

Challenges and Opportunities for Young Members in IT Industry



Information Technology (IT) to India means growing opportunities and has transformed India's image on the global platform from a snail's pace economy to a land of innovative entrepreneurs. The sector is generating major avenues of direct employment which has helped India to develop into one of the biggest IT capitals of the contemporary world where all the major players of international level IT sector are present. Such scorching and fast paced growth has not been felt in any other industry than in the IT industry. This IT revolution has affected the Chartered Accountancy profession in a big way. There are more job opportunities in the IT sector for Chartered Accountants who want to be in service. Also new opportunities for practicing Chartered Accountants in emerging

areas like IT audits have landed in. In view of this scenario it has become imperative for Chartered Accountants both in practice and in service to invest in improving their IT expertise to make them "industry ready." A Chartered Accountant having strong functional expertise as well IT knowledge can play a unique role of bridging IT professionals and business people, and add tremendous value to IT system design and development. An all pervasive IT has created manifold opportunities for chartered accountants. To know how, read on...

In the new era of globalisation, post-economic reforms in 1991, Indian IT industry has grown swiftly. According to NASSCOM, the sector aggregated revenues of \$100 billion in 2012, where export and domestic revenue stood at \$69.1 billion and \$31.7 billion respectively, growing by around 11-14%. The IT sector's contribution to India's GDP has grown from 1.2% in 1998 to 7.5% in 2012.

On the other hand, the use of IT in India has grown exponentially in the recent past. According to a report by the Internet and Mobile Association of India (IAMAI), India is expected to become world's second-largest online community after China with 243 million Internet users by June, 2014. Further, out of 900+

million mobile users, the IAMAI expects the number of mobile Internet users to touch 185 million by June, 2014, accounting for about 76 % of the internet user base in the country.

In addition to this, India's total IT industry's (including hardware) share in the global market currently stands at 7 %; in the IT segment, the share is 4 % while in the ITes space the share is 2 %. Moreover, India plans to spend around \$3.9 billion on cloud services during 2013-2017, of which \$1.7 billion will be spent on software-as-a-service (SaaS), according to the latest outlook by Gartner.

With increasing awareness about the benefits that IT can bring into their operations, various ministries and departments of Governments across India are focused on and have geared up for a greater role for IT in their day-to-day workings.

Leading from the front are the Central Government ministries, which are largely focused on the automation and streamlining of their processes. For example, MCA has embarked upon the magnificent task of totally re-



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engineering the process of corporate governance across India. MCA had placed this assignment to a large Indian IT company for country-wide implementation of the e-Governance project.

Income-tax Department's Central Processing Centre (CPC) project which has been given to one of the top three IT companies is government's pet project and is being used to process all electronic returns filed from across the country as well as all the paper returns filed throughout India. It is also processing TDS returns besides other returns of income. Statutory regulators have also accelerated reporting deadlines and imposed mandatory reporting in eXtensible Business Reporting Language (XBRL)—adding to the pressure on the finance function. Gartner reports that IT spending by the Government of India is projected to reach \$6.4 billion in 2013.

While new opportunities are opening up, as organisations grow and expand into multiple geographies, and enter new industry verticals in order to achieve business objectives reliably, they are required to comply with complex mandatory legal requirements too. In the face of growing transaction volumes and business complexity, the finance function is becoming almost totally reliant on technology to deliver business insight and process efficiency as well as compliance and control.

What does this mean to a young Chartered Accountant?

The past few decades have witnessed significant growth in the expectations from finance professionals, particularly as they have become central to helping their organisations navigate through an increasingly complex business world. Traditionally, the main emphasis of the CA's role was typically the guardian of the financial health of an organisation, overseeing and implementing adequate financial controls infrastructure, accounting, auditing the financial statements *etc.* Over the years, the range of responsibilities of the CAs has expanded manifold, driven by complexity as a result of globalised markets, dynamic regulatory and business scenario and most importantly growth in information technology.

IT revolution has affected the chartered accountancy profession in a big way with more job opportunities in the IT sector for Chartered Accountants focusing on service, and new opportunities for practicing Chartered Accountants in emerging areas like IT audits.

With IT gaining more acceptance among business as a tool to enhance productivity, cut costs, generate more revenues and gain competitive advantage, and

These IT skills can be categorised into 'IT user' skills and 'IT Provider' skills. IT user skills would be expertise in MS Office products such as MS Excel, PPT, Access, how to use ERP, etc. and IT provider skills would include knowledge such as system designing, SQL, Visual Basic, Business Objects, etc.

various ministries and departments of governments across India are focusing and gearing up for a greater role for IT in their day-to-day workings, it has become imperative for Chartered Accountants in practice as well as in service to invest in improving their IT expertise.

Such an investment, not only makes them 'industry ready', but also opens up new gates of opportunities. While IT has proved to be a boon for various corporates, any lapse in controls, system and security could prove disastrous. Considering this, a Chartered Accountant having strong functional expertise as well IT knowledge can play a unique role to bring together the best of IT professionals and business people and add tremendous value to the IT system design and development.

Opportunities

As IT has become all pervasive, it has created manifold opportunities for chartered accountants. Some of the key areas where the Chartered Accountants are playing or can play an important role are discussed below:

- Enterprise Resource Planning (ERP)
- Information Systems
- Information System Audit
- Governance, Risk and Compliance (GRC)
- IT Security
- Business Consulting
- Other areas

Let us have a look at the opportunities for CAs in each of these areas.

1. Enterprise Resource Planning (ERP)

With increased IT usage, ERP has become the backbone of any large company. In addition to just being a user of ERP or an auditor of an ERP-enabled organisation, a Chartered Accountant can also play a significant role in the implementation of the ERP package. The domain knowledge of various process of finance, accounts, MIS, *etc.* enables him/her to contribute in this area.

As a functional consultant in ERP implementation team, a Chartered Accountant can perform various activities like requirement analysis, process mapping,

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configuration, user acceptance testing, *etc.* and represent business users more effectively. By being a proficient ERP consultant, CAs prove indispensable to the business world and modern Management Information Systems.

In a global complex environment, IT division of an enterprise, responsible for development, maintenance and implementation of all software/applications which are required to run the company business, have to align themselves to the growing business needs as well as keep them agile in order to address today's competitive market conditions. These applications can be in any domain like HR, Sales & Marketing, Finance & Accounts and Administration, *etc.* Typically, this division consists of technical as well as business analysts. A CA can be a very good business analyst.

Chartered Accountants can perform following responsibilities in this division.

- Proactively understand the need of IT systems.
- Proactively advise management about areas of improvement.
- Bullet proof requirement analysis, process mapping, business process re-engineering (BPR).
- **Justification of IT cost/Business value analysis:** Chief Information Officers (CIOs) are being asked to justify the IT spending in the current cost cutting scenario. A CA can help the CIO to do such analysis and calculate the quantitative value of business benefits and ROI of IT expenditure.
- **Evaluation and selection of software tools:** CAs can contribute in identification of tools, vendor negotiations, functional and technical feasibility, ROI & Gap analysis, customisation/configuration, dealing with support issues, scalability and performance issues, integration feasibility with existing applications, *etc.*
- **Valuable Inputs in software designing:** This includes inputs about various IT controls, business rules which need configuration, business logic, audit trail.
- **Testing, implementation and training:** A Chartered Accountant can be responsible for system testing, making proper training plans, organise training, prepare implementation plan, data migration strategy, risk mitigation plan, *etc.*

CA students must seriously undergo IT training conducted by the ICAI. CA final's paper, Information Systems Control and Audit (ISCA), covers basics of IT skills.

Implementation is not an easy task and requires a good change management process knowledge.

2. Information System (IS) Audit

The overall objective of the IS Audit is to ensure the appropriate controls are implemented in IT as designed and envisaged by the senior management. IS Audit is expected to provide reasonable assurance to management that appropriate controls are designed and implemented in the information systems supported by Information Technology. IS Auditors have to understand the key concepts of IS risks, its management, IS security, Controls, Control objectives and the methodology of IS Audits. As businesses are becoming more and more dependent on Information Technology, the IT auditors need to keep aware of Software Development life cycle (SDLC) and other aspects of software engineering. Various system controls are under scrutiny due to SOX 404 compliance. Data, Network security, digital signature, Electronic Data Exchange (EDI), encryption/decryption protocols, *etc.* have made the role of the auditor more critical.

3. Governance, Risk and Compliance

Governance, Risk, and Compliance (GRC) are highly related but distinct activities that solve different problems for different sets of constituents of an organisation. Risk Management is no longer an *ad hoc* distinct activity; it is an integral part of the day-to-day operations of organisations. External and internal risk management requirements are becoming increasingly complex and intrusive, while the demand for more comprehensive and actionable governance, risk and compliance (GRC) information continues to increase.

The historic approach of managing risk in silos across different functions, processes, methods and infrastructure cannot keep up with these requirements; and, in many cases, risk management has become a growing operational and financial burden, limiting the organisations' ability to keep pace with essential business growth and transformational initiatives.

In order to manage these challenges, leading organisations are driving technology-enabled and automated GRC transformation programs that can:

- Create improved visibility of enterprise risks and how these are mitigated,
- Lower the cost of risk management through the reduction of manual processes and controls,
- Increase efficiencies through standardisation, simplification, automation and end-to-end process centralisation.

CAs with logical thinking, good management and leadership skills are highly valued in an IT organisation considering its unique nature of work.

Widespread interest in GRC was sparked by the US Sarbanes-Oxley Act (SOX) and the need for US listed companies to design and implement suitable governance controls for SOX compliance, but the focus of GRC has since shifted towards adding business value through improving operational decision-making and strategic planning. CAs expertise in process audit and compliance makes them the natural candidate for implementation, monitoring and functional maintenance of GRC tools.

4. Information Security

Nowadays everything has been transformed into bits and bytes. However, there are threats of theft, fraud, *etc.* The wealth that is now targeted is information. This reiterates the importance of information security in an organisation. Multiple users connecting to corporate networks, mobile users, suppliers, customers, investors, public, e-business and new technologies have made organisations more vulnerable to security issues. Hacking is no longer rocket science. In addition to the outside threats; threats from insiders are also on the rise. Ignorance, lack of education, improper security process and malicious intent could be the factors for security breach by an insider. Virus attacks are becoming routine affairs these days. Cases of unauthorised use of computer systems resulting in financial loss have been reported many times.

The Information System Security for any organisation is not merely the IT department's concern, but a business issue. An organisation should have proper laid down policy for Information security. The following steps should be followed to ensure information security:

- Identification of important information asset, classification and categorisation thereof,
 - Collect vulnerability information for identified assets,
 - Analyse threats and risk for these assets with respect to vulnerabilities,
 - Assess administration and management procedures and process,
 - Compliance with IS regulations,
 - Security and Risk mitigation plan.
- Information Security is one of the fastest growing

segments in the Information Technology market. This growth has fuelled the demand for various specialised security professionals. A Chartered Accountant can be a very good IS security practitioner because of his/her strong knowledge of business process, understanding of internal controls, process and technical knowledge.

5. Fraud Risk Assessment and investigation

With high IT penetration and complex system, frauds have also become more sophisticated. To unearth any fraud in the organisation, the person should have good understanding of internal processes, systems, various statistical models which can be used to find out abnormal behavior. CAs can play important role in such assignments.

6. Business Consulting

Many Chartered Accountants with experience in the IT industry are venturing into business consulting and also setting up their own start-up enterprises. As part of business consulting, CAs advise clients about process improvements, productivity enhancement, cost optimisation, IT solution to their business problem.

As part of these start-up ventures, CAs can deliver cost-effective, safe and practical solutions to their client's business needs. Typically, such ventures strive to understand specific business needs/requirements of their clients by studying their business processes and offer innovative technological solutions that can generate more profit to their business and mitigate business, compliance and IT risks. Some of the examples where CAs can provide business consulting services are compliance management tools, GRC solutions, ERP solutions *inter alia*.

7. Other areas

There are several other areas where CAs can contribute and look for career opportunities such as BPOs, Banking and Insurance Software, *e.g.*, Finacle, e-Governance Projects *etc.* CAs also play important role in various finance, tax and accounting functions of IT organisations.

Challenges

As mentioned above there are numerous opportunities for young chartered accountants in the field of Information Technology but this comes with its own set of challenges which must be dealt with by the young CA professionals in order to make the best out of the IT sector. Some of these challenges are discussed below.

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• Technical Knowledge

As IT is a non-core area for CAs, it might be a challenge to possess such knowledge to enter this field. These IT skills can be categorised into 'IT user' skills and 'IT Provider' skills. IT user skills would be expertise in MS Office products such as MS Excel, PPT, Access, how to use ERP, *etc.* and IT provider skills would include knowledge such as system designing, SQL, Visual Basic, Business Objects, *etc.*

However, such challenges should not demotivate young professionals as many IT companies nowadays provide in house training and also there are ICAI and external courses available where CAs can gain required knowledge and skills. CA students must seriously undergo IT training conducted by the ICAI. CA final's paper, Information Systems Control and Audit (ISCA) covers basics of several such areas discussed above.

To gain more knowledge, CAs can opt for post qualification courses offered by the ICAI to give them an edge over others such as Information System Audit and CPE Course on Computer Accounting and Auditing Techniques (CAAT), ICAI also offers ERP Courses on SAP FI & MM Module.

• Obsolescence

Information Technology is growing at a rate beyond anyone's expectations. This means that the CA professionals in the field need to constantly be improving their skills. New technologies are always appearing, leading to previous information becoming obsolete. New concepts such as Cloud Computing, Big Data Analytics, *etc.* are some of the fast developing technologies which required the CA community's attention. The ICAI as part of the CPE trainings recently organised a national conference on "Cloud Computing: Opportunities and Challenges for CAs" in Bangalore and New Delhi. This conference gave a detailed insight into the cloud basics and developments in the Cloud Computing and how CAs can contribute to its advancement and add value to the industry using Cloud Computing.

• End to End business process knowledge

Many CAs with their expertise in specific areas such as Income-tax, Accounting may find it challenging to possess end-to-end knowledge of various business processes. Acquiring this knowledge is a basic threshold requirement in the IT field as the Industry looks upon CAs as business process specialists and a clear end-to-end process knowledge is the need of the hour. Internal Auditors, Corporate Finance Professionals in

the industry, Information System Auditors and Fraud Auditors are some of the experts who naturally possess this knowledge and can be some of the potential candidates to grow in the IT fields as discussed above.

• General Management and Communication Skills

IT being a service industry which requires exposure to global cross-culture environment as it not only involves working for foreign clients from India but also on many occasions, CAs are required to work on site at client's location outside India. With this background it becomes extremely important to possess good communication skills and soft skills. CAs with logical thinking, good management and leadership skills are highly valued in the IT organisation considering its unique the nature of work. Learning a foreign language can be a very useful addition to a young CA's resume and should be pursued by young CAs.

The ICAI is continuously taking several steps to ensure that these CAs acquire such skills before completing the CA. 15 day's mandatory GMCS skills and three month residential GMCS batches are some of the great initiatives of the ICAI and is getting a very good response from the students and is being appreciated by the industries as well.

Conclusion

Chartered Accountants cannot distance themselves from Information Technology. It is equally important for both members in practice as well as in service. Today's CA professional has to pick up IT skills through appropriate courses or on-the-job training to seek opportunities in many IT companies in India.

IT is one the highest paid fields for Chartered Accountants. IT industry hires significant number of members' in ICAI's campus placements. Average starting salaries typically range between ₹5 lakh to ₹10 lakh depending on the competence of the candidate. Moreover, there are frequent international travels to countries in North America, Europe and Middle East as many of the IT projects in these countries are being implemented by Indian IT Companies. The IT sector in India has crossed \$ 100 billion mark and is growing at 11 % to 14% per annum, creating thousands of job opportunities for CAs.

The ICAI has taken many steps to ensure that young professionals are upto date with the technological advancements through various courses and seminars which young professionals must actively participate and make use of such initiatives to their advantage. ■