Journal of Accounting and Finance
Volume 34, No. 1 · October 2019-March 2020

Impact of Technology on the Global Accountancy Profession

Krishna Kumar

Abstract

Accounting is the language of business. The rapid pace of technological change continues to disrupt traditional procedures in all spheres, including the accounting profession. The authors examine the potential effects that disruptive technologies will have on both the profession at large and accounting education specifically. It is predicted that the traditional mix of jobs in accounting firms will change substantially and accountants will need to learn new skills when the more traditional tasks become automated and the technical maintenance and analytic needs of the work increase substantively. A major wave of educational change is also emerging with the advent of distance education, various forms of unorthodox training, and a large set of new learning needs. By looking to the future it helps the profession stay at the cutting edge. It provides a platform to look forward, to tune into the emerging trends and discussions in the global business and policy spheres and the latest reforms facing the world of finance. For accountants there is a twofold challenge: firstly, understanding how the key forces shaping the future could affect the organizations they serve. Secondly, they need to assess the implications for accounting standards and processes and the accountancy profession as a whole. The impacts encompass everything from the CFO's role and reporting standards through to the training and development of tomorrow's accountant. The study aimed to study about converging technologies and their potential to influence the accountancy profession. In the longer term, the accountancy function is expected to play an ever more central role in developing and evaluating business models and pricing strategies. An enlarged long-term remit in merger and acquisition (M&A) activity is also envisaged. Similarly, in the longer term there is an expectation that business decision making could increasingly be driven by intelligent accounting systems and predictive analytics. These would help analyze and exploit the huge volumes of accounting data that corporations are building up through their daily activities and transactions.

Keywords: *Technology, Accounting, Profession*

Introduction

The overriding global themes for the decade ahead are those of shifts in regional wealth and power, extreme economic uncertainty and political transitions. At the same time, the business

Krishna Kumar, Ph D Scholar, Department of Commerce, Periyar University, Tamilnadu, India

landscape is being reshaped by a combination of market volatility, globalization and transformational innovation. The impact of these challenges is compounded by rapid advances in science and technology, demographic shifts and disruptive new business models. Collectively, these forces of change are driving new societal values, needs and expectations. In short, they are transforming every aspect of our world. In the face of such all-encompassing change, there is a growing recognition in business of the need to develop a rigorous understanding of these and other emerging drivers of change and to prepare for a range of possible future scenarios. There is a clear emphasis on the need for fundamental change in every aspect of business from governance and leadership through to approaches to innovation. There is scrutiny of the critical role of leaders' attitudes to change, the level of business complexity, the rate of change in business cycles and adoption of new business models. Other strategic drivers considered include the need to consider alternative business and market paradigms and the management of enterprise risk, accountability and compliance. Globalization is seen to create both opportunities and challenges. A focus is placed on the scale of international mergers and acquisitions, the global talent pool, choice of business languages, reverse innovation from emerging economies and the impact of new financial centers. Key managerial challenges highlighted for the next decade include the importance of reputation management, the adoption of corporate 'living wills', the level of foreign direct investment and the use of integrated systems thinking. Business responsibility is identified as a crucial issue for the coming decade with a focus on social business, the level of social entrepreneurship, evolution of corporate governance and managing diverse stakeholder expectations. Other important drivers explore the role of cash in financial transactions, the role of intermediaries and the emergence of new industry sectors. An enlarged strategic remit may require many to rethink the organizational design of the accountancy function and its interfaces with the rest of the firm. A wider remit also implies rethinking the technical and emotional capabilities required to fulfill ever-broadening responsibilities effectively. Technology should go some way towards delivering on the data requirements of total enterprise reporting. In practice, the biggest challenge will be to realign mindsets and processes in the finance function to encompass this responsibility for providing a perspective on total organizational health and sustainability. The biggest impact on the accountancy profession; firstly, automation, where tasks such as entering data, creating electronic documents and producing receipts are taken over and delivered automatically by software; secondly, the cloud, which changes the way professionals store data, collaborate, and gather information; and thirdly, new developments in accounting software.

Objective of the Study

- To study about the converging technologies and their potential to influence the accountancy profession

Research Methodology

- Secondary data were used for the study.

From Action to Outcomes: Scenarios for the Future of the Profession

Technology advancements have enhanced the accountant's ability to interpret data efficiently and effectively. He/she now has the ability to interpret the language of business with such

ease that the accountant has become a corporation's most trusted business advisor. There are significant uncertainties over exactly how the driving forces presented in this report may play out. What is clear is that, however they unfold, the resulting impact will be transformational both for business as a whole and for the accountancy world in particular. The ways in which companies and the profession respond and the relative importance and priority they attach to the different imperatives could lead to a range of alternative possible outcomes or scenarios. The scenarios are based on two key influencing factors, with a range of options for how they might evolve:

- Public perception of the profession - with a spectrum of possibilities ranging from 'part of the problem' to 'guardians of integrity'.
- Scope of the accountant's role - ranging from a 'narrow compliance focus' to a 'broad organizational remit'.

Practice of Accounting & Accounting Profession

Both strategic and operational drivers are explored. The changing scope, scale and complexity of the CFO role are examined, particularly in relation to growth in demand for non-financial and integrated reporting. The ramifications of the globalisation of accounting regulation, standards and supply chains are explored along with the implications for the strategies and structures of accountancy firms. Operational considerations include defining audit's role, managing internal audit, balancing managerial and financial accounting, valuation of intangible assets and the rate of adoption of XBRL as an accounting data standard. In the wake of the financial crisis, public expectations of the profession, its attractiveness and definitions of its role are central to many of the drivers emphasised. Importance is also placed on the flexibility and suitability of accountancy training. Particular attention is given to building capacity in transitional economies and developing entrepreneurial skills and business awareness. Other factors highlighted include establishing the role of industry associations in developing markets and the impact of entrants from outside the profession on the accountancy services sector.

Table 1: Impact in Business Based on Time Frame

Quality and availability of the global talent pool	Speed and duration of business cycles	Business leader responsiveness to change and disruption	Capitalism next: future governing business and market paradigms
Scale of global mergers and acquisitions (M&A)	Experimentation with and adoption of new business models	Crowdsourced funding for innovation: the consumer as investor	Influence of emerging financial centers
Extent of foreign direct investment in developed and developing economies	Level of complexity in business	Adoption of integrated systems thinking to manage business complexity	Choice of global business languages

Scale of reverse innovation flow from emerging economies to the industrialized world	Enterprise risk management capability	Living wills for businesses	Management of accountability and compliance within the firm
Extent of social entrepreneurship in social and business sectors	Evolution of corporate governance regulation and practice	Scope and diversity of expectations of external stakeholders	Emergence of new industry sectors and professions
Pressure to manage corporate reputation as part of business strategy	Level of corporate commitment to social responsibility, investment, philanthropy and volunteer work	Use of cash for financial transactions	The future role of intermediaries

Source: Secondary data

Table 2: Impact in Practice of Accounting based on Time Frame

Size and complexity of the CFO's remit	Clarity in financial reporting and defining the audit function	Defining the scope of the accountant's role	Changing structures and business models for accountancy firms
Internal audit management	Impact of size specific business regulation upon accounting practices	Non-financial information and integrated reporting	Opportunities arising from adoption of global regulation
Importance of non-tangible assets in company valuation	Rate of adoption of XBRL as an accounting data standard	Balance between external financial accounting and internal managerial accounting	Evolution of the global accounting supply chain & Adoption of globally accepted accounting standards

Source: Secondary data

Table 3: Impact in Accountancy Profession based on Time Frame

Flexibility, suitability and cost of accountancy training	Public perception and attractiveness of the accountancy profession	Establishment and recognition of accountancy associations in developing markets	Societal expectations and definitions of accountancy
Accounting skills capacity in transitional economies	Impact of competition from entrants outside the profession on the provision of accountancy services	Level of entrepreneurial skills in the accountancy profession	

Source : Secondary data

The business environment is changing and becoming more complex. These factors were expected to affect both management practices and the need for reporting of the non-financial activities of global firms in an integrated manner. The legacies of the financial crisis, coupled with continued economic uncertainty, are also reflected in the priority given to the stability of the global economic infrastructure. In addition, some priority is given to public concerns over the viability of and risk associated with the models of pure capitalism that are seen to have contributed at least in part to the current volatility. The sheer level of complexity in business is emphasized as an important factor. Similarly, concerns are also raised over the ability of business and the finance function to keep pace with and control the costs of compliance, given a growing volume and complexity of legal regulation. Equal priority is given to the impact of an ageing society in Western nations and the resulting effects on workforce age structure. Increasing age diversity in the workplace is identified as bringing its own challenges relating to differences in working practices, use of technology, use of language and developing social cohesion.

The top 10 technologies with the potential to reshape the accountancy profession and business landscape considerably are:

- **Mobile:** Anywhere, anytime access to broadband connectivity from a range of devices, wireless networks, operating systems, and applications.
- **Big Data:** The massive quantity and variety of structured and unstructured data from internet-connected systems, devices and physical objects.
- **Artificial Intelligence and Robotics:** The broad range of machines and computer systems that demonstrate limited characteristics of intelligence.
- **Cyber Security:** Protection from new forms of cyber risk, attack, crime and terrorism caused by increased reliance on personal and professional digital devices and data.
- **Educational:** Trends and tools that are changing and enhancing educational achievements, developments, techniques and possibilities.
- **Cloud:** Internet-based technology resources - such as software applications, computing power and data storage - provided remotely as a service.
- **Payment Systems:** New, evolving and emerging internet-enabled software applications, currencies, payment platforms, devices and services.
- **Virtual and Augmented Reality:** Technologies that use computer modeling to simulate, overlay and supplement reality and enable people to interact.
- **Digital Service Delivery:** New technologies used to provide online, interactive, self-service, business processes, software and services.
- **Social:** Technologies that support social interaction and are enabled by communications technology, such as the internet

Table 4: Global Forum Member Rankings of Drivers Expected to have the Greatest Impact on the Accountancy Profession

Rank	*Driver*
1	Non-financial information and integrated reporting
2	Stability of the global economic infrastructure
3	Public attitudes to pure capitalism
4	Level of complexity in business
5	Volume and complexity of legal regulation
6	Workforce age structure
7	Enterprise risk management capability
8	Focus of global governance institutions
9	The workplace expectations of Generations Y, Z and beyond
10	Quality and availability of the global talent pool
11	Evolution of corporate governance regulation and practice
12	Societal expectations and definitions of accountancy

Source: Secondary data

Table 5: Impacts of the Drivers on the Economy, Business and the Accountancy Profession

Economic Context	Uncertainty over stability of global economic infrastructure and integrity of the Euro zone & Knowledge-creation activities represent a growing share of the national and global economy creating a 'knowledge economy'	New economic models and perspectives explored, eg Collapsonomics and closed loop economics & Greater reliance in the West on economic migrants from developing countries	Broader adoption of protectionist policies to protect internal markets and control export of valuable raw resources & Emerging centres of financial power in the East, eg Shanghai, Mumbai, Seoul
	Greater private-sector delivery of public services & Increase in total global population, but continued population decline across much of the developed world & Risk of increasing income inequality between and within developed and developing countries	Decreased use of physical currency & Increased global competition for finite resources & Governments struggle to control public debt across the developed market economies	Continuing concern around volatility and low levels of economic growth & Key global institutions such as the UN and WTO reformulated to reflect the new distribution of global power

Challenges for Business	Shortening of business cycles & Increased competition for top global talent & Fundamental reshaping of industry value chains and business models	Increased competition across all sectors from BRICS market firms selling innovative quality products at lower prices & A decrease in the mobility of global labor & An ageing workforce in much of Europe and East Asia	Growing public and government demands on business to demonstrate greater transparency, regulatory compliance and ethical behavior & Challenges of managing a continuously digitally connected 24/7 workforce with decreased attention spans and increased distractions
	Decreased business intermediation as consumers interact directly with producers & Shift in industrial logic from machine age thinking to biological models of design	Challenges of incorporating of Generations Y and Z into the workforce and meeting their expectations & Impact of human enhancement (chemical, genetic and technological) increasingly apparent in the workplace	Cyber security risks of fraud and theft of intellectual property and sensitive corporate and financial information & Increased participation of women in the workforce globally, especially in senior management
Business Strategies and Priorities	Increased focus on tackling complexity & Shift from asset ownership to rental & Use of social media to interact with stakeholders and develop new business relationships & Adoption of 'living wills' helps to facilitate orderly financial unraveling of failed companies &Intelligent systems now at the heart of corporate decision making	Increased focus on organizational resilience plans via political volatility, the impacts of climate change and unforeseen 'black swans'	Exploiting new technologies and production models, eg 3D printing, nanotechnology, and biomimicry & Increased digitization of work and company assets & Greater social entrepreneurship creating social goods and ethical business practices and strategies
	Wide adoption of new business models, eg crowdsourcing for funding innovative ideas & Increased corporate social responsibility and sustainability efforts & Significant shifts in global centers of R&D and innovation now apparent	Greater use of concepts such as chaos theory and integrated systems thinking to manage complexity & Social goals rank equally with financial returns for many firms	Increased adoption of cloud computing reduces the size of firms' technology infrastructures & Immersive, multi-dimensional, gesture based, tactile and voice-controlled interfaces to most systems and devices

	Further pressure to manage corporate reputation for competitive advantage and to address public concerns & Newly democratizing countries creating fresh market opportunities for foreign business	Technology and globalization enable a new generation of emergent global micro business & Firms go beyond mere regulatory compliance by adopting exemplar behaviors voluntarily	New organizational forms and business models emerge driven by Eastern philosophies & Greater emphasis for business leaders to recognize and respond to global changes and disruptions, or be left behind
Public Image	Process of rebuilding public trust after the perceived failings of accountants that came to light during the financial crisis	Establishment of accountancy associations in developing markets to provide a collective voice for the profession, as well as training and standardization of practice	The changing role of accountants within business and the use of emerging technologies radically redefines the accountancy profession
Positioning in the Business	Expansion in the size and complexity of the CFO's remit & Watchdog role to ensure compliance with new legal regulations, enforcing transparency and the management and reporting of risk	Accountants take on a more strategic role, helping to explore the merits of potential new business models and markets & Growing strategic responsibility for value maximization & Expansion of the internal audit function from being simply an independent assurance function to becoming a management adviser	Increasing use of big data, predictive analytics and intelligent accounting systems to develop and evaluate strategies, business models and pricing approaches & Auditing of the genetic health of the workforce
	Greater focus on managerial accounting within organizations alongside external financial accounting & Increasingly prominent role in strategic decision making	A greater role in constructing M&A strategies to help plan for future growth and stability Accountants playing a key role in implementing green practices through the minimization of waste and identification of green opportunities such as use of alternative energy	Accountants ensure compliance with regulations such as a carbon tax and other emerging environmental market mechanisms & Expansion of the internal audit function from being simply an independent assurance function to becoming a management adviser

Measurement and Reporting	Greater push for simplified and transparent financial reporting to gauge the true health of an organization and discourage financial malpractice	Increased importance of non-tangible assets in company valuation, eg R&D & Challenge of responding to a proliferation of local and virtual currencies, and new methods of payment, eg 'time banking'	Accounting in multiple strong global currencies, ie US dollar, yuan and euro 2.0 & Greater experimentation with immersive financial reporting using data mining, augmented reality and virtual reality
	Increased use of alternative business measures, eg innovation, trust, happiness and sustainability	Greater integration of non-financial information into auditing reports & Increasing use of data mining to create tailored financial reports	Increased auditing of environmental impact of organizations
Accountancy Practices	Increasingly complex regulatory landscape with regards to different types and sizes of business & Adoption of new structures and business models for accountancy firms & Widespread international adoption of common global accounting standards and practices, eg IFRS	Widespread adoption of XBRL as an accounting data standard & Increased off-shoring of accounting, especially lower value routine tasks & Greater focus on audit of non-tangible and digital assets, eg virtual real estate, digital music, and intellectual property	Increased competition in the provision of accountancy services from non-accountants & Advances in fields such as artificial intelligence and predictive analytics could create truly intelligent automated accounting systems & Increased global regulation of the accountancy profession
Skills, Training and Development	Increased cost of higher education & Greater focus on accountants' ability to analyze larger datasets	Greater emphasis and expansion of continuous professional development to ensure staff are up to date with a rapidly changing world	Greater emphasis on basic entrepreneurial skills such as business insight and leadership, creativity, and communication
	More organizations offer to pay full or part course fees in return for students' agreement to work within the company & Increased uptake in online learning for academic study and business training	Harmonization of accountancy education in developing countries with international competency standards & Emphasis on language acquisition and cultural training to accommodate a diverse workforce and operate in emerging markets	Widespread provision of free open and unrestricted access to intellectual content & Brain-machine interface allows education modules to be downloaded straight into the mind

Source : Secondary data

Table 6: Forces Shaping the Business Environment and Driving Change in the Accountancy Profession

Forces shaping the Business Environment		*Forces driving change in the Accountancy Profession*	
Global Economy	Continued globalization is taking place against a backdrop of persistent economic turbulence and uncertainty and growing pressure to rethink the entire global economic and financial governance infrastructure.	**Trust and Reporting**	Pressures are increasing on the accountancy profession to strengthen its public image and go beyond current financial reporting practices to provide a more transparent, simplified but holistic picture of a firm's health and prospects.
Business Environment	Growing business and regulatory complexity is coupled with intensified global competition and shortening business cycles.	**Regulatory Expectations**	An increasing regulatory burden could drive up the cost of compliance.
Innovation and Change	Rapid advances in science and technology are driving disruptive innovation, overhauling industry structures, challenging and reinventing business models and spawning new sectors.	**Standards and Practices**	There is a drive to globalize accounting standards and practices.
Society and Work	Changing social values and expectations of work, an increasing global population and an ageing society working well past current retirement age are creating challenges for how technology is managed and leveraged to integrate a diverse multigenerational, multicultural and multinational workforce.	**Intelligent Systems and Big Data**	There is potential to use intelligent systems, data mining and predictive analytics to exploit the repositories of 'big data' that firms are amassing and as a result transform both the operational and interpretative elements of accountancy.
Learning and Development	The structure, techniques, distribution channels and costs of providing education and training are being transformed, with a growing trend towards online courses and accelerated learning.	**Organizat-ional Remit**	There are increasing expectations that the CFO and accountancy function should play a far greater role in everything from strategic decision making to the design of new revenue models.

Through exploration of the drivers and analysis of their potential implications, a clear set of implications and priorities emerges for business and the accountancy profession. These priorities have been consolidated into 10 key 'strategic action imperatives'. These imperatives need to be addressed as a matter of priority if business and the accountancy profession are to

ensure they can perform effectively in the decade of uncertainty and rapid change that lies ahead.

Table 7: Ten Strategic Action Imperatives for Business and the Accountancy Profession

Five imperatives for Business		*Five imperatives for the Accountancy Profession*	
Assume and Plan for Volatility	With uncertainty as the new normal, businesses have to factor in turbulence as a very real possibility and develop strategies for a range of different economic and market scenarios.	**Embrace an Enlarged Strategic and Commercial Role**	As businesses adapt to a turbulent environment, opportunities are emerging for accountants to assume a far greater organizational remit. The potential exists to leverage the capabilities of the accountant across all aspects of corporate decision making, from strategy formulation through to defining new business models.
Build the Radar	Systematic, organization-wide approaches are required for scanning the future external environment. Preparing for a wide range of possibilities, tolerance of uncertainty, curiosity and 'seeing round corners' are becoming critical development priorities for managers and leaders alike.	**Establish Trust and Ethical Leadership**	The profession needs to be seen to be addressing clear public concerns. According to the research conducted for this report, there is a perception that the profession could do more to highlight and prevent everything from small-scale financial irregularities through to the major systemic failures that helped cause the global financial crisis and the ensuing economic uncertainty.
Pursue Technology Leadership	The pace and disruptive potential of information and communications technology (ICT) development has placed technology at the heart of strategy and operations of businesses of almost every size. New mindsets and approaches to technology management are required to exploit and extract full value from the next decade of advances.	**Focus on a Holistic View of Complexity, Risk and Performance**	There is growing consensus on the need for reporting to provide a firm-wide view of organizational health, performance and prospects. Such a holistic perspective must acknowledge the complexity of modern business and encompass financial and non-financial indicators of a firm's status and potential.

Five imperatives for Business		*Five imperatives for the Accountancy Profession*	
Prepare for True Globalization	Development of a truly global operating model is becoming a priority. A clear emphasis is required on leveraging technology effectively. Equally important is developing the capability of management to work with, adapt to and get the best out of a multi-location, multi-cultural and age-diverse workforce.	**Develop a Global Orientation**	The pace of global expansion of firms from developed and developing markets alike is placing the spotlight on accountancy's ability to master the technical, language and cultural challenges of cross-border operations.
Develop a Curious, Experimental and Adaptable Mindset	A critical success factor in an increasingly complex and fast-changing environment is building a 'curious' culture. This implies nurturing an environment that is open to external ideas and in which participants are encouraged to forge a network of strong working relationships across the entire business ecosystem.	**Reinvent the Talent Pool**	The diverse range of demands and impacts on the profession is forcing a rethink of everything from training and development through to the type of people being recruited. Characteristics such as entrepreneurial spirit, curiosity, creativity and strategic thinking skills could assume far more significance in the selection of tomorrow's accountants

Accountancy Practices

At the operating level, the spotlight is expected to fall on regulation, standards and systems on the one hand and on the accountancy services sector on the other.

- **Regulation, Standards and Systems** - The regulatory compliance and standards backdrop is expected to become increasingly challenging. The driver here is the desire of governments and standards bodies to prevent financial excesses and provide governance to an increasingly complex and highly digitized business landscape. While efforts will be pursued to minimize the burden on smaller firms, there are concerns that new regulations could increase complexity. The universal adoption of global standards and practices is expected by many to take a decade or more, while others doubt if it is even possible. Nonetheless, if implemented, global standards could bring major benefits in the form of consistent reporting and financial management of multinational enterprises. The take up of XBRL as a data standard is expected to contribute significantly to streamlining accounting processes - particularly across borders. Finally, adoption over time of increasingly intelligent accounting systems could lead to far greater automation, even of expertise-driven and creative tasks such as interpreting and commenting on results.
- **Implications**

  Concerns over the cost and complexity of compliance could drive accountants and service providers to seek process efficiencies and accelerate the development and deployment of

increasingly intelligent systems.

- **The Accountancy Services Sector**

  In the short term, the industry must address the twin challenges of globalizing firm structures and coping with the emergence of non-accountants who offer services to clients. The demand for lower-cost service provision on outsourced activities will force accountancy service providers to respond. Solutions may include a drive to automate tasks and conduct them in whatever location that can undertake them at the lowest cost for a given level of quality. As requirements grow for firms to provide a more holistic view of their organization, opportunities may open up for some accountancy firms to provide services advising clients on how to set up such mechanisms. The potential for conflict between advisory and audit roles could arise - leading to a new wave of calls for accountancy firms to divest their advisory and consulting activities. In the medium to long-term, firms in more mature economies may also experience the entry of energetic competitors from the emerging markets. Collectively these challenges could see the accountancy services industry embark on a period of continuous change, adaptation and innovation. As a result, the next decade could see big shifts in business strategies, choice of geographic locations, business models and operating structures for accountancy firms.

- **Implications**

  Pressure could mount on the accountancy services sector to demonstrate that it is sharing the burden of economic uncertainty with its clients by reworking its business models, and placing a greater emphasis on innovation.

Skills, Training and Development

The training agenda is going to be influenced by the sheer scale of change anticipated within the accountancy profession, coupled with an equivalent set of transformations under way in higher education. Together, these suggest that both the curriculum and delivery methods for training tomorrow's accountants will evolve significantly in the decade ahead.

- **A New Learning Agenda** - Both the core accountancy curriculum and continuing professional development programmes will be affected by the need for accountants to play an increasingly strategic and entrepreneurial role within the firm. The cultural and language requirements for operating in a global environment will also have an impact on in-service training. As technology penetrates ever further, so accountants will need to acquire a deeper understanding of how to deploy intelligent systems to best effect. Key here will be learning how to manage and exploit the 'big data' that sits at the heart of the modern firm.

- **Implications**

  Core accountancy training and continuing development programmes will need to be reviewed and updated on a regular basis to reflect the changing expectations and needs of business and the profession.

- **Transforming Education Delivery** - The online environment, cost pressures and new insights on learning are combining to reshape the provision of higher education. Well

over 1,000 universities such as Harvard and MIT and others such as the Khan Academy, are making a wide range of courses freely available online to anyone around the world who wants to take part. The only charges applied are typically for those who wish to receive some form of examination accreditation at the end of the course. Increasing use is also expected of virtual worlds, simulations and serious gaming to help enhance the quality of education and training experiences. In the much longer term, advances in cognitive science and brain-machine interfaces offer the potential for downloading content directly to students' brains.

- **Implications**

  The profession needs to ensure that it is taking full advantage of the potential of online education and developments in educational technology. At the same time, education business models may need to be reworked in a world where accountancy course content is freely available online.

The Impact of Science and Technology

Science and technology developments that could have a major bearing on business and accountancy. Advances in science and technology lie at the heart of many of the developments that will shape the commercial landscape over the next decade. They offer the potential for disruptive innovation in literally every aspect of human life, society and work. The ability to master these developments could be the key differentiator between success and failure.

- **Big Data and the Digitization of Work -** As automation spreads through every aspect of business and private life, vast quantities of transactional data are being amassed. Tools will increasingly become available to enable mining of this data and the prediction of future possibilities on the basis of past patterns of events. Advances in the sophistication and power of mobile devices, such as tablet PCs, are also driving a revolution where these tools are becoming an essential part of our personal ecosystem. The ease of use of these personal platforms is driving the desire to 'bring your own device' (BYOD) to work and use it for core business activities. Such developments offer a potential cost saving, reducing the need to provide computers for staff, but they create major operational challenges for ensuring the security of data held on these devices.

- **Implications**

  The ability to exploit big data and infer future behaviours from past patterns offers the potential to transform the cost and effectiveness of processes such as new product development, market targeting and price setting. For the accountancy profession, adoption of intelligent tools that can analyze and interpret large volumes of data rapidly could transform activities such as audit and forensic accounting.

Disruptive Technologies in Accounting

Recently, disruptive technologies such as robotic process automation (RPA), artificial intelligence (AI), blockchain, smart contracts, and advanced analytics have reshaped existing business models and facilitated the emergence of new ones wherein repetitive and mundane tasks are becoming less important and the need for high-level skills is increasing. Though it still will be some time before these technologies affect the workplace at a significant scale, the

current "entry-level" jobs that require noor low-level cognitive skills may eventually disappear. It has been estimated that at least 50% of the work that accountants and other professionals are paid for is automatable through currently available technologies, with an additional 15% automatable through forthcoming technologies (James Manyika et al., "Jobs Lost, Jobs Gained: What the Future of Work Will Mean for Jobs, Skills, and Wages," McKinsey Global Institute, November 2017, https://mck.co/2LCunZd).

Accountants have always exploited emerging technologies to help them to complete their tasks more accurately, quickly or simply from the incised clay tablets of the Sumerian scribes, through the adding machines of the 19th century, to the calculators and computers of the 20th century. But all of these technology developments were simple propositions by comparison with the myriad technologies that are now rapidly reshaping the worlds of business and accountancy. Heading into the 21st century technology trends in cloud, big data, mobile and social collaboration are converging to change the ways in which we consume information technology resources, share knowledge and experiences, and access products and services. At the same time, these trends are also underpinning and influencing developments in cyber security, digital service delivery, robotics, augmented and virtual reality, and artificial intelligence. A 'new normal' is emerging. Accountants in practice and in the finance function are part of that connected world. This is changing the ways in which they communicate and collaborate with those in the businesses they work with and for, and shaping new working patterns. It is providing accountants with the opportunity to automate and de-skill time-consuming and repetitive work and focus on higher value work, so that they can consolidate their role as advisers on finance and business. It is impossible to predict the future with any degree of certainty. By keeping informed about technologies as they evolve, considering new technologies as they emerge, and then assessing their implications for finance professionals and those they serve and support, accountants can be prepared to minimize the burdens and maximize the benefits. In this way the profession can exploit technology and potentially change the scope of what it means to be an accountant. The ten technology trends are: o mobility o cloud o social collaboration o digital service delivery o big data o payment systems o cyber security o robotics o augmented and virtual reality o artificial intelligence. As valued advisers to the organizations they work with and for, accountants must maintain a watching brief across a broad range of technologies and trends. Finance professionals need to consider the challenges and opportunities created by new and emerging technologies, and then use their analytical and problem-solving skills to assess their potential influence, so that they can provide the financial insights needed to guide any affected tactical and strategic business decisions.

Education for Future Accountants

Accounting degree programs offer what graduates need to learn about the technical side of the business. In addition to innovative technology, this also includes financial accounting, economics and management accounting. These are foundational concepts for students aspiring to one day work as accountants. It's also a smart move to consider taking liberal arts courses that can improve your soft skills. Attracting and retaining new clients will require expertise in critical thinking, communication and emotional intelligence. Combining these soft skills with the knowledge needed to understand and use innovative technology can prepare accounting graduates to succeed in the accounting jobs of the future.

Five Imperatives for the Accountancy Profession

- **Embrace an Enlarged Strategic and Commercial Role** - As businesses evolve their strategies, structures and business models to survive and thrive in a turbulent environment, there is a clear opening for accountants to assume a far greater organisational remit. The need to ensure responsible practices in the pursuit of growth opens the door for accountants to participate in broader business decision making. This broader role will require accountants to apply financial expertise in combination with analytical, creative and risk management skills. These capabilities will prove equally valuable in everything from assessing country risk to developing and testing innovative new revenue models.
- **Establish Trust and Ethical Leadership** - The profession needs to be seen to be addressing the clear ethical concerns of diverse stakeholders. There is an expectation that it could do more to highlight and prevent everything from small-scale financial irregularities through to the major systemic failures that helped cause the global financial crisis and current economic uncertainty. The focus needs to shift from rule conformance to genuine compliance with the spirit of regulation. The shift will be challenging, given the scale of impending regulation that many of our contributors have identified. The ethical remit has clear implications for both the training and continuing professional development of accountants and for the design of core internal audit and accounting processes.
- **Focus on a Holistic View of Complexity, Risk and Performance** - A very clear message is emerging on the need for company reporting to provide a firm-wide view of organizational health, performance and prospects. Such a holistic perspective needs to take account of the complexity of modern business and highlight the efforts to address it. Such an integrated view must also report on non-financial measures such as innovation. Equally important will be the assessment of the strength of core business relationships, the overall vibrancy of a firm's culture and employee health and happiness. Taking the holistic view goes well beyond the current remit of the CFO's organization and has major implications for training and the development of the accountancy function.
- **Develop a Global Orientation** - The pursuit of global opportunities is now a clear priority for large, medium and small enterprises from developed and developing markets alike. The implications for the accountancy function are immense. The first priority is gaining rapid mastery of relatively straightforward matters such as understanding local accounting rules, taxation laws and procedures for profit repatriation, all of which may influence market entry decisions. Then come the more complex challenges of getting a thorough understanding of local business customs and practices, cultural norms and language differences. Key here is developing the mindset within accountancy that is respectful of different practices and cultures and open to ideas, wherever they originate.
- **Reinvent the Talent Pool** - The range of driving forces identified in this study suggests a diverse and growing set of demands and impacts on the accountant's role in the future. This has a direct bearing on recruitment, professional training and development. The speed of change and the rate of emergence of new requirements place an emphasis on the need for 'on demand' accelerated learning-based solutions. Increasingly these will be delivered via the internet and mobile devices. At the same time, an increasingly broad, complex and

demanding remit will influence the type of people that the profession seeks to attract. Alongside the traditional characteristics typically associated with the profession, traits such as entrepreneurship, curiosity, creativity and strategic thinking skills will become of increasing importance for tomorrow's accountant.

Scope of the Accountant's Role

At one end of the spectrum, accountants focus solely on compliance. This approach obviously stresses the importance of meeting the core accounting and regulatory reporting requirements without driving a larger sphere of activity. At the other end of the spectrum, the finance function moves well beyond the realm of compliance and adopts a broader remit. Hence, accountants play a far greater role in everything from strategy formulation through to new product development and defining new business models. By focusing on these two key factors and the range of possible outcomes, a number of different possible 'generic' scenarios emerge.

Top 5 Ways which Technology is Transforming the Accounting Industry

The accounting industry is now speaking a brand new language of business. It is the language of future generations of accounting professionals. The evolution of accounting technology has been tremendous with strong growth potential for the future.

- **Artificial Intelligence & Robotics -** Artificial intelligence and robotics is automating complex and repetitive tasks and processes, with extreme accuracy, reducing operating costs and increasing efficiency. These are some of the emerging technologies supporting the transitional role of today's accountant into a more critical thinking role. However, the Association of Chartered Certified Accountants (ACCA) and the Institute of Management Accountants (IMA) states in their report, Digital Darwinism: thriving in the face of technology change: Although an agent intelligent enough to replicate the human brain is not yet a reality, there are many examples that can demonstrate limited 'intelligence', depending on how this is defined. Intelligent behavior can include: learning from experience, determining what is important, handling complex situations, understanding visual images, being creative or imaginative, and other characteristics.
- **Cloud Computing -** Cloud computing - is a type of Internet-based computing that provides shared computer processing resources and data to computers and other devices on demand. This allows accountants to perform accounting tasks from any location as well as the ability to deliver financial information and reports through the cloud. This opens up a new way for accountants to work with their clients. Now, there is more time to engage with the client and focus on business strategy instead of getting burdened with detailed processes.
- **Innovations in Tax Software -** The tax software of today has helped improve accuracy while reducing margins of error - something businesses want to embrace in order to avoid tax penalties and prevent issues with stake holders. Better tax software also helps streamline audits by making them more efficient and effective. Raymond Cheng, Council Member of HKICPA, states that "An understanding of new accounting software and other business and financial models will be necessary if practicing accountants are to effectively conduct audits and discharge their responsibilities. Continuing professional development and education in this area will be necessary for auditors."

- **Mobile Accounting** - Accountants are increasingly dependent on their mobile devices to accesses data. Mobile connectivity also bridges accountants and their clients. Companies like Xero are helping to launch the mobile age of accounting. Their mobile apps help accounting firms manage their business while on-the-move. Firms can reconcile, send invoices, add receipts and create expense claims from smartphones or tablets
- **Social Media** - Social media has become an essential tool for firms wanting to engage with their current and potential clients while expanding their brand reach. Gary Boomer, CPA/CITP, CEO of Boomer Consulting Inc. and Jim Bourke, CPA/CITP/CFF, partner in charge of internal technology at accounting firm WithumSmith+Brown, see social media as a tool that will continue to evolve and provide accountants with a valuable sales and marketing platform that can instantly connect firms to current and potential clients. Most accounting firms understand the importance of implementing traditional marketing into their overall business development plans, but many firms may not realize the power of integrating social media marketing into their long-term marketing strategies. Social media should be a part of a firm's overall business development strategy and if done consistently, will help amplify the effectiveness of all other marketing and business development efforts. Accountants will need to embrace the rapid advances in accounting technology if they want to remain relevant in the accounting industry. This includes staying up-to date with technological trends, optimizing and adapting current accounting software to meet the needs of their firm, and being open to accepting and learning advancing technologies. Technology advancements have enhanced the accountant's ability to interpret data efficiently and effectively. He/she now has the ability to interpret the language of business with such ease that the accountant has become a corporation's most trusted business advisor.

In order to remain relevant, accountants will need to keep pace and embrace the changing dynamics linked to disruptive technology. The future profile of the profession will include key shifts.

- Accountancy will be cloud based.
- Accountancy will harness the power of big data.
- Accountancy will integrate non-traditional financial information.
- Accountancy will be more efficient and mobile.
- Accountants' roles are and will continue to change radically.

The Impact of Technologies on the Accounting Profession

- By 2015 every accountancy firm will give clients an app they can use to access their business/accounting data from a mobile device such as a tablet or smart phone.
- Accountants will need to re-skill to retain their emerging role as the gatekeeper of corporate data.
- The profession must develop new ways to measure and value technology costs and benefits for the world of cloud computing and social networking.

- The accountancy profession will shrink as software vendors build progressively more finance expertise into self-learning products and services.
- The CFO of the future will need to know as much about technology as they do about financial management.
- Unless accountants embrace technology they will follow the dinosaur into extinction - individually and as a profession.
- By 2020 audits may well be real-time. Regulators will conduct them automatically pulling data in from business systems and sensors embedded in everything - from stock to livestock and even human beings.
- If accountants do not position themselves as subject matter experts on emerging trends such as crowd funding and new payment platforms then other professionals will.
- Accountants must exploit emerging technologies to attract talent and to develop and manage existing talent.
- By 2025 all digital data will be available to everybody.

Conclusion

The accounting profession is rapidly transforming partially due to productivity optimization available through newer technologies. Accounting solution software such as Monily, Xeros, Bench.co, and other ones on the market have automated your financial functionalities so you can perform effectively with your business proceedings, directly or indirectly. Today's accountant is no longer burdened with task-oriented projects. Instead, thanks to the shift in dynamic accounting technology, accounting software programs are becoming more automated and the role of the accountant is changing to that of a business advisor. The role shift of the modern accountant to a business advisor requires new skill-sets, including professional skepticism, judgement and critical thinking skills. These skills will remain a high priority to accounting firms when looking at new hires. While the profession is rapidly changing due to emerging technologies, the need for these types of soft skills remains constant. Those who are in this profession is a clear demonstration of the accountancy sector's ability and willingness to engage in long-term strategic thinking. Analysis has highlighted key areas of the economy, business and the profession that could be affected the most. Assessment of the impacts suggests strategic action imperatives on which business and the profession should focus as they try to navigate through a turbulent economy and rapidly transforming business and regulatory landscape. The different ways in which the profession, in particular, responds to these imperatives could lead to a range of possible scenarios. Faced with an ever-growing operational and regulatory compliance workload, an understandable choice would be to opt for the safe hands scenario and focus on a purely technical and more traditional definition of the accountant's role. The emphasis on integrity would meet with strong public approval. This would entail meeting the public's need for the highest standards of integrity while taking a broader leadership role within both business and the wider economy.

References

https://www.newenglandcollegeonline.com/resources/accounting/how-technology-is-changing-the-accounting-profession

https://www.rogercpareview.com/blog/5-ways-technology-transforming-accounting

https://www.cpapracticeadvisor.com/home/article/10263076/the-evolution-of-technology-for-the-accounting-profession

https://online.maryville.edu/blog/accounting-technology-in-2019

https://www.jmark.com/5-ways-technology-has-changed-the-accounting-industry/

https://www.topaccountingdegrees.org/faq/how-has-technology-changed-the-accounting-industry/

https://www.accaglobal.com/content/dam/acca/global/PDF-technical/futures/pol-af-ttti.pdf

https://www.accountancyage.com/2018/06/14/technology-is-the-future-for-accountants-but-not-without-risk/

https://www.cpajournal.com/2018/09/13/the-impact-of-disruptive-technologies-on-accounting-and-auditing-education

Dillon, T. W., & Kruck, S. E. (2004, Spring). Management accounting quarterly Business services industry. The emergence of accounting information systems programs. Retrieved from http://findarticles.com/p/articles/mi_m000L/is_3_5/ai_n6272118/

Kruglinski, J. A. (2009, Winter). CPAs: many doors to opportunity. Pennsylvania CPA journal, 79(4), 38, 4. Retrieved from http://access.sjcny.edu:2090/pqdweb?index=0&sid=2&srchmode=2

McNamara, W., CPA. (2006, September). The importance of corporate governance for the private company. Builder/architect magazine. Retrieved from http://www.cowangunteski.com/documents/ImportanceofCorporateGovernanceforPrivateCompanies.pdf

Torgerson, S. (2007, May). Partnering with customers for success. Accounting technology, 8,1. Retrieved from http://access.sjcny.edu:2090/pqdweb?index=29&sid=2&srchmode=

2009 Product & service guide searching for technology for your firm or your client. (2009, August). CPA & NSA technology advisor industry newsletter. Retrieved from http://www.cpata.com/PSG/2009/2009Guide.pdf

Gibson, C. H. (2007). In R. Dewey (Ed.), Financial reporting & analysis (pp. 51-53). Mason, OH: South-Western Cengage Learning

Laudon, K. C., & Laudon, J. P. (2006). In B. Horan (Ed.), Management information systems (pp. 16, 56-57, 59, 62, 180, 276-277, 339-340, G12). Upper Saddle River, NJ: Pearson Prentice Hall.

Accountants and auditors. (n.d.). United States department of labor (bureau of labor statistics) [Occupational Outlook Handbook, 2008-09 Edition]. Retrieved September 30, 2009, from http://www.bls.gov/oco/ocos001.htm

Definition of: supply chain management. (2009). PC Magazine.com [Encyclopedia]. Retrieved November 22, 2009, from http://www.pcmag.com/encyclopedia_term/0,2542,t=supply+chain+management&i=52261,00.asp

How technology has impacted accounting. (n.d.). Retrieved September 27, 2009, from http://www.topaccountingdegrees.com/how-technology-has-changed-accounting

Overview of the certified information technology professional credential. (2009). AICPA information technology center. Retrieved September 29, 2009, from http://infotech.aicpa.org/Memberships/Overview+of+The+Certified+Information+Technology+Professional+Credential.htm

Schroeder, D., CPA, CITP, CISA. (2006). IT Governance. In AICPA information technology center. Retrieved November 22, 2009, from http://infotech.aicpa.org/Resources/IT+Governance/IT+Governance.htm

Wailgum, T. (2008, January 29). CIO.com-business technology leadership. In Why ERP systems are more important than ever. Retrieved November 21, 2009, from http://www.cio.com/article/177300/Why_ERP_Systems_Are_More_Important_Than_Ever

What is cloud computing? (2009).Salesforce.com. Retrieved November 21, 2009, from http://www.salesforce.com/cloudcomputing/

file:///C:/Users/USER/Downloads/Global_100Drivers_IMA_ACCA.pdf

Journal of Accounting and Finance
Volume 34, No. 1 · October 2019-March 2020

Current Advancement of Indian Economy 2020

Sony Hiremath

Abstract

From 1990s, India witnessed significant changes in the macroeconomic policy regime along the neoliberal route which has resulted in a weakening of the interventions by the State, in many important economic and social arenas. In this paper an attempt has been made to highlight the major issues of the contemporary Indian economy. The paper highlights that economic growth is not only important from internal economic and social perspective but also external economic front. But, full market deregulation is more prone to external shocks and instabilities of world economy. At the same time, social improvement and government spending are also not a free flow mechanism unless guided by proper regulation. So, for inclusive growth of India, both development paradigms are important as given by Sen and Bhagwati which should be used with proper care and national requirements.

Keywords: *Economy, GDP, Industrial Deregulation, Global Financial Crisis, Government*

Introduction

India is developing into a framework of open-market economy and economic liberalization, including industrial deregulation, privatization of state-owned ventures, and reduced controls on foreign trade and investment, began in the early 1990s and has served to accelerate the country's growth, which has averaged more than 7 per cent per year since 1997. Accelerated economic growth rates and the presumed progress in poverty reduction are the key goals of the present Indian development outlooks. Indian diverse economy covers traditional farming, modern agriculture, handicrafts, a wide range of modern industries, and mass of services. Slightly more than half of the work forces are in agriculture, but services are the major source of economic growth, accounting for nearly two-thirds of India's output, with less than one-third of its labor force. In 2010, the Indian economy rebounded back robustly from the global financial crisis in large part because of strong domestic demand and growth exceeded 8 per cent per year in real terms (CIA, 2013). However, India's economic growth began with sluggishness in 2011 because of a tight monetary policy, intended to address persistent inflation, and a decline in investment, caused by investor pessimism about domestic economic reforms and about the global situation. High international crude prices have exacerbated the government's fuel subsidy expenditures, contributing to a higher fiscal deficit and a worsening current account deficit.

Dr Sony Hiremath, Assistant Professor, Akkamahadevi Women's University, Vijayapur, Karnataka, India

Objectives of the Study

- To highlight the major issues of contemporary Indian Economy.
- To analyze the trend and pattern of Indian Economy with special reference to recent development paradigm.

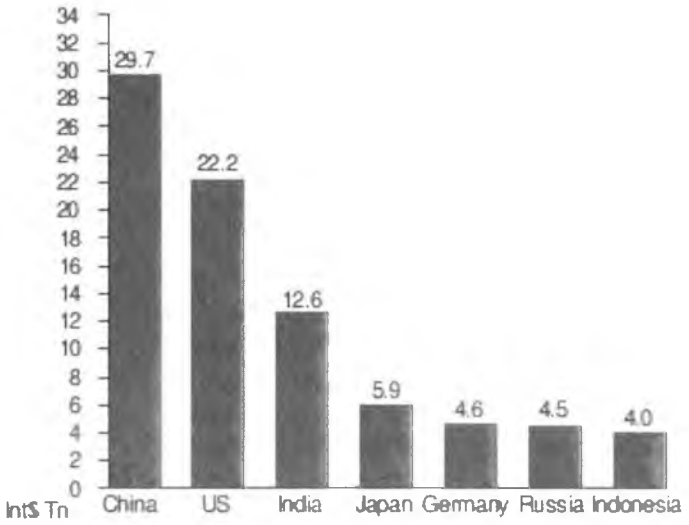
In late 2012, the Indian Government announced reforms and deficit reduction measures to reverse India's slowdown. The India's medium-term growth is positive due to a young population and corresponding low dependency ratio, healthy savings and investment rates, and increasing integration into the global economy etc. However, India has many long-term challenges that it has not yet fully addressed, including poverty, inadequate physical and social infrastructure, limited non-agricultural employment opportunities, inadequate availability of quality basic and higher education, and accommodating rural-urban migration. In the mean time, large sections of the Indian population continue to suffer, very acutely, with reference to a whole range of development deficits. Since the early 1990s, significant changes in the macroeconomic policy regime along the neoliberal trajectory has resulted in a weakening of the interventions by the State, in many important economic and social arenas, and consequently a whole range of positive impulses have suffered a good deal .. The economy of India is characterized as a developing market economy. It is the world's fifth-largest economy by nominal GDP and the third-largest by purchasing power parity (PPP). According to the IMF, on a per capita income basis, India ranked 142nd by GDP (nominal) and 119th by GDP (PPP) per capita in 2018. India is the 19th-largest exporter and the 10th-largest importer in the world. The economy slowed to around 5.0 per cent for the 2012-13 fiscal year compared with 6.2% in the previous fiscal. On August 22, 2013 rupee hit an all time low of 65.56 against US dollar. In order to control the fall in rupee, the government introduced capital controls on outward investment by both corporate and individuals.

Methodology of the Study

The paper is mostly analytical and based on secondary data collected from various sources such as Central Statistic Office, World Bank, and Economic growth Performance of Indian Economy, Union budget.

The Indian Government rejoicing, for some time now, the country's recent macroeconomic performance, in particular, high growth rates of the gross domestic product. The economic privileged within the country as well as a very substantial section of the middle classes have coupled the carnival sleet India as the new growth 'miracle' in the developing world. As regards the structure of growth, the most significant feature of the recent years has been a striking increase in the share of the tertiary sector., that the Indian economy's progress with respect to most economic and social indicators has been a remarkable one since the early 1990s. If we look at the GDP trend, from 1991 onwards, it is clear that since the economic liberalization of 1991, India's GDP has been growing at a higher rate.

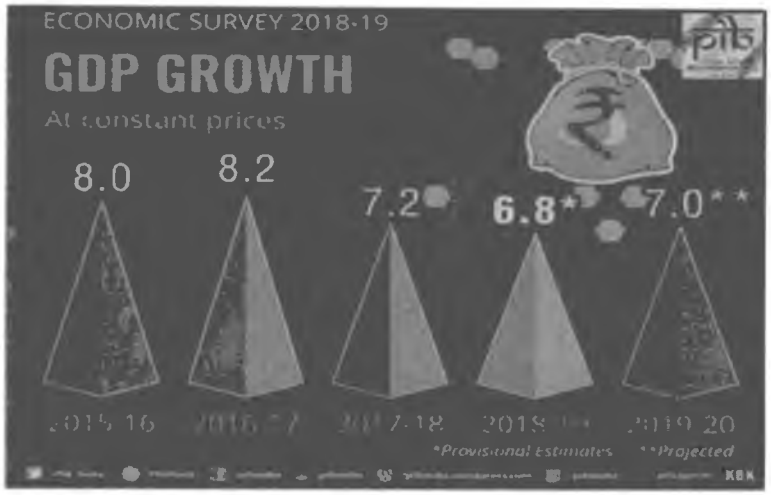
Figure.1 : Largest Economies by PPP



Source : Largest economies by PPP, GDP in 2020, According to IMF

The data revealed by the World bank, IMF and CIA that the GDP growth rate of India is at third level in world 2018, 2019, and 2020. The GDP growth rate of India during 2010 was even more impressive as India is able maintain a high rate of growth even through world economy was facing a global melt down. The economic privileged within the country as well as a very substantial section of the middle classes have coupled the carnival sleet India as the new growth 'miracle' in the developing world. As regards the structure of growth, the most significant feature of the recent years has been a striking increase in the share of the tertiary sector.. Economic Growth Rate and Indian Economy Indian Government has been , for some time now, the country's recent macroeconomic performance, in particular, high growth rates of the gross enveloping impression has been created by the official spokespersons, as well as the media, that the Indian economy's progress with respect to most economic and social indicators has been a remarkable one since the early 1990s.

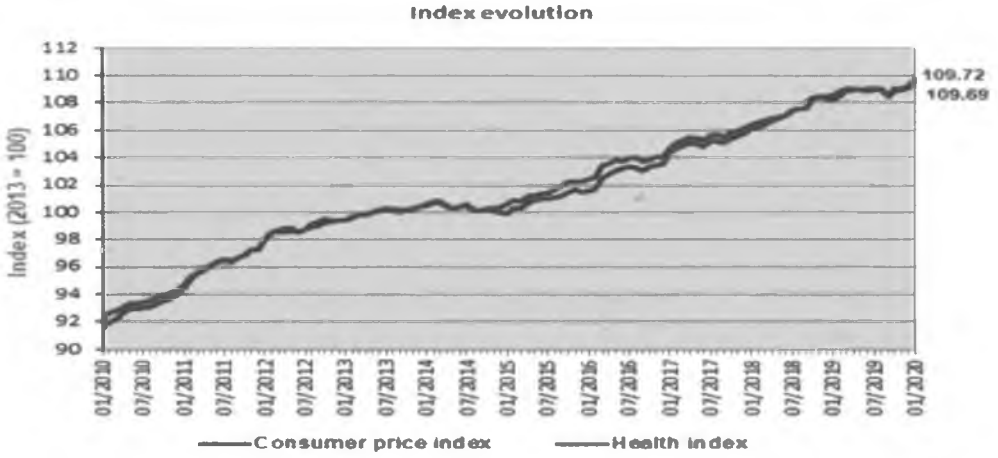
Figure.2 : GDP Growth Rate



Source : Secondary data

The data revealed that the GDP growth rate of India is at high level. The GDP growth rate of India was even more impressive as India is able maintain a high rate of growth even through world economy was facing a global melt down. The economic privileged within the country as well as a very substantial section of the middle classes have coupled the carnival sleet India as the new growth 'miracle' in the developing world. As regards the structure of growth, the most significant feature of the recent years has been a striking increase in the share of the tertiary sector.

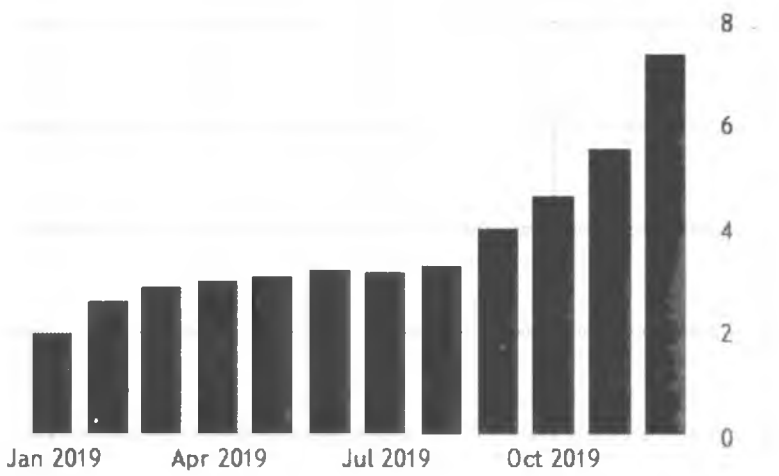
Figure.3 : Inflation Rate in India (Annual Change on Consumer Price



Source : Secondary data

India Government External Debt Source: Ministry of Commerce and Industry High levels of fiscal deficit relative to GDP tend not only to cause sharp GDP ratio, but also savings and investment, and consequently growth.. The combined fiscal deficit of the centre and states stood at 91. There was a clear improvement in the early nineties. After falling to 6.26 percent in 1996-97, the fiscal deficit to GDP ratio started rising again and was around 10 percent in 2001-02-03. Although only marginally 91, this level of fiscal deficit was qualitatively much different because it was accompanied by much higher levels of the debt-GDP ratio, the ratio of interest payments to revenue receipts. The inflation rate in India was recorded at 5.79 percent in July of 2013(Ministry of Commerce and Industry 2013). India Inflation Rate averaged 7.72 Percent from 1969 until 2013, reaching an all time high of 34.68 Percent in September of 1974 and a record low of in May of 1976. In India, the wholesale price index (WPI) is the main measure of inflation. The WPI measures the price of a representative basket of wholesale goods.

Figure.4 : Trend of Consumer Price Index



Source : Secondary data

Inequality of Income Growth Inequality in earnings has doubled in India over the last two decades, making it the worst performer on this count of all emerging economies. The top 10% of wage earners now make 12 times more than the bottom 10%, up from a ratio of six in the 1990s. Moreover, wages are not smoothly spread out even through the middle of the distribution. The top 10% of earners make almost five times more than the median 10%, but this median 10% makes just 0.4 times more than the bottom 10%. There is evidence of growing concentration of wealth among the elite. The consumption of the top 20% of households grew at almost 3% per year in the 2000s as compared to 2% in the 1990s, while the growth in consumption of the bottom 20% of households remained unchanged at 1% per year. In comparison, the income of the bottom 20% of households in China grew at double the rate in the 2000s as compared to the 1990s, while the increase for the top 20% of households was much slower. Corruption in India is a major issue and adversely affects its economy. In 2005

a study conducted by Transparency International in India had found that more than 62% of Indians had firsthand experience of paying bribes or influence peddling to get jobs done in public offices successfully. In its 2008 study, Transparency International reports about 40% of Indians had firsthand experience of paying bribes or using a contact to get a job done in public office. In 2012 India has ranked 94th out of 176 countries in Transparency International's Corruption Perceptions Index, tied with Benin, Colombia, Djibouti, Greece, Moldova, Mongolia, and Senegal. Most of the largest sources of corruption in India are most of the largest sources of corruption in India are entitlement programmes and social spending schemes enacted by the Indian government; for examples Mahatma Gandhi National Rural Employment Guarantee Act and National Rural Health Mission. Other daily sources of corruption include India's trucking industry which is forced to pay billions in bribes annually to numerous regulatory and police stops on its interstate highways.

Anti-Corruption Effort

India has been ranked at the 80th position among 180 countries and territories in the Corruption Perception Index (CPI) prepared by Transparency International. The CPI, released at the WEF 2020 here, ranks 180 countries and territories by their perceived levels of public sector corruption, according to experts and business people. Denmark and New Zealand have cornered the top spot, followed by Finland, Singapore, Sweden and Switzerland in the top ten.

Other countries in with a score of 41, India is at the 80th spot. The rank is also shared by China, Benin, Ghana and Morocco. This year's analysis shows corruption is more pervasive in countries where big money can flow freely into electoral campaigns and where governments listen only to the voices of wealthy or well-connected individuals, Transparency International said. According to the non-government group's report, even in democracies, such as Australia and India, unfair and opaque political financing and undue influence in decision-making and lobbying by powerful corporate interest groups, result in stagnation or decline in control of corruption. Not only are more than two-thirds of countries -- along with many of the world's most advanced economies -- stagnating, some are seriously backsliding.

Conclusion

From the above analysis, it is clear that India is able to achieve a robust growth especially after the post reform era. The per capita GDP growth rate of India is also enhancing over the years; but if we compare the world per capita GDP growth rate to Indian scenario, it is very low. Growing fiscal deficit, inflation and corruption are the main problem of Indian Economy. Looking at these problems with growing income inequality, India is following inclusive growth model which is also full of contradiction and debates. However, growth is not only important from internal economic and social perspective but also external economic front. But in this process, full market deregulation is more prone to external shocks and instabilities of world economy. At the same time, social improvement and government spend are also not a free flow mechanism unless guided by proper regulation. So, for inclusive growth of India, both development paradigms are important and should be mixed with proper care and national priority.

References

Ullekh NP, ET Bureau (2013) 'Amartya Sen vs Bhagwati: Who is right in the debate on Gujarat-Kerala growth models?', Economic Times.

"World Bank, International Comparison Program database". Retrieved 22 July 2019.

Field listing - GDP (PPP exchange rate), CIA World Factbook

"World Economic Outlook Database, 2019". IMF.org. International Monetary Fund. Retrieved 25 October 2019.

https://economictimes.indiatimes.com/news/economy/finance/indian-economy-may-grow-7-6-in-fy20-un-report/articleshow/67659157.cms?from=mdr

https://en.wikipedia.org/wiki/Economy_of_India

https://www.ibef.org/industry/science-and-technology.aspx

https://economictimes.indiatimes.com/news/economy/finance/indian-economy-may-grow-7-6-in-fy20-un-report/articleshow/67659157.cms

https://www.indiabudget.gov.in/doc/frbm1.pdf

https://www.tutor2u.net/economics/reference/india-economic-growth-and-development

https://www.senat.fr/international/anglais/intervention_singh_anglais.pdf

http://www.moneycontrol.com/ms/moneycontrol-virtual summit

https://www.business-standard.com/article/economy-policy/gdp-first-advance-estimates-predict-economic-growth-at-5-in-2019-2020-120010700990_1.html

https://tradingeconomics.com/india/gdp-growth-annual