STRATEGOS

# Strategic Foresight as a Prerequisite for a Timely Reaction

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## Abstract

*The state of uncertainty in the strategic environment has been a challenge throughout human history. Today's intelligence analysts must be not only creative, but also able to anticipate a new threat before it actually materializes. Without awareness of the current situation in the strategic environment and the trends that shape it, it is almost impossible to predict and develop relevant future scenarios. If we add to that today's picture of a very complex and dynamic world, strategic foresight is becoming an increasingly important tool for organizations and individuals in adapting to changes, anticipating risks and taking advantage of opportunities.*

*The aim of this paper is to provide insight into the processes and analytics of strategic forecasting "as a key concept and as a tool for making effective and timely decisions. Strategic foresight is fundamentally qualitative, but also quantitative in nature and includes not only the military dimension, but also others such as political, diplomatic, economic, social and others that are often crucial in relation to the military, but this paper will deal with mostly only in the military dimension.*

## Keywords

*strategic foresight, forecast, analysis, risk assesment, uncertainty, defence*

## Introduction

Carl von Clausewitz (1997), one of the most influential and respected theorists of military strategy, argued that during military operations, it is impossible to predict all the circumstances that can affect the course of an operation. He explained the concept of the "fog of war," asserting that war is nothing more than an area of uncertainty where individuals operate in a "fog," making their actions unpredictable.

Predicting the future is very demanding, and when we add the word "war" to that term, it becomes even more complex. Predicting the escalation of crisis to war is an exceedingly challenging task for several reasons.

Firstly, war is a complex and dynamic phenomenon influenced by a broad array of factors, including political, social, economic, and cultural elements. This complexity makes it highly demanding to foresee how these factors will interact and impact the outcomes of war. Secondly, technology and military capabilities are continually evolving, significantly altering the character of warfare and its potential outcomes. For instance, the development and deployment of new technologies and tactics can give certain countries a desired advantage or lead to the emergence and evolution of new forms of warfare, such as cyber, information, and hybrid warfare.

Thirdly, the actions and decisions of individual leaders and groups often result from their personal preferences, emotions, and character, rendering prediction methods based solely on strict rational parameters irrelevant. Moreover, geopolitical dynamics rapidly change, dramatically altering the course of events.

Nevertheless, with existing historical trends and patterns, it is possible to develop outlines and predictions for future wars, bearing in mind that such forecasts are prone to errors due to the persistent unpredictability of human behavior and the intricate interplay of other external factors.

The purpose of this paper is to provide insight into the processes and analytics of strategic foresight. The aim of the paper is to highlight the importance of the strategic foresight as a tool and practice, by providing a brief overview of the concept within the European Union and NATO, forming the basis for a later proposed conceptualized model of strategic foresight.

Through content analysis and a case study of the Russian invasion of Ukraine, the paper seeks to answer the questions related to monitoring critical indicators to achieve a high level of caution and readiness for events of this nature.

Being largely unexplored area within the framework of national defence planning process in the Republic of Croatia, this paper argues for a need to make strategic foresight an effective tool (precursor) for strategic planning. Consequently, we propose a creation of an integrated framework (methodology) that shapes strategic foresight analysis both as a capability (integrated in the MoD's organizational culture) and a tool (processes and systems). Implementing such a framework would mean establishing a starting point for the development of the process that starts with the creation of predictive hypotheses, and is in direct function of the strategic planning and support to decision making at the strategic level.

Assuming that "timely action," without preceding strategic foresight analysis, is highly questionable, the authors aim to demonstrate that a prerequisite for a timely response to future security challenges is high-quality designed and well-executed strategic foresight analysis.

The paper also presents the current state in the Republic of Croatia within the framework of the posed question, emphasizing that Croatia has not fully implemented this concept in its national defense and security system. However, it is a fact that there are no unified documents in Croatia addressing long-term plans; instead, there are sectoral planning documents. The concept of strategic foresight has not yet been incorporated into doctrinal documents and dictionaries, and thus, its introduction into practice is not expected. There is still a lack of synergy between national strategy and a timely response in Croatia

## Definition and Characteristics of Strategic Foresight

Predicting the future of strategic environment is a highly challenging task that demands, among others, a profound understanding of geopolitics, economy, technology development, ecology and human behavior. While historical trends and patterns can offer insights into future possibilities,

the complexity and unpredictability that chracterize the environment make it nearly impossible to accurately predict outcomes of such a system with certainty.

The aim of this chapter is to provide the theoretical framework of the concept of strategic foresight.

The first distinction that has to be made is between Forecasting and Foresighting. The main difference lies in the approach to describing the future. The focus of Foresight is on identifying driving forces of change, exploring their interactions and understanding a range of issues, signals and trends. Forsight is more about exploring possibilities than predicting numbers. It serves, primarily, as a precursor for strategic planning and development of long-term strategies. On the other hand, Forecasting uses analyses of past events and current conditions, and is based on the assumption that past results are a reliable predictor of future results. It is useful for creating short-term (near-term) scenarios. It follows that Forecasting, as a methodology, is actually just a part of a more comprehensive Foresight.

In Croatian terminology, both terms are translated as "strateško predviđanje," and this work will use parentheses to indicate which aspect is being referred to.

## Definition and Characteristics of Strategic Foresight

As stated by Coates (2010) strategic foresight is the practice of researching and anticipating future developments and trends, using this knowledge to make strategic decisions in the present. It typically involves a range of tools and methods, including scenario planning, trend analysis, environmental scanning, and the engagement of numerous participants. It occurs when any planner utilizes reviewed and categorized input data, forecasts, research on alternative futures, analysis, and feedback to develop or adjust plans and activities implemented by a particular organization. It is a potent tool for organizations and individuals seeking to navigate an increasingly complex and uncertain world, positioning themselves for success in facing future challenges and opportunities.

The practice of strategic foresight provides impetus for military leaders as well as civilian executives to anticipate the future, plan potential scenarios, and develop strategic decision-making. In this context, there are critical leadership qualities associated with foresight that, by their presence or absence, make a noticeable difference between success and failure when organizations confront uncertainty. To facilitate a clearer understanding of strategic foresight, numerous approaches exist to identify its characteristics. The authors have chosen four fundamental ones proposed by Sam Cook (2023), which relate to the qualities a leader or executive of an organization should possess. According to him, these characteristics involve cultivating "future" thinking, scenario planning, long-term vision, and agile decision-making.

In developing "future" thinking, Cook identifies horizon scanning as a crucial element of foresight leadership. He considers scenario planning a key aspect of embracing foresight leadership within an organization. The long-term vision possessed by a leader is seen as motivation for teams and a tool to align essential activities, ensuring all participants work as a cohesive unit with a common purpose. Agile decision-making, involving adaptability and versatility, is a characteristic that makes a leader adept at utilizing foresight in every decision-making process, earning the trust of the entire team in their leadership. These characteristics are typical of a military organization.

## Basic Approaches to Strategic Foresight

Due to the presence of various parameters, strategic foresight can be examined through three distinct dimensions, relying on the past, the present, and the future. Therefore, an appropriate classification of strategic foresight falls under the general categories of:

*Forecasting:* This approach treats strategic foresight as a form of prediction, where the focus is on anticipating future developments based on historical and current data.

*Episodic Interventions:* In this perspective, strategic foresight is considered a result of ad hoc future exercises, emphasizing sporadic interventions to address specific scenarios.

*Practice Approach:* This approach views strategic foresight as a set of every-day practices and activities that enable organizations to create and secure sustainable competitive advantages.

By categorizing strategic foresight under these general headings, it provides a framework for understanding its diverse applications, encompassing both predictive elements and ongoing practices that contribute to an organization's adaptability and competitiveness.

Strategic forecasting represents a traditional perspective on strategic foresight. It generally relies on a linear assessment of the future, often formalized through strategic planning. In this sense, it utilizes traditional forecasting techniques such as S-curves, time series, econometrics, and mathematical modeling to address organizational challenges. By focusing on mapping and generalizing sets of historical data, this research stream promotes strategic forecasting as the capability to use quantitative techniques to predict technological directions, uncover evolving trends in the environment, and their potential impacts on the future competitiveness of the organization.

This approach is suitable for those who tend to believe that the future will closely resemble the past. In other words, observing strategic forecasting in this way suggests it to those who often let the future "take care of itself" rather than actively shaping it. This doesn't imply that creating a tangible future ensures its accuracy, but it can aid in finding a strategy robust enough to navigate changes in behavior and, in turn, contribute to shaping the future.

The tradition of episodic intervention treats strategic forecasting as a result of strategic exercises that are played out, involving the enactment of future scenarios in various directions and the monitoring of their outcomes. The narratives of such games are then used to develop compelling visions that closely resemble current global events. When modeling these narratives, internal resources, organizational structure, and all external factors with a likely impact on the future are considered. The results of modeling are diverse future scenarios that are then ranked based on their perceived uncertainty, resulting in a map of potential consequences for the organization's strategy.

This approach allows for seamless and free interaction with external participants who interpret and combine relevant past and present contextual

cues into meaningful knowledge directed towards the future. Moving away from the positivist approach to prediction, which relies on numbers, this approach, often referred to as intuitive logic due to its reliance on qualitative and informal tools, embraces methods such as value chain analysis, counterfactual narratives, mind mapping, and lateral thinking.

The practical approach shapes strategic foresight through the outcome of creative actions and daily activities of competent organizational actors. This approach advocates for a continuous focus on future thinking, not just episodic interventions as seen in the previous tradition. The practical approach is grounded in strategic dialogues and reflective, adaptive learning, with an open possibility for the involvement of external theorists and strategists. The result of this approach is strategic foresight in the form of strategies, defining strategic foresight as something organizations actively engage in, as opposed to something they possess.

Particular emphasis is placed on the importance of everyday organizational practices and micro-interactions among organizational members as the foundation for understanding the future and, consequently, effective ways to address challenges.

## Strategic Foresight in the EU and NATO

The following section provides an overview of strategic foresight in the European Union and NATO, serving as the foundation for the later proposed conceptualized model of strategic foresight. Additionally, the status of strategic foresight in the Republic of Croatia is examined in this context.

### EU and Strategic Foresight

Strategic forecasting plays a crucial role in the context of the European Commission (2023), as a tool for decision-making and future planning. The EU faces various challenges and complex issues that require anticipating future events, trends, and possibilities. As stated on the official website of the European Union: "Forecasting is a discipline that involves examining, predicting, and shaping the future, contributing to the development of

collective intelligence and its structured and systematic use for anticipating changes. Strategic forecasting should become part of the EU policymaking process. It systematically and structurally leverages collective intelligence, assisting in better planning for possible transitions, strengthening the EU's resilience to future shocks, and shaping the future we desire."

The EU bodies have prescribed the following steps in the implementation of strategic foresight:

*Perspective Assessment:* Systematically examining and collecting data on events and trends to predict future courses of action or visually mapping new signs of change.

*Mega Trends Analysis:* Analyzing changes in patterns and the interaction of trends, engaging in discussions to obtain a unified model of the future and an action plan.

*Scenario Planning:* An interactive and iterative process involving interviews, analyses, and modeling, resulting in a series of possible scenarios (desirable or undesirable) and the pathways leading to them.

Ultimately, *Vision Development:* Establishing the preferred direction, resulting in a shared understanding and a clear description of the desirable future and a medium-term plan outlining specific steps toward realizing the vision.

The report issued in 2022 is the latest and provides a comprehensive depiction of how rapid and robust changes in the environment impact transformations. Each new report confronts what is happening in the surroundings and offers the best possible solutions at the given moment for the coming years. For the first time, the EU's policy shifts towards green and digital transition, creating a comprehensive outlook until 2050, departing from the previously more short-term planning.

The report analyzes the significant impacts of digital technologies and the influence of all geopolitical, economic, and social factors on these two concepts. In the pursuit of ecological action and nature preservation, a connection and synergy are identified between digital technology and green technology, aiming for mutual collaboration and support for the common good.

## *Strategic Foresight and NATO*

Due to the complexity and a certain high level of data protection within NATO operations, this chapter will not outline the specific steps of strategic foresight taken by NATO. However, it will provide insight into how strategic foresight within NATO promotes a long-term understanding and raises awareness of future trends, supporting decision-makers in their actions. The following paragraphs will illustrate how strategic foresight in the NATO Alliance is a fundamental tool for future considerations and the development of strategic documents. This concept is crucial given NATO's broad range of interests and the security challenges it faces.

Therefore, strategic foresight in NATO (2023) enables the organization to recognize and prepare for future threats and opportunities. Based on the results of strategic foresight, NATO can adjust its policies, strategies, resources, and operational capabilities to effectively respond to changes in the international environment. It is important to note that strategic foresight in NATO takes place in the context of ongoing dialogue and mutual collaboration among allies, aiming to ensure a common vision of the future and coordinate efforts to strengthen collective defense.

The collaborative effort in strategic foresight by all NATO member countries makes the alliance stronger. Representatives from NATO member countries, partners, and contributing nations gather to discuss future trends and the new realities the Alliance faces. The results of these discussions are compiled into a report analyzing strategic foresight for a specific upcoming period. The report examines key trends in global changes and the resulting defense and security implications for NATO, highlighting challenges as well as opportunities.

The aim of such reports is to identify trends that will shape the future strategic context and report implications for the Alliance up to a specific year and beyond. The first NATO (2013) document of this kind was adopted in 2013 under the title "Strategic Foresight Analysis," stating that SFA would be a living document regularly updated in line with developments in the environment. As stated in the document, SFA will identify trends in five broad areas: political, human, technological, economic, and environmental.

This document is designed to monitor and shape the Alliance's strategic context until 2030.

The latest NATO (2017) SFA document was adopted in 2017, building on previous reports from 2013 and 2015 yearNATO3 (2015). It describes NATO's expectations for the period up to 2035 and beyond. It is noteworthy for proposing the creation of the document "Long-Term Military Transformation," where SFA is again responsible for raising awareness of security, without which military decision-makers cannot effectively operate.

It is concluded that, in the face of changes that are faster than ever today, both the EU and the NATO Alliance must act swiftly and make decisions in line with the challenges. For this reason, the reports that are produced are subject to changes and supplements if the situation requires it. The importance of involving the entire collective in extensive consultations that require cooperation among member states is emphasized, with each member state being ready to contribute with its comprehensive and informed approaches. Therefore, each country, including the Republic of Croatia, must conduct continuous foresight, both through a series of exercises within the Alliance and independently. The key is to focus on meeting and fulfilling all the steps of strategic foresight, as outlined and presented in this paper.

## Strategic Foresight Status in the Republic of Croatia

Following an overview of strategic foresight within the EU and NATO, of which the Republic of Croatia (RH) is a member, this section provides an examination of the status of strategic foresight in Croatia. As an introductory segment, it is essential to highlight that the European Commission (2023) of the European Union, in one of its definitions of strategic foresight, stated: "*Strategic foresight seeks to integrate foresight into the creation of European Union policy. It is built on the collective collection of intelligence data in a structured and systematic manner.*"

As evident from the definition, collective intelligence data collection is a concept to which all members, including Croatia, are obliged to contribute. The aim of such data collection is to create a strong and resilient EU capable of withstanding all challenges and shaping the future in the desired

direction. To make its contribution, Croatia primarily needs to develop its own capabilities to achieve national security and, consequently, the security of the community.

In the subsequent parts of this chapter, we will explore specific initiatives and activities of the Republic of Croatia in the field of strategic foresight to gain a better understanding of its current status and contribution to this crucial aspect of European and international security.

The problem lies precisely in the fact that the Republic of Croatia (RH) has not yet embraced the importance of these concepts and has not invested sufficient effort and commitment in implementing strategic foresight across all areas, particularly noticeably in the field of national security.

As reported by Stip Compass (2023), the closest to strategic foresighting is the 2016 document „Smart specialization strategy of the Republic of Croatia for the period from 2016 to 2020", whose authors are the Ministry of Economy and Sustainable Development and the Ministry of Science and Education.

When considering strategic foresight in the context of national security, it involves identifying key trends and actors on the horizon of long-term planning. Such identification of factors enables further prioritization and a clear focus on expected changes over time.

Prompted by this issue, Professor Tatalović (2011) initiated several questions and spurred targeted audiences to contemplate the matter through his professional work titled "Does Croatia Need a New National Security Strategy?" In his work, he emphasizes that Croatia has not recognized the need to develop strategic foresight to support strategic planning and the ultimate development of strategic documents. Instead, it remains a vision of those who do not have a strong enough influence on policy makers. From this, one may gather the impression or conclude that there is a lack of competence among policy makers in creating and developing strategic foresight, which is a result of the absence of a strategic culture.

Namely, the last existing Defence Strategy (2002) has certainly become outdated, not only due to changes happening in the vicinity of the Republic of Croatia (RH) or changes occurring on a global scale but also due to changes

in Croatia's status and strategic framework and environment after joining NATO and the EU. Therefore, the documents developed by NATO and the EU can and should be a good foundation in the creation of Croatia's own national documents, but they must not be the only reliance. They should provide a framework to which elements of national specificity are added and implemented." The creation of national documents has become extremely complex, undoubtedly influenced by upheavals in the political sphere of the RH, but this work will not delve into the exact causes of these changes.

This part of the paper emphasizes the importance of this issue and indicates the existence of an appropriate nucleus of experts working on projects for future periods. These are professionals who have realized that strategic foresight in the Ministry of Defense and the Armed Forces of the Republic of Croatia (MORH/OS RH) is not institutionalized either methodologically or organizationally. Following this realization, a project in the field of strategic foresight and strategic culture has recently been initiated. The ultimate goal of the project is to anticipate the strategic environment of the Republic of Croatia in 2030, focusing on challenges, priorities, and opportunities, and to identify implications for national defense.

 The project aims to develop a strategy and decision-making concept at the political and military-strategic levels. As discerned from the text, strategic foresight serves as the foundation for the development of a national security strategy, which holds a special place in the hierarchy of a state's strategic documents. Tatalović (2011) states that it represents the "crown and starting point of the legislative pyramid of documents in the field of national security. Its development should be based on a comprehensive approach with a systematically developed national risk assessment method."

In conclusion, Croatia needs a new national security strategy based on strategic foresight, taking into account strategic culture and situational awareness. Moreover, the newly adopted strategy should be suitable for responding to potential challenges in the environment and precisely defining the desired status of Croatia in the global context. Without clearly defined goals, progress becomes difficult. High-quality strategic foresight will enable

the government to make decisions regarding the future need to strengthen specific capabilities in light of a certain level of risk.

As Tatalović (2011) notes in his work, the prevailing and current trend in Croatia is that the Drafts of the strategy do not reveal hierarchies of threats and risks faced by Croatia. Concrete goals of foreign and security policy or national objectives are not clearly defined. There are no attempts to rank threat priorities or develop scenarios. There are no perspectives on the main processes within international relations and international security; Croatia's place cannot be found in regional or global levels.

All the issues point towards one thing - it's time for a new Strategy, and its precursor must be strategic foresight. For this reason, the next chapter proposes a conceptualization of strategic foresight that, if applied, could mitigate this issue to a more acceptable level..

## 4. Analysy on the Basis of EU and NATO Approaches

Drawing on the literature on strategic foresight, we propose a framework that suggests a higher level of abstraction of strategic foresight capabilities beyond the fundamental processes or activities. Specifically, this framework considers three broad conceptualizations of strategic foresight and emphasizes three groups of analytical-level capabilities: (i) environment scanning, (ii) strategic choice, and (iii) capability integration.

**Figure 1. Strategic foresight activities**
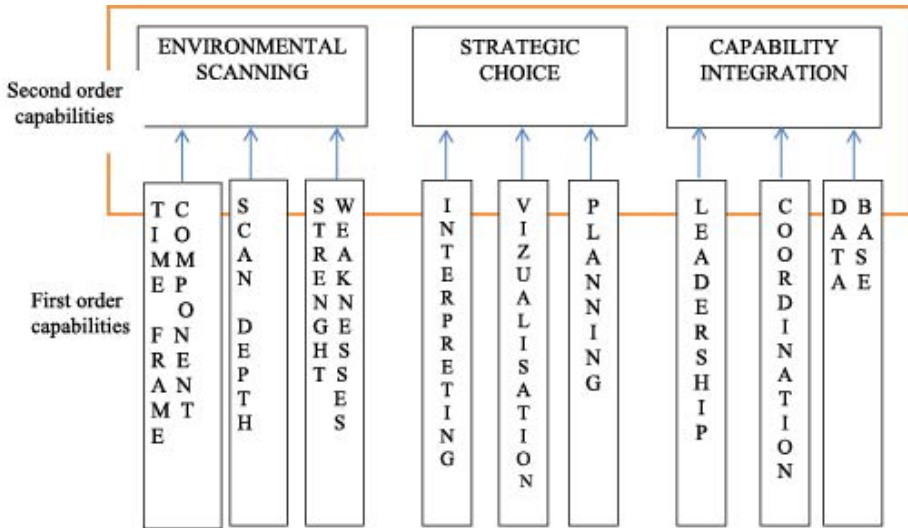


Source: Authors

From Figure 1, nine specific sub-components supporting higher-level capabilities are evident. The specific components in the first subset encompass: time horizon, scanning depth, and the use of network connections linked to sources.

Following the model, for the capability support group of strategic choice, activities related to analyzing and interpreting information gathered through scanning are undertaken. This involves visualization activities of conceptual connections between data and planning activities on how to use this information to achieve competitiveness. Lastly, leadership collaboration in coordinating database management enables the formation of organizational integration capabilities, resulting in the creation of a future picture.

## *Second-order capabilities*

In the proposed model, there are three second-order capabilities of equivalent importance. Below is a brief explanation of each, along with a tabular representation indicating the percentage of their representation and the percentage of benefits derived from them.

### *I. Scanning/Environment Scanning Capability*

This capability involves systematically examining both the external and internal environment to identify key forces, technologies, competitor positions, and organizational processes causing changes. This builds the ability to envision the future on a broader horizon than our visionary capabilities. It needs to be carried out continuously and uninterruptedly to create awareness of ongoing changes that affect the situational context. The breadth of scanning is often conditioned by the time period it needs to cover - it can be short-term or long-term. The scope of the performed scanning, termed as scanning depth in this model, reflects the territory that needs to be covered by the search. The intensity and quality of the data identified through scanning largely depend on the degree of developed connections within the organization. In other words, it depends on the level of development of strategic relationships; the number of memberships in business groups or involvement in online communities. Active interaction within these networks can be a valuable source of alerts for organizations about risks and threats, i.e., a source for recognizing latent opportunities for action.

### *II. Capability to Identify and Select Relevant Information*

Environment scanning can generate a large amount of data scattered across different time periods, so the second step in this model is to identify and select only what is relevant for creating a comprehensive picture of the future. The ability to identify and select relevant information that can be transformed into reusable future knowledge relies on interpretation, envisioning, and planning. Interpretation refers to activities that support the analysis of information collected through scanning. Visualization involves building pragmatic conceptual connections between selected data and how they

can be interpreted. Future planning utilizes organizational resources and experts to achieve the desired state and realize an idealized vision. Strategic selection capabilities as a subcomponent of strategic foresight, therefore, relate to organizational capabilities that enable systematic interpretation of the security environment and the optimization of limited resources to achieve an idealized future.

*III. Capability to Integrate Possibilities*

The final second-order capability involves integrating processed information into organizational processes, future technological platforms, and plans for the development of new products. This requires engaging all available resources and involving experts deployed throughout the organization. To fully leverage the potential, there is a need to develop the organization's knowledge base, enabling quick and creative exploitation of identified opportunities and constraints in moments of unpredictability. Leadership and coordination of organizational processes that support the development of organizational resources to achieve the desired goal come to the forefront. Leadership relies on the commitment of management to different visions of organizational actors, thus creating a common interpretation of the future, while coordination involves aligning different visions to direct current actions. This is crucial for creating, confirming, and accepting the idealized image of the future by all departments and functions within an organization.

Table 1 provides a tabular overview of second-order activities for easier perception of their role in the strategic planning process. The table highlights the benefits these capabilities bring, with the most prevalent being the creation of creative and broad insights into issues, the establishment of quality leadership, and the coordination of dedicated and confidential participant work.

**Table 1. Second-Order Activities and Their Representation (%) within the Strategic Foresight Process**

| ACTIVITIES | BENEFIT |
|---|---|
| **FRAMEWORK CREATION (22%)** | • To think with an open mind, balanced and impartial (9%)<br>• Focus on the real problem and its core (7%)<br>• Be careful with influences, assumptions and previously created mental profile (6%) |
| **SCANNING (16%)** | • Understanding the context and all the complexities through the established framework (5%)<br>• Quick adaptation and avoiding surprises (11%) |
| **INTERPRETING (21%)** | • Creating more creative, deeper and broader insights (16%)<br>• Identifying a wider range of opportunities and possibilities (5%) |
| **VIZUALIZATION (10%)** | • Prioritizing and decision-making (10%) |
| **PLANNING (7%)** | • Constructing paths from the present to the future that will enable training and preparation for the future. (7%) |
| **ACTION (23%)** | • Catalysing actions and changes (7%)<br>• Creating good leadership and conditions for work - conformity, commitment, trust (14%)<br>• Building an organization that constantly learns (2%) |

Source: „ Thinking about the Future: Guidelines for Strategic Foresight",
by Andy Hines, 2012.

This chapter is written with the purpose of contributing to the theory and practice of strategic foresight, aiming to develop a framework that specifies the organizational logic of strategic foresight. This comprehensive framework presents strategic foresight not only as a process, method, or practice but as a unified organizational capability that enables organizations to "deal with the future." Higher-order capabilities play a distinct role, including environmental scanning, strategic selection, and integration capabilities, and are at a higher level of abstraction than their fundamental activities. They come together to link the everyday activities that an organization undertakes to maintain constant awareness of the environment and improve its overall functioning.

The authors believe that such an integrated framework would enhance organizations by assisting them in developing future scenarios, thus enabling them to take action at the right moment, with the caveat that setting and defining a precise problem is a prerequisite. As known, solving the wrong problem brings no benefit. As the paper has already demonstrated, to recognize and determine a precise problem, situational awareness and timely responsiveness are crucial.

Moreover, it must be ensured with certainty that there are sufficient capacities and resources for the implementation of all planned activities. After selecting and providing the capacity to work, creating an interactive atmosphere is very important. Particularly, the involvement of those willing to challenge hypotheses and interpret outcomes in their own way is promoted. The essence is to create a strategic working environment conducive to open thinking, experimentation, and prototype creation to gain a clearer picture and develop as many possible future scenarios as possible. The formation of alternative futures should be guided by the understanding that the initial foresight is almost always wrong because data never lead to just one conclusion. Solutions need to be developed, and the quality and consistency of obtained solutions should be verified and supported by empirical data.

## Case Study: Russian Invasion Of Ukraine

After establishing the theoretical and methodological framework of strategic foresight and its foundations for successful operation, it is necessary to illustrate and test it in a real-world event within a real environment. Given the significant changes that have affected the global stage, the paper will focus on one of the currently key global crisis hotspots—the example of the Russian invasion of Ukraine.

The following chapter will provide insights into critical indicators that pointed to the impending invasion, and continuous monitoring of these indicators would undoubtedly lead to the preparation and reaction of the attacked party. The paper will not analyze these reactions, political decisions, nor will it delve into the outcomes and forecasts of the war. What it will attempt to demonstrate is the importance of recognizing tendencies of opposing parties, establishing critical indicators as input parameters for developing strategic foresight. It should be noted that the paper will not delve into the historical sphere of relations between conflicting parties, nor will it address economic policies. The exploration of these factors, as well as the factor of "underestimating the enemy," is left open for further research in the mentioned areas.

This chapter is based on research conducted by the RAND organization, summarized in an article from 2022, as well as the book "The Battle for Ukraine: World War III?" by American author Yuri Felshtinsky (2022). The RAND research is particularly interesting as it illustrates how the Russian Ministry of Defense reexamines the likelihood and character of future wars, probing the relationships of military capabilities between Russia and its adversaries. In these studies, the authors rely on a previously established framework for examining key indicators. The analysis of their forecasts and continuous comparison with potential adversaries, such as the United States, showcases their method of tracking changes and making predictions. This serves as a good example of functional positioning in the broader global context and acting in accordance with it.

*Critical Indicators as Input Parameters for Strategic Foresight*

It is known that there is no certain, predictable future for which one can plan. However, trends can be examined, and their development can be monitored. This was precisely the focus of Yuri Felshtinsky, a historian of the Russian secret service.

What could be observed in the period leading up to the invasion, without the presence of extensive expert analytical commentary or access to confidential intelligence information, was the increase in public rhetoric and threats from Russia toward Ukraine in anticipation of the attack. This includes statements from political officials, media propaganda, and other moves that clearly and openly indicated what would happen. Vladimir Putin himself expressed dissatisfaction with NATO's policy, especially in the period before the invasion, publicly warning that Russia would be ready to act if it were the only way to stop the spread of NATO. For several years, starting in 2007 when he stated at the Munich Security Conference as reported by Politico (2007) that the emergence of a unipolar world with the dominance of the United States and NATO in Europe disturbed Russia.

Furthermore, the media reported on the amassing of forces along the border between these two countries. Previous conflicts that occurred between these two countries also served as indicators that had to be carefully monitored over the years. In the broader context, Ukraine can be seen as a geostrategically important region that is at the "crossroads" of interests between Russia, Europe, and the United States. This implies that any political crisis or tension within the country carries the potential for the escalation of larger disturbances.

In support of these statements, Felštinski's account reinforces that this war was anticipated, and February 24, 2022, was not a surprise. As Felštinski (2022) notes, "Putin has been preparing for a major war for a long time. Russia conducts military exercises in all its border zones, from the Kuril Islands to Kaliningrad and from the Black Sea to the Baltic Sea. Bilateral military agreements are unilaterally canceled, and nobody pays attention to it." He also emphasizes: "… add to that Putin's rhetoric about establishing a powerful military base in Crimea, the concentration of the Russian army

along the border with Ukraine, the presence of a powerful military force in Transnistria (supposed peacekeepers), a series of cases where the Russian navy violated the maritime boundaries of neighboring countries, joint military exercises with Belarus, calling reservists for summer training, changes in laws on the schedule and frequency of reservist recruitment, increasing spending on weapons, the provocative rhetoric of Duma representatives like Vladimir Zhirinovsky, the leader of the Liberal Democratic Party of Russia (LDPR), close to the Kremlin and Putin, and the policy of the Central Bank of the Russian Federation buying gold - and it quickly becomes clear that Russia is building a war machine." elshtinsky, 2022)

The other clear indicators are outlined through the 'retaliatory sanctions' by the Kremlin against Europe and the USA, indicating that Russia is preparing for isolation. It states: 'Aware that absolute isolation awaits the moment it launches a comprehensive aggression, Russia is actively preparing for such a scenario and a break with the civilized world. Among other measures, it has stopped the credit-based gas deliveries and banned the import of foreign food to gradually reform the country and start self-sufficiency. Kremlin-affiliated companies like Lukoil are already selling their foreign stakes. This is even more true for 'private citizens' close to the Kremlin: they have long been preparing for war and are also selling their overseas assets. All this is happening at a time when Russian strategic bombers have again begun to penetrate the borders of NATO countries, and Russian fighter planes have started to pursue NATO aircraft." Felshtinsky,( 2022)

On the other hand, Russia has conducted a quality and detailed strategic prediction by correctly identifying critical indicators, monitoring them, evaluating, and making decisions accordingly. According to open RAND research, Russian analysts operate by comparing their weaknesses and strengths with potential adversaries. Based on these comparisons, they determine their position, recognize and highlight implications, and rank them in terms of importance and urgency for remediation to achieve competitiveness. In simpler terms, they find their place, raise awareness of their weaknesses, and seek ways to ensure and strengthen their security by presenting a strategic plan. By following their analyses and thought processes, it could be concluded that something is being prepared.

According to the research findings, Russia has identified Ukraine, along with the support of the NATO alliance, as the main threat. The development of NATO's military capabilities is depicted in the analyses as the source of disruption of the strategic stability and as a potential opportunity for social disturbances in the former Soviet Union space. These developments led to the known decision - Russia's preventive action.

What they decided to do and set as a strategic goal is deepening their relationship with China because their analyses showed that only through a partnership with China can they achieve their objectives. However, before they began working on forming this partnership, they carefully decided to first ensure the correctness of that decision. In practice, it looked like this: "Recognizing the need to strengthen the partnership with China, in the spring of 2014, various Russian agencies analyzed potential risks of cooperation with the PRC: before rushing into the warm embrace of Beijing, Moscow wanted to be sure about the consent of its giant neighbor's presence in the economic space. What they undertook was a comprehensive insight into the main trends in the development of the Chinese military-industrial complex, Chinese foreign policy, and priorities of military strategic planning."

From the chapter, it can be concluded that by building what Felštinski likes to call a war machine, Russia provided numerous indicators that were sufficient to warn Ukraine, and the only logical step should have been to raise the level of readiness to a high degree. Similarly, in their analyses, they publicly portrayed the greatest threats to their security and clearly indicated that they would act when security lost its essence.

The step that Ukraine should have taken based on the gathered information, for which it cannot be guaranteed that it was actually taken, would have been anticipation aimed at providing a counterbalance to the "embedded tendency and belief that Russia will not attack, i.e., the tendency to ignore challenging information." Perhaps this could have allowed time for reflection and the devising of alternatives. Maybe it could have created space for discussions that do not exclude alternative perspectives, and perhaps the current world picture would not look like this today. Maybe these indicators could have been sufficient for a timely reaction and could have saved thousands of

lives. But the key word is "maybe." What is certain, according to available literature and sources, is that the invasion was predicted based on the listed indicators, and the reactions and involvement of external actors leave room for the reader to contemplate.

## Conclusion

After reviewing the theoretical framework of strategic foresight, the proposed conceptual model in which the action and purpose of strategic foresight are clearly presented, and after reviewing the real case - the Russian invasion of Ukraine - the paper came to the final part, in which a summary overview of everything written is given, with special reference to Republic of Croatia, together with the author's comments.

Strategic foresight is a tool in strategic planning aimed at developing critical thinking skills for considering the impact of long-term uncertainties on decision-making. It serves as a counterbalance to the inherent human tendency to support well-known data and ignore challenges, providing users with sufficient time to contemplate alternatives. Decision-makers must be cautious, open to changes in thinking approaches, and prepared for cultural organizational changes. This work emphasizes the importance of fostering and reviving long-term strategic thinking, specifically strategic foresight, which holds a high position in the societal and security advancement of a nation. The paper describes strategic foresight as a method for systematically considering longer time horizons and a broader range of challenges. It illustrates how integrating strategic foresight into the planning process facilitates a systematic approach to problem-solving, enabling users to be prepared for future threats, emphasizing the early seizing of opportunities for action.

The importance of having a systematic theoretical framework was evident, as it not only facilitates the achievement of organizational goals but also promotes organizational culture, resulting in the avoidance of problems arising from isolationism, i.e., steering clear of task duplication due to lack of coordination. It is crucial to emphasize that individuals in high managerial positions in society, organizations, or businesses should be involved in

organizing strategic foresight. The success of strategic foresight depends on their engagement, awareness of the situation, and understanding of the issues on which they provide or withhold support for action. Accordingly, their involvement should be encouraged to create a trend of engagement, involving and encouraging other leaders from various parts of the organization. After all, more brains mean more diverse versions and potential future scenarios — key elements in strategic foresight.

Despite all the advantages and benefits that strategic foresight brings, there are still organizations, states, and others where strategic foresight remains only a dead letter on paper. From this arises the need to reach higher levels and raise awareness about the importance of this issue to start investing in this area. In such systems, it is initially necessary to change the long-standing and probably deeply rooted short-term planning; it is necessary to provide a shield context and introduce them to long-term and holistic thinking. If we look at the Republic of Croatia and literature addressing this issue, it can be rightly said that this is an untouched area eager for exploration, development, and implementation in security systems. Especially considering that Croatia is part of both NATO and the European Union, both of which clearly emphasize the importance of strategic foresight and encourage all member countries to contribute to the collective through their strategic foresight.

The authors of this paper recognize the importance, and as a result, propose an institutional model for strategic foresight based on studying foreign literature in this field. The proposed model is presented for one specific reason: without the institutionalization of strategic foresight as a component of strategic planning and decision-making processes, the ability to sustain foresight will be highly sensitive to changes in leadership, and its scope of action may be limited or unclear. It is crucial, along with precisely specifying the steps of action, to enable and maintain a "protected space" within which analysts feel empowered to express their views and exchange information with other collaborators.

History has repeated itself too many times, and everyone should strive to avoid the same. However, as this case illustrates, things are not always black and white. If history hadn't repeated itself with Russia, perhaps the EU

wouldn't have started gaining independence and creating autonomy from Russian energy, resulting in the construction of its own gas pipeline. This prompted Croatia to develop and upgrade existing terminals, contributing to Europe as a whole but primarily to itself. It remains to be hoped that in this scenario, Croatia will manage to achieve benefits and welfare because, as suggested, what is war if not profiting. Of course, the foundation for the development and concepts of such terminals and networks must again be well-executed strategic planning, with strategic foresight as its precursor.

The thesis is put forward that strategic foresight is not predicting the future. Nevertheless, by tracking trends and creating different action scenarios, very precise and robust strategies can be developed that will be ready to respond to a crisis if it arises. This confirms that strategic foresight is the key to a timely response, and if not undertaken, the reaction will be delayed or useless. Given the uncertain future and rapidly changing environment, this requires significant effort.

The summary clearly emphasizes the key aspects of strategic foresight as a tool in strategic planning. Here are several key points highlighted:

**Definition of strategic foresight:** Identified as a tool in strategic planning with a focus on developing critical thinking skills. Its goal is to consider long-term uncertainties to make informed decisions.

**Counteracting human tendencies:** Emphasizes the role of strategic foresight as a counterbalance to inherent human tendencies to confirm known information and ignore challenges. It provides users with enough time to consider alternatives.

**Changes in thinking approaches:** Decision-makers must be cautious and open to changes in thinking approaches, as well as willing to undergo cultural organizational changes.

**Importance of long-term strategic thinking:** The work underscores the importance of encouraging and reviving long-term strategic thinking in society and the security advancement of a nation.

**Systematic problem-solving approach:** The integration of strategic foresight into the planning process enables a systematic approach to problem-solving.

**Readiness for future threats:** Through strategic foresight, users are enabled to be prepared for future threats, while simultaneously emphasizing the importance of seizing opportunities for action early.

## References

Al-Rodhan, N. (2015 ). Strategic Culture and Pragmatic National Interest . Global Policy .

Clausewitz, C. v. (1997.). O ratu. Zagreb: Ministarstvo obrane Republike Hrvatske.

Clint Reach, A. D. (2022). Russian Military Forecasting and Analysis. Santa Monica, California: RAND Corporation.

Endsley R., M. (May 1990.). Situation Awareness In Dynamic Human Decision Making: Theory And Measurement. Dissertation. Faculty Of The Graduate School University Of Southern California,

Endsley Mica R., Daniel J. Garland (Eds). (2000). Situation Awareness Analysis and Measurement. Mahwah, New Jersey: Lawrence Erlbaum Associates.

European Commission (2023), Strategic foresight, European Commission, Available at: https://commission.europa.eu/strategy-and-policy/strategic-planning/strategic-foresight_en, Accessed: 16. 5 2023.

Greenblott, J. M. (13. 12 2018). Strategic Foresight in the Federal Government: A Survey of Methods, Resources, and Institutional Arrangements. World Futures Review, str. 245-266.

Hines, A. a. (2012 ). Thinking About the Future:Guidelines for Strategic Foresigh. Washington D.C.: Palgrave Macmillan.

Hrvatski sabor, Strategija Obrane Republike Hrvatske, NN 33/2002., 29.3.2002

Johnston, A. I. (1995.). Thinking about Strategic Culture. JSTOR, 32-64.

Joseph Coates, P. D. (2010). Strategic Foresight Issue: Introduction. Technological Forecasting and Social Change , 1423-1425.

Jurij Felštinski, M. S. (2022.). Bitka za Ukrajinu: TREĆI SVJETSKI RAT? . Zagreb: Stilus knjiga.

Kopal Robert, D. K. (2022.). Obavještajna analitika. Zagreb: Grafomark d.o.o., J.Lončara 2f, 10090 Zagreb.

Flasch M., J. (1995). Situation Awareness: Proceed with Caution. Human Factors: The Journal of the Human Factors and Ergonomics, 149-157.

Paliokaitė, A., Pačėsa, N. Pačėsa & Sarpong, D. (2014). Conceptualizing Strategic Foresight: An Integrated Framework. Strategic Change, 23(3-4), 161-169. DOI:10.1002/jsc.1968

Politico, Opinion | The Speech In Which Putin Told Us Who He Was, Politico MGAZINE, , Available at: https://www.politico.com/news/magazine/2022/02/18/putin-speech-wake-up-call-post-cold-war-order-liberal-2007-00009918, accessed 19.5.2023.

NATO (2023), Allied Command Transformation Strategic Foresight Work, NATO Allied Command Transformation, Available at: https://www.act.nato.int/futures-work, access at 19. 5. 2023.

NATO (2017), Strategic Foresight Analysis 2017 Report, NATO Allied Command Transformation, Available at:https://www.act.nato.int/wp-content/uploads/2023/05/171004_sfa_2017_report_txt.pdf, access at 19. 5. 2023.

NATO (2013), Strategic Foresight Analysis 2013 Report, NATO Allied Command Transformation, Available at: https://www.act.nato.int/wp-content/uploads/2023/05/sfa_security_implications.pdf, access at 19. 5. 2023.

NATO (2015), Strategic Foresight Analysis 2015 Interim Update to the SFA 2013 Report, Available at: https://www.act.nato.int/wp-content/uploads/2023/05/160121sfa.pdf, access at 19. 5. 2023.

Stip Compass (2023), Smart specialization strategy of the Republic of Croatia for the period from 2016 to 2020, available at: https://stip.oecd.org/stip/interactive-dashboards/policy-initiatives/2023%2Fdata%2FpolicyInitiatives%2F99996903, accessed 15.5.2023

Tatalović, S. (2011). Treba li Hrvatskoj nova strategija nacionalne sigurnosti. iz Hrčak- portal znanstvenih članakaAvailable at: https://hrcak.srce. hr/102853 Accessed: 15.. 6. 2023.

## Strateško predviđanje kao preduvjet pravodobne reakcije

## Sažetak

*Stanje nesigurnosti u strateškom okruženju predstavlja izazov kroz povijest čovječanstva. Današnji analitičari obavještajnih podataka moraju biti ne samo kreativni nego i sposobni predvidjeti novu prijetnju prije nego što se ona uopće materijalizira. Bez svjesnosti o trenutnoj situaciji u strateškom okruženju i trendovima koji ga oblikuju, gotovo je nemoguće predvidjeti i razviti relevantne buduće scenarije. Ako tome dodamo današnju sliku vrlo složenog i dinamičnog svijeta, strateško predviđanje postaje sve važniji alat za organizacije i pojedince u prilagodbi na promjene, predviđanju rizika i iskorištavanju prilika.*

*Cilj je ovog rada pružiti uvid u procese i analitiku strateškog predviđanja kao ključnog koncepta i alata za donošenje učinkovitih i pravodobnih odluka. Strateško predviđanje u svojoj je biti kvalitativno, ali i kvantitativno, i uključuje ne samo vojnu dimenziju nego i druge dimenzije, poput političke, diplomatske, ekonomske i društvene, koje su često presudne u odnosu prema vojnoj dimenziji, no ovaj rad uglavnom će se baviti samo vojnom dimenzijom.*

## Ključne riječi