



Strategic Security Analysis

Resilience and Agility: Managing and Mitigating Evolving Threats in a Hyperconnected World

Hassan Abul-Enein



Key Points

- Evolving threats are gradual and continuously developing situations that threaten or cause disruptions and harm to interests across an expansive landscape by manifesting and augmenting a variety of risks across the political, economic and social spheres. They often snowball and increasingly impact a multiplicity of stakeholders.
- Due to their evolving nature and widespread and varying manifestations, these types of threats emphasise the need for resilient and agile responses from governments, businesses and society that allow them to contain, mitigate and navigate such crises.
- In order to develop resilience and agility in a world characterised by hypoconnectivity, organisations need to invest in four key pillars: strategic management and foresight; human capital, diversity and leadership; collaboration and partnerships; and technology and innovation.
- Investments of this kind will support effective and timely risk assessments and decision-making, enhance resource mobilisation and allocation, promote problem-solving, foster creativity, and encourage organisations to explore new frontiers and growth opportunities. They will also unite actors around shared values, knowledge and intelligence, help to consolidate safety and security buffers, and promote the development of transferable skills and mobility.

About the Author

Hassan Abul-Enein is a policy and strategy consultant that has worked for the United Nations and the private sector. He holds a MSc from the London School of Economics and Political Science and a BA from the Geneva School of Diplomacy and International Relations. Hassan is a GCSP Alumni and was a Young Fellow in Foreign and Security Policy.

Introduction

For years, technology, governance and business have become increasingly interconnected. As a result, we live in a world where enterprises face immense challenges to their efforts to grow and create value. These challenges are magnified and compounded by evolving threats.

These threats are situations characterised by their gradual and continuous development that threaten or cause disruptions and harm to a wide range of interests. They snowball with time and have serious and widespread repercussions across an expansive landscape by manifesting and augmenting a variety of risks across the political, economic and social spheres. Because of their rapid development and complexity they cause many ambiguities and uncertainties to arise that hamper our ability to deal with them effectively.

Over the last decade some of these evolving threats have included terrorism, natural disasters, humanitarian and refugee crises, a global recession, trade tensions, cyber attacks, climate change, and pandemics. These threats have all impacted the global policy discourse and changed national, regional and global agendas. Although they originated in specific circumstances, they quickly transformed themselves and often spiralled out of control. Threats of this kind cannot be overcome by using traditional crisis management techniques. As a result, they make governments and enterprises appear to be unprepared and unable to cope.

Perhaps today we are experiencing one of the most drastic evolving threats humankind has ever seen. The COVID-19 pandemic has taken the world by storm. Unprecedented in scale, it was first reported in Wuhan, China, and has spread to more than 200 countries. At the time of writing (5 August 2020) the virus had infected 18,142,718 individuals and claimed 691,013 lives.¹

Its impact, however, is not only on health. As governments scrambled to contain the outbreak, policy interventions have ranged from full lockdowns to the use of masks and social distancing measures. Consequent restrictions on the freedom of movement halted supply chains, reduced productivity, increased unemployment and bankrupted many businesses.² Individuals are becoming more stressed and anxiety levels are increasing,³ threatening human welfare. Issues of continuity and growth have become critical:⁴ the global economy has been severely disrupted, with the International Monetary Fund forecasting a downturn worse than the Great Depression of the 1930s, with gross domestic product rates falling to -3 per cent for 2020⁵ and global debt increasing dramatically to foot the US\$8 trillion bill for economic stimulus packages.⁶

The pandemic highlights how asymmetrical global responses to evolving threats have become. The response to COVID-19 has varied significantly, ranging from full lockdowns and halts to day-to-day life, to less-restrictive measures. The question of balancing economic sustainability in the longer run with short-term lockdowns has also baffled governments and policymakers, contributing to the asymmetry of national response measures.

We will overcome the COVID-19 pandemic, but other kinds of evolving threats will persist. Accordingly, how can stakeholders intervene to prevent catastrophic aftermaths to crisis situations? There is no single panacea. Due to their evolving nature and varying manifestations, the impact of such threats cannot always be predicted or prevented. Containment also depends on a variety of factors and responses. Therefore, focusing on mitigating and managing their magnitude while simultaneously upgrading organisational capabilities is the best way forward.

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Strategic foresight entails the process of assessing future events and drivers of change

In order to ensure this, governments and enterprises need to focus on resilience and agility. Resilience in this context refers to the “ability to effectively absorb, develop situation-specific responses to, and ultimately engage in transformative activities to capitalize on disruptive surprises that potentially threaten organization survival”.⁷ Agility may be defined as “the ability to recognize unexpected changes in the environment and appropriately respond in a swift and efficient manner, by utilizing and reconfiguring resources”.⁸ It is worth mentioning that these definitions are not exhaustive, and a variety of models approach the terms differently. However, their conceptualisations are always interlinked and focus on the idea of continuous improvement through adaptability and robustness.

Resilience and agility may be developed and propelled through investments in four main pillars, namely: (1) strategic management and foresight; (2) human capital, diversity and leadership; (3) collaboration and partnerships; and (4) technology and innovation. Investments in these pillars will support and aid overall crisis management and assist in the containment and successful navigation of evolving threats. Each of these pillars and the way in which they support resilience and agility are explored in the following sections.

Strategic management and foresight

Managing evolving threats and navigating crises requires strategic management and foresight. Strategic management refers to the governance structures and processes needed for evaluating, planning, and implementing decisions that aim to secure an organisation’s interests and comparative advantages. These structures and processes aim to create value by developing value systems that support strategic decision-making and flexibility.⁹ Without strategic management, decision-making and proactive action are neither facilitated nor promoted. As a result, important insights are not acted on and decisions may not be implemented effectively or timeously. Organisations will then become idle and fail to respond to changes taking place in their operational environments.

Strategic foresight entails the process of assessing future events and drivers of change. It is promoted through strategic management. Strategic foresight maps the potential impact of future events on an organisation through deep analysis that synthesises information and intelligence by exploring a variety of scenarios and forecasts. Ultimately, this “generate[s] an explicit, contestable and flexible sense of the future”.¹⁰ This sense allows an organisation to enhance its resilience and preparedness by identifying weaknesses, conducting stress tests, optimising resource allocation and developing its capabilities. It also supports the containment and management of shocks and promotes better response to and the mitigation of evolving threats by creating safety margins and effective buffers. Moreover, as it explores a variety of scenarios, it develops cases to extrapolate and learn from.

Together, strategic management and strategic foresight are critical for managing and responding to evolving threats. Having the right processes and governance structures and frameworks in place allows for smooth and timely decision-making. It also assimilates enterprise risk management functions quicker and smoother, and facilitates an organisation’s ability to identify and act on future insights by continuously assessing its position and future. This enhances agility and resilience by increasing preparedness, robustness and adaptability.

Hard choices and forced halts to production abruptly reversed growth and development trajectories

Among other things, the COVID-19 outbreak constitutes a case study of why strategic governance and foresight are critical to containing and responding to evolving threats. It also underscores the value of developing insights into an organisation's operating environment and integrating them across operational structures.

Although many leaders, national security institutions and international organisations had warned about the risks of a health pandemic in their past risk assessments, the possibility that they might occur was never prioritised. The World Economic Forum's *Global Risks Report 2020*, for instance, weighted infectious diseases as a less-significant risk than social instability, global governance and climate action failure.¹¹ Meanwhile, AXA's *Future Risks Report* published in January 2020 (i.e. before the full effects of the COVID-19 pandemic had become apparent) positioned infectious diseases as the eighth most-significant risk of the ten that it mapped.¹² None of the assessments talked about the impact of a health pandemic on global trade, business continuity, economic growth, and human welfare and well-being, instead categorising such a situation as a single potential occurrence. Because many organisations (both public and private) did not act on these risk assessments or explore the wider possible impacts of a health pandemic on their operations, when the pandemic occurred its effects were catastrophic.

Hard choices and forced halts to production abruptly reversed growth and development trajectories. Small and medium-sized enterprises were put out of business by industry closures. Challenges characterising the gig economy such as the risk of zero-contract hours were augmented. Cyber attacks increased, with hackers using malicious software to target more individuals in the hope of breaching security networks as more people worked from home.¹³ The COVID-19 outbreak also shed light on critical deficits in social security systems and increased the threat of deteriorations in people's mental health. Groups such as the elderly were at higher risk, but were often effectively excluded from response plans. The outbreak has had a domino effect, with many industries and value chains being adversely impacted for the foreseeable future.¹⁴

Had organisations been agile and resilient through strategically utilising foresight methodologies to understand the severity of the consequences of a global pandemic outbreak – including the exponential rate of the virus's spread – a comprehensive and more effective response could have been designed and implemented. This would have resulted in the better management and deployment of resources, flattening the infection curves earlier and saving many lives. It could have made for a better socio-economic response, helping to mitigate the negative repercussions associated with the virus.

Human capital, diversity and leadership

Human capital, diversity and leadership are critical in addressing evolving threats and navigating adversities. When organisations and governments invest in human capital, they reinforce skills such as problem-solving, business acumen, creativity, coordination and emotional intelligence. This results in workforces becoming highly mobile and agile, especially as they grow their transferable skills and gain tacit knowledge that is deployable.¹⁵

Moreover, investing in human capital while simultaneously promoting diversity fosters innovation and out-of-the-box thinking. Having multi-gendered teams in place with members from a variety of backgrounds and with a range of different experiences promotes creativity, continually generates new ideas and facilitates innovative dialogue.¹⁶

The International Labour Organisation estimates that 30,000 work months have been lost, impacting 81 per cent of the global workforce and causing income losses of up to US\$3.4 trillion in the first quarter of 2020

This develops agility and resilience by enhancing an organisation's capacity to address and tackle disruption, and even to anticipate its occurrence and consequent repercussions.

Leadership, on the other hand, is interlinked with human capital development and diversity. It is also of paramount importance in responding to and managing evolving threats. By having the right individuals exercising management functions, organisations can become more informed and aware, and better prepared to face and deal with evolving threats as they arise. Good leadership promotes optimism and reflects compassion and trust. It also propels diversity. This fosters creativity and imagination by facilitating experimentation.¹⁷ Together these elements enhance agility and resilience by overcoming gut reaction "flight or fight" responses while allowing solutions to be shaped, instead of problems being fought.

The COVID-19 outbreak has further clarified the importance of investing in human capital, diversity and leadership if organisations are to mitigate the impacts of evolving threats.¹⁸ The pandemic has changed daily work routines and has impacted productivity. The International Labour Organisation estimates that 30,000 work months have been lost, impacting 81 per cent of the global workforce and causing income losses of up to US\$3.4 trillion in the first quarter of 2020.¹⁹ The outbreak has also caused labour and work-routine disruptions. Because teams and individuals were not prepared, adapting and accommodating to, for example, social distancing regulations was imperfectly executed and led to many people needlessly becoming infected. As a result, productivity fell and job markets froze.

Had organisations adequately invested in human capital, diversity and capable leadership, the impact of the COVID-19 outbreak could have been better managed and their ability to weather the storm created by the pandemic would have increased. The timely enablement of flexible working, the early identification of sales and growth opportunities, the rapid and effective reallocation of labour, and the implementation of measures to increase labour productivity would all have been accelerated.

The Majid Al Futtaim Group (one of the largest holding groups in the Middle East) provides a thought-provoking case study of what could be done to respond effectively to the pandemic. With business holdings across the retail, leisure and hospitality sectors, the Group faced a serious continuity threat due to shutdowns across the Middle East and North Africa. However, because of a highly adaptable and robust workforce, coupled with technological preparedness and good, strategic and forward-looking leadership, the reskilling and synergising of more than a thousand employees was facilitated.²⁰ Employees were moved to work in the Group's Carrefour hypermarket network to respond to soaring demand in online ordering as individuals stocked up on food and supplies throughout the lockdown phase. This allowed the Group to overcome the challenge of lay-offs and redundancies, while managing business disruptions in a more agile and resilient way.

With more data and information in circulation, appropriate resource allocation and strategic foresight are increased and sequential-response preparedness is therefore enhanced

Collaboration and partnerships

Because we live in a hyperconnected world, the need for collaboration and partnerships is underscored. Working in silos and limiting the exchange of information prevents organisations from managing and mitigating evolving threats. It results in turf wars between individuals or teams within the same organisation and creates a negative competition effect.²¹ This weakens an organisation's resilience and agility.²²

Collaboration and partnerships help catalyse the exchange of information both vertically and horizontally. With more data and information in circulation, appropriate resource allocation and strategic foresight are increased and sequential-response preparedness is therefore enhanced. Moreover, when companies and organisations collaborate, they identify shared value. This in turn addresses vulnerabilities by creating up-to-date frameworks that provide solutions through sharing knowledge and resources, while avoiding duplication.²³ Collaboration and partnerships also absorb and share risks collectively by building talent, aligning strategy, and creating safety and security buffers. This is important for business continuity and supply chain stabilisation. It also stimulates innovation by promoting dialogue, sharing resources, and increasing investments in research and development, which drives further growth.²⁴

The COVID-19 outbreak has reinforced the need for collaboration and partnerships. China's initial response, for instance, and its initial failure to share data with the international community and stakeholders such as the World Health Organisation aggravated the severity of the outbreak.²⁵ It resulted in a delayed global response and reflected weaknesses and failures in the multilateral health system, which could ultimately be traced to the lack of transparent collaboration.²⁶

On the other hand, however, collaboration and partnerships have also provided success stories in terms of containment. Partnerships between the private and public sectors in South Korea, for example, enabled the tracing of those infected by the virus and the deployment of testing kits.²⁷ Similarly, partnerships between technology and genomics companies such as Group 42 and BGI have in another instance provided rapid testing solutions in countries like the United Arab Emirates.²⁸ Meanwhile, the collaboration of Microsoft and Google to facilitate e-education during lockdown is an example of successful and productive collaborations.²⁹

Had key actors collaborated and formed partnerships earlier, knowledge sharing would have increased. Expertise would have been shared and the impact of the outbreak might have been better managed. In light of this experience, taking a leap into the future and rebounding after an evolving threat such as the COVID-19 outbreak will require more integrated and impactful collaboration and cooperation on a global scale.³⁰

Technology and innovation

Technology and innovation represent the last building block in terms of preparing for and mitigating evolving threats, especially in a hyperconnected world. Due to their evolving nature, such threats result in serious disruptions that halt networks and operations. Their impact often decouples societies and communities from economies and increases the threat of marginalisation.

Technology and innovation offer myriad solutions to address these challenges by increasing resilience and preparedness. For example, technological advances and innovations harnessing artificial intelligence and machine learning can analyse big data rapidly and effectively. This helps with decision-making, risk assessment, foresight, and resources mobilisation by providing timely and accurate insights, which increases resilience and agility.³¹ Similarly, automation and digitisation help to increase productivity and ensure supply and value chain continuity.³² This helps to keep governments and economies afloat and functioning throughout the stresses caused by an evolving threat.

Technology and innovation also promote ingenious thinking by expanding the frontiers of knowledge and shaping new solutions. They also unite a variety of actors around a shared purpose, unlock potential and even create value. This increases resilience and agility by connecting stakeholders, increasing accessibility to a variety of solutions to specific problems, and promoting diversification within and across borders.³³

The COVID-19 outbreak has resulted in drastic social-distancing measures being put in place. Almost all meetings and engagements are carried out virtually nowadays, and as a result the outlook for human interaction is being questioned. Amid all the disruptions caused by the pandemic, technological solutions have facilitated continuity and helped to contain the outbreak.³⁴ Countries with highly developed digital infrastructure and internet penetration have managed to successfully shift operations online. Automated manufacturing lines are helping businesses survive and adapt.³⁵ Innovations such as 3D printing are helping to provide medical supplies across a range of countries, and a partnership between the unlikely pairing of the Mercedes F1 team and University College London is reverse engineering breathing aids to increase the availability of ventilators.³⁶ Meanwhile, Facebook and Google are helping to create maps to analyse population density and movement patterns, which in turn is supporting the tracing of people infected by the virus and the distribution of supplies.³⁷

These initiatives reflect the value of investing in technology and partnerships. Nevertheless, it is important to note that technology and innovation gaps will need to be bridged if governments and organisations are to increase their resilience and preparedness equitably. This will ensure that no one is left behind. At the same time, technology and innovation-oriented investments should be comprehensive, balancing both values and risks.³⁸ This is critical because they can act as a double-edged sword. The case of automation, for instance, is indicative of this. Although automation helps to increase productivity and develops certain safety buffers, it can also create unemployment.

Technology and innovation offer myriad solutions to address these challenges by increasing resilience and preparedness

Conclusion

Over the years a wide range of different evolving threats have been drastic in their impact and magnitude. This impact is likely to be amplified in the future, especially as global risks such as deglobalisation, fractured social contracts, digital divides and technological gaps increase.³⁹ Also, the rollout of stimulus packages and soaring debt that is estimated to top US\$10 trillion by the end of 2020 is likely to make the global economic landscape more fragile.⁴⁰

The COVID-19 outbreak has perhaps resulted in the single largest socio-economic experiment in the history of humankind. As an evolving threat, what started as a health pandemic in China has snowballed, causing disruptions around the globe and impacting every single industry and individual. Countless lessons are being extrapolated from the outbreak.

At the core of these lessons is the importance of resilience and agility in any response to an evolving threat. If governments, organisations, businesses, and society are to manage and mitigate threats of this kind that may occur in the future, there is a need to consolidate and further invest in the four pillars highlighted in this study: strategic management and foresight; human capital, diversity and leadership; collaboration and partnerships; and technology and innovation.

Together, these pillars make for organisational resilience and agility. This in turn helps organisations to overcome ambiguity and uncertainty by embedding adaptability and flexibility across their structures. This will allow organisations and vested stakeholders to better map out ecosystem changes that threaten their interests and growth. It will also allow them to respond proactively, timeously and effectively by implementing whole-of-enterprise risk management functions and developing solid decision-making structures and frameworks.

Investments in these pillars will also provide opportunities for shared value creation and avoid duplication and wastage. This will help drive growth and mitigate the impact of evolving threats by generating innovative solutions faster and more dynamically, and will accelerate the focus on solving problems rather than fighting them. It will also help to develop human capital, ensure accessibility to a variety of solutions to a wide range of problems, and increase integration, which in turn will create safety buffers and support shock containment.

There is a need to consolidate and further invest in the four pillars highlighted in this study: strategic management and foresight; human capital, diversity and leadership; collaboration and partnerships; and technology and innovation

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Chemin Eugène-Rigot 2D
P.O. Box 1295
CH-1211 Geneva 1
Tel: + 41 22 730 96 00
Fax: + 41 22 730 96 49
e-mail: info@gcsp.ch
www.gcsp.ch

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