

Technological Effect of Robotics on the Business

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ABSTRACT

Robotics has been a great development by the humans for themselves and it has being used for many risky tasks hence making humans to live with some security. There is no area of work apart from the businesses which has not used the robotics. And with use of such advanced technology it makes feel developed but on the other hand the use of robotic technology is very expensive and every business cannot use the same but that does not much affect the business that are not using robotics. But with the use of robotics the multi-tasking is becoming easy and in less time many tasks are being completed which is making life of the business owners way too easy and carefree and then they can focus on other business activities hence helping the business to grow more efficiently. An inter-relationship between robotics and business as proved way too beneficial for economy and various industries operating in the economy. This technology is proving developing for the business and further helping life threatening industries to work more effectively and putting less human lives in danger. But the other side of the story is such advancements can increase the level of unemployment in the economy. The use of robotics has great upcoming future and this future oriented technology may takeover many jobs but then the supervision of the technology or robotics will be of the utmost priority as robots cannot be wrong but the ones who are giving the instructions should be highly skilled. And these highly skilled employees will be an extra burden on the business owners. So the business owners must understand the financial position of their business and then introduce technological advancements in their businesses. And lastly the businesses should also understand the technology is also advancing in itself.

KEYWORDS Robotics, Business development, Economic Development, Unemployment

I. INTRODUCTION

HUMANS have also tried to identify the ways to make their lives easy be it difficult or life risking tasks or even day to day work and in the process of making lives easy and tasks achievable a new techno machine was invented which was termed as robot. Robot is a machine which will act according to the instructions given to it which made many industries and corporate to use the robots but it required heavy supervision so robots are doing near to perfect job but with very minute supervision and many developments are also being made in the robotics and being provided to the various industries. Robotics has been a great development by the humans and it has being used for many risky tasks hence making humans to live with some security. There is no area of work apart from the businesses which has not used the robotics. And with use of such advanced technology it makes feel developed but on the other hand the use of robotic technology is very expensive and every business cannot use the same but that does not much affect the business that are not using robotics. But with the use of robotics the multi-tasking is becoming easy and in less time many tasks

are being completed which is making life of the business owners way too easy and carefree and then they can focus on other business activities hence helping the business to grow more efficiently. An inter-relationship between robotics and business as proved way too beneficial for economy and various industries operating in the economy. This technology is proving developing for the business and further helping life threatening industries to work more effectively and putting less human lives in danger. But the other side of the story is such advancements can increase the level of unemployment in the economy. The use of robotics has great upcoming future and this future oriented technology may takeover many jobs but then the supervision of the technology or robotics will be of the utmost priority as robots cannot be wrong but the ones who are giving the instructions should be highly skilled. And these highly skilled employees will be an extra burden on the business owners. So, the business owners must understand the financial position of their business and then introduce technological advancements in their businesses. And lastly the businesses should also understand the technology is also advancing in itself.

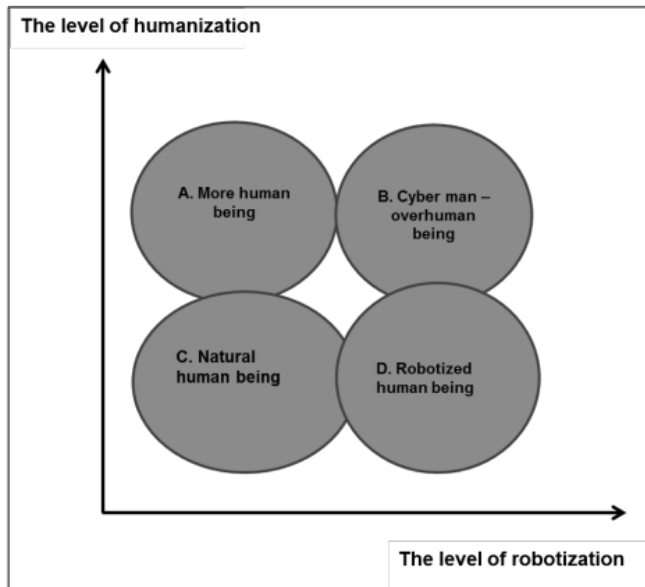


Figure 1. The future of human beings: The impact of robotics

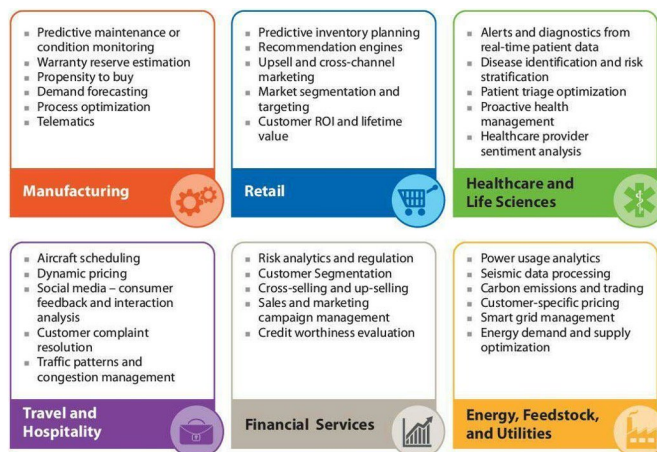


Figure 2. Use of machine learning across the industries

The above figure depicts the relationship between humanization and robotization in which the figure is divided in 4 parts and explained as below:

- Part A states that with fewer robots and more humans then there will be more human beings on the job.
- Part B states that with more humans and more robots it will be the mix of humans and robots then it will be the situation of cyber man and over human being.
- Part C fewer robots and fewer human beings the population of both human beings and robots will be less and all the population will be more of natural human being.
- Part D states that with less human beings and more robots it will be an harmful situation as the population will be more of robotized human beings.

Machine learning [1]–[3] is the process which makes robotics a more sophisticated technology so following are the various uses of machine learning which makes robotics more

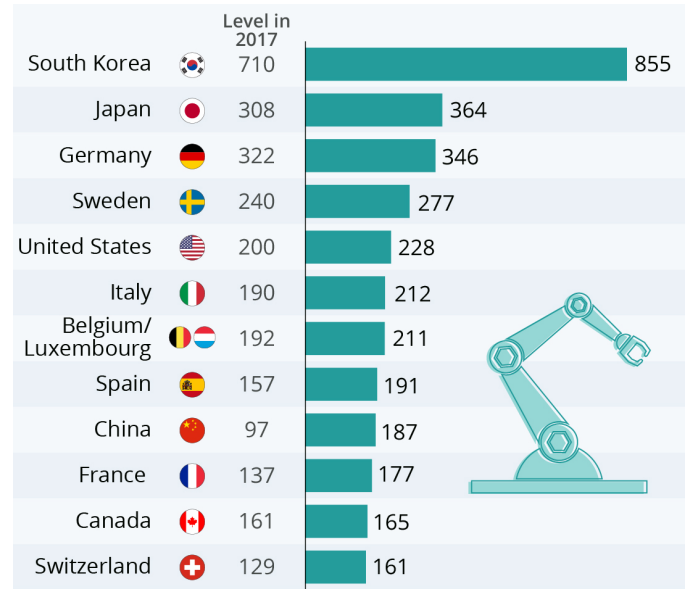


Figure 3. The countries with highest density of robot workers

sophisticated and advanced.

Figure 3 gives proper information that how various industries use the machine learning for their betterment and also adds with the points that how use of machine learning has helped the businesses to improve with their working styles

Manufacturing industries [4], [5]- Machine learning has helped the manufacturing industries by helping it to understand that how the processes can be optimized with reservation system related to inventory and also helps the businesses to control the production process based on demand forecasting.

Retail Industries [6]- Machine learning has helped the retail industry by making them realize that how they can create lifetime value amongst customers by understanding their demand patterns and giving the results to the company.

Health care industry [7], [8]- Machine learning helps the health care industries by devising the best formulas and techniques to improve the products and their qualities.

Travel and hospitality [9], [10]- Scheduling and ticket booking is the most important part of one's travel so the travel and hospitality industry can feature the ads to the customers based on their search history and various travel-oriented companies can work upon the credentials and let customers know what they can get on booking and scheduling their travel with the particular website. Further all the boarding, lodging and travel details can be taken care at one place.

The above figure states the highest density of robot workers in different countries which also shows the dependency of these countries on the robots and it can also be added that how much advanced technologies are working in these nations that they have developed robots in such advanced levels that they are working with minimum supervision and in maximum scientific manner. The more use of the robots confirms the huge advantages of such technologies in the

overall development and growth of the various industries in these nations and these economies have also developed.

II. REVIEW OF LITERATURE

Bessen (2016) et al. [11]- According to this research the premium or very high skilled jobs can only get affected by the use of robotics and with the use of robots does not mean that jobs will be lost completely only 10-20% jobs can get affected rest human augmentation is required. Kaivo-oja (2015) et al. [?]- According to this organization introduction of robotics has not affected the jobs rather it has helped to improve the GDP of many countries like Germany and Korea. Hence it will not be wrong to say that robotics is like a helping hand or it can say another arm which helps businesses and GDPs to grow. Atkinson (2019) et al. [13]- According to this research automation or robotics does not intend to replace the traditional jobs rather they help to increase the efficiency of the ongoing job with minimum cost burden on the company. In the context of robotics, automatic parallelization [14], [15] can be used to optimize the performance of robotic systems. For example, if a robot is designed to perform a task that involves multiple sub-tasks, automatic parallelization can be used to break down the task into smaller parts and run them simultaneously on different processors or cores, thus reducing the time required to complete the task. AutoML [16] can be used to create more intelligent and efficient robots. Robots, like any other computer system, are vulnerable to cyber attacks [17], and the consequences of a successful attack could be severe. Robotics developers and manufacturers should comply with established security standards [18], [19] and best practices. IoT and robotics can work together to create more intelligent and efficient systems. By integrating robots with IoT devices and sensors, robots can collect and process real-time data, enabling them to make better decisions and operate more efficiently.

III. RESEARCH METHODOLOGY

All the secondary data is used to find the relationship between businesses and robotics and also to find out the impact of robotics on the businesses.

IV. DISCUSSION

From the paper above few of the points are of some discussions

- According to the previous researches it is found that robotics cannot be a job replacement in a big number but the premium or high skilled job may have some kind of risks.
- Robotics is the future of corporate world and it will give immense opportunities for the development. It will like an extra arm for the businesses to make work easier and speedier.
- Robotics helps in improving the efficiency of the ongoing jobs and optimizing the quality of the work done by the staff.

- The use of robots and robotics requires a very minute supervision hence it can be stated that the businesses require such skilled staff which can understand the working of the robotics and help in repairing and maintenance work also.
- But the usage of robots will be a very niche market and may affect the low skilled jobs also for some period of time. Technology maintenance will be the cause of the concern.

V. CONCLUSION

Undoubtedly robotics has a great future in the market and of course for the corporate world and also it is helping many businesses to grow and develop with the introduction of robotics it has been found that economies do develop and businesses have reduced the cost and increased the efficiencies but with all these modernizations the maintenance will be the cause of concern. Businesses houses do have an advantage of using robots but other than maintenance it requires very minute supervision as to trust technology is a very big task and businesses cannot have some losses happening due to technology. Automation and robotics are still in a growing stage and certainly it entails many developments and with all the developments which have happened it is helping the business world and the economies in a very nice manner. It can be concluded that robotics is a very less harmful against the traditional jobs and it is just a onetime heavy investment which will help the businesses to improve its overall growth.

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