ECOSOC on Automation
St. John Preparatory School - Danvers, Massachusetts - December 2018

Letter from the Chair

Dear Delegates,

My name is Geraldo Hinch, and I will be your Chair for the ECOSOC Committee on Automation. I am a senior, and I am the Director General of Model UN here at St. John's Prep. I joined MUN in my Junior year, and partook in many conferences during that time. I participated as a photographer/videographer during the SJPMUN XII conference last year, so I am looking forward to being a Chair this year. Aside from MUN, I am president of our school's Filmmakers Club, a drummer for the SJP Jazz Combo, and a percussionist for the Concert Band. I am also a Boy Scout, and I have earned my Eagle Scout rank last year. I am fascinated by the topic of automation, as it is something very prevalent and concerning for our generation, who will face the consequences of automation in the near future. It is important that we find a way to adapt to the rapid technological changes of our society, before it is too late. I would recommend that you come into this committee having done some research on this topic, especially having to do with your country's position. I am looking forward to meeting all of you, and I can not wait to see what you will bring to the discussion. Best of luck with your preparations. If you have any questions or concerns, please do not hesitate to email me.

Regards,

Geraldo Hinch '19

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Director General

Chair, ECOSOC Committee on Automation, SJPMUN XIII

Committee

The United Nations Economic and Social Council (ECOSOC) is one of the main six bodies of the United Nations. It is the principle UN organization responsible for global sustainable development in the economic, and social fields. The council promotes higher standards of living, full employment, and conditions of economic and social progress. ECOSOC develops possible solutions to international economic and social problems. It serves as the central forum for the discussion of such international economic, social, humanitarian, and environmental issues, and for formulating policy recommendations addressed to member states, and the United Nations system. The Council plays a key role in fostering international cooperation for development and in setting priorities in action.

The Economic and Social Council has 54 members elected by the General Assembly, but for the sake of our committee we will have less members. Usually, 14 members are from African states, 11 from Asian states, 6 from Eastern European states, 10 from Latin American and Caribbean states, and 13 from Western European and other states. The Council operates in standard parliamentary procedure. It's main functions are to propose the agenda, create a program of work, and organize the session to formulate the best solution to the issue at hand.

ECOSOC has the power to make or initiate studies and reports as well as make recommendations to the General Assembly. The council makes recommendations for the purpose of promoting respect for, and observance of, human rights and fundamental freedoms for all. It also has the ability to prepare resolutions for the General Assembly, concerning issues that fall under its specialty. In our Committee concerning automation, the Council will have the ability to discuss, and prepare resolutions for the issue of rapid global automation in the workforce.

Statement of the Problem

Human jobs all around the world are being replaced by machines and computers at a rate faster than new jobs can be created. Because of this a massive global population of blue collar, as well as white collar workers, will be unemployed. This could lead to extreme income inequality, to levels we have not seen since the first Industrial Revolution, with the top 1% of the world controlling all of the companies and benefitting from all of the automation, and the rest of the world trapped in poverty. Not only that but artificial intelligence could possibly make even the most high level occupations obsolete.

A PwC report finds that by the 2030's, 38% of all United States jobs will be automated, as well as 30% in the United Kingdom, 35% in Germany, and 20% in Japan. The jobs most at risk of being automated are transportation, storage, manufacturing, wholesale and retail trade, administrative and support services, financial and insurance, professional, scientific, technical, construction, and even arts and entertainment, all of which have between a 20%-50% chance of automation within the next few decades.

Instead of paying manual workers for their labor, some companies such as Amazon, Tesla, and DHL have decided to build robots and machines to replace the workers. Amazon, for example, just recently proposed AirPrime, a delivery service where Amazon drones will drop off packages on people's doorsteps rather than have workers from companies FedEx do it (Toor). Not only would a powerful company like Amazon, who ships millions of packages a day, gain potentially $5-$10 more revenue per shipment, but they would also run shipping companies that hire human workers out of business because that shipping company would lose all revenue from

Amazon shipments. These business tactics would in fact increase both profits and total production due to the lower opportunity cost of delivering a product.

However, despite predictions of overall economic prosperity from automation, it has the potential for catastrophic consequences. Certain science fiction authors have predicted horrible futures due to AI and robots taking over jobs and later humanity, while other writers such as Andrew McAfee and Erik Brynjolfsson dismiss this idea as one unlikely extreme. McAfee and Brynjolfsson describe how the nature of machines and manual labor as complements and how their relationship as economic sub*stitutes is objectively good (The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies*). Businesses naturally do risk cutting manual jobs when undergoing automation, but such a move would open an entirely new field of jobs for humans to fix and build machines. In turn, businesses like RobotWorx argue that they can make more profit, increase wages for the quality of work from their skilled workers, and remain at the competitive level expected in the modern economy (RobotWorx).

Naturally, such statements beg the question whether economies would not crash because it would naturally adapt and shift as it has previously done when inventions such as the assembly line and textile mills came to fruition. However, multiple other theorists and some economists have argued against this transition to automation, citing the inaccuracies in the business logic. An Economist article titled "Automation and Anxiety" outlines some economic implications regarding automation. By cutting jobs through automation, unemployment rates would skyrocket, and unemployed workers would not have money to afford products (Automation and Anxiety). Because most modern economies runs on consumerism, if businesses cannot sell their products and they lose their liquid value, overproduction happens. After losing liquid value,

businesses lay off more workers, further decreasing demand for their products, and perpetuating a downward economic spiral, creating a recession. A major gap between the poor and the rich would also develop, and economies would not function because of economic inequality, leading to a major crash.

Writers such as Martin Ford (author of *Rise of the Robots: Technology and the Threat of a Job*less *Future*) do not blame the development of working AI and possible job takeover on the technology, but rather on businesses and capitalism seeking to make a quick buck. Ford argues that the true enemy in the case of naturally developing technology in the workforce becomes businesses that control the technology into things like automation.

This leads some to believe that the solution to the rise in automation is establishing a universal basic income or a UBI. A UBI is essentially a fixed amount of income at a level sufficient for living, regardless of income or work status. Average proposals in certain countries estimate $10,000 annually. This would cost anywhere between $1.5-$3.2 Trillion, and could be payed for in a multitude of of ways, some of which use automation as a method of funding, because of how much, it saves companies. This could have the potential to eliminate poverty and the fear that comes with loss of jobs as robots eventually take over most aspects of the economy. Many would even say that UBI has the potential to create an almost utopia where all humans are treated equally as well as having exceptionally high standards of living. Countries like the Netherlands, Kenya, Switzerland, India, France, and Finland attempting to undertake the implementation of such a system. But there are those who staunchly oppose such ideas for it would decentivize productivity, deplete resources and funds, and create inflation.

Considering the problem, and all possible solutions, many countries have responded differently to this issue because factors such as political beliefs, worker demographic, and technological demand. However, Artificial Intelligence is no longer science fiction, and automation is no longer a distant problem for future generations to deal with. It is happening right now. We are in the midst of a dramatic shift in labor onto computers and robots, and if we are not prepared for it, our future may be a dystopian one. We have been through revolutions like this before, but the robot revolution is different. Many perfectly capable humans will find themselves unemployable through no fault of their own. When around 35% of jobs in the workforce are to be automated in the next few decades, and that percentage grows more with time, this is a big problem. This does not mean automation is bad, after all it is inevitable. It just means we need to adapt our world to this extreme change in society, and the first step is addressing, discussing, and creating legislation.

History of the Problem

Automation has always been prevalent since the beginnings of human civilization. From the time of hunters and gatherers, we have built tools that make our work easier, and more efficient. These technological innovations led to the agricultural revolution, where farmers could grow produce in massive amounts with less people. This allowed others to specialize in other areas of work, such as developing better technologies. This cycle continues over the course of history, which leads to increased standards of living worldwide.

The First Industrial Revolution occurred between the late 1700's and the early 1800's. This the time when we shifted from manual labor, to machine based manufacturing. Factories rose everywhere, producing products like cloth, and textiles in massive amounts. This wave of industrialism spread across the world, but was most prevalent in Europe and America. It marks a turning point in history, as it is the starting point of which technology began to improve and develop at an exponential rate. For the first time, standards of living continuously increased, and population growth soared.

The economic prosperity and technological development of the First Industrial Revolution set the stage for the Second Industrial Revolution of the late 19th and early 20th century. This revolution was based based from the inventions of steam power, railroads, and the electric motor. The automobile industry boomed during this time, as well as advancements in agriculture, electrification, chemical manufacturing, railroads, steel based products, maritime technology, and telecommunications. This Revolution was more substantial than the first and led to more economic prosperity. While the first two Industrial Revolutions had many benefits and led to vast improvements to society across the globe, it was not without its downsides.

Businesses that owned these factories, and created these products and advancements were not regulated. This gave them the ability to make enormous amounts of profit, at the expense of workers and smaller companies. Corporations did everything they could to destroy all competition from other corporations. They employed tactics of business that led other competitors to bankruptcy, and formed monopolies. Since there were no laws protecting workers during this time, those who worked in the factories were treated to terrible conditions, and measly salaries. The way companies were run led to massive income inequality, and demonstrates how corporations, prioritized profit over the well being of workers.

After reforms were put into place to improve the conditions for workers, technology continued to grow at an exponential rate. The next stage of development was the Third Industrial Revolution, also called the Digital Revolution. With this comes the rise of computers, and the internet, and leads us into the present day. Now, we have programmed computers to manufacture cars, as well as a multitude of other products. Factories became primarily machine run. But also the world became a lot more smaller. All of a sudden, people from separate sides of the Earth were able to communicate, and collaborate on a massive scale. Today almost everyone is online, and has a digital footprint, leading to entirely new cyber industries, like online shopping, online videogames, social media, movie and TV streaming, video sharing. All of this exploded onto the scene, and within a few years, everyone became a part of it. The US alone has generated more than $966 Billion dollars through the internet, 6% of the economy, and rising. While this Technological Explosion was massively beneficial in countless ways, it did bring about its fair share of issues. For one, the privacy of citizens, is much easier to be compromised, by governmental as well as non governmental parties. The internet opened an entirely new

avenue for crime and exploitation. Scammers, hackers, and fraudulent websites often steal lots of money from people from their homes, and the dark web allows for criminal enterprises to make business off of things like illegal firearms, drugs, and even human trafficking.

We are now in the midst of a fourth Industrial Revolution, where radical system wide innovations can take place in only a few years. Artificial Intelligence is already beginning to be implemented in the stock market. Drones make deliveries, and cars can drive themselves. We are making programs that surpass human ability in a variety of fields. AI Technology, though new, is improving exponentially, and will be most prevalent in the not too distant future.

Each Revolution, had its fair share of problems, and because of this, legislation has regulated these advancements, as to keep things from descending into chaos. In 1833, the United Kingdom enacted the Factory Act, improving the working conditions of children working in factories. Along with this every other modern nation enacted many industrial reforms throughout their countries, so that today, factory workers do not have to worry about a high chance of injury or death. The United States developed policies such as Net Neutrality (recently undone), to help prevent the slowing down of certain sites, and promoting a free, open, and regulated internet. Many other countries developed similar laws respective of their own countries.

Overall, the rise of machines, has led to great economic benefits for everyone. Machines are more efficient, and make more money, as well as create new and better jobs for the population. Society went from primarily agriculture based jobs, to manufacturing, to programming, and service. The difference between the past and present however, is that better technology, while making profit more efficiently, employed more people in better jobs. Today, automation leads to creating much higher profit, with much less workers.

Questions to Consider

- How will the rise in automation affect both developed and underdeveloped nations?
- How can countries least prepared for the wave of automation be helped?
- What benefits and disadvantages does automation in the workforce bring?
- What should the role of governments be in regulating business and use of automation?
- What steps should governments take in protecting workers affected by automation?
- How will automation affect the global market?
- How can income inequality and rising unemployment rates be efficiently combated?
- How will your country's perspective compare with that of other countries on the issue?
- How should we respond to artificial intelligence inevitably controlling most of society?

Bloc Positions

A nation's position will vary from its specified bloc due to its demographics, political basis and structure, technological demand, beliefs of its population as well as of its government, and relative situation. I encourage you to research more about your individual country to better understand their position, and if automation would be to their benefit or disadvantage.

Bloc A: These are countries more prepared for the rise in automation. They are generally highly developed countries with advanced economies. They tend to benefit from, and push for increased automation, yet their populations would still be negatively affected by it.

Australia, Austria, Belgium, Canada, Denmark, France, Finland, Germany, Estonia, Japan, Singapore, South Korea, Spain, Sweden, Switzerland, Taiwan, United Arab Emirates, United Kingdom, United States of America.

Bloc B: These are countries less prepared for the rise in automation. They are mostly underdeveloped and developing countries, but there are also some developed countries here as well. They tend to have emerging economies. Some of these countries are moving rapidly into automation while others have not the resources for it yet, but regardless their populations will be drastically disadvantaged by automation, and they will mostly be in opposition to it.

Argentina, Brazil, China, El Salvador, Ethiopia, Greece, Vietnam, India, Indonesia, Kenya, Mexico, Netherlands, Nepal, Nigeria, Russia, Saudi Arabia, South Africa, Thailand, Turkey, Uzbekistan.

Helpful Resources and Additional References

Here are a number of videos, articles, and graphics I believe would be helpful to your research.

The Rise of the Machines – Why Automation is Different this Time

Humans Need Not Apply

Will You Lose Your Job to Automation?

The big debate about the future of work, explained

Will automation take away all our jobs? | David Autor

The last job on Earth: imagining a fully automated world | Guardian Animations

The Fourth Industrial Revolution

REPORT: Robots Will Take 38% Of US Jobs By 2030s

In Advanced and Emerging Economies Alike, Worries About Job …

http://www.bbc.com/news/business-3937…

What Automation Means for the Human Workforce

https://hbr.org/2017/04/the-countries-most-and-least-likely-to-be-affected-by-automation

Most Likely Industries to Be Changed By Automation | Best Countries …

https://www.therobotreport.com/10-automated-countries-in-the-world/

https://futurism.com/images/universal-basic-income-answer-automation

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