

Effects of Technology

INTRODUCTION

Today in the United States, there is certain concern that advancement in technology will displace people from work, which will raise the unemployment rates in the country. The changes taking place currently are close to the famous Industrial Revolution, an event that occurred between the 17th to 19th centuries. Some changes touched upon such spheres of production as manufacturing, mining and agriculture industries. All the changes that occurred in these sectors had an effect on the socio-economic and cultural conditions that started in Britain and thereafter spread to other parts of the world, including the United States and Europe. The changes triggered by the Industrial Revolutions shaped the history of the United States, with great impact on the life of Americans, as Everett explained (54).

In the 17th century, the United States experienced a transition from manual labor and farming-based economy to machinery-based production. This revolution started with mechanization in the textile industries and the development of iron tools that facilitated the production of machines used in other industries. Technology presupposed using artificial programs that enhanced people's abilities in producing goods. The humankind soon realized that with the advancement of technology, instead of considerable help in labor, technological revolution had a negative impact on the socioeconomics of the country. New machines ousted manual labor, which led to massive job losses in the United States. Therefore, the advancement of new technologies enhanced job insecurity. One of the technologies to blame for the deplorable state of the U.S. economy is the microprocessor-based technologies that presuppose the use of computer and its applications evolving at a rapid pace. Called technology displacement, such mass discharges result in another crisis and are likely to

lead even to a revolt. The current way of technology advancement in the United States bears the traits similar to the ones of the continuous process that occurred in the mid-twentieth century (Brewster 43).

ROBOTS

Nowadays, there is much concern in the United States about the technology advancement in the job sector because the new technology led to high unemployment rates in the manufacturing industry in 1983, which resulted in the loss of 200,000 jobs in the USA. Thus, the workers in the United States are concerned about their jobs at present (Garrison 34).

MANUFACTURING INDUSTRIES

Wherever robots are utilized in the manufacturing industries, there will be loss in jobs manufacturing. The increment in robotic technology and applications in manufacturing industries has a considerable effect on job layout in the United States. In 2006, according to the research conducted by the Institute for Employment Research, it was predicted that by the end of 2010 there would have been approximately 2000 robots in the manufacturing industry. Because of robotizing the industry, 35 per cent of the workers who are employed in the manufacturing industry and 60 per cent in the automobile industry who are involved in painting, are going to be dismissed. According to the U.S. statistics, there are 30,000 robots currently used in the manufacturing industry, and this figure is to increase in the nearest future. As Athey claims, "1.500 workers in the manufacturing industry are being laid off. It is estimated that 400.000 workers have been displaced" (Athey 90), which means that robots are slowly taking over the employment market.

MECHANIZATION

“Due to the adaptation of mechanization in the United States in agricultural sector, America unemployment will have increased by 15 million by the year 2020, while the countries economy will grind to a complete standstill” (Autor 87). For instance, farmers in the United States use machines to do the work that was previously done by people in the agricultural industries, such as spraying chemicals to farms. It is estimated that mechanization in agricultural sector is decreasing the rates of employment in the U.S. at a rate of three thousands per week and about five hundred thousand every year.

ECONOMICS

The magnitude of mechanization is quite tangible in the United States now because the entire economics of the country has been altered in order to give room for the new advance method in agricultural industry. Mechanization has greatly improved work in agricultural sectors, because one tool could accomplish the work of more than 20 men altogether. “As a result of profitability brought about by these machines in farming, many people who previously worked in the agricultural sectors lost jobs” (Berthwall 66).

COMPUTER APPLICATIONS

The increase of computer applications in the United States was followed by a number of rumors. Certain jobs in the United States have been affected disproportionately by the advancement of computer, which induced mass unemployment in the country. The trend in the United States today is that applying to practically any job, one must have skills in Information Technology (IT). The advancement of technology has made it hard for graduates who do not have any form of training in Information Technology to get jobs. It is obvious that the Information Technology sector in the United States is making

billions of dollars, but it does not hire the local people. The majority of the IT companies will outsource their services to other places in the world where the cost of production will be lower as compared to the United States, e.g., Microsoft outsourcing computer-hiring programmers from India. There is also an increasing trend to recruit people from other countries with high-level of Information Technology skills, despite availability of talented specialists, who can be found in the United States. These companies prefer the employees from other countries because people coming from other states like India will demand low wages as compared to their counterparts in the United States.

THE ISSUES OF UNEMPLOYMENT

It is a common fact that there are two major types of economy, which are the active and the non-active ones. The people who are involved in the economics actively are the people who are willing to work; the employees engaged in manufacturing industry also belong to this group. The issue of unemployment in a country can be defined as the state when people who are willing to work are unable to find a job due to the effects of technological development. The other category is those people who are considered economically inactive, “and this will refer to type of people who are not working but they are not interested in looking for jobs because they don’t have any qualifications or they are still students” (Bailey 76).

TYPES OF UNEMPLOYMENT

According to Nalishan, “They are various types of unemployment in business world, but this article will try to address structural unemployment which will occurs as a result of changes in the structure of an industry due to technology advancement” (99). The government should try to address the causes that create unemployment in a country.

CHANGES IN TECHNOLOGY

When the demand for a product changes, it has an impact on the work force because the production will cease and companies will dismiss their workers, thus, increasing the unemployment rates of the state. When relating high unemployment rates to technology, the government must control the amount of technology that is coming into the given country.

If many companies producing the same type of goods are focused densely in a particular place, the unemployed will find it difficult to search for new jobs because the companies mentioned above will introduce unhealthy competition, which will devastate the job market in that particular place. The government should try to control these companies so that they could be evenly distributed across the county, as Morwood says. The governmental control of the location of enterprises can be implemented by imposing tax incentives on those companies that are investing in remote areas in the country.

MARXIAN METHODOLOGY

The government should introduce Marxian methodology. Marxian methodology aims at getting rid of over-aged people in the national workforce. Numerous vacancies left behind by old people will be taken by the younger employees, which will be followed inevitably by the increase in the country's productivity. The government can do this by lowering the retirement age in the country. The advantage of Marxian methodology will accelerate the economic growth, which will create more workplaces for the youth, thus, addressing the process of unemployment.

FRictionAL UNEMPLOYMENT

Frictional unemployment is caused by industrial friction brought about due to the lack of raw materials, leading to breakage of machinery. There can be no doubt that, once an industry faces technical stagnation, the people operating machines will suffer greatly, and may even face the threat of losing their jobs. The government should try to make raw material constantly available to the industries, which can be implemented by lowering the taxes charged on a raw material that is brought into the country. The other cause of frictional unemployment is ignorance; the latter is brought about when the qualified, yet unemployed people are not aware on the existence of jobs in the country. The government should try to come up with the database where the companies that have vacancies could offer workplaces to the people, thus, helping the unemployed youth.

CONCLUSION

The government should realize that a high unemployment rate will affect the country both economically and socially. If a country has a high unemployment rate, it will not use fully its labor resources, which means the country will be less efficient, and, as a result, the government will not be able to provide the necessary services for its citizens. High unemployment rates are bound to trigger various social problems, for example, the rise in criminal activities.

Despite it is evident that the effect of technology will contribute to high unemployment in a country, some benefits can also be obtained with the help of technological advancement. For example, by means of technology it is possible to communicate with other people all over the world. It is also necessary to mention that

the introduction of biotechnology has increased the food technology that is found in the country.

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