Intersection of Technology and Diplomacy: Foresights and Implications

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Summary

• With advancements in technology and shifting global attitudes, the coming years will see diplomacy transform. This Insight article identifies trends and innovations that may shape the field of diplomacy, focusing on virtual reality and artificial intelligence.

• It aims to provide a multifaceted and holistic approach about the intersection between diplomacy and technology – looking at the two as necessarily interrelated. It is an attempt to facilitate academics and decision-makers in the ongoing and rapidly developing technological   landscape.

• In theorising future methods, this Insight looks at specific examples, such as China's virtual training programme, Sweden and Tuvalu's early explorations of virtual nationhood, the UAE's Dubai.AI project and more. It also analyses ideas that have yet to be fully developed, that may play a decisive role in future diplomacy, such as the recent concept of AI as a tool for conflict resolution.

• Importantly, this Insight brings to light areas of concern, such as cybersecurity risks, as well as the more long-term, wider picture dangers of poor implementation of technology, and the extent of their risk. It also suggests strategies for mitigating risks, such as the hybrid process to effectively combine the strengths of diplomacy and AI.

• It considers ideas drawn from some of the fields' most influential voices, such as those of Volker Türk, current United Nations High Commissioner for Human Rights, as stated at Stanford Cyber Policy Center, as well as Oxford's Digital Diplomacy research group and more.

• From a Gulf perspective, the Insight argues that this region may grow to be a focal point for future innovation in digital diplomacy. It suggests that it may be imperative that the region leads the world in this area, considering the rise in regional and global conflict and misinformation.

• Finally, this Insight provides some recommendations:

• A hybrid model, where AI is used for specific tasks, as a 'tool' or a 'crystal ball' and not as the primary voice in the diplomatic process, will be ideal in the long term. Considering security and intelligence risks, as well as human shortcomings, a hybrid approach will combine the strengths of traditionalist diplomacy and AI, while limiting weaknesses. A hybrid approach may involve using concepts such as descriptive, diagnostic, predictive, and prescriptive analytics. There is also potential for using AI to foster more effective conflict resolution.

• It is crucial that these developments are made, and there will be great benefits, to early innovators and globally likewise. The UAE and the greater Middle East region have much to gain from experimentation and may even be a big player in the integration of AI into government and diplomacy.

• Virtual space is also a significant area for experimentation, particularly as we see evolving concepts of national identity. There are great benefits for increased integration of virtual spaces into government and diplomacy, most notably decreased costs and time-saving. However, caution must be exercised as the cyberspace will remain vulnerable to nefarious actors. The solution for this may be careful decisions as to what should or should not be present in such virtual spaces.

Introduction

Shaped by globalisation, technological change and shifting attitudes towards bureaucracy, the craft of diplomacy has been transforming through the past few decades. Importantly, we can observe changing ideas of representation and leadership – be it New Zealand appointing their youngest member of parliament since 1853 (21 years of age),[1] or the increasingly visible concept of 'new diplomacy', where non-traditional actors are observed entering the diplomatic stage (NGOs, celebrities, etc.).[2] Increasingly, diplomacy is veering from the traditional idea of elites shaking hands behind closed curtains.

At the same time, technology is rapidly altering the landscape in every imaginable direction, with artificial intelligence (AI) leading the world into an era of great potential. There is also room for concern, with technological innovation outpacing governments' capacity to regulate, and the ongoing threat of 'bad actors', or individuals and groups with self-oriented goals opposed to values of democracy and equality. As Volker Türk, current United Nations High Commissioner for Human Rights stated at Stanford Cyber Policy Center's conference on generative AI in February 2024, before you use the spell of magic, you need to first "master the magic".[3] This is important because the rapid technological transformation we see today is as much filled with potential as it is with unknowns.

Nevertheless, there is room for optimism, and certainly there is space and necessity for careful analysis and decision-making. Together with shifting ideologies and advancements in technology, in future years we expect to see the gradual breakdown of traditionalist diplomacy, replaced by a form of 'new diplomacy' that is more cost and time efficient, more accurate in accomplishing goals, and perhaps even more representative of populations and conducive to public agenda.

This Insight ideates some forms of future diplomacy, focusing on two main areas of interest – virtual space and artificial intelligence – along with cybersecurity implications, while acknowledging and studying areas of concern.

Virtual Space in Diplomacy

In popular media, since at least the 1980s, there has been a steady rise in interest in the concepts of virtual space – spiking in 2021 with Mark Zuckerberg's plans for the Metaverse (the term 'metaverse' subsequently "became one of the hottest buzzwords in 2021").[4] Virtual realities – where individuals can use a network of shared virtual environments and interact through visual representations of themselves, "avatars" – are seen as a soon-to-arrive reality, particularly with advancements in technologies such as cloud computing, broadband access, augmented reality, 360-degree cameras, digital currencies, and Non-Fungible Tokens4. The applications of such virtual realities may be widespread – in education, entertainment, community-building, or business. Likewise, there may be significant applications for virtual reality in the field of diplomacy. As outlined in "Amplifying diplomacy with the Metaverse" published by the Anwar Gargash Diplomatic Academy and Accenture, applications of the metaverse in diplomacy could potentially involve, among others, the training and briefing of diplomats.[5]

This Insight focuses on three main areas where virtual space may contribute to diplomacy:

1. Education and Training;

2. Conference Space;

3. Peacemaking, Conflict Resolution and Emergency Management.

1. Education and Training

Considering the applications of virtual education in the wider sense, virtual space options offer increased potential from the additional inclusion of traditionally restricted groups – such as those with disabilities or based in remote or regional locations. They can also be more effective than textbook-based studying. Learning through 'doing', in realistic and diverse environments that are not 'fixed', but modifiable and replicable, has been proven a valuable method of concrete learning.[6] With diplomacy being a field that would greatly benefit from increased accessibility and balanced, well-executed decision making, there may be significant potential to consider virtual spaces as a recruitment and 'training ground' for future diplomats.

China's 3D Avatars

This has been tentatively experimented in the Chinese Academy of Governance, a key training school for government officials. Students appear as avatars, and in a three-dimensional space are encouraged to study culture by examining historical relics and listen to virtual narrators discuss "current hot topics and knowledge".[7]

The system has saved time and travel costs and is said to be effective in creating an engaging space better suited for "party building". There is still much room for development and expansion, and this experimentation is very much only the beginning of a larger trend.

Increasingly, technology is enabling even more elaborate possibilities – imagine such virtual training grounds with the addition of realistic diplomatic simulations, where trainees with little to no experience could gain valuable experience. Practice is valuable, no doubt, and a space where mistakes can be made, and lessons learnt without real-life ramifications, may be crucial in building a more effective – and less costly – generation of diplomats and government officials.

It is a sound prediction that many existing training programmes, simulation exercises, in-person role-plays, which have not yet been utilising avatars, could adopt their use in the near future. Equipped with advanced algorithms, avatars personalise learning experiences, enhance student engagement, and address diverse needs, offering innovative ways to engage students and explore complex topics.

In the United States, and other, technologically more advanced nations, AI avatars are already finding their place increasingly in the realm of higher education, marking a transformative shift. This also means that avatars could be utilised and, with an increasing probability, will be utilised in programmes, which invite students, educators and professionals from a variety of backgrounds to step into the roles of decision-makers in diplomacy. Many existing in-person simulation programmes could be executed virtually, by avatars, as long as the participants have access to the necessary technology and software.

US's Model Diplomacy

One of these candidate programmes could be the highly popular 'Model Diplomacy' programme of the Council on Foreign Relations, which is a free simulation programme used already in all 50 states of the USA, and over 100 countries by high schools, colleges and universities, military academies, international organisations, and the US and foreign governments. If it were to happen, due to the programme's exceptional outreach and popularity, a spill-over effect could be that many similar, but less well-known, programmes would follow suit. The participants could use Canva, for example, an online design platform, to create personal avatars that reflect their persona and use them in a video conference or presentation.

Most probably, other simulation programmes would still be continued with the traditional method of students' role-play as their core ingredient. For example, the most well-known and widespread simulation programme globally, the Model UN, would hardly be turned into a virtual exercise, at least not for the foreseeable future. This programme is run by various organisations and institutions all over the world, with almost half a million students participating across more than 100 countries every year, from primary school to university level.

Although there have been some attempts to turn the Model UN programme into a virtual exercise executed by avatars, there have been already several challenges and limitations to using virtual reality. A few of these obstacles are:

- costs and accessibility of the required technology and equipment, such as VR headsets, computers, and internet connection;

- quality and the realism of the virtual environment and the avatars, which would significantly affect the immersion and engagement of the participants;

- technical and logistical issues that may arise during the simulation, such as connectivity problems, bugs, and primarily cyberattacks; and,

- lastly, the ethical and social implications of using avatars, such as the potential for identity manipulation, deception, harassment, or discrimination.

This is not to say that the Model UN programme could not be turned into a virtual exercise executed by avatars. However, it would require careful planning, design and evaluation to ensure its effectiveness, feasibility and safety, and at the global scale.

At the same time, the notion of an accessible digital space for citizens to learn diplomacy globally would be beneficial for more widespread participation and inclusion too. Historically, diplomacy has long had a bad name when it comes to drawing a wide talent pool. The current US Foreign Service scores poorly in minority representation – 2.9% identify as African-American, and 3.6% as Asian-American.[8] This stands in opposition to the national representation percentage of roughly 14% and 7% respectively. Economic representation too is important. In

the UK, socioeconomic diversity was not introduced as one of the nine legally protected characteristics of the Equality Act 2010, and until recently received inadequate attention in the Civil Service.[9] Clearly, there is room for improvement.

Representation is important, not merely for minimising lost potential, but also in terms of diplomatic decisions reflecting the needs and wants of citizens. A fundamental issue to combat, going forward – relating to, but certainly not limited to, the field of diplomacy – will be ensuring every citizen has access to the digital world, limiting the digital divide. With decreasing costs of technology, rising tech-savvy generations, and careful policymaking, such as the US Department of Education's 2024 Technology Plan – which focuses on redefining categories of 'digital divide' and navigating paths for virtual education in a post-COVID world – there is scope for digital divide to be gradually eradicated.[10]

2. Conference Space

Virtual space for diplomacy leads to another exciting question: what if virtual space could be utilised as a replacement for the conventional diplomatic meeting place; conferences held online, with secure bilateral and multilateral discussions – both informal and formal?

Economically speaking, certainly, the transition to virtual meetings, with little to less need for physical travel, translators, administrative, and logistic support, would save phenomenal amounts of money. In Australia, for example, in the 2021-2022 financial year, public servants cost the exchequer an alarming $3.7 million in domestic flights alone, hundreds of which were under two hours.[11]

Going beyond elementary virtual spaces for diplomatic discussion, imagine the large-scale mirroring of international organisations – crucially, the UN and its related bodies – into the virtual world. If officially maintained, globally accessible virtual spaces could be developed, the benefits would be innumerable. More than reduced costs, such an innovation would have implications for the greater good of society. The modern world has long been limited by the logistics, as not fully 'by the people' nor 'for the people'; instead, we have long utilised forms of, to different extents, representative political systems. Established virtual spaces may offer the potential for increased levels of long-term citizen involvement, through observation, education and even participation. This may enable transparent and accessible diplomatic actions as well.

Sweden's Virtual Embassy

On a very limited level, we can partly imagine what virtual presence might look like for a country – in 2007, Sweden created a virtual embassy in Second Life, with the embassy in the US as its canvas, virtual IKEA furniture and a regular staff presence.[12] Although there were no real applications government-wise, we can look at this as a glimpse at what one fraction of virtual government may resemble. In an age that may well be defined by climate disaster and conflict, virtual space may be one part of an interesting equation seeking to answer questions of efficiency, representation and national identity. That said, there is reason to be wary of the digitalization of diplomacy, and due to intelligence priorities, 100% digitalization of diplomacy will likely never occur. This is addressed later.

3. Peacemaking; Conflict Resolution and Emergency Management

Relating to the secondary notion of virtual space as a 'meeting ground', another innovative application may lie in conflict resolution. Virtual space offers a unique, multifaceted approach to an area historically plagued with misunderstanding and lack of cooperation, as conflict parties tend to be trapped in their own conflict narrative and subjective experiences.

In her paper Virtual Reality and the Future of Peacemaking, Julia Gregory argues that virtual reality provides a "unique capacity for the sharing of perspectives".[13] She outlines three main methods for virtual reality in mediating and preventing conflict:

a. through 360-degree camera filming, non-combatants sharing their hardships with conflict party leaders and resultantly raising empathy and perspective;

b. similarly using 360-degree cameras, recording the mediation process from a mediator's perspective, aiming to encourage parties to view the situation under a new light;

c. finally, as a historic learning experience, where conflict parties can view examples of conflict resolutions in the past.

It would be naive to suggest increased empathy would totally end conflict. Very few wars occur purely due to lack of empathy, and this disregards the small percentage of the human population who are clinically unable to

empathise at all, as well as the much larger percentage of those with low levels of empathy. Nevertheless, these methods may well play a valuable role in speeding up conflict resolution, and in the long term may play a key role in reducing overall conflicts. Certainly, as a new and emerging field, there is great potential.

Research conducted in the context of the Israeli–Palestinian conflict found that viewing photorealistic scenes filmed by a 360-degree camera produce higher levels of empathy than conventional 2D videos.[14] Ingroups, when viewing their own harmful actions and being vicariously exposed to victims' experiences, were less likely and able to find moral justification. Increasingly, we are discovering that empathy plays a critical role in judgement and decision making. Going forward, there may well be further areas for innovation – not merely in large-scale conflict resolution, but on a widespread micro level, inclusive of smaller international disputes, courts and tribunals, domestic and family issues, and perhaps even sporting events (red card or yellow card?).

Similarly, another area for innovation related to public diplomacy and corporate social responsibility could be the emergency management, the process of preparing for, responding to, and recovering from disasters and crises that threaten the safety and well-being of people and communities. A good example to follow from the corporate world could be the role Cisco plays in supporting Ukraine's emergency management efforts in the face of the ongoing war with Russia and its allies. Cisco's emergency teams demonstrate the company's commitment to helping Ukraine and its people during this challenging time and they also show how technology can be used for good and make a positive difference in the world.

As a concrete example, Cisco Talos provides cyber defence by its threat intelligence team, by monitoring, analysing and responding to cyberattacks against Ukraine's critical infrastructure, institutions and organisations. Combined with the practice of the company to utilise avatars in some of its platforms and products for several years, new emergency management tools could be developed and demonstrated in the virtual space.

Cybersecurity and Virtual Space

Virtual spaces as a mirror to conventional diplomatic conferences, mediation and training grounds are presently speculative and largely optimistic, and for the short-term future, certainly may be improbable, considering cybersecurity concerns and encryption limits. Nevertheless, the notion of virtual space for nations leads to some interesting ideas; certainly, gradually we may find ourselves in an era characterised by breakdown of pre-established ideas and rethinking of structures. Considering nations such as Tuvalu, disappearing due to rising sea levels, the future may involve a rethinking of nationality – what does it mean to be a nation? Indeed, the government of Tuvalu has begun work on a national contingency plan aiming to preserve and administer its sovereignty and cultural continuity through to the digital realm,[15] even amending its constitution to ensure the physical area is safeguarded, "regardless of rising seas".[16]

Nevertheless, there are risks to navigate. A key area to discuss when considering the utilisation of virtual space is cybersecurity. Clearly, the importance of cybersecurity and the extent to which cybercrime and cyberwarfare will play a role in the future has become evident in recent years. Russia's invasion of Ukraine began with cyberattacks – a distributed denial of service attack disrupted access to several government websites and the two largest banks in Ukraine; researchers have also discovered wiper malware, which "destroys or corrupts data", on Ukrainian systems.[17] The war has shown the world the relevance of cybersecurity, with Ukrainian and American cyber defence measures leading to critical achievements such as the disruption of a Russian government botnet before it could be used, and intermittent interferences with Russian digital attacks and communications.

Going beyond cyberwarfare, across the world, the broader significance of cybersecurity has become more visible to the public. In Australia, the Cyber Threat Report 2021-2022 recorded 76,000 reports of nationwide cybercrime – a 13% increase from the past financial year.[18] The US also saw an increase of 7%.[19] Major national failures such as Australia's September 2022 Optus Telecommunications data breach, which led to over 10 million customers having personal data stolen has led to major decline in public trust in key institutions and corporations.[20] According to the Cyberthreat Defense Report by CyberEdge Group, across the world, a staggering 84.7% of organisations admitted to suffering at least one cyber attack in 2023.[21]

Globally, nations are scrambling to get on top of a rapidly transforming issue, with the US taking steps to develop a shared repository for cybercrime data and coordinate efforts through unifying definitions and categories of what is and what is not a certain 'cybercrime'.[22] The significance of cybersecurity is growing clearer to both governments and individuals. Certainly, as a reaction we have seen increasingly heavy investments in cybersecurity measures – in 2021, global spending on cybersecurity rose by 12% to $150 billion; by 2025 this figure is forecasted to rise to $1.75 trillion.[23]

Undoubtedly, security will be a key area for concern in the increased utilisation of virtual space. Could such a valuable space ever be safe in the online world? Certainly, there is risk involved. It is common understanding that in network security, anything connected to a network can be exploited; if not now, then soon enough with advancement in methods. With the (already beginning) rise of quantum computing, there is even concern that through 'store now decrypt later' methods, all prior encrypted information will no longer be safe, and nations will have to react rapidly.

What is secure today is not necessarily secure tomorrow. Nevertheless, this risk can be managed. If not through heavy investment in cybersecurity measures, and a large, competent taskforce (make no mistake – there will continue to be significant and growing demand for digital professionals; the ISC2, a non-profit specialising in training and certifications for cybersecurity professionals, still estimates a workforce gap of 2.7 million workers), then certainly at the very least through minimalism and avoidance.[24]

Indeed, there is nothing to suggest that a virtual space requires the storage of sensitive information at all. Consider existing commercial and creative virtual spaces, be it Red Dead Redemption or Second Life. Many of these spaces require only a nickname and an email address. The primary issue of concern, then, may be necessarily discreet conversations between national leaders or diplomats.

Perhaps, then, the answer may be that these virtual spaces could be reserved for only transparent discussions and conferences – and there are certainly already a multitude of these. If this should be the case, then not only would it not matter if the progress and outcomes of these diplomatic meetings be 'leaked', but it would be beneficial for these to be spread, entirely accessible by the public. This would be of paramount benefit to the generally disinterested population. Presently, far too many crucial diplomatic developments – even those that are not at all discreet – are made behind curtains, contrasting with the ideas of transparency and equal access to information.

Artificial Intelligence in Diplomacy

If virtual space as an international ground for diplomacy and training seems speculative, certainly a core element of the future for diplomacy might be in AI. In recent years, advancements in AI technology have become increasingly visible to the public. In just three years, 2017-2020, AI systems have proven superior to human counterparts in image recognition, speech transcription and direct translation. We have also managed to cultivate AI systems capable of identifying relevant information in paragraphs and even systems capable of driving cars.[25]

Across governments, political actors are beginning to view AI technology as one critical for developments in economics, politics, and national defence. At least 27 national governments have articulated an interest in "encouraging and managing the development of AI technologies".[26] AI is increasingly appearing on the agendas of UN bodies, a number of them in collaboration with academics and industry actors are seeking to determine methods in which AI might contribute towards "global humanitarian and development challenges" and how they might fit into the Sustainable Development Goals.[26]

Crucially – as described by Nate Persily, Professor of Law at Stanford Law School, and founding Director of Stanford Cyber Policy – AI can be viewed as a "keystone technology", in that it relates to every other technology and invariably touches on every aspect of society[3]. This means risk ("AI amplifies the abilities of all good and bad actors") but it also means there's room for positive development, and certainly incentive to ensure sound decisions are made before nefarious usage arises.

More specifically, concerning applications of AI in diplomacy, there are at least four suggested ways: descriptive, diagnostic, predictive, and prescriptive analytics.

1. Descriptive analytics involves aiding diplomats by monitoring in real time a wide range of foreign media (across several languages), flagging emerging risks and trends. Having access to real time analytics undoubtedly is crucial in enabling diplomats to contextualise information and make critical decisions.

2. Diagnostic analytics is all about diagnosing the information brought to light from the descriptive process. Diplomats can use diagnostic analysis to assess the validity and extent of the information introduced – if descriptive AI suggested a recent crisis has emerged, diagnostic AI tells you how big of a deal it is.

3. Predictive analytics can aid in looking to the future – in anticipating potential social or political tension, and indeed alongside descriptive analytics, identify misinformation and further aid diplomats in optimising their efforts.

4. Prescriptive analytics is perhaps the most futuristic-sounding idea of AI aiding diplomats in formulating decisions. Accordingly, AI can help develop specific courses of action, depending on a set of criteria.

Cautious Experimentation

Applications of AI in such ways are yet to be widespread. Nevertheless, we can see the allure – consider that the traditional flaws in human analysis, prediction and decision making, at times tainted with emotionally-driven or personal motivations, may be largely bypassed. After all, if AI defeated humans in chess as far back as 1997, it does not sound entirely far-fetched that AI may prove a valuable tool in the much more complex game of diplomacy. In coming years, we may indeed find AI to be greater decision-makers than ourselves. (They already are in recommendations and advertisements – why not in the history, strategies and priorities of a nation or body?)

And make no mistake – human bias and error is rife in modern governance and diplomacy. Consider the COVID-19 pandemic, and the "'biased global health diplomacy and policy making" resulting in widespread counterproductive measures and border management, dangerous health practices and uncontrollable misinformation.[27]

AI is yet to reach its full potential, and there will likely be a range of applications for AI across the field of diplomacy. Yet there are potential problems to examine. One suggested concern is the idea that with the implementation of AI in diplomacy, and the lessening of cognitive effort required (with AI providing such reliable and easily understandable answers to complex questions), diplomats may grow overly reliant on AI and lose their competency.[28]

This is an interesting question, certainly, though perhaps a debatable one. We can draw parallels to the greater technologization of the population – with the widespread adoption of the internet, have the general population necessarily lost skills in research and information absorption? The modern human might not go about retrieving information in the traditional way, but they are simultaneously capable of being far more productive, and reaching far higher levels of information.

Perhaps this may be the case in diplomacy – we cannot be too fast to assume the usage of AI will 'dumb down' the diplomat, any more than we may fear humans watching YouTube book reviews would prevent them from being able to understand literature. Diplomats might lose touch with traditional tactics of diplomacy, but only because such methods have become obsolete; instead, we may find diplomats developing entirely new skills, such as searching for errors and misinformation in AI, or optimization of AI-generated results. At the very least, the adoption of AI might be viewed as a tradeoff, where traditional skills are lost, in exchange for greater efficiency and higher levels of ability and innovation.

That said, it is admittedly difficult to ascertain the true risk of such rampant adoption of technology. The information age is unfolding too fast for us to truly grasp long-term ramifications, and nefarious actors are one step ahead of government regulation. Liability is often unclear, and transparency limited. AI has given us a plethora of questions that have yet to be answered, concerning responsibility, originality, copyright, and ownership. AI poses as many risks as it offers rewards.

Volker Türk outlines several ways in which AI may threaten human rights, be it the right to work (what will happen to individuals whose expertise has been replaced by AI?), the right to access information, in a world increasingly flooded with misinformation and exploitable with cheaply-produced, wide-scale AI-generated propaganda, or the right to privacy and personal image – consider the power of deepfakes. In February 2024, a finance worker at a multinational firm was tricked into paying $25 million, with the scammer using deepfake technology to impersonate the company's chief financial officer.[29]

There has been much action and an ongoing conversation concerning the need for regulation to catch up with the rapidly transforming technological landscape. As a recent example, and with a powerful call for an interfaith dialogue on this issue, Dr Mohammad bin Abdulkarim Al-Issa, Secretary General of the Muslim World League, has suggested the involvement of religious authorities – be it at a global summit on AI or in the incorporation of the Makkah Charter into AI programming.[30] These may be effective ideas indeed, and, even in more secular regions, similar universally shared and understood guidelines would be crucial.

Similar in concept is the idea of 'digital human rights'. Clearly, digital space is an area where increasingly humans will require the granting of basic protections, to levels matching that of the physical world.

Bletchley Declaration

In November 2023, at a major diplomatic event hosted by the UK, the first global summit brought together leading AI nations, technology companies, researchers, and civil society groups to discuss the opportunities and the risks of frontier AI, the most advanced and powerful forms of AI. The outcome of the summit, in the form of the

Bletchley Declaration on AI safety, recognized the urgent need to understand and collectively manage potential risks through a new joint global effort to ensure AI is developed and deployed in a safe and responsible way for the benefit of the global community.

As it is, we are currently in an era of rapid transformation, and the form of the future will be determined by our decisions today. Perhaps it may be important for the time being to be cautious of over-dependence on AI, and maintain a capable and effective force of diplomats, wary of foundational methods and basic skills. For those institutions aiming for cautious experimentation, it may be optimal AI be best utilised alongside humans, through a "hybrid foresight process", where AI does not commandeer diplomats so much as diplomats utilise AI, as a "proverbial crystal ball" to be consulted with.[31] This is related to the greater concept of "hybrid diplomacy", which the Oxford University Digital Diplomacy collective has argued will be the form diplomacy will likely take in the future.[32] Hybrid diplomacy gives us the best of both worlds – with the physical and the virtual integrating and empowering one another. This allows the mitigation of security and intelligence concerns, while also fostering and furthering dialogue through the additional opportunities provided by the virtual realm.

Conclusion and Recommendations

Ultimately, the adoption of AI, at least to some extent, is inevitable, and, along with virtual spaces, will certainly comprise one part of the larger diplomatic picture in the coming years. Questions for the future are difficult to answer, particularly so in such a rapidly transforming reality. There are larger questions, few of which have concrete answers – e.g. What happens when AI makes a mistake, and who is responsible? What about biases AI may be preconditioned towards? These are questions that will have to be answered as we move towards the increased use of AI in diplomacy. Certainly, the integrity of any AI tools would have to be transparent, and careful eyes kept open for potential flaws in the system.

Looking specifically at Gulf region and Middle East, there has been significant investment. According to the International Data Corporation, the Middle East spent about $3 billion on AI-related developments in 2023, and is expected to spend $6.4 billion by 2026.[33] Governments and the private sector alike have made extensive use of emerging technology, with bodies such as the Dubai Electricity and Water Authority working to engage ChatGPT to "enrich its services".

Particularly ambitious might be the UAE's creation of Dubai.AI, an interactive and comprehensive platform utilising AI to generate reliable information relating in every aspect to the city. Developed in collaboration with government entities, the system uses generative AI to give a 'personal touch' to every visitor.[34] Nevertheless, despite such rapid innovations and projects, there is still room for experimentation. Companies innovating with AI have "barely scratched the surface", with few companies using more advanced machine learning analytics and models.[35]

The following decades will be crucial. States in the region must continue to leverage influence as middle powers, through non-alignment and balanced decisions. Sustainable futures built on diversified economies must continue to be envisioned, minimising dependence on finite resources. Going forward, there is much to suggest the Middle East will be a focal point for technological experimentation across the field of diplomacy. Conditions are ideal – heavy investment and financial capabilities, a strong reason for transformation and diversification, a young, tech-savvy working population as well as a large expatriate labour pool.

Furthermore, with rising conflict in the region and globally, diplomacy will continue to become more important than ever – when good or bad diplomacy might mean life or death, there is every reason to innovate. The Middle East must enhance its cohort of diplomats, and maximise the effectiveness of every diplomatic decision.

Increasingly, we are finding that no single actor exists in a vacuum – network science in the study of politics has shown us that political agents' choices affect overall structure, and this structure in turn affects individual agents; we exist in a complex set of networks built on interdependent relations where every minute choice can impact another.[36]

In such a complex reality, it is more important than ever that effective, ethical and accessible innovations are undertaken. There must be meticulous consideration to potential issues and foresight for the long-term. We must remember that if there is one thing we can be certain of, it is the fact that nothing will stay the same for very long – not all diplomatic practices, no matter how effectively implemented in the past, will remain sustainable in the coming years.

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