
Digital Transformation in Accounting and Auditing: An Analysis of Its Impact on Financial Reporting, Internal Controls and Fraud Detection

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Abstract

The business world is highly computerised today as a result of the technological revolution. The language of business, accounting, has also gone through many changes. The double-entry system originated in Italy and was first documented in 1494 by Luca Pacioli who was known as the father of accounting due to his contribution to the study of accounting. Some of the earliest information about accounting is found in the book of Chanakya, the philosopher and economist, who wrote the Arthashastra during the Mauryan period. This priceless resource provided guidance on accounting and financial management. Now, the accounting profession is undergoing a revolutionary change in the midst of technological revolution. The use of new technologies including artificial intelligence, blockchain, data analytics and cloud computing is transforming accounting practices, improving the quality of data and improving decision-making. This study will focus on the impact of these technological developments in financial reporting and accountants. The study is founded on a detailed review of literature, case studies and expert interviews to gain insight into the various technological advancements in accounting. In addition, primary data were collected from the leading Indian companies - Wipro, Infosys, TCS and Tech Mahindra. A total of 95 respondents, chartered accountants, accountants and financial analysts (70 men and 25 women), took part in the study. For the data analysis, statistical techniques have been used (chi-square test and percentage analysis). This was done to find any insights and associations, particularly between gender and status in organisations. The findings reveal that technology is positively affecting accounting and auditing. Moreover, technology has enabled more accurate and timely financial reporting, and has become a valuable component of accounting.

Keywords: Digital Technologies, AI, MI, Blockchain Technology, Accounting, Auditing

1.INTRODUCTION

We are in a digital era in which the world and commerce are changing. In particular, accountancy is expected to undergo dramatic changes in the not so distant future due to technology. Due to the rapid technological pace of change, accounting is becoming more technologically focused. The traditional role of accountants doing ledgers and calculations is being replaced by a new reality of digital technologies and systems. In this world, accountants and finance professionals are faced with a dilemma. They need to learn to work with, and manage risks with new technologies. This research will explore the impact of new technologies on accounting. This will examine the

effects of technology in changing the profession, opportunities and regulatory issues. This study will give an overview of the benefits and risks of applying new technologies in accountancy. These technologies can enhance productivity, accuracy and decision making but on the other hand, it can be a threat. But there are also risks of over-automation, loss of privacy and security. In addition, the research identifies the need for considerable changes in accounting education and training to keep accountants up-to-date in a technology based world.

The research also explores the changing mindset of the stakeholders in the profession - business, clients and regulators - and how this is impacting on the accounting profession. In an ever-growing

technologically driven world, it is important to research the influence of technology on the accountant, financial information management and the effect on business. The purpose of this study is to offer an impartial view of the accounting profession. This study seeks to provide guidance to accountants, academics and regulators by identifying the potential opportunities and threats resulting from technology. The research will aid in understanding the magnitude of this change and how to navigate through a digital world. Therefore, it aims to ensure the accounting profession continues to fulfil its role of financial transparency, integrity and reliability in a digital world.

2. LITERATURE REVIEW

Accountants' roles have shifted from completing tasks such as book-keeping and financial reporting to more strategic activities in the organisation. The latest research indicates that accountants need to use data analytics and modelling to forecast and predict for management decisions and strategies. Alles et al. (2019) and Arvidsson et al. (2014) stress the need for data skills and for accountants to work in a data environment. The use of technology has also impacted accounting, including artificial intelligence (AI) and automation. DeBerg et al. (2019) and Männistö et al. (2020) mention efficiency increases from the use of AI and robotic process automation (RPA). They report these technologies increase automation of accounting tasks, reduce errors and enhance efficiency. This leaves more time for accountants to engage in more value-adding work like analysis, forecasting and consultancy. However, there are risks to security and privacy. For instance, the digitisation of more sensitive data creates security risks (Fanning and Cogger, 2017). The literature emphasises the importance of information security and security controls to protect financial information from unauthorised access and hacking. Second, empirical papers identify some of the issues with information management systems, especially user-tagging systems. In particular, users have a tendency to attach multiple and repetitive tags to the same item and this makes searching for information more difficult. Also, many tags just

copy the name of the items, causing duplication and redundancy.

We are living in a rapidly changing world and technology is seeping into every nook and cranny of business including manufacturing, logistics, finance, health care and supply chain. This is impacting on accounting practice and research. A number of research studies focus on the disruptive impact of emerging technologies like blockchain, artificial intelligence (AI), machine learning (ML), cloud computing and big data analytics (Kokina & Davenport, 2017; Moll & Yigitbasioglu, 2019). Not only are they changing the face of business, but also the role of accounting. Authors like Richins et al. (2017) and Andersen (2019) note that accounting is a constantly evolving profession as a result of the application of advanced information technologies. Accounting, more than other professions, is set to keep up with the changes with the use of new technologies including artificial intelligence (AI), blockchain, cloud computing and data analytics. The technology automates processes and increases accuracy and report in real-time, making accounting processes more efficient. Moreover, Ibrahim et al. (2021) show how new technologies can help in allowing accountants to work more effectively in the dynamic business environment. The use of new technologies such as artificial intelligence analytics (AI), big data analytics and the cloud, help with decision-making and enable accountants to provide more value-added reports.

This is also backed up by evidence. KPMG International (2017) surveyed 580 respondents in 16 countries on the adoption of disruptive technologies, and its integration with business strategy. The research found 77% of the respondents considered data analytics and big data to be the most important technologies, followed by cloud computing (74%). This demonstrates the growing use of data technologies to affect business and accounting.

2.1 Cloud Accounting

Adoption of cloud computing is increasingly becoming a popular technological solution for many enterprises, with many enterprises choosing

the public cloud deployment model for its scalability and cost-effectiveness. This model allows a subscription-based pay-as-you-go approach that helps in managing costs and scaling up as the business expands (Du & Cong, 2015). This therefore enables effective cost management in the future and the ability to adapt to business demands.

The latest trends indicate that cloud accounting systems are becoming increasingly popular with enterprises of all sizes. Indeed, according to a Eurostat (2021) survey, in 2021, 41% of all European Union enterprises with over ten employees used cloud computing services (this is a five percentage point increase from 2020). This was primarily for purposes such as hosting e-mail and storing electronic documents. In addition, almost 47% of these enterprises used advanced cloud-based accounting and finance management software, showing the trend towards digitisation in accounting.

2.2 Artificial Intelligence, Data Analytics, and Big Data

Advancements in digital technologies, particularly in the online and mobile environment, has led to the creation of a data explosion. The "data explosion" has resulted in an exponential increase in the generation of data, doubling every 18 months. Companies are now generating and storing more data in a short period of time than they did in hundreds of years. Data generated by companies today is projected to double every 18 months. (Warren et al., 2015). The increase in data is of significance to accountants and auditors. Big data is often characterised by the 3 V's of volume, velocity, variety. Volume refers to the volume of data being generated and stored and velocity is the speed that data is generated and processed. Variety refers to the different types of data, including structured, semi-structured, and unstructured data, such as social media data, transaction data, images, and geo-location data. The sources of data streams include enterprise applications, sensors, mobiles, satellites and social media (Gartner, 2016). To make use of big data, advanced and affordable analytics techniques are required to extract value. These techniques can be used for decision-making,

automation and accounting and auditing. In addition to the three main characteristics, veracity is also considered to be important for big data. This is associated with data quality, accuracy and trustworthiness and is critical for the analytics and decision making to be successful (White, 2012).

Big data analytics has recently changed the way intangible assets are valued. Vasarhelyi and Warren et al. (2015) discuss the valuations of customer relationships, brand and liabilities using data analytics. These intangibles are not typically reported in the financial statements of entities, but do enter the consolidation process, particularly in mergers and acquisitions, where they are reported in the financial statements of the parent entity. Further research by Cong et al. (2018) has shown that information from both business-to-consumer (B2C) and business-to-business (B2B) relationships can be used to enhance such valuations, such as stock and property, plant and equipment (PPE). Thanks to technological advances, such as sensor data, assets can be more accurately measured. This leads to improved depreciation estimates, which reflect use and wear, instead of estimates.

Bhimani and Willcocks (2014) point out that accounting processes and systems need to adapt to the gathering of big data and analytics. This will help to produce financial information that more accurately reflects economic value. Similarly, the application of analytics on big data will change corporate reporting studies by Krahel and Vasarhelyi (2014), and Al Htaybat and von Alberti-Al Htaybat (2017) to include real-time reporting, and more emphasis on interpretative and contextual information related to financial numbers.

The use of robotic process automation (RPA) in accounting has also been extensively discussed. Chanyuan et al. (2023) highlight five dimensions of the successful adoption of RPA in an enterprise: the impact on the workforce, IT governance, data security and privacy, sustainability and performance measurement. Their research offers important insights into the effective adoption of RPA and overcoming business and strategy challenges.

Furthermore, Lazarus Elad et al. (2023) noted that digital technologies can strengthen internal control procedures and prevent and detect fraud. Organisations can identify risk more proactively, thereby closing the expectation gap in auditing through the use of advanced digital technologies. This can result in better audit quality, lower costs, and higher stakeholder trust in auditing.

2.3 Blockchain technology

The use of blockchain technology in accounting has received considerable attention; however, it is still in its infancy and there are some limitations. As Ting Yu, Lin, and Tang (2019) point out, the technology is still hampered by storage capacity, speed, privacy and regulatory concerns, which have stifled its adoption. This indicates that although it has the potential, the use of blockchain technology in accounting requires further technological and institutional development. However, the technology revolution has changed financial reporting and auditing. Some of these developments include adoption of digital technologies, improved methods of big data analytics, online and real-time reporting and continuous auditing, as noted by Ageeva, Karp and Sidorov (2021). They also propose a method for the incorporation of blockchain technology into accounting, reporting and auditing practices, demonstrating that it enhances transparency and efficiency.

Furthermore, Abdennadher and Grassa et al. (2022) demonstrate that blockchain technology has a significant impact on the accounting profession. It improves the recording of transactions, improves the storage and verification of financial data, and provides a secure medium for transactions. This boosts the reliability, traceability and trust in financial information systems.

3. OBJECTIVES OF THE STUDY

1. To understand the range of technological developments in accounting and auditing.
2. To understand the impact of technology in accounting and auditing.
3. To understand the impact of technology on financial reporting.

4. HYPOTHESES

H₀₁: Technology has no impact on accounting and auditing.

H₀₂: There is no impact of technology on financial reporting.

5. RESEARCH METHODS

The study is based on Indian firms that use modern technologies for accounting and auditing processes to improve financial reporting and transparency. A random sample was drawn from this population in order to gain valid evidence. These companies include prominent firms like Wipro Ltd., Infosys Ltd. and TCS Ltd. Primary and secondary data were used for the study. Data collection method largely relied on structured questionnaires, and secondary data were collected through a review of literature, reports and documents. A total of 135 questionnaires were sent to finance professionals such as accountants, auditors and finance officers of organisations. The questionnaires were sent to 135 organizations that adhere to international standards and practices in accounting and auditing. Of these, 119 were received, with 95 being valid and usable for the study (a response rate of 70.37%). The participants were chosen based on their knowledge and experience in the field, with an expectation that they would be able to provide valuable insights into adoption of new technologies in accounting and auditing and its impact on transparency of financial reporting.

Theoretical Framework

Theoretical framework is used to explain, interpret and analyse the concepts, principles and assumptions of a particular phenomenon to better understand it, and to provide a platform for research. It assists in the organisation of the study through the identification of variables and direction of research.

In the current study, the work of Frank (1979) is adopted to build a conceptual understanding. Furthermore, the study uses a theoretical framework developed by Sharif (2020) with minor adjustments to suit the purpose of this study. The modified model is applied to explore the interaction between technological developments and their

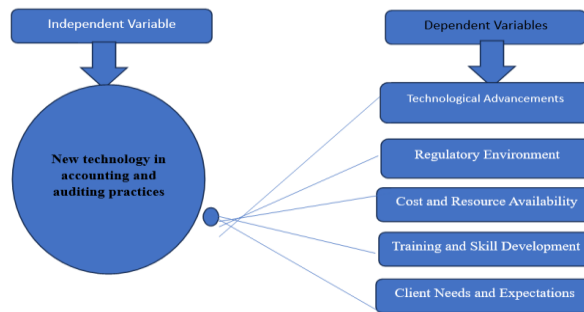
effects on accounting and auditing processes, and their implications for financial reporting.

Hypotheses Development

According to Frank (1979) a hypothesis is a provisional statement of fact that must be tested by

the researcher. In our research the dependent variable is the new technology in accounting and audit and the independent variables are Technological Development, Regulatory Framework, Cost and Resource Availability, Training and Development.

Figure 1: Factors affecting the new technology in accounting and auditing practices.



Source: Authors work

Let me discuss the factors in detail manner in the below table:

Table: 1 Factors affecting the new technology in accounting and auditing practices

SI. No	Factor	Detail description
1	Technological Advancements	Technological advancement has a direct influence on the execution of accounting and auditing functions. Emerging technologies such as artificial intelligence (AI), machine learning (ML), blockchain, and cloud computing significantly enhance operational efficiency, improve accuracy, and streamline financial processes
2	Regulatory Environment	The introduction of new laws and regulatory requirements significantly influences the adoption of technology in accounting and auditing practices. Compliance with established standards such as GAAP and IFRS often necessitates the use of advanced technological tools and specialized technical expertise to ensure accuracy, consistency, and transparency in financial reporting..
3	Cost and Resource Availability	Another factor that determines the use of new technologies in accounting and auditing is professional resistance to change. The expenses involved into the creation, implementation and maintenance of new technologies and the presence of qualified professionals to operate them are also important aspects in this field. This is particularly among smaller companies, which might be resource and expertise deprived.
4	Training and Skill Development	Training and continuous education are essential to assist the accounting and auditing practitioners to efficiently utilize new technologies. Training is necessary as it will make the implementation process slow and reduce the gains of advances in technology.
5	Risk Management Considerations	Organizations must evaluate and manage the risks involved in adopting new technologies. Such threats as data breaches, system failures, and non-compliance issues should be taken into consideration. This highlights the importance of robust risk management systems to make sure that there is a safe and successful adoption of technology solutions in accounting and auditing systems..

Source: Authors work



6. DATA ANALYSIS & INTERPRETATION:

1. To what extent has your organization adopted digital technologies in its accounting and auditing processes?

Table 2: Digital technology in Accounting and Auditing Technology

Scale	Respondents	Percent
Very low	0	0
Low	0	0
Moderate	0	0
High	31	32.64
Very High	64	67.36
Total	95	100

Source: Primary Data

The table above shows that most respondents (67.35) think that accounting and auditing processes are completely integrated with digital technologies, and the other 32.64% believes that the processes are highly integrated. It is important to note that all the respondents did not indicate low or moderate levels of integration. This is an

indication of a high overall view of extensive use of digital technologies in the sampled organizations.

One can thus conclude that the chosen companies have integrated digital technologies, including big data, artificial intelligence, and blockchain extensively in their accounting and auditing.

2. What particular digital technologies has your organization been adopting or is taking into consideration in the practice of accounting and auditing?

Table 3: Introduction of technologies into accounting and Auditing

Technologies	Respondents	Percent
Robotic Process Automation (RPA)	26	27
Artificial Intelligence (AI)	31	33
Blockchain	21	22
Cloud Computing	0	0
Data Analytics	17	18
Other (please specify)	0	0
Total	95	100

Source: Primary Data

As the table shows, the most commonly used technologies are Artificial Intelligence (AI) and Robotic Process Automation (RPA), which occupy 33% and 27% of places respectively. This is preceded by Blockchain at 22 and Data Analytics at 18. It is important to note that Cloud Computing is not adopted in the surveyed organizations. These findings demonstrate a definite move towards the

adoption of more sophisticated digital technologies, especially AI and RPA, in the accounting and auditing processes. Their increasing application implies that organizations are increasingly turning to these tools as a means to boost efficiency, increase accuracy, and better financial data and analysis.

3. What has been the impact of the use of digital technologies on the internal controls in the financial reporting/accounting processes?

Table 4: Technologies had an effect on internal controls in financial reporting / accounting processes

Likert Scale	Respondents	Percent
Significantly improved	57	60
Improved	38	40
No significant change	0	0



Declined	0	0
Significantly declined	0	0
Total	95	100

Source: Primary Data

Table 4 presents a significantly positive effect of the use of digital technology on internal controls in the financial reporting and accounting processes. Most of the respondents (60% of all) mentioned that internal controls have been reinforced greatly by the use of digital technologies, and the other 40% of all said improvements have been realized, albeit to a small degree. None of the respondents reported a negative effect or no effect, which

demonstrates a high degree of agreement with its positive effects. On the whole, the results indicate that digital technology has increased financial reporting systems reliability, accuracy, and efficiency. This means that organizations are becoming more aware of digital transformation as an important aspect in enhancing internal control mechanisms and enhancing quality of accounting information.

4. Are there any gains in fraud prevention and detection capacity since the implementation of digital technologies?

Table 5: Fraud Prevention and Detection

Variable/Gender	Male	Female	Total
Yes	59(62)	19(17)	78(82)
No	11(12)	06(6)	17(18)
Total	70	25	95

Source: Primary Data

Table 5 provides the information about the increase or decrease in the abilities to prevent and detect fraudulent activities after digital technologies have been introduced, by gender and type of response. The answers are categorised as Yes and No to show whether there has been any change observed. The analysis shows that 78 out of 95 (82%), or a considerable majority of respondents, had improvements in fraud prevention and detection after adopting digital technologies. It means a large majority of respondents (78 out of 95, i.e., 82%) believe that there are gains in fraud prevention and detection. Only 17 respondents (18%) feel that there are no gains. In general, the results show that there is a high degree of consensus that digital technologies have had a beneficial impact on fraud detection and prevention capacities. The existence of a minority that reports no change can, however, indicate that there are differences in experiences and perceptions. This indicates that more

qualitative research is required to learn more about these contrasting perspectives. According to the participants, the following changes have taken place with regard to fraud prevention and detection capabilities since the advent of digital technologies: (1) Digital technologies have enabled the creation of sophisticated algorithms and artificial intelligence models that can analyze vast amounts of data in real-time. The designs can be identified by these structures, which show that fraudulent activities are going on in a better way than before. (2) Digital tools have facilitated the gathering and processing of extensive data on various sources which are essential in making effective decisions as well as in performing relevant accounting and auditing practices such as transaction records, customer behaviour and third-party database.

Complex data analytics methods will help to reveal unnoticed relationships and abnormalities that can be the signs of fraud.

5. Do you have any difficulties with technologies in financial reporting / accounting presently?

Table:6: Challenges with technologies in financial reporting / accounting

Variable/Gender	Male	Female	Total
Yes	62(65)	14(15)	76(80)
No	08(8)	11(12)	19(20)
Total	70	25	95

Source: Primary Data

The majority of respondents, 76 out of 95 (80%), are currently facing challenges with technologies in financial reporting and accounting, with 62 being male and only 14 being female. A lesser proportion, 19 out of 95 (20%), reported not facing challenges, with three males and six females in this category. This information highlights a widespread

recognition of the difficulties encountered by professionals in financial reporting and accounting due to technological advances. Respondents are revealed the following challenges with technologies in financial reporting. (1) Integration of Systems (2) Data Security and Privacy (3) Skills Gap (4) Cost of Implementation.

6. Does the adoption of digital technologies enhance the quality of financial reporting?

Table 7: Technologies improve the financial reporting

Variable/Gender	Male	Female	Total
Yes	70(74)	25(26)	95(100)
No	0(0)	0(0)	0(0)
Total	70	25	95

Source: Primary Data

Table 7 reveals a strong overall perception that digital technologies improve financial reporting. The majority of respondents agree that the use of technology enhances the quality, accuracy, and efficiency of financial reporting processes. However, the findings also indicate a gender-based difference in perception, with a higher proportion of male respondents expressing a positive view compared to female respondents.

In conclusion, the data reflects a general consensus that technologies contribute positively to financial reporting, while also highlighting noticeable variations in perception across gender groups.

Hypotheses testing:

H01: There are no technologies, improve financial reporting

Table 8: Observed Frequency

Variable/Gender	Male	Female	Total
Yes	62	15	77
No	8	10	18
Total	70	25	95

Source: Primary Data

Table 9: Expected Frequency

Variable/Gender	Male	Female	Total
Yes	57	20	77
No	13	5	18
Total	70	25	95

Source: Primary Data

Table10: Statement showing Chi -Square test value

O	E	O-E	(O-E) ²	(O - E)2/E
62	57	5	25	0.4385
15	20	-5	25	1.25
8	13	-5	25	1.9230
10	5	5	25	5
Chi -Square test value				8.6115

Source: Primary Data

Table 10 reveals that the chi-square statistic, 8.6115 corresponds to the value of the Chi Square test in the table, 3.84. It is found that chi-square values 5.6115 is more than the table of chi square test 3.84. So, null hypothesis (H0) is rejected and accepted the alternative hypothesis. The Chi-square test was applied to establish whether there is an impact of technology adoption on the financial reporting by genders. The table value of Chi-square is 3.841 at a 5% level of significance (0.05) and 1 degree of freedom. This suggests a strong link between technological use and improved financial reporting. In other words, the data indicate that digital technology improve financial reporting practices. In a nutshell, the data indicate that digital technology improve financial reporting practices. Furthermore, the observed heterogeneity between gender suggests that male and female respondents may have various views of the magnitude of this change.

Respondents reported that the efficiency, accuracy and transparency of the financial reporting process have improved significantly over the years as a result of technological improvements made. The application of technologies like data analytics tools, blockchain, cloud computing, accounting software, and artificial intelligence are becoming more common in streamlining reporting processes in organizations. The tools are useful in automating routine operations, crunching huge amounts of data within a short time frame, enhancing data security and in real-time reporting of financial performance.

On the whole, the finding supports the fact that the implementation of technologies has a significant impact on enhancing the quality and the effectiveness of financial reporting.

Ho2: There is no impact of technology in accounting and auditing practices

Table 11: Observed Frequency

Likert Scale/Gender	Male	Female	Total
Significantly improved	40	5	45
Improved	25	20	45
No significant change	3	0	0
Declined	2	0	0
Significantly declined	0	0	0
Total	70	25	95

Source: Primary Data

Table 12: Expected Frequency

Likert Scale/Gender	Male	Female	Total
Significantly improved	33	12	45
Improved	33	12	45
No significant change	2	1	3
Declined	2	0	2
Significantly declined	0	0	0
Total	70	25	95

Source: Primary Data

Table 13: Chi -Square test value

O	E	O-E	(O-E) ²	(O - E)2/E
40	33.16	6.84	46.78	1.41
25	33.16	-8.16	66.58	2.01
3	2.21	0.79	0.62	0.28
2	1.47	0.53	0.28	0.19
5	11.84	-6.84	46.78	3.95
20	11.84	8.16	66.58	5.62
0	0.79	-0.79	0.62	0.78
0	0.53	-0.53	0.28	0.53
0	0	0	0	0
0	0	0	0	0
Chi -Square test value				14.77

Source: Primary Data

The Chi-square test was used to test the effect of technology on accounting and auditing practices. The Chi-square value (14.77) is greater than the critical value (7.815) with 3 degrees of freedom at the 5% level of significance. This shows that there is a statistically significant difference between the observed and the expected frequencies. Therefore, the null hypothesis that there is no influence of technology is rejected. In conclusion, it can be affirmed that technology plays a great role in accounting and auditing practices and it affects efficiency, accuracy and professional performance in general. Since the respondents disclosed that technology has greatly influenced the practices of accounting and auditing. (1) Automation: A majority of the respondents said that technology has enabled one to automate the boring activities such as data entry, reconciliation and report

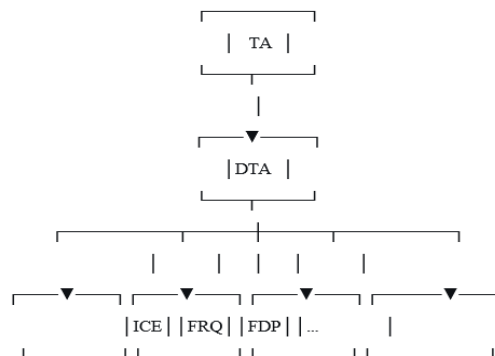
preparation. This not only reduces time and effort needed in these operations, but also reduces the risk of human error. (2) Blockchain Technology: Over 95% of the respondents feel that the Blockchain technology can change the way audits are conducted by providing a secure and unalterable ledger of transactions. It enhances transparency, reduces fraud exposure and efficiency of audit trails. (3) Remote Auditing: They stated that they were taking advantage of the technological advancements that made remote auditing a reality, whereby auditors can carry out the engagement without necessarily going to the sites of their clients. Auditors can effectively perform their duties at any place in the world virtually because of virtual collaboration tools, video conferencing and secure file-sharing systems.

7. SmartPLS – Style Diagram:

Outer circles=Indicators

Inner circles=Latent variables

Arrows=Paths

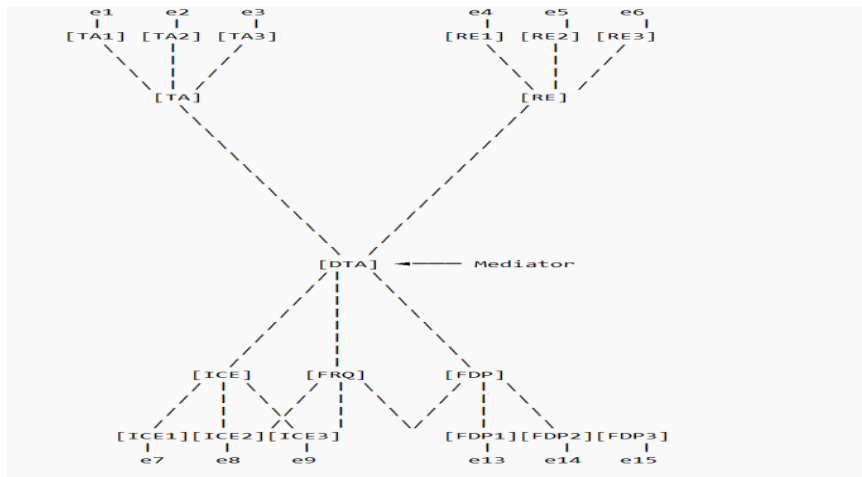


Exogenous variables (left side): TA, RE, CRA, TSD, CNE → all pointing to DTA

Endogenous variables (right side): DTA → ICE, FRQ, FDP

The provided SmartPLS-style diagram is a structural equation model in which the latent variables are linked by the directional relationships. Technology Awareness (TA), Regulatory Environment (RE), Cost and Risk Analysis (CRA), Technological Skill Development (TSD) and Customer Needs/Expectations (CNE) serve as the exogenous variables that influence Digital

8. PLS-SEM Path Diagram

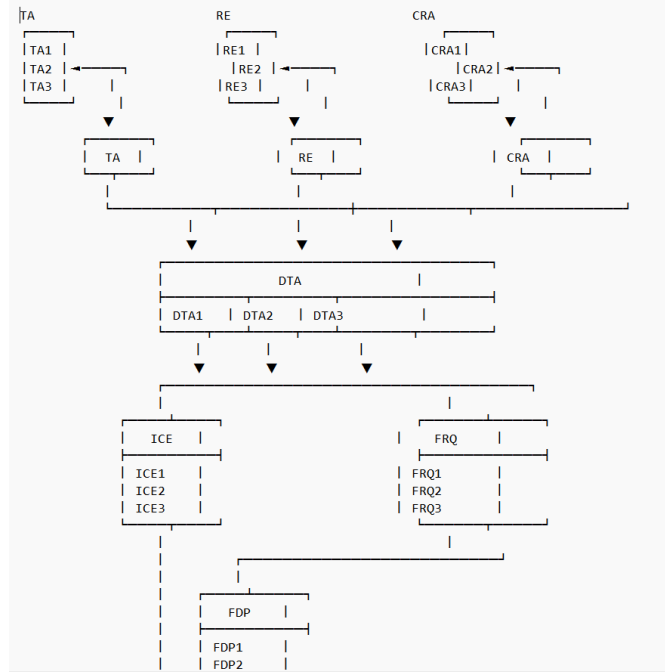


The figure is a PLS-SEM (SmartPLS) model that consists of the measurement model and structural model. TA (Technology Awareness) and RE (Regulatory Environment) are positioned at the top and quantified using their respective indicators (TA1, TA2, TA3 and RE1, RE2, RE3) and error terms (e1-e6) are used to indicate measurement errors. These two constructs act as independent (exogenous) variables and are shown influencing DTA (Digital Technology Adoption), which is

Technology Adoption (DTA) in this model. DTA is the main endogenous and mediating variable, because it is influenced by these factors and, conversely, it also influences outcome variables like Internal Cost Efficiency (ICE), Firm Revenue/Quality (FRQ), and Financial Decision Performance (FDP). The arrows represent the postulated causal connections, whereby organizational and environmental variables cause technology adoption, which in turn boosts the performance outcome of business.

positioned at the center as a mediator. This means DTA transmits the effect of TA and RE to the outcome variables. At the bottom, DTA influences ICE (Internal Cost Efficiency), FRQ (Firm Performance/Quality), and FDP (Financial Decision Performance), which are dependent (endogenous) variables, each measured by their own indicators (e.g., ICE1–ICE3, FDP1–FDP3 with corresponding error terms.

9. PLS-SEM Path Model of Digital Technology Adoption and Its Impact on Organizational Performance



This diagram is a PLS-SEM (SmartPLS) structural model with a mediator, showing how multiple factors influence outcomes through Digital Technology Adoption (DTA).

At the top, TA (Technology Awareness), RE (Regulatory Environment), and CRA (Cost and Risk Analysis) are exogenous (independent) latent variables, each measured using indicators (TA1–TA3, RE1–RE3, CRA1–CRA3). These constructs are the most important determinants of technology adoption. The arrows of these variables are directed to DTA meaning that the variables have a direct impact on Digital Technology Adoption.

DTA is the mediation point that is in the middle, and the endogenous variable, which is measured using indicators (DTA1-DTA3). It has a dual purpose: not only it is influenced by TA, RE, and CRA, but also it affects the performance outcomes. This mediating position implies that the influence of the independent variables is mediated by DTA.

The dependent variables at the bottom are ICE (Internal Cost Efficiency) and FRQ (Firm Performance/Quality), which are measured by their own measures (ICE1–ICE3, FRQ1–FRQ3).

Moreover, an additional outcome variable is FDP (Financial Decision Performance) that is measured by FDP1 and FDP2. The fact that the arrows of DTA to ICE and FRQ are positive helps to improve efficiency and performance, and the arrow that leads towards FDP indicates that the results (directly or indirectly) increase financial decision-making.

Generally, the model describes a causal chain:

Organizational (TA, RE, CRA) factors to Digital Adoption (DTA) to Performance Outcomes (ICE, FRQ, FDP), with the mediating role of DTA to enhance business efficiency and quality of decision-making.

10. Findings and Recommendations

It is found that chi-square values 5.6115 is more than the table of chi square test 3.84. So, null hypothesis (H0) has been rejected and accepted the alternative hypothesis. Hence, *there is technologies, improve financial reporting*. The results of the research demonstrate that technology adoption, technological hurdles, and simplicity of access all have positive effects on the usage of novel tools in financial reporting. *It is also observed that There is*

significance positive impact of technology in accounting and auditing practices It has also been observed that there are technologies that may enhance financial reporting. It indicates that there is a favourable technological improvement in financial reporting. The participants stated that technological developments over the years have considerably enhanced the efficiency, accuracy, and transparency of the financial reporting process. Finally, it's decided that technology has a positive effect on auditing and accounting methods.

The recommendations to the organisations are: 1) Organizations should invest in advanced digital tools such as cloud-based accounting systems, AI-driven analytics, and integrated ERP solutions. Proper integration across departments improves the accuracy, timeliness, and transparency of financial reporting (2) Employees and auditors must be trained in digital tools, data analytics, and emerging technologies. Building digital competency ensures effective use of technology in financial reporting, strengthens internal controls, and enhances fraud detection efficiency

11. Conclusion

The study has substantial implications for how accounting records are generated and audited. Whereas the incorporation of evolving technology tools in transactions raises the probability of substantial error, they also create novel possibilities for auditing techniques. Conventional methods for auditing are becoming increasingly obsolete as technology advances. Software for auditing enabled by developing technologies increases the value delivered to audits by helping auditors to accomplish their jobs more quickly, efficiently, and effectively. Growing audit technologies assist auditors in acquiring sufficient and relevant audit evidence through actions such as vouching, tracing, verification, recalculation, re-performance, and third-party digital verification. These technologies also help with the study of systems utilizing audit software. As a result, auditors must adapt their perspective to accept developing technology capabilities when auditing their customers' financial accounts.

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