

# Information Technology: An Overview and its Impact on Economy

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## **ABSTRACT**

Mankind has handled information for thousands of Years. In the early technologies abacus and printing were the major concepts. In the recent three decades information technology has experienced a rapid development. This rapid Development has put an noticeable impact on the economy. As per the studies and surveys the information technology has put both positive and Negative impacts over the economy but it is great enabler of development and has more positive impacts through increase in productivity educational advancement and access, community development, creation empowerment and enhanced economic growth .The information technology has also shown its impact in e-commerce, Marketing tactics, Job insecurity.

**Keywords:** *Information Technology, Economy, Community, Development, Growth, Labour Market.*

## **I. INTRODUCTION**

“The Phrase information Technology refers to creation, Gathering, Processing, storage and delivery of Information and processes”. The Term information technology was coined probably in late 1970s, for handling information. Its applications are industrial, commercial, administrative, educational scientific, professional.

Educational institutions have adapted to information technology with vast speed and now adjudged by the level of their technological acquisition, dissemination information via internet and use of information technology tools with in their premises. Distance education and open universities are more feasible today through internet. Advanced countries are giving more emphasis today on information technology education since childhood educations.

## **II. INFORMATION TECHNOLOGY AND COMMUNITY DEVELOPMENT**

Information technology has also raised the level of community development. The most traditional Methods of communications like letters, post were replaced by the recent trends of information technology tools like landline phone, later mobiles and most recent android Phones with facility of audio-video calls and communications through social sites and networks has emerged today. The latest technologies have more features that are helpful in economics and social states of communities.

The information Technology advancement has led to two major components: E-commerce and technical Jobs. E-commerce (Via Internet) has ability to utilize and elaborates databases on customer preferences. Therefore there is no need to data entry and manual collections customers are interrelated via internet to collect their

reviews and comments for a production business. 24x7 hour services provision in being given by companies to customers through latest technologies. Hence customers or end users have more satisfaction from the side of company assistance. More reach to customer is possible with help of latest technologies like calls etc. On the whole end benefit to customer. E-commerce systems stream line the purchase manufacturing and delivery of products. This way it saves money in salaries, profits, benefits and trainings. In case of technical jobs, the information technology has redefined job opportunities. These jobs range from computer equipment operator at lowest level to system Engineers at top levels. The beginnings of e-commerce can be traced to the 1960s, when businesses started using Electronic Data Interchange to share business documents with other companies. In 1979, the American National Standards Institute developed ASC X12 as a universal standard for businesses to share documents through electronic networks. After the number of individual users sharing electronic documents with each other grew in the 1980s, in the 1990s the rise of eBay and Amazon revolutionized the e-commerce industry. Consumers can now purchase endless amounts of items online, both from typical brick and mortar stores with e-commerce capabilities and one another. Snap deal, shop clues, flip kart, homeshop18, Naaptol, etc are few other online shopping businesses that have proved to contribute to economy today in all aspects

### **III. INFORMATION TECHNOLOGY AND ECONOMIC GROWTH**

The companies that do not cope up with new information technology tools are left behind in gaining productivity and competitiveness. Companies with less technology resources lack behind in all aspects from those which are fully equipped with latest technologies. Information with Capital and labour are side by side two critical and essential production factors. The labors with information technology expertise are more prone to production and growth. While less skilled ones result in low production and Growth. Technological advances really impact the economic growth. The theories states that economic growth will not take place unless there are technological advances, and those advances happen by chance. Once an advance has been made, then labor and capital should be adjusted accordingly. It also suggests that if all nations have access to the same technology, then the standard of living will all become equal. There shall be no differences in the living standards of people if all of the nations experience same economic growth. Information Technology today is doing its best to contribute in the economic growth of nations.

### **IV. INFORMATION TECHNOLOGY IN WORKPLACE AND LABOUR MARKETS**

In today's world of technology, the information technology has given provision to communicate over a long distances via ways that are complementary to traditional ways of communication. Today's information technology provides provision to communicate face to face though being located at distances. The places where weather condition are very less favorable outside, the workers work for the companies from their own residences or localities, rather than centralized workplace. This mechanism increase economic activities

and at the same time becomes more profitable by reducing cost and improving in lots of savings in terms of transformations cost, labour and facilities and infrastructure. Customer's assistance is also being given by the means of information Technology by various companies. Information Technology has also given demand to skilled labourers in various fields. Professionals and skilled ones are being hired with attractive packages of salaries. On the one side these professional and skilled people have lifted up their companies and firms in economics spheres, on the other hand they are paying good income taxes against their salaries. These both factors together are giving rise to national economies.

## **V. INFORMATION TECHNOLOGY AND EDUCATION**

"Computers have been used in schools since first Apples were introduction 1970s." However their impact was limited then. As information technology has influenced at all levels from elementary schools to universities. Multimedia educational programs are being played to teach kids to explore the web for information. To save money, Time and to improve the performance of student's information technology has been playing a vital role. "A concept of digital libraries has evolved from where students can download books and read them. In addition to this, Internet is store house of information and we can take any kind of information from it." Digital libraries provide e-books, so there are no transportation charges and buying books is no more necessity. Even paper wastage will be controlled A virtual classroom is an online learning environment. The environment can be web-based and accessed through a portal or software-based and require a downloadable executable file. Just like in a real-world classroom, a student in a virtual classroom participates in synchronous instruction, which means that the teacher and students are logged into the virtual learning environment at the same time. Many schools and businesses have rolled out virtual classrooms to provide synchronous distance education. Virtual classroom software applications often employ multiple synchronous technologies, such as web conferencing, video conferencing, live streaming, and web-based VoIP to provide remote students with the ability to collaborate in real time. To enhance the educational process, applications may also provide students with asynchronous communication tools, such as message boards and chat capabilities. All of the above advancements in the field of education are result of information technologies and these have resulted in upliftment of economy in some or the other ways.

## **VI. INFORMATION TECHNOLOGY AND NATIONAL DEVELOPMENT**

Internet today can be developed to be catalyst for national development because all of the technical and scientific ideas are exchanged via information today. It is the internet that has enabled to share the knowledge through the world. The Developed nations may dominate the developing nationals. Internet provides a good platform for those. Information Technology today has developed the nations in the Economic, Political, Scientific, Material, Cultural and Social fields. National Development is the total effect of all citizen forces and addition to the stock of physical, human-resources, knowledge and skill.

## **VII. INFORMATION TECHNOLOGY AND SCIENCE & ENGINEERING**

“Powerful Computers are used to simulate dynamic process in the practice of science and engineering”. Computers and Internet as part of information Technology has made significant influence in the field of science and engineering. Today information technology is being used to diagnose human body disorders, Digital and image processing today has enabled doctors to better understand the human body parts and also their disorders. Working towards proper disorders saves both time and money rather most important lives of human beings.

Satellites are being used. The information technology today enables signals from one corner of earth to reach the other corners, also eliminated the need of wires between two different stations. Since wire being used has been reduced to minimum point, thus there are no wastes of national resources. On the whole it contributes to the rise of economy.

Information technology has shown its amazing results in the field of topography. Today computerized geographic information has given the provision of world maps for observations. These maps via internet are being used to navigate from one place to another. The use of navigators has reduced transport costs and saved time today. Person can reach his destination in less cost wasting no time in more efficient ways.

## **VIII. CONCLUSION**

Information Technology has redefined the world economic concepts by providing the digital economy. Thus, it has shown improvements in productivity, education, social and political spheres of the world. These all together in turn have influenced the world's economy. All types of nations whether technological advanced or less advanced all are doing their efforts to contribute to world's economy but efforts must be made to raise the developing nations in Information technology that they too may contribute their best. This Practice will develop the feeling of harmony and oneness to work for economic Growth among one and all.

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