



The impact of IOT in finance with special reference to Peenya Industrial Area (Bangalore)

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Abstract

The present research paper addresses the effect and impact of digital revolution and its associated problems in companies. This paper mainly deals with innovation leads to ease of doing business. Some business firms are struggling in order to survive in the market. Business environment may or may not adjust to new technological advancement. Due to increase in the usage of mobile phones related things (MPT), internet kind of things business are becoming, technically speaking easy but perception of government, consumers and general public are rational. In order to overcome this negativity TAI has been widely used. We have selected 100 respondents and gathered the opinions and perception in 4.O in Finance These respondents include academicians, Research Scholars, Financial Managers and Engineers (IT). We have also used secondary data to analyse the current trend in 4.O.

Keywords: finance, industry 4.O, MPT, rational, TAI

Introduction

Industrial revolution and manufacturing process directly affects financial system of the company. When we are discussing about the impact of 4.0 in company there are two things to be analysed 1. Opportunities or possibilities 2. Challenges or issues in the industrial revolution. 4.0 industrial revolution nothing but revolution in the technology, and it is the fusion of technology i.e. it blends digital technology and physical technology and provides new range of production technologies – people are interconnected through connectivity throughout the world. The important feature of 4th industrial revolution is “exponential growth” in the industry.

Acceleration of technological advancement leads to investment multiplier effect in the economy. Advances in technology are accelerating the process and function of human activities in the business. At the same time removing humans from the workplace creates job cuts and less utilization of human skills. In order to achieve a common goal, humans and robots are working side by side. There is a sudden shift from knowledge to technological aspects creates benefits of adoption of automation and AI is expected to grow slowly. At the same time not all activities will be appropriate for automation. We have to consider the human time, value and cost of implementation against the future benefits. Information is always abundant we have to gather, store, analyse and interpret to conduct effective business operation.

It is the time to replace all the humans with robots (artificial intelligence, automation etc.) the maximum utilization of human resources leads to exploitation of skill, talent and knowledge of the employees. In order to avoid the exploitation of human resources in the organization, companies can utilize artificial intelligence to overcome such problem. Using AI and automation creates a productivity rather than creating unnecessary problem associated with labour laws and Industrial relations.

Technology is the future that creates flexibility to the environment. This will require changes in finance, taxation and accounting. Logistics, Suppliers and supply chain can also be integrated and collaborated through consistent interfaces. Integration of information and communication technology is the new way to maximize product quality, design and functionality.

Industry 4.0 is about connectivity it is an opportunity to radical change in industry needs and responses which needs to the society. In the next few years we can expect digital transformation of life to bring huge changes. Everything from science, robotic and Information technology. it is not just relevant to management but it is important to everyone. If we want to success in the market, we need to keep this tool. The amount of global competition is increasing rapidly, in order to get succeed in the market numerous companies follows different strategies that affects finance and capital structure in the business.

- Companies need to understand the cost of implementing a particular technology and that impacts on business process and industrial relations.
- Industry 4.0 in finance promoting innovation, increasing competition and better services to customers.
- The path of 4.0 is not been easier competition becomes pressure in the market. Values are diminishing and creates hindrance for many start-ups.

The famous thought in the financial word is “high return involves high risk; low return involves low risk”

Accelerates and creates innovative opportunities in the field of finance. Manufacturers and business people adopt distributed network models. Which creates an opportunity for job seekers in the field of finance and commerce. This is the information age in order to analyse company’s data and information on customers, their behaviour, buying habits, interest in the markets, marketing techniques, brand creation, expansion of business, acquisitions and mergers in

which they operate Being able to analyse that data has become a critical skill for decision makers at every level of an organizations.

4.0 industrial revolution provides inter connection between men, material, method and machinery and then internet of things and bringing more optimised services to customers by this, the entire flow of material was automated and well regulated. This helps to use resources and man power very effectively. As per the requirement of the customer, with regards to the performance, the customer was involved at each and every phases of the business development to keep them track on the progress of the business.

The technological changes have highly significant effect on production and trade. The contemporary business environment has become an increasingly more developed and complex environment and IT domain has contributed greatly to this due to multiple cycle of innovation that has experienced over time.

Objectives

- To understand the concept of industry 4.0 in Finance.
- To study the impact of industry 4.0 in Finance in Peenya industrial area.
- To make list of findings.
- To give appropriate suggestions and concussions.

Limitations

- Due to time constraints and limited resources, the sampling frame for this study was only limited to 100
- This paper limited to Peenya Industrial Area. We have approached 25 IT engineers, 25 research scholars, 25 Finance Managers and 25 Academicians.
- The study restricted to Peenya Industrial Area only.
- The result may not applicable to other areas.
- The result obtained is based on the respondents' opinion so there is chance of bias.

Research Methodology

The research methodology consists of both primary and secondary data and also we have used both qualitative and quantitative method of analysis for the study that is face to face interview, interviewers asked questions to academicians, Research Scholars, Financial Managers and Engineers (IT). Accordingly note done the responses from the respondents. We have used secondary data collected from various sources such as newspapers articles and Internet.

Review of Literature

1. A study on "Impact of industry 4.0 and internet of things (IOT) on the business"-accompanied by Juditnegy and Juditolah. Publication details: www.mdpi.com/journal/sustainability. This paper focus on data analytics, IOT, IIOT, Automations, IT tools and techniques, Robotics, cloud computing, big data techniques. The outcome of this paper helps us to rethink investments in IT tools.
2. A study on "Industry 4.0 and Environmental accounting- new revolutions? Accompanied by the Roger and Katherine Christ. Publication details: Asian journal of sustainability and social responsibility. This paper focuses on impact of industrial revolution 4.0 on supply chain, logistics, IT, Finance and Accounting. The outcome of this paper heavy investments in industry 4.0

will lead to increase in ROI for long period of time.

Challenges

Finance constraints and skill shortages is the major problem in the company for implementation of smart technologies. at the same time respondents positively reacted for technology and automation plays a vital role in planning, budgeting and forecasting the profits, revenues and overheads.

The internet of things and that communication between devices in part of what's made industry 4.0 possible. Everything in the factory is on a network that also includes sales partners, suppliers, equipment manufacturers and clients report.

Findings

- 60% of the respondents reacted positively on early detection of financial frauds and errors creates minimizing the damages.
- Implementation of internet of things makes easier to access data, forecast the profitability and analysis of return on investments. (Secondary Data)
- There is a strong relationship between development of digital technologies and level of trust in institutions. (Secondary Data)
- Increasing globalization leads to decreased level of trust in institution. It is the new era finance automation represents the beginning of the trust giver. It is the only solution for avoiding the risk and control on management. (Secondary Data)
- All the firms use data to detect market movement and analyse themselves from competitors. From this we can immediately make decisions to find out advantages and stay competitive in the market. (Secondary Sources)
- 50% of respondents reacted to digitalization of the audit process will help increase its security by allowing a digital trail of when and by whom each file was accessed.
- 20% of respondents reacted that small firms cannot face enormous competition at the same time digitalizing the firm has to consider financial problems
- 50% respondents reacted to finance jobs are at risk of automation. It is the highest of any other profession.
- 30% worried that implementation of new technologies would cause disruption and delay
- 35% fear about job losses that is after caused by advancement in technology.
- 48% of financial services companies reported excellent progress in finance automation in areas that were priorities for their organizations.
- 10% responders reacted to automation and advancement of technology slowdowns human values and efficiency.
- 46% respondents said that automation in business improvises communication throughout the supply chain.
- 23% said that data along with product oriented business can survive in the market for longer period than a product oriented business.
- 62% respondents are reacted to decision making i.e. workers in the organization are still learning to convert business data into useful information in decision making process.
- Skill and training requirements have come down, real time processing in the business reduced to 1/10th of the early time consumption. Down time come down by 20% and productivity gone by 25%.

- Many said that 4.0 provides funds for digitalization with tomorrow's gains. Profits from such industries can be re-applied in the investments.

Conclusion

Information technology always faces different challenges, so Technology can fundamentally alter how to do business. In today's business world, understanding of money movements within as well as outside the organization, tracking such movements is very difficult without improvements in technologies or changes in company policy and regulatory environment. It is very crucial for any organization to keep up to date with these changes. Technological advancement such as cloud, AI, Robotics and other automation process. It also includes ability to save cost, assessment of risks and experiments of research and development. We should also govern the risk associated with each technological innovation. This concept is very new to India and this concept is still long. Only few multinational company can adopt such concepts, mostly new enterprises built to prove the concept. This automation process definitely boosts job in the economy. 4.0 industrial revolution provides inter connection between men, material, method and machinery and then internet of things and bringing more optimised services to customers by this, the entire flow of material was automated and well regulated. This helps to use resources and man power very effectively.

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