



# The Future Of Accountancy Profession In The Light Of Digitalization: Evidences From Odisha

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**Abstract:** Technology develops constantly within the accounting field. Numerous innovative technologies have been designed to create facilities for accountants as well as finance professionals and increase the value of their performance, however there are few researches on what accountants require based on features of the organization that they work for. Against the backdrop of fundamental, organizational and technological change, this study discovers the understanding and significance of digital technology on the profession of accountants in Odisha by examining the tools used, the opportunities and challenges brought and what makes some organizations more digital than their counterparts. A survey research design was adopted and a non-random sampling technique was employed where the purposive sampling method has been used. Through a survey of 80 accountancy and finance professionals, the digital proportion was assessed against a series of indicative digital tools and concepts. The outcomes specify that, when considering emerging technologies respondents are rather lacking in understanding and ambition. However, many accounting firms have also already taken the digital plunge since the current crisis has encouraged some accountants and clients to make greater use of digital tools and those who have not yet done so are convinced that change will come in subsequent years.

**Keywords - Accountancy, Accounting Education, Digitalization, Finance professionals, Technology**

## I. INTRODUCTION

In the 21st century, it is likely to see the footprints of digitalization at nearly all walks of life. Digital technology has an impact on almost all aspects of life from individuals to societies, from economies to cultures and changes the world. Fast changing technology, economy and thinking means professions are required to change in line with the world order. Around the world today, digitalization for professions has become a compulsion instead of a choice. Professions that do not act in accordance with technology changes will certainly be left behind their peers.

Accountancy profession has endured major transformations lately. One of the most noteworthy changes among these is the introduction of accounting digitalization into the profession. It is noticeable that the present consumer is techno geek. They have incorporated digital technology abundantly. The financial accounts can be accessed by them at any moment, digitally, in any place. They require real time reporting of all their transactions, fast service and customized treatment. For such types of customers, accounting digitalization is the way out. This instrument enables accountants to provide quick and flawless service to their customers. Finance and Accountancy professionals are an essential part of the digital revolution. The digital ride matters for the reason that it is a crucial part of business success and growth. As accountants as well as finance professionals are the heart of organizations, if they do not realize how technology and the digital journey is progressing in their workplace, they will place themselves at risk. The next generation accountancy and finance professionals should understand not just accounting and their industries but also Artificial Intelligence, Block chain, Big Data, as well as how these technologies work together. While there are challenges to the accountancy profession as advances in technology empower and enable customers to gain information and be more independent, the benefits offered by technology considerably offset the risks.

Digital transformation is vital for future organizational growth and development. In that context, this paper studies how much should finance and accountancy professionals know, the skill set that they have and the skills that they are required to develop.

## II. REVIEW OF LITERATURE

Saeidi and Prasad (2014) examined the extent to which organizational performance is affected by accounting information. The paper intended to study how accounting information systems function in addition to its prospective contribution in TCS, to ascertain the voids of the accounting information system, to ascertain the perception and level of awareness of managers as regards accounting information system and to study the dissimilarity amongst the executives who do not use accounting information system with other executives who practice the same while taking different decisions. Data was collected from managers employed in accounting and finance departments of TCS and other managers using accounting information and non-financial managers in Chennai office. The association between variables was examined in this study considering Kolmogorov-Smirnov test and Pearson correlation coefficient was used to test the lack of normality of data. After analysis of data, it was found that between accounting information system and impact of elements on the organizational performance, there is a positive relationship.

Damayanti (2019) studied the impact of industrial revolution 4.0 on accounting systems. The study used a narrative review approach for matching and summarizing a number of literatures which consist of models and theories so as to gain a profound understanding of

fresh roles of accounting in digital age. The paper discussed four subjects that are big data, real-time accounting, accounting practitioners and intellectual capital. It was concluded that traditional accounting changes due to presence of disruptive era by forcing it to affirm real-time accounting and not depend only on episodic information, as high-volume of data is dealt more with in this revolution which is known as big data that entail latest information in a complex set of software. The innovative accounting furthermore has to deal with processing of the massive data which are highly unstructured and in order to be a significant fact to make a decision they have to be stated in the financial reports. The novel accounting even has a task of assessing the intangible assets comprising Intellectual capital that will be a bulk of assets in high-tech companies in the fresh era.

Al-Htaybat et al. (2018) investigated the association between accounting education and new technologies, taking into account the peer group to be educated and their integral features associated with technology and economics, based on educators' perceptions. This study is an empirical study on accounting education and accounting educationalists' perceptions of first-hand technologies. A qualitative approach was used to examine accounting educationalists' perceptions of these advances. Virtually accessible empirical data, for example podcasts and semi-structured interview data were analyzed in twofold coding cycles. The results show that though substantial fluctuations are anticipated, respondents' views differ as regards the requirement of modifying the curriculum of accounting. Supportive modifications comprise improving relevant courses to highlight classic skills, for example problem-solving, and modern-day skills, for instance innovative technologies, to practically explain the developments.

Huttunen et al. (2019) studied the practice of Data Science Applications as well as Big Data analysis to enlarge investment and budgeting decisions within accounting and finance field. The study concluded that it will be a disruptive force to use Big Data in accounting framework as it will need substantial alteration both in the manner in which traditional accountants work as well as in skill set. Traditional tasks for instance data registration will turn out to be less significant and management accounting techniques will turn out to be outdated. Big Data technology will shortly offer options for forecasting, cost analysis, asset valuation as well as budgeting. Accounting standards such as GAAP and IFRS will most likely require to be modernized according to technical innovations.

Begum (2019) explored the status quo and evolving trends of digitalization in accounting, the duties for implementation and some hindrances to the digitalization of accounting in India. The study developed a maturity level model which allotted corporations to well-defined groups and reflected the present status of digitalization in their accounting organizations. It also investigated in what way digital accounting businesses can set up a general business model, so as to be an efficaciously digitalized business. Using random sampling survey method, data relating to digital transformation of accounting in India was generated from finance officers of various organizations. The study concluded that there is absence of knowledge about digital transformation in accounting and finance among the staffs in various organizations and the status quo is in the average level and the future aspiration expectation at the high level.

Schiavi et al. (2020) examined the innovation competency of accounting corporations in the Brazilian marketplace which practice digital technologies concentrating on transaction competencies and also operations, managerial and technological development. These competencies are verified by grouping them into technology-driven and business-driven competencies. To carry out this, a multiple case study was directed with six noticeable firms functioning in diverse ranges of accounting. The key managers of these firms were interviewed and official papers were collected. Data were evaluated through content analysis via codes from the innovation competencies context. The study concluded that accounting has taken the traditional route headed for digital innovation, representing the value and quality which technology-related solutions can produce when exploited in business and particularly in processes. The variations in accounting business models are caused by this advancement in technology.

Ogaluzor (2019) examined the influence of digitization on the profession of the accountant to determine if it was a companion or else a threat to the accountant. The study investigated if digitization will shrink the work of the accountant and if reequipping disturbs the work of the accountants in a digitized work setting. A survey research method was used for the study consisting of all practicing professional accountants in Port Harcourt district of Nigeria. Using Taro Yamane's formula, a sample size of 220 was recognized. Likert scale structured questionnaire was used to collect the data and it was analyzed using parametric method. Investigation was completed in three stages i.e., univariate, bivariate then multivariate analysis. In the univariate analysis, tools for determining standard deviation and mean were commonly used whereas in the bivariate analysis, Pearson's Product Moment correlation coefficient was used to decide the degree and direction of correlation. In the multivariate analysis, the study hypotheses were verified by means of multiple regression. Outcomes from the data analysis showed that, digitization positively affected the job of the accountant and a new challenge is thrown at the accountant hence necessity for reskilling subsists. The study concluded that, instead of being a threat to the accountant, digitization is a companion instead but to avail this benefit, required training must be obtained by the accountant.

Sarea et al. (2021) conducted a study to examine how accounting education in higher education in the Gulf Cooperation Council was affected by COVID-19 in terms of the assessment of accounting students, digitizing accounting education, lecturing timing and self-efficacy of the accounting lecturers. The study has exploratory research design and employed quantitative survey instruments like non-random judgmental sampling and snow-ball methods to collect data. The results discovered the approval of the bulk of the respondents that this pandemic enlarged their duty towards learners. Although the respondents specified that they have the required technical abilities, there is a necessity to improve their technical expertise and acquire innovative techniques as well as to put further energies to survive the new challenges to encounter the organization's goals and to attain their pedagogic aims.

From the past studies it is evident that there are few empirical studies that have been conducted in the literature concerning the influence of digitalization on the activities of accountancy and finance professionals. Moreover, none have been conducted in Odisha. Hence, there was a data gap and the present quantitative study allowed us to have a broad view and to generalize the results and it seemed to be a real added value to fill that gap.

### III. OBJECTIVES OF THE STUDY

The present study seeks to examine the following aspects of digitalization of organizations with special reference to Odisha.

1. To identify the digital skills possessed by accountancy and finance professionals.
2. To ascertain the extent to which accountancy and finance professionals accelerate the implementation of digital technology in their workplace.

#### IV. RESEARCH METHODOLOGY

##### 4.1 Data Collection

The two kinds of data collection in research are primary data and secondary data. The freshly collected data that follow a definite purpose is stated to be primary data. The secondary data is the data which is previously made accessible by other scholars for other motives, but then again, it can be used for fresh study. As this field of research is new and not many consistent results are there relating to the context of this problem, this paper uses a primary data collection method.

##### 4.2 Research Design

The study implements a survey research design. The study implemented the survey research design based on three main motives central to the study. First, it is an effective method in unfolding attitudes, beliefs and features. Secondly, it allows facts to be mostly collected from a portion of the population. Thirdly, the survey research design lets implications to be drawn on the population from the data collected from the sample. The structure by which the study describes the attitudes, beliefs, features of the population under study in solving the research problem was through the tool of a structured questionnaire. A descriptive research design was used for the purpose of describing a population too large to be viewed directly.

##### 4.3 Population of the study and sample size

In this study, a non-random sampling technique has been used where the purposive sampling method has been taken into account. It means that the participants have been carefully chosen with the intention to signify the most appropriate sample for this particular field. The population of study comprises of accountancy and finance professionals in Odisha, including Accountants, Auditors, Chief Financial Officer, Controller of Finance and Academicians from accountancy and finance field. The information is collected through questionnaire from 80 respondents related to the digital transformation of accounting in Odisha. The highly specified nature of the issue of this study demanded the necessity to seek out the thoughts of these distinct groups of people. Their views are very significant since they were in a better situation to deliver appropriate replies to the queries raised by this study.

Odisha was chosen for this study because it is one of the prominent states of India comprising modern infrastructure and facilities. Moreover, the 5 'Ts' boost Odisha's governance. They are transparency, teamwork, technology and timeliness- leading to transformation. The Odisha government embraced the '5T' agenda to renovate governance in all units by bringing about vast, transformational, institutional level modifications. It has united with several development and private tech consulting companies like Deloitte, E&Y, SAS, Facebook and Diagnostic Robotics who provide suitable way out according to Gupta (2021). A single innovative technology cannot help to bring the transformation. Hence, a convergence of emergent technologies like Machine Learning, Block chain, Internet of Things (IoT) Artificial Intelligence and Robotic Process Automation (RPA) is desired for a further collective, hands-on, outcome driven and wide-ranging engagement of government with inhabitants and other interested party.

##### 4.4 Method of Data Analysis

The responses obtained from respondents were organized in tables. The computations were converted to percentages. This was done to show the relationship of each answer to the other options available to the respondents. The strategy brightens vividly, the reasons for the given answers and made analysis easier. The simple percentage approach was used and the ease of understanding was enabled to address the respective research objectives.

$$\text{Simple Percentage} = (\text{Frequency in the category} \div \text{Total number of participants}) \times 100 \quad (1)$$

#### V. RESULTS AND DISCUSSION

The study identified 80 respondents belonging to accountancy and finance profession in Odisha whose demographic profile is shown in Table 1. In the age classification, 74 respondents representing 92.5 per cent belonged to 20-30 age group while 6 respondents representing 7.5 per cent belonged to 30-40 age group. It could be said that respondents for this study were mostly between the ages of 20-30. In gender classification, it shows that 56 respondents representing 70 per cent were females while 24 respondents representing 30 per cent were males. In other words, the outcome from the data indicates that the females are larger in number. On the educational qualification of respondents, the table shows that 22 respondents (27.5 per cent) have a bachelor's degree, 55 respondents (68.75 per cent) have a master's degree and 3 respondents (3.75 per cent) have a professional degree like CA/CS/CMA. From the result above, we can infer that the respondents sampled are well educated. Details regarding the place of employment reveals that most of the respondents i.e., 40 respondents (50 per cent) were from business/industry. 10 (12.5 per cent) of respondents belonged to public accounting firms, 17 respondents (21.25 per cent) were from education sector, 9 respondents (11.25 per cent) were from government sector, and 4 respondents (5 per cent) specified that they belong to private accounting firms and company secretary firms. Furthermore, all the respondents sampled from the above sectors were either accountants, auditors, CFOs, teachers/professors of finance and accounting or other professionals like financial analysts, executives and managers related to the field of study.

**Table 1** Demographic details of the respondents.

Particulars	Classification	Frequency	%
Age	20-30	74	92.5
	30-40	6	7.5
	<b>Total</b>	<b>80</b>	<b>100</b>
Gender	Female	56	70
	Male	24	30
	<b>Total</b>	<b>80</b>	<b>100</b>
Education	Bachelor's Degree	22	27.5
	Master's Degree	55	68.75

	CA/CS/CMA	3	3.75
	<b>Total</b>	<b>80</b>	<b>100</b>
Place of employment	Public Accounting Firm	10	12.5
	Business/Industry	40	50
	Government	9	11.25
	Education	17	21.25
	Other	4	5
	<b>Total</b>	<b>80</b>	<b>100</b>

Source: *Primary Data*

Table 2 reveals that 47 respondents representing 58.75 per cent use both manual and digital methods to record accounting transactions at their workplace while 30 respondents representing 37.5 per cent said they use only digital methods to record the transactions. This shows that usage of digital technology has taken a dramatic leap at all levels. When questioned how often they used their digital skills, 44 respondents representing 55 per cent said that they are required to use digital skills in their role all the time and it was a key element of their work while 29 respondents representing 36.3 per cent said they use it sometimes. Only 7 respondents said they use it rarely or never. This shows the significance of digital skills in the workplace. Every association expects a vast majority of their staffs to have them, hence, employees must keep up with the growing demand for digital skills.

**Table 2** Usage of digital skills by respondents.

Questions	Options	Frequency	%
Methods used in your workplace to record accounting transactions.	• Manual	3	3.75
	• Digital	30	37.5
	• Manual and Digital	47	58.75
	<b>Total</b>	<b>80</b>	<b>100</b>
How often are you required to use digital skills in your role?	• All the time	44	55
	• Sometimes	29	36.3
	• Rarely	5	6.3
	• Never	1	1.2
	• Don't know	1	1.2
	<b>Total</b>	<b>80</b>	<b>100</b>

Source: *Primary Data*

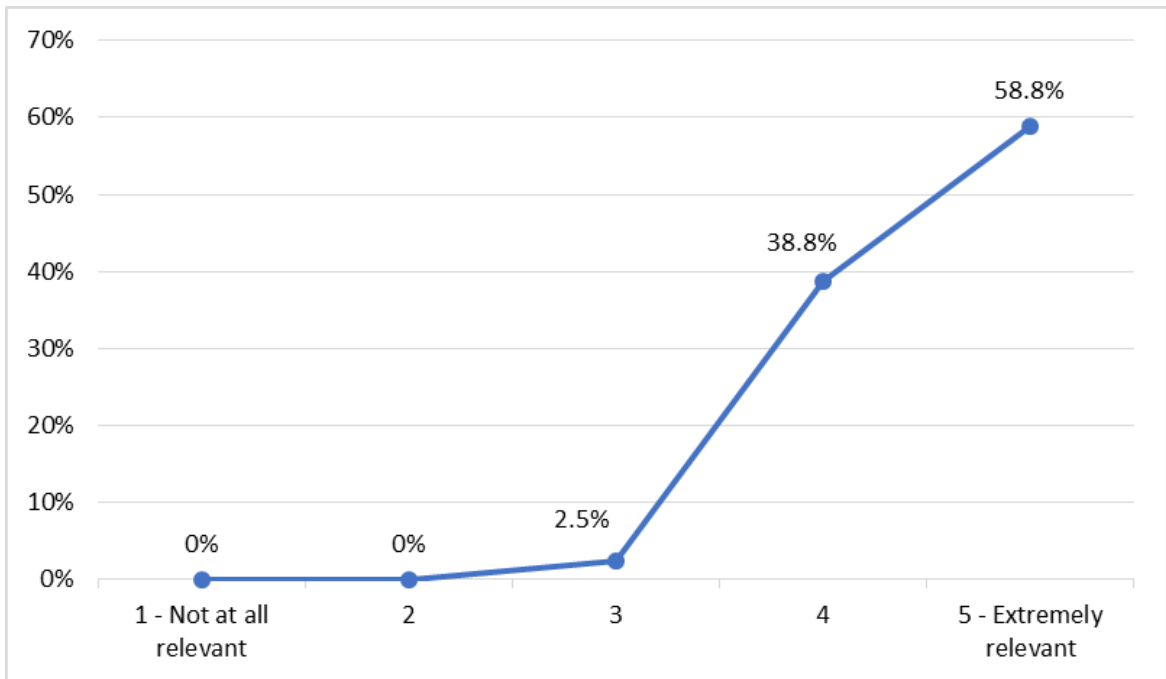
Table 3 shows that 46 respondents representing 57.5 per cent claimed that they had the right level of digital skills required to perform their role though 23 respondents representing 28.7 per cent said that they did not know whether they have. This shows that majority of respondents believe they have right level of digital skills required to perform their job while some respondents were confused in answering this question. 48 respondents representing 60 per cent approved that the management has been able to provide them with essential training opportunities to update their digital skills. This shows that training opportunities are being provided by the management to an extent but the scope has to be widened for the benefit of whole population as most of them are still refrained from availing the same. 61 respondents representing 76.3 per cent believed that these innovative opportunities have helped them to improve their professional competence, 64 respondents representing as good as 80 per cent felt that the advent of digital technology has transformed the way they carry out their duties than it used to be before without it. This shows that technological advancements have enabled the respondents in running their tasks smoothly and performing well than ever before.

**Table 3** Adoption of digital technology by respondents

Questions	Yes	No	Don't know	Total
In the role that you perform, do you consider you have the right level of digital skills required?	46 (57.5%)	11 (13.7%)	23 (28.7%)	80
Has the management been able to provide necessary training opportunities for you to update your skills?	48 (60%)	27 (33.8%)	5 (6.3%)	80
Have these new opportunities helped you to develop your professional competence?	61 (76.3%)	10 (12.5%)	9 (11.3%)	80
Do you feel a change in the way you perform your duties today with the advent of digital technology?	64 (80%)	9 (11.3%)	7 (8.8%)	80

Source: *Primary Data*

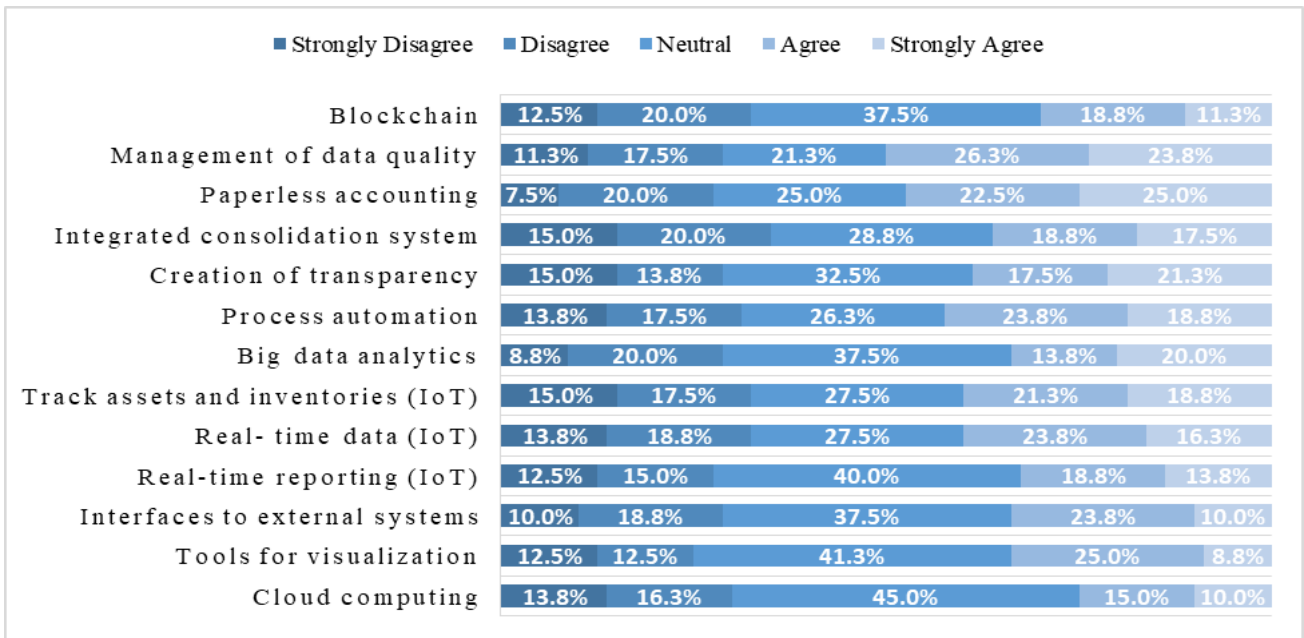
In the survey that formed a part of this research, 97.5 per cent of the respondents considered digital skills to be relevant or very relevant, as shown in Figure 1. From the results, it can be deduced that digital skills are an essential part of the workplace and that accountancy and finance professionals must embrace the sustained need for these innovative skills as not paying attention to it may result in potential risk.



Source: Primary Data

**Figure 1** Relevance of digital skills for accountants and finance professionals.

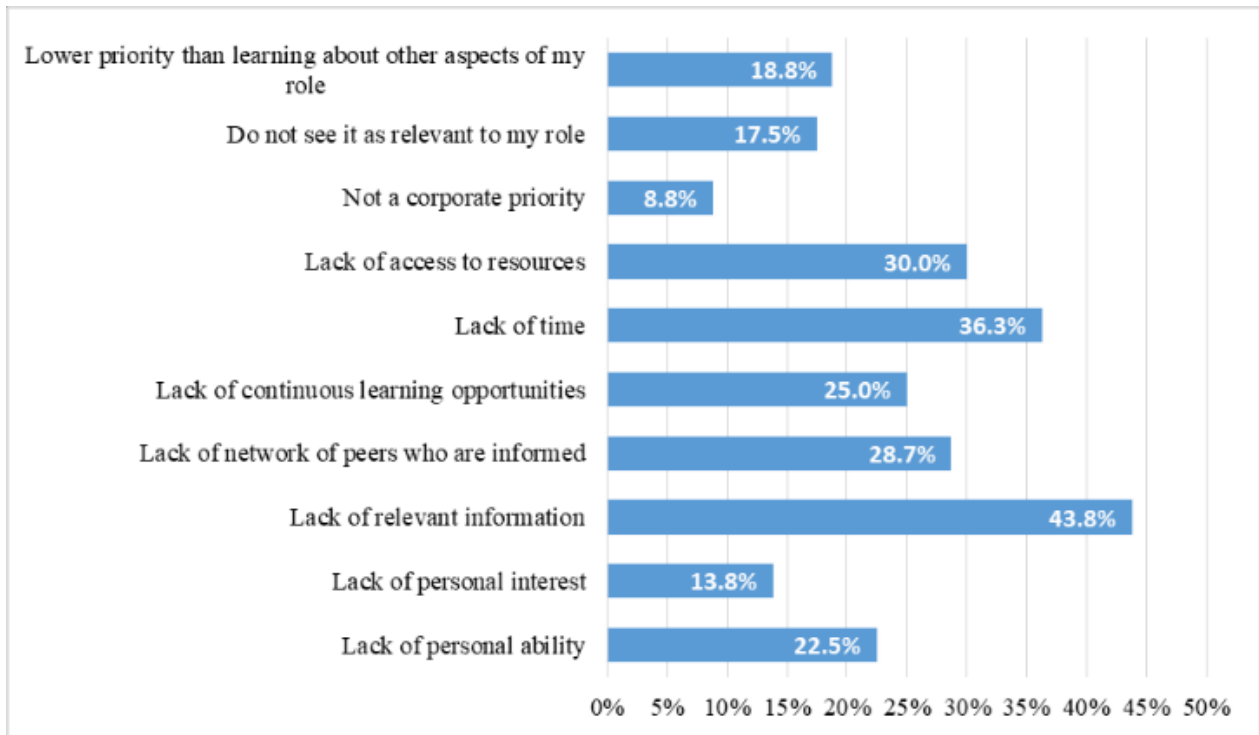
When questioned about which digital tools they have plenty of experience with respect to financial administration, 25 per cent of the respondents strongly agreed with paperless accounting in comparison to other skills and 26.3 per cent of respondents agreed with management of data quality in comparison to others as shown in Figure 2. A majority of respondents representing 45 per cent, 41.3 per cent and 40 per cent had neutral opinions for this question regarding Cloud computing, Tools for visualization and Real time reporting respectively. The survey results showed that maximum respondents picked the neutral route in the Likert scale which states that the respondents were doubtful and were in a state of bewilderment while answering this question.



Source: Primary Data

**Figure 2** Usage of digital tools in accounting function.

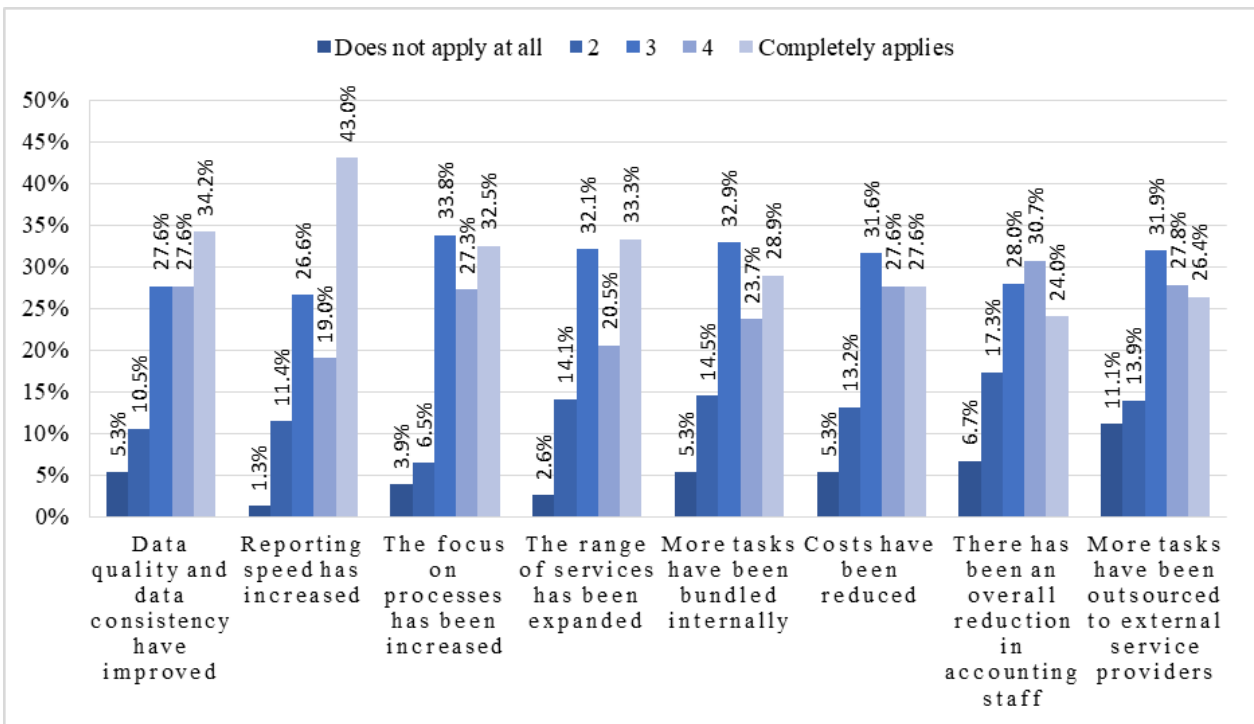
The respondents to the survey also revealed the challenges that they face in developing their responsiveness and adeptness in the digital technology as shown in Figure 3. Respondents were able to select all those limits that applied to them. Besides lack of relevant information (43.8 per cent), lack of time (36.3 per cent) and lack of access to resources (30 per cent) were cited as the greatest substantial challenges in maintaining digital skills. The lack of network of peers who are informed (28.7 per cent), lack of continuous learning opportunities (25 per cent) and lack of personal ability (22.5 per cent) were also important areas of challenge for respondents. The digital area is time and again seen as perplexing for many and the scope that may need to be covered may well be daunting. It is essential though to grab the chances available and take advantage of them.



Source: Primary Data

Figure 3 Challenges faced in developing digital skills.

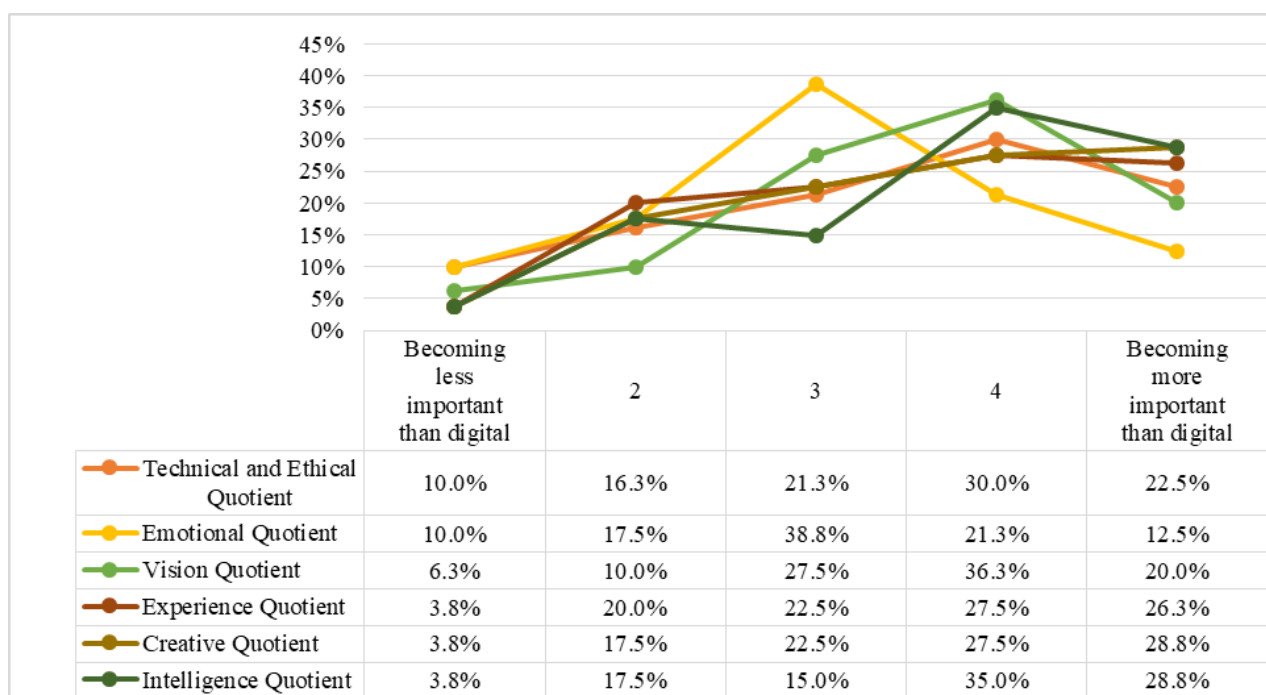
In addition to the matter of the already applied digital solutions in accounting or which are planned to be applied in the foreseeable future, the impact of digitalization on accounting is of significance. For that reason, the study asked the question what influence digitalization in accounting has already had. So far, the firms experienced the impact of digitalization on accounting in terms of data quality and data consistency, with agreement “completely applies” and “rather applies” at 61.8 per cent, speed of reporting at 62 per cent, focus on processes has been increased at 59.8 per cent, expanded range of services at 53.8 per cent, tasks bundled internally at 52.6 per cent, reduction in costs at 55.2 per cent, overall reduction in accounting staff at 54.7 per cent and tasks outsourced to external service providers at 54.2 per cent as shown in Figure 4.



Source: Primary Data

Figure 4 The influence of digitalization on accounting.

The survey conducted as a part of this research evaluated the perception of how the significance of digital quotient would change as compared to that of the other professional quotients in the next 3-5 years. The reactions in Figure 5 indicate that the respondents did not have a clear preference of one quotient compared to another when positioned against the digital quotient. Placing the digital quotient in setting is significant. To be an effective accountancy and finance professional, the survey respondents confirmed that a sense of balance in the quotients is essential, and while much of the discussion is around digitalization of the workplace, it is the state of affairs in which digital skills are used that remains vital.



Source: Primary Data

**Figure 5** Importance of digital quotient compared with other professional quotients.

## VI. CONCLUSION

Digitalization is shifting the nature of business. The rapidity of evolution is growing. For administrations now it is not a matter of whether they digitalize but how fast they embrace the prospects and remain pertinent to their clients. In order to remain relevant, accountancy and finance professionals in Odisha must adopt that digital shift, knowing that the digital domain is relentlessly stirring ahead. The study leads to the inferences that the use of blockchain and IoT along with big data are still not very prevalent amongst the accounting jobs. This study furthermore displays that even in our contemporary domain, there is still a sizeable gap among the professionals to develop and implement the innovative technologies due to various causes. The traditional digital tools with which they have been related for so long are being hidden by innovative technologies that draw on a number of data sources and visually denote that data. They have to accept these alterations to make sure that they have the abilities essential to practice these tools and welcome fresh business models. At this moment it appears clear that these technologies are coming together to construct the new normal and accountants have an important part to play in this increasingly connected and interconnected ecosystem. In the upcoming years, the technology will not only be competent enough to substitute accountants in the tedious tasks, but also be able to support accountants in non-repetitive tasks similar to decision-making process. Accountants who are not ready to acquire these skills will suffer the threat of being substituted by automation. Hence, the state of Odisha has to prepare itself for adopting the digital approach to harness the benefits of it.

## VII. FUTURE RESEARCH

It is recommendable that further research will be directed regarding the problem if a future in accounting without human intervention is possible. Additionally, it would be attention-grabbing to conduct a survey study, pooled with in-depth interviews to achieve further awareness into the use of automation in accounting firms and the idea of an extensive population on how the role of an accountant is shifting. By selecting a broader population, the outcomes can be generalized. Lastly, it would be valuable to interview IT-specialists who have deeper understanding on the technology behind the automation. By interviewing IT-specialists, it would be possible to discover how the technology is evolving and what automation will be able to accomplish in the years to come. Hence, it would help to have a clear understanding of accounting tasks that can or cannot be computerized.

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