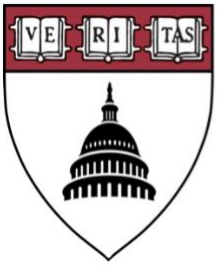

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THE ECONOMICS OF ARTIFICIAL INTELLIGENCE IN THE DEVELOPING WORLD

By Matt Tibbitts

INTRODUCTION

Language Model – *An artificial intelligence model that attempts to generate language as text or speech and comprehend inputted text or speech, similar to ChatGPT or Siri.*

"Welcome to this briefing on the fascinating subject of Artificial Intelligence (AI). As we delve into the history, opportunities, and challenges surrounding AI, prepare yourself for a surprising revelation. The insights and information you are about to encounter were crafted not by a human hand but by an AI **language model** known as ChatGPT. That's right – an AI itself has generated this introduction.

Artificial Intelligence has come a long way since its inception, and today, it permeates our lives in ways we may not even realize. From intelligent personal assistants to cutting-edge healthcare diagnostics, AI has made remarkable strides in transforming industries and shaping the world we live in. As we explore the history and implications of AI, it is intriguing to acknowledge that the very technology we are discussing has played a part in creating this briefing.

Neural Networks – *A type of active learning model in which hidden layers of formulas transform data from one form to another.*

By leveraging vast amounts of data, sophisticated algorithms, and **neural networks**, AI systems like ChatGPT have become capable of comprehending, reasoning, and generating human-like text. The evolution of AI has witnessed periods of excitement, setbacks, and renaissance, and it continues to push the boundaries of what was once considered unimaginable. The emergence of AI has spurred conversations about its potential, ethics, and the need for responsible development.

As we navigate this briefing, let us reflect on the implications of AI as a tool that both humans and machines can employ to augment

their capabilities. It is a testament to the remarkable progress in the field that AI systems can contribute meaningfully to discussions about their own creation. Embrace this twist of fate as we embark on a journey through the history, challenges, and promises AI holds for the future.

(Note: While AI has generated this briefing, the inputs and knowledge it draws upon are based on the collective human expertise and data it has been trained on. AI systems like ChatGPT serve as tools to assist and augment human intelligence rather than replace it entirely.)"

Yep, that's right, you just witnessed AI generate human text. Just from me asking, ChatGPT wrote its own introduction to a briefing about itself and other artificial intelligence tools. Throughout this human-written briefing, we will examine the many aspects of our lives that artificial intelligence has touched, with a particular focus on the economics of the technology and how systems like ChatGPT have, despite reminding us in a note that they don't aim to, replaced some forms of human intelligence and labor around the world — often at disparaging rates.

Artificial intellegence aims to combine human style learning with machines to produce technolgy that can learn alongside humans.

We will begin with a history of the complex "under the hood" background of artificial intelligence and aim to better comprehend how systems like ChatGPT can interact with us similarly to humans. We will then explore the economic impacts and implications of artificial intelligence, particularly in the developing world.

As World Bank members, it will be your job and responsibility to understand how this technology works and how access to it, or lack thereof, can have catastrophic consequences for economics and societies around the world. So, while artificial intelligence may have provided us with an introduction, let's delve into a human-crafted description of just how we ended up in this situation and what lies in the future at the intersection of technology, economics, and global politics.

EXPLANATION OF THE ISSUE

Historical Development

While AI may seem like a recent invention, its conception goes back over 50 years!

While today, artificial intelligence may not seem like a massive step in technological progress, just over 50 years ago the first ramblings of a "smarter computer" were seen as something straight out of a science fiction novel. In the 1950s, Alan Turing, a British poly-mathematician, became one of the first minds to begin exploring the possibility of artificial intelligence from a purely mathematical perspective, with the goal being for a computer to be able to make decisions like that of a human. Turing's idea was that if you could provide a computer with enough information, the

computer should be able to decide in the same manner as that of its human counterpart.

In Turing's time, computers looked rather different. Before 1949, computers could only execute commands — they lacked any storage, an obvious prerequisite for a computer designed as Turing had envisioned to be like the human mind. Adding to his trouble, the average computer cost nearly $200,000 a month to run, allowing only top universities and massive corporations to be able to afford to lease one. These troubles continued to plague the field of artificial intelligence until around the 1980s when John Hopfield and David Rumelhart introduced the idea of "deep learning." This process focused on experience and stored the data inside of the computer. At a high level, it was initially used for processes referred to as **expert systems** in which a programmer could build a database of how experts responded to a situation via a survey and then import those answers into a computer such that a non-expert could ask a question and receive an answer. If this sounds like the artificial intelligence we know today, that's because it is. These first experiments over forty years ago served as the foundation for the artificial intelligence we know and sometimes fear today.

Expert System *– an early form of AI in which a database stored situations and expert suggested responses.*

In those years, computers began to become stronger, grow in memory and processing power, and diminish in cost, becoming a household item rather than a corporate luxury. Along the way, many achievements made news headlines, including that of IBM's Deep Blue, a program designed with the same deep learning principles we just discussed focused solely on understanding chess. By feeding the program millions of moves and countermoves from its opponent the program was able to develop an understanding of the game, ultimately leading to its victory over chess grandmaster Gary Kasparov, the 1997 world chess champion (Anyoha, 2017).

From here, AI seemed to become more and more human, with programmers being able to feed into programs seemingly endless amounts of information related to spoken language and even human emotion. Combined with other programming methods such as web scraping, which allows programs to scrape information from websites, artificial intelligence models have become smarter and smarter. Additionally, a shift from passive to active learning has allowed these models to become even more sophisticated. In the past, these passive learning models operated as we described: putting some sort of database into the program and watching the computer regurgitate it when presented with unique citations. However, active learning, on the other hand, is more similar to how humans learn. In this process, machines are provided with some initial database and then the machine is continually fed more and more information until the computer is sufficiently accurate (Geeks 2023).

Today, combining artificial intelligence with industries outside of technology including the automotive industry, the pharmaceutical industry, and even the educational industry, has had profound effects on how we view artificial intelligence. What was once a cool hack that programmers could use to show off their tech skills is now responsible for the changing global economy and employment system, advancement in the understanding of the world around us, and even a rise in misinformation and conspiracy theories.

We've arrived at a difficult technological crossroads where people begin to fear that computers and artificial intelligence will one day replace them. While we are still far away from the science fiction novels that fueled the first ideas of artificial intelligence, we have arrived at a unique part in the story in which you could be reading this briefing and wondering if even this history was written by artificial intelligence.

Sorry to disappoint — it wasn't.

The technology industry within the developing world is growing, but AI may be a new driving factor of it.

Image Source: IT News

Scope of the Problem

While an exciting addition to the world of technology and a seemingly endless opportunity for growth and advancement in many areas of society, the changes brought by artificial intelligence and its economic effects are not equal around the world. In fact, while some people and firms stand to greatly benefit from an increase in productivity and general ability, other people might have their very way of life ripped out from under them as some of the most advanced technology on the planet stands to replace them in jobs that they have done their whole lives.

Meanwhile, others might have their educational paths altered by these new emerging technologies and the economic advancements that they may bring to those who understand their innermost workings.

Let's explore some of the changes that artificial intelligences has brought to our world, and more importantly, examine the underlying economic and political mechanisms that are driving changes that create "winners" and "losers" in a world of ever-changing technologies.

Effects of Artificial Intelligence on the Developing World

While we have seen artificial intelligence greatly impact the environment in which we live, work, and learn, the effect of AI on already existing global disparities has yet to be fully realized. Access to technology more broadly has always been a key indicator in economic models of development and global investment; most investors are drawn to nations that have access to emerging new technologies and are becoming increasingly industrial — allowing production costs to decline as the developing world goes through

the same technological revolution as developed nations once did just under a century ago.

However, on closer examination we can see that the possibility for investment from access to these new technologies is not equal amongst nations. In fact, the addition of technologies like AI are likely widening the gap between rich and poor countries by shifting third-party investment to countries where the newest forms of technology can latch on and thrive rather than those countries still playing catch up. This is mostly due to the role new technology plays in economics at different stages of development. In developing countries, we see technology and automation play a replacing role, taking over simplistic jobs that even the most basic **robot** or AI model could replicate with minimal human intervention.

Robot *– a machine able to replicate certain repetitive human motions and functions automatically.*

These changes are best seen in the automation of the automobile industry in the United States, which was once a massive human-run assembly line and now stands as a robotic line: each robot performing one repetitive task in a line, and a much smaller number of human managers overseeing the work of the machines. The contrast can be seen in the images on the left-hand side. These changes allowed the costs of manufacturing to go down and for automobiles to become more accessible to the public. This is beneficial for the people who can now afford cars but is detrimental for the thousands of low-skill workers laid-off and replaced by robots. This competitive aspect of technology can have devastating effects on nations whose labor supply is mostly lower skill, focused on agriculture and manufacturing, rather than higher skill industries. In these higher-skill industries, workers can be complemented by technology and artificial intelligence to increase their own productivity and eliminate tertiary positions dedicated to performing menial tasks such as organization, computation, or modeling. Yet, for developing countries without many workers in these high-skill sectors, the technology can be seen as more of a threat than a welcome partner in progress.

Today's manufacutring processes use large amounts of robots and automation.
Image Source: Expense Reduction Analysts

Thus, purely from an economical sense, we can see the role of the **"invisible hand"** in action. As some nations avoid technology growth because of fears of massive changes to their economic landscape, investors seek to put their funds to work in countries who can integrate technology into their work and see future costs drive down and profits increase. This simple result can have devastating effects on the economy for developing nations and can be one of the largest driving factors in contributing to the divergence of the developed and the developing world's wealth disparities.

"Invisible Hand" *– a term coined by Adam Smith in the book the "Wealth of Nations" to describe the way markets move in a capitalist economic system.*

World Bank Action

Machine Learning (ML) *– a field of mathematics and computer science in which data is transformed and modeled. ML aims to predict future or unknown data and patterns based on what already exists.*

While the World Bank does not have regulatory powers, it has been an important vehicle in discussions surrounding best ethical practices involving AI and has made recommendations to ensure that AI technologies are implemented in a way that benefits society. Additionally, the World Bank takes part in research to develop such ethical AI systems for various purposes including helping low-income regions of the world. Recently, the World Bank has developed one such **machine learning (ML)** model which aims to curtail inflation of food costs (Khare 2023).

The World Bank uses such models to monitor and forecast food prices across more than 25 countries. Such data collection is typical of World Bank programs, with World Bank-developed AI used for data collection and analysis to inform of the World Bank's mission around the world.

In addition to directly developing such systems, the World Bank also helps to provide financial support for projects using AI and aiming to develop their own AI systems in developing countries.

Other Policy Action

Outside of assistance from agencies like the World Bank, many nations have approached artificial intelligence differently. Some countries, typically the more developed ones like the Nordic nations in Europe, have taken a hands-off approach to artificial intelligence. These countries simply allow the free market to drive the development of new technology, with governments becoming involved in limited aspects of technological regulation and use in the public sector.

However, other nations, such as the United Arab Emirates, have taken a more hands-on approach to directly providing government funds to support the development of artificial intelligence in the country and utilize the technology in many aspects of its government ranging from passport control to speeding tickets.

Thus, there is precedent for both paths when looking at nations being exposed to artificial intelligence. As external funders, you could examine industry programs that exist within the country already that you could fund, rather than starting a government program. You could also take the route of working solely with the government and bringing in external stakeholders. There is not just one way to bring about this unique technological innovation in a new nation!

This is a good time to research your own country's view on artificial intelligence and gain a better understanding of how your government has approached the development of artificial intelligence. Has the government supported it directly or been quick to heavily regulate the sector? Knowing this information can better

guide you through the remainder of the briefing, having the knowledge of where your member nation might stand in some of the complex debate areas that we will soon discuss throughout the remainder of the briefing.

IDEOLOGICAL VIEWPOINTS

In the discussion of artificial intelligence and investment across the developing world, there are not particular ideologies that align on this issue. These funding situations are argued across geopolitical boundaries. While wars wage and markets flow, the World Bank stands as an opportunity to both see past global issues but also view their impacts in discussions. Thus, the following binary viewpoints are simply a generalization of how developed versus developing nations might view policies funding artificial intelligence around the world.

However, it is your job as a delegate to also incorporate your nation's own history with artificial intelligence and current international relations and economic conditions into your viewpoints on funding these programs on a global scale.

A drone flies over a village in Malawi. The drone helps farmers identity diseases in crops.
Image Source: The Borgen Project

First-World / Developed Nation's View

First-world nations are often supportive of the increase of artificial intelligence in developing countries as an opportunity for economic growth and collaboration. They recognize the potential for new markets, investments, and partnerships that could arise from fostering AI expertise and industries in these regions. Such collaborations can lead to mutually beneficial outcomes, including technological advancements, knowledge exchange, and job creation. These same nations often recognize that AI has wide-ranging implications across several sectors. These nations often recognize that nurturing AI capabilities in developing countries can enhance global competitiveness and foster innovation on a broader scale. This can also have downsides, however, as the increase in global competitiveness may cause price increases for first-world nations who are purchasing products from developing nations. On the other hand, first-world nations may temporarily benefit from the reliance of these nations on the need for technological materials and education.

In a broader humanitarian lens, nations that are often supportive of humanitarian aid and efforts around the globe would likely support increases in AI because of its ability to address some of the world's more pressing issues that are often barriers to development for nations. Within this development, however, first-world nations may have higher bars regarding the ethical and safety concerns of AI. These nations often emphasize the importance of

promoting ethical AI practices and ensuring that AI is developed and deployed responsibly across borders. They encourage the adoption of ethical frameworks, privacy protections, and safeguards against biases in AI algorithms, while also ensuring that the deployment of AI to different regions of the world does not pose security risks in a complex geopolitical environment.

Creditworthiness – *the perceived ability of a debtor to repay their debt to the lender.*

And, as always with World Bank policy, first-world nations may be worried about the **creditworthiness** of the projects the Bank decides to invest in, as they provide most of the World Bank funding. Thus, these nations may be less open to funding projects in areas that are deemed by first-world nations to be "riskier" nations for investment than others.

Developing Nation's View

On the other hand, developing nations see AI as a catalyst for economic growth and development. They recognize that embracing AI technologies can enhance productivity, attract investments, and foster innovation in key sectors, while possibly providing them the opportunity to leapfrog the more traditional stages of development that more advanced nations went through over a hundred years ago. This could provide them with the possibility to bridge the economic gap between developing and more advanced nations. Additionally, as we discussed, AI provides developing nations with more paths to solve their unique challenges such as healthcare accessibility, agricultural productivity, and infrastructure development. By supporting AI development, they aim to harness the power of AI to improve healthcare outcomes, optimize resource utilization, enhance agricultural practices, and overcome infrastructure limitations.

Total factor productivity – *increased productivity that cannot be directly accounted for by increases in capital and labor and is generally considered to be driven by changes in technology.*

Additionally, an increase in technology and **total factor productivity** may serve as a way for developing nations to close the technology gap between themselves and more advanced nations. By supporting technical education programs and being able to support their local economies with technology, they can reduce reliance on foreign investment and technologies while also enchanting their own **human capital** and developing a competitive advantage on the world labor stage. However, in the interim, this process may require a large amount of foreign support both in technological knowledge and cash influx, which may lead some nations to be less willing to participate in such a program.

Human Capital – the skills, knowledge, and experience possessed by an individual or population, viewed in terms of their value or cost to an organization or country.

Developing nations also must deal with the ethics of AI development, particularly as they integrate it into a society that may not have had previous widespread access to technology. This is another aspect to consider when discussing the effects of third-party investment in these countries whose value system may be different from those living in the country. Navigating these discussions is somewhat difficult and may end up being a key

decision factor on whether a country aims to accelerate its adoption of artificial intelligence.

AREAS OF DEBATE

Now that we have examined some of the largest problems that artificial intelligence can cause for the developing world, and simultaneously the major problems that the same technology can help solve, we arrive here, aiming to discuss how we might do both simultaneously. Here we will explore some major areas of discussion and concern for both developed and developing nations in the discussion of artificial intelligence. From implementation challenges to security threats to the movement of the "economic invisible hand," we will examine some starting points for this difficult and complex debate.

Do not assume this list to be exhaustive, as there are many more areas of this difficult discussion that we will not touch on. But, as educated delegates, you are most encouraged to explore outside of these starting points and explore even more unique and in-depth areas of artificial intelligence that we may have missed in this brief overview.

Fixing Share in Production

In typical economics, economists measure the total output of a country via some version of the following Cobb-Douglas equation: $Y = A \times K^{\alpha} \times L^{\beta}$. In this equation, you see total output (Y), capital input (K), labor input (L), and alpha and beta — which represent the two inputs' respective shares of output. Then there is the A term representing total factor productivity, often referred to in layman's terms as "technology." As you can see from first glance, simplifying all a nation's productivity and technology levels into a single number is not easy, but it can provide us with some important information about a nation's economy, particularly around their labor markets.

Feedback loop – *when the outcome of something causes the same thing to occur again in the future.*

Continuing in the economic realm, we consider fair wages to be equal to the value of the labor a worker does. Therefore, when total factor productivity or technology is higher, wages also increase. Consider the example of a grocery store clerk scanning items rather than typing prices in. Because of an increase in technology, the clerk can scan more items and thus serve more customers, leading to higher profits for the store. This generates a positive **feedback loop.** However, since wages rise from technology, firms are induced to replace workers with technology, especially when workers are working in repetitive, lower-skill jobs. Thus, while some workers are better off, others are now out of a job, leading to economic inequality across the country.

Thus, it becomes the job of the World Bank to help mitigate the possibly severe economic and employment impacts of artificial intelligence. This can be done in several ways, particularly in those surrounding education. As we have previously discussed, increases in technological education and high-skill job training programs may help reduce the negative impacts of increasing wages in the developing world. Simultaneously, these programs can help bring artificial intelligence into other sectors and improve the way of life for millions of people living at or below the poverty line.

Political Perspectives on this Solution

Many nations are likely to be supportive of programs to increase access to technical education, but some may be reluctant to do so because of the increase in wages in these countries. Many first-world nations rely on these less developed or developing nations for a source of lower-cost imported goods, particularly related to manufactured goods like clothing or household items. A rise in wages triggered by an advance in technology may have repercussions in the labor market surrounding these goods. Although their manufacturing may become more automated, the price may temporarily increase as some countries advance their technology while others do not. Thus, this asymmetry in the market may lead to factories being closed or shifted to other areas, providing serious economic shocks to regions attempting to advance their own economies through increases in technology such as artificial intelligence.

Artificial Intelligence for Local Development

Azuri Technolgies is just one of many compaines combining many development goals and using AI to do it.

Image Source: Azuri

While manufacturing and robots are often the first thing we think about when it comes to artificial intelligence, in discussion of the developing world, there are several other sectors that can benefit from the new technological innovations. Take, for example, the energy grid. Around the world there are 1.2 billion people who don't have access to electricity and a functional power grid, thus many technology start-ups from around the world are using AI to develop new and innovative solutions to find a way to bring energy into these areas (Sonneborn, 2020).

One example is Azuri Technologies, a UK-based clean energy tech firm that focuses on merging AI with solar technology to produce reliable clean energy in East Africa. Their products use active learning to understand the needs of a household and then use AI to automatically dim lights, slow fans, and fluctuate the speed at which devices charge to ensure that the grid is not overloaded. Simultaneously, the same AI can be used to adjust solar panels to achieve maximum sun exposure and efficiency and help run all the necessary electric products on cloudy days and throughout the night (Azuri, 2023). The company recently received another $26

million USD to continue its work, all from private investors who see the value in the work being done.

Yet another area of improvement lies in the financial sector. Many of these same areas of the developing world that we are discussing are also severely underbanked. Meaning that they have a difficult time accessing lines of credit, loans, mortgages, and other financial markets. To provide accurate risk information to lenders, brick-and-mortar branches are normally needed with many agents able to visit properties in rural areas to provide accurate information on the risk for mortgages and insurance. However, this can be very costly, eating into the thin profits of financial service companies which prevents them from ever setting up shop in the first place. AI can also be extremely helpful in preventing this. By using digital technology to survey the area and even more active learning models to price risk, banks can operate completely online while providing accurate pricing for their clients. This allows a higher rate of free-flow capital to rural areas (Sonneborn, 2020).

A good example of this success can be seen in the company M-Shwari in Kenya which has provided small loans to over 21 million people in Kenya by using AI to accurately predict the probability of loan default, all while operating as an entirely digital bank. (M-Shwari, 2023). Thus, the combination of increased technology and artificial intelligence can provide even more positive feedback to help support the economy and expand access for entrepreneurs to make improvements in their local economies.

Political Perspectives on this Solution

This may be a solution that many types of nations agree on, but each for unique reasons. In the examples above, we see that first-world nations like the United Kingdom, are actively acting in expanding artificial intelligence to increase development in less developed nations. Thus, other first-world nations may be likely to support policies that provide companies in their nations with funding to generate ideas that provide aid to the developing world, but also create jobs and stimulate economic growth in their own nations.

However, there is an underlying debate here about charity versus development. Like the adage of "give a man a fish and he'll eat for a day but teach a man to fish and he will never go hungry," there is a continuous debate of involvement in development. Should organizations like the World Bank focus on increasing development almost in a vacuum by using skills and education within the nation, should more first-world nations be involved in this action, or should there be some sort of happy medium of interaction? This is an interesting debate to read more on during your research and come ready to build it into your loan funding plans.

International Security Concerns

Cybersecurity *– the state of being protected against criminal, or unauthorized use of electronic data.*

With AI comes many risks, but **cybersecurity** risks may be one of the worst. AI systems are very vulnerable to cyber threats and attacks, and as developing countries begin to use more and more AI, they also open themselves up to possible cybersecurity risks that were not previously thought of as possible. The developing nations may receive help via funding to create and implement the AI, but then may lack the resources needed to build robust cybersecurity capabilities to protect critical infrastructure, sensitive data, and AI-enabled systems.

As previously discussed, AI provides an opportunity for nations to integrate new technologies into many different sectors to help increase innovation and expand access to public services. However, providing AI access to sensitive sectors such as utilities or public databases, opens backdoors for criminals to attack these sectors.

Cybersecurity is a key concern of bringing complicated and powerful techonolgy into new spaces.

Image Source:

Inadequate cybersecurity measures can lead to vulnerabilities that can be exploited by malicious actors, posing risks to national security, and potentially enabling cyberattacks with global implications. This could thus be an additional lever used in global conflicts and provide nations with a source of weakness in national defense. Thus, plans to expand AI must also include plans to maintain and secure it throughout the lifetime of the technology.

Political Perspectives on this Solution

Again, most nations would likely be supportive of these initiatives to provide cybersecurity when producing and introducing AI to new areas of the world. However, special attention should be paid to areas that are particularly prone to violence or prone to proxy conflicts between powerful first-world nations. Such areas may require additional planning to ensure that the AI technologies are being used for development purposes and do not become weaponized or militarized in any way.

BUDGETARY CONSIDERATIONS

NGO *– a nonprofit organization that operates independently of any organization to benefit a social or political organization.*

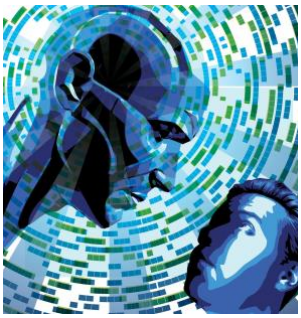
As with any World Bank policy, we are funding all these policy considerations through loans. While other organizations at Harvard Model Congress can appropriate funding where they see fit, the World Bank operates uniquely by offering low-interest or no-interest loans to governments and **NGOs** around the world.

The World Bank typically offers two types of loans: Investment Loans and Development Policy Loans. Investment loans are provided to finance specific development projects, such as infrastructure development, education programs, healthcare initiatives, or agriculture projects. The loans are typically given to

the government of a borrowing country and are meant to fund long-term investments with substantial impact. These loans typically have much lower interest rates than similar loans provided by commercial banks and are normally repaid within 15 to 30 years, but repayment terms are traditionally flexible.

Development policy loans are similar in terms of repayment structure but are distributed in tranches — meaning that the loan is not given in one large lump sum, but instead in smaller disbursements, linked to some specific condition. These conditions are often related to enacting certain legislation, implementing economic reforms, or achieving specific development targets, and in some rare cases, the World Bank does offer grants, which do not need to be repaid, but the grants are typically given to countries facing extreme poverty or experiencing significant crises to support emergency relief, humanitarian efforts, or specific development projects.

All these policy tools are at your disposal, and unlike government agencies, you don't have a firm budget to spend. Instead, you have a more delicate task of using the World Bank's lending arm to make the most change you can in the world. Along the way, you are encouraged to think of the credit risk that some nations may have, as having unpaid loans prevents your ability to help other projects in the future. You should also balance the merit of the projects you are funding with the World Bank's mission statement and attempt to consider the opportunity cost of funding one project over another — the most valuable project may be something you have not even heard about yet!



Artificial intellegence has become smarter and smarter as techonolgy has continued to evolve.
Image Source: Wall Street Journal

CONCLUSION

Throughout this briefing, we have focused on some of the most recent and innovative technologies in the world today. Unlike other policy topics, artificial intelligence is an entirely new beast. While we have historical precedent for dealing with many other phenomena, AI stands completely new on its own. Thus, many complicated economic, logistical, and ethical concerns are raised when using it as a tool to help develop some of the poorest areas of the world.

Yet, like many new inventions and innovations, AI could be a key to speed up development and make massive improvements to the world. It is simply a matter of how policy and technology develop alongside one another. While, at this conference, you may be unlikely to develop an artificial intelligence application of your own, you stand ready to be one of the guiding forces in shaping how these revolutionary technologies affect our world.

AI is a powerful tool, as we have discovered, and, thus, placing checks on certain areas and accelerating its growth in other areas presents a key opportunity to make the world a better place. Unfortunately, ChatGPT won't have all the answers to these many complicated questions. It's all up to you!

GUIDE TO FURTHER RESEARCH

Within your research, I would first suggest using some sort of AI and simply playing around with the technology to understand how it works. While ChatGPT is a common example of AI, many others exist, such as virtual assistants like Apple's Siri or Amazon's Alexa, or other unique AI-powered apps like the photo app Facetune. Using some sort of AI and understanding how the technology works is key for making policy around it. When it comes to technical aspects of policymaking, members often lack key understandings about the technology they are helping to fund or legislate, this is your opportunity to deviate from the norm and become a mini-AI expert!

For additional policy research, I would recommend searching for how your own member nation has interacted with AI and other new technologies in the future. Has the local market been welcoming to it, or has the government made any large legislative changes related to AI? Has AI been integrated into daily life within your country, or has it not caught on? Having this background can help you better understand how your member nation might feel about supporting loans to other countries to create and implement AI products.

Lastly, I would encourage you to read up on current World Bank loans, and World Bank news relative to AI. The world of finance and technology moves extremely fast, and new AI software is coming out every day. Having a pulse on the market and the technology sector will make you much more well-versed on these issues as a delegate.

And, as always, you are encouraged to use this briefing as the floor for your debate, seeing it as the foundation on which to build your ideas rather than a perfect map to guide you. In this advanced committee, we expect you to conduct additional research and gain a fuller picture of the world of AI and the economics behind it.

GLOSSARY

Creditworthiness — The perceived ability of a debtor to repay their debt to the lender.

Feedback Loop — AKA: "vicious cycle" The outcome of something is what causes it to happen again in the future.

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NGO — (Non-Governmental Organization) a nonprofit organization that operates independently of any government, typically one whose purpose is to address a social or political issue.

Robot — A machine able to replicate certain repetitive human movements and functions automatically.

Total factor productivity – increased productivity that cannot be directly accounted for by increases in capital and labor and is generally considered to be driven by changes in technology.

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