Geopolitics Is Shaping Generative AI (and Vice Versa)

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> Country-specific ideologies are shaping AI regulations in each jurisdiction, leading to the likely scenario of technological decoupling. This research helps prepare executive leaders to use GenAI tools as a platform to create business value when adopting these tools across different jurisdictions.

More on This Topic

This is part of an in-depth collection of research. See the collection:

- 2023 Hype Cycles: Deglobalization, AI at the Cusp and Operational Sustainability

Overview

Impacts

- When ChatGPT launched to the public, it proved to be the fastest aggregator of users to date due to its novelty and simplicity — which many in the technology industry had not expected. ChatGPT could hasten misinformation unless regulated, and its use is triggering power redistribution and geopolitical supremacy competition in the age of reglobalization and multipolarization.
- Regulation around the world, which has to emerge and encompass GenAI, will accelerate as there is more investment pouring into AI, even though no AI-specific regulation is in place in the U.S. The EU is working on an AI Act and China, which already strictly controls AI-created content, is carefully looking at GenAI to augment the country's regulation.
- The divergent views held by the U.S., the EU and China on how to approach regulating AI could further accelerate the technological decoupling of otherwise generally connected digital foundations on the basis of greater digital sovereignty.

Recommendations

Executive leaders leveraging GenAI tools in their enterprises should:

- Become well-versed in the tools in a lab environment by specifically understanding the impacts on trade-offs (such as privacy, intellectual property, ethics, AI biases, and regulatory and compliance requirements in each jurisdiction) before deciding to roll out.
- Confirm that the AI output is abiding regulations by enhancing control on biases within the model, following corroboration and validation of output within the different jurisdictional expectations of what is and is not considered acceptable to train GenAI tools.
- Plan for the eventual technological decoupling as more complexity and regulations conflate the market by pursuing composable architecture and edge operations in each jurisdiction of operation, which could inevitably lead to different deployments in each geography.

Introduction

The deployment of generative artificial intelligence (GenAI) tools is raising concerns about how blind spots in regulations could hasten the spread of misinformation, elevate biases in outputs, and increase the harvesting and misuse of personal data. The large language models (LLM) underlie GenAI tools that create unique content in response to user prompts. The ability to distinguish fact from fiction and the underlying dataset used to train the tools are the critical elements, and there are currently barely any regulations in place to govern these AI tools.

At the same time, the role of the U.S. as the leading superpower in the world for over three decades following the collapse of the Soviet Union is under challenge. In the absence of great power competition, many countries adopted the American policy — such as free market economics and trade and open technology platforms — over national political interests in order to fuel the enormous global growth experienced to date. But all holidays come to an end, and the world has entered the age of reglobalization and multipolarization, in which countries are desiring greater independence, autonomy and domestic resilience.

Technology, along with demographic shifts, is setting the pace of economic and social development, and AI is at the center of the new proxy wars because it is a catalyst for power redistribution and geopolitical supremacy. Some recent examples of AI-related technology shifts and the resulting competition with regard to their use in reglobalization are: [1,2,3]

- U.S. sanctions imposed upon China's Huawei and TikTok
- The rise of four different internets (China, Washington, Silicon Valley and Europe) instead of one, with others potentially on the horizon (for example, India)
- The redefinition of taxation, privacy and ethico-civic standards for global social networks of strong proto-political impact, such as Facebook by the EU
- Google's Bard is available in around 180 countries, but deliberately not open for use in the EU due to progressive data protection legislation, such as General Data Protection Regulation (GDPR) and the EU AI Act
- New military technology developments driven by AI-sustained human-machine interaction, which China and Russia appear to be leading

This research provides an overview of:

- The different approaches taken by influential jurisdictions, such as the U.S., China and the EU, to regulate GenAI tools
- How executive leaders should adopt GenAI tools in different jurisdictions based on understanding the ideologies shaping the regulations in each jurisdiction
- Seeing beyond the likely scenario of technological decoupling, [4] in which different jurisdictions will end up using different technologies, to create business value

Table 1 shows examples of technological decoupling.

Table 1: Examples of Technological Decoupling

Tech Stack	*U.S., Japan, Australia Operations*	*China, Pakistan, Nigeria Operations*
Network	Cisco	Huawei
Cloud Platform	Amazon Web Services (AWS)	Alibaba Cloud
ERP	SAP	Yonyou
CRM	Salesforce	Qidian.com
Collaboration Tool	Microsoft Teams	DingTalk
Social Networking Service	WhatsApp	WeChat
Search Engine	Google	Baidu
AI Chatbot	ChatGPT	To Be Determined

Source: Gartner (May 2023)

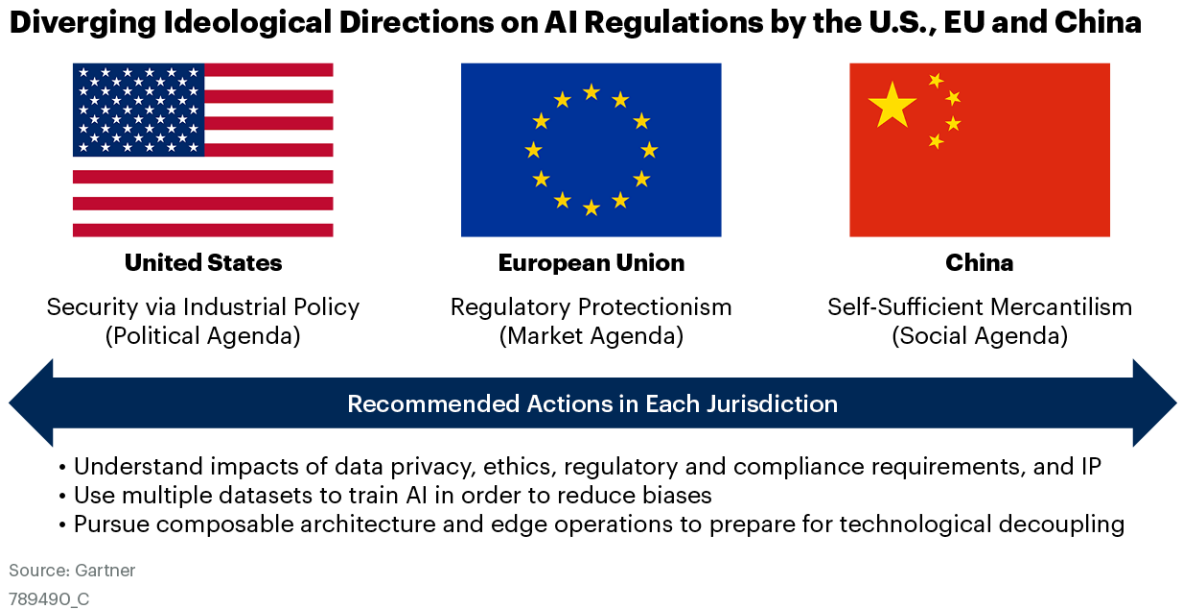
Impacts and Recommendations

Understand the Geopolitical Risks and Regulations

The world was not prepared for GenAI, as systems currently cannot be held accountable when they act in unpredictable ways. However, the potential of AI is recognized, and it could advance national agendas and shift the balance of power between nations — for example, by empowering new geopolitical players beyond countries, and influencing or interfering with communication or operation of other countries. A glimpse of this occurred with Ukraine and Starlink satellite internet service and AI drones boosting defenses when Russia invaded Ukraine. [5,6]

The challenges posed by GenAI are in some ways relatively recent, and the best policies are not obvious. Regulation around the world will accelerate in the coming months, and the somewhat divergent movements by the U.S., China and the EU are especially worth monitoring (see Figure 1).

Figure 1: Diverging Ideological Directions on AI Regulations by the U.S., EU and China



U.S. Approach: Self-Regulation

In October 2022, the White House Office of Science and Technology Policy unveiled a blueprint called the AI Bill of Rights. However, it is only a framework of how government, technology companies and citizens can work together to ensure more responsible use of AI, and thus it is nonregulatory and nonbinding. Currently, there is no AI-specific regulation in the U.S., despite increased attention from federal agencies, the White House and Congress. As GenAI tools raise concerns over data collection, misinformation and bias, one of the areas lawmakers are researching is the need to pass a comprehensive data privacy bill, like the American Data Privacy and Protection Act (ADPPA) which failed to make it through Congress in 2022. On the other hand, the National Institute of Standards and Technology (NIST) released a voluntary AI Risk Management Framework to help organizations deploying AI systems enhance their trustworthiness and reduce biases, while protecting individuals' privacy.

The U.S.'s approach is focused on self-regulation of the digital space, including AI. The fundamental approach is based on respect for individual human rights and condemns the use of AI for social surveillance and control purposes, as witnessed in the social credit systems from China, Russia, and other authoritarian nations. The social credit system is a big data system that uses a wide variety of data inputs to assess a person's social credit score, which determines social permissions in society, such as buying a train or plane ticket.

China Approach: Rule for the People

Censorship has long been a universal practice on the Chinese internet. The Chinese regulation, for example, explicitly bans people from generating and spreading AI-created fake news. How that will be implemented, though, lies with the service providers. The next set of regulatory measures is targeting deep synthesis technology, which denotes "technology that uses deep learning, virtual reality, and other synthesis algorithms to generate text, images, audio, video, and virtual scenes," also known as GenAI. [7] As with other types of internet services in China, from games to social media, users are asked to verify their names before using GenAI apps. The fact that prompts can be traced to one's real identity inevitably has a restrictive impact on user behavior, and these rules could lead to more responsible use of GenAI. As MIT Technology Review pointed out, Baidu's text-to-image model filters out politically sensitive keywords. [8]

China also regulates recommendation algorithms through the "Internet Information Service Algorithmic Recommendation Management Provisions," which went into effect in March 2022 and is the first regulation of its kind worldwide. [7] The law gives users new rights, including the ability to opt out of using recommendation algorithms and delete user data. It also creates higher transparency regarding where and how recommender engines are used. The regulation goes further with its content moderation provisions, which require private companies to actively promote "positive" information that follows the official line of the Chinese Communist Party. It includes promoting patriotic, family-friendly content and focusing on positive stories aligned with the party's core values. Extravagance, overconsumption, antisocial behavior, excessive interest in celebrities and political activism are subject to stricter control: Platforms are expected to intervene actively and regulate this behavior. Therefore, China's regulation of recommendation algorithms goes far beyond the digital space by dictating what type of behavior China's central government considers favorable or not in society.

Finally, China has the “algorithm filing system,” which requires developers to register their algorithms to a central database that Chinese officials maintain. This registry includes sources for training data and potential security risks, and it allows regulators to learn more about how AI is being built and deployed. [9]

EU Approach: Rule by the People

The EU has been a front-runner in data regulation and AI governance, starting with the GDPR, which went into effect in 2018. The EU was more recently considering how to regulate generative models under “general purpose AI” in its proposed AI Act, which will go into effect in 2024. [10] The AI Act, with the Digital Markets Act (DMA) and the Digital Services Act (DSA), creates a holistic approach to how authorities seek to govern the use of AI and IT in society. The AI Act establishes a horizontal set of rules for developing and using AI-driven products, services and systems. Regulatory authorities are already preparing to enforce these rules. [11] DMA attempts to ensure digital platforms do not exploit consumer data, and DSA seeks to give consumers more control over what they see online. So the gatekeeper platforms are responsible for mitigating disinformation or election manipulation, balanced against freedom of expression, and are subject to independent audits.

The malicious use of GenAI poses challenges that are similar to content moderation on online platforms concerning which content should be allowed or disallowed. The amended version of the AI Act attempts to regulate the use and functioning of AI models, in conjunction with the DSA and other connected sets of regulations on the horizon.

As it stands, AI guidance is largely voluntary and broad, meaning enterprises are left to set and follow their own guardrails. So some AI may be coming out before it is completely ready, resulting in providing false information.

Geopolitical Consequences

The ideological differences between the leaders of the three great powers could have broader geopolitical consequences for managing AI and information technology in the years to come. The ability to innovate faster and better will determine the outcome of the great-power competition, especially between the U.S. and China. AI will be critical in the race for tech superiority. China is already a leader in AI-based surveillance technology, which it not only uses to control dissidents at home but also sells to authoritarian governments abroad.

In October 2022, the Biden Administration blocked U.S. companies producing AI computer chips from selling to China. Certain U.S. policies, such as placing a growing number of Chinese companies on the Bureau of Industry and Security (BIS) Entity List, will make it more difficult for China's central government to rely on strategic technical components from the U.S. as part of the country's economic growth strategy. These policies will thus incentivize China to continue toward its goal of achieving technological self-sufficiency, which it is doing with strategic investments in AI and other innovative areas.

As recently as May 2022, China's central government ruled that central government agencies and state-subsidized companies must replace computers from foreign-owned manufacturers within two years. [12]

These developments may complicate the possibilities for finding new international solutions to facilitate the harmonization of AI use and legislation.

These developments diminish the prospects for finding international forms of cooperation on AI governance, and could contribute to a fragmentation of technological ecosystems. The result, already partially underway, would be the emergence of individual networks and digital ecosystems — a U.S. one, a EU one and a China one — each with its own rules and governing framework. In the long run, this may mean that it will be much more difficult to agree on how more complicated forms of AI should be regulated and governed worldwide. At present, the EU and China do seem to agree on taking a more proactive approach to regulating AI and digital ecosystems relative to the U.S. This could change, however, if the U.S. were to pass the Algorithmic Accountability Act. [13] Like the EU AI Act, the Algorithmic Accountability Act requires organizations to perform impact assessments of their AI systems before and after deployment, including providing more detailed descriptions on data, algorithmic behavior and forms of oversight.

Undoubtedly, AI will continue to revolutionize society and businesses in the coming decades. However, it remains uncertain whether the world's countries can agree on how technology should be implemented for the greatest possible societal benefit. As stronger forms of AI continue to emerge across a wider range of use cases, securing AI alignment at the international level could be one of the most significant challenges of the 21st century.

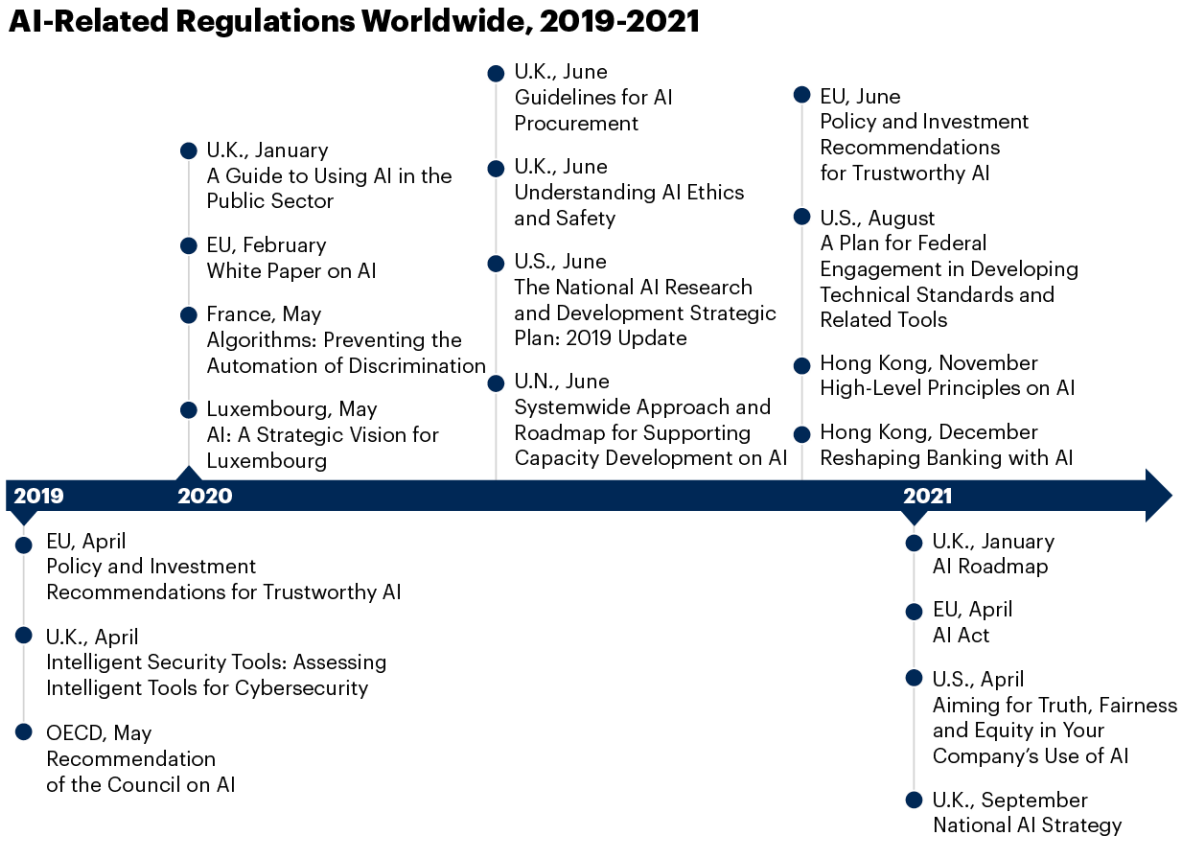
Every country has efforts to regulate AI or to somehow make sure that the legal or social system is keeping up with the technology, but there is no consensus yet as to how the fast changing field should be governed. [11,14] Given the geopolitical tensions and mistrust across nation states, and the differences in approaches by the three great powers as described earlier, not much collaboration can be expected, either.

Figures 2 and 3 show a timeline of recent developments in regulating AI across the key areas of the globe. [15] Table 2 also shows a sample of upcoming AI regulations in the works by select jurisdictions.

Recommendations:

- Track the evolving AI regulations in the jurisdictions of your operations
- Confirm that the AI output is abiding regulations

Figure 2: AI-Related Regulations Worldwide, 2019-2021



Source: Gartner
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Figure 3: AI-Related Regulations Worldwide, 2022-2024

Source: Gartner
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Gartner

Table 2: Pending and Implemented AI Regulations Around the World

(Enlarged table in Appendix)

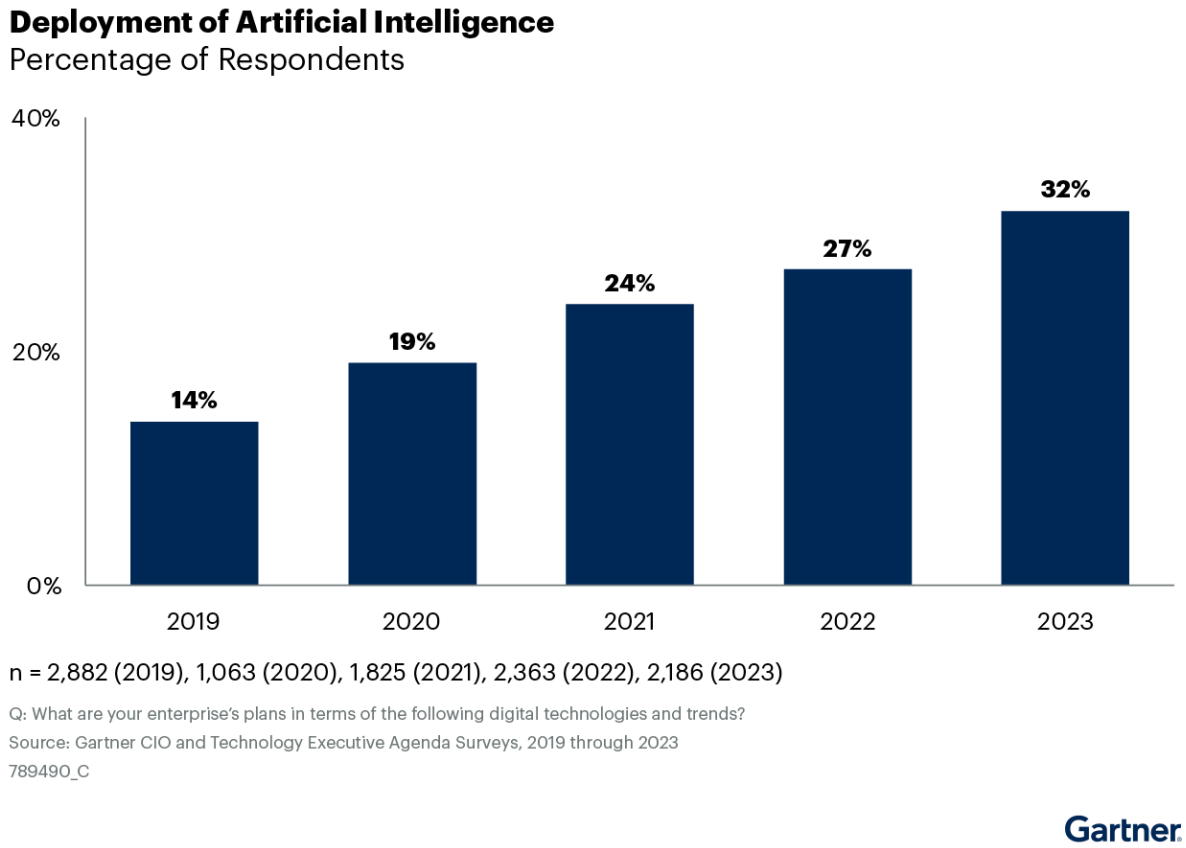
No.	Country	Regulatory Theme	Implementation Date Proposed	Description	Status
1	China	Regulation on "deep synthesis" technology	10 January 2023	The Cyberspace Administration of China, the country's top internet watchdog, passed a regulation on "deep synthesis" technology. [16,17] - Users are prohibited from using GenAI to engage in activities that endanger national security, damage public interest or are illegal. - Providers of GenAI are required to verify users using mobile phone numbers, IDs or other forms of documentation. - Service providers must audit AI-generated content and user prompts either manually or through technical means.	Implemented
2	U.S.	Education Department of NYC ban of ChatGPT	23 January 2023	New York City schools have banned ChatGPT, which generates human-like writing of essays, amid fears that students could use it to cheat. [18,19] According to the city's education department, the tool will be forbidden across all devices and networks in New York's public schools.	Proposed
3	India	National Strategy for AI (not specific to GenAI)	7 February 2023	The government has published the National Strategy for AI with the objective of developing an ecosystem for the research and adoption of AI. The technologies related to GenAI are still evolving; currently, there is no specific regulation for GenAI. However, the development and deployment of AI is governed through laws and policies related to privacy, data protection, intellectual property and cybersecurity. [20]	Proposed
4	U.K.	Medical equipment related regulations	3 March 2023	The Medicines and Healthcare products Regulatory Agency (MHRA) remains open-minded about how best to assure LLMs that any medical device must have evidence that it is safe under normal conditions of use and performs as intended, as well as comply with other applicable requirements of medical device regulation. [21]	Proposed
5	U.S.	U.S. Chamber of Commerce push for AI regulation	10 March 2023	GenAI, like ChatGPT, is an innovative and massively disruptive technology. U.S. regulators are pushing for increased laws and provisions to ensure consumer, economic and international safety. [22]	Proposed
6	Canada	Ethical Implications to AIDA	13 March 2023	Canada released a companion document to its Artificial Intelligence and Data Act (AIDA), which states businesses would be held accountable for the creation and enforcement of appropriate internal governance processes and policies to achieve compliance with the AIDA. [23]	Proposed
7	U.S.	Copyright-related Regulation	16 March 2023	The Copyright Office clarified its practices for examining and registering works that contain material generated by the use of AI technology. [24,25]	Proposed
8	Italy	ChatGPT ban	23 March 2023	The Italian privacy regulator ordered a ban on ChatGPT over alleged privacy violations. [26,27] The national data protection authority will immediately block OpenAI from processing the data of Italian users.	Implemented
9	U.K.	Pro-Innovation Regulation of Technologies Review	March 2023	If passed, the government should announce a clear policy position on the relationship between intellectual property law and GenAI to promote innovations. [28]	Proposed
10	Singapore	Internationally accepted AI ethics principles	5 April 2023	The government of Singapore has released their "AI Verify" toolkit, which seeks to provide companies with a technical tool that verifies if their system complies with "internationally accepted AI ethics principles." [29,30]	Implemented (Pilot)
11	EU	AI Act: Adding AGI to "high risk" category	Early 2024 expected	With the EU Artificial Intelligence Act (AI Act) draft currently being considered by the EU Parliament, recent speculation suggests that the EU Parliament is considering adding artificial general intelligence (AGI) to the category of "high risk" AI systems. It may be that AGI will default to the transparency category, but that its ultimate uses in products could be high risk, i.e., the determination will be based on final use and not by the model itself. [31,32]	Proposed

Source: Compiled from various sources

Enhance Control on Biases in Each Jurisdiction to Train GenAI Tools

According to Gartner's annual CIO and Technology Executive Agenda surveys from 2019 to 2023, AI continues to be deployed at an increasing number of enterprises around the world (see Figure 4).

Figure 4: Deployment of Artificial Intelligence



With the emergence of GenAI, private enterprises have two approaches to AI governance. The first is companies self-governing the space by limiting release strategies, keeping an eye out on the use of models and limiting access to their products. Newer, nontraditional organizations, on the other hand, believe that GenAI models are for democratizing access as they have the potential to positively impact both the economy and society.

When looking at public sectors, there are no regulations concerning the growth of GenAI models, yet that does make more room for issues concerning the invasion of privacy, intellectual property and copyright. As GenAI datasets are usually retrieved from the internet, they are used without permission from the creators/artists, which can appear to be original when, in reality, it is fabricated and classifies as plagiarism.

As beneficial as GenAI has the potential to be, its growth does raise legal, moral and ethical questions. Some of the biggest concerns are: [33]

- **Copyright:** With GenAI producing unlimited amounts of content, especially art pieces, the internet will soon be filled with paintings that are unrecognizable from the originals. This also raises the issue of GenAI replacing humans when it comes to many creative workforces, such as freelancers or commercial artists who work in publishing, entertainment and even advertising. This is already a concern in practice, and organizations should be aware of long-term effects when using these platforms for code and application development. [34]

- **Unreliable Content:** As GenAI models are being fed large datasets — such as articles, books and websites — there is a huge chance that the information they are being given is biased, and that makes it hard to filter credible content completely. With this, democratized use of models can easily create deepfakes, reinforce machine learning bias and share misleading content across platforms. [35]

- **Scams:** The internet is filled with scammers and people who are trying to steal your data and money, and GenAI can be used by such people to cause damage to users or, at the very least, circulate spammy news online. [36]

As stated above, GenAI algorithms need large amounts of training data so they can perform their tasks with high accuracy. However, it is challenging for generative adversarial networks (GANs) to generate entirely new content; they can only combine what they picked up in new and different ways and give a fresh output. With GANs being hard to control, GenAI models are not always stable, and they can produce unexpected outcomes.

GANs have two parts: the generator, which learns to generate plausible data that becomes negative training examples for the discriminator, and the discriminator, which learns to distinguish the generator's fake data from real data. GANs are generative models that create new data instances that resemble the training data, so the key becomes controlling the data instances used for training to be fed through the generator and the discriminator.

Activities and use of the model must serve a specific purpose (in the absence of a granularly defined purpose, it's not possible to determine which outcomes were intended vs. unintended) to enhance control of the biases. And the bounds of what is intended are dictated in part by the jurisdiction of operation, especially given what is and is not desired regarding societal effect of outcome per the different regulations. [37]

Thus, in order to reduce faulty outputs by GenAI, more datasets from more countries must be used to train GenAI. However, for most enterprises, it is impractical to engage with multiple datasets from multiple countries to train their GenAI tools because they consume the models "as is." They do not control the training datasets. So this cannot be done with third-party provisioned, democratized models like ChatGPT, but it can be done when using models under your own control, like open-source, fit-for-purpose models that the organization trains itself on before using (see Market Guide for AI Trust, Risk and Security Management).

Nonetheless, GANs can be used to great positive effect as well. For example, the creation of synthetic data to replace identifiable data can proactively reduce privacy and confidentiality risks, such as in application testing and training of other proprietary models.

Recommendations:

- Train and test the tools extensively in a lab environment before deciding to roll out, by specifically understanding the impacts on trade-offs such as privacy, intellectual property, ethics, AI biases, regulatory and compliance requirements in each jurisdiction
- Confirm that the AI output is abiding regulations, by enhancing control on biases through validation of output within the different jurisdictional expectations of what is and is not considered acceptable

Explore Composable Architecture and Edge Operations

The design assumption for Amazon was that regions needed to be independent, but a handful of global dependencies (such as telemetry being available to AWS operators on a global basis, in a normal follow-the-sun approach) were okay.

The design assumption for Google was that modern companies would use the internet for everything and would be interested in globally distributing their applications. As a result of the political situation in Hong Kong (circa 2019), Google began to decouple their designs with the intent of making it possible for regions to continue to operate if cut off from the internet.

The design assumption of Microsoft was that Azure was going to be for small businesses who wouldn't really care about multiple jurisdictions. They have pivoted, of course, but they are still trying to unwind their original design assumptions and they have a long way to go.

All these companies started in an era of globalization, where customers wanted more reach, more geographic dispersion and more digital works-from-anywhere seamlessness. So complete isolation by jurisdiction of these cloud platforms would not be simple as they were not envisioned for locally divided use.

But enterprises must now plan for business continuity as regulations conflate the market, leading to eventual technological decoupling, by exploring composable or modular architecture and edge operations in each jurisdiction of operation.

This potential solution is what we refer to as a metatopology (see Figure 5). It is a blend of several techniques which include edge computing, edge analytics and privacy-enhancing computational techniques (see Infographic: Understanding Edge Computing). In fact, organizations plan to pursue privacy-enhancing computation techniques for business intelligence and analytics as a top privacy capability in the next 12 months (see Three Critical Use Cases for Privacy-Enhancing Computation Techniques).

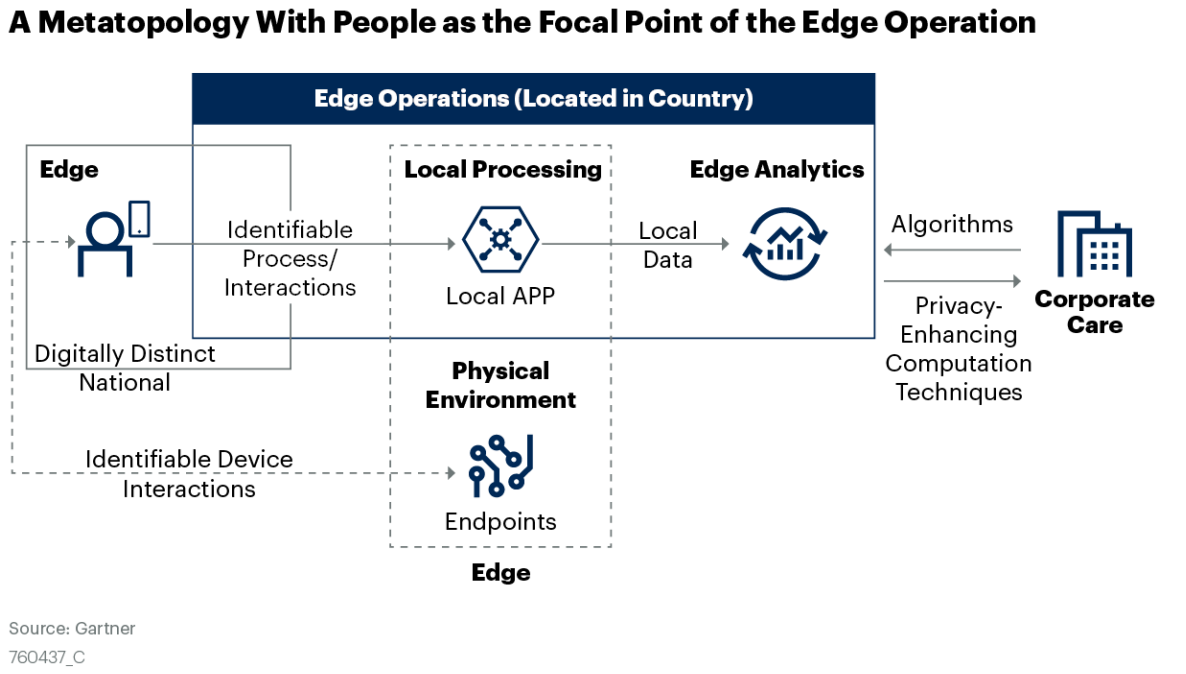
The focal point for this metatopology is a concept called the digitally distinct national (DDN), an individual with whom an enterprise must engage. It is important to note the DDN's private and/or professional computing environment emerges from nationally deterministic network effects and their personally descriptive data is regulated by national laws.

Rather than the edge computing model being built with devices as the endpoint, this metatopology applies to people as the focal point of the edge operation. An edge topology that can accommodate a DDN is one that allows multinationals to deal with the challenges of both employees and customers impacted by the laws and technologies of their home country, even though they may not reside there.

Think of the edge operations as self-contained sandboxes that comprise certified and compliant applications of a specific country (see Building an Edge Computing Strategy). Each jurisdiction will have its own unique sandbox as the regulations and restrictions vary from one nation to another. This sandbox allows digitally distinct end users or nationals to be connected to their originating work country yet remain compliant to laws and regulations under its jurisdiction in another country. A DDN will be locally compliant but globally consistent and connected.

This proposed metatopology does not need to be deployed everywhere, but will benefit from doing so in anticipation of evolving reglobalization risks. Such a metatopology deployment will be especially beneficial to your enterprise when the only other available option is to exit a market.

Figure 5: A Metatopology With People as the Focal Point of the Edge Operation



In summary, executive leaders looking to adopt GenAI tools in different jurisdictions should be prepared to deploy them differently across various jurisdictions.

Recommendation:

- Plan ahead for the eventual technological decoupling by pursuing composable architecture and edge operations in each jurisdiction of operation which could inevitably lead to different deployments of GenAI in each geography

Evidence

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State of Privacy — The European Union

What Executives Need to Do to Support the Responsible Use of AI

Use Generative AI in Applied Innovation to Drive Business Value

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Social Networking Service	WhatsApp	WeChat
Search Engine	Google	Baidu
AI Chatbot	ChatGPT	To Be Determined

Source: Gartner (May 2023)

Table 2: Pending and Implemented AI Regulations Around the World

No.	Country	Regulatory Theme	Implementation Date Proposed	Description	Status
1	China	Regulation on “deep synthesis” technology	10 January 2023	The Cyberspace Administration of China, the country’s top internet watchdog, passed a regulation on “deep synthesis” technology. [16,17] - Users are prohibited from using GenAI to engage in activities that endanger national security, damage public interest or are illegal. - Providers of GenAI are required to verify users using mobile phone numbers, IDs or other forms of documentation. - Service providers must audit AI-generated content and user	Implemented

				prompts either manually or through technical means.	
2	U.S.	Education Department of NYC ban of ChatGPT	23 January 2023	New York City schools have banned ChatGPT, which generates human-like writing of essays, amid fears that students could use it to cheat. [18,19] According to the city's education department, the tool will be forbidden across all devices and networks in New York's public schools.	Proposed
3	India	National Strategy for AI (not specific to GenAI)	7 February 2023	The government has published the National Strategy for AI with the objective of developing an ecosystem for the research and adoption of AI. The technologies related to GenAI are still evolving; currently, there is no specific regulation for GenAI. However, the	

				development and deployment of AI is governed through laws and policies related to privacy, data protection, intellectual property and cybersecurity. [20]	
4	U.K.	Medical equipment related regulations	3 March 2023	The Medicines and Healthcare products Regulatory Agency (MHRA) remains open-minded about how best to assure LLMs that any medical device must have evidence that it is safe under normal conditions of use and performs as intended, as well as comply with other applicable requirements of medical device regulation. [21]	Proposed
5	U.S.	U.S. Chamber of Commerce push for AI regulation	10 March 2023	GenAI, like ChatGPT, is an innovative and massively disruptive technology. U.S. regulators are pushing	Proposed

				for increased laws and provisions to ensure consumer, economic and international safety. [22]	
6	Canada	Ethical Implications to AIDA	13 March 2023	Canada released a companion document to its Artificial Intelligence and Data Act (AIDA), which states businesses would be held accountable for the creation and enforcement of appropriate internal governance processes and policies to achieve compliance with the AIDA. [23]	Proposed
7	U.S.	Copyright-related Regulation	16 March 2023	The Copyright Office clarified its practices for examining and registering works that contain material generated by the use of AI technology. [24,25]	Proposed

8	Italy	ChatGPT ban	23 March 2023	The Italian privacy regulator ordered a ban on ChatGPT over alleged privacy violations. [26,27] The national data protection authority will immediately block OpenAI from processing the data of Italian users.	Implemented
9	U.K.	Pro-Innovation Regulation of Technologies Review	March 2023	If passed, the government should announce a clear policy position on the relationship between intellectual property law and GenAI to promote innovations. [28]	Proposed
10	Singapore	Internationally accepted AI ethics principles	5 April 2023	The government of Singapore has released their “AI Verify” toolkit, which seeks to provide companies with a technical tool that verifies if their system complies with “internationally	Implemented (Pilot)

				accepted AI ethics principles.” [29,30]	
11	EU	AI Act: Adding AGI to “high risk” category	Early 2024 expected	With the EU Artificial Intelligence Act (AI Act) draft currently being considered by the EU Parliament, recent speculation suggests that the EU Parliament is considering adding artificial general intelligence (AGI) to the category of “high risk” AI systems. It may be that AGI will default to the transparency category, but that its ultimate uses in products could be high risk, i.e., the determination will be based on final use and not by the model itself. [31,32]	Proposed

Source: Compiled from various sources