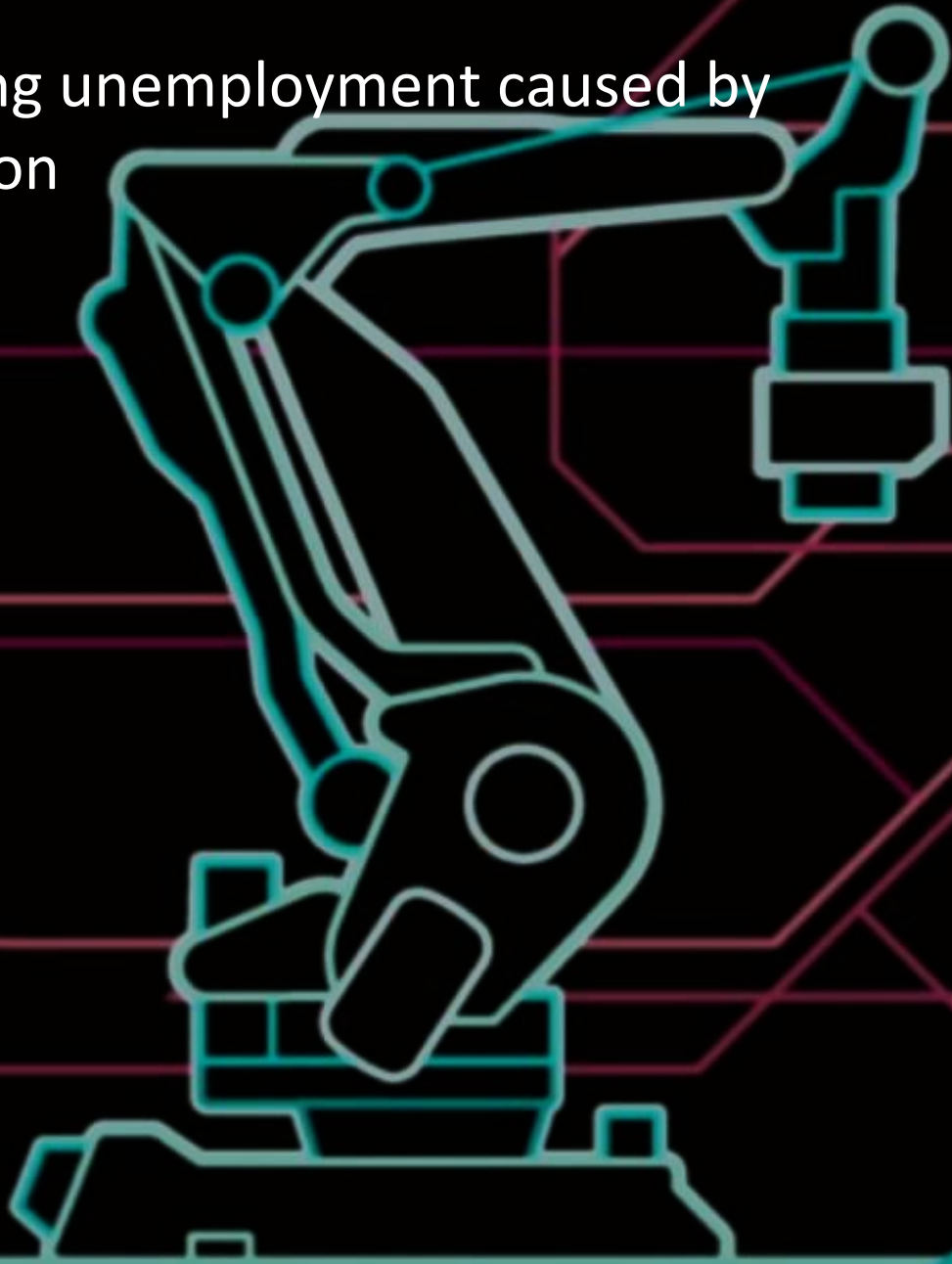


Economic and Social Council

Countering unemployment caused by automation



Forum	Economic and social council
Issue:	Countering unemployment caused by automation
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Introduction

In 2020 the estimated world unemployment rate was at an alarming 6.47%, which put to a global scale means that over 511 million people were estimated jobless. As a result of this lack of income, such individual must rely on their government's funding, charitable donations and in many occurrences theft or other illicit acts. When relying on governmental funding, they can be seen as a burden to the country's economy and its economic growth, but this is only the case within the majority of the MEDCs, (more economically developed countries).

Although these MEDCs have the resources to provide housing and provisions to those in need, not all countries across the world can afford to or do not provide aid to the jobless. So instead of being a 'burden' through the requirement of government aid, they end up that on the streets, or contribute to the slum population. Completing the establishment of the importance of minimal jobless people. Looking at it from a humanitarian point of view, these people now cannot provide shelter and food for themselves or their family and loved ones.

Circling back to the case in this forum, unemployment caused by advancement in technology and automation is greatly concerning to the already existing and problematic issue. This issue regards the continuation of job loss, due to the requirement of more advanced skills. Currently, in the automation world a shift is occurring to minimize the need for labour work, such as but not limited to;

- Grocery store workers
- Equipment assemblers
- Bulk food preparers
- Any kind of factory workers



The world is learning to replace the need for low skill labours by using automation. An argument can be made that automation is opening up job opportunities in the tech world for more people, but while it may be creating more jobs, these are only for the skilled and at a much smaller capacity. Many of the labour workers do not have the skills to work in higher end jobs, as they more often than not, do not have the education to prepare themselves for the job. These jobs would require them to complete a degree or other higher education, and to some that is simply not affordable but on a time and financial front. They cannot stop their daily income to provide that quickly. The more advanced jobs also weigh out to much less of a need in comparison to labour, while a labour factory would require 100 workers, only 4 would be needed to work the technology.

Definition of Key Terms

MEDCs - More economically developed countries

A more economically developed country is generally a well industrialized nation with a high income and standard of living. The country's government is typically wealthy, with a high **GDP - gross domestic product** and growth per capita. Some examples of more economically developed countries are, The Netherlands, The United States, Germany and Sweden,

LEDCs - Less Economically developed countries

A less economically developed country is generally not as industrialized as a nation with a lower income and standard of living. The country's government is typically less wealthy, with a low **GDP - gross domestic product** and growth per capita. However, this is not always the case, as the UN has not updated the terms for developing or developed nations and there are no partitions within the LEDCs to define how developed the nation is. Some examples of less economically developed countries are Sudan, Afghanistan and Kenya. And some examples of Less economically developed countries that do not match all indicators are, India and China.

Structural change



Structural change is a reference to a dramatic shift or change in the way a market, country, or industry operates. This is usually put in place via huge economic developments such as advancement of technology, Artificial intelligence and “cashierless stores”.

Automation

Automation is a wide range of technological projects that reduce and minimize human intervention. This decrease occurs through the predetermination of the decision criteria and subprocess relationships, which is embodied within machines. Some examples of automation are;

- Employee analytics
- Self fill forms
- Online customer support
- Employee help desk support
- Hiring process

Employment

Employment generally refers to the state of having paid work in a structured manner. This could mean with a daily, weekly, monthly or yearly income or simply being paid to work in aid of someone or something else. Employment also leads to contribution of the nation's economy and requirement to pay taxes.

Unemployment

Unemployment is when one does not have a stable income from which they work and earns from. The term refers to individuals who are employable and actively looking for a job and are unable to get employed.

Labour work

Labour work usually regards work that does not involve or require any particular skill, but mostly activity involving physical exertion and effort. However, in recent definitions it can also define work including mental effort, such as one of a cashier. Labour work can be broken down in two sections, skilled and unskilled labour, in this forum unskilled labour is the main victim in terms of job loss due to automation.



General Overview

Details of the issue

“There certainly will be job disruption, because what’s going to happen is robots will be able to do everything better than us. ... I mean all of us,” said Elon Musk, speaking to the National Governors Association. It is now more than convenient to say that automation, assuredly, is taking over and replacing jobs that were previously done by a human. Jarvis - the robotic butler is already full on duty at the Grand Hotels, while at a much more rapid pace, advanced AI entangled with an enormous online education (that we, as students and teachers have experienced foremost) and other industries taking over many jobs.

It has been estimated that 45 million Americans would lose their jobs due to advanced automation by 2030. That is almost one quarter of the workforce. This prediction is 6 million more than the one made in 2017 which means as time progresses the numbers will increasingly become more and more alarming.

But now we must also look at it from a brighter perspective. While automation currently poses a threat to those with labour or low educational jobs, over time it's predicted that technology will create millions more jobs than it will replace. In this aspect there is a great positive potential. Just as in the past there have been waves of panic and stress due to mechanization or the industrial revolution, yet we can see with retrospect that it has enhanced life quality today. Hence, with this technological advancement being incredibly important, we must face the challenge of allowing it to continue unobstructed while attempting to not increasing unemployment of people today nor lowering their life quality on the path of innovation.

History of unemployment due to Automation

Unemployment due to automation has been an issue since the very beginning of the human race, it started with the simple creation of tools and has gone on to develop into entire artificial intelligence machines. But the key changes in history started a couple centuries ago.

In the 16th century, all the labour was manual until an idea to mechanize the production of stockings, which was then developed into textile machines. Hundreds of years



after this discovery in the 19th century during the industrial revolution riots occurred, the same happened in the car manufacturing industry in the 20th century which now is an entirely automated industry. This has been an issue since the start and is a concern even more due to the global pandemic. People are worried of being overlooked by governments in a hurry to rebuild their economies, so here we are to fix it.

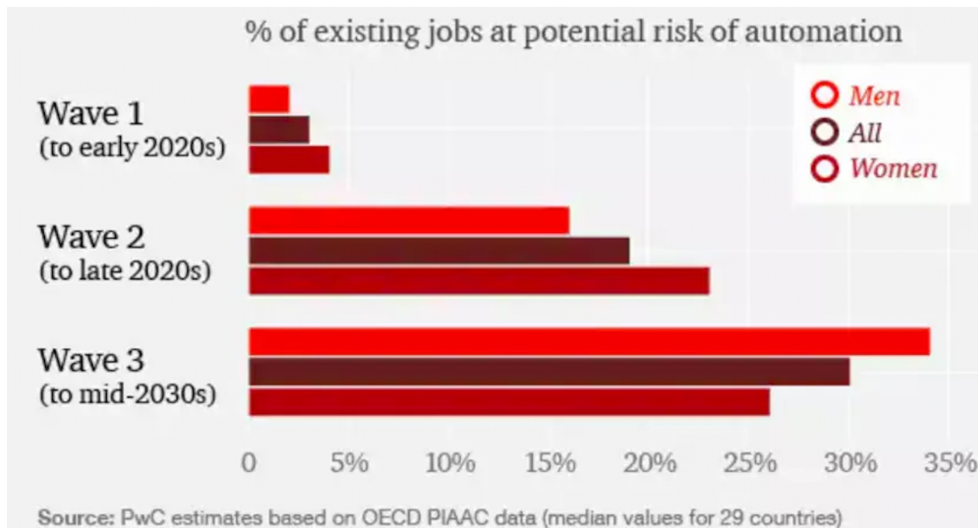
What has been done up to this point?

Right now, around 37% of the people are worried about losing their jobs to automation. We are currently going through another wave of mechanism and unemployment anxiety. Unfortunately, this fear is not new and has been an issue that has risen multiple times since the industrial revolution. Governments since have started to provide more stress on early education so that more individuals have the capability to work in the jobs provided for skilled people, and general aid towards government schools have increased. Private tech companies have also begun to provide free training to those willing to take them in order to work in those companies within the technology department. Additionally, outside charities also provide aid to those in a transition period between the labour job and one skilled or simply another, but there is definitely not enough. At the moment the situation is worsening especially with the novel coronavirus, many companies cannot afford to provide training and governments have prioritized other situations.

At the moment the situation is polarizing and discussed actively in the United States, however this issue is actually globally responsive. Currently, within developing nations with high labour force such as eastern Asia and the United States, but in the near future it will affect Europe as well.

Some Statistics on the risks of unemployment





It is critical to remember that automation and allowing it to progress despite the job loss is incredibly important. We can see this in how after the initial scare in many developing nations such as China and India, new technology has created millions more jobs. Subsequently, it has also allowed millions of people to rise above the poverty line within a relatively short amount of years. Furthermore, these countries are now seen as tech giants and have begun to compete with the world's largest economies within just a few years of this change. The benefits can be seen within a short time span and are essential to the world's population.

Major Parties Involved

Amazon

Amazon is one of the most important artificial intelligence companies in the world. They invested in the consumer-oriented side of artificial intelligence and applications designed for company processes. They have made it clear that they are in favour of automation and see the loss in jobs worth the gain. Amazon's popular Alexa device has allowed for voice activated vacuum cleaning, door closing, lights switching and so much more, replacing many people's need for an at home assistant. This of course is only for those who can afford one in the first case, but this example serves as a microcosm showing the bigger current issue. Other than Alexa, they are also actively working towards a self-driving car, eliminating the need for taxi drivers, public transport for many and drivers overall. Amazon believes in the paradox of automation, which states that the more efficient the



technology or automation is, the more vital the human contribution of the operators becomes. A common example of this is when an autopilot of a plane stops working, pilots were not prepared for the manual flying causing failure. Their contribution became much more valuable.

IBM Watson

IBM Watson is an automated system designed to answer questions naturally. This company has helped transform healthcare industries through aiding meet business and clinical needs. The artificial intelligence developed by David Ferucci and his research team helps many organizations predict future outcomes and optimize their employees time. This means that they reduce the need for lower income jobs. One of the biggest shifts IBM has caused is one in healthcare, they speed up DNA analysis in cancer patients helping to save lives and medical professionals time, allowing them to put focus on multiple patients at a time.

Google

“At Google we all think that AI can meaningfully improve everyone's lives and that the biggest impact will come when everyone can access it.” stated as an opener on Google's website. Google since its creation has been a strong example of automation causing unemployment. The concept of a universal search engine with access to all books, materials, and information has caused many libraries to have a reduction in demand and so much more. But they are also an example of how we must wait to allow automation to change the world. Google now provides millions of jobs to people related to their AI and is providing training to those lacking the skills. Google employs over 135,000 people alone and with its current efforts towards AI development will be employing even more which they themselves teach the skills too.

Timeline of Key Events

Issue: Automation leading to Unemployment



Pre-context: In order to comprehend the issue, we need to dwell into the very first advancements of the early automations, which by fact, have been created in order to replace demanding human labour.

Date	Event
1778	<p>The steam engine was improved and advanced by James Watt after the benefactors and past engineers Thomas Newcomen and Thomas Savery. This improvement made steam power take off and influenced many automations after. For example; one of such creations was The Automatic Flour mill which was designed by Oliver Evans which was the very first fully automated flour spinning mill which essentially replaced jobs in that sort.</p>
INDUSTRIAL REVOLUTION	
1804	<p>Creation of Railways allowed for much more faster advancement in technology, which has dramatically impacted the course of the labour market for humans</p>
1807	<p>Creation of Steamboat, in the similar way, has shifted the course of transportation and also allowed for much more improvement.</p>
1826	<p>Creation of Photography, at the time, was considered such an automation that completely replaced the human work of resembling a real life picture, and shifted the whole idea and meaning behind art and its artists, mass media and journalism.</p>
1831	<p>Reaper was created to lower the emphasis of the labour-intensive task of harvesting crops.</p>
1844	<p>Telegraph was invented which was able to transform the communication between humans, which allowed for a more stable collaboration</p>
1876	<p>With the creation of a Telephone, people were able to express the messages much more faster, concisely, and with the benefits of a much more improved collaboration.</p>



1876/1879

After the creation of the Internal-combustion engine in 1876 by Nikolaus Otto (which was later used in the automobiles), later, In 1879, Thomas Edison was able to create a lightbulb which drastically shifted and transformed humans ability to create power, light, heat and so much more in the years after. With this invention, a new gate of much more opportunities and inventions that can be done by humanity, was unlocked.

1937

Computer was invented by John Atanasoff. It also important to mention that many advancements were made before this invention (such as Television and etc.), however with this tool that is a practically half operated AI system that responds to human on commands, the computer catapulted humanity into the new horizons, from which it gave birth to many other inventions, on which modern humanity is structured.

1957

The Soviet Union has launched the world's first artificial satellite, which allowed for the "Space Race" between the USA, not only promoting the tensions of the Cold War, but many new discoveries for humanity.

1974

The Personal Computer and Internet was created in 1974, which was a major breakthrough for humanity.

2012

CRISPR allowed for a much more in depth look into the sciences and let the technology and science to submerge.

2017

AlphaGo team of scientists that have been working at the artificial intelligence program for years and it announced this year that its AI had become the world's best go player, and the AI has in fact figure by itself how to beat humans in this game, and also, through many improvement (that were done by itself) it was able to beat an older version of AI, of itself in other words.

UN involvement, Relevant Resolutions, Treaties and Events

Below you can see some of the previous moments through the united nations that have been discussed or occurred in regards to automation causing unemployment.



- Promoting full employment and decent work for all, 24 July 2008 (E/2007/49)
- Brief for GDSR, Automation and artificial intelligence - what could it mean for sustainable development?
- General Assembly High-level Meeting on the Future of Work Organized on the occasion of the 100th Anniversary of the International Labour Organization, united nations headquarters New york, 10-11 April 2019
- United Nations world development report 2019 - Argues that while automation displaces workers, technological innovation creates more new industries and jobs on balance.

Possible Solutions

Delegates can suggest solutions that mandate companies to provide aid to workers before laying them off due to a shift in automation for their transition period and giving them a choice between the additional financial aid or a training session. Said training session also being mandatory as a choice to all workers being laid off. Additionally delegates may add a clause to control how fast the shift is by allowing companies to drop only a certain number of workers in one go.

Some useful links for delegates

- <https://www.youtube.com/watch?v=th3nnEplTz0>
- https://www.youtube.com/watch?v=cXQrbxD9_Ng
- <https://www.un.org/ecosoc/en/events/2017/joint-meeting-ecosoc-and-second-committee-%E2%80%9Cfuture-everything-%E2%80%93-sustainable-development>

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