

 **Oasis International School Model United Nations**

Economic and social council

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Guiding Package

Topic (1): The impact of usage and methods of artificial intelligence to the non-developed countries

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11. **Abstract**

Today, with a simple app, you can easily know the weather, program an alarm, be informed of your appointments, be updated with the latest news and never ending usages. All of that thanks to the Artificial intelligence. But beyond these practical uses, artificial intelligence covers a vast field of application. Artificial intelligence is the implementation of a number of techniques to enable machines to imitate a form of real intelligence. It is integrated in a growing number of application areas that only developed countries can afford, such as: strategy games, mathematical research, finance, medicine, personal assistants and home automation, perception/interpretation (facial recognition, language comprehension, etc.), robotics (industry, transport, armament, etc.) and factory machines. Non-developed countries or least developed countries (LDCs) are low-income countries facing severe obstacles to sustainable development. They are highly exposed to the possibility of being attacked to some economic and environmental shocks and have low levels of human assets. The list of LDCs is reviewed every three years by the Committee for Development (CDP). In an attempt to progress, LDCs are seeking to implement artificial intelligence to enhance the economic and social level.

**II. Introduction**

As technology work progresses, artificial intelligence moves from a simple common Sculpin to an automatic financial fund management system, indicative medical assistance, risk assessment in the field of bank credit or insurance or a decision-making ally in the military field. While in 2015 the artificial intelligence market was worth 200 million dollars, it is estimated that by 2025 it will amount to nearly 90 billion dollars.

Despite the many advantages and uses it offers, artificial intelligence still has significant disadvantages. Therefore, there’s two debatable points of view concerning the impact of usage and methods of artificial intelligence to the non-developed countries. Some countries consider it will be suitable, affordable and will help the country's economy and level rise, yet others think that the use of artificial intelligence is unethical due to the misuse of people and it will be the cause of destroying the economic and social level of the country.

Artificial intelligence will gradually extend to almost all areas of the information and communication technology (ICT) sector, as well as to the ecosystem that supports its normalization. It will initiate much of ITU's technical work, including data management, network orchestration and management, video coding. These opportunities will help the non developed countries turn into smart cities and raise its economical and social state.

**III. Key terms**

1. Artificial intelligence: the branch of computer science that aims to create intelligent machines that are made and produced by human beings instead of occurring naturally. It has become an essential part of the technology industry.
2. Autonomous: when an AI construct doesn’t need help from people, it doesn’t need a human inside of it to function at full capacity
3. Machine learning: Machine learning is the process by which an AI uses algorithms to perform artificial intelligence functions. It’s the result of applying rules to create outcomes through an AI.
4. Algorithm: It refers to a set of instructions that get a task done. In artificial intelligence, Algorithm tells the machines how to figure out answers to different issues or questions.
5. Black box: it’s a system that can be viewed whose ideas and productions are known and outputs useful information, but the internal structure is not understood by people
6. Neural network: it’s a series of algorithms that attempts to recognize basic information in a set of data through a process that imitates the way the human brain operates
7. Deep learning: a process that uses algorithms to present and study difficult data sets. It’s a part of machine learning methods that is used to connect data and datasets that is dedicated to teach machines to learn to accomplish tasks on their own
8. Forward Chaining: process where the machines study forward from a given point using a system to reach the required goal.
9. Backward Chaining: process to figure out if there is any data available from the that can be used as evidence to the current goal.
10. Pruning: The process of cleaning up code so that unwanted solutions can be eliminated. But with the cutting down of code, the number of decisions that can be made by machines is restricted.
11. NLP – Natural Language Processing: based on speech recognition or gestures that pushes machines to understand human language. The more you interact with the machine using NLP, the better it becomes at understanding and processing the orders.

**IV. Background information**

The artificial intelligence known as the AI was born in the 1950s with the work of Alan Turing, John McCarthy, and Marvin Lee Minsky. The concept of artificial intelligence draws on the resources of mathematical logic, the science of neural networks, quantum physics and of course computer science. Its various operating modes all aim to develop logical methods (where algorithms play a major role) to solve complex problems.

Concerning the non-developed countries, they follow three essential criteria when assessed: low-income, human resource weakness, and economic vulnerability. The low-income criterion is based on three years average estimation of the gross national income per capita. The human resource weakness criterion is involving a composite human assets index (HAI) based on four indicators which are: nutrition, health, education, and adult literacy. Finally, economic vulnerability criterion is based on indicators of the instability of agricultural production, the instability of exports of goods and services, the economic importance of non-traditional activities and the merchandise imported to the country. According to the list of the least developed countries (LDCs) Africa is the continent with the biggest number of non-developed countries with a number of 36 non-developed countries, afterward Asia with a number of 10 non-developed countries, and then Australia and the Pacific with a number of 5 non-developed countries, lastly the Carribean with a number of 1 non-developed countries.

All around the world, Artificial intelligence is already metamorphosing positively developed countries, for example: in Nepal, machines are created to help mapping and analyzing post-earthquakes reconstruction needs and ways to prevent land disasters. In addition to all across Africa, artificial intelligence is educating young students and helping them catch up on coursework. In addition, its implementation in humanitarian aid agencies. They are using big data analytics to optimize the delivery of supplies for refugees fleeing conflict and other hardships. In India, farmers use artificial intelligence to boost profits and improve their agriculture. They developed agricultural countries with smart agriculture. Farmers nowadays monitor crops more effectively and make better predictions on planting, weeding and harvesting using artificial intelligence tools. It may also be used to analyze the case of each and every plant at a time and add pesticides only to infected plants and trees instead of spraying pesticides across large tracts of crops. Artificial intelligence is used to predict any catastrophes to prevent reconstruction and death. Thanks to artificial intelligence, innovations like these help us achieve the United Nations Sustainable Development Goals on some very significant issues like eradicating poverty, ending healthcare inequality, increasing access to schooling, and combating global warming.

As we can distinguish the implementation of artificial intelligence has many consequences Some of the advantages include that artificial intelligence is used to predict any catastrophes to prevent reconstruction and death. It is still finding its way in emerging markets, but certain applications have already emerged and are now widely used. Finally yet importantly, machines are more efficient and faster due to the fact that they don’t sleep or need any kind of rest like humans and that artificial intelligence would have a low error rate compared to humans if coded properly. They would have incredible precision, accuracy, and speed. Some of the artificial intelligence’s inconveniences are: as artificial intelligence is widely spread, robots are replacing human jobs which is leading to severe unemployment. A new analysis by the government says that by 2030, approximately 800 million jobs could be lost worldwide to automation. In the second place, artificial intelligence costs a lot of money and time to build, rebuild, and repair. Lastly, some people consider it unethical and not morally correct to have machines replace humans.

The 2017 World Summit of Artificial Intelligence for the Social Good is the first attempt to establish a global dialogue on the prospects for exploiting artificial intelligence for the common good. While the 2017 Summit provided an opportunity to establish this dialogue at the global level with all interested parties, the 2018 Summit is more action-oriented and will focus on artificial intelligence solutions that can deliver benefits in the long term...

**V. Major countries involved**

* **The United States of America**: leads the world with over 1000 companies of AI and 10 billion dollars in venture capital, which is a different type of equity and financing that investors provide to companies and small businesses that have a long term impact on a society’s growth. There are also more than 850,000 AI professionals in the United States, which is a lot compared to other countries. With companies like Amazon, Google, Microsoft, Facebook and IBM investing in AI, the United States has every resource necessary to become a global leader in automation and is likely to become an AI superpower. Between 2011 and 2015, the US published almost 25,500 papers. With America's scientific knowledge and its business market power, it will allow them to stay on top.
* **The People's Republic of China:** Leaders in China see AI as an essential piece of the country's economic growth. The amount of AI grew by 90% in the last five years. By some estimates, AI could increase the Chinese economic growth rate by 1.6% by 2030. China was recently thinking of as a developed country, the country now intends to be a leader in many fronts. AI is another area the Chinese consider of utmost importance. According to the times higher education, between 2011 and 2015, China published over 41,000 papers on AI. Last year, they announced their intention to become a principal world center of artificial intelligence innovation.
* **Estonia:** Estonia ranks 27th in the world for fastest internet, beating out the United States. The country also has the third most startups which is an organization dedicated to creating something new per capita, per person in Europe. In addition to having technical resources, Estonia has been a leader in addressing legal questions related to intelligent machines. Points of resistance that could block other countries are being resolved early in Estonia. They are qualified as one of the most countries who controls the usage of AI and it provides an economic growth which helps them proceed with new algorithms.

**VI. Major organizations involved**

* **International civil aviation organization:** This organization focuses mainly on the impact of artificial intelligence on jobs and inequality. It evaluates AI’s technological change on productivity. Moreover, it analyses the characteristics of artificial intelligence and concentrates on its benefits. They also discuss and solve the potential of AI in the context of the developed economies and countries that face governance. In particular, it notes the risk of AI leading to further industry by taking into consideration the inequality, unemployment and the developing economies in order to increase them.
* **United Nations Children’s Fund (UNICEF):** is using Machine Learning and Artificial Intelligence for both programmers and operational purposes. Based in the "Principles of Digital Development". The organization promotes applications and development of Machine Learning and Artificial Intelligence with equity at their core, whether through fair and open training sets or through discussions on algorithmic equity and information on poverty.
* **Algorithmic Justice League:** is an organization that aims to remove human bias from AI algorithms that can result in unfair practices and understanding its social implications. Their work focuses on 4 key parts: rights and liberties, labor and automation, bias and inclusion and lastly safety and critical infrastructure.
* **Foundation of Responsible Robotics:** their job is to shape a future of responsible robotics and artificial intelligence AI in design, development, use, regulation and implementation. They bring together researchers from many disciplines to solve issues related to artificial intelligence. Furthermore, they offer a complete approach to ethical design of AI-related technology. Their goal is to enhance technology development by integrating ethics and development for the benefit of industry and economies.
* **Future of Life Institute:** works to increase diversity and inclusion in artificial intelligence. It’s a charity organization working to ensure that tomorrow’s most powerful technologies are beneficial for humanity. It is currently focusing on keeping artificial intelligence controlled in order for it to not surpass human intelligence and to focus on its main points and their positive impact.

**VII. UN Involvement**

The United Nations are working on opening many centers on artificial intelligence and robotics, one of them will be opening in the Netherlands. The office will help focus on AI throughout the UN in a single agency, which will be organized under the UN Interregional Crime and Justice Research Institute (UNICRI). The UNICRI launched its program on AI and Robotics in 2015. In October 2015, the 70th Session of the UN General Assembly held the event, “Rising to the Challenges of International Security and the Emergence of Artificial Intelligence.” And in October 2017, the UN led a joint meeting of the UN Economic and Social Council and the Second Committee to consider the role and impact of AI on sustainable development.

They also created an agency for information and communication technologies, the international telecommunication union (ITU) and has become one of the key UN platforms for exploring the impact of AI. ITU has stated that it will provide a neutral platform for the government and the industry to build a common understanding of the capabilities of emerging AI technologies and consequent needs for technical standardization and policy guidance.

**IIPossible Solutions**

* To advance policies to assure that development of AI will be directed at augmenting humans and the common good.
* Produce a control system to shut AI down to prevent unwanted effects and AI from becoming too powerful to surpass human intelligence.
* Shift the priorities of economic, political and education systems to empower individuals to stay ahead in the race with the robots.

**Guiding Questions**

1- What are the pros and cons of the use of artificial intelligence?

2- What are the measures to control the use of artificial intelligence?

3- Will artificial intelligence be able to develop all countries or only non developed ones?

4- Is the use of artificial intelligence considered effective for development?

5- To what extent does the use of artificial intelligence may be considered non ethical?

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