



DECISION-MAKING IN TIMES  
OF UNCERTAINTY

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**How can we navigate a changing world ?**

Pierre-François ARRIGHI

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## **SKEMA Publika**

SKEMA Business School, Grand Paris Campus  
5 Quai Marcel Dassault – CS 90067  
92156 Suresnes Cedex, France

Tel.: +33.1.71.13.39.32  
Email: [publika@skema.edu](mailto:publika@skema.edu)  
Website: [www.publika.skema.edu](http://www.publika.skema.edu)



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**Sean Scull**, Think Tank Project Manager, is currently a PhD student in Information and Communication Science at Université Paul Valéry – Montpellier III. He holds a degree in Political Science with a specialisation in International Relations from the University of Gothenburg, and a Master’s in International Politics with a specialisation in English-speaking politics from the University of Toulon. Sean has lived and worked in Sweden and the USA.

**Grégoire Kraoul-Riera** is studying for a Master’s in International Governance and Diplomacy programme at Sciences Po Paris. A graduate of SKEMA Business School’s Grande École programme and holder of a Master’s in Business Law with a specialisation in European Law and New Economies (Université du Littoral – Côte d’Opale), he focused his research dissertation on the regulation of digital industries in the European Union, exploring the intersection between law, industrial economics and international governance. On completing his Master’s at Sciences Po, he intends to join an international organisation to contribute to multilateral dialogue and the development of global governance for new technologies.

## AUTHORS

**Pierre-François Arrighi** is a economic intelligence analyst specialising in the analysis of strategic environments and geopolitical risks concerning industrial sectors. He has worked on issues to do with economic protection and decision-making support within the Orano Group, and has also gained experience within international groups including General Electric and PwC. His research involves decision-making in uncertain environments and the evolution of economic intelligence practices in the face of technological change. He is a graduate of SKEMA Business School's Grande École Programme (MSc in Business Consulting & Decision Intelligence) and has a Master's in Economic Intelligence from the European School of Economic Intelligence.

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## SUMMARY

Given that uncertainty is now systemic in our societies and shapes the very framework of decision-making, we believe it is crucial for decision-makers to develop their ability to make decisions and think ahead. This policy paper examines the role of economic intelligence, which involves gathering, analysing, protecting and exploiting strategic information to enhance an organisation's competitiveness, security and influence. However, given this new environment marked by uncertainty, the conventional approach to economic intelligence is proving restricted. This policy paper thus aims to highlight the limitations of the conventional economic intelligence model and the need to adapt it to contemporary issues. It involves clarifying the shift from economic intelligence based on information-gathering to economic intelligence focused on strategic decision-making in times of uncertainty.

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## INTRODUCTION

*“The formerly rules-based international order is falling apart. I fear this must be put even more bluntly: this order, however imperfect it may have been even at its best, no longer exists in that form.”<sup>1</sup>*

This was how Germany’s Chancellor Friedrich Merz described the transformation of the international order established after the Second World War: one founded on multilateralism and the rule of law to govern relations between states. For since the 2008 economic meltdown, the world has been facing a growing number of crises that go hand in hand. The 21st century began with the emergence of a global terrorism whose effects have permanently affected Western societies. Since the 2010s, population movements coming from Africa and the Middle East have also intensified, representing a major factor in geopolitical realignment for both the host countries and the countries of origin. Donald Trump’s rise to power in 2016 marked the start of a geopolitical upheaval, with the US accelerating its withdrawal from Europe in order to focus on domestic issues and thwart China. In 2022, with Russia’s invasion of Ukraine, the Old World also saw the return of high-intensity warfare. More recently, the Israeli-American war against the mullahs’ regime in Iran, begun in March 2026, plunged the world into a new period of uncertainty. And East Asia is marked by tensions over Taiwan and instability in the South China Sea. We are thus witnessing a return to the law of the jungle, with no regard for cooperation and international law as a means of resolving disputes.

As well as these geopolitical tensions, escalating environmental, technological and societal changes are disrupting the established balance. The global COVID 19 pandemic also put companies to the test, presenting new challenges in terms of health, mental well-being and the organisation of work.

In addition, the early 2020s saw the emergence of artificial intelligence (AI), which is disrupting our relationships with work and knowledge. Competition

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<sup>1</sup> Amt, A. (2026). *Federal Chancellor Friedrich Merz's speech at the Munich Security Conference on 13 February 2026 in Munich*. Ministère Fédéral des Affaires Étrangères. <https://allemagneenfrance.diplo.de/fr-fr/actualites-nouvelles-d-allemande/01-politiquefederale/2756814-2756814>.

for natural resources, growing inequality driven by rising raw material costs and declining trust in institutions are other factors that show how our times are changing. All these upheavals reveal a new reality: ever-present uncertainty.

According to the Larousse dictionary, “uncertainty” means a factor that cannot be known in advance and is therefore unpredictable<sup>2</sup>. Vincent Desportes believes that uncertainty has become systemic in our societies and now represents the normal framework for decision-making<sup>3</sup>. According to the United Nations, the consequences of various global crises are tending to worsen, making it all the more pressing to anticipate future challenges<sup>4</sup>. In this context, it is thus vital to develop the ability to make decisions in the face of uncertainty, and anticipate future developments through forward planning. This is precisely the role played by economic intelligence (EI), which involves gathering, analysing, protecting and exploiting strategic information to enhance an organisation’s competitiveness, security and influence. EI is a holistic approach that supports decision-making, engagement and the management of an organisation’s activities in a competitive world<sup>5</sup>. It is based on monitoring, data protection and influence. However, as Christophe Bisson points out, EI needs rethinking in the age of digital technology and AI. Given the rapidity of technological change, the rise of AI and geopolitical instability, the conventional approach to industrial intelligence is proving restricted<sup>6</sup>. This policy paper thus aims to highlight the limitations of the conventional EI model and the need to adapt it to contemporary issues. The idea is to clarify the shift from an EI based on information-gathering to one focused on strategic decision-making in times of uncertainty.

Firstly, we will discuss the limitations of the conventional economic intelligence model in a rapidly changing world. Secondly, we will consider

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<sup>2</sup> Larousse. (2026). *Définitions: incertitude, incertitudes - Dictionnaire de français Larousse*. <https://www.larousse.fr/dictionnaires/francais/incertitude/42222>.

<sup>3</sup> Desportes, V., & Cuhe, B. (2007). *Décider dans l’incertitude*. Economica.

<sup>4</sup> ONU. (2024). Les crises mondiales se conjuguent, le monde doit adopter une approche tournée vers l’avenir pour protéger la santé humaine et planétaire. <https://www.unep.org/fr/actualites-et-recits/communiquede-presse/les-crises-mondiales-se-conjuguent-le-monde-doit-adopter>.

<sup>5</sup> Ecole de Guerre Economique. (2024). *Qu’est-ce que l’intelligence économique?* École de Guerre Economique. <https://www.ege.fr/quest-ce-que-lintelligence-economique>.

<sup>6</sup> Sala, J. (2026). *L’Intelligence Décisionnelle pour la Stratégie et la Souveraineté*. By Christophe Bisson. [www.veillemag.com](http://www.veillemag.com). [https://www.veillemag.com/L-Intelligence-Decisionnelle-pour-la-Strategie-et-la-Souverainete-Par-Christophe-Bisson\\_a6927.html](https://www.veillemag.com/L-Intelligence-Decisionnelle-pour-la-Strategie-et-la-Souverainete-Par-Christophe-Bisson_a6927.html).

what a new approach to economic intelligence might look like in times of uncertainty.

# I. THE LIMITATIONS OF THE CONVENTIONAL ECONOMIC INTELLIGENCE MODEL IN A RAPIDLY CHANGING WORLD.

## A. THE CONVENTIONAL ECONOMIC INTELLIGENCE MODEL

Economic intelligence (EI) falls within a conceptual framework that is close to yet distinct from concepts like strategic intelligence and competitive intelligence. EI typically refers to all the organised practices involved in gathering, processing, and disseminating information used in decision-making, where the goals are protection and influence. Strategic intelligence focuses more on informing long-term decisions by incorporating forward-looking, systemic aspects. Lastly, competitive intelligence, which originated in the English-speaking world, focuses on analysing the competitive environment and market players with a view to strategic positioning.<sup>7</sup>

The conventional EI model thus involves an approach structured around three main interdependent and complementary functions. The first concerns strategic intelligence, i.e. actively and continuously monitoring the company's environment, including its technological, competitive and regulatory aspects. It draws on a variety of sources to pinpoint weak signals and anticipate market trends.<sup>8</sup>

The second function concerns information security, designed to protect the company's strategic assets from internal and external threats. This covers a wide range of issues, including cybersecurity, intellectual property protection and the prevention of economic espionage. In France, this aspect is notably embodied in the national cybersecurity agency ANSSI, which is responsible for securing information systems and raising awareness of digital risks.

The model's third and final component is based on influence strategies, which involve shaping the business environment by actively participating in

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<sup>7</sup> Michael E. Porter (1980) – *Competitive Strategy* <http://ijevanlib.ysu.am/wp-content/uploads/2023/02/Michael-E.-Porter-Competitive-Strategy.pdf>

<sup>8</sup> Lesca, H. (2003), *Veille stratégique: concepts et démarche*

legislative, regulatory and public decision-making processes. This may involve participation in drawing up international standards, including within organisations like the ISO (International Organisation for Standardisation) and the EU, or in institutional lobbying. This focus on influence is also reflected in economic diplomacy, which leverages public and professional networks to promote national economic interests on the international stage.

This model is based on a relatively controllable view of the environment, in which information helps to reduce uncertainty and inform decision-making. Far from being a recent development, this approach is part of a time-hallowed trajectory rooted in the practices of commercial intelligence and state intervention in the economy.

Control over information has long been a driving force behind economic exchanges, from medieval trade networks to the information systems shaped by the Industrial Revolution and financialisation. However, for many years these practices remained fragmented, and little integrated into an overall strategic approach.<sup>9</sup>

This fragmentation continued into the 20th century, despite the growing importance of scientific and technical information in the balance of power, particularly during the Cold War. In France, existing capacities remained fragmented and underused by businesses. Oil crises, globalisation and the subsequent deregulation revealed the limitations of this model, necessitating a more integrated, coordinated and strategic approach to information.

In France, this trend was driven by both institutional initiatives, like those of the Centre de Prospective et d'Évaluation (centre for foresight and evaluation), and scholarly work that provided a more aggressive interpretation of economic reports. This culminated in the publication of the 1994 report "Intelligence économique et stratégie des entreprises" (Economic Intelligence and Business Strategy), edited by Henri Martre. This seminal document formalising the concept of economic intelligence in France was focused on protecting economic interests. It also highlighted the government's pivotal role in disseminating these practices, at a time when

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<sup>9</sup> Delbecque, E. Pardini, G. (2009). *Historique de l'intelligence économique*.

international rivalries were shifting from the military to the economic sphere.

In the 2000s, economic intelligence began to be gradually institutionalised. The appointment of a senior official for economic intelligence – notably Alain Juillet – signalled a commitment to establishing a national framework, with its reach extending to businesses and the regions, with back-up from academic and operational stakeholders like the *École de Guerre Économique* (School of Economic Warfare). This evolution continued into the 2010s with increasing integration into economic security policies, as exemplified by the creation of the SISSE (economic strategic information and security department), reflecting a shift toward issues of sovereignty.

Today, in the digital age with its plethora of data, EI operates in an information-rich environment that is profoundly transforming the way it works – but without reducing uncertainty, which, on the contrary, is becoming increasingly structural. In this context, it still involves a comprehensive approach, structured around complementary functions ranging from the production and protection of information to its strategic use in terms of influence. As underscored by Claude Revel in the SKEMA Publika publication *Influence et contre-influence en 2023: Formes, acteurs, dérives et stratégies*<sup>10</sup>, influence embodies the cutting edge of EI in that it enables us to shape – rather than be ruled by – international competition in economic, political, scientific, narrative, normative and value-based terms. However, this historically formative framework now appears to be partially ill-suited to environments marked by systemic complexity, ever-faster information flows and growing instability, thus raising the question of how it should evolve.

## **B. AN ARCHAIC EI MODEL IN A FAST-CHANGING, INTERCONNECTED WORLD**

As we mentioned in the introduction, we live in a changing world where crises are intermingled, including those involving liberal democracy and the liberal international order. It is a complex and multifaceted phenomenon

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<sup>10</sup> Revel, C. (2023). *Influence et contre-influence en 2023: Formes, acteurs, dérives et stratégies*. SKEMA Publika. <https://publika.skema.edu/fr/influence-contre-influence-en-2023-formes-acteurs-derives-strategies/>

that has become more pronounced since the 2010s. The crisis of liberal democracy is reflected in a sense of disillusionment with politics and institutions that now seem unable to address today's challenges. The 2026 CEVIPOF Barometer reports that 22% of French people say they have confidence in politics. The same survey shows that trust in political parties is at its lowest level since 2009, with only 15% of French people saying they trust them<sup>11</sup>.

Although the causes are multifaceted, François Facchini sees in this crisis of confidence a sense of powerlessness among voters, who feel their voices no longer have any effect on how the country is governed. Another explanation lies in the crisis facing traditional political parties and the resulting lack of ideological differentiation. The blurring of the left/right divide has made politics harder to understand, and voters are finding it difficult to identify the political alternatives available<sup>12</sup>. This crisis facing long-standing political parties has paved the way for anti-establishment groups that have disrupted the traditional democratic balance, like Italy's Five Star Movement, which rose to power in 2018, and Donald Trump's election in 2016, driven by an anti-establishment message.

According to Marcel Gauchet, the roots of this crisis in liberal democracy lie in social fragmentation. Gauchet believes that liberal democracy is a combination of two elements. Firstly, a liberal element, based on the law and the protection of individual freedoms. Secondly, a democratic element, understood as the transformation of freedoms into a collective power that is expressed through the government. However, in Gauchet's view, these two components are central to the contemporary paradox, in that while individually free, we are increasingly unable to shape a shared destiny. This is why democracy is disintegrating: because there is a failure to translate individual freedom into collective power<sup>13</sup>. The difficulty in "building a sense of community" is materialised in a sense of political and economic marginalisation, as exemplified by the Yellow Vests movement in France

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<sup>11</sup> *Baromètre de la confiance politique CEVIPOF 2026: la confiance s'effondre en politique, la proximité fait figure de refuge.* (2026). Cevipof. <https://www.sciencespo.fr/cevipof/fr/actualites/barometre-de-la-confiance-politique-cevipof-2026-la-confiance-s-effondre-en-politique-la-proximite-fait-figure-de-refuge/>

<sup>12</sup> Facchini, F. (2022). Les raisons de la crise de la démocratie représentative. *Journal des libertés*.

<sup>13</sup> Gauchet, M. (2008). Crise dans la démocratie. *La revue lacanienne*, 2(2), 59-72.

between 2018 and 2019. Other societal issues are contributing to the fragmentation of society, such as loneliness,<sup>14</sup> increasingly fragile social ties and the rise of digital technology, all of which are undermining social cohesion and the traditional models of community life.

At an international level, we are also witnessing changes in the multilateral order that emerged in the aftermath of World War II and the neoliberal globalisation of the 1980s. This is because the pillars of the post-war order were international institutions like the United Nations (UN) and the World Trade Organisation (WTO), as well as founding principles like interstate cooperation and international law. However, the resurgence of assertive “power states” – Donald Trump’s America, Xi Jinping’s China and Vladimir Putin’s Russia – marks a return to unabashed power plays in world affairs, to the detriment of international law. This transition goes hand in hand with a reassessment of the rules established after 1945 and the free-trade economic standards of the 1980s.

Didier Lombard used the term “digital village” for the world emerging from the widespread adoption of new information and communication technologies<sup>15</sup>. Meanwhile, Herbert Marshall McLuhan talked of the “global village”<sup>16</sup>. With the advent of AI, automation is now accelerating. AI automates tasks, optimises workflows and makes adjustments in real time. But it also challenges human intelligence by undermining not only creativity but also the ability to exercise judgment, because of its proliferation of misleading content<sup>17</sup>. The conventional EI model thus has its limitations in this interconnected, ever-changing world. As previously discussed, the conventional model is based on three key elements: monitoring, analysis and influence.

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<sup>14</sup> Meffre-Korsia, S. (2025). Vers une épidémie d’isolement social? <https://www.vidal.fr/actualites/31493-vers-une-epidemie-d-isolement-social.html>

<sup>15</sup> Lombard, D. (2008). Introduction. Le Village numérique mondial: La deuxième vie des réseaux (p. 11-16). Odile Jacob. <https://shs.cairn.info/le-village-numerique-mondial--9782738121233-page-11?lang=fr>.

<sup>16</sup> Adoumié, V. and Escarras, J.-M. (2019). Chapter 2. Le « village planétaire », une réalité toujours croissante. Lieux et territoires de la mondialisation (p. 30-51). Hachette Education. <https://shs.cairn.info/lieux-et-territoires-de-la-mondialisation--9782017026006-page-30?lang=fr>.

<sup>17</sup> Ikenberry, G. J. (2024). L’ordre libéral international a-t-il un avenir? *Revue Défense Nationale*, 871(6), 49-62.

Christophe Bisson reports that, in the face of rapid technological change, the rise of AI and instability, this conventional economic intelligence model in France is showing its limitations<sup>18</sup>. Firstly, it is ill-suited to the realities on the ground. In today's open and fluid world, the EI model lacks flexibility, and Bisson laments a certain rigidity that is making it ineffective. French-style organisation is still too unbending and hierarchical, which makes it difficult to adopt a pragmatic position. In addition, a "siloed" approach to EI limits its impact. In France, every administrative department wants to set up a strategic intelligence unit without seeking to coordinate efforts or draw up a roadmap. Bisson also regrets a French cognitive bias that reduces EI to an economic definition, preventing the approach from being contextualised through the integration of other perspectives.

To escape from this impasse and unlock the full potential of EI in France, Bisson proposes drawing on new digital technologies. Because in the digital age, the scale of information is changing, and only technology of a similar nature can keep up with this change. Since one of the chief purposes of EI is to control the information landscape, integrating automated information-processing technologies would enable pragmatic strategies to be rolled out by collecting data from the ground and then determining the angle of attack. Today, we are drowning in data. The challenge lies in being able to sift through this mass of information and make sense of it. EI thus needs to be reimagined in the context of digitisation, prioritising foresight rather than observation alone by leveraging automated data gathering<sup>19</sup>. This would enable EI to organise and channel information flows more effectively to support informed decision-making.

### **C. THE LIMITATIONS OF EI AND THE NEED TO RETHINK OUR RELATIONSHIP WITH UNCERTAINTY**

As discussed earlier, the conventional EI model is now facing profound structural and methodological limitations in an environment marked by growing uncertainty, often described as VUCA (volatile, uncertain, complex

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<sup>18</sup> Sala, J. (2026). *L'Intelligence Décisionnelle pour la Stratégie et la Souveraineté*. By Christophe Bisson. [www.veillemag.com](http://www.veillemag.com). [https://www.veillemag.com/L-Intelligence-Decisionnelle-pour-la-Strategie-et-la-Souverainete-Par-Christophe-Bisson\\_a6927.html](https://www.veillemag.com/L-Intelligence-Decisionnelle-pour-la-Strategie-et-la-Souverainete-Par-Christophe-Bisson_a6927.html).

<sup>19</sup> Viala, B. Bisson, C. (2020). *L'intelligence économique doit faire sa transition numérique*. Les Echos. <https://www.lesechos.fr/idees-debats/cercle/opinion-lintelligence-economique-doit-faire-sa-transition-numerique-1225866>.

and ambiguous). In this context, established approaches to information gathering and analysis struggle to grasp the rapid pace of change and the interdependence of these phenomena, as highlighted by the World Economic Forum's reports on global risks.<sup>20</sup>

In particular, the sequential decision-making model, based on the Intelligence/Modelling/Choice (IMC) framework theorised by Herbert Simon, now seems out of step with current trends. Developed in a relatively stable environment, this model is based on a linear sequence of steps ranging from information gathering to analysis and decision-making. But this no longer enables an effective response to situations characterised by urgency, information overload and instability. Several recent studies on strategic management and decision sciences stress that this sequential approach limits organisations' responsiveness and tends to compartmentalise decision-making processes.<sup>21</sup>

Furthermore, the predominance of instrumental rationality in established models helps to perpetuate an illusion of predictability. By relying on analytical tools and formalised methods, these approaches tend to underestimate the profoundly uncertain, contingent and human nature of economic, social and political interactions. As Nassim Nicholas Taleb has shown, rare and unpredictable events – known as “black swans” – fall precisely outside these analytical frameworks, leaving organisations vulnerable to disruption. Likewise, Karl E. Weick's work highlights the central role of interpretation and meaning in ambiguous environments, questioning a strictly rational view of decision-making.

Lastly, the exponential growth in data volumes is a major challenge for conventional economic intelligence systems. Far from automatically improving the quality of decision-making, this plethora of information exposes organisations to increased risks of misinformation, cognitive bias and information overload. As Thomas H. Davenport and Jeanne G. Harris point out<sup>22</sup>, the value of information no longer lies in its accumulation, but in its ability to be interpreted and used strategically. Consequently, the

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<sup>20</sup> World Economic Forum – *Global Risks Report*.  
<https://www.weforum.org/publications/global-risks-report-2024/>.

<sup>21</sup> David J. Teece - *Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance*.

<sup>22</sup> Thomas H. Davenport - *Competing on Analytics*.

challenge of our times is to develop the ability to find a way through an ever-growing flood of information. However, conventional monitoring approaches often prove inadequate for handling these diverse and massive data streams, thereby limiting organisations' ability to generate truly actionable intelligence.

Thus the limitations of the conventional economic intelligence model do not involve a simple need to make adjustments, but reveal a deeper mismatch between its foundations and the nature of today's environments. In a context where uncertainty is becoming a structural matter, the issue is no longer just to reduce uncertainty by gathering more information, but to develop the ability to act and make decisions in situations of uncertainty. This implies a paradigm shift: moving from economic intelligence based on data collection and analysis to economic intelligence conceived as a strategic navigation system. With this in mind, we now need to rethink the ways in which knowledge is produced and the decision-making processes involved.

## II. FROM INFORMATION MANAGEMENT TO DECISION-MAKING IN SITUATIONS OF UNCERTAINTY

### A. RETHINKING THE PRODUCTION OF KNOWLEDGE

In an environment where uncertainty has become structural, the challenge for organisations is no longer only to gather more information, but also to generate actionable knowledge that can inform decision-making. This means that strategic intelligence systems need to evolve towards approaches that combine the detection of weak signals, the contextualisation of data and strategic foresight.

Historically, the identification of weak signals has relied mainly on sector- or technology-specific monitoring systems based on human expertise and intuition. However, the exponential increase in the volume, speed and diversity of information means that these methods are now inadequate for grasping the complexity of today's environments. Given this situation, the ability to turn information into useful knowledge no longer depends solely on access to data, but also on the ability to interpret, prioritise and integrate it into a decision-making framework.

In the context of these changes, EI needs to adopt more integrated and dynamic approaches. In particular, this means moving beyond siloed thinking towards a collective intelligence that draws on multidisciplinary expertise.<sup>23</sup> This approach not only broadens the scope for detecting weak signals, but also makes sense of them by placing them in the wider context of the organisation as a whole.

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<sup>23</sup> ANCT. (2020). *L'intelligence collective mobilisée pour lutter contre la menace des coronavirus*. Labo. <https://labo.societenumerique.gouv.fr/fr/articles/lintelligence-collective-mobilis%C3%A9e-pour-lutter-contre-la-menace-des-coronavirus>

A highly speaking example of this trend is the handling of the COVID 19 pandemic. Some companies specialising in data analysis, like BlueDot<sup>24</sup>, used multidisciplinary areas of expertise, combining epidemiology, data science and public health, to analyse diverse sources of information like air travel flows, health data and international media content. Using AI techniques, these systems made it possible to identify early warning signs of the virus's spread, ahead of official announcements from the health authorities.

This type of approach illustrates the ability of structured collective intelligence to integrate knowledge from different disciplines and produce a contextualised interpretation of the information. It thus highlights the key role of a multidisciplinary approach in the detection, definition and interpretation of weak signals in environments characterised by a high degree of uncertainty.

Nonetheless, this evolution in organisations, while necessary, is only adequate if it goes hand in hand with a more fundamental transformation of decision-making models. The established "Intelligence, Modelling, Decision" (IMD) model is based on a sequential approach that now seems ill-suited to environments marked by urgency and information overload. This approach can lead to a form of decision-making paralysis, stemming from the accumulation of diverse information and the difficulty of interpreting it consistently.

In this context, scenario-based approaches seem to be effective alternatives for dealing with uncertainty. As Tony Grundy points out in his work on strategic management, scenarios help us make sense of uncertainty by exploring several possible futures rather than seeking to predict a single outcome.<sup>25</sup>

This approach is notably illustrated by the Defence Red Team initiative of the DGA (Directorate General for Armaments)<sup>26</sup> set up by the Agence de l'innovation de défense (defence innovation agency). This initiative, based on a collaboration between science fiction writers, researchers and military

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<sup>24</sup> Niiler, E. (2020, 25 January). An AI Epidemiologist Sent the First Warnings of the Coronavirus. *WIRED*. <https://www.wired.com/story/ai-epidemiologist-wuhan-public-health-warnings/>

<sup>25</sup> Tony Grundy (2006), *Scenarios for Managing Uncertainty Strategically*

<sup>26</sup> *Discover the Red Team*. (2021). <https://redteamdefense.org/en/meet-the-red-team>

experts, seeks to develop forward-looking scenarios that explore future forms of conflict. Drawing on creative and multidisciplinary approaches, the Red Team aims to anticipate emerging threats and strategic disruptions that are hard to pinpoint with conventional analytical methods.

In this sense, scenario-planning is not only a decision-making tool, but also a cognitive framework that makes it possible to broaden the scope of possibilities, challenge implicit assumptions and prepare organisations more effectively for uncertain and changing environments.

This is the rationale behind the 3SP (strategic early warning system) developed by Christophe Bisson. In his book *Vaincre le vide stratégique (Overcoming the Strategic Vacuum)*, Bisson proposes an in-depth rethink of decision-making processes by turning the conventional logic of economic intelligence on its head.

Unlike conventional models, the 3SP uses data gathering at the end of the process, after a strategic modelling phase. This involves identifying the key factors shaping the environment, particularly through analytical tools like PESTEL. On this basis, dynamic scenarios are developed to anticipate possible developments according to various time scales. These scenarios are then used in strategic simulations, enabling decision-makers to test their assumptions and minimise cognitive bias.

The scheme is also shored up by a learning organisation mobilising people from a variety of backgrounds, in order to foster the exchange of views and limit the effects of groupthink. Lastly, the monitoring process is activated selectively, gathering only the information relevant to confirming or refuting the hypotheses derived from the model.

The 3SP framework thus provides a structured approach for turning information into actionable strategic knowledge, while reducing information overload. It is also a useful framework for integrating big data processing and artificial intelligence technologies, providing an analytical framework to guide and contextualise their use.

## **B. ENHANCING ANALYTICAL CAPABILITIES THROUGH TECHNOLOGY**

By enabling us to make the most of the wealth of information available, the arrival of AI has broadened and deepened the analytical capabilities needed to understand, anticipate and make decisions in a VUCA world. AI enables faster, better informed decision-making by automating data collection, pattern recognition and trend forecasting. Companies that use it effectively do not just react more quickly; they also anticipate developments more accurately.

AI is radically transforming the gathering and analysis of competitive intelligence by automating tasks previously performed manually. AI-based systems can be integrated with various digital channels and use algorithms that continuously gather data from multiple sources like websites, news portals and social media. Strategic monitoring platforms like Talkwalker and Meltwater enable companies to keep watch on a large number of media-related and digital sources in real time and thus pinpoint significant developments in the competitive landscape. Similarly, certain data analytics solutions like ChapsVision make it easier to aggregate and explore enormous amounts of data from a variety of sources. This automation not only reduces the workload involved in gathering information, but also ensures the continuous monitoring of the strategic environment, thereby improving organisations' ability to detect weak signals at an early stage.

Automated natural language processing plays a central role in transforming unstructured text data into actionable information. By analysing content like customer reviews, industry publications and social media discussions, these technologies help to identify market sentiment, key themes and emerging trends. For instance, solutions like IBM Watson Natural Language Understanding and MeaningCloud make it possible to automatically extract entities, identify relationships between stakeholders and assess perceptions of a product, company or sector. These analytical capabilities help to reduce information-related uncertainty by providing a deeper understanding of sector dynamics and market trends.

Lastly, machine learning techniques enhance these capabilities by making it possible to rapidly analysis huge datasets and identify complex correlations between different sources of information. Predictive analytics platforms like DataRobot and H2O.ai further the development of models that can anticipate certain market trends or pinpoint relationships between economic, technological or competitive variables. By combining internal and external data, these systems provide a more integrated view of the strategic

environment and make it easier to anticipate changes. Real-time monitoring systems can also flag up significant variations in competitors' behaviour, market conditions or customer expectations. By cross-referencing data from multiple sources, these tools improve the reliability of analyses and thus help to minimise decisions based on incomplete information.

These AI-based tools, combined with the 3SP approach, help organisations make the most of available technological capabilities, while providing a framework for structuring research and analysis tailored to the situation of an organisation and its goals. This makes for faster decision-making and improved foresight, providing decision-makers with the strategic information they need to navigate periods of uncertainty.

### **C. DIFFERENTIATED NATIONAL MODELS FOR UNCERTAINTY MANAGEMENT**

However, these technological transformations do not occur in a strategic vacuum: how they are adopted and used varies according to national contexts, strategic cultures and power objectives. From this perspective, economic intelligence cannot be seen merely as a set of tools or organisational practices: it is a powerful instrument that can help governments shape the balance of economic, technological and informational power on a global scale. Consequently, an analysis of the models developed by various major powers, notably the US and China, sheds light on how these technological capabilities are integrated into overarching strategies for managing uncertainty, and reveals different approaches to the interplay between information, technology and strategic decision-making.

The US economic intelligence model forms part of an integrated approach to projecting power, where control over information is a key strategic lever.<sup>27</sup> In this context, economic intelligence – often called competitive intelligence – goes beyond simply observing the business environment, and moulds competitive dynamics at an international level.

This set-up is based on close coordination between public and private sector stakeholders, characterised by a strong capacity for initiative on the part of

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<sup>27</sup> Intelligence économique et stratégique: le cas des États-Unis - Thomas Bonnacarrere, Nelly Dubois, Florentin Rollet and Olivier Soula (2011)

the federal government. The latter supports companies' global positioning and guides strategic innovation, notably through instruments like the In-Q-Tel fund, which finances high-potential technologies for national security. This organisation fosters the smooth flow of information between the economic, technological and security spheres.

Another distinctive feature of this model lies in the use of extraterritorial jurisdiction, through legislation like the Foreign Corrupt Practices and CLOUD acts, which enable the United States to shape the competitive environment to its advantage.<sup>28</sup> The law thus becomes an instrument of not only regulation but also strategic competition, helping to reduce uncertainty for US players while shifting it onto their competitors.

Against a backdrop of accelerating technological change, artificial intelligence is emerging as a central pillar of this strategy<sup>29</sup>. Historical intelligence-gathering systems, e.g. the Echelon network, are now being expanded through AI-based analytical platforms, like the solutions developed by Palantir<sup>30</sup>. These tools make it possible to analyse vast amounts of data in order to identify weak signals, anticipate disruptions and turn uncertainty into strategic opportunity.

The American model stands out for its ability to externalise uncertainty by actively shaping its informational, legal and economic environment. This approach relies on a high degree of adaptability and the effective integration of technology tools into decision-making processes.

However, not everyone adopts this rationale. Other powers have developed very different approaches, based not on the projection and external structuring of the environment, but on a more internal, centralised control of information flows. In this respect, the Chinese model provides a particularly speaking contrast, illustrating a strategy where reducing uncertainty relies chiefly on the coordination and integration of capabilities within the state apparatus.

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<sup>28</sup> Rapport Lellouche-Berger sur l'extraterritorialité de la législation américaine - Assemblée Nationale (2016)

<sup>29</sup> The future of competitive intelligence in an AI-enabled world - Fred P. Hoffman, Shelly L. Freyn (2019)

<sup>30</sup> Palantir lance l'initiative "Working Intelligence: The AI Optimism Project" - Zoé Le Guillou (EI portal)

Chinese economic intelligence is based on a systemic, centralised approach, where information is a strategic resource integrated into the government's actions<sup>31</sup>. Economic intelligence is not the sole preserve of businesses, but forms part of a broader strategy designed to strengthen the country's technological, economic and political sovereignty<sup>32</sup>.

Since the 1980s, China has been gradually developing an economic intelligence ecosystem closely linked to public policy, in which the boundaries between the civilian, military and state spheres are becoming increasingly blurred. This approach is based on close coordination between stakeholders, and an organised flow of information serving national strategic objectives<sup>33</sup>.

A key feature of this system lies in the combination of different information gathering methods. Human intelligence, notably through the concept of *guanxi*<sup>34</sup>, provides access to informal information by drawing on networks of relationships based on trust and mutual commitment.

At the same time, the integration of digital technologies and artificial intelligence enables the large-scale, continuous use of data, regarded as a national resource. This mix of relational and technological approaches boosts the ability to anticipate trends and manage the strategic side<sup>35</sup>.

The Chinese model is also characterised by the combined use of legal and extra-legal means, ranging from strategic intelligence gathering to more controversial practices like cyber espionage and technology transfers. This wide range of instruments helps to reduce some forms of uncertainty while creating others, particularly in geopolitical and legal terms<sup>36</sup>.

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<sup>31</sup> L'intelligence économique chinoise: une réelle menace? - Corentin Schutz (2023)

<sup>32</sup> De l'espionnage industriel à l'intelligence économique: la stratégie agile et intégrée de la puissance chinoise - Nicolas Moinet (2025)

<sup>33</sup> "La Chine ou le réveil du guerrier économique" - ALI LAÏDI

<sup>34</sup> "Le Guanxi en Chine: un concept opératoire de l'intelligence économique" - Pei Liu and Eric Boutin (2012)

<sup>35</sup> What Western companies misunderstand about China's AI strategy - Sharon Gai (2026) – *ComputerWeekly.com*

<sup>36</sup> "De l'espionnage industriel à l'intelligence économique: la stratégie agile et intégrée de la puissance chinoise" - Nicolas Moinet

However, this centralisation also has its limitations. The system's lack of transparency, the disparities between players and the international tensions caused could undermine its long-term effectiveness. Furthermore, the high degree of data integration and the centralisation of decision-making processes could multiply the knock-on effects should there be any analytical error, informational bias or strategic failure, by limiting peripheral players' ability to raise objections or make adjustments.

The Chinese model tends to internalise uncertainty by relying on the centralisation and coordination of information flows. This approach, based on an internal control of the environment, goes against more open approaches and emphasises that the management of uncertainty depends on not only the tools employed but also the power structures underlying them.

A comparative analysis of the American and Chinese models thus reveals structurally opposed rationales. The control of information, however advanced, is only an intermediate lever for strategic performance. However, these two models reveal contrasting approaches to managing uncertainty. Whereas the American model tends to externalise uncertainty by structuring the competitive environment to its advantage, the Chinese model seeks to internalise it through the centralisation of information flows and close coordination between public and private players.

Despite these differences, the two models agree on one key point: reducing uncertainty depends primarily on the ability to rapidly turn information into action. In other words, an enhanced understanding of the environment, made possible by data processing technologies, only becomes fully meaningful if it goes hand in hand with an appropriate capacity for implementation. In this context, the real issue is no longer just about access to information, but about organisations' ability to take rapid, consistent and judicious action.

The shift from a knowledge-based to an action-based approach requires a radical rethink of organisations in favour of more agile structures, decentralised decision-making and the ability to adapt quickly in the face of uncertainty.

#### D. A NEED FOR FREEDOM OF ACTION: FLEXIBILITY AND PRAGMATISM

Contemporary environments are characterised by growing uncertainty, marked by events with neither isolated nor linear effects. An external shock – whether geopolitical, economic or technological – tends to affect several aspects of a company at once (operations, supply chain, compliance and reputation), thereby revealing the deeply systemic nature of organisations' vulnerabilities.

In this context, decision-making can no longer be based on a fragmented view of information. On the contrary, it requires an integrated approach, based on a bird's eye view made possible by the convergence between strategic intelligence, analytical capabilities derived from big data and artificial intelligence systems.

This approach is illustrated by Project Maven, a programme developed by the US Department of Defence. This system relies on the integration of big data from various sources (satellite imagery, drone feeds and sensors), analysed by AI systems to identify, classify and prioritise potential targets. By organising and visualising this information within a unified platform, Maven provides analysts and decision-makers with a comprehensive operational overview of the environment, thus facilitating rapid and coordinated decision-making.

We discussed this holistic approach in a SKEMA Publika report: "The impact of major events on France's image"<sup>37</sup>. It is possible to anticipate crises by understanding others and adapting actions to the context, while drawing on a stronger digital presence. A continuous feedback loop, based on systematic feedback, enables lessons to be learned from past actions in order to improve future decisions. This hybridisation fosters the emergence of augmented collective intelligence based on a human/machine collaboration, and improves both the detection of weak signals and their interpretation.<sup>38</sup>

This collective intelligence plays a dual role. Firstly, it enables the organisation to anticipate and assess the impact of an uncertain event across

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<sup>37</sup> Revel, C. et al (2026). L'impact des grands événements sur l'image de la France. SKEMA Publika. <https://publika.skema.edu/fr/impact-grands-evenements-image-france/>

<sup>38</sup> Thomas H. Davenport & Harris, *Competing on Analytics* (2007)

the entire organisation by combining business perspectives with the data available. Secondly, it helps to pinpoint areas for improvement within the organisation by highlighting resources that could be mobilised (including skills, operational capabilities and knowledge), thus turning a constraint into an opportunity.

However, information production, no matter how sophisticated, still falls short even if it is a necessary condition for effective decision-making. The organisation must also be able to turn this analysis into action promptly. This is precisely where enterprise agility comes into play.<sup>39</sup>

In this respect, agility is defined as an organisation's ability to adapt its course of action quickly and collectively in the face of uncertainty. It is based mainly on decentralised decision-making, which brings the action closer to the information landscape, and on flexible coordination mechanisms that ensure overall strategic consistency.

The most agile enterprises thus adopt an iterative method: they prioritise rapid, small-scale decisions, test their assumptions, then adjust their actions according to the feedback received. This experimental approach reduces uncertainty by gradually exploring rather than eliminating it.

However, this model has certain limitations. Excessive decentralisation can lead to fragmented decision-making and a loss of strategic consistency, particularly in highly regulated or critical sectors. Likewise, the growing reliance on analytical tools and information systems raises issues of reliability, bias and information overload.

Enterprise agility is thus not a one-size-fits-all solution, but a delicate balance between autonomy and coordination, speed and control, exploration and risk management. Nonetheless, it seems to be a crucial prerequisite for effective decision-making in environments marked by structural uncertainty.

## **E. INDISCIPLINARITY AS A RESPONSE TO UNCERTAINTY**

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<sup>39</sup> Sunil Mundra, *Enterprise Agility* (2012)

Indisciplinarity could provide a complementary approach to decentralisation, helping to rethink an EI capable of navigating times of uncertainty. Unlike interdisciplinarity, which combines the findings of several disciplines, indisciplinarity examines a subject from the perspective of several disciplines used simultaneously by bringing different viewpoints together. It stands out for its ability to challenge established beliefs, and its refusal to confine the study of a phenomenon to a single discipline or methodology that would make it impossible to grasp its complexity<sup>40</sup>. Indisciplinarity rejects intellectual compartmentalisation at a time when issues transcend disciplinary boundaries. It is thus designed to avoid the constraints that one particular discipline might impose on creativity and, ultimately, on the production of knowledge.

This approach seems appropriate in light of the contemporary challenges that, in globalised societies, are essentially transdisciplinary and transnational<sup>41</sup>. In a globalised and ever-changing world, it is vital to adapt the mindset of decision-makers by constantly preparing for the worst and acknowledging the uncertain nature of activities. This is because the historical period now ending was marked by the benefits of peace and the idea that humanity was experiencing “the end of history”, as put forward by Francis Fukuyama. To help decision-makers navigate an uncertain world, indisciplinarity could turn uncertainty into a strength through a pragmatic approach emphasising the importance of feedback from the ground. EI has established itself as a discipline for understanding and managing information flows in a globalised world. The aim is thus to adopt an approach where EI can learn from its mistakes and act swiftly to find appropriate solutions. The indisciplinary approach could meet this need, as it fosters a way of thinking where no single body of knowledge holds a monopoly on the truth, which requires humility and intellectual curiosity. Indisciplinarity would foster analyses that draw on various perspectives in an attempt to understand other points of view. For instance, the use of indisciplinarity could take the form of horizontal collaboration between experts and non-experts.

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<sup>40</sup> Catellin, S. and Loty, L. (2013). Sérendipité et indisciplinarité. *Hermès, La Revue*, 67(3), 32-40. <https://doi.org/10.4267/2042/51882>.

<sup>41</sup> Nourrit-Lucas, D. (2023). Comment penser l’interdisciplinarité en pratique? Une question de disposition, d’indisciplinarité et de complexité. *Journal of Interdisciplinary Methodologies and Issues in Sciences*, 11(Subject Area 1: Interdisciplinarity as a field of research).

## RECOMMENDATIONS

### **1. Rethinking economic intelligence as a capacity for strategic foresight**

Economic intelligence should no longer be limited to monitoring the environment. It should develop a forward-looking capability that makes it possible to detect weak signals, structure available information and inform decision-making in uncertain environments. This evolution requires moving beyond conventional monitoring towards a dynamic understanding of the strategic environment.

### **2. Developing economic intelligence augmented by artificial intelligence**

Organisations should use AI to analyse diverse big data, identify complex correlations and detect potential disruptions at an earlier stage. The issue is not to delegate decision-making to the machine, but to use AI as a tool to aid interpretation and direct human attention towards the most relevant information.

### **3. Building strategic scenarios and turning them into options for action**

In the face of uncertainty, economic intelligence should enable us to explore several possible futures rather than seeking to predict a single outcome. These scenarios should be accompanied by concrete courses of action that can be implemented swiftly in a crisis, technological upheaval, geopolitical shock or disruption to value chains.

### **4. Establishing short decision-making loops between monitoring, analysis and action**

The effectiveness of economic intelligence depends on its ability to quickly turn information into decisions. Organisations could thus shorten the lines of communication between EI teams, strategic departments and operational functions in order to test hypotheses, refine decisions and adapt actions on an ongoing basis.

### **5. Establishing cross-functional and multidisciplinary governance for economic intelligence**

Economic intelligence should be organised as a cross-functional role, bringing together experts, decision-makers, operational staff and professionals from a wide range of disciplines. This governance would help to minimise the silo effect, bring different perspectives together and interpret weak signals more effectively. It could draw on a network of EI

representatives to ensure that forward planning is closely aligned with realities on the ground.

#### **6. Boosting organisations' resilience and agility in the face of disruption**

Organisations could incorporate the lessons learned from economic intelligence into their operational adaptability. This would involve identifying critical dependencies, diversifying the available options and introducing mechanisms for rapid repositioning. Resilience should no longer be seen as a mere reaction to crises, but as a proactive ability to adapt in the face of uncertainty.

## CONCLUSION

Uncertainty, long seen as a constraint to be minimised, is now recognised as a structural feature of present-day environments. Against a backdrop of accelerating technological change, geopolitical fragmentation and increasingly complex systems, conventional economic intelligence models based on the control and linearity of information seem out of step with the realities of current trends. The issue is no longer about predicting the future, but about finding a way through unstable situations with constantly changing reference points and frequent disruptions.

The analysis presented highlights the need to shift economic intelligence towards a more adaptive paradigm that combines knowledge production with the capacity for action. This transformation involves several complementary factors: the integration of artificial intelligence technologies to process vast amounts of data; the use of scenario-based approaches to manage uncertainty; the development of forms of collective intelligence where different perspectives are compared, and the adoption of more agile, decentralised organisational models. With this in mind, economic intelligence can no longer be confined to an analytical role, but should be fully integrated into organisations' decision-making and operational processes.

Consequently, the strategic value of economic intelligence no longer lies solely in its ability to generate information, but in its capacity to inform quick, context-sensitive, adaptable decisions. It is becoming a tool for navigating uncertainty, where the goal is not to eliminate but to explore this lack of certainty, give it structure and, in some cases, turn it into an opportunity.

Ultimately, the ability to make decisions in the face of uncertainty could prove a decisive competitive advantage – or even a hallmark of power – for organisations and governments alike. In an environment where information is plentiful but meaning elusive, differentiation will now depend not only on access to data but also on the ability to interpret it, make sense of it and act judiciously.



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**SKEMA Publika**

SKEMA Business School, Grand Paris Campus  
5 Quai Marcel Dassault – CS 90067  
92156 Suresnes Cedex, France

Tel.: +33.1.71.13.39.32

Email: [publika@skema.edu](mailto:publika@skema.edu)

Website: [www.publika.skema.edu](http://www.publika.skema.edu)