

A Study on the Impact of Digital Transformation on Job Roles of Accounting Professionals: Evidence from Sri Lanka

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ABSTRACT

The study aims to identify the impact of digital transformation on the job roles of accounting professionals in terms of the functions of the role, the objective of the role, specific duties and responsibilities assigned to the role, and the knowledge and skills required to perform the job role.

The study attempts to answer the following question: How has digital transformation impacted the job roles of accounting professionals in Sri Lanka?

Accordingly, 25 Sri Lankan accounting professionals whose organizations have been subjected to digital transformation during their tenure were interviewed to identify the impact of digital transformation on their job roles.

The study revealed that the use of blockchain technology, use of big data, artificial intelligence, and the use of cloud

computing are the most prominent digital transformations that have impacted the accounting profession in Sri Lanka. Further, the study revealed changes in accounting job roles including job tasks, job tools, and required skills as a result of digital transformation.

Keywords - Digital Transformation, Accounting Professionals, Job roles

1. INTRODUCTION

Watty et al. (2014) and Hoarau (1995) argue that despite being a global profession there are drastic variations in the accounting profession and the job roles of accountants across countries due to the differences in accounting standards followed, differences in the entry qualifications, the differences in the accounting education systems etc.

The global digital transformation and the evolution of technology during the Industrial 4.0 revolution have resulted in the integration of digital technologies into all business processes across multiple industries.

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As per Gulin et al. (2023) the accounting profession is one of the most traditional professions which has been subjected to drastic changes due to digitalization.

The salient literature identifies the transformation from manual accounting systems to automated accounting systems empowered by new technologies is one of the most significant change that has occurred in the accounting profession in the history. This digital transformation of accounting has significantly impacted the job roles of accounting professionals in terms of the functions of the role, specific duties and responsibilities assigned to the role, and the knowledge and skills required to perform the job role as per the salient literature conducted in different countries (Kossek, 2016; Gnatiuk et al., 2023; Taib et al., 2022).

However, there is a lack of research studies conducted in the Sri Lankan context with regard to the impact of digitalization on the job roles of accounting professionals.

Hence, it's worthwhile to explore the impact of digital transformation on the job roles of accounting professionals in Sri Lanka.

This study primarily aims to identify the changes in the job roles of accounting professionals led by digital transformation in Sri Lanka.

Henceforth, the following research objectives are derived and answered in this study.

1. To identify the digital transformations which has impacted the accounting profession in Sri Lanka.

2. To identify the significant changes in the duties and responsibilities assigned to the accounting professionals in Sri Lanka due to digitalization.
3. To identify the changes in the job tools used by accounting professionals in Sri Lanka.
4. To identify the significant changes in the knowledge and skills required from accounting professionals in Sri Lanka due to digitalization.

Accordingly, 25 Sri Lankan accounting professionals whose organizations have been subjected to digital transformation during their tenures were interviewed to identify the impact of digital transformation on their job roles.

2. LITERATURE REVIEW

2.1 Accounting Profession and Job Roles of Accounting Professionals

Del-Pozo-Antúnez (2021) defines accounting as a meaningful profession that is dedicated to the provision of quality information in respect of organizations and entities to markets with the intention of facilitating resource allocation in markets and stewardship of the organizations or entities.

As per Sánchez et al (2019) the main activity of an accounting professional is associated with the preparation, presentation, audit, and communication of financial information of entities to their interested stakeholders.

Further, Sánchez et al. (2019) categorize the accounting profession as an Active Job that has strong demands and a wide range of autonomy which makes the profession

demanding and a profession with high pressure.

As per Leitner-Hanetseder et al (2021) there are many job roles at different levels in the accounting profession ranging from bookkeeper to financial accountant to data analysts and these job roles have been evaluated over time.

Awang et al (2022) suggests that evolution of the accounting profession over the time line could be classified into five stages namely manual stage, mechanized stage, automated stage, robotic stage, and artificial intelligence assisted stage based on the technical and technological components used in each era of evolution.

2.2 Digital Transformation in Accounting

Past studies establish that the digitalization of accounting practices and integration of accounting into sophisticated information systems as one of the most prominent and radical changes faced by the accounting profession in the history of modern accounting (Gherman et al., 2021; Kossek, 2016; Gnatiuk et al., 2023; Taib et al., 2022).

The salient literature states that digitalization has resulted in major revolutions in accounting including amendments to accounting standards and accepted accounting principles, amendments to the financial reporting process, changes to the scope of financial reporting and non-financial reporting practices (Savić & Pavlović, 2023).

Boyle (2021) states that continuous accounting powered by in-memory and cloud-scale computing has replaced the

repetitive manual accounting process conducted by accountants for decades and this digital transformation will continuously evolve, and the enterprise systems will be fully integrated with Artificial Intelligence in the future.

The salient literature establishes that cloud computing, continuous accounting, blockchain technology, big data and data analytics, and artificial intelligence are the most significant technologies that have led the revolutionary digitalization of the accounting profession (Leitner-Hanetseder et al., 2021; Awang et al., 2022; Gulin et al., 2019).

2.3 The impact of Digital Transformation on the duties and responsibilities of Accounting Professionals

The extant knowledge in the area establishes that the digitalization of accounting profession has impacted the job roles of accounting professionals and the job roles have evolved from traditional bookkeepers and accountants to advisors and consultants (Gulin et al., 2019; Coman et al., 2022).

Geok & Fernandez (2022) establishes this evolution of job roles as a transition from accounting professionals performing mundane repetitive tasks to accounting professionals undertaking more strategic advisory roles in the organizations.

Khanom (2020) further establishes that due to digital transformation many accounting tasks including book keeping, payments, month end routine journal entries, invoicing has been automated and systems have replaced accounting professionals who were handling these routine jobs.

Further, the salient literature states that with the continuous radical changes in the profession fueled by digital transformation accountants are expected to continuously upgrade their technological abilities to thrive in the market (Sabuncu, 2022; Awang et al., 2022).

2.4 The changes in the job tools used by accounting professionals due to digital transformation.

Taib et al (2022) establishes that the digital transformation in has resulted in a change in the job tools used by accounting professionals. It's further highlighted that traditional manual accounting tools have been replaced by tools based on modern technologies including Internet of Things, Big Data, Data Analytics, and Blockchain.

Berikol & Killi (2021) argue that there was a radical change in the tools used by accounting professionals to perform their job roles due to digital transformation. The main changes highlighted by Berikol & Killi (2021) include the transition from paper-based primary sources to e-sources, computerized accounting systems replacing manual accounting systems, the introduction of Integrated Accounting Information systems enabled by Artificial Intelligence, and the introduction of cloud storage systems and data mining techniques to mine the accounting data stored in the cloud storage systems.

2.5 The significant changes in the knowledge and skills required from accounting professionals.

The salient literature establishes that with the wave of development in the accounting

profession due to the digital transformation accounting professionals are required to continuously improve their knowledge on accounting information systems, computerized accounting applications, data analytics, the newly developed branches of accounting, fintech regulations, and other new technologies relevant to accountants (Prawitasari, 2022; Taib et al., 2022; Berikol & Killi, 2021).

Further, the prominent researchers in the area has highlighted the increasing need for the accounting professionals to improve the ICT competencies, Data analysis competencies, and strategic decision making competencies as the job role of accounting professionals have transformed from a traditional operational level job role to a more managerial and a strategic level job role with the digital transformation in the profession (Leitner-Hanetseder et al., 2021; Awang et al., 2022; Gulin et al., 2019).

Moreover Fettry et al (2019) suggests that as per the perception of accounting professionals it's the duty of professional accounting bodies to ensure that accounting professionals are provided with opportunities to improve their technological skills, and to improve the curriculum to reflect the changes in the accounting profession resulted by digital transformations.

3. METHODOLOGY

A qualitative research method was employed and accounting professionals were used as unit of analysis. The study employed purposive sampling to identify accounting professionals in Sri Lanka

whose employing organizations have been subjected to digital transformation during their tenure.

Accordingly, 25, Sri Lankan accounting professionals whose organizations have been subjected to digital transformation during their tenures were interviewed using a semi structured interview guide to identify the impact of digital transformation on their job roles.

Table 1. summarizes the participant details of the 25 respondents.

Table 2: Respondent Details

Person	Accounting Job Role	Years in the Accounting Profession	Industry in which the organization operates in
A	Financial Analyst	10	FMCG
B	Management Accountant	5	Production
C	Bookkeeping Clerk	25	Logistics
D	Financial Reporting Manager	22	Banking and Finance
E	Forensic Analyst	11	Holding Company of a Business Conglomerate
F	Tax Advisor	12	Tax Advisory
G	Accounts Receivable Clerk	20	Retail
H	External	16	Audit Advisory
I	Project Accountant	6	Construction
J	Accountant	8	Plantation
K	Cost Accountant	9	Manufacturing
L	Finance Manager	10	Education
M	Petty Cash Officer	12	Retail
N	Chief Financial Officer	18	Apparel
O	Junior Accountant - Credit	5	Manufacturing
P	Financial Analyst	17	FMCG Retail
Q	Senior Executive	9	Banking and Finance
R	Risk Officer	6	Insurance
S	Internal Auditor	6	Hotel
T	Assistant Finance Manager	6	Pharmaceuticals
U	Accounting Information Systems Executive	8	Holding Company of a Business Conglomerate
V	Financial Controller	25	Hotel
W	Management Accountant	13	Manufacturing

X	Fund Accountant	5	Banking and Finance
Y	Cash Officer	18	Retail

The collected data was subjected to a thematic analysis to identify the common themes raised by the respondents.

4. FINDINGS AND DISCUSSION

4.1 Digital Transformations

The digital transformations experienced by the accounting professionals interviewed includes the usage of block chain technology, usage of computerized cloud accounting packages, usage of Business Intelligence tools (Datapine, Yellowfin BI, Power BI , and Tableau) for analytics, usage of Big Data for analytics and decision making, and the usage of AI tools.

A few extracted statements from the respondents are given below.

“Our organization adopted cloud accounting in the year 2019. The adoption of cloud-based accounting was the first phase of the many digital transformations we underwent. We are now actually using Block Chain technology to store the data in the clouds. Additionally these collected data is mined using Big Data analytics to get insights about the many markets that we are operating in” [U].

“In the past we used basic tools and software such as Ms Excel, Sage Intacct, Net Suite and etc. With the development of Business Intelligence tools, the management of the organization realized the need for investing in a more sophisticated analytics tool and invested in Microsoft Power BI which provides real

time information and analytics in a more visually appealing manner” [A].

“We, the forensic accountants of the entity used to rely on manual methods and simple software to detect financial frauds and recognize patterns in crimes. But with the introduction of Block Chain Technology now the transactional data is recorded in our systems in a manner which makes it impossible to be manipulated” [E].

These findings are supported by the salient literature where the prior research has also recognized the use of blockchain technology, use of big data, artificial intelligence, and the use of cloud computing as the most prominent digital transformations that have impacted the accounting profession in many countries across the world (Leitner-Hanetseder et al., 2021; Awang et al., 2022; Gulin et al., 2019).

4.2 The changes in the duties and responsibilities of accounting professionals in Sri Lanka due to digital transformation.

Accounting professionals has experienced a shift in the assigned duties and responsibilities due to digital transformation where mundane repetitive duties and responsibilities undertaken by accounting professionals in the past have evolved and the accounting professionals are currently playing more strategic advisory roles in the organizations due to digital transformations.

Indicated below are a few extracted statements from the interviewees.

“In my 22 year tenure in the area of financial reporting I have seen the accounting profession being subjected to numerous changes driven by digital transformations. In the early 2000s’ financial accountants were given mundane tasks of recording transactions and reporting financial statements. But with the new digital technologies in the accounting profession the financial accounting process has been automated. Now, we don’t spend time on mundane repetitive tasks due to the new systems even the financial statements are automatically generated. With the reduction of the time spent on routine work we are now focusing more on providing strategic solutions to the top management” [D].

“I have spent 22 years as a book keeping clerk in a leading logistics organization in Sri Lanka. Those days there were many book keeping clerks in the organization as our work was mainly manual and it was time consuming. But with the introduction of digitalized accounting systems now I am the only book keeping clerk in the organization. Most other companies no longer have book keeping clerks employed and it seems as if the job position book keeping clerks are almost not in existence due to digital transformation” [C].

These findings are backed by the findings of prominent researchers (Gulin et al., 2019; Coman et al., 2022; Khanom, 2020) in the area where it is established that duties and responsibilities of accounting professionals have evolved into strategic roles from traditional mundane roles and several duties and responsibilities of

accounting professionals have completely been replaced by machines .

4.3 The changes in the job tools used by accounting professionals in Sri Lanka.

The main changes experienced by the accounting professionals due to digital transformation in terms of the job tools includes the e-source document based bookkeeping systems, cloud accounting documentation, AI based analytics tools, Integrated Accounting Information Systems.

Given below are a few extracted respondent statements from the interviewees.

“When I initially joined the company 25 years ago all the work was paper based. In the late 2000s’ the company started using computerized accounting software and later on moved to an ERP system. Most recently the entire accounting and reporting process was digitalized and we no longer use any paper even though our source documents are e-documents” [C].

“Being a financial analyst for over 17 years at a FMCG Retail company I have had the task of conducting various analysis to understand customer spending patterns, demand patterns in order to provide reliable forecasts to the senior management. I used to spend a lot of time using Ms Excel and SPSS to conduct various analysis and these analysis consumed a lot of time as the tools were not sophisticated. However, recently our organization invested in an Integrated Accounting Information System which is powered by the block chain technology and has an inbuilt data analytics component powered by Artificial Intelligence which

has reduced the hours I spent on conducting various analysis” [P].

These findings are supported by the salient literature where the prior research has also recognized the introduction of the e-source document based book keeping systems, cloud accounting documentation, AI based analytics tools, Integrated Accounting Information Systems in place of traditional accounting tools as a change in tools brought by digital transformation (Taib et al., 2022; Berikol & Killi, 2021).

4.4 The changes in the knowledge and skills required from accounting professionals in Sri Lanka due to digital transformation.

The main changes experienced by the accounting professionals due to digital transformation in terms of the required knowledge and skills include the increasing need for the accounting professionals to improve the soft skills including communication skills, and negotiation skills, the need for the accounting professionals to be tech-savvy and competently use ICT skills, and the increasing demand for the accounting professionals to be continuously updated on accounting information systems, computerized accounting applications, data analytics, the newly developed branches of accounting, fintech regulations, and other new technologies relevant to accountants.

Given below are a few extracts of the respondent statements.

“I have been into management accounting for over a decade. When I was the Assistant Management Accountant 13 years ago the Management Accountant at the time and

our team spent majority of our time on calculations where we used calculators to do calculations and maintained physical documents. But now as the Management Accountant I spend minimal time on calculations as the computerized models and dashboards as well as the system generated reports has reduced the need for lengthy manual calculations. Furthermore, now I play a more managerial role where I spend more time on coming up with suitable managerial decisions. With the implementation of these new systems our team had to undergo various trainings to sharpen our ICT skills as well” [W].

“The landscape of the accounting profession has drastically changed during the past two decades in Sri Lanka due to the various digital transformations taken place. So many new branches of accounting has developed with the digitalization and I always encourage my staff members to continuously update their IT skills, analytics skills, fintech knowledge, and to stay in touch with the new developments in the profession through engaging in continuous professional development training programs. Otherwise accounting professionals would not be able to survive in the industry in the long run” [V].

These findings are supported by the salient literature where the prior research has also recognized the need for the accounting professionals to be tech-savvy and competently use ICT skills, and the increasing demand for the accounting professionals to be continuously updated on accounting information systems, computerized accounting applications, data analytics, the newly developed branches of

accounting, fintech regulations, and other new technologies relevant to accountants (Leitner-Hanetseder et al., 2021; Awang et al., 2022; Gulin et al., 2019).

However, the increasing need for the accounting professionals to improve the soft skills mainly the communication skills, and negotiation skills has not been identified by the prior literature as changes in the accounting profession due to digital transformation.

5. CONCLUSION

The study aimed to identify the impact of digital transformation on the job roles of accounting professionals in terms of the functions of the role, the objective of the role, specific duties and responsibilities assigned to the role, and the knowledge and skills required to perform the job role.

Accordingly, 25 Sri Lankan accounting professionals whose organizations have been subjected to digital transformation during their tenure were interviewed to identify the impact of digital transformation on their job roles.

The study revealed that the use of blockchain technology, use of big data, artificial intelligence, and the use of cloud computing are the most prominent digital transformations that have impacted the accounting profession in Sri Lanka.

Moreover, the study revealed that accounting professionals has experienced a shift in the assigned duties and responsibilities due to digital transformation where mundane repetitive duties and responsibilities undertaken by accounting professionals in the past have evolved and the accounting professionals

are currently playing more strategic advisory roles in the organizations due to digital transformations.

Further, it was revealed that the main changes experienced by the accounting professionals due to digital transformation in terms of the job tools includes the e-source document based bookkeeping systems, cloud accounting documentation, AI based analytics tools, Integrated Accounting Information Systems.

Finally, it was revealed that the main changes experienced by the accounting professionals due to digital transformation in terms of the required knowledge and skills include the increasing need for the accounting professionals to improve the soft skills including communication skills, and negotiation skills, the need for the accounting professionals to be tech-savvy and competently use ICT skills, and the increasing demand for the accounting professionals to be continuously updated on accounting information systems, computerized accounting applications, data analytics, the newly developed branches of accounting, fintech regulations, and other new technologies relevant to accountants.

All the research findings except the need for the accounting professionals to improve soft skills are backed by the salient literature as impacts of digital transformation on the job role of accounting professionals. The finding of the need for improvement in soft skills of accounting professionals could be added to the existing body of knowledge after further verification through future studies.

The research findings could be employed by professional accounting bodies in

designing professional development programs to suit the industry demands in the digital era of accounting.

The research was limited to 25 Sri Lankan accounting professionals representing various sectors, and various positions and due to the limited number of respondents these findings may not be generalized to all the accounting professionals in Sri Lanka. Future research could be conducted based on a broader sample and future studies could be conducted to evaluate the need for soft skill development of accounting professionals due to digital transformation.

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