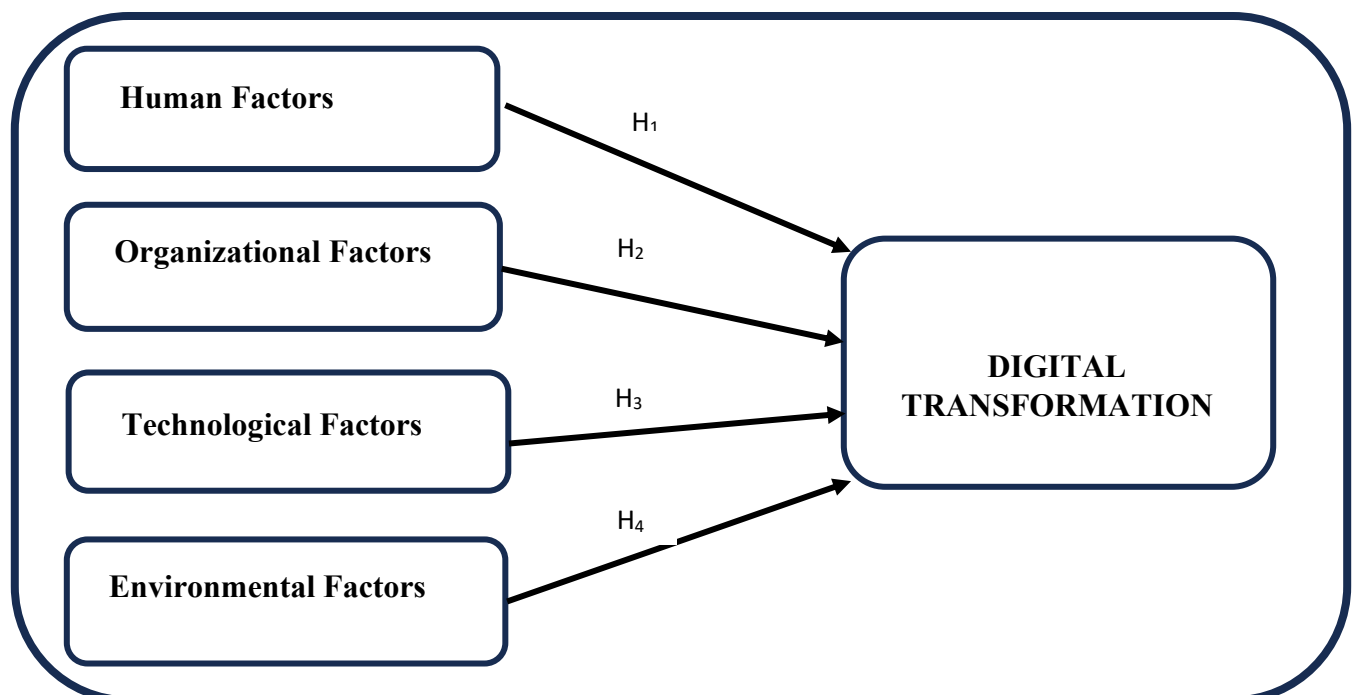


Figure 1: Conceptual Framework

### **Hypothesis Development**

#### *Human Factors*

The digital revolution is crucial for enterprises, professionals, and students, as machines are devoid of creativity (Kruskopf et al., 2020). Businesses must employ technology for accounting purposes (Trang et al., 2024). The quality of accounting information is

contingent upon human variables such as training and understanding. Financial integrity necessitates human resource proficiency, while software management and advancements in accounting information systems require experience in accounting information systems. The hypothesis is as follows:

Hypothesis 1: Human factors influence the digital transformation of accounting information.

#### *Organizational Factors*

Executives are required to authorise digital accounting information (Syafaat et al., 2022). It necessitates computational, analytical, and user interaction competencies. Cultural norms, financial reporting mandates, institutional accounting frameworks, management dedication, data integrity, employee disposition, system complexity, and executive endorsement influence the quality of AIS. Leadership, culture, and commitment influence the quality of AIS. Organisational commitment significantly influences staff engagement and system execution. Decision-makers obtain trustworthy, adaptable, coherent, and accessible data from AIS (Nguyen & Nguyen, 2020). Improvements in AIS, software upkeep, and financial integrity necessitate expertise in HR and information systems. As a result, the following hypothesis emerges.

Hypothesis 2: Accounting information's digital transformation is influenced by organisational factors.

#### *Technological Factors*

Technology significantly enhances accounting operations. Economic growth and performance management necessitate precise data (Chong & Nizam, 2018). Accounting information systems enhance strategic initiatives, decision-making, efficiency, quality, cost management, work productivity, and knowledge dissemination by delivering more reliable, accurate, and timely information. User satisfaction is essential for successful adoption, as perceived utility and ease of use influence technological acceptance and intention (MA et al., 2021). The following is the proposed hypothesis as a result:

Hypothesis 3: Technological factors influence the digital transformation of accounting information.

#### *Environmental Factors*

Competitive situations complicate risk management and monitoring for expanding enterprises. Internal control depends on the regulations of accounting information systems (AIS), which address both financial and non-financial management issues. Employee-centric initiatives enhance internal controls (Alawaqleh, 2021). Organisations necessitate real-time information systems to maintain competitiveness (Látečková et al., 2016). Coercive, noematic, and mimicry influences affect AIS utilisation. Examples include strategic choices, social norms, professional standards, and successful businesses (Alshirah et al., 2021). Consequently, the theory is as follows:

Hypothesis 4: Environmental factors influence the digital transformation of accounting information.

#### **Methodology**

In information systems research, positivism advocates for scientific investigation and quantification (Kivunja & Kuyini, 2017; Bell et al., 2019). Quantitative deductive research assessed and analysed numerical data (Saunders et al., 2019). Deductive, iterative, and

inductive reasoning constitute the seven-step study design proposed by Rao (2016). Accounting personnel in the Upper East Region and analytical divisions are the focus in Northern Ghana. Sampling generates a microcosm to estimate a population (Majid, 2018). Purposive sampling identified 300 accountants from the Upper East Region. Three hundred accountants from the region were surveyed. Researchers can uncover concealed correlations in SPSS (Ong & Puteh, 2017). A bifurcated questionnaire assessed the adoption of digital transformation in school accounting systems and its determinants. A Likert scale assessed levels of agreement or disagreement with utterances.

#### *Data Analysis*

The researchers distributed 300 questionnaires to accounting personnel in the study area, of which only 228 were returned, representing a response rate of 76% (Denscombe, 2017). Previous studies indicate that a response rate of 76% is enough for statistical analysis. Responses from accounting personnel are utilised for analysis. PLS-SEM and IBM SPSS Statistics 20 analysed the data. This pertains to the reliability of address indicators, convergent validity, item-level discriminant validity, and the outcomes of hypothesis testing for the measurement model.

#### *Data Screening of Survey*

Data cleaning and analysis necessitate data screening. Researchers pursuing valuable results must be concerned with poor data. Not all individuals may approach the survey with seriousness. A researcher can identify deceptive or thoughtless responses through many methods. Strict social science research is feasible (Desimone et al., 2015). All elements must be assessed to identify survey inaccuracies (Petersen & Ekstrøm, 2019). Numerous examples exhibited absent data and contested responses. Thirteen surveys did not pass the screening process.

#### *Extent of Accounting Information System*

AIS data is crucial for management. Commercial involvement and precise, prompt information is demonstrated. Consequently, accurate and prompt financial accounting supports all corporate activities. Accountants utilise AIS as illustrated in Table 1.

Table 1

*Extent of Accounting Information System*

Item	Response	Number of Respondents	Percentage
Use of Accounting Information System	Yes	201	93.5%
	No	14	6.5%
	<b>Total</b>	<b>215</b>	<b>100%</b>
Period use of accounting information system	Less than 6 months	0	0.0%
	7 months – 1 year	0	0.0%
	1 – 2 years	12	5.6%
	More than 2 years	203	94.4%
	<b>Total</b>	<b>215</b>	<b>100%</b>
Accounting software use	Spreadsheet	137	63.7%
	QuickBooks	5	2.3%
	Tally	60	27.9%
	Manager	4	1.9%
	Sage	0	0.0%
	ERP	0	0.0%
	Others	9	4.2%
	<b>Total</b>	<b>215</b>	<b>100%</b>

Source Field Survey 2025

Participants were requested to identify the accounting software utilised in their organisations. In Table 1, participants ranked Spreadsheet (63.7%), Talley (27.9%), other custom software (4.2%), and QuickBooks (2.3%). The majority of accounting personnel who employed the Accounting Information System for over two years provided favourable feedback, as illustrated in Table 1.

*Data Analysis of Constructs*

Every study commences with a qualitative description followed by a quantitative evaluation. The utilisation and analysis of data are essential following the experiment (Brandt, 2014). For years, social science researchers have utilised statistical analysis to formulate, examine, and substantiate findings. Instruction was provided on partial least squares structural equation modelling and fundamental statistical techniques. It can evaluate concepts and identify data patterns and correlations (Hair Jr et al., 2021).

*Measurement Assessment*

In management research, latent variable analysis utilising scales necessitates population-wide reliability, convergent validity, and discriminant validity. Confirmatory factor analysis and Cronbach's alpha may be inadequate. Discriminant validity highlights specific characteristics, whereas convergent validity pertains to all testing methodologies (Cheung et al., 2024). Figure 2 illustrates the measurement model.

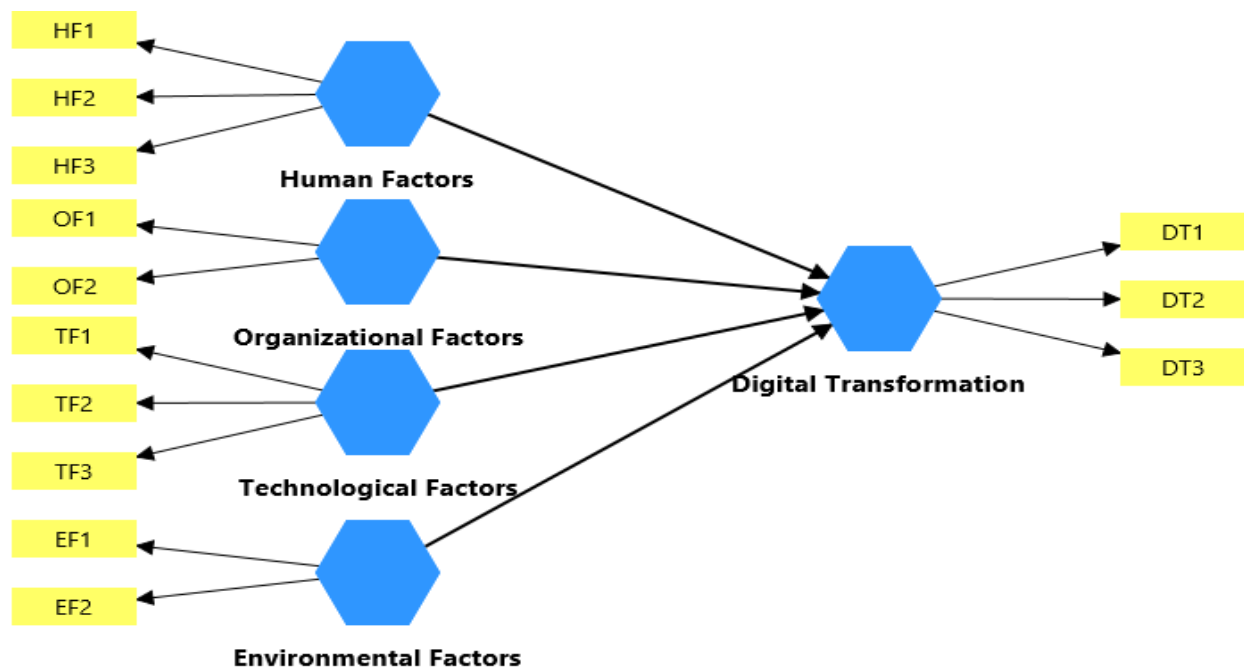


Figure 2: Measurement Assessment  
Source (Ringle, Wende & Becker, 2024)

### *Indicator Reliability*

In formative evaluation, indicators create a latent construct. Multicollinearity, construct validity, indicator weights, and reliability are used (Ong & Puteh, 2017). Cronbach's alpha, Average variance extract (AVE), discriminant validity, and composite reliability indicate dependability (Hair Jr. et al., 2021). The composite reliability should be 0.70–0.95, and Cronbach's alpha should exceed 0.6. Exploratory studies show Cronbach's alpha and composite reliability values of 0.60–0.90. Composite dependability is higher than Cronbach's alpha. To assess convergent validity, AVE is calculated from the construct's indicators' grand mean squared loadings. Good values exceed 0.5 (Hair Jr. et al., 2021). The indicator's volatility is 50% or more due to this notion, with an AVE of 0.50 or higher (Hamid, 2017).

### *Discriminant Validity*

This study measures discriminant validity. Discriminant validity compares two variables (Ahmad Mahmoud et al., 2018). That is a construct's empirical distinctiveness. The limitations of AVE compared to inter-construct correlations and the Fornell-Larcker criterion in accurately identifying discriminant validity difficulties are highlighted by discriminant validity. Use the heterotrait-monotrait ratio (HTMT) to assess discriminant validity. The mean correlations of indicators between constructs are compared to the geometric mean within those constructs by HTMT. For potential discriminant validity, Hair Jr. et al. (2021) suggest a threshold of 0.90 for extremely similar structures and 0.85 for more dissimilar structures. VIF assesses multicollinearity (Ong & Puteh, 2017). Each predictor construct's VIF must surpass 0.20 but not 5. A VIF over 5 indicates substantial collinearity, while a VIF between 3 and 5 is not concerning (Hair Jr., et al., 2021). Ten or more variables imply correlation, while five or more suggest multicollinearity.

Indicator loadings measure latent variable variance to determine construct validity, unlike Cronbach's alpha, which is meaningless due to insufficient internal consistency. Significant

loadings (over 0.70 or 0.40 in exploratory research) ensure indicator reliability, allowing modestly weighted indicators to be retained while maintaining exact measurements (Ong & Puteh, 2017; Hair Jr, et al., 2021). Study models are assessed for discriminant validity. HTMT, VIF, cross-loading, and Fornell-Larcker tests examined discriminant validity (Hair Jr. et al., 2021). Cronbach's alpha, composite reliability, and average variance were used. Data is in tables below.

Table 2  
*Indicator Reliability*

Construct	Indicator	Outer Loading	Cronbach's alpha >0.60	Composite reliability >0.70	Average variance extracted (AVE) >0.50
Digital Transformation	DT1	0.53	0.67	0.77	0.55
	DT2	0.81			
	DT3	0.90			
Environmental Factors	EF1	0.92	0.69	0.82	0.70
	EF2	0.74			
Human Factors	HF1	0.87	0.63	0.78	0.54
	HF2	0.64			
	HF3	0.67			
Organizational Factors	OF1	0.91	0.62	0.74	0.51
	OF2	0.47			
Technological Factors	TF1	0.60	0.61	0.74	0.51
	TF2	0.82			
	TF3	0.65			

Source (Ringle, Wende & Becker, 2024)

Table 3  
*Cross-Factor Loadings of Construct*

Construct	Digital Transformation	Environmental Factors	Human Factors	Organizational Factors	Technological Factors
DT1	0.53	0.18	0.32	-0.02	0.11
DT2	0.81	0.03	0.10	0.37	0.13
DT3	0.90	0.20	0.19	0.40	0.34
EF1	0.18	0.92	0.02	-0.03	0.15
EF2	0.11	0.74	0.10	-0.04	0.00
HF1	0.25	-0.06	0.87	0.10	0.16
HF2	0.10	0.17	0.64	-0.12	-0.02
HF3	0.12	0.16	0.67	-0.23	0.02
OF1	0.39	-0.04	-0.04	0.91	0.29
OF2	0.01	0.03	-0.08	0.47	0.28
TF1	0.16	0.20	0.11	0.15	0.60
TF2	0.27	0.06	0.07	0.25	0.82
TF3	0.14	-0.01	0.06	0.20	0.25

Source (Ringle, Wende & Becker, 2024)

Table 4  
*Fornell-Larcker criterion*

	Digital Transformation	Environmental Factors	Human Factors	Organizational Factors	Technological Factors
Digital Transformation	0.74				
Environmental Factors	0.18	0.83			
Human Factors	0.24	0.06	0.73		
Organizational Factors	0.39	-0.04	0.04	0.71	
Technological Factors	0.29	0.11	0.11	0.29	0.70

Source (Ringle, Wende & Becker, 2024)

Table 5  
*Heterotrait-monotrait ratio (HTMT) – Matrix*

	Digital Transformation	Environmental Factors	Human Factors	Organizational Factors	Technological Factors
Digital Transformation					
Environmental Factors	0.30				
Human Factors	0.41	0.29			
Organizational Factors	0.75	0.15	0.50		
Technological Factors	0.46	0.24	0.19	0.82	

Source (Ringle, Wende & Becker, 2024)

Table 6  
*Collinearity statistics (VIF)*

Dependent Variable	Construct	VIF (<5)
Digital Transformation	DT1	1.03
	DT2	1.55
	DT3	1.56
	EF1	1.21
	EF2	1.21
	HF1	1.13
	HF2	1.37
	HF3	1.38
	OF1	1.02
	OF2	1.02
	TF1	1.11
	TF2	1.10
	TF3	1.17

Source (Ringle, Wende & Becker, 2024)

All structures exhibit composite reliability above 0.70 to below 0.95 (Hair Jr. et al., 2021). This is lawful. All study constructs exceed 0.60 Cronbach's alpha (Hair Jr et al., 2021). The object's AVE values exceed 0.50 (Ab Hamid & Mohmad Sidek, 2017) at 0.51–0.70. Table 2 demonstrates that research components are internally consistent and explain 50% or more of indicator variance. In this study, discriminant validity is examined. Difference between variables is called discriminant validity (Ahmad Mahmoud et al., 2018). That distinguishes a construct experimentally. Discriminant validity certifies that a construct captures phenomena that other model constructs do not. Discriminant validity of indicators was investigated using cross-loadings. The informative construct and discriminant validity are originally supported since each informative indication should load the linked construct most. Table 3 illustrates that assessing and reporting cross-loading is best with rows for indicators and columns for latent variables. Table 3 reveals that each informative indicator loads the most on its own, validating the study's informative constructs' discriminant validity. As indicated in tables 4 and 5, Fornell Larcker and HTMT discriminant validity criteria are within the threshold. Note that table 6 contained no highly related indications. VIFs ranged from greater than 0.2 to fewer than 5, indicating collinearity. Consequently, each predictor construct exhibited no collinearity.

### *Test of Hypothesis*

This research has to test hypotheses. Evaluate a meticulously formulated hypothesis to address research enquiries. Study results were hypothesised as relational assertions between two or more quantitative components (Mourougan & Sethuraman, 2017). Logic produced hypotheses that are testable, falsifiable, and practical. T-values and P-values were evaluated to evaluate hypotheses. T-values exceeded 1.65, indicating a 5% significance level. The \*, \*\*, and \*\*\* p-values were designated as 0.10, 0.05, and 0.01 (Brandt, 2014). The association is corroborated for p-values within these three ranges. Present the findings of the study hypothesis testing in Table 7.

Table 7

### *Summary of Hypothesis Testing*

Hypothesis	Description	T Values	P Values	Results
H <sub>1</sub>	Human Factors -> Digital Transformation	3.09	0.00	Supported
H <sub>2</sub>	Organizational Factors -> Digital Transformation	5.34	0.00	Supported
H <sub>3</sub>	Technological Factors -> Digital Transformation	2.30	0.01	Supported
H <sub>4</sub>	Environmental Factors -> Digital Transformation	2.70	0.00	Supported

Note: Significant value: (\*p < 0.10, \*\*p < 0.05, \*\*\*p < 0.01 and NS: Not significant)

Source (Ringle, Wende & Becker, 2024)

### **Discussion of Hypothesis**

Table 7 shows four relationships between digital transformation and accounting information, supporting the hypothesis. Human, organisational, technical, and environmental factors are endorsed. Comprehensive discussions ensue for each hypothesis.

Hypothesis 1: Human factors influence the digital transformation of accounting information.

Human factors exhibit a positive relationship with digital transformation in accounting information among accounting workers in the educational sector in the Upper East Region of

Ghana, with  $t = 3.092.70$  and  $p = 0.00$ . Research on the digital transformation of accounting information (Kruskopf et al., 2020; Trang et al., 2024) supports the findings. Human factors, including digital transformation training and expertise, enhance the quality of accounting information (Trang et al., 2024).

Hypothesis 2: Accounting information's digital transformation is influenced by organisational factors.

Table 7 demonstrates a correlation between organisational traits and digital transformation in accounting information ( $t = 5.34, 3.09$ ;  $p = 0.00$ ), so substantiating hypothesis H<sub>2</sub>. We concur with Nguyen & Nguyen (2020) and Syafaat et al. (2022). Proficiency in computers, decision-making, and user interaction is required. Culture, financial reporting, institutional accounting frameworks, management commitment, data integrity, staff attitude, system complexity, and executive support influence the quality of AIS services. Leadership, culture, and commitment influence the quality of AIS. Organisational commitment fosters employee emotional attachment and system adoption (Syafaat et al., 2022). Decision-makers obtain dependable, flexible, consistent, and accessible AIS data (Nguyen & Nguyen, 2020).

Hypothesis 3: Technological factors influence the digital transformation of accounting information.

Hypothesis three (3) posits that technology aspects have a positive correlation with the digital transformation of accounting information, with  $t = 2.30$  and  $p = 0.01$ . Chong and Nizam (2018) and MA et al. (2021) reported analogous findings. Chong and Nizam (2018) assert that the use of digital accounting information enhances dependability, accuracy, timeliness, strategic initiatives, decision-making, efficiency, quality, cost-effectiveness, productivity, and knowledge dissemination.

Hypothesis 4: Environmental factors influence the digital transformation of accounting information.

This study supports hypothesis four (H<sub>4</sub>) by demonstrating that environmental factors influence the digital translation of accounting information ( $t = 2.70$ ,  $p = 0.00$ ). Consequently, hypothesis four is corroborated. Previous studies (Látečková et al., 2016; Alawaqleh, 2021; Alshirah, 2021) confirm this conclusion. Mimetic, coercive, and noematic influences impact AIS use and the digital transformation of accounting information. Strategic decisions, societal expectations, professional norms, and successful enterprises exert influence (Alshirah et al., 2021).

All four hypotheses on the factors influencing the digital transformation of accounting information among accounting educators in Ghana's Upper East were validated. The findings were corroborated. Table 7 delineates these elements.

## Conclusions

The section reiterated the study subject and hypotheses prior to addressing the research questions and findings. The conclusions emphasise the study's shortcomings and the need for future research. Accounting professionals in the educational sector in Ghana's Upper East region are impacted by the digital transformation of accounting information. The research addresses a knowledge deficiency and enhances our comprehension of digitisation within the accounting sector. The study indicated that the majority of respondents utilised

accounting information systems. Most respondents have utilised spreadsheet software, Tally, various bespoke applications, and QuickBooks for over two years.

The study analyses 228 responses from a survey of 300 accounting personnel. The primary objective is the digital transformation of accounting information by educational accounting specialists. Human, organisational, technical, and environmental variables were taken into account. The digital transformation of accounting information is influenced by human, organisational, technological, and environmental variables. For the digital transformation of accounting information, an organisation must evaluate these four elements.

The HOTE assessed the human, organisational, technological, and environmental elements of AIS adoption by educational accounting personnel in Ghana's upper east as part of the digital transformation of accounting information. Using a variety of theoretical frameworks, this study characterises the factors hypothesised to influence educational accounting staff's digital transformation of accounting information. This study tests and recommends a technique for anticipating accounting information's digital transformation. The human, organisational, technological, and environmental findings in this study contribute to the literature on information digital transition. Accounting professionals in Upper East Ghana and other developing countries can better understand digital accounting information transformation by utilising technology adoption concepts. Human, organisational, technological, and environmental aspects from one study are used to improve IT performance theory and predictions. This study's instrument can look at accounting data from other emerging technologies, such as cloud computing. This study has implications for legislators, business owners, managers, technology vendors, and service providers. Accounting information systems must be upgraded by the government in order for corporations to compete globally. Ministries and other government organisations will assist accountants with digital transformation and adoption. Quality accounting information stakeholders are more likely to support digital transitions.

#### *Practical Contribution*

Accounting Information Systems enhance the accuracy of financial data, hence improving organisational performance and reducing costs. It addresses research deficiencies to enhance the record-keeping of educational funding in Ghana. It may assist developing nations such as Ghana in comprehending the digitalisation of accounting data. The study's insights can be applied to cloud computing. Research influences legislators, entrepreneurs, and service providers.

#### **Limitation of Research**

This research on the digital transformation of accounting information in Ghana includes limitations on sample selection, geography, and size. The sample comprised accounting personnel inside a specific nation's educational sector, hence constraining generalisability. The study exclusively sampled accounting personnel from the educational sector in Ghana's Upper East region. Consequently, opinion trends vary from those in other regions.

### Suggestions for Future Research

The study's limitations require additional research on the digital transformation of accounting information. Subsequent studies must encompass diverse geographical regions. The study just examines elements influencing the digital transformation of accounting information, notwithstanding other pertinent issues.

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### Competing Interest

Authors declared no competing interest.

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