

Beyond Comfort Zones: A Future Ready Profession in the Digital Era

In this exclusive write-up, the author, who is an ICAI Past President and former Board Member of the International Federation of Accountants, the apex body of Accountants, says that disruptive technologies have transformed the traditional accounting and audit roles. The author, who served as the President of the ICAI during 2014-15, outlines how professionals need to embrace technology to be relevant and is confident that the profession is future ready to meet the challenges in this era of digital disruption. Read on...



CA. K. Raghu

The author is a Past President of ICAI and a former member of IFAC. He can be reached at cakraghu@kraghu.com or eboard@icai.in



Today, innovation in technology has impacted the accounting profession in a big way. The Internet is becoming all invasive, pushing the global economy to go digital. As the profession races to build capacity and develop specialty practice areas, many professionals have started exploring new avenues in the field of Data Analytics, Robotic Process Automation, Artificial Intelligence, Blockchain and other emerging technologies.

Digital Disruption - Beyond the Comfort Zone

To stay relevant, Chartered Accountants have no choice but to embrace technology. Change is now constant, opportunities are boundless

and accountants must embrace innovation to remain effective business partners. The profession has embraced technology but the pace of change in technology is accelerating and is now having a profound impact on our profession.

To stay relevant, Chartered Accountants have no choice but to embrace technology. Change is now constant, opportunities are boundless and accountants must embrace innovation to remain effective business partners.

VISION— Past Presidents

If the accounting profession is to maintain its relevance at the centre of business and the public sector, the accountants need the skills to assess and implement technology-driven initiatives so that they enable cognitive business and further transform the finance and accounting functions. The profession's positioning and brand needs to incorporate digital leadership and cognitive business.

The corporates in India are currently using new technologies to capture, record and mine accounting information in their organisations and have invested huge resources to build cloud based infrastructure. In this scenario, Chartered Accountants must have the skill-sets to assist companies in implementing new age technologies and also provide support services in developing a robust Information System (IS) Controls and a strong Cyber Security framework.

New Technologies Impacting the Profession

- **Artificial Intelligence (AI)**

Artificial Intelligence aims to replicate human intelligence in machines and AI applications are revolutionising all sectors of the economy, be it manufacturing or service organisations, both in the private and the public sector. International Data Corporation predicts that

the annual growth rate for global spending on AI will be 50.1% reaching \$57.6 billion by 2021. AI tools are being used in the banking, insurance, retail, healthcare and manufacturing sectors extensively.

AI has impacted the Accountancy sector in a big way and AI tools are being used for providing online accounting services, fraud detection services and cyber security services. AI can assist Chartered Accountants in conducting online real-time audits, creating audit dashboards and providing fintech services to various clients.

- **Fraud Detection**

Fraud Detection is gaining lot of importance and AI tools can help organisations to detect frauds on an online real-time basis. AI tools can spot fraudulent transactions and help organisations to detect and prevent fraud easily.

- **Robotics Process Automation (RPA)**

RPA has the potential ability to disrupt the entire business functions across all companies and sectors.

Where humans were once the sole resource to perform functions such as customer service, transactional activities and generating insights, RPA technology has advanced

to a level where robots can perform these same tasks, with even greater efficiency and accuracy.

Today's RPA technology uses software robots to offer improved business efficiency, data security and effectiveness by mimicking human actions and automating repetitive tasks across multiple business applications without altering existing infrastructure and systems.

This means there is a huge opportunity for existing finance and accounting functions, which generates a lot of transactional repetitive activities, to optimise their processes through RPA.

There is a huge opportunity for existing finance and accounting functions, which generates a lot of transactional repetitive activities, to optimise their processes through RPA.

- **Cloud Accounting**

Storing data on remote servers opens up opportunities by making geography unimportant. Once data is entered in the cloud, you can work on it anywhere - in your office, at the airport, in your home 500 miles away. Cloud Computing is now evolving like never before, with companies

VISION— Past Presidents

of all shapes and sizes adapting to this new technology. While Cloud Computing is undoubtedly beneficial for mid-size to large companies, it is not without its downsides, especially for smaller businesses.

- **Big Data and Analytics**

It has the potential to transform almost every aspect of business – from research and development to sales and marketing and to provide new opportunities for growth. Trained to structure, gather and analyse financial information, accountants and finance professionals can apply their core skills to non-financial and other datasets and help make Big Data smaller and more structured.

Big Data and Data Analytics provide an opportunity to accounting professionals to use their skills in descriptive analytics, predictive analytics and prescriptive analytics.

Big Data and Data Analytics provides an opportunity to accounting professionals to use their skills in descriptive analytics, predictive analytics and prescriptive analytics.

Big Data would also help accounting professionals to play a strategic role, proactive and a future-facing role than a traditional finance role. The availability of online real-time information will assist in quick decision making and also assist them to speed up of the audit process. Finally, Big Data analytics will improve the quality and accuracy of financial reporting.

- **Cyber Risk Consulting**

Cyber Risk services which include Cyber Strategy and Management, Cyber Intelligence and Cyber Analytics are gaining ground due to the advent of mobile technology, Cloud Computing and social media. Chartered Accountants, as Technology Consultants, can help businessmen in realigning their business to the dynamic economic conditions.

- **ERP Implementation**

Chartered Accountants are playing a key role as functional consultants in deployment of ERP packages, upgrading to new and improved functionalities and post-implementation maintenance of ERP systems.

- **Blockchain Technology**

Blockchain works as a series of blocks, each of which contains

digital information such as sender ID, recipient ID, recipient ID, time stamp, a consensus protocol such as proof of work and hashed (registered) value of the previous block. Each block contains a full history of the transactions involved, and the subsequent blocks in the chain carry that date forward with each one containing a hash of the previous block.

The distributed ledger system allows each participant (or node) to see clearly where information has come from and gone to - in essence, Blockchain is an innovation in record keeping, a cryptographic chain of Proofs.

To alter the Blockchain without being obvious, anyone wanting to create a false record would supposedly have to modify every subsequent block, which generally requires everyone using the blockchain to agree to the fraudulent transaction. Therefore, in a Blockchain environment it is extremely difficult to alter data or insert false information.

Blockchain alters the conventional techniques for invoicing,



VISION— Past Presidents

reconciliation, documentation, contract preparation and mechanises the physically performed assignments. Blockchain can streamline financial reporting and audit processes. Chartered Accountants can also assist organisations in help implementing Blockchain solutions effectively.

Blockchain technology would also transform the way audit is conducted. Today, account reconciliations, trial balances, journal entries, sub-ledger extracts and supporting spreadsheet files are provided to an auditor in a variety of electronic and manual formats and this involves significant time to complete the audit process. In a Blockchain environment, an auditor will have online real-time access to date via the read-only nodes in Blockchains and would help the auditor to speed up the audit process since information is provided instantly.

In a Blockchain environment, an auditor will have online real-time access to date via the read-only nodes in Blockchains and would help the auditor to speed up the audit process since information is provided instantly.

- **Peripheral technologies (Drones, Cameras and Sensors)**

Drones and Sensors are increasingly being used to assist audit procedures. Drones - equipped with cameras and sensors - can inspect assets such as buildings or agricultural land to make more efficient valuations and asset write-offs. Drones can particularly support accountants in stock taking. This means that the audit process can be expanded from sampling to a test of the entire inventory without spending more man-hours.

Another major benefit is the possibility to perform continuous stocktaking. It becomes possible to obtain a real-time overview of inventories while at the same time patterns can be analysed and deviations detected due to the availability of real-time data.

- **Cyber Security**

Cyber Attacks are becoming a growing reality in the digital world, and today, top banks, financial institutions and corporates are giving a lot of importance for Cyber Security in their organisations and investing heavily on cyber security infrastructure.

Chartered Accountants can offer their services

to the Cyber Security strategy of a company and help them create a strong cyber security infrastructure that is robust and sophisticated. Cyber Security allows companies to detect frauds and other vulnerabilities in the ERP systems in their organisation and prevent cyber attacks on real time basis across the enterprise.

Cyber Risk and Cyber Security present new opportunities and challenges to the Accountants.

Every corporate using sophisticated IT systems are vulnerable to Cyber attacks. It is assessed that a large cyber security breach currently represents one of the world's most serious risks, and that it will also trigger an explosion in corporate expenses. That is unfortunate in a social perspective, but from a commercial perspective, it offers opportunities for new advisory services, risk assessments and assurance engagements. It is an entirely new threat arising in the wake of digitisation and, hence, a new professional opportunity for accountants.

An enhanced role in Cyber Security requires relevant knowledge, skills and experience. For accountants to effectively undertake Cybersecurity Risk management or

VISION— Past Presidents

attestation services, key areas of knowledge and skills include:

- Relevant IT systems and technology, as well as the ability to be updated about changes in the technology and systems environment.
- Understanding IT processes and controls and their evaluation.
- Awareness and relevant experience with Cyber security frameworks.
- Understanding an entity's industry and business and whether it is subject to specific types of Cyber security risks.
- Establishing and engaging multi-disciplinary teams, for example, including information security professionals and auditors.

The Accountant needs heightened ethical awareness when it comes to considering what action has to be taken when there has been a breach of IT security in their organization. It may also be necessary to seek specialist advice and support from accountants who are specialising in Cyber Security.

• Digital Commerce

Digital Commerce

uses the Internet, mobile networks and commerce infrastructure to execute transactions with customers or businesses, today we find that new business models are driving growth and creating value by disrupting many existing businesses. For example, Flipkart, Snapdeal, Big Basket are successful enterprises in the digital commerce space. Aggregators in the travel, food, hospitality, transport, housing, fashion has created many success stories. Example, Uber, Ola, Zomato have created huge valuations. The Government of India is also driving digital commerce in a big way. Many traditional business houses have ventured into e-commerce in a big way.

In the scenario, it is essential for CA's to study the developments in the digital commerce space. CAs can offer pre-funding consulting services, due-diligence, valuation, negotiation and post funding reviews to such digital commerce companies where huge investments are flowing into. We can offer our services as a trusted advisor by providing strategic inputs over and above contributions in core areas of accounting, finance, tax and audit.

CAs can offer pre-funding consulting services, due-diligence, valuation, negotiation and post funding reviews to such digital commerce companies where huge investments are flowing into. We can offer our services as a trusted advisor by providing strategic inputs over and above contributions in core areas of accounting, finance, tax and audit.

Digital Disruption - What CA Firms Need to Do Now

- Invest in Technology and develop go-to-market strategy to enhance clients' execution of relevant business technology.
- Develop Data Warehouse Architecture competencies to support clients Business Intelligence.
- Work with technology companies to develop AI tools.
- Develop dashboards, real-time tracking and predictive analytics.
- Invest in Drone technology for Stocktaking.
- Make an analysis

VISION— Past Presidents

- of clients and investigate the need for technologically supported advisory services among SMEs and mid-market enterprises.
- Consolidate businesses to create entities with new expert units (lawyers, finance, investment advisers, etc.).
- Automate processes using office management software.

ICAI - Embracing and Facilitating a Digital-Ready Profession

- The profession's positioning and branding needs to incorporate digital leadership.
- Engaging technology needs to be a core part of ICAI's strategies and plans, including assessing opportunities and risks, such as the displacement of jobs as well as the creation of new jobs, including "new collar jobs" like Cyber Security experts and Data scientists. ICAI needs to assess what roles and tasks are affected and how quickly. For example, more and more Chartered Accountants are moving into Forensic accounting and Cyber security roles.
- ICAI has to step up its capacity in providing technology based support to the members and students by appropriate partnerships with technology companies.
- ICAI needs to consider its role in making technology more accessible and understandable to their members and students. It should develop a digital relevant curricula and competency frameworks needs to be further considered.
- The implications for accountancy education could be significant given professional accountancy education currently does not comprehensively incorporate technology, innovation, and design thinking. ICAI should update digitally relevant competency frameworks and curricula which are needed for the profession to leverage the opportunities arising out of emerging technologies.
- ICAI should engage with regulators and standard setters to assess how technology might impact the continuing effectiveness and relevance of financial regulations and accounting standards.

Conclusion

We are in a period of rapid change and in the next few years, the role of many Chartered Accountants will be to keep pace with the gradual digitization of clients and help

them navigate technologies, systems and data digitisation.

The CA study programmes must offer students an insight into digitisation trends, technological developments and new business models, and value chains as well as new types of risk, transformation processes, etc. affecting accountancy activities. They must learn how to apply new business models (including models based on information technology, business procedures, analytics, risk, strategy, value chain analytics, processors and product development, the blurring of sectoral boundaries, etc.

Tomorrow's Chartered Accountant will spend a greater portion of his or her time giving advice to clients about data infrastructure and analytical setup and accordingly will need new competencies within computer science, computer engineering, etc. Moreover, he will need communicative competencies to be able to translate big data volumes to output like pie charts, heat maps and geocharts that are easily comprehensible for enterprise management.

Lifelong learning is critical to future-proofing the profession - incorporating both technology itself as well as its effective application and implementation. This learning will showcase to the world that we the CA profession is a future ready profession. ■