INDIA'S INTERNATIONAL MOVEMENT TO UNITE NATIONS

STUDY GUIDE

COMMITTEE: WORLD ECONOMIC FORUM

AGENDA: THE QUESTION OF ARTIFICIAL INTELLIGENCE AND EMPLOYMENT SECURITY

MANDATE

The World Economic Forum is the International Organization for Public-Private Cooperation. It was established in 1971 as a not-for-profit foundation headquartered in Geneva, Switzerland. It is independent, impartial and not tied to any special interests. The Forum strives in all its efforts to demonstrate entrepreneurship in the global public interest while upholding the high standards of governance. The Forum brings together the world's most influential political, business, cultural, and other leaders to influence global, regional, and industry agendas. It aspires to exhibit entrepreneurship in the global public interest while keeping the highest governance standards in all its endeavours. The operations are defined by a distinct institutional culture based on the stakeholder idea, which holds organisations accountable to all segments of society. The institution carefully mixes and balances the best of many different types of organisations, including those from the public and commercial sectors, international organisations, and academic institutions.

INTRODUCTION

What is Artificial Intelligence?

Artificial intelligence (AI) is a branch of computer science that deals with the creation of intelligent agents, which are systems that can reason, learn, and act autonomously. AI research has been highly successful in developing effective techniques for solving a wide range of problems, from game playing to medical diagnosis. There is no single, universally accepted definition of AI. However, AI is commonly defined as the ability of a machine to perform tasks that would usually require human intelligence. This includes tasks such as understanding and responding to natural language, recognising and classifying objects, and making decisions in complex environments. Once an AI system is trained, it can be used to perform tasks on new data that it has not seen before. For example, an AI system that has been trained to identify objects in images could be used to identify the objects in a new image that it has never seen before.

There are four primary types of AI:

1. Reactive machines: These machines are the simplest type of AI. They can only react to their current environment and cannot learn or adapt over time. An example of a reactive machine is a thermostat, which can only turn on or off the air conditioning based on the current temperature.

2. Limited memory machines: These machines can store some information about their past experiences and use this information to make better decisions. An example of a limited memory machine is a self-driving car, which can use its past experiences to learn how to navigate different types of roads and traffic conditions.
3. Theory of mind machines: These machines can understand and reason about the mental states of others. This type of AI is still in its early stages of development, but it has the potential to revolutionise the way we interact with computers. For example, a theory of the mind machine could be used to create a virtual assistant that can understand and respond to our emotional needs.
4. Self-aware machines: These machines would be able to understand their existence and would have the ability to learn and adapt on their own. This type of AI is still very far in the future, but it is the ultimate goal of AI research.

AI is a powerful technology that has the potential to transform many aspects of our lives. As AI technology continues to develop, it is important to understand the potential benefits and risks of AI. It is also important to

Advantages and Disadvantages of AI

AI has the potential to revolutionise many aspects of our lives and offer several advantages, such as:

- AI can automate many tasks that are currently performed by humans, freeing up our time for more creative and strategic work. For example, AI is already being used to automate tasks such as customer service, accounting, and manufacturing.
- AI can analyse large amounts of data to identify patterns and trends that would be difficult or impossible for humans to spot on their own. This can lead to better decision-making in a wide range of fields, from healthcare to finance.
- AI is being used to develop new products and services that would not be possible without AI technology. For example, AI is being used to develop new medical treatments, create new forms of art and entertainment, and develop new ways to interact with computers.
- AI can be used to personalise our experiences in a variety of ways. For example, AI can be used to recommend products to us based on our past purchases or to tailor educational content to our individual needs.

- AI can be used to improve safety in a variety of ways. For example, AI can be used to develop safer self-driving cars or to detect fraud and other criminal activity.

While AI offers many advantages, it also has some disadvantages such as:

- As AI becomes more sophisticated and capable, it is likely to displace some human workers. This could lead to increased unemployment and social unrest.
- AI systems are trained on data, and if that data is biased, the AI system will also be biased. This could lead to discrimination against certain groups of people.
- AI systems collect and analyse large amounts of data, which raises privacy and security concerns. It is important to ensure that AI systems are used in a way that protects our privacy and security.
- It can be difficult to hold AI systems accountable for their actions. This is because AI systems are complex and opaque, and it can be difficult to understand how they make decisions.
- Some experts have warned that AI could pose existential risks to humanity. For example, if AI becomes more intelligent than humans, it could decide that humans are a threat and take steps to eliminate us.

The Importance of AI

AI can provide end-to-end efficiency, which means that it can eliminate all the friction created in work and improve the analytic part. It also automates many complex processes. Furthermore, it acts as a helping hand in cost reductions and resource utilisation. It also improves accuracy and decision-making. Not only this, but AI has a significant importance in empowering employees. As machines think differently from humans, they can uncover gaps and opportunities in the market more quickly, helping their clients introduce new products, services, channels and business models with a level of speed and quality that wasn’t possible before, hence providing intelligent offerings.

Effects of AI on Various Fields

AI, or Artificial Intelligence, has overtaken the world in a few years at a rapid speed. AI assistants such as Siri, Alexa or even ChatGPT are the recent advancements in this field. According to a report from the World Economic Forum, nearly 85 million jobs will be replaced

by AI, by 2025. However, the same report also states that AI will create around 95 million new jobs, resulting in a gain of 10 million jobs.

In the upcoming years, businesses will have to identify which tasks can be automated or not. They will have to create strategies and plan their future policies accordingly, keeping up with all the technological advancements. At present, AI has already started to impact work life. They have automated many work tasks and have also made the workers more efficient. According to Forbes, in the future, AI will bring up countless numbers of opportunities/possibilities and applications, which will help us simplify our lives to a great extent.

Employment Security

Employment

Employment is the state of having a job. It is the opposite of unemployment. A job is a paid position that requires a person to perform a set of tasks or duties. Jobs can be full-time, part-time, or temporary. They can also be salaried or hourly.

There are three main types of employment:

- Formal employment: Formal employment is a type of employment that is regulated by the government and provides several benefits to workers, such as social security, paid time off, and health insurance.
- Informal employment: Informal employment is a type of employment that is not regulated by the government and does not provide the same benefits as formal employment.
- Self-employment: Self-employment is a type of employment where a person works for themselves and is not employed by another person or organisation.

Sectors of Economy

The Economy is divided into different types of sectors depending on the nature of employment. The economy is divided into three types of sectors:

- Primary sector: The primary sector includes activities that are carried out using natural resources and serve the purpose of raw materials for all other goods. This includes activities such as agriculture, mining, and fishing. It is also known as agriculture and the allied sector as agriculture, along with fishing, dairy, etc., play a major role in the contribution of raw materials.

- Secondary sector: The secondary sector includes activities that involve the work of manufacturing. Thus, it includes industries that manufacture goods from raw materials and is responsible for the production of finished goods that are ready for consumption. This sector includes activities such as construction, manufacturing, and utilities.
- Tertiary sector: The tertiary sector includes activities that provide services to the other two sectors. This sector doesn't involve the production of goods or raw materials. It involves industries that provide services such as education, healthcare, guidance, banking, IT, tourism and retail, to name a few.

Employment security

Employment security refers to the stability of a person's job. It is often measured by the risk of a person becoming unemployed. Employment security is important for individuals because it provides them with a source of income and stability. It is also important for society as a whole because it helps to reduce poverty and crime.

Several factors can affect employment security, including:

1. The state of the economy: When the economy is strong, there are more jobs available and workers are less likely to lose their jobs. When the economy is weak, there are fewer jobs available and workers are more likely to lose their jobs.
2. The industry in which a person works: Some industries, such as construction and manufacturing, are more cyclical than others, meaning that they are more likely to experience job losses during economic downturns.
3. The skills of a worker: Workers with skills that are in high demand are more likely to have job security than workers with skills that are in low demand.
4. The location of a worker: Job security can vary depending on the location of a worker. For example, workers in rural areas may be more likely to experience job losses due to plant closures.

Employment security is an important issue for individuals and society as a whole. Several factors can affect employment security. By investing in education and training, providing social safety nets, and promoting economic growth, we can help to ensure that everyone has the opportunity to find and keep a good job. Employment security is a complex issue, and there is no easy solution. However, by taking the steps outlined above, we can help to improve employment security for everyone. It is also important to note that employment security is not a guarantee. Even workers with the most in-demand skills can lose their jobs due to factors such as economic downturns or

company restructuring. However, by taking steps to improve their employment security, workers can reduce the risk of becoming unemployed.

Impact of AI on Employment Security

AI will also significantly impact the job search process. According to some research, an automated system can reject up to 75% of the resumes, even before a person can go through it. The employees and the employers are advised to take active measures to solve the structural unemployment problems caused due to the development and application of AI in the overall labour market.

According to a report, the impact of automation would vary in each aspect. Some industries and occupations would largely benefit from automation while at the same time, some occupations are very vulnerable and hardly give any chance for human growth, excluding the jobs that are going to end shortly.

HISTORY

AI is about the ability of computers and systems to perform tasks that typically require human cognition. The history of AI is neither very recent nor ancient. The first and official introduction of AI dates back to the mid-twentieth century, i.e. in 1950. It was when the coining of the term “Artificial Intelligence” came into existence. The Turing Test, proposed by Alan Turing, was to determine a machine’s intelligence capabilities. Following this, in the same year, Claude Shanon came up with a paper on machine learning chess.

The lack of significant progress led to the period of “AI winter”. This period extended from the 1970s to the 1980s. The era of the 1990s and the 2000s is popularly known as the Internet era and the era of machine learning. The name makes it evident that the period was all about the fueling of machine algorithms.

The 2020s is the era of very rapid development of AI as per what has been predicted. GPTs have been quite popular recently. GPT models are a type of large language model that utilises the transformer architecture. They are trained on vast amounts of unlabelled text data, which enables them to generate content that closely resembles human writing. As of 2023, most LLMs share these characteristics and are hence often broadly referred to as GPTs.

Some years important in the History of AI are:

1950: It was when the coining of the term “Artificial Intelligence” came into existence. The Turing Test, proposed by Alan Turing, was to determine a machine’s intelligence capabilities. Following this, in the very same year, Claude Shanon came up with a paper on machine learning chess.

1980: It was when the Japanese Fifth Generation Computer systems aimed to develop an “intelligent” computer. This was, however, a failed attempt.

1986: The backpropagation algorithm was reintroduced.

1999: Sony released AIBO, a robotic pet, demonstrating the capabilities of AI.

2016: Google's AlphaGo program beat the world champion Go player, Lee Sedol.

2018: The journey of Generative pre-trained transformers (GPT) began this year when OpenAI, a leading AI company in the United States, introduced the first GPT model.

CURRENT SCENARIO

The swift progress in Artificial Intelligence (AI) prompts a critical examination of its impact on job security. Automation and AI-driven technologies are set to reshape industries, ushering in both job displacement and creation. Understanding the current landscape is pivotal for navigating the future work environment. AI's rapid evolution brings forth noteworthy developments such as natural language processing where AI models comprehend and generate human language, facilitating applications like chatbots, virtual assistants, and intelligent content creation and computer vision where AI algorithms proficiently interpret visual data, advancing image and video recognition, autonomous vehicles, and medical diagnostics. There are technologies where major tech innovations are substituting human tasks such as Robotic Process Automation (RPA) in which software robots automate repetitive tasks, impacting customer service, data entry, and accounting. There are AI-powered decision-making bots in which algorithms influence areas such as loan approvals, insurance underwriting, and even criminal justice. Quantifying AI's sole contribution to job loss is intricate. Estimates vary, with the World Economic Forum suggesting 85 million job displacements by 2025 but creating 97 million new jobs. The OECD projects 14% of jobs in developed countries to be highly automatable. AI's impact varies by sector. Routine tasks are more susceptible to automation, while roles demanding creativity, social intelligence,

and critical thinking remain in demand. Upcoming projects underscore AI's potential to reshape the job market which includes;

AI-powered Healthcare: Medical diagnosis, surgery assistance, and personalised treatment plans impact healthcare professionals.

AI-powered Education: Intelligent tutoring systems and adaptive learning platforms revolutionise education, potentially affecting teaching roles.

AI-powered Customer Service: Chatbots and virtual assistants handle customer inquiries, impacting customer service jobs.

Governments and regulators address AI's ethical and societal implications, focusing on transparency and explainability which includes ensuring AI algorithms are transparent, and decisions are explainable, Ensuring that there is no bias and discrimination which prevents AI systems from perpetuating bias and discrimination. There is also a pressing issue of data privacy and security protecting individual privacy and securing sensitive data used by AI systems. Governments have established regulatory measures to hold a system accountable. The impact of AI on job displacement varies widely, sparking debates on widespread job loss versus the emergence of novel opportunities. McKinsey Global Institute's 2021 study forecasts the potential displacement of 800 million jobs by 2030, juxtaposed with the creation of 950 million new roles. This underscores the importance of proactive initiatives for training and reskilling to bridge evolving skill gaps.

AI's influence on distinct industries and job functions will be profound. Sectors likely to witness extensive automation encompass:

- Manufacturing: Robotic involvement in tasks such as assembly, welding, and quality control.
- Transportation: Autonomous vehicles are poised to revolutionise roles in trucking, taxi services, and delivery.
- Retail: AI-driven self-checkout systems and cashierless stores diminishing reliance on human cashiers.
- Administrative & Support Services: RPA and AI-driven decision tools streamline tasks like data entry, scheduling, and customer service.

The domains resistant to automation include those demanding:

- Creativity and Critical Thinking: Design, engineering, research, and writing roles exhibit lower susceptibility to AI replacement.

- Social and Emotional Intelligence: Professions in healthcare, education, and social work relying on intricate human skills challenging for AI replication.
- Human Interaction and Empathy: Jobs like customer service, sales, and therapy require emotional connection and understanding, posing a challenge for AI.

Governments and international entities have actively sculpted policy frameworks for AI, the key areas are algorithmic transparency and explainability which ensure fair and accountable AI decision-making through transparency, data privacy and security where there is a need to implement measures to safeguard individual data and prevent misuse, tackling potential biases in AI systems to prevent perpetuation of unfairness and ensuring job security and social safety nets and crafting policies supporting displaced workers in transitioning to new roles. Currently, there are some policies in place which include The European Union's GDPR which establishes stringent data privacy standards for EU businesses, The U.S. National AI Research and Development Strategic Plan that outlines federal priorities and addresses ethical considerations and The International Labour Organization's Future of Work Commission which advocates a human-centred approach prioritising social justice and inclusivity.

PROPOSED SOLUTIONS

Addressing the question of artificial intelligence (AI) and employment security requires a vibrant approach that balances the benefits of AI with the potential impact on jobs. It may include points such as:

- Governments can allocate funds and resources for education and training programs to equip the current workforce with the skills needed to work alongside AI technologies and also implement lifelong learning initiatives to facilitate continuous upskilling and reskilling throughout a person's career.

- Governments and international organisations can develop and enforce ethical guidelines and regulations for the responsible development and deployment of AI. New committees can be formed to look into matters related to bias, transparency, and accountability in AI algorithms to ensure fair and ethical practices.

- There can be collaboration between governments, private industries, and educational institutions to align AI development with workforce needs. Establishing joint initiatives to identify skill requirements and developing training programs can create pathways for employment in AI-related fields.

- Policies should be implemented to provide social safety nets and support mechanisms for workers displaced by AI and automation which includes providing resources for career counselling, job placement, and financial assistance during transitions.

BLOC POSITIONS

India

India recognises the potential of AI to drive economic growth, innovation, and efficiency. However, in the past few years, there have been concerns raised about its impact on employment security, particularly in sectors where automation might replace certain jobs. India has acknowledged the potential for job displacement due to automation and AI technologies. There is an emphasis on addressing the skill gap through education and training programs to equip the workforce with the skills needed in the age of AI. The country has been working on developing a National AI Strategy to harness the benefits of AI while mitigating potential negative impacts on employment. It involves creating a conducive environment for AI research, development, and implementation.

USA

The United States has remained at the forefront of AI investment, since 2013 with nearly $250 billion invested in 4,643 companies cumulatively. The U.S. government and various stakeholders have been navigating the challenges and opportunities posed by AI. The United States recognises AI as a driver of economic growth, innovation, and global competitiveness. The country's policymakers often emphasised the potential for AI technologies to create new industries and job opportunities. The country has also acknowledged the concerns about potential job displacement due to automation and AI technologies and emphasised the need for workforce development and training programs to help workers transition into roles that complement AI technologies.

Japan

Japan views AI as a key technology that can contribute to economic growth, innovation, and global competitiveness. Japanese AI works to enhance public transportation safety, decrease congestion, and improve traffic management. The Government has emphasised leveraging AI to enhance productivity and create new business opportunities. In 2019, the Japanese government published the Social Principles of Human-Centric AI as principles for implementing AI in society. Japan emphasises the concept of human-machine collaboration, where AI and automation complement human capabilities rather than replacing them entirely. Thus encouraging the integration of AI technologies into existing work processes to enhance efficiency and effectiveness.

China

China has actively embraced artificial intelligence as a strategic focus for economic development and technological advancement. Over the last decade, China has become a leading developer and user of digital technologies, in particular artificial intelligence. China recognises the potential benefits of AI in driving innovation, improving productivity, and maintaining global competitiveness. However, like other countries, China is also aware of the challenges related to AI, including potential impacts on employment security. Chinese policymakers have enacted a series of regulations around data and consumer protection to ensure the proper use of these technologies and to prevent market abuses by dominant players. China often emphasises the potential of AI to create new job opportunities and foster economic growth. The government encourages the development of AI-related industries, viewing them as drivers of employment. There is strong government support for AI research and development through funding and incentives. Policies are put in place by the government to encourage the integration of AI technologies into various sectors of the economy.

South Korea

South Korea has been actively pursuing the development and deployment of artificial intelligence (AI) technologies as part of its broader strategy for economic growth and technological advancement. The country has earned a reputation as a leading global information and communication technology centre and is ranked second in the Bloomberg Index of Most Innovative Nations 2020. In 2019, the Korean Government announced its first national AI

strategy which included focusing on heavy investments in AI infrastructures and greater use of AI technologies across all industries. But just like many other countries, South Korea acknowledges the potential benefits of AI but is also aware of the challenges it may pose to employment security. It has expressed a willingness to collaborate with the international community on AI standards, governance, and best practices. The country has also participated in global forums and initiatives related to AI to contribute to the development of international norms.

SUGGESTED MODERATED CAUCUS TOPICS

1. Discussing the role of AI and the importance of AI in the future.
2. Analysing the various challenges faced by developing countries in the implementation of AI technologies
3. Examining the impact of AI on employment securities.
4. Discussing the role of the international community in furthering AI and reducing its negative impacts.
5. Discussing the advantages and disadvantages of using AI.
6. Discussing the role of collaboration between governments, private industries, and educational institutions in designing and implementing AI education and training programs.
7. Analysing the impact of AI on culture, society and economy.
8. Discussing the need for social safety nets to support workers displaced by AI.
9. Examining ways in which jobs can be created in the AI sector.
10. Discussing ways to improve employment security with growing AI technology.

RESEARCH LINKS

(Note: Delegates, some of the links are only meant for light reading and thus are not highlighted, only refer to the highlighted sources as valid proof as others may or may not be accepted as a source of proof in the Council. The decision of the Presiding Officer in regards to the acceptable sources is Final and Binding.)

1. **https://bernardmarr.com/the-evolution-of-ai-transforming-the-world-one-algorithm-at-a-time/**
2. https://www.nexford.edu/insights/how-will-ai-affect-jobs
3. https://intellectdata.com/the-impact-of-ai-on-the-job-market-and-the-future-of-work/
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10. **https://hbr.org/2018/01/the-question-with-ai-isnt-whether-well-lose-our-jobs-its-how-much-well-get-paid**
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12. **https://cepr.org/voxeu/columns/impact-artificial-intelligence-growth-and-employment**
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22. https://www.whitehouse.gov/wp-content/uploads/2022/12/TTC-EC-CEA-AI-Report-12052022-1.pdf
23. https://www.bruegel.org/blog-post/do-we-understand-impact-artificial-intelligence-employment
24. https://www.nytimes.com/2023/05/23/business/jobs-protections-artificial-intelligence.html
25. https://news.stthomas.edu/artificial-intelligence-and-its-impact-on-jobs/
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