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#### **Dynamics of Modern Technology and Industrial Development**

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#### Abstract :

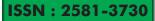
The economic growth of the country directly depends upon industrial development and modern technological developments become an engine of industrial progress. The Innovations such as combustion engines, electricity, and assembly lines have all had a significant role in manufacturing, where the past three industrial revolutions have changed the way manufacturing is performed. The technical progress within the manufacturing industry continues at a high rate and today's progress can be seen as a part of the fourth industrial revolution. Technologies significantly affect humans as well as other animal species' ability to control and adapt to their natural environments. Technology changes the world's practices and also possess develops the field of education. These days most people are dependent on technology for their work, after Covid 19 the use of technology increasing day by day but practices that are based on technology affected positive and negative to life of the people. The paper makes to attempt the dynamics of technology for industrial development.

Keywords: Industrial Revolutions, Natural Environments, Covid 19, Industrial Development

## **INTRODUCTION :**

Technology is the making, modification, usage, and knowledge of tools, machines, techniques, systems, and methods of organization, to solve a problem, improve a pre-existing solution to a problem, achieve a goal, handle an applied input/ output relation, or perform a specific function. It can also refer to the collection of such tools, including machinery, modifications, arrangements, and procedures. Modern Technology is modern products, services, and infrastructure that are designed and built using scientific knowledge and engineering. This includes information technology based on software, computers, networks, television, cell phones, artificial intelligence, and audio & visual technology. It is easy to see the advantages of Modern Technology in our everyday lives. Technology has given us mobile phones, computers, televisions, smartwatches, and many other useful things. Industrial revolutions are today often perceived as an historical term, describing the transition from workshops to factories, from horses to steam power. The first industrial revolution was a major step in human history as population and average income experienced substantial growth as a result of the technological transition. The major transition was in manufacturing technology where production went from muscle-powered technology to machines. This resulted from both factories emerging as well as new ways of processing iron, improved waterpower, and the use of the steam engine. The second industrial revolution introduced the power of electricity and the combustion engine to society and caused a shift towards a new economy. However, the introduction of electricity did not create a rapid productivity shift, as electricity-based





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technology diffusion was slow through the industry. One reason identified by several historians is the fact that staff and managers needed time to adjust to the new technology. The third industrial revolution is referred to as the digital revolution. Some consider this revolution to have started in the middle of the 1990s when personal computers were linked and the first iteration of the internet was taken into play. The impact of this revolution takes its form both in the massive use of social media as well as solar power and artificial intelligence

## **1.2 OBJECTIVE :**

- 1. To explore the nature of modern technology in Indian industries
- 2. To examine the technical progress within the manufacturing industry
- 3. Identify the problem of social media for effective work traditions
- 4. To analyze the implications of modern technology for industrial development

## **1.3 SOURCE OF DATA AND METHODOLOGY**

The present study is based on secondary data. The useful resource has been made used to validate the study. Secondary sources of data are obtained from books, journals, and other published sources. The present study examines the technical progress and its implications for industrial development by endorsing a multidisciplinary approach.

#### **2.1 INDIAN TECHNOLOGY**

Indian Technology involves IT, aerospace, nuclear science, manufacturing technology, automobile engineering, chemical engineering, shipbuilding, electronics, computer science, and other medical science-related research and development occurring on a large scale in the country.



## Figure No. 1

India scores 46th rank in the Global Innovation Index 2021. India has climbed 2 spots and has been ranked 46th by the World Intellectual Property Organization in the Global Innovation Index 2021 rankings.

## 2.1: Implications of Modern Technology

• Impact of Modern Technology in India : Technology affects the way individuals communicate, learn, share their opinion with others, gain knowledge, online study, online classes, use projectors,



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do online marketing, and do digital marketing. It helps society and determines how people interact with each other daily. It's made learning more interactive and collaborative.

- Negative Impact of Technology: These days'social media and mobile devices have been linked to eyestrain, difficulty focusing on other tasks, and depression. While some forms of technology may have made positive changes in the world, there is evidence of the negative effects of technology and its overuse, as well. Technology negatively affects the environment by compromising human health and safety, security.
- Dependency on Technology in India-: Advancements in technology havecompletely reshaped the everyday routine of Modern Humans. Health, Location check, E-Banking, saving data in the system, buying a plane ticket or booking an Uber or rent a hotel on your phone, Telehealth, 3D medical imaging, and smart wearable devices that track heart rate and blood oxygen level are just a few examples of technological advancements introduced in health care over the last few decades.
- Modern Technology Importance: Modern technology is important in today's world because it serves a variety of functions in many of the most important aspects of modern society, like education, online education mode, communication, business, and scientific progress. During the past few decades, in particular, computers have become such an integral part of society that technology has become a relied-on tool for most people.
- Advantages of Modern Technology in India: Breaking the distance barriers, Quick access to information, simplifying tasks, saving time, Increased productivity and efficiency, very convenience, Time management, Improved communication, and Creating new jobs.
- Disadvantages of Modern Technology in India-Modern Technology wastes our time, Technology causes distraction from work and study, Technology causes isolation of the people, Addiction to the technology of the people, Technology causes a lack of interest in studying, Security issues in using the technology.

## 2.3: Problem of Modern Technology in India

- 1) Lack of skilled laborers to perform work properly
- 2) Local Technology as a Comparison to America
- 3) People's dependency on technology
- 4) Lack of awareness of how to utilize technology effectively
- 5) Using the traditional method of working
- 6) Don't believe in change in new technology
- 7) Lack of resources, like- unskilled candidates, machinery, technology

## 2.4: Solution for Modern Technology in India-

- 1) Provide funds that help solve modern technology-related problems
- 2) Improve resources, like- men, machinery, management



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- 3) Provide a training program for employees' advancement
- 4) Motivation helps to attract employees and helps to add interest in employees

## **CONCLUSION :**

The study observe the problem of social media for effective work traditions and the effectiveness of modern technology for industrial development and found that the technical progress within the manufacturing industry continues at a high rate and today's progress can be seen as a part of the fourth industrial revolution. Technology is the making, modification, usage, and knowledge of tools, machines, techniques, systems, and methods of organization, improving a pre-existing solution to a problem, achieving a goal, handling an applied input/ output relation, or performing a specific function. It can also refer to the collection of such tools, including machinery, modifications, arrangements, and procedures. Modern Technology is modern products, services, and infrastructure that are designed and built using scientific knowledge and engineering this includes information technology based on software, computers, networks, television, cell phones, artificial intelligence, and audio & visual technology.

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