Implementation Of Robots: Review Of Articles

The article “Japan: the Land of Rising Robotics” published by The University Of Tokyo on the university’s website, explains the importance of robot use in various industrial sectors and how the culture “monozukuri” gave Japan the edge above all countries in the field of robotics with dominance shown in the global market share. Japan is a competitive market that seeks to enhance robots through its highly developed technologies to transform different cultures or even create new ones. “Monozukuri” means ”production of things” through technological prowess and is the Japanese term for “manufacturing”. This helped Japan sustain a level of consistency in the field of robotics where robots are being constantly integrated into our lives in different forms. I believe that robots are key to achieve excellency in societies, especially in manufacturing industries to facilitate the production and quality of products formed.

In the 2nd paragraph of the article “Japan: the Land of Rising Robotics”, the author points out the dominance of Japan in the global market by using statistical analysis, “Japan shipped approximately 3.4 billion yen's worth of robots in 2012, comprising nearly 50% of the global market share. The number of operating units in Japan was close to 300,000, which was about 23% of the global market share.” This shows that Japan is a country that manufactures most robots we see around us. The export market of robots yields to a ton of money to the country’s income, which in turn plays a huge role in Japan’s economic level. In the 4th paragraph of the article under the heading “The Changing and Widening Landscape of Robot Use”, the author points out that Japan has been manufacturing robots for almost 50 years “Since the 1970s…”. He/She shows the purpose of robots in various work fields, and the transition from having relegated or much simple functions to much more complex and meaningful roles. Advancements of the “Internet of Things” (IoT) have led to this major transition, where industries are being more developed than ever, demanding robots to have a bigger impact and utility to capitalize on such developments (Par.6).

Paragraphs of the article under the heading “Examples of Robots Active in Various Fields” show the various works robots have and the different purposes they might serve society. For instance, paragraph 9 shows how robots are being integrated into outer space missions. In the 10th paragraph of the article, the author shows how continuous societal demands have led to the creation of disaster-response robots to save people affected by natural disasters. Such robots study and analyze what might cause such unfortunate events and educate people about the causes that stimulated the disaster. The author uses research in the 11th paragraph “In the laboratory of Professor Atsushi Yamashita at the University of Tokyo School of Engineering's Department of Precision Engineering, advances are being made in research…” to show that research centers are developing robots concerned about resolving social issues processed through the human eye. For example, such robots will enter dangerous environments to provide the public with the necessary information regarding the weather, humidity levels, etc (Par.12). This phenomenon presents difficulties, for the lens becomes foggy in rainy weather and the information provided would not be accurate, since robots interpret the water drops as noise without being able to reproduce clear images of the situation.

Paragraphs 15 and 16 show the urgency of developing medical robots. This process facilitates the lives of surgeons and patients. With appropriate engineering mechanisms, robots would

serve as assistants for the surgeon or even play the role of the surgeon, minimizing conventional surgery procedures that might cause permanent damage if something went wrong (Par.16). Thus, minimally invasive procedures would be an easy task for robots, for it requires small openings/incisions that would make recovery much easier and comfortable for the patient. (Par.17). The video in the article with title “Janken (rock-paper-scissors) Robot with 100% winning rate.” shows that certain robots can beat any human being in a game of “rock, paper, scissors” when engineered in a certain way that allows them to capture reflexes a human eye would not normally recognize.

To conclude, the implementation of robots will help society grow and will be a driving force for a better future. With technological advancements, robots must be used in all industrial sectors and in any field of work to facilitate all human lives. I believe that the article “Japan: the Land of Rising Robotics” made a strong point proving robots’ roles and functions in our society. Thus, as proven by the author, robots are key components for a successful future and can truly shape the path a society heads to.