



Leveraging the Transition to Strategic Capitalism:

A Summary of a Delphi Expert-Opinion Study

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Executive summary

Fractured geopolitics, shifting alliances, and growing systemic uncertainty define the environment in which Finland must now build and sustain its innovation resilience. This Delphi study was launched to explore how Finland, and Europe more broadly, can navigate these evolving conditions in order to foster a more robust and future-proof innovation system.

The findings from the study revealed three interlinked layers of insight: external vulnerabilities, internal capabilities, and strategic positioning. Together, these layers form the underlying structure of this policy brief.

The deck begins by outlining both internal and external vulnerabilities shaping Finland's innovation environment. These range from the erosion of geopolitical trust and increasing threats to talent flows, to the growing dominance of

China across critical technologies and value chains. These developments are not merely weak signals or short-term disruptions; rather, they represent structural conditions that fundamentally shape the global playing field for innovation.

The middle section highlights an emerging shift from laissez-faire approaches toward what experts increasingly describe as strategic capitalism. Respondents emphasized the importance of not only investing in R&D, but also improving the capacity to absorb and deploy it effectively. They pointed to the need for stronger coordination across policy silos and a move away from episodic interventions toward more sustained, long-term innovation strategies. The discussion of industrial, technology, and innovation policy underscores a central message: ambition alone is insufficient without coherence.

The final part of the deck repositions Finland's innovation system firmly within the European framework. Experts stressed Finland's growing dependency on EU-level instruments, particularly in funding, regulation, and standard setting, highlighted its potential role in helping to shape Europe's global technological posture. At the same time, they noted that Finland must remain agile, sharpen its priorities, and engage strategically in Brussels to ensure influence rather than passivity.

Across the study, it became clear that resilience should not be understood as a single policy choice or an isolated strategy. Instead, it represents a deeper structural shift in how innovation systems are organized and governed. This deck translates that insight into a coherent narrative—one that begins with risk, moves through leverage, and ultimately points toward action.

Stability Attracts Talent: Security Choices Shape Finland's Innovation Trajectory

Stability underpins competitiveness, as it remains a key driver of talent attraction, and the availability of talent is a primary determinant of foreign direct investment. At the same time, geopolitics is reshaping risk perceptions, with Finland's long-term stability increasingly influenced by a changing threat landscape. NATO membership provides reassurance but also introduces new geopolitical dynamics, while broader geopolitical orientation continues to shape patterns of foreign direct investment. Against this backdrop, global competition for both talent and investment is intensifying. Finland's proximity to Russia constitutes a persistent strategic risk, and policy choices, ranging from STI funding to immigration and taxation, may, if not carefully aligned, unintentionally weaken perceptions of Finland's innovation attractiveness at a time when long-term stability is increasingly shaped by a changing threat landscape.

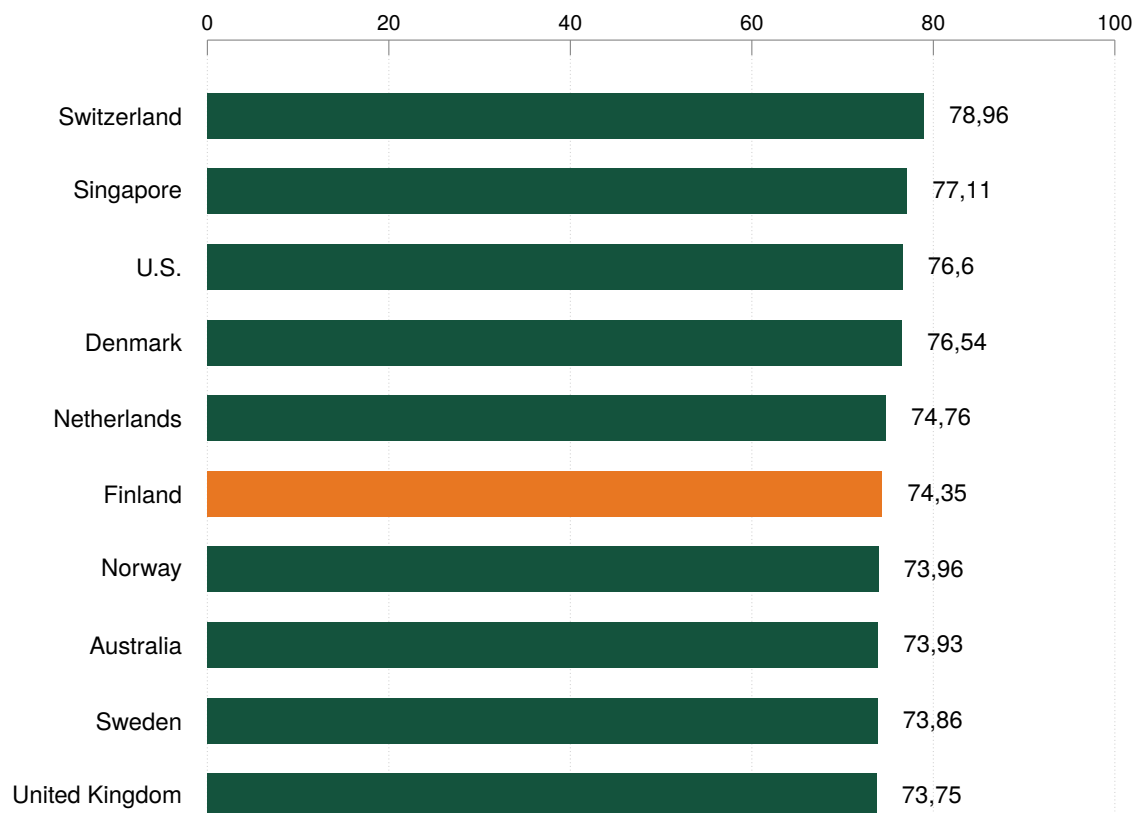


Figure: Top countries for attracting global talent (percentage). Source: Insead, & Portulans Institute, & Accenture.

(November 6, 2023). In Statista.

Strategic Capitalism Replaces Laissez-Faire: A New Era for Innovation Policy

Industrial policy reflects the return of the state as an active market shaper, with the objective of mobilizing and crowding in private investment while steering strategic production. These efforts are increasingly sector-specific and often driven by geopolitical considerations. Technology policy, in turn, has become the frontline of great-power competition, concentrating on critical technologies and explicitly managing the balance between innovation opportunities and risks related to security and dependency. Innovation policy operates alongside these approaches by enabling broader system change, extending beyond technology development to encompass new business models, social innovation, and wider system-level transformation. Despite its potential, innovation policy remains underutilized relative to other policies. To thrive in this environment, countries must adopt a holistic and integrated policy mix that links investment, technology, and innovation within a coherent, strategic, and future-facing agenda.

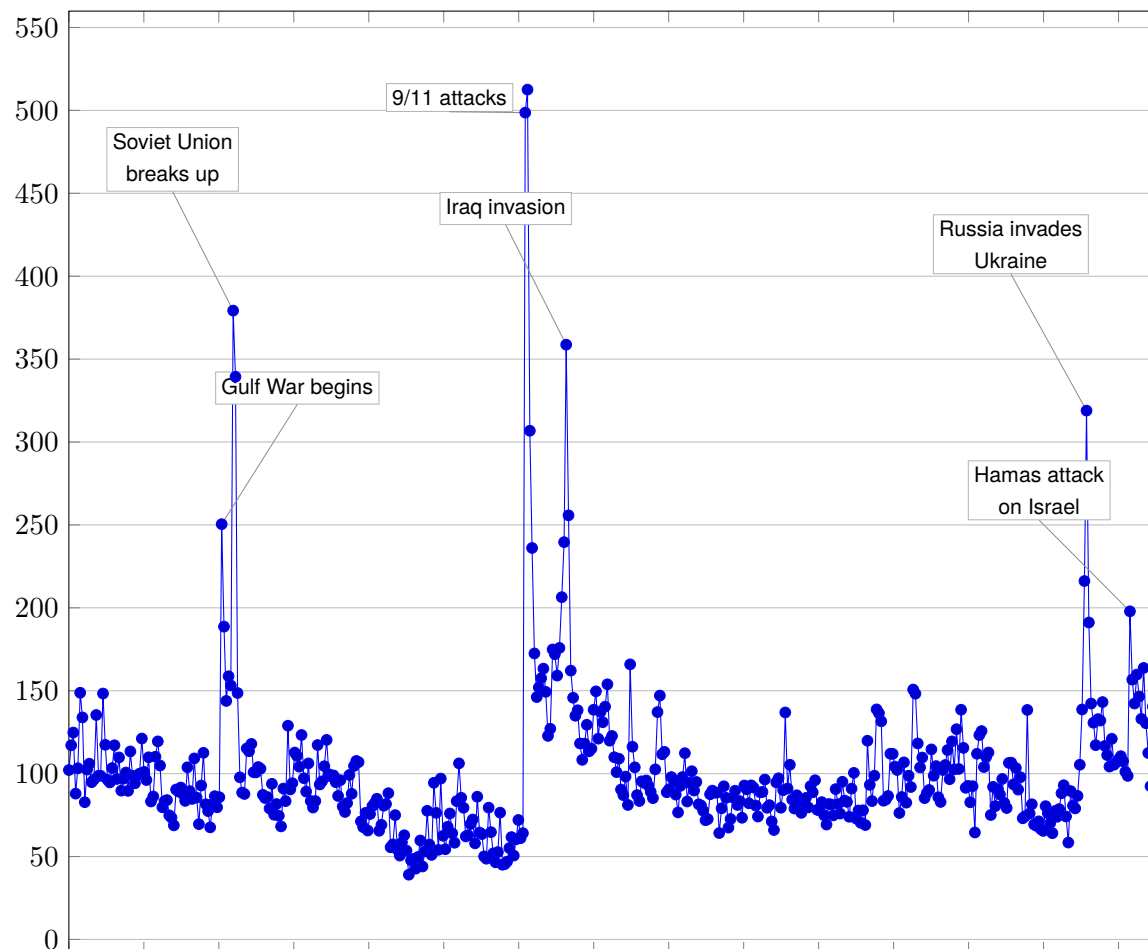


Figure: Geopolitical Risk Index (GPR), 02/1985 to 01/2025. Source: [In Statista](#).

Geopolitical Fractures and Strategic Vulnerabilities for Finland and the EU

Finland's strategic relationships with the United States and China are increasingly shaped by trust erosion, and without it other policy interventions risk losing effectiveness. A core vulnerability lies in illicit practices such as economic espionage, which pose structural threats to both innovation and industry; if these risks are not addressed, investments remain persistently exposed. The interlinkage between internal and external dynamics calls for a systemic, adaptive policy response capable of handling complexity. Early critical signals are already visible in shifts in global trade patterns, which serve as leading indicators of deeper structural realignments and should be understood as proxies for geopolitical intent and influence. Although China's dominance in key value chains in technology and materials is apparent, the most significant systemic risk to the EU may stem from China's indirect influence through Russia and Africa, where, in a crisis scenario, Europe's exposure could prove irrecoverable.

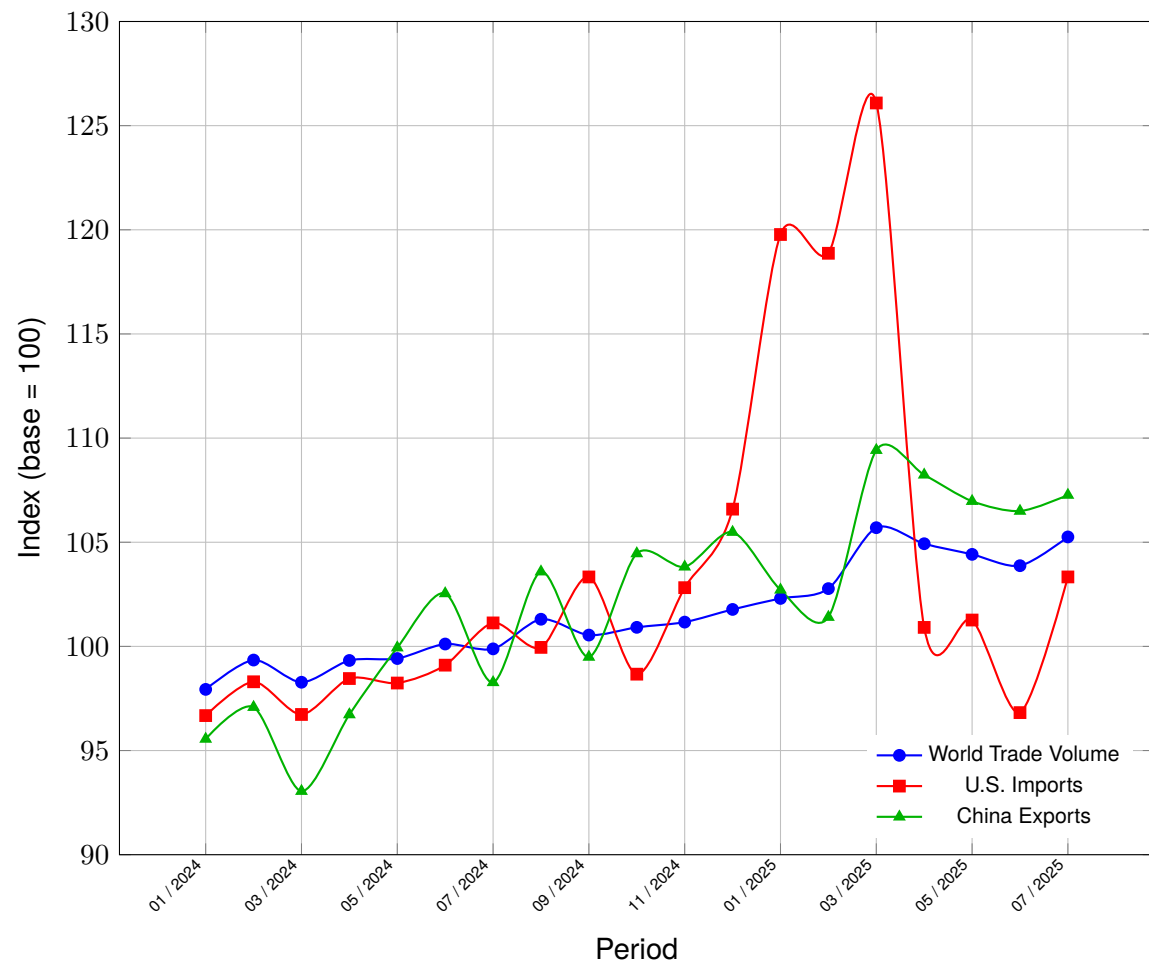
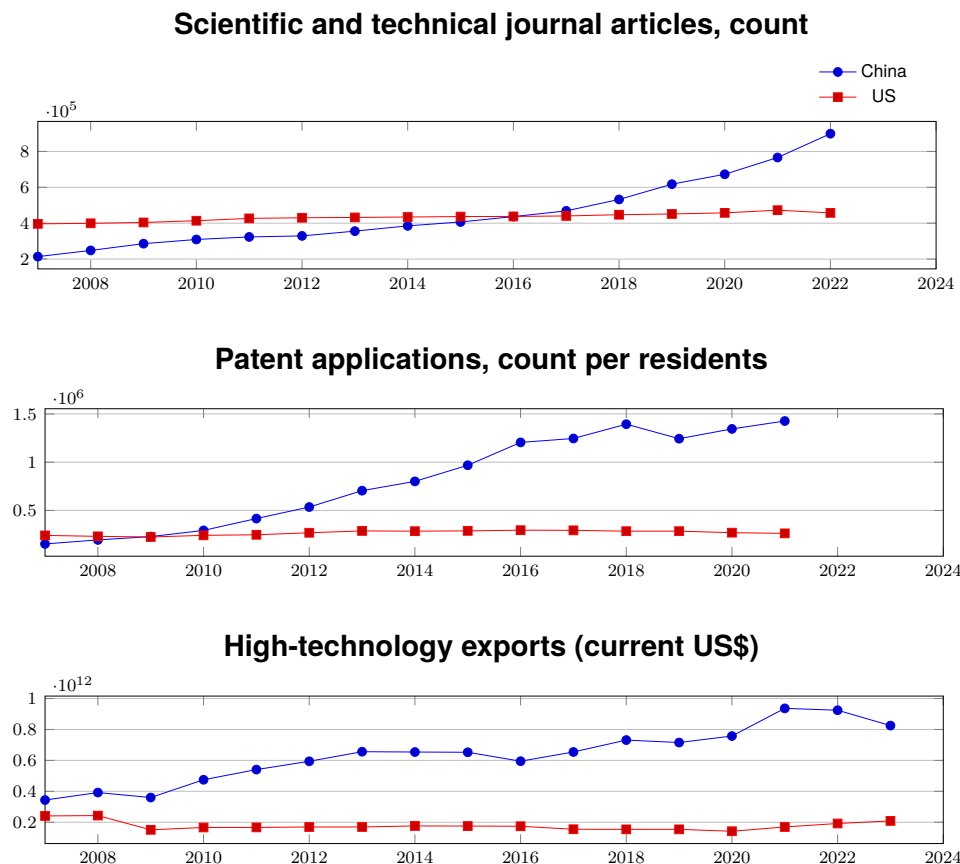


Figure: GTrade and International Business Investment (vs. 2024 levels). Source: Altman, Steven A. & Bastian, Caroline R. (October 2025). DHL Global Connectedness Tracker. DHL Group. DOI: 10.58153/29j2t-c9v91. CPB
World Trade Monitor

Breaking the Lock-In: Coherent Policy and Strategic Agency Matter

A key risk for Finland and the EU lies in fragmented policies and insufficient ambition, which leave them vulnerable while competitors act with greater coherence and speed. At the same time, both Finland and the EU retain strategic agency and the capacity to act, provided that proactive and long-term policies are pursued to build enduring capabilities for innovation and commercialization. Strengthening the innovation ecosystem requires accelerating innovation cycles and resilience through targeted R&D investments, strategic partnerships, and coordination across the entire ecosystem. However, innovation alone is not sufficient. Building diversity and control across value and supply chains is essential to translate R&D into lasting strategic advantage. Ultimately, resilience demands more than innovation performance; it also requires strategic security measures and deliberate diversification of supply chains and technology partnerships to reduce geopolitical exposure.



Data: World Bank Group.

Figure: China has overtaken the US in fundamental science, knowledge application and high-tech production.

Source: World Bank Group data observatory

Avoiding the Strategic Capitalism Trap

Mechanism	What it looks like	Implication
Strategic capitalism gap	Overdominant public intervention in innovation systems	Risk of crowding out private innovation and risk-taking
Input additionality	Public R&D acting as a catalyst rather than a substitute	Increased private-sector R&D effort and investment
R&D and absorptive capacity	Strong in-house R&D enabling innovation and external knowledge adoption	Higher ability to integrate, adapt, and scale external advances
Adoption–innovation balance	Parallel diffusion of mature technologies and exploration of emerging ones	Short-term productivity gains alongside long-term technological renewal
Temporal strategy	Rapid adoption of mature technologies combined with long-term breakthrough bets	Balanced innovation portfolio across time horizons
Deployment & application focus	Policy emphasis on scaling, deployment, and use rather than invention alone	Realization of economic and societal value from innovation

Table: Core mechanisms shaping innovation performance and policy effectiveness. Source: Authors.

Our results suggest that innovation performance is driven by a small set of interrelated mechanisms rather than individual policy instruments. Overly dominant public intervention can weaken private risk-taking, while

public R&D is most effective when it catalyzes additional private investment. Strong in-house R&D and absorptive capacity are critical for both innovation and adoption, and effective policy requires balancing rapid dif-

fusion of mature technologies with longer-term investment in emerging ones. Ultimately, value is realized through deployment and application, not invention alone.

Focus with Evidence: Strategic Choices for Talent, Technology, and Long-Term Impact

Building a Resilient Foundation

A innovation system requires sustained, long-term commitment rather than episodic policy interventions. Maintaining a consistent focus provides both strategic direction and legitimacy for innovation efforts. At the same time, innovation policy should create enabling environments that support high-quality research while allowing scalable and competitive business models to emerge. Bottom-up investment plays a critical role in capturing decentralized and emergent innovation, and policymakers must accept that some outcomes will be unpredictable or serendipitous by nature.

Developing a Future-Ready Workforce

Talent is a central pillar of long-term competitiveness. Developing a future-ready workforce re-

quires prioritizing ambitious, skilled, and adaptable professionals who can navigate technological and organizational change. This, in turn, demands stronger alignment between education systems, research and development, and business environments. Supporting lifelong learning and workforce agility ensures that skills evolve alongside technological trajectories rather than lag behind them.

Focusing with Foresight

Strategic focus is essential in conditions of uncertainty. Rather than attempting to cover all possible technological directions, organizations and policymakers should select focus areas and partnerships deliberately, even when such choices involve inherent risks. Building on existing strengths helps reduce uncertainty and amplify impact. Importantly, emerging technologies often require long development time-

lines—sometimes a decade or more—before delivering economic returns, underscoring the need for patience and long-term commitment.

Balancing Exploration and Exploitation

Effective innovation systems balance the rapid exploitation of existing technologies with sustained investment in transformative innovation. Leveraging mature technologies supports short-term competitiveness, while parallel investment in longer-term breakthroughs ensures renewal and future growth. This balance also involves identifying global breakthroughs—whether developed domestically or abroad—and adapting them to local strengths and contexts to maximize economic and societal value.

From Strategy to Implementation: Building Institutional Continuity for Innovation

Theme	What it requires	Why it matters
Strategic anchoring	Set a long-term direction with clear near-term milestones; coordinate through shared priorities and national goals; sustain continuity beyond political cycles.	Reduces policy volatility, aligns actors, and keeps investments credible across election cycles.
Leadership & timing	Address leadership bottlenecks in making bold, future-oriented choices; build mechanisms to accelerate decision-making when speed matters; improve coordination and sequencing.	Prevents slow or fragmented implementation in fast-moving domains where timing determines competitiveness.
Empower & engage	Involve the private sector in policy dialogue; preserve freedom and entrepreneurial initiative; design for serendipity—leave room for bottom-up openings and unplanned innovation.	Avoids crowding out experimentation and enables scalable, demand-driven innovation pathways.

Table: Core components of institutional continuity for innovation implementation. Source: Authors.

A recurring bottleneck is not the lack of strategy, but the lack of institutional continuity: long-term objectives are declared, yet delivery stalls when priorities shift, coordination fails, or political cycles reset commitments. Our results suggest that weak political will can undermine even well-designed strategies. Without sustained leadership and commitment, ambition fades over time, highlighting the need for governance structures that actively support long-term strategic direction.

From Strategic Intelligence to Intelligent Leadership

	System-Level Foundations	Human & Organizational Enablers
Insight Infrastructure	Connect Supply and Demand Create a platform aligning intelligence producers and users around real-world needs.	Invest in Future Leadership Develop leaders with the skills to act on intelligence under uncertainty.
Intelligence Culture & Purpose	Design a Holistic System that Enables Action Intelligence is foundational, but only impactful when embedded in systems that act.	Share for National Value Foster a collaborative, open intelligence culture that builds collective understanding.

Figure: Strategic Intelligence Framework: A 2x2 matrix mapping foundational system-level capabilities.

Source: Authors

Strategic intelligence has no value if it doesn't lead to timely, collective action. Without intelligent leadership, even the best insights remain unused, and opportunities

are lost. Our results emphasize combining system-level foundations with human and organizational enablers so that intelligence is embedded in governance structures, incen-

tives, and decision-making processes that translate insight into coordinated action.

From Export Targets to Economic Security: Redefining Strategic Multilateralism

Strategic shift	Implications
Multilateralism still matters	Global challenges such as climate change and systemic risks require multilateral solutions. International institutions remain the most effective mechanisms for managing shared risks, even amid rising geopolitical and economic pressures.
Networked strategy = resilience	An internationally networked strategy supports both short-term prosperity and long-term security. Finland must act globally to remain economically competitive and strategically relevant.
Strategic selectivity	Finland must be active but selective: bundling internal resources, avoiding duplication, and choosing alliances and platforms that offer the highest strategic returns under constrained capacity.
Stronger EU as mid-term leverage	A more cohesive and competitive EU is essential for Finland's global position. National strategies need to align with broader EU efforts on technology sovereignty and economic security.

Table: Strategic multilateralism reframes competitiveness from export expansion toward economic security and resilience.

The core shift is from export-led targets toward economic security. Future competitiveness depends less on increasing trade volumes and more on reducing vulnerabilities in critical tech-

nologies, value chains, and dependencies. Multilateral engagement therefore remains essential, but it must be paired with a networked and strategically selective approach. In the mid-term,

the EU provides the primary leverage for aligning national action with shared instruments, scale, and bargaining power in an increasingly fragmented global economy.

The EU as Finland's Launchpad: Aligning National and European Innovation Strategy

National–EU Coordination *(Strategic Foundation)*

- Finland must broaden access to EU funding for critical tech
- Ensure domestic stakeholders successfully engage with EU instruments
- Combine national agility with EU scale and legitimacy

Building a Competitive European Ecosystem *(Global Leverage)*

- Position the EU as a safe haven for talent and investment
- Push forward the Digital Single Market and innovative public procurement to shape global standards
- Leverage European tech alliances, while ensuring they don't fragment EU strategy

Guardrails for Sovereignty & Security *(Ethical Boundaries)*

- Promote digital sovereignty, but avoid overreach that undermines data privacy and cybersecurity
- Strike a balance between market power and democratic values

To lead globally, Finland must act strategically in Brussels. Success depends on strong national execution, alignment with EU priorities and instruments, and credible par-

ticipation in shaping European and global technology rules. The objective is not only to access funding, but to combine Finnish agility with EU scale to build capability, re-

duce dependencies, and influence emerging standards.

Is Technology Sovereignty an Illusion? Strategically Choosing the Battles

Innovation system based on the wargame

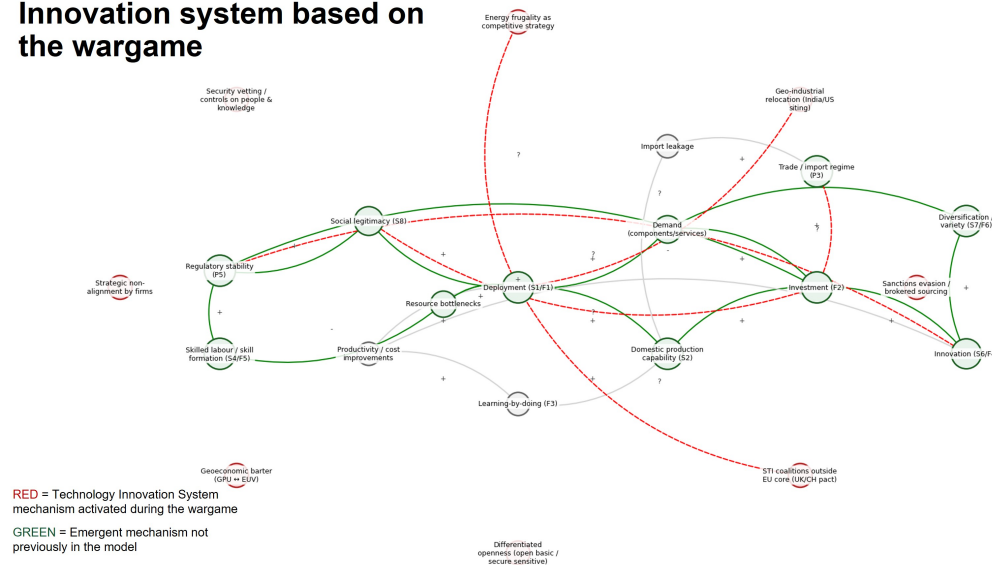


Figure: Adapted innovation system model based on the wargame run in the project.

Source: Authors

1. Full **technology sovereignty is unrealistic**, especially for small countries and even the EU as a whole.

2. **Strategic leadership is possible** in se-

lected critical technologies, not across the board.

3. **Global value chains and dependencies remain they must be managed**, not elimi-

nated.

4. **Monitoring sovereignty gaps is still valuable** for awareness, resilience, and strategic positioning.

Strategic Depth Over Autonomy: A Survival Strategy for Europe's Tech Sovereignty

Europe's challenge is no longer only technological capability, but also its strategic position in a fragmenting global order. The "West" as a coherent actor is eroding, the efficiency-driven globalization model is no longer fit for purpose, and economic security is now central to global competition. In this context, overreliance on either the United States or China increases vulnerability. Europe's response should focus on building **strategic depth**. Long-term resilience through coordination, reduced dependencies, and diversified partnerships rather than autonomy for its own sake. This leads to three strategic imperatives:

- **Coordinate EU-wide investments** in strategic tech clusters (e.g. semiconductors, green tech, space, materials).
- **Double down on dual-use technologies**, incl. AI, drones, and quantum.
- **Build strategic depth—not just autonomy**—to sustain resilience under geopolitical uncertainty.

Challenge: A shifting global order	Strategic response: Redefining Europe's position
The West as a united concept is eroding; shared values are no longer guaranteed	Re-evaluate transatlantic relations; EU must lead in shaping the rules of collaboration
The old model of globalization focused on efficiency and short-term gains is outdated	Shift to a survival-oriented strategy built on resilience and long-term depth
Economic security is now a core dimension of global competition	Develop new European approaches to protect key assets and reduce dependencies
Overreliance on US or China leaves Europe exposed	Diversify global partnerships while deepening EU collaboration

Table: Strategic depth reframes sovereignty as long-term resilience through coordination, diversification, and reduced dependency. Source: Authors.

Project and acknowledgements

Project reference

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Results based on a Delphi Study

The policy brief is based on a Delphi study of Finnish and international experts from industry, policy and the academia. Experts participated in two rounds of the Delphi survey during 2025, focusing on how to build a resilient innovation system. The project team thanks the active participation of experts.

Research Team

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AI use

In preparing this manuscript, the authors used artificial intelligence (ChatGPT 5.1. and 5.2. and LUMO) to improve the language and search for cross-reference data. Any revisions and data were verified by the author before including them in the policy brief.

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