

# New-Age Technologies to Overcome the Pandemic Challenges

*The COVID-19 crisis has impacted the global economy and many economies are yet to recover from the multiple waves of Covid and lockdowns. Many of the countries are on the brink of recession and are struggling with rising unemployment. Like other countries, India also witnessed a sharp deterioration in overall business confidence and there is a need for another fiscal package to restart the economy. Today, organisations are quickly adapting to the changing environment to overcome the challenges faced by them due to the pandemic. Read on...*

**C**hartered Accountants have an important role to play in helping business navigate through the long lasting impact of the pandemic. The accountancy profession must remain resilient in times of crisis and the profession should take the lead in helping the economy recover soon.

## Impact of Covid on various Sectors of the Economy

### Manufacturing Sector

Countries across the globe were heavily dependent on China for manufacture of

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goods which contributed 28% of the global manufacturing output. With the Covid disruption, India will emerge as a favoured destination for manufacturers to set up their operations. Manufacturers are aware that when the pandemic ends, the focus would be on greater automation, setting up smaller manufacturing units and sourcing raw materials from local sources. Vietnam, Indonesia, Cambodia and Singapore will also be favoured destinations for manufacturing.

### IT Sector

IT industry's revenue is estimated at around US\$ 191

billion for FY 20-21. The IT industry, as compared to other industries, has witnessed an enormous market boom due to this disruption. The industry has been most successful in thriving this crisis by continuing to work remotely. The pandemic has proved to be a catalyst to speed up technological changes.

### Healthcare Sector

The Healthcare sector comprises of hospitals, medical equipment manufacturers, diagnostics, pharmaceuticals, etc. The COVID-19 pandemic has created a severe strain on healthcare resources across the globe. It has highlighted the



weaknesses in the healthcare infrastructure in well-developed countries like USA, Italy, Spain, etc. During the second wave, India witnessed an acute shortage in supply of oxygen, ventilators, hospital beds, etc.

The disruption has created new opportunities in the wellness industry by providing nutrition and wellness products, fitness equipments, online medicine delivery services, etc. Online consultations have increased manifold in the back drop of the pandemic. There has been a dramatic rise in the online sales of immunity-related products, masks and sanitisers. The Indian Pharmaceutical industry which is popularly known as “Pharma of the World” was highly benefitted in this disruption due to its huge production capacity.

### Telecommunication Sector

With increasing restrictions, people are spending more time at home for both work and leisure in countries across the globe. This has led to increased voice calls, video calls, etc. and network usage has witnessed a huge spike in the last 2 years which augurs well for the telecommunication sector.

### Education Sector

Virtual classes have now become the new norm as teacher-student interaction is happening through online platforms such as Zoom, Google Meet, Microsoft Teams, etc. and due to this the telecommunication industry has witnessed

a boom. Approximately 825 million learners are currently affected due to school closures in response to the pandemic. According to UNICEF monitoring, 23 countries are currently implementing nationwide closures and 40 countries are implementing local closures, impacting about 47% of the world’s student population.

### Aviation Sector

As compared to 2019, more than half the passenger traffic was lost in 2020. Thus, about 4.8 million jobs were affected, i.e., a 43% reduction from pre-covid levels. Significant reductions in passenger numbers have resulted in flights being cancelled or planes flying empty between airports, which in turn massively reduced revenues for airlines and forced many airlines to lay off employees or declare bankruptcy. As passenger flights were cancelled, the cost of sending cargo by air changed rapidly.

### Insurance Sector

While the insurance industry, like every other industry, has taken a major hit during this pandemic, the future prospects of the industry look bright. Since the onset of the pandemic, people are rushing to insure their lives and there seems to be a boost in demand for insurance. India has been an under-insured country and with Government initiatives, such as Ayushman Bharat which aims to insure the poor and vulnerable, the gap is

now being bridged. However, Insurance Schemes from Private Insurance Companies cover only 18% of the urban population and a little over 14% of the rural population.

### Agricultural Sector

As compared to the Manufacturing and Service sectors, the Agricultural sector is under dual pressure of COVID-19 and climate change. Agrarian economies such as India, Bangladesh, Vietnam for which agricultural sector accounts for 12-16% of their GDP, have been affected the most. The agricultural sector has been suffering despite the government launching relief schemes and packages for the benefit of small farmers.

### Adoption of Technology by Businesses – Role of our profession

The Corporates in India are using new age technologies to capture, record and mine information in their organisations and have invested huge resources to build Cloud based infrastructure. Due to multiple lockdowns put in place by various governments, the pandemic has speeded up the process of technology adoption manifold and these changes are here to stay.

To remain competitive in this new business and economic environment, businesses – both big and small - have no choice but to recognise the

importance of technology. Technology adoption and implementation has become the need of the hour.

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.

### Emerging Technologies that can help business to be innovative during the pandemic times

#### 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. AI tools are being used in the banking, insurance, retail, healthcare and manufacturing sectors extensively.

#### 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 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.

#### 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 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. Big Data and Analytics help businesses in descriptive analytics, predictive analytics and prescriptive analytics.

The availability of online real-time information will assist in quick decision making and 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 re-aligning their business to the dynamic economic conditions.

#### Block Chain Technology

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

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

Block chain alters the conventional techniques for invoicing, reconciliation, documentation, contract preparation and mechanises the physically performed assignments. Block chain

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can streamline financial reporting and audit processes. Chartered Accountants can also assist organisations in help implementing Block chain solutions effectively.

### 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. Cyber-attack is an entirely new threat arising in the wake of digitisation.

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

### 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, Amazon, Flipkart, Snapdeal, Big Basket are

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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 and many traditional business houses have ventured into e-commerce in a big way.

In this scenario, it is essential for CA's to study the developments in the digital commerce space. CA's 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 these companies. 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.

## Adoption of Technology by our profession

### 1. Invest in Technology

Every crisis demands difficult decisions to be made. Chartered Accountants need to analyse the size and nature of their organisations to decide the level of investment in technology. For instance, smaller firms having smaller teams require basic VPN and firewall facilities to enable remote working. Applications like Google Meet, Microsoft Teams, WebEx, etc. can be used for holding virtual meetings. However, larger organisations require a larger amount of investment in technology.

### 2. Engage with IT Companies and Professionals

Once the organisation's tech appetite has been decided, we need to engage IT companies or professionals who can provide their expertise after carefully evaluating the needs of our profession. Professionals need to work closely with Business Process Consultants to create a detailed blue-print and build a suitable digital infrastructure.

### 3. Up skilling and training of staff

Once the digital infrastructure is implemented, the next most important step is to train and up skill the staff with the emerging technologies and this can be achieved by conducting continuous training programmes.

### 4. Implementation of a Hybrid workspace

The most visible impact of the pandemic was the shift from "Work from Office" to "Work from Home". Remote working and virtual meetings are here to stay, although less intensely. Offices have started working with less than 100% workforce while continuing to practice working remotely. Chartered Accountants need to adopt a hybrid system of working so as to significantly reduce the cost of workspaces.

### 5. Building broader client base

During the pandemic, there has been a dramatic shift by consumers towards online channels, and businesses have succeeded in responding digitally. Businesses have refocused

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their attention to existing business processes and industries have witnessed a dramatic change in their operations. Professionals need to look at this shift as an opportunity and seek to broaden their client base beyond geographical boundaries. Ex: The Start-up ecosystem provides an excellent opportunity for our profession to broaden our client base and work with the Next Generation businesses.

## Conclusion

Currently, economies and societies around the world are trying to find a way to move forward from this crisis-laden period. As strategic partners, our profession has a pivotal role to play in helping governments and businesses navigate efficiently in these troubled times. Chartered Accountants can support businesses in expanding and enhancing their digital infrastructure, and in doing so, must innovate and embrace technology.

Our profession is future- ready and can meet the pandemic challenges in these testing times.

