

The Netherlands is re-industrializing:

from cost optimization to risk-driven
execution



Make it real.

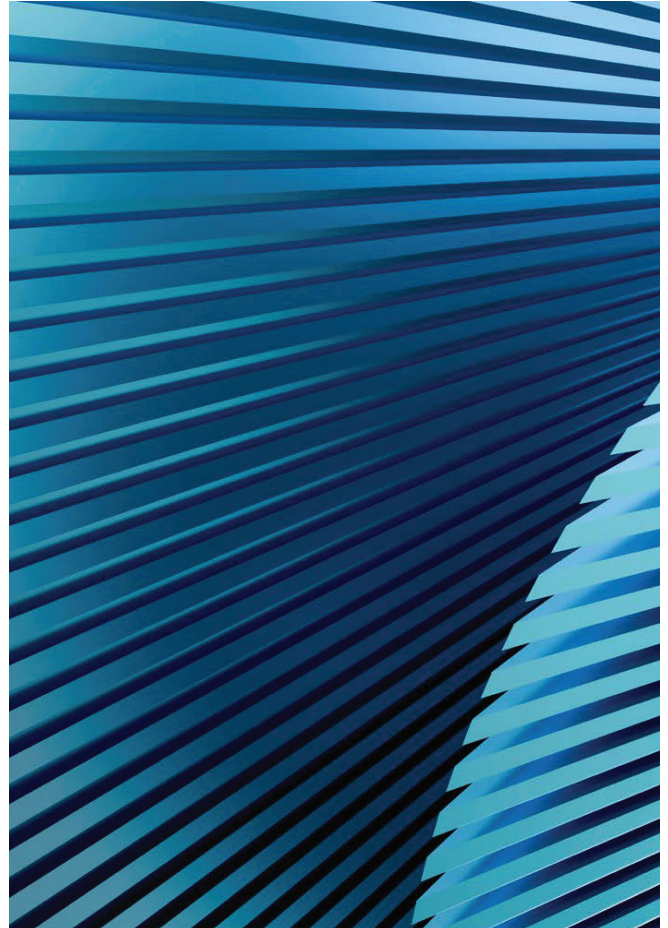
The Netherlands is re-industrializing: from cost optimization to risk-driven execution

“Re-industrialization of the supply chain is all about making conscious choices based on the risks throughout the entire chain.” Marcel van de Griend, Head of Intelligent Industry, Capgemini.

Marcel van de Griend is the Head of Intelligent Industry at Capgemini. His passion lies in reinforcing industry by translating technology, data and sustainability into concrete and future-proof business results. He believes that re-industrialization is the primary opportunity to reconfigure supply chains: making them more efficient, less vulnerable and more capable of withstanding disruptions. As a thought leader at the intersection of digital transformation and industrial innovation, Marcel inspires organizations not only to respond to change, but to design it purposely.

Cost-driven supply chains pose a continuous risk

Companies can no longer base their operating models solely on cost optimization. The world is no longer sufficiently predictable enough for that. The corona virus pandemic, the war in Ukraine and turmoil in the Middle East: these are recurring disruptions. Trade restrictions, regional conflicts and shifting power dynamics make the vulnerability of globalization evident. As a result, critical raw materials and components are now largely concentrated in specific regions, with all the attending consequences. Access



to stable and affordable energy is under pressure, particularly in Europe. And access to knowledge and talent is evolving from a supporting factor into a critical dependency. In short: companies that base their supply chains and operating models primarily on cost optimization are exposed to ongoing risk. Global instability makes concentrating producing and sourcing from a single region (often the most efficient one) a vulnerable business model.

Re-industrialization - i.e., the deliberate repatriation or relocation of production capacity and the redefinition of your production, supply chain and operating models - is increasingly becoming the preferred approach in the light of global turmoil. Re-industrialization is not a massive re-shoring movement. It is a deliberate decision made to reduce specific risks. For most companies, the first step is to gain insight into risks

and the consequences of their choices, and to be able to make decisions more quickly and clearly. But executing that step turns out to be difficult. Initiatives remain limited to small-scale optimizations. Execution is fragmented. Successful re-industrialization demands a structural change in the way organizations work and make decisions. Using hybrid shoring strategies and technological innovations such as AI, cost-driven supply chains must transform into flexible supply chains that are guided by real-time data.

In the Netherlands, re-industrialization is becoming increasingly urgent.

The report 'The Resurgence of Manufacturing: Re-industrialization of Europe and the US – 2026' by the Capgemini Research Institute reveals that 73% of organizations worldwide are now developing or implementing a re-industrialization strategy, while 72% are actively seeking to gain greater control over supply chains and critical dependencies.

However, the strategies do vary by region. For example, the United States is investing heavily in re-shoring and domestic production. Europe opts more often for 'friend-shoring', which involves relocating production to geopolitically stable and economically integrated regions. Currently, 64% of the organizations in Europe are committing to friend-shoring. And although India is emphatically positioning itself as an alternative manufacturing hub in Asia, China continues to play a crucial role in global value chains despite all the geopolitical tensions. So a mix of global, near-shoring, and re-shoring remains necessary. The right balance appears to depend largely on the situation and therefore varies by region, sector and product type.

For the Netherlands, a trading country, global instability and re-industrialization are of particular importance. Our economy features an open character, a strong logistical position and international integration. This makes us vulnerable to geopolitical disruptions. It would appear that this realization

has sunk in: last year, 38% of Dutch companies had already implemented a re-industrialization strategy, while the global average is 23%. In 2026, 67% of all Dutch companies will have already implemented a re-industrialization strategy or will have one under consideration. 90% say that geopolitical tensions influence decisions concerning local production, and 41% are investing to bring (part of) the supply chain back to the Netherlands. At the same time, the implementation of re-industrialization strategies is under pressure in the Netherlands. The primary reasons are high energy costs, grid congestion, regulatory pressure, lack of space and shortages of personnel and expertise.





From cost optimization to risk-driven management

Global instability is affecting companies at the very core of their operations. Schedules are becoming more unpredictable, delivery times fluctuate, inventories increase to account for uncertainty, and production stoppages become more frequent threats due to missing components. What used to be operational exceptions are now systemic risks that impact performance and margins daily. The result is a clear shift in what organizations use to guide their decisions. While organizations were traditionally driven by cost optimization and efficiency, the focus is now shifting toward supply security, risk diversification and reduced dependence on others. In that light, bringing production back home is not an end in itself, but a way to manage risks in an unpredictable world. So the “cheapest” production location is no longer the sole driving factor.

In short, this is certainly no nostalgic return to the past. Quite the contrary: successful re-industrialization actually requires companies to rethink their way of working, with risk-based decision-making paramount.

At Capgemini, we observe that those companies successfully navigating this transition integrate these types of risk assessments integrally into their operational decisions. This does indeed require organizations to break down their traditional operational silos and start operating as a single end-to-end system. Supply chain, manufacturing, logistics, IT/OT, R&D and the workforce can no longer operate in isolation: they must be designed and managed coherently. Risk-based decision-making must be able to be done in real time - data-driven and involving cross-functional collaboration across the entire operating model. Product development, for example, should not focus solely on functionality and costs, but also on the availability of components and geopolitical risks in the production region. Therefore, alternative sourcing strategies and risk scenarios must be taken into account as early as the design phase. Integrate the supply chain strategy into the design phase, for example.

So the impact of re-industrialization on existing operating models is significant. Moving from a cost-driven model to a risk-driven model means that flexibility, adaptability and continuous monitoring become - and must remain - the focus. After all, re-industrialization is not a one-time effort. It is a complete transformation of operational thinking and acting that is constantly evolving.

AI as a point of departure makes re-industrialization feasible

How can your organization deliver the same quality at the same price while maintaining a lower risk profile?

In addition to geographical decisions related to hybrid shoring, technology, data quality, standardization, decision-making, and an organization's ability to execute are determinant for success. Automation and AI can make local production more efficient and cheaper, and supply chain management more manageable and predictable. And that makes

re-industrialization feasible in the Dutch context as well.

Dutch industry has traditionally been particularly strong in areas involving high levels of product complexity and relatively low volumes, where quality and reliability are decisive factors and innovation is closely integrated with production. So the greatest opportunities for the Netherlands lie not in mass production, but rather in such highly complex and knowledge-intensive sectors as semiconductors, high-tech manufacturing, mechanical engineering, life sciences and defense. However, in these sectors, supply chains are particularly vulnerable due to the quantities and dependence on specialized components and expertise. R&D and intellectual property play a central role. Since supply chain risks often carry much greater weight for Dutch industry than purely cost-based considerations, the potential strategic benefits of re-industrialization are significant - as long as automation and AI are embraced.

Successful re-industrialization in the Netherlands requires using AI as the point of departure for process design, with human support and traditional automation being used only where truly necessary. AI's value does not lie in automating single existing process steps. That's too limited. The question organizations must ask themselves is: "How would we design this process if AI had been part of our operating model from the start?" This means that organizations should not start with the current allocation of tasks between humans and machines, but with the goal itself. What do we want to achieve? Which decisions need to be made more quickly, better or with more adaption? Which areas can AI support? Where is human expertise still essential?

It is important that AI solutions be designed primarily to be more broadly applicable. Many organizations make the mistake of developing pilots or isolated use cases that cannot be scaled to the entire supply chain. The power of modern AI lies precisely in its ability to be used across multiple processes and situations simultaneously.

This becomes evident, for example, with insight into risks across multiple layers of the supply chain. Many supply chains still lack visibility into second and third-tier suppliers due to the volume and quality of the data. AI can provide this insight by identifying connections among components, sub-suppliers, geographic locations and associated risks. This provides insight not only into a single link, but into the entire chain's dependencies and vulnerability.



AI also enables better analysis of rapidly changing and difficult-to-predict situations and the adjustment of decision-making continuously based on the current context. Using a digital twin, for example, AI can simulate various scenarios, detect anomalies early and compare alternatives automatically.

Consider being able to factor in disruptions, for example - such as the loss of suppliers, longer delivery times or changes in rates - and their impact on service, margins and cash flow. This highlights where the greatest vulnerabilities in the supply chain lie and which choices fit best to address these.

With this, AI is an important enabler for the necessary shift from a primarily reactive and phased approach to work toward risk-driven processes that adapt and look ahead. Without systematically integrating AI into their decision-making processes, organizations run the risk that their operating models will prove insufficiently agile in the near future. With all of the attending consequences.



How do you transform with AI?

If you want to deploy AI effectively, you must first ensure that data, systems and processes are seamlessly integrated. A strong digital foundation is essential for transformation. Among other things, this includes uniformly structured data, IT/OT integration, digital twins, cybersecurity, agreements about decision-making and responsibilities, and platforms that support decision-making across the supply chain(s).

The integration of data, systems and processes is the foundation for every AI-driven transformation. Furthermore, generative and agentic AI are also changing the way this integration takes place. AI-powered integration enables the transformation of the entire software and operations chain. From design and development to deployment and operations, processes are accelerated, automated and supplemented with relevant information. Consider the automatic generation of integration flows, for example, or real-time schedule adjustments and predictive system maintenance. As a result, technology will actively influence decisions instead of merely supporting them.

The greatest value lies in the combination of three effects:

- Efficiency: less manual work and more rapid development
- Adaptability: systems that learn and adapt in real time
- Scalability: growth without a corresponding increase in complexity

The ultimate challenge lies in the actual adoption (and scalable roll-out) of AI-driven transformation. Successful organizations first focus on building capabilities and then scale up based on proven value. Learn more about transforming with AI in Capgemini's POV "Integration Powered by AI."

The supply chain is becoming the central hub for decision-making

External disruptions first become evident in the supply chain. This is where strategic decisions are felt immediately, and where geopolitics, raw materials, components, energy, tariffs, production capacity, logistics and customer promises all come together. Therefore, the supply chain is the logical starting point for transformations based on re-industrialization.

Many supply chains are designed based on a fixed production location, a fixed supplier network and a specific logistics route. Organizations are used to optimizing these elements continuously in order to maximize efficiency. And since many supply chains have now been optimized to the fullest extent possible, it's proving difficult to let them go. But the new reality calls for a different model. It's no longer a question of how to produce most efficiently under ideal conditions: the real question is how to keep delivering when your most optimal routes are cut off, suppliers drop out, energy prices rise, export restrictions change or geopolitical risks increase.

Moreover, in sectors such as high-tech and semiconductors, it's not just about the flow of goods but also about factors such as uptime, service, spare parts, software updates and global support. Complex machines are often unique; they perform critical tasks and must remain in constant operation. An optimal supply chain, therefore, does not end with the delivery itself, but also extends throughout a product's entire lifecycle.

In new, risk-driven operating models, supply chain decisions become strategic; they are no longer merely operational. As a result, supply chains are shifting from linear, cost-driven chains to chains with multiple options guided by data and risk. These factors are so complex that they can no longer be managed in an operational or linear manner.

The characteristics of this approach are:

- Complete insight into the entire supply chain;
- Real-time, data-driven decision-making;
- The use of AI for scenario analysis and decision-making.

AI's current role in the re-industrialization of the supply chain is still primarily to identify and compare risks rather than to optimize costs or redesign supply chain networks. AI can provide early warning alerts so that people can make better decisions. It makes risks explicit and more quickly visible, and can objectively compare options.



Consider such applications as supply risk and resilience agents, for example, which provide insight into external disruptions, such as logistics incidents, trade measures, weather conditions or raw material shortages. This provides a clearer view of where risks accumulate and what impact these may have on the supply chain.

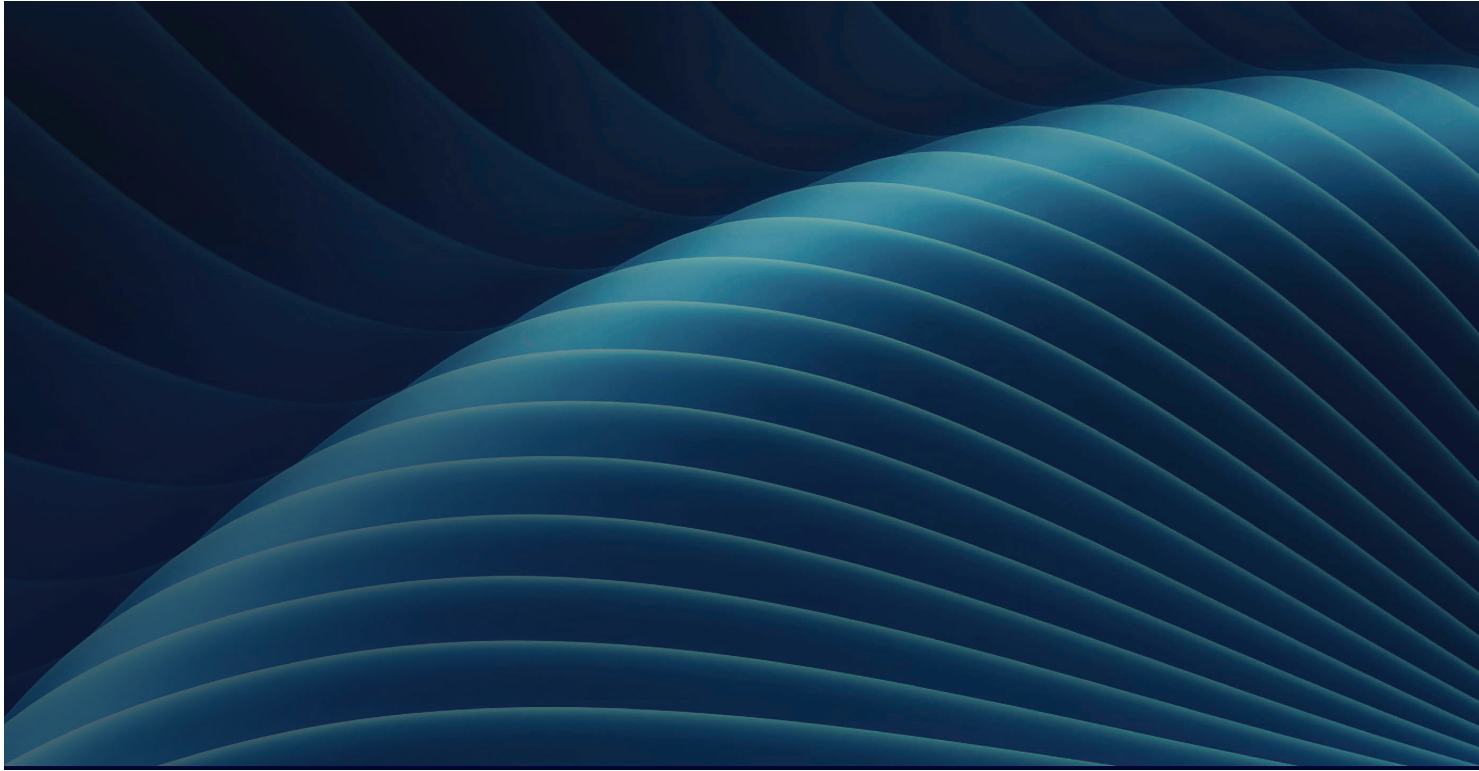
By deploying AI as a "decision support" tool rather than as "decision replacement," the application is also more scalable. This way, it supports optimal re-industrialization: not a complete re-shoring transformation, but a targeted shift wherever the risk profile justifies it.

The biggest challenge lies not in strategy, but in execution

In practice, many organizations still encounter a gap between strategy and execution. Although many companies have clear roadmaps, they often lack the ability to execute plans across departments from start to finish. This is because technology, organization, knowledge and architecture are not being developed with sufficient coherence. As a result, initiatives get stranded in the pilot stage or in isolated implementations, without implementation across the entire operation. Effective approaches succeed only if strategy, engineering, technology and implementation are developed and executed together. Without this integrated approach, re-industrialization remains fragmented, significantly reducing its impact.

In addition, the role of risk management is transforming fundamentally. While this was traditionally a support role, this domain is now evolving into an essential skill within organizations. Continuous monitoring of geopolitical developments and the ability to respond to these quickly are becoming key factors in competitive advantage. AI can play an important role in this by providing real-time insights and decision-making that quickly adapts to new situations. However, the role of risk management in operating models - and the opportunities that AI provides in this regard - are still not sufficiently appreciated. Organizations that do prioritize this will turn out to be tomorrow's global winners.





People remain the most important precondition

The transition toward integrated, risk-driven operating models also has direct implications for employees in every organization. As production environments become more digital and integrated, their role is shifting fundamentally. The old industrial model primarily rewarded repetition: people became valuable by performing the same tasks better over the course of the years. That model is losing ground. If a task can be learned primarily through repetition, AI or automation can take over that task. After all, repetition is the foundation of standardization. And standardization is that for automation and, ultimately, AI implementations.

The traditional distinction between operational, technical and digital roles will also blur. Increasingly, organizations will need employees with a combination

of skills. Professionals, for example, who combine practical experience with expertise in data and technology, and who are able to use data and technology to optimize processes. Engineers who understand what goes on at the customer's site. R&D specialists who can take account of supply chain risks.

The availability of expertise is becoming an increasingly important precondition for successful re-industrialization. After all, if you don't stay on top of technological developments yourself, you won't gain enough knowledge to keep up with things. The future skills gap could become wider and harder to bridge if organizations don't invest in their employees in a timely manner. So investing in technology without investing in people at the same time is a significant risk. This is a significant mission for Dutch companies.

Conclusions: from paper to reality

Many success factors for re-industrialization are already present in the Netherlands: strong knowledge clusters, high-quality industry, advanced technical engineering capabilities, excellent universities, a well-developed logistics infrastructure, an international outlook and a tradition of collaboration between businesses, government, and research institutions. Furthermore, there is a proven ability to adapt quickly and embrace new economic realities.

At the same time, there are also significant obstacles. Energy insecurity and grid congestion are hindering the development of new production capacity. A complex regulatory environment delays decision-making. And shortages of technical and digital talent pose a continuing risk. A successful transition therefore requires action on multiple levels:

- Governments that create the necessary conditions for innovation, energy, and industrialization
- Companies that explicitly include risks in their strategic decisions and invest in digital and data-driven operating models
- Ecosystems in which industry, education, and research institutions collaborate intensively

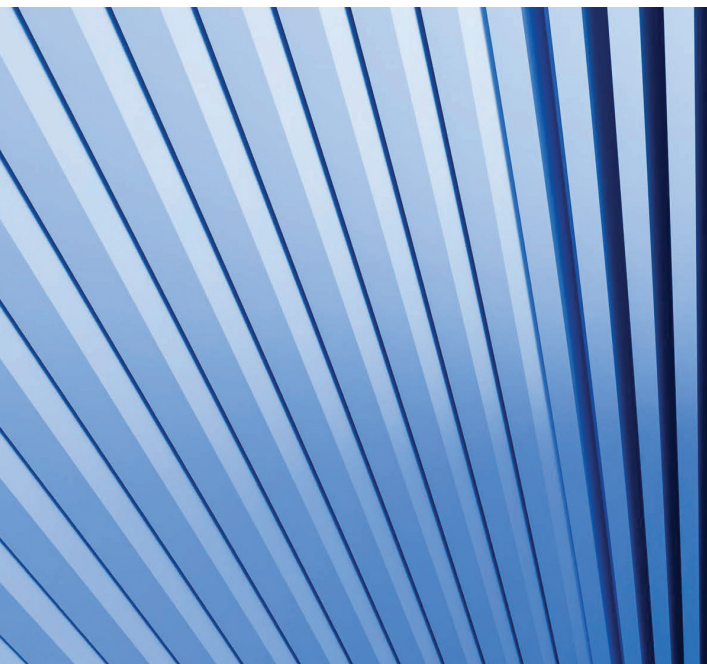
The government must ensure predictability in energy, infrastructure, regulations and knowledge. However, the main challenge does not rest solely with these necessary conditions. Clear and unified direction is also lacking. Without a clear direction, the Netherlands risks being overtaken by countries that are actively pursuing re-industrialization and reducing their dependence on others. We will then lose our strong economic foundation. The current government's failure to respond strongly to the recommendations in the December 2025 Wennink report is a striking example. The government must also follow through on recommendations and strategic documents. We need to get from paper to reality.

For organizations, this means they need to make substantive changes to the way they work:

- **Stop optimizing existing supply chains and start redesigning them**, with cost no longer being the sole determining factor
- **Make risk paramount in decision-making and governance** so that decisions align better with an increasingly unpredictable reality
- **Invest in both AI and talent simultaneously, not in phases**, in order to actually effect this change

The business community can take its own steps by identifying risks, by collaborating actively with governments and by accelerating investment in knowledge, digitalization and AI. In addition, sharing knowledge and building joint ecosystems is essential to achieving a greater impact. This requires a pragmatic approach: moving forward wherever possible while actively collaborating with government and ecosystems to address persistent problems.

Because waiting for the perfect conditions poses the risk of the transformation coming too late. As emphasized before: the question is not whether companies need to adapt their operating model, but how quickly they dare to do so. In a risk-driven world, waiting itself is the greatest risk.



Authors



Marcel van de Griend
Head of Intelligent Industry
Capgemini Nederland
marcel.vande.griend@capgemini.com



John Bakker
Director of Supply Chain
Transformations
Capgemini Nederland
john.bakker@capgemini.com



Bas Morselt
Market Unit Head Private Sector
Capgemini Nederland
bas.morselt@capgemini.com

This report was composed with contributions from the following Capgemini experts:

Erik Roelofs | **Giselle van Wissen** | **Els van der Velden** |

Joke Achterberg | **Esther Kok**

About Capgemini

As a global partner in business and digital transformation, Capgemini harnesses the power of AI to deliver tangible value to its clients. We conceive the future of organizations and bring this to life through AI, technology, and people. With a rich history spanning nearly 60 years, we are a responsible and diverse group of 420,000 employees in more than 50 countries. We deliver integrated services and solutions with our in-depth industry expertise and supported by a strong partner ecosystem. We commit our knowledge and expertise in the areas of strategy, technology, design, engineering and operational management. In 2025, the Group reported global revenue of €22.5 billion.

Make it real.

www.capgemini.com