

# ROLE OF FINANCE PROFESSIONALS IN THE RAPIDLY EVOLVING FINTECH ERA



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## Abstract

*The emerging changes in FinTech space have brought in a plethora of new opportunities as well as new challenges to the finance professionals. We will see in this article about some of the unique value additions a finance professional can make in the changing business landscape. We will also explore the impact of AI on the roles of various professionals including Cost Accountants.*

## INTRODUCTION

The theme of the recent Regional Cost Convention 2022 organised by the Southern India Regional Council of the Institute of Cost Accountants of India namely “**Changes in the Business Landscape: Future Ready Finance Professionals**” is illustrative of the vision statement of the Institute which states : ‘The Institute of Cost Accountants of India would be the preferred source of resources and professionals for the financial leadership of enterprises globally’. India is undergoing a paradigm changes in the digital era. To encourage innovation and at the same time to regulate the FinTech industry, RBI has started its own regulatory sandbox ecosystem in August 2019. The recent introduction of Central Bank Digital Currency (CBDC) by the RBI is the latest development in the digital space. The emerging changes in FinTech space have brought in a plethora of new opportunities as well as new challenges to the finance

professionals. Some of the unique value additions a finance professional can make in the changing business landscape are discussed in this article. It also explores the impact of AI on the roles of various professionals including Cost Accountants.

## FIN TECH AND CHANGING BUSINESS LANDSCAPE

Financial Services Board (FSB), an international body that monitors and makes recommendations about the Global financial system defines FinTech as “technology-enabled innovation in financial services that could result in new business models, applications, processes or products with an associated material effect on the provision of financial services”. The quick, cost effective and easily accessible solutions offered by FinTech segments have taken financial services to every nook and corner of the country. Due to their customer centric products, FinTech companies have started posing challenges to traditional financial institutions. Of late,

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traditional financial institutions have begun collaborating with FinTech companies. This is a win-win situation for both of them and customers are also benefiting in the process by being assured of traditional security as well as innovative services.

Shri Pramod Kumar Ojha, in his article on “FinTech: Financial inclusion or Banking disruption”, in the July-Sept 2022 issue of Bank Quest, traces the evolution of FinTech as follows:

<b>Period</b>	<b>1866-1967</b>	<b>1967-2008</b>	<b>2008 - current</b>	
<b>Era</b>	Fintech 1.0	Fintech 2.0	Fintech 3.0	Fintech 3.5
<b>Key elements</b>	Infrastructure/ computerization	Traditional/ internet	Mobile/start-ups/new entrants	
<b>Remarks</b>	Telegraph, railroad and steamship were utilized for cross border financial transactions	Shifting from analog to digital	Distrust of the traditional banking and emergence of new player	Globalization of digital banking

Source: Shri Pramod Kumar Ojha’s illustration based on Bester A, 2022.

He uses the mnemonic ‘SECURE’ - Security, Education, Customer, Undertaking, Regulation and Evolution – in the article, to stress the features necessary for the robustness of the financial institutions in the changing business landscape. Under the point ‘Education’, he elaborates that frontend professionals have to understand the needs of the customers, sell them appropriate products and have to pass on the feedback of customers to backend professionals who in turn have to envisage and develop customer centric products.

Education is the key for the success of finance professionals in this ever evolving FinTech era. It is necessary for professionals to become tech savvy and to update their domain knowledge continuously.

**FINANCE PROFESSIONALS AND ARTIFICIAL INTELLIGENCE**

Artificial intelligence (AI) is one of the buzz terms in digital sphere in this decade, though the term itself was originally coined as early as 1955 by American computer scientist Dr. John McCarthy. FinTech innovations under the category of Data Analytics and Risk Management have resulted in large scale use of Artificial Intelligence and Robotics in the day to day operations.

AI has already integrated with the operations of the public and private sector organisations which is visible from the number of chat bots we come across in our day-to-day life. Top public sector and private sector banks in India have introduced AI in their customer service applications in the form of chat bots. Airlines and Government offices like Income Tax office offer AI based customer service solutions.

Newspapers and journals carry latest updates in the field of AI on continuous basis as to the trends, needs, opportunities and skill gaps in AI nationally and globally. Keeping pace with latest technological trends is essential for a professional to survive in the profession.

**CHANGING DIMENSIONS**

AI has influenced and enhanced the capabilities of today’s industries and this trend has been termed as Industry 4.0. The term ‘Industry 4.0’ was defined and discussed by renowned economist Dr Klaus Schwab, founder of World

Economic Forum, in his article, ‘The Fourth Industrial Revolution - What It Means and How to respond’ published in a magazine in December, 2015. His candid observations that ‘We stand on the brink of a technological revolution that will fundamentally alter the way we live, work, and relate to one another. In its scale, scope, and complexity, the transformation will be unlike anything humankind has experienced before.’ are worth remembering.

That article identified the various industrial revolutions as follows:

<b>Version</b>	<b>Driving Force</b>	<b>Achievement</b>
Industry 1.0	Water and steam power	Mechanisation of production
Industry 2.0	Electric power	Mass production
Industry 3.0	Electronics & Information Technology	Automation of Production
Industry 4.0	Industry 3.0 & Fusion of Technologies	Evolving Cyber Physical Systems

Industry 4.0 can be described in short as an industrial internet of things, powered by Artificial Intelligence, leading to smart factories. The consequences of smart factories are well picturised by the jocular remarks of distinguished professor Warren Bennis that ‘The factory of the future will have only two employees, a man and a dog. The man will be there to feed the dog. The dog will be there to keep the man from touching the equipment’! In this challenging situation, the professionals have to look for opportunities for adapting themselves to new trends and fit themselves in new roles and functions.

**HOW DOMAIN EXPERTISE AND AI SUPPLEMENT EACH OTHER**

Applications of Artificial Intelligence are distinguished by their subject matters. In the book ‘Introduction to AI’, authors Eugene Charniak and Drew McDermott point out how AI in a particular domain is interlinked with domain knowledge. They highlight it by the example of robotics, stating that many of the issues that arise in the construction of robots which weld together car parts are more properly in

the domain of mechanical engineering than AI. It is then needless to say that mechanical engineers have a role to play in efficient building of robots. Thus, the professional horizons of mechanical engineers are modified and expanded by robotics.

AI in banks so far caters mainly to answering customer queries. The ideal starting point for AI is in governance functions at the regulator level. AI in Reserve Bank of India's regulation and supervision functions, when integrated with AI in governance of individual banks, will ensure automatic reporting for disclosure and compliance purposes. Such a scenario, *inter alia*, will make divergence in NPAs (that is a sort of under reporting of NPAs by banks) a thing of the past. AI can play a big role in the day-to-day operations of bank like credit appraisal, credit assessment, follow up, recovery, provision making and NPA analysis. AI can capture unusual behaviour and data in a transaction and keep a watch on suspicious transactions, money laundering and frauds.

In the July-September 2018 issue of Indian Institute of Bankers' magazine Bank Quest, Dr A. S. Ramasastri, Director, Institute for Development and Research in Banking Technology (IDRBT) has written an article on "Banking on Technology in the next decade: From SMAC to FABS?". He narrates therein that banks have adopted the SMAC technologies – Social, Mobile, Analytics and Cloud – very innovatively and are further moving towards four emerging technologies of FABS – 5G, AI, Blockchain and Smart things. In building such AI applications and in interpreting the results of such analytics, the operational horizons of banking professionals are reshaped.

In corporate governance too, AI can play a very significant role. Board room diversity is much advocated nowadays. Diversity among members of Board in many aspects like age, sex, experience, expertise,

outlook, style and approach ensures effective and innovative decision making. But in practice such diversity in the Board room is hard to obtain. Now AI with its vast repository of knowledge of past situations and decisions can assist in Board room. With due protection for data privacy, Big Data Analytics (BDA) can help in saving the wisdom of Boards in repositories, transcending time and distance barriers. AI can be integrated with Board functions either as a supervisory or semi supervisory model or as an independent neural network with deep learning capabilities. Thus, AI can add to the independence of the Board in its true sense.

AI can get insights of customer preferences, by observing his spending pattern and suggest customer specific products and services. Techniques of Data Warehousing and Data Mining facilitate top executives to drill down and get new, trendy and hidden information from databases. Based on the external and internal information of an organisation, AI can aid in its goal setting and direction, to achieve its mission and vision. Thus, AI can help not only in operations but also in governance.

### ROLE OF DOMAIN EXPERTS IN BUILDING ERROR FREE AI

Dr Rekha Melwani, in her article on AI in the March 2019 issue of The Management Accountant, quotes Bill Gates as stating, 'The first rule of any technology used in a business is that automation applied to an efficient operation will magnify the efficiency. The second is that automation applied to an inefficient operation will magnify the inefficiency'. Thus, the success of BDA and AI will be determined by the underlying quality and veracity of data. The adage regarding computer applications, viz. 'Garbage in, Garbage out' is apt for BDA and AI too. This emphasises the need for cleansing the data to a certain extent, for making meaningful predictions. The role of

domain experts is valuable in assuring data veracity. They have a role in interpreting AI based decisions too.

### ROLE OF DOMAIN EXPERTS IN BUILDING ETHICAL AI

At the annual meet of World Economic Forum (WEF) in Davos in January 2020, Shri Satya Nadella, CEO of Microsoft and Professor Klaus Schwab, founder of WEF, discussed a number of issues. It was interesting to listen to them discussing ESG (Ethics, Sustainability and Governance), AI and ethical AI. They touched upon points like whether ethics in AI is needed to be built at regulator level or at implementation level. It is obvious from this discussion that domain experts have a role in building ethical AI too.

### CONCLUSION

In the scenario of AI integrating with corporate governance, professionals need not worry about the diminishing importance for their traditional professional wisdom. Their contribution is still required for building relevant AI applications and for interpreting the information thrown by AI.

Charles Darwin's theory that "It is not the strongest of the species that survives, nor the most intelligent, but the one most responsive to change" is true in the ever evolving FinTech era. Thus, finance professionals who keep adapting to innovations in the FinTech industry will always be the most sought after. **MA**

### References :

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