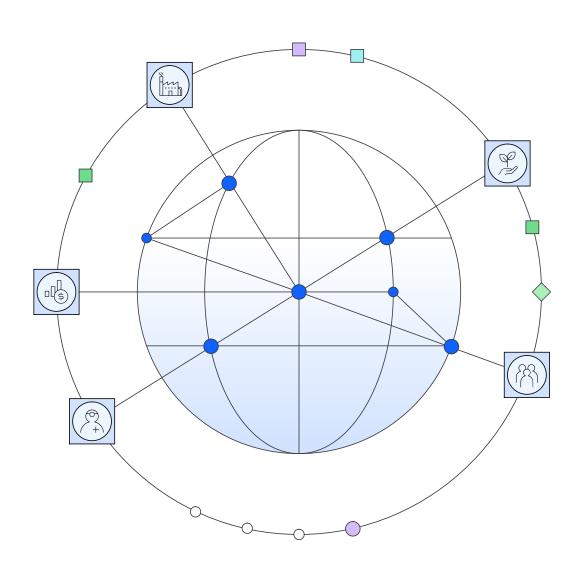
Strategy development in companies and other organizations University of Skövde

Strategic Outlook Global Strategic Trends 2055

Mats Göthe December 1, 2024

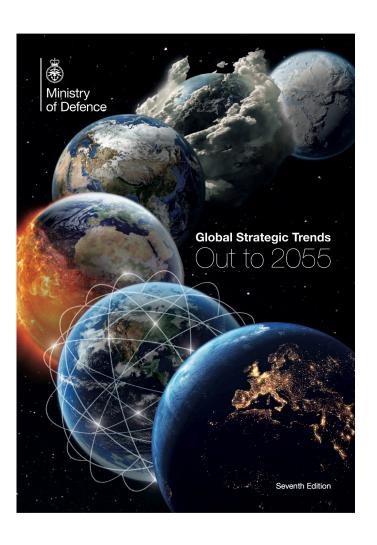


Introduction

The selection of industry and country for my strategic analysis is both straightforward and self-evident. My role as a Technical Design Strategist at IBM Software's development lab in the United States (IBM Sustainability Solutions, 2024), with a focus on AI and sustainability for industrial applications (IBM ALM, 2024), reflects this choice. I reside in Sweden but work remotely within the global tech industry.

The challenge with strategic trend forecasting lies in predicting complex and interconnected trends over an extended time horizon. Generally, short-term data and extreme changes tend to be overestimated, while unexpected developments are underestimated.

In my analyses, I primarily focus on why a trend influences, followed secondarily by how a trend will influence. The underlying causes are generally more stable than the unpredictable responses of complex global systems.

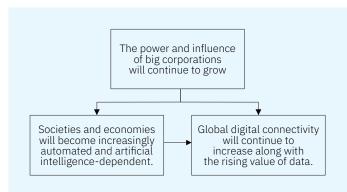


Global Strategic Trends - Out to 2055

The report Global Strategic Trends: Out to 2055, 7th edition (GST7, 2024), is a strategic foresight analysis of social, defense, and security issues up to the middle of the century. The report provides a long-term strategic context for decision-makers.

GST7 identifies six global change drivers shaping governance and society towards 2055 (GST7, p.7) power shifts, demographic changes, climate change, technological development and global connectivity, economic transformation and energy transition, as well as increasing inequality and governance challenges. Politics is characterized by power shifts between states and non-state actors, as well as growing global tensions. Societies face aging populations in developed countries and urbanization in developing nations. Sustainability policies related to climate adaptation lead to increasing global political tensions between the Global North and South. Technological innovations may enable a more sustainable future. GST7 highlights the importance of global cooperation but emphasizes the uncertainty surrounding the impact of new global power dynamics and regional political developments.

In my analysis, based on the course's strategic theories (Pettersen, 2021), I have chosen two of these global drivers: technological advancements for my industry analysis and climate stressors for my analysis of Sweden.



Trends and Dependencies from the GST7
Report's Global Driver 'Technological
Advances and Connectivity' Affecting the Tech
Industry and the Future of AI.

"We innovate technology, which then shapes us."

Bo Dahlbom guest lecture, a striking description of the tech industry's role and impact on the future (Dahlbom, 2024).

My Industry - Tech and AI

My analysis is based on the political, economic, and social impact of major international tech companies through the following questions:

- How will the influence of major tech companies and AI affect society?
- How will AI impact IBM's strategies?
- How is the AI market affected by the lack of data?

GST7: The power and influence of big corporations will continue to grow.

The report identifies that "many non-state actors will have a stronger influence than states" (GST7, p.43). We see a trend where large B2C tech companies hold dominant power in society. Examples include Apple, Meta, X, Google, Amazon, and OpenAI.

Why is the influence of major tech companies increasing?

- The absence of global political control structures enables actions beyond national regulations.
- Through global dominance, companies can control the availability and content of products and services..

How will the influence of major tech companies impact society?

Large companies will expand their ecosystems and increase their political and economic influence (BBC; Financial Times, 2024). Major corporations will come into conflict with regional laws and regulations concerning accessibility and content (Apple; ABC, 2024). The boundaries between state actors and corporations are becoming more blurred. Ethics and accountability are challenged as AI-driven business models rely on systematic manipulation of information (The Verge, 2024; GST7, p.428).

As a world-leading B2B tech company, IBM is well-positioned to take a stance both internally and externally on business ethics related to AI and sustainability (IBM Ethics, Equal, Diversity, Sustainability 2024).

"AI will change everything, just as the railway, electricity, and the telephone did 150 years ago. It is happening fast – we are falling behind – danger in

AI-commission: AI roadmap for Sweden (Regeringen, 2024).

28,5%

AI yearly market growth (Statista, 2024).

\$443B

AI service market, 2027 forecast (Gartner, 2023).

\$298B

AI software market, 2027 forecast (Gartner, 2023).

GST7:Societies and economies will become increasingly automated and artificial intelligence-dependent.

The report highlights the exponential growth expected in AI, computing power, transfer speed, storage, sensors, and data (GST7, pp. 391, 393).

We will look back at 2024 as a milestone: 'Life before AI' and 'Life with AI'. Revolutionary technological leaps occur approximately every 25 years. Just as electronic miniaturization and the internet have shaped our lives, AI will redefine information, automation, and robotics. Companies and society must quickly adapt through new AI strategies (IBM AI Strategy, 2023; (Regeringen, 2024).

Why is the industry becoming increasingly dependent on AI?

- AI enables efficiencies beyond what humans can achieve today.
- AI drives disruptive changes, creating new opportunities for the tech industry and society.

How will AI impact IBM's strategies?

The industry requires continuously increasing productivity. In industrial applications, AI will revolutionize efficiency and automation (IBM Maximo, 2024). Companies and regulatory authorities face challenges in keeping pace with technological advancements through rules and regulations (Stenberg & Burden, 2021).

With growing geopolitical tensions, there is a risk of increased protectionism (CNN, 2024) and that companies may abandon the Open Source ecosystem that currently dominates AI (Hugging Face, 2024).

IBM's B2B strategy is clear: "Become an innovative and focused company, built around the two most transformational technologies of our time: hybrid cloud and AI" (IBM Annual Report, 2024). The impact of AI can already be observed. The Q3/2024 earnings report showed a reduced demand for consultants due to AI, leading to a 6% drop in IBM's stock (Yahoo! Finance, 2024). Large consulting firms like McKinsey will be significantly affected as AI replaces consultants' expertise in business projects (Björk, 2024).

"Data is the fuel that runs AI."

AI-commision: AI roadmap for Sweden (Regeringen, 2024).

GST7: Global digital connectivity will continue to increase along with the rising value of data.

The report predicts "a rapid growth of global data" and "improved speed and reliability in data communication over satellite networks" (GST7, p.391).

Why are digital communication and data important?

- The quality of AI models is directly dependent on data quality.
- The availability of open data in the industry is limited.
- No data produced in China leaves the country today.
- Data has become an industrial global commodity.

How is the market affected by the lack of data?

An industry insight is that "Data is the fuel that runs AI". Specialized AI automation requires more specialized data. Distributed data collection, storage, and analysis drive up the demand for digital data volume (IBM watsonx.data, 2024).

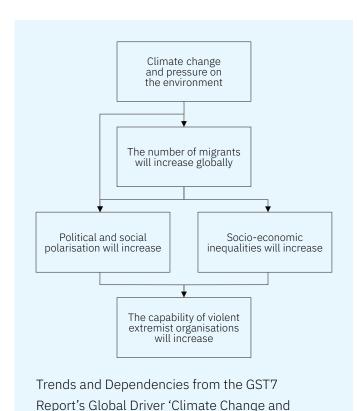
More important than data volume is quality—meaning verifiable, ethical, and impartial data. With global power competition, the value of data will accelerate (GST7, p.393). Like other commodities, data is a scarce resource. Global power struggles, protectionism, security interests, intellectual property, data sovereignty, and privacy regulations will impact future data availability. Regulated economic trade in data will be introduced.

My Country - Sweden

The report highlights the climate impact across energy, demographics, digitalization, geopolitics, migration, and integration (GST7, p.369). Sweden faces several of these significant challenges by 2040 (Regeringen, 2019).

I analyze and explore the connections and consequences through the following questions:

- How do climate change and increasing migration impact Sweden?
- How does political polarization affect Sweden?
- How do extremist organizations influence Sweden?



Pressure on the Environment' Affecting My

Country, Sweden.

GST7: Climate change will cause more extreme weather events and increase the number of global migrants.

At the beginning of the 2020s, climate change has become increasingly evident and extreme in most parts of the world, with rising temperatures, wildfires, storms, floods, and ice melt. The report specifically mentions tipping points and their consequences (GST7, p.368). These create urgent and growing shortages in basic social functions, global distribution challenges, and increased instability linked to migration and its demographic impact on Sweden.

Why is migration increasing?

- Global migration due to poverty, intolerance, discrimination, slowed economic growth, and corruption.
- Refugee flows from conflict zones.
- Migrants used as hybrid weapons in political conflicts.

How do climate change and increasing migration impact society?

During this period, we may see a turning point. Global climate effects will lead to increasing migration to Europe from the south and east. Politically, climate migration will remain a divisive issue (Utrikespolitiska institutet; Riksdagen, 2024). The political fragmentation in Europe and Sweden will result in reluctance to fulfill international environmental agreements.

GST7: Socio-economic inequalities and political and social polarisation will increase.

Some European countries have, during the 2020s, seen voters shift from social liberalism to more nationalist leaders. Global environmental issues appear politically idealistic. Large-scale migration has been used to highlight socio-economic challenges and failures in integration (SOU, 2024).

Why is global polarization increasing?

- The global economy has not delivered the promised environmental and social improvements.
- A decline in trust in political leaders.
- Large-scale disinformation and influence operations are used as hybrid weapons to create instability and polarization.

"Both violent crime and financial crime are increasing."

Dan Norlander guest lecture on police work in disadvantaged areas on the suburbs of the cities. (Norlander, 2024).

1111%

Increase in violent crimes where 6 or more individuals collaborate (Norlander, 2024).

1371%

Increase in financial crimes where 6 or more individuals collaborate (Norlander, 2024).

How does polarization impact Sweden?

Social fragmentation is putting increasing pressure on Swedish democracy and its liberal values. Continued large-scale disinformation targeting different groups challenges fundamental values and societal functions (Regeringen, 2023, 2024). The ability to maintain a welfunctioning welfare state will become increasingly difficult, exacerbating inequalities and social exclusion.

GST7: The capability of violent extremist organisations and organized crime groups to do harm will increase.

The report describes the growth of political and criminal violence (GST7, pp. 44, 369). Extremist organizations in politics, religion, and environmental movements, as well as organized crime, consider violence, illegal methods, and hybrid attacks justified in achieving their goals.

Why are extremist organizations growing?

- Political and criminal groups operate in the gray area between societal norms and regulations.
- These groups use extreme violence to fight their opponents.
- They quickly adapt to new technology, such as encryption and social media, for planning, recruitment, and radicalization.

How do extremist organizations impact Sweden?

Violent political groups claim that "civil disobedience combined with selective sabotage is self-defense for the climate and is, in fact, aligned with democratic values" (Flamman, 2021). These groups, often with international connections, use violence and harassment against individuals and institutions they perceive as enemies or opponents.

During the guest lecture, Dan Norlander (Norlander, 2024) noted that criminal networks, often based in vulnerable areas, are expanding and causing significant unrest in society through shootings and bombings. Law, order, and trust are crucial for the functioning of Sweden's welfare state. These groups undermine this trust and harm Swedish society through infiltration and exploitation of welfare systems (MSB, 2013).

Politics and public administrations will continue efforts to dismantle the criminal economy, thereby strengthening the protection of essential societal functions such as healthcare, education, social services, and defense (Korsell, 2016; Europeiska kommissionen, 2021; Dahlin, 2023; Sveriges riksdag, 2024).

"The future's so bright, I gotta wear shades."

A positive introduction to the summary of an otherwise rather bleak future outlook. Song title by the American rock band Timbuk 3.

Conclusions

The Global Strategic Trends report highlights the shifting direction in which the liberal open world order is now rapidly being replaced by a more conservative, national, and protectionist order over the next 25 years.

My summary analysis of GST7 identifies aspects from the future scenarios (GST7, p.53) with a global focus on Politics, Economy, and Social factors that will primarily dominate the period up to 2040:

- A series of global and regional conflicts accelerate competition over resources, influence, and values.
 Protectionism and resource nationalism become the new norm.
- Western democracies struggle with polarizing political tensions. China increases its influence through closer cooperation with emerging mid-sized economies.
- An increasing number of states are reducing their climate ambitions. The world is characterized by the inability of national governments and international organizations (UN) to manage the challenges this entails.

Future scenarios for my Tech industry and Sweden, focusing on Technology, Environment, Politics, and Social factors.

- The tech industry, driven by AI, will redefine how we perceive information, automation, and robotics.
 Large corporations will expand their ecosystems and continue to grow their influence and symbiosis with society and politics. AI requires quality data but is affected by scarcity and protectionism. The market will be characterized by disruptive changes, increasing dependence on AI, and global power struggles over technology and data.
- Global climate change will secondarily impact Sweden through increasing climate measures, climate migration, and accelerating political division. Polarization and rising inequalities threaten societal stability and increase insecurity due to the influence of violent extremist organizations and criminal groups.

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