

# Future of European manufacturing – Ready for 2030? Seven paths to success



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# Introduction

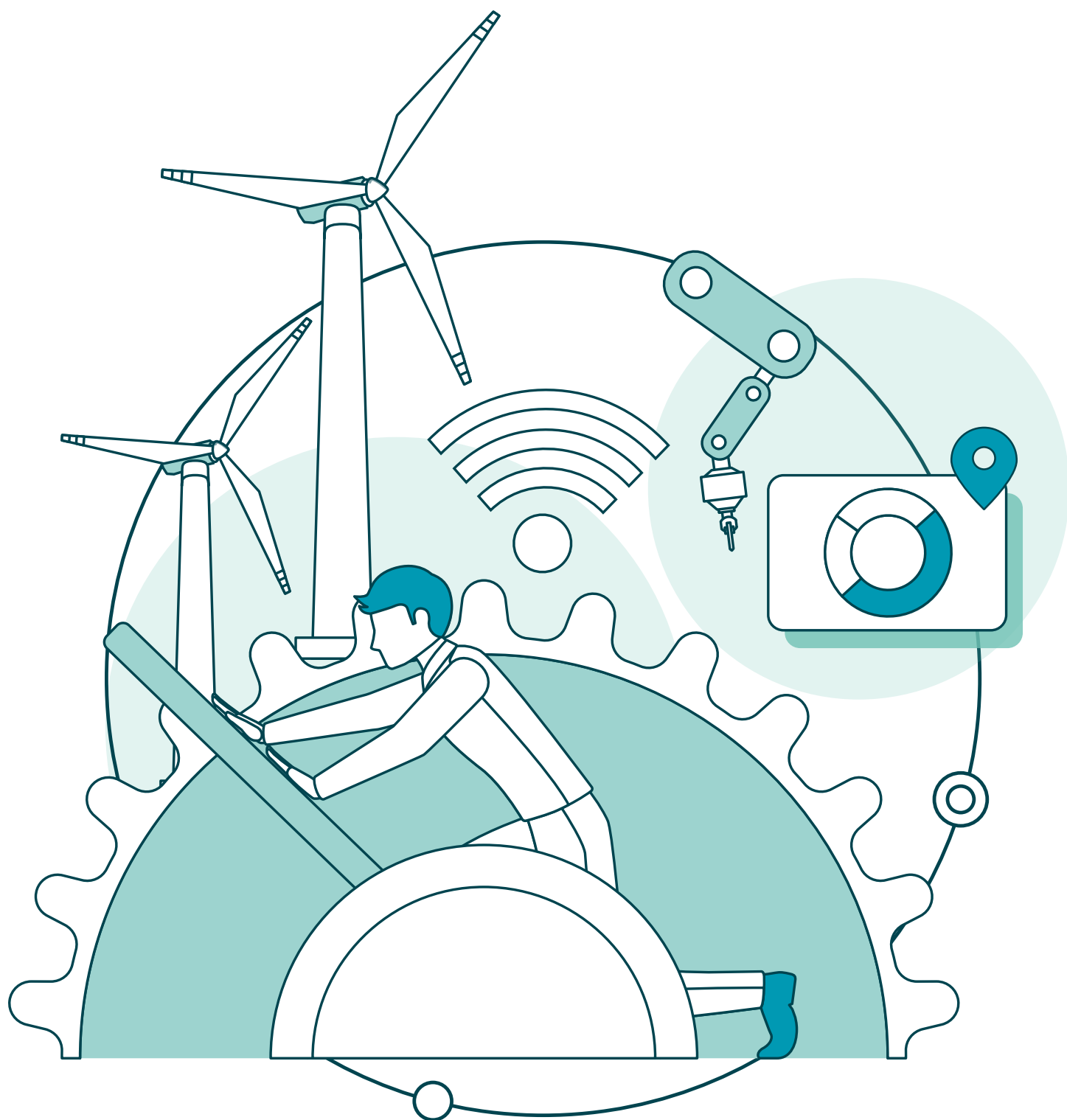
This white paper is based on Deloitte's extensive analyses as well as our surveys and discussions with subject-matter experts conducted in collaboration with top-tier companies in the industrial manufacturing sector. We bring together the experience, expertise, statistics, data, facts and opinions of numerous sources, providing in-depth analyses and placing them in a broader context. This allows us to identify a range of future strategies designed to put European companies on the road to success in 2030.

Back in 2021, we ventured a first look into the future with Deloitte's Industrial Manufacturing 2030 study<sup>1</sup> and have continued our analysis of the sector with other major Deloitte publications, for example the recurring CFO Survey.

This study is able to provide a variety of perspectives and insights thanks to our interviews with top management and c suite executives from mid-sized to multinational manufacturers as well as our discussions and deep dives with the VDMA research committee and other subject-matter experts. With such an extensive dataset, we can shed light on the latest trends and challenges in the current global economy and recommend a strategic course of action to sector players.

<sup>1</sup> See "Industrial Manufacturing 2030: 4 Scenarios" at the following link:

<https://www2.deloitte.com/content/dam/Deloitte/at/Documents/energy-resources/at-growth-engine-machinery-2030-en.pdf>



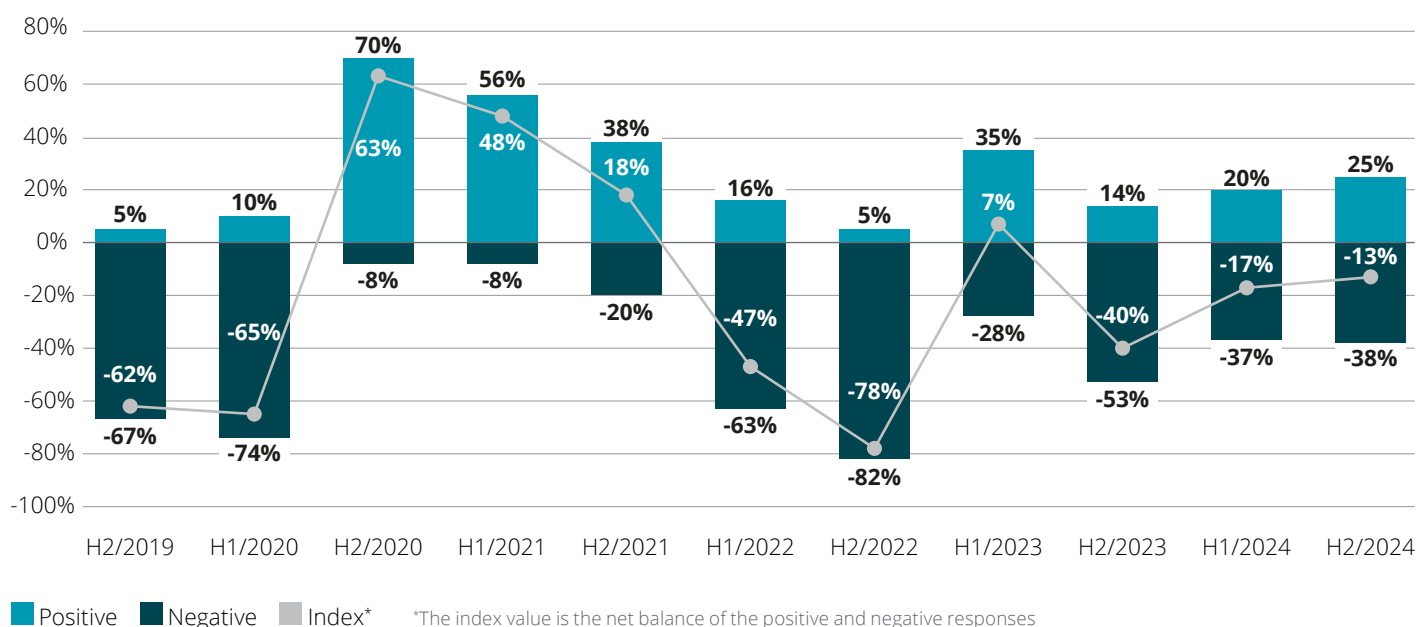
# 2030: The make-or-break year for strategic planning

In the next 6 years, it will be important for every enterprise to rethink their strategies and make key decisions for the typical five-year horizon that will impact the business from 2030. And a vast number of factors is driving these decisions. Not only will we find out how the global sustainability goals from the UN's Agenda 2030 play out, but also how the business world changes as artificial intelligence evolves from a mere innovation into an industry standard. These are just two examples among many future scenarios leading up to 2030, which we believe offer challenges as well as opportunities for European industry in general and industrial manufacturing in particular.

However, European industry is under increasing pressure. Its competitiveness, especially vis-à-vis Asian competitors, is declining. At the same time, the European economy continues to falter and to fall short of expectations. This is particularly evident in the case of Germany, once the world's leading exporter not only of cars but also of industrial goods such as machinery.<sup>2</sup>

Despite the challenging economic environment, now is the time for Europe's industrial manufacturers to reposition themselves and develop a strategy that gives them greater autonomy and the tools they need to win the future. We hope that this report and our seven strategies for future success will give you some food for thought at this pivotal moment!

<sup>2</sup> See also German Federal Ministry for Economic Affairs and Climate Action (2024), <https://www.bmwk.de/Redaktion/EN/Dossier/economic-development.html>.

**Fig. 1 – Current business outlook in the manufacturing sector compared to three months ago****Question:** How do you rate your company's current business prospects compared to three months ago?

### Sentiment remains negative, but some optimism is returning

The sentiment in the manufacturing sector is still negative, but has improved slightly – in the spring, 20 percent of CFOs were more optimistic than they had been three months earlier, and now the figure is at 25 percent, according to Deloitte's latest CFO Survey.<sup>3</sup> And yet, growth in manufacturing is still lagging behind the economy as a whole. That raises the questions: What exactly is the way forward?

### The global economy rallies, while Europe risks falling behind

Global and emerging economies are on the upswing, relying mainly on diversification to protect them against political risk, though there is still considerable political as well as economic volatility. India, for example, is investing 30 billion US dollars in the semiconductor industry, and the US has earmarked 370 billion US dollars for eco-friendly domestic production. The eurozone, by contrast, faces an uncertain future, with Germany ranked with the lowest economic growth in the eurozone in the first half of 2024, at 0.1%. The overall forecast for 2024 is even negative. To turn things around, we need bold strategic decisions that are driven, in part at least, by the industrial players themselves.

### Between now and 2030, it's "change or die"

Europe's industrial manufacturers have to make major changes today if they want to retain their competitive edge, embrace innovative technologies and champion sustainable solutions that align with market demand and increased public scrutiny. In our practice, we have seen how vital it is for manufacturers to develop and expand solutions expertise as a way to compete with cheaper rival products. Artificial intelligence (AI) will clearly play a major role here and drive benefits from automating routine tasks to mobilizing specialist expertise. More than 50 percent of the top managers in our survey believe AI offers the greatest transformation potential. These enterprises will also have to make sustainability a key priority as the demands of environmentally conscious investors and consumers get louder.

### Europe's industrial sector must act now to leverage these seven strategies for future success

It is time for industrial manufacturers in Europe to take decisive action: Despite current challenges, the European manufacturing sector is still leading on the global market in technology and quality. The most

promising trends we see for manufacturers in the medium term are bundling products and services into comprehensive solutions and addressing clients' demand for more consulting services. There is also considerable opportunity in eco-friendly industrial production, as demonstrated by Europe's steel industry which has adopted sustainability as a strategic goal and is starting to invest in green steel production. And last but not least, the build-up of arms and post-conflict reconstruction in Ukraine also promise to create opportunities for industrial manufacturers.

On the following pages, we discuss seven key levers around markets, customers, innovation, sustainability, resilience, artificial intelligence and talent, pointing out where there is room for improvement in the European industrial manufacturing sector. Each of these issues offers important insight into future growth prospects based on Deloitte's studies, interviews and consulting experience.

<sup>3</sup> Deloitte (2024): CFO-Survey Fall 2024

# 1. All for one in Europe's manufacturing sector!

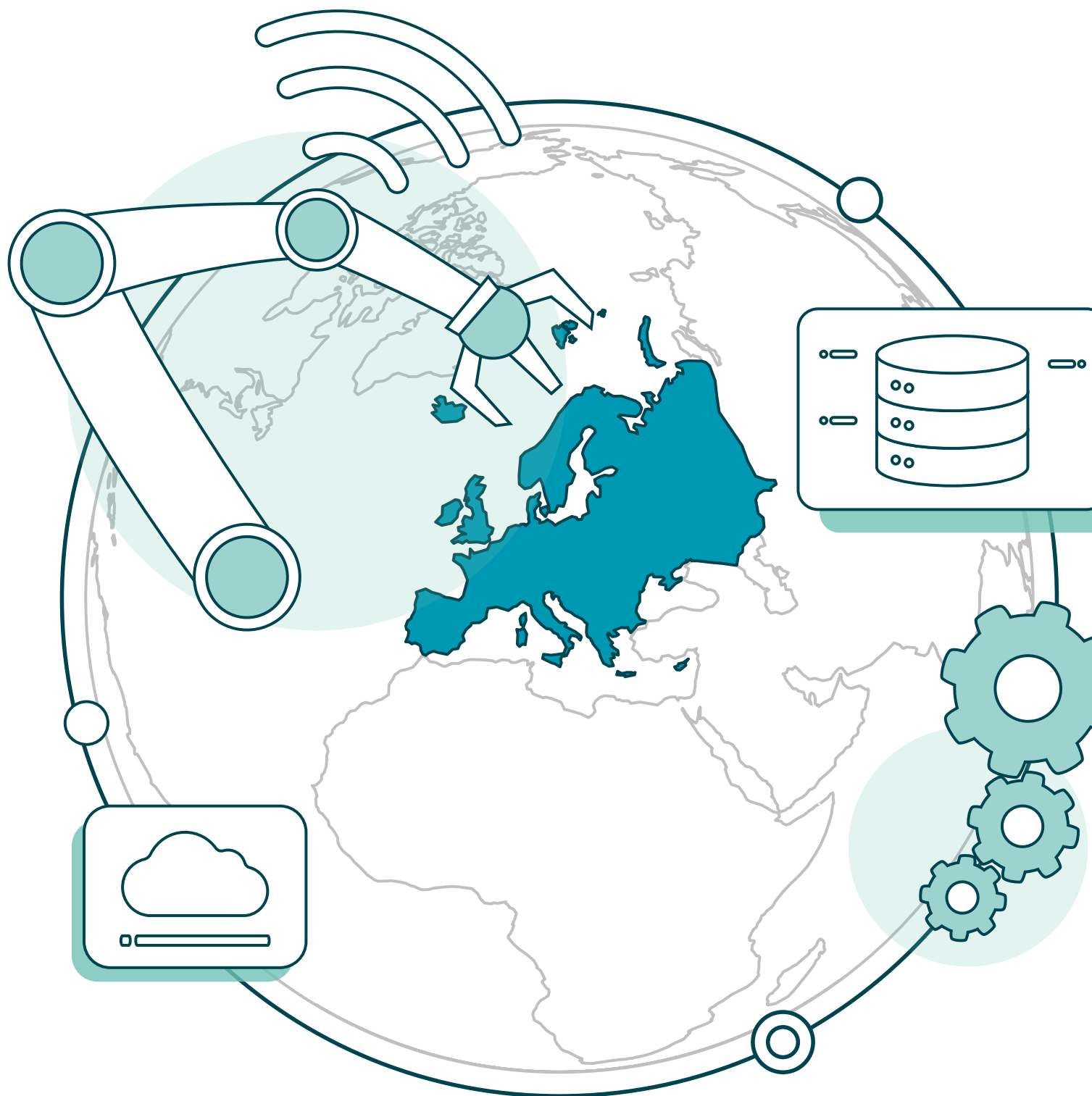
Between now and 2030, European industrial manufacturers will face considerable geopolitical and global political challenges, particularly if we see China and the US forming a stronger economic bloc. Our current CFO survey indicates that these tensions are also having an impact on the investment decisions of manufacturing companies (Deloitte, 2024, see Fig. 2).<sup>4</sup> To provide a credible counterweight and stimulate growth, Europe's enterprises have to pursue a global reach as well as a strong local presence.

## **Strengthening Europe while also capitalizing on emerging opportunities**

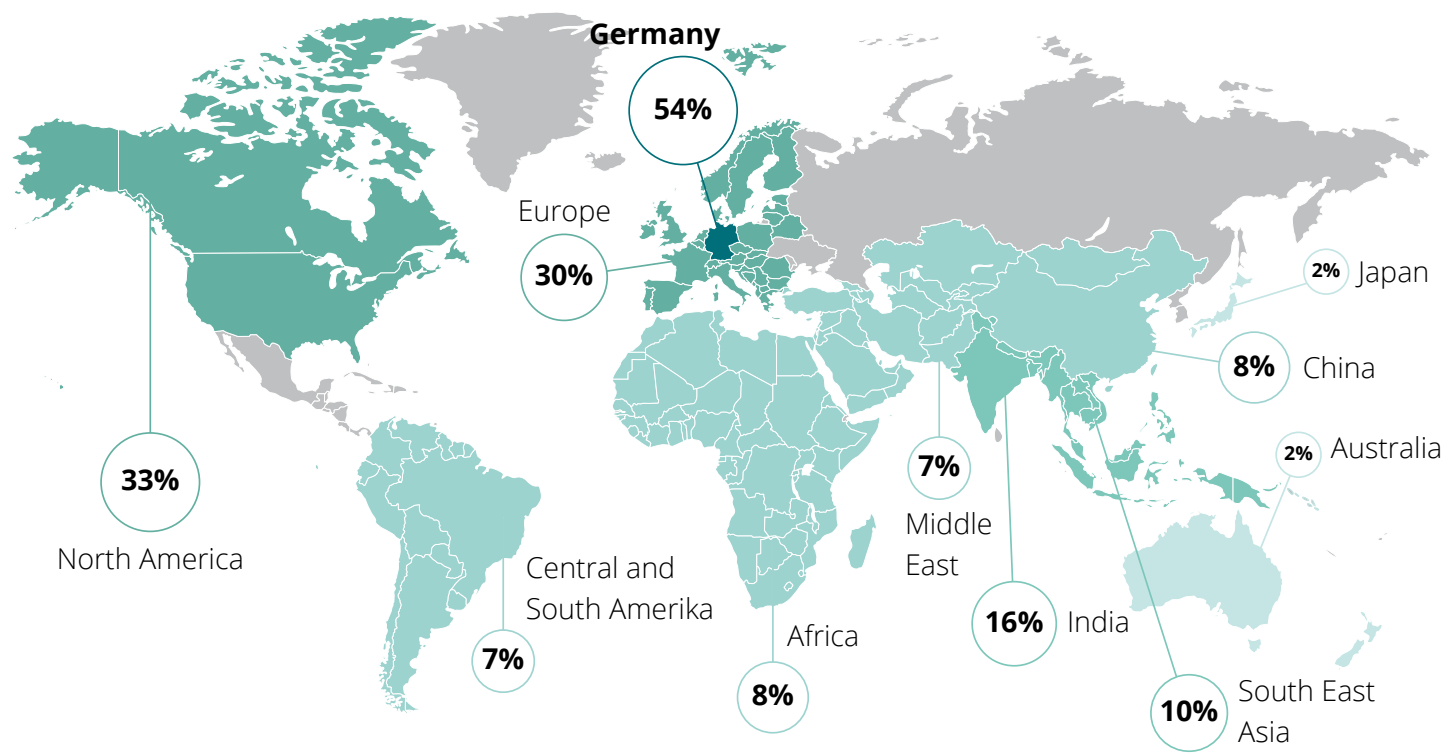
Globalization opens up opportunities on markets across the world and helps enterprises increase their competitive edge through access to new customers and business prospects. That is why it is so important to bolster Europe without completely removing Asia from the equation. Of all the markets for industrial products, Asia still offers the highest growth potential; so maintaining a strong presence in the region is vital if manufacturers want

to make the most of that potential. Focusing on regional priorities and adapting to local market conditions is decisive when it comes to meeting demand and seizing the opportunities available in different countries. At the same time, it is equally important for European players to collaborate across industries in R&D and other areas to create a strong counterweight. Competition for energy sources is another key issue here that calls for stronger alliances among industrial manufacturers at the European level.





**Fig. 2 – Medium-term investment priorities by region for in five years according to German CFOs of industrial companies**  
**Question:** Which regions will you be investing in five years from now?



### Tailored strategy for different economic blocs and regions

Manufacturers have to develop custom strategies for each different location in response to the stronger US and China bloc and the need for a more powerful European presence. As the Deloitte CFO Survey has shown for some time, the majority of CFOs in the manufacturing sector see geopolitical risks as a significant risk factor. One member of the ISLA network active in plant engineering says this is already the reality: “Decentralization will be a major priority between now and 2030. We plan to focus our global activities more on individual regions to get closer to customers—for after-sales service and sales but also for production.”<sup>5</sup>

By employing a “local-for-local” approach in regional units, companies can benefit from economic growth in China and other high-risk countries. The best way to mitigate overall risk and contain specific regional risks is to set up separate local organizations with their own production sites and limited information flows, e.g., to prevent data from being shared as the result of cyberattacks. At the same time, there has to be a dedicated strategy for the US market that capitalizes on government initiatives to bolster the American manufacturing industry, for example by estab-

lishing a stronger presence in the country to take full advantage of the low energy costs, subsidies and other incentives in the Inflation Reduction Act (IRA). Europe also looks set to regain relevance as a location for production for the reasons we mentioned above, e.g., as China-based production becomes more expensive and riskier. With manufacturing relying more and more on automation, companies see their headcounts decreasing—along with the associated labor costs—and manufacturing companies in Europe need to collaborate more closely to navigate these changes.

<sup>5</sup> Participant at ISLA's 2024 Service Leaders Summit

### Rethinking the production network

That means enterprises will have to rethink their global production network in the run-up to 2030. Due to the factors outlined above, more production investments are shifting back to core Western markets than a few years ago. On a continental scale, the US leads with 33 per cent of CFOs saying they would invest there in the medium term. Europe is also gaining in importance as a location, with Germany playing a central role. 30 per cent of CFOs see Europe as a further focus for investment, with Germany leading the way with 54 per cent agreement. The main drivers here are geopolitical stability, reliable conditions and therefore better market access. As China continues to pursue authoritarian and expansionary policies, India's global profile is rising, both as an alternative production location as well as a sales market and a hub for broader access

to Southeast Asia. 28 per cent of the CFOs in our survey not only see more opportunity for investment in India in the coming months and years; they also see a need to invest in the country's critical infrastructure (i.e., IT skills) and production facilities.

Manufacturers need to rethink their production networks on the European continent as well. In our practice, we are seeing more and more clients relocating headquarters or branch offices to gain tax advantages. The disparities in energy and/or labor costs—in addition to taxation—will continue to incentivize companies to adopt a more “agile” approach to their production network.

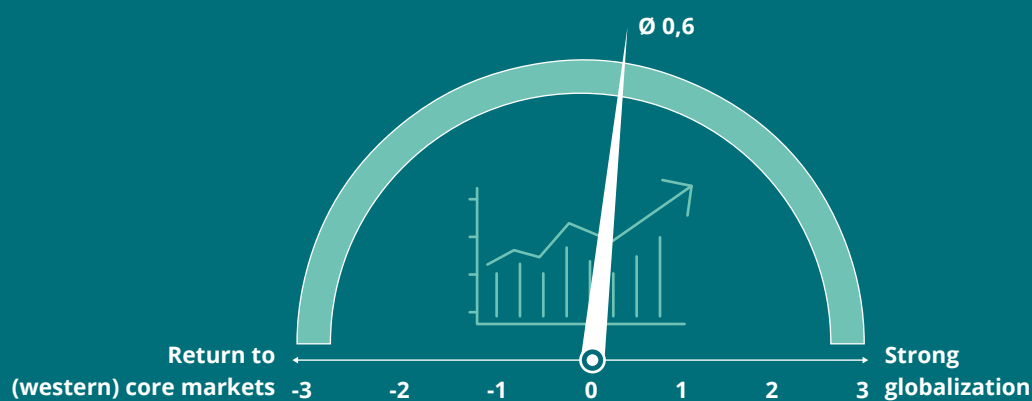
“We need to work towards a more cohesive European manufacturing sector. That means exchanging ideas, engaging in debate and exerting influence to improve our status as a production location while also maximizing the potential of global expansion at the same time. Striking the right balance here is key. Wouldn't it be great to have a 'Europe Inc.' along the lines of the successful 'Germany Inc.' of the 1980s and 90s? After all, that is what made us the world's leading exporter for decades and brought prosperity to the entire country.”

**Oliver Bendig,**  
**Deloitte Partner and Lead Industrial Products & Construction Sector**



## What the experts in our network are saying

**Fig. 3 – Findings on challenging market conditions based on our interviews with the strategy experts in our survey and the VDMA committee<sup>6</sup>**



### Findings

Although 57 percent of the respondents in our survey believe that globalization with a modified production network and independent local organizations is still vital, there is no clear majority view. The opinions of our experts on this issue in particular remain divided and contentious.

### Our assessment

With the huge growth potential on the Asian market, a stronger US/China trade bloc and ongoing geopolitical threats, Europe's industrial manufacturers face a tough challenge: global growth or greater autonomy? Globalization is inevitable, but the key to success is adapting your strategy to local realities, for example by setting up local branches in China and leveraging the advantages on the US market with a local-for-local approach.

<sup>6</sup> Deloitte (2024): survey based on Deloitte's interviews and discussions between May and July 2024, n=30.

## 2. Creating customer-centric solutions that win!

Growing competitive pressure, particularly now that industrial goods made in Asia offer comparable quality, is making it more difficult for European manufacturers to set themselves apart. Their efforts to remain competitive present a quandary: focus on stand-out “Made in Europe/Germany” products or make the inevitable shift to solutions provider with more comprehensive service packages? Digital innovation plays a decisive role here, helping manufacturers adopt a more customer-centric approach with tailored solutions that address the specific needs of the customer and lead to long-term partnerships (“lock-in effect”).

### Think like a customer: the customer journey

In the machine manufacturing sector, there have always been thought leaders who envisioned a closer link between sales and service, but it has rarely succeeded in practice—often because manufacturers were afraid of jeopardizing the status quo. This mindset needs to change: It simply isn't enough for manufacturers to focus exclusively on closing another sale; they need to broaden their horizons to the customer journey as a whole and provide targeted services across all possible channels—including products, spare parts, consumables and services as part of comprehensive solutions with regular updates and support. To highlight one key indicator, the growth forecasts for the equipment-as-a-service market remain strong at 35 percent,<sup>7</sup> and leading industrial manufacturers are adding consulting services, operating models, exclusive packages, upgrades and more to their solutions, which promise to differentiate European players from their Asian rivals.

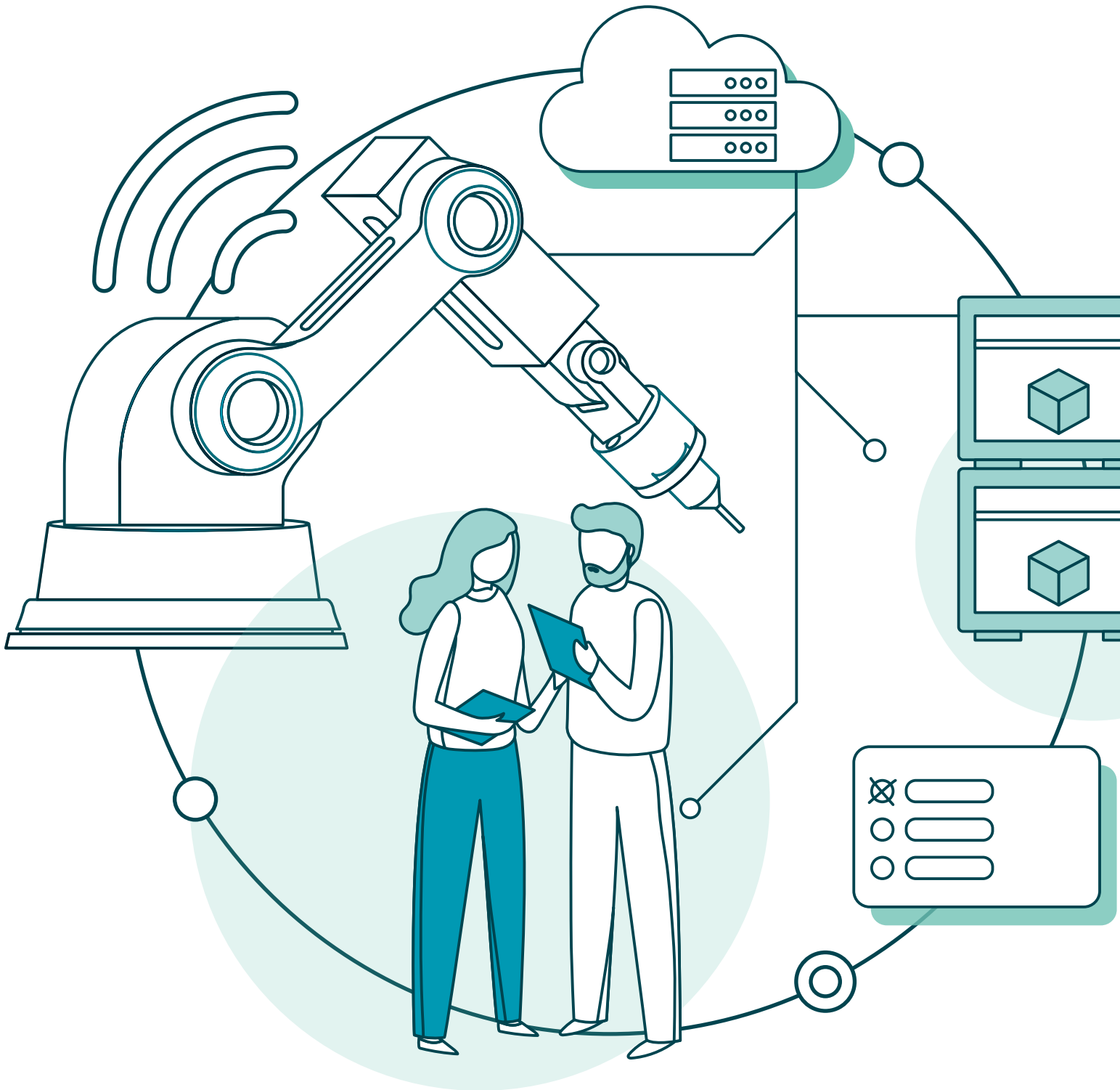
However, as Deloitte's “Customer Excellence in Industrial Manufacturing” study shows, a majority of manufacturing companies are still behind the curve when it comes to customer-centricity. More than 40 percent still haven't really thought about the customer journey and what it means to provide comprehensive solutions (Deloitte, 2023, see Fig. 4).<sup>8</sup> In many cases, these companies have managed to conceptualize and develop service packages, but the efforts fall flat when it comes to monetization because they don't consider the day-to-day realities of the users. This leads to frustration on the part of developers, a lack of understanding on the part of customers and promising projects that die a quiet death. The projects and project inquiries we see in our consulting practice confirm this observation. For too many industrial manufacturers, developing high-quality products has always been their main priority, rather than looking at things from the customers' perspective and focusing on adding value for them—especially with digital services.

### The customer-centric enterprise

By 2030, collecting, updating, segmenting and evaluating valid customer data and market analyses will be a critical success factor for customer-centric companies. The practice of understanding and actively inquiring about the needs of the customer will become a springboard for innovation. Companies may have to fill new roles, such as customer journey manager, to ensure they curate and optimize all of the interactions with a company to create a consistent, satisfactory and positive customer experience. They can also mine the vast pool of customer data to gain AI-driven predictive customer insights and identify what customers need in advance.

<sup>7</sup> IoT Analytics: Equipment-as-a-Service (2020)

<sup>8</sup> Deloitte (2023), Customer Excellence in Industrial Manufacturing: Sustainable growth through customer centricity [https://www2.deloitte.com/content/dam/Deloitte/de/Documents/energy-resources/Customer%20Excellence%20in%20Industrial%20Manufacturing\\_Vol2-EN-Deloitte.pdf](https://www2.deloitte.com/content/dam/Deloitte/de/Documents/energy-resources/Customer%20Excellence%20in%20Industrial%20Manufacturing_Vol2-EN-Deloitte.pdf)



### Omnichannel is the key

Omnichannel capability will become the basis for customer interaction, providing a seamless link between online and offline channels to reach and serve customers more efficiently and cost-effectively. In a recent Deloitte study, we show that machine manufacturers could achieve efficiency gains of up to 10 percent by optimizing interaction along the entire customer journey (Deloitte 2023).<sup>9</sup> This seamless integration allows manufacturers to take online interactions offline and vice versa without any disruption. Having a centralized online system means everyone has rapid access to all relevant customer data and processes. Customers can use the omnichannel platform when, where and how they like to manage their own data, place smaller orders or obtain further training. Giving customers this level of control will help optimize staff allocation as well as processing times per interaction, making efficient use of highly qualified specialists and simplifying customer interaction at the same time.

Investing in customer centricity and creating solutions that add value for the customer is the key to success in European manufacturing—regardless of the sector. In some ways, manufacturers have a lot to learn from consumer goods, e commerce and even US-based tech giants, where decision-makers are more agile and more willing to take risks. We need to be bolder in our approach again if we want to win.

**Fig. 4 – Availability and use of structured customer journeys and growth forecasts for the equipment-as-a-service market (Deloitte (2023), Customer Excellence in Industrial Manufacturing: Sustainable growth through customer centricity).**



“Becoming a solutions provider will be key for machine manufacturers if they want to hold their own against Asian competitors in particular. It will be critical for German manufacturers to reposition themselves and create clear end-to-end solutions that stand out from ‘good enough’ rivals. Relying on service alone as a differentiator will simply no longer be sufficient.”

**Sandra Wagner,**  
**Vice President Digitalization at König & Bauer**

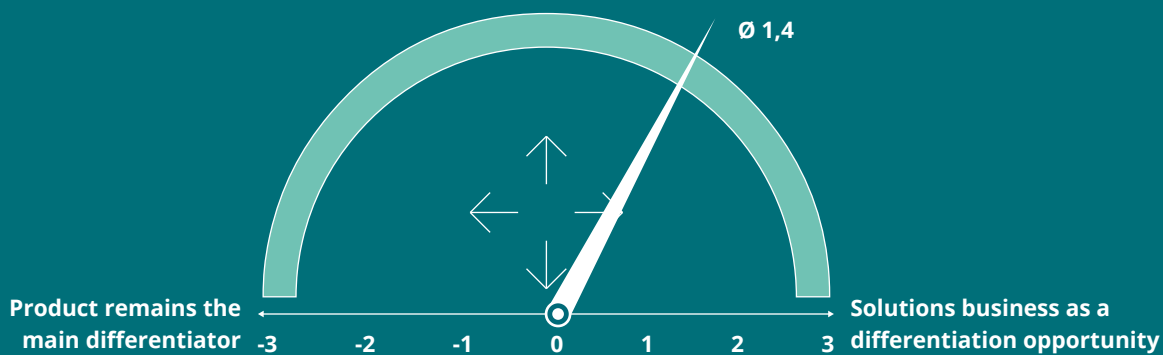
<sup>9</sup> Deloitte (2023), Customer Excellence in Industrial Manufacturing: Sustainable growth through customer centricity  
[https://www2.deloitte.com/content/dam/Deloitte/de/Documents/energy-resources/Customer%20Excellence%20in%20Industrial%20Manufacturing\\_Vol2-EN-Deloitte.pdf](https://www2.deloitte.com/content/dam/Deloitte/de/Documents/energy-resources/Customer%20Excellence%20in%20Industrial%20Manufacturing_Vol2-EN-Deloitte.pdf)





## What the experts in our network are saying

**Fig. 5 – Findings on differentiation and market strategies from our interviews with European manufacturing experts<sup>10</sup>**



### Findings

78 percent of our respondents see the move to solutions provider as a differentiation opportunity, particularly when it comes to omnichannel customer care, and are clearly shifting their focus from pure product business to more customer-centric solutions.

### Our assessment

More and more companies are focusing on the solutions business to build customer loyalty and offering outstanding service as a differentiator against cut-price Asian competitors. It remains to be seen, however, whether this will be enough to compete with the (still) lower prices.

<sup>10</sup> Deloitte (2024): Survey based on Deloitte's interviews and discussions in the period from May to July 2024, n=30.

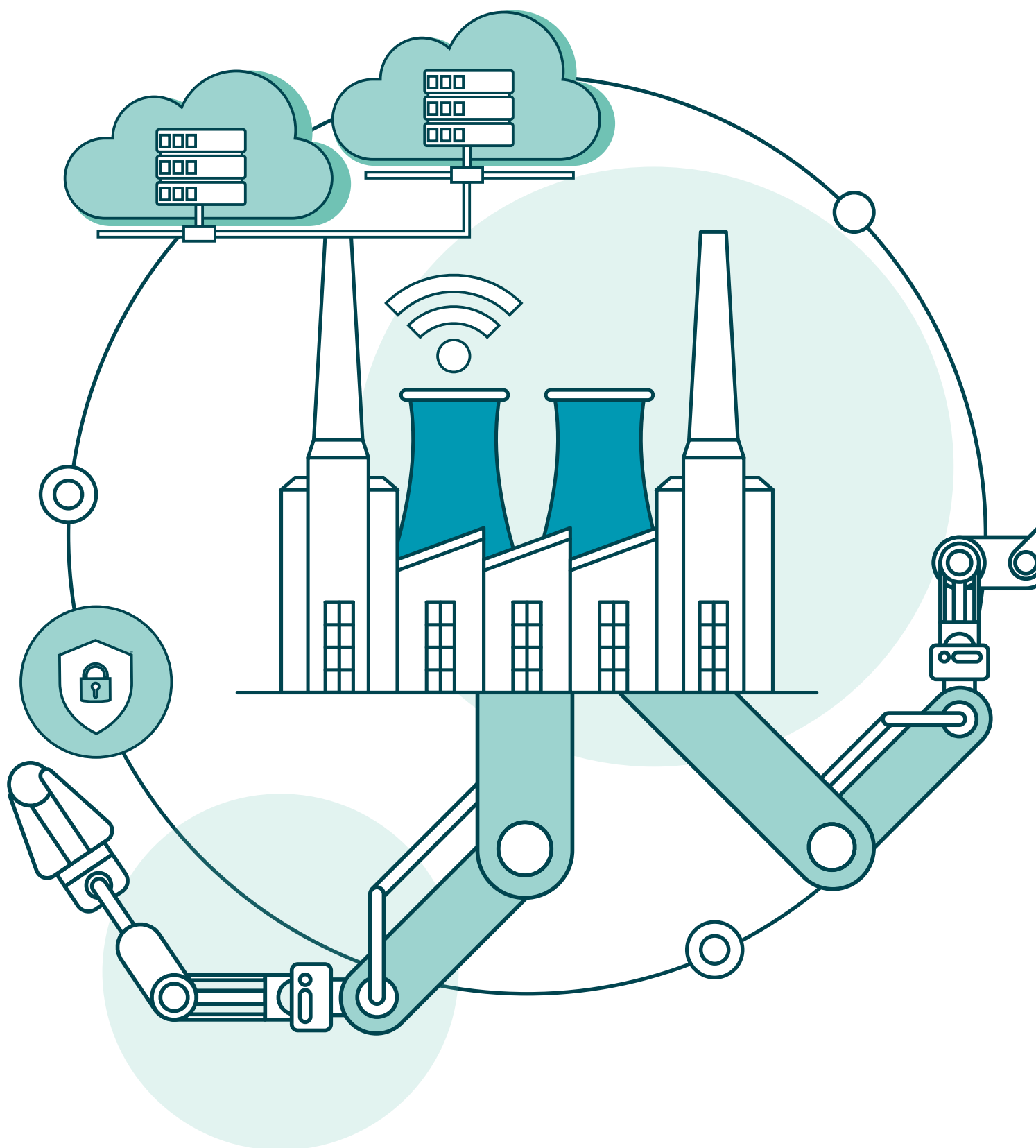
### 3. Rethinking collaboration as an engine for the future!

By 2030, industrial manufacturers in Europe will also have to take a critical look at their overall capacity for innovation and decide whether they are in a position to take it further—if nothing else, to stand out from the competition as solution providers. Developing joint ecosystems and partnerships can play a key role in this transformation strategy. After all, collaboration, even with a competitor, offers new innovation potential and gives companies a chance to deepen their expertise beyond pure technical skills as products become increasingly complex.

#### **From service provider to partner**

Most machine manufacturers are already working with a variety of service providers that specialize in after-sales service, software development, warehousing, production planning and marketing as well as cloud services and big data applications. A recent Deloitte study reports that 61 percent of the manufacturing executives in the survey see partnerships with specialist suppliers as a key element of their innovation and growth strategy (Deloitte, 2023, see Fig. 6).<sup>11</sup> Between now and 2030, industrial manufacturers need to reinforce their partner ecosystems, moving away from purely transactional relationships with these service providers and forming strategic partnerships instead. The goal of these part-

nerships is to expand the business as well as create and possibly even co-fund new business models. Working with partners like these, even if it is horizontal cooperation in the same market or sector, creates space and potential for new innovations, particularly in terms of cross-industry R&D and data exchange. This dynamic will require a complete paradigm shift, as business development opportunities with partners and competitors have been exceedingly rare in the machine manufacturing sector to date.



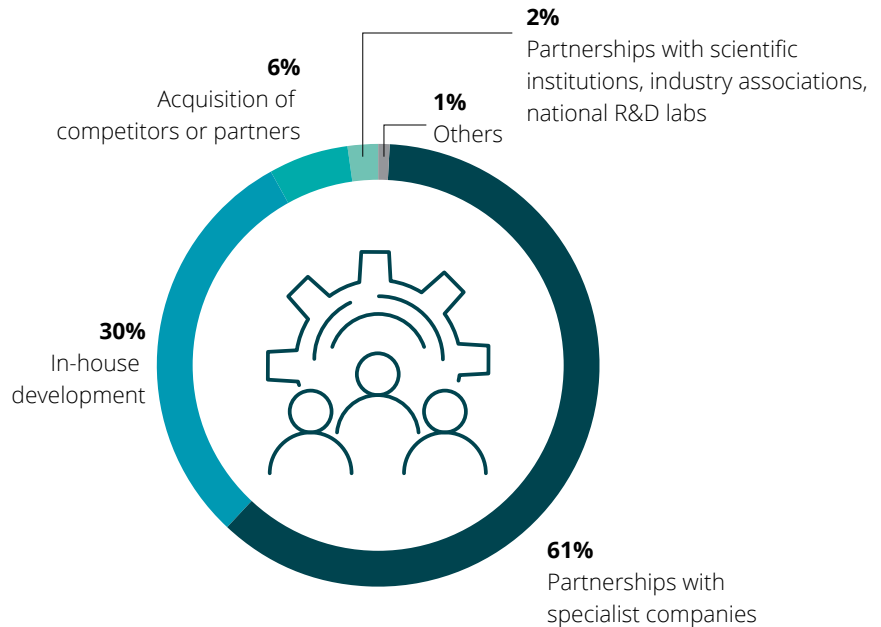
### Partner networks need managing

Companies need internal expertise to build and manage this sort of partner network between now and 2030, particularly when it comes to finding the right partners, coordinating strategy and creating long-term relationships. Leaders can—and must be willing to—radically rethink their strategy; out-of-the-box thinking is key. And that means clearly defining your partnership goals, identifying and closing any skills gaps, and developing an innovative strategy for the future that maximizes potential synergies. What manufacturers should be prioritizing is transparent, targeted collaboration based on shared objectives and open communications.

### The “Europe Inc.” proposition

Ideally, companies with similar circumstances and a similar culture will collaborate in these partner ecosystems, as we have seen American and Japanese companies do successfully. A European version of this, i.e., ‘Europe Inc.’, based on common European values and goals could be more effective than a global approach. That said, operational considerations such as efficiency gains and cost optimization will still be the key drivers, along with regulatory requirements. Joining forces with these partners might also make a lasting impact on policy and regulations, moving legislators in the right direction in terms of investments or bureaucracy.

**Fig. 6 – Importance of partnerships in the innovation strategies of industrial manufacturing companies through 2029**



“Acquisitions and partnerships are key drivers for manufacturers looking to expand their product range and strengthen their market position, while agility and interoperability are essential for success in Industry 4.0. We are convinced that alliances between willing partners will promote new digital business models in the medium term, though it is clear that government support would motivate and accelerate the process.”

**Prof. Dr. Matthias Niemeyer,**  
CEO, Uhlmann Group



## What the experts in our network are saying

**Fig. 7 – Findings on innovative focus and ecosystem impact from our interviews with the strategy experts in our survey and the VDMA committee<sup>12</sup>**



### Key message

73 percent of respondents show no clear inclination to diversify through ecosystems or to concentrate on their core business.

### Our assessment

Companies recognize that building ecosystems as part of a united Europe opens up opportunities to compete on the global stage; however, there is a lot of uncertainty when it comes to the lack of government support, their own limited experience and the risks involved. European engineers are not always comfortable working with others and culturally they are more focused on experimenting with and optimizing product performance rather than creating value—or the perfect products—for their customers.

<sup>12</sup> Deloitte (2024): Survey based on Deloitte's interviews and discussions in the period from May to July 2024, n=30.

## 4. Making sustainability a clear priority!

Sustainability looks set to remain a top issue through 2030. And even though Europe is seen as a sustainability pioneer within the global economy, the manufacturing industry, one of the biggest CO<sub>2</sub> emitters, is under particular pressure to take a position as new challenges arise. On the one hand, machinery and plant manufacturing companies are facing growing regulatory requirements; on the other, the options for today's players are vast and varied: from pioneering eco-warriors focused on achieving energy independence in Europe to mainstream companies simply adding a green product range. It is up to European manufacturers to make forward-looking decisions regarding the role they want to play in the sustainability transition—everyone has to choose their own path.

### **Rushing into it carries risks ...**

In 2024, a lot of critics are still talking about sustainability as a luxury only the “wealthy” can afford. There are, however, innovative companies already proving that sustainability isn't just a “nice-to-have”, but rather a “must-have” in environmental and long-term economic terms. That said, each company needs to find the right

tempo for their green transition: rushing into it carries serious financial risk, but acting too slowly could prevent manufacturers from keeping up with market and customer demand.



### ... but lagging behind could jeopardize the business

We expect sustainability to become even more important in the run-up to 2030, and companies need to be prepared, whether they focus on reducing the amount spent on CO<sub>2</sub> offsets, meeting investors' sustainability expectations, or satisfying end customer demands for eco-friendly products. If they fail to invest enough in sustainability, industrial manufacturers risk losing market relevance and competitiveness. That is why it is so crucial to set the speed of the sustainability transition based on that of the customer to minimize profitability risks. In a number of our consulting projects, we find that many manufacturers are not necessarily eager to make a quick yet measured transition to sustainability in the form of reuse, refurbish, remanufacture, repurpose & recycle (the 5 Rs of the circular economy). Their customers, however, i.e., the people using the machines and production lines, are demanding action in no uncertain terms. In other words, those "nice to have" sustainability initiatives are quickly becoming "must haves" for manufacturers who want a future in selling new machines.

### A sustainability strategy is key

To turn sustainability into a profitable European USP, the manufacturing sector needs to define clear sustainability benchmarks that apply across the entire value chain and product lifecycle. The key consideration here is making sure the benchmarks are focused on adding value for the customer. As we highlighted in a recent Deloitte sustainability study with a consumer focus,

almost half of end customers say they are not willing to pay a green premium for sustainable products,<sup>13</sup> and this applies to products as well as services and processes. Despite—or perhaps because of—CO<sub>2</sub> offsets, many are finding it more expensive to produce machinery and therefore end products. Industrial manufacturers have to show customers the benefits and added value of their sustainability initiatives and be transparent about any extra costs if they want to keep their margins intact.

"Sustainability will always be in our DNA. The challenge in the future will be to find lower-emission solutions for our increased energy demands—and to find them as quickly as possible."

**Massimo Muzzi,**  
**Vice President for Strategy, Business Development & Sustainability,**  
**ABB Electrification**

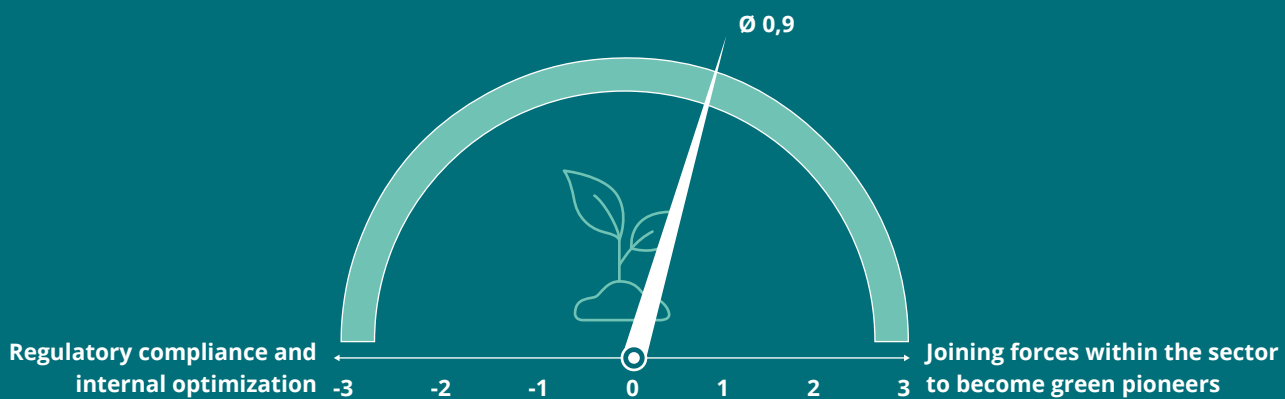
<sup>13</sup> Deloitte (2023): Creating value from sustainable products, <https://www2.deloitte.com/content/dam/Deloitte/ca/Documents/consumer-industrial-products/ca-en-consumer-creating-value-from-sustainable-products-aoda.pdf>.





## What the experts in our network are saying

**Fig. 8 – Findings on the commitment to the green transition from our interviews with the strategy experts in our survey and the VDMA committee<sup>14</sup>**



### Key message

When it comes to how they view sustainability, the companies in our survey are split: 36 percent are focused exclusively on regulatory compliance, while 64 percent are looking to become sustainability leaders.

### Our assessment

With customers unwilling to pay the green premium and an increasingly strict regulatory regime, it is no wonder companies are feeling anxious. Coming up with a broad-based, shared approach to sustainability must take place in collaboration with private industry and government officials. That said, the focus should not only be on selling eco-friendly products; we need to transform the entire sector—a shift that even China and the US are embracing.

<sup>14</sup> Deloitte (2024): Survey based on Deloitte's interviews and discussions in the period from May to July 2024, n=30.

## 5. Building resilience—not only in the supply chain!

Experts expect geopolitical tensions to (continue to) escalate, regulations to become even stricter and cybercrime to soar between now and 2030. In the current economic climate, most industrial manufacturers are focusing more and more on efficiency gains through cost optimization and automation, though other important future issues, such as supply chain security, improving smart operations (including cybersecurity) and making both production and administration more flexible (e.g., through shared services), are still on their radar. The goal is to be agile enough to respond to changes in the market and prepared for whatever the future has in store.

### **Resilience is still a top priority for CEOs**

Even as late as 2030, we can expect resilience to still be a top priority at board level. Managers want to be proactive rather than solely defensive: 83 percent of supply chain managers in industrial manufacturing say they expect supply chain risks to have a permanent effect on margins (Deloitte, 2024).<sup>15</sup> Simple interventions like making processes more efficient, lowering costs or improving existing workflows are no longer enough. Instead, companies need to rethink the entire supply chain and make sure it is protected and flexible enough to survive over the long term. What this means in concrete terms is investing in alternative locations, developing new processes and building or rebuilding the production network. Resilience requires businesses to evaluate and adapt their workflows on an ongoing basis to benefit

from innovation, while also taking an agile response to evolving customer requirements and changes along the entire supply chain: whether it is extracting raw materials or physically operating the machinery on site over ten, 20 or even 50 years.

### **Rethinking outsourcing and shared services**

One effective way to make supply chains more flexible and translate new skills into new workflows and offerings is to outsource non-core business activities. In this context, more than 40 percent of the CFOs in the industrial manufacturing sector last year already saw buy options for non-transactional activities as a strategic advantage because of the flexibility it offers when it comes to scaling the business (Deloitte, 2023, see Fig. 9).<sup>16</sup> Alternatively, businesses can package tasks

they don't outsource as "global shared services", essentially setting up a centralized in-house service center responsible for non-core activities such as invoicing for one or more companies. These shared service centers make companies more resilient, encourage more professionalization in peripheral disciplines, cut costs and speed up digital transformation. Near-shore solutions in particular are playing a bigger role here.

<sup>15</sup> Deloitte (2024): Supply Chain Pulse Check 2024 – Supply chains and margins under pressure – technology as a beacon of hope, <https://image.marketing.deloitte.de/lib/fe31117075640474771d75/m/1/76878a56-a2fe-4563-a52f-7b084b5ec7fa.pdf>.

<sup>16</sup> Deloitte (2023): CFO Survey Herbst 2023 – New investment strategies, the potential of AI and outsourcing (N=58), <https://image.marketing.deloitte.de/lib/fe31117075640474771d75/m/1/d0906c65-36f3-4aac-9903-17d8a3e57c06.pdf>.



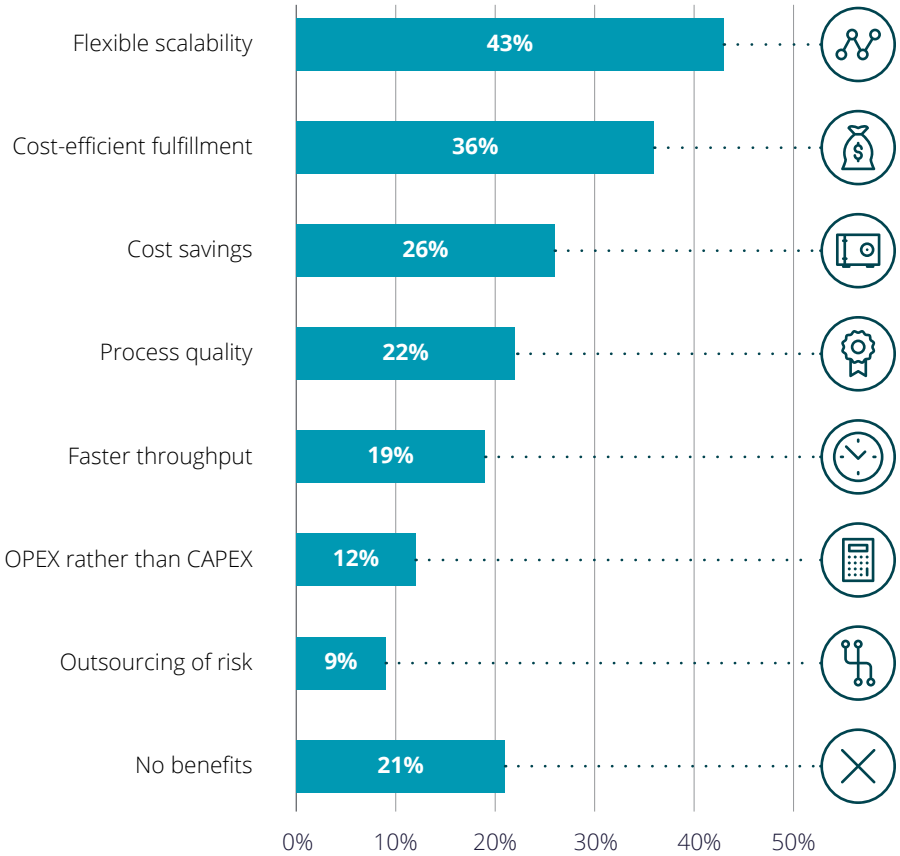
The demand for more resilience that goes beyond the supply chain is already apparent in the “normal” course of business. But what if companies face even more extreme scenarios in the future—both in terms of politics and transformation? What if, for example, the energy transition fails on a grand scale? Today more than ever, it is up to industrial manufacturers to actively observe, analyze and evaluate all possible scenarios. This will help them draw conclusions and, where necessary, adapt their operating models with an agile approach, for instance with decentralized shared services. For this reason alone, strategic forecasting is becoming an increasingly critical success factor.

**Cybersecurity**

As digital transformation advances, developing a robust cybersecurity strategy will be crucial. The number of cyberattacks is soaring, while the potential damage caused by data theft, denial of service attacks or viruses is becoming exponentially worse. Companies need to take targeted action to protect their IT infrastructure, whether it is implementing advanced security technologies, regularly training staff or developing a proactive incident response system. This is the only way to make companies more resilient to cyber threats and ensure business continuity.

**Fig. 9 – CFO perspective on the advantages of using buy options for non-transactional activities**

**Question:** In your opinion, what are the benefits of using buy options for non-transactional activities?



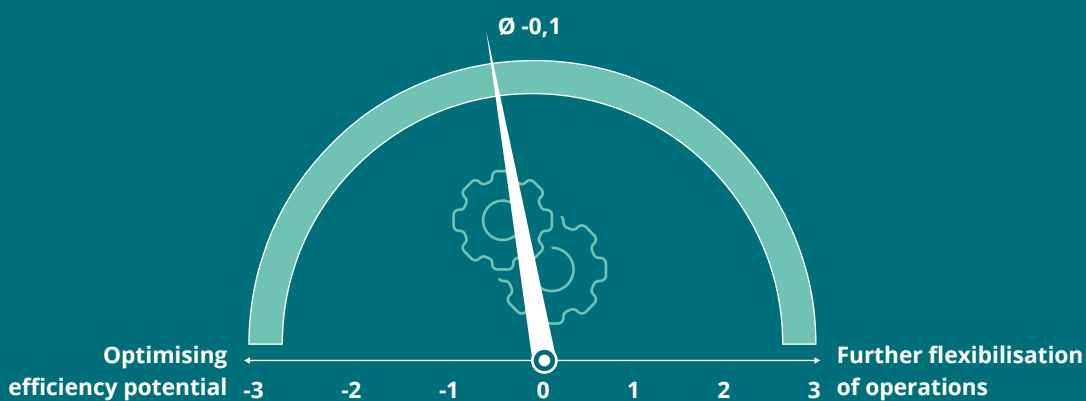
“Efficiency and agility are not mutually exclusive goals—they complement each other. Efficiency helps you make optimum use of the available resources, while agility enables you to adapt to changes in the market as they happen. Both are vital for long-term success and innovation.”

**Sami Laine,**  
**Lead Partner for Industrial Products & Construction, Deloitte Nordics**



## What the experts in our network are saying

**Fig. 10 – Findings on the transformation towards future-proof operations from our interviews with the strategy experts in our survey and the VDMA committee<sup>17</sup>**



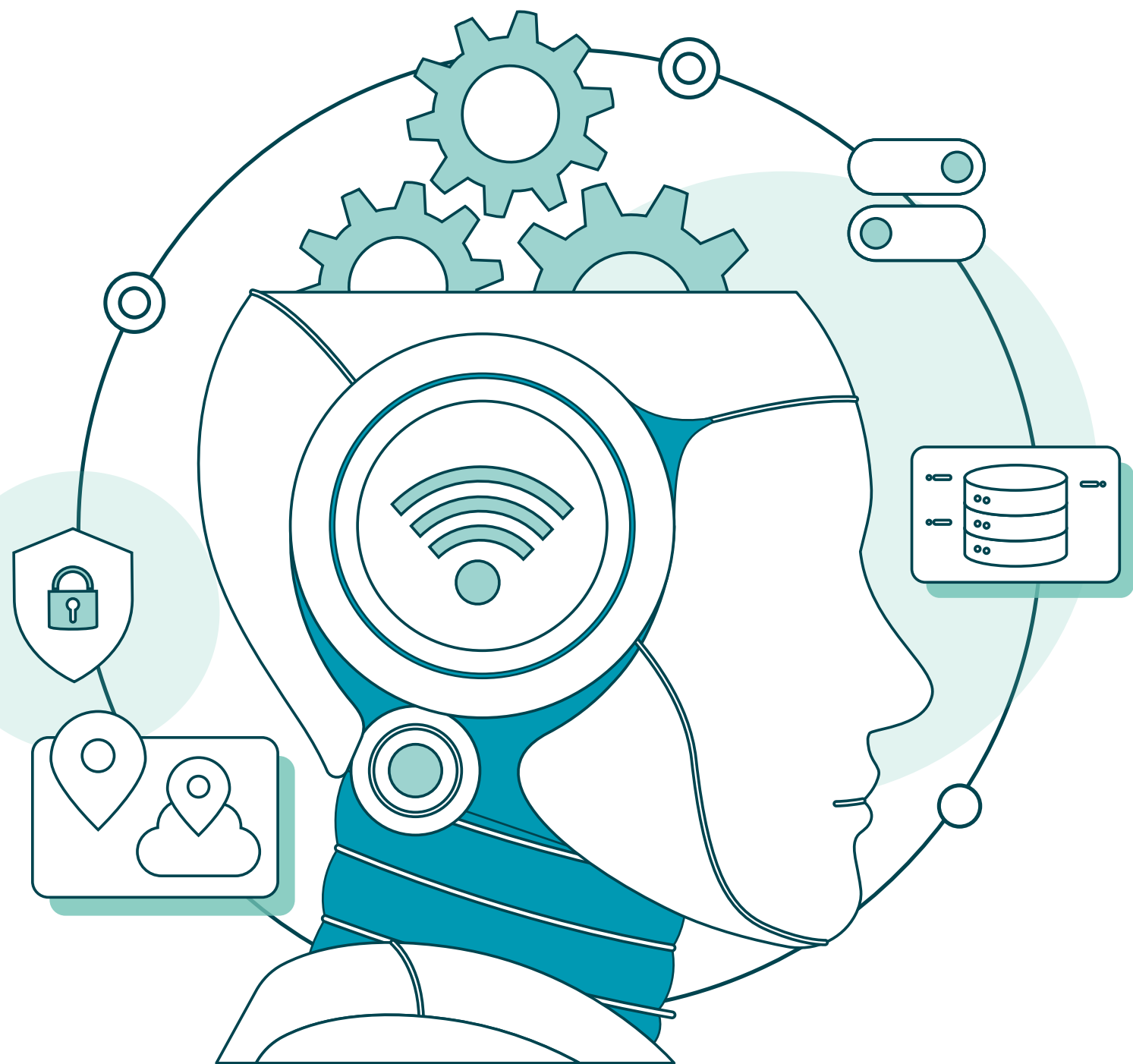
### Key message

54 percent of European industrial manufacturers rely on collaboration with shared service partners and cybersecurity experts to make their operations more agile and more resilient, while a minority are focused exclusively on potential efficiency gains.

### Our assessment

Businesses are starting to recognize the importance of operational excellence across the value chain and the need to go beyond simply improving efficiency and become more agile. Working with shared service partners sharpens the focus on core business, while cybersecurity assumes a much larger role.

<sup>17</sup> Deloitte (2024): Survey based on Deloitte's interviews and discussions in the period from May to July 2024, n=30.



## 6. Banking on artificial intelligence!

Upgrading software, word processing programs and chatbots with artificial intelligence (AI) and analytics has the potential to make the industrial manufacturing much more competitive between now and 2030. These technologies are already improving production processes, quality control and preventative maintenance, supporting customer interactions and enabling automated software coding. European industrial manufacturers only have a limited amount of time to invest in AI solutions and lay the groundwork for their digital future. Otherwise—and all the experts agree here—they risk missing the boat completely. One of those experts is Rainer Bürkert, Member of the Central Management Board and CEO of Würth-Gruppe: “We have to make AI our top priority. Even if it only delivers half of the benefits the research promises, AI will become the biggest disruptor and game changer our economy has ever seen.”

### Accelerating product development

Up to 2030, we expect AI to speed up the product development process, particularly in R&D, starting with faster market research and idea generation as well as faster iteration cycles and automated fault detection using virtual designs. Digital twins are becoming the new standard, able to integrate IoT data and provide more precise monitoring and optimization of products and processes in real time—with applications that are easy to understand and easily accessible. At the same time, players are adopting the metaverse as an interactive platform for virtual collaboration and customer interaction, which will revolutionize product development and improve both efficiency and flexibility.

### More efficiency, leaner logistics and more agile production

By 2030, AI will make supply chains more efficient and more sustainable (see action items 1 and 3). 50 percent of the industrial manufacturing CFOs in our survey believe that productivity is a key lever for

AI (Deloitte, 2023, see Fig. 11).<sup>18</sup> Under the banner of “operational excellence”, we are seeing more machines and production lines networked with the help of AI or controlled by AI systems, some of which include automated features that can adapt to changing conditions or trigger timely alerts for maintenance and repair. Manufacturers can simulate complex production scenarios using digital twins and optimize processes thanks to data analytics. AI gives industrial manufacturers the power to monitor products across the entire lifecycle, potentially up to and including second-use applications for retired assets.

### AI takes automation to the next level

Between now and 2030, we expect the exponential growth of AI to drive automation of routine tasks across all areas of the business and free up scarce human resources for more high-value tasks. This is already the reality for many companies, particularly in machinery and plant manufacturing: AI is successfully improving complex production lines and reducing scrap

rates thanks to precise cause-and-effect analyses. Today, there are neural networks, image recognition and other AI technologies being used for high-precision sorting on the shop floor, leading to a measurable increase in total productivity.

### Smarter customer contact and services

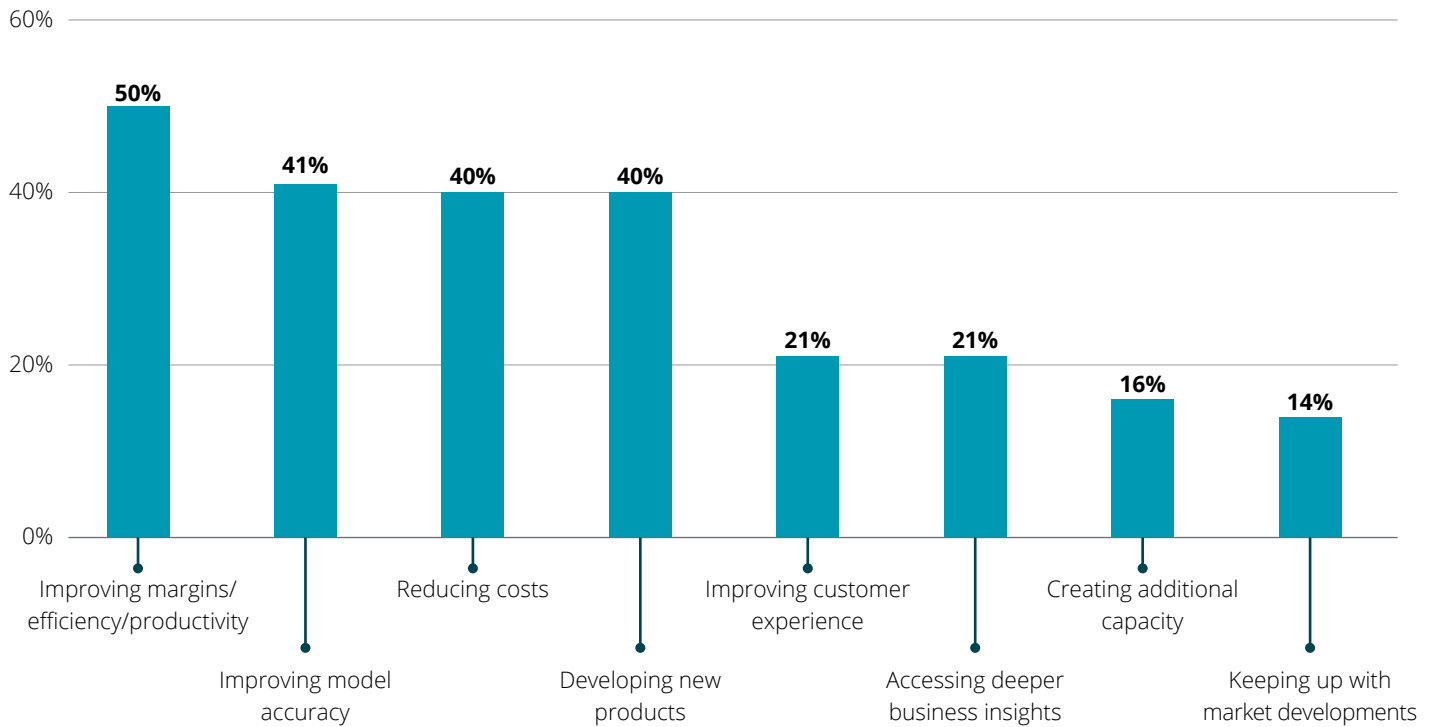
AI even promises benefits for customers. Between now and 2030, AI systems will completely revolutionize digital communications with customers (see action item 2) and improve traditional as well as digital service models in the process, optimizing first-level support in particular. As more companies use these new product features, we will see the trend towards personalization of industrial goods increase, in line with what the executives in our survey have said (“We rely heavily on AI in the area of service to automate data analysis—especially when it comes to finding the right analytics experts to handle this for us.”).<sup>19</sup>

<sup>18</sup> Deloitte (2023): CFO Survey Herbst 2023 – Neue Investitionsstrategien, Potenziale von KI und Outsourcing (N=58), <https://image.marketing.deloitte.de/lib/fe31117075640474771d75/m/1/d0906c65-36f3-4aac-9903-17d8a3e57c06.pdf>.

<sup>19</sup> Participant at ISLA's 2024 Service Leaders Summit.

**Fig. 11 – Benefits businesses hope to achieve with generative AI**

**Question:** If your company intends to adopt generative AI: What are the main benefits you hope to achieve?



Talent management is another area where we expect AI to have a big impact. We are seeing more and more human roles in the areas of monitoring, management and idea generation as companies seek to capitalize on computational strengths such as speed and precision in combination with the creativity and flexibility of their human counterparts. European manufacturers have a unique opportunity to minimize repetitive tasks and create long-term competitive advantage by collaborating on the development and implementation of AI solutions.

“Artificial intelligence and automation look set to become the key differentiators in our sector, particularly for tracking assets across the supply chain and product lifecycle, including second and third-life applications—though this will likely become mainstream over time. Companies in this industry have to make this their top priority; after all, AI promises to play a key role in most areas of the business, and we will have to keep developing these applications on an ongoing basis to maintain our competitive edge.”

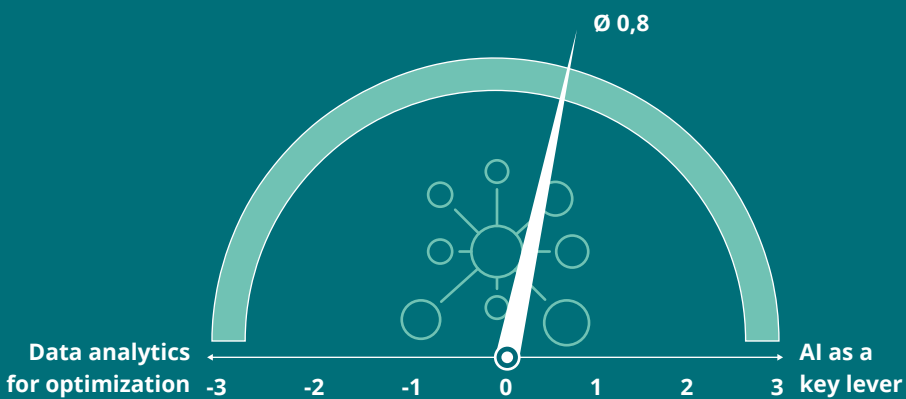
**Chris Saul,**  
**Chief Strategy Officer, Hitachi Europe**





## What the experts in our network are saying

**Fig. 12 – Findings on data analytics and AI as key levers from our interviews with the strategy experts in our survey and the VDMA committee<sup>20</sup>**



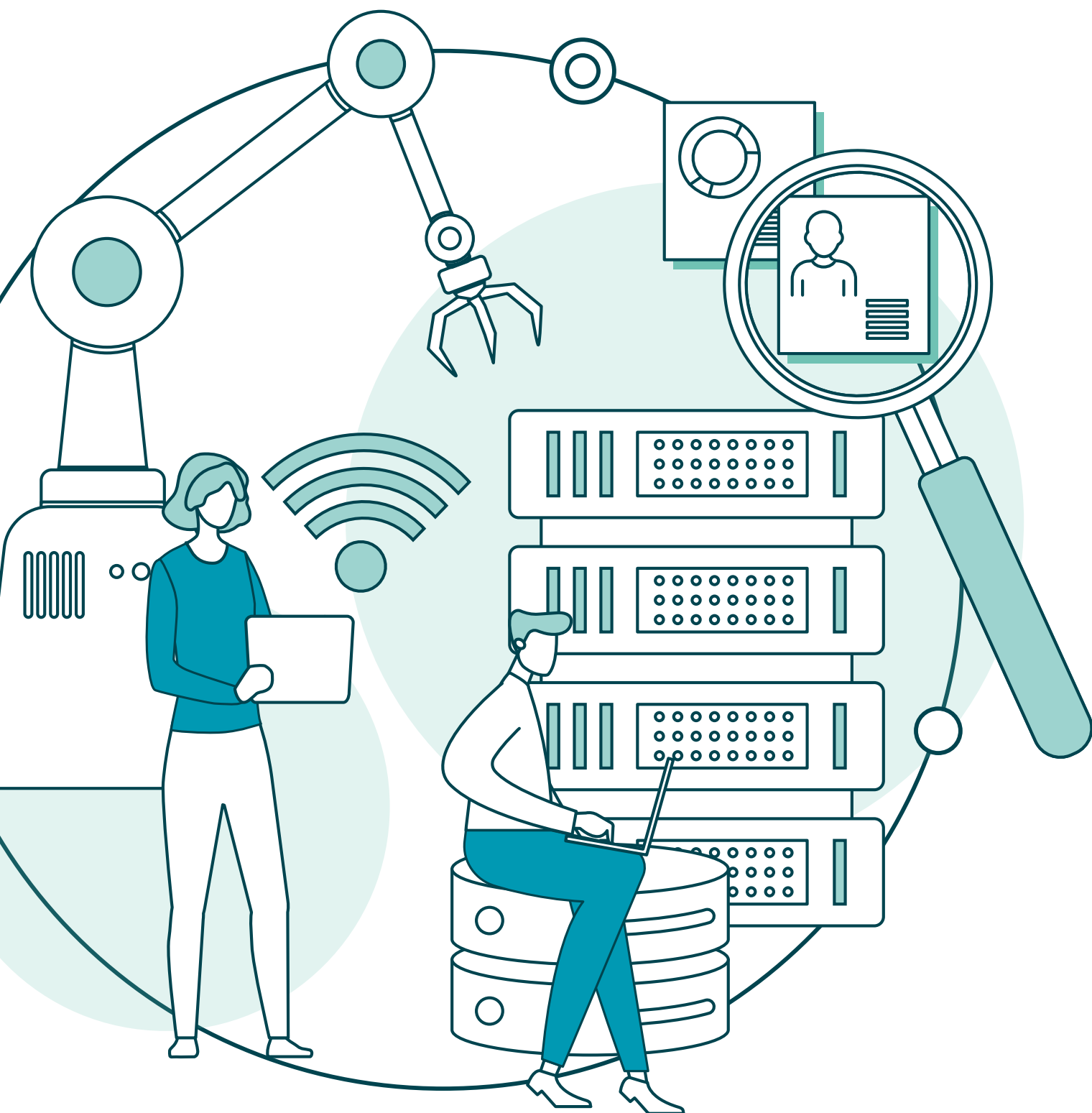
### Key message

67 percent of respondents see artificial intelligence (AI) as a key lever for future success as well as for efficiency and innovation gains.

### Our assessment

Industrial manufacturers are well aware of the strategic value of AI in terms of increasing efficiency, developing new business models and maintaining a competitive edge. In Germany and the EU, however, a lot of companies have been too slow to adopt the new technology. In our view, the only way to bridge this gap is through collaboration within the sector and government support.

<sup>20</sup> Deloitte (2024): Survey based on Deloitte's interviews and discussions in the period from May to July 2024, n=30.



## 7. Find innovative ways to recruit and retain talent!

The skills and talent shortage facing Europe's industrial manufacturers today is not likely to improve by 2030 (Deloitte, 2023).<sup>21</sup> AI can help global teams get stronger and overcome language barriers through advanced translation and communication technologies, for example. These features help companies work together in Europe and across the globe, allowing for more effective and efficient cross-border collaboration.

### New ways of working gain momentum

In the years to come, attracting new talent will remain a challenge, but it will also have to become a core component of corporate strategy in the run-up to 2030—and that means receiving the attention and the prioritization it deserves at the board level. Leaders will have to make a lot of talent-related decisions that have far-reaching consequences to ensure that their businesses have what it takes to win the future, but also what it takes to make growth possible in the first place. That may mean, on the one hand, relying more on effective onboarding initiatives to help experts from other regions feel at home in a different work culture. It may also, on the other hand, require contemporary workplace models such as remote working, phased retirement, project contracts and flexible working hours to help compensate for the talent shortage, while also addressing the individual circumstances of employees.

Industrial manufacturers will become more open to working with freelancers and other outside contractors for temporary project support. It is up to the companies themselves to develop concrete strategies and

innovative approaches to stand out from the competition and make their employer brand more attractive. As one member of the ISLA network put it at the 2024 Service Leaders Summit: "Relying on innovative or distinctive products is simply no longer enough. Ultimately, customer service is all about the people. We have to make sure we have the right staff who are committed and receive the support they need, [...] that will take us to the next level as a company and differentiate us from our competitors."<sup>22</sup>

### But you don't only need talent in head office positions

Companies tend to limit their discussion about skill shortages and tight talent markets to traditional head office roles such as research and development. Although there are, in fact, major shortages in these areas, shop floor workers are too often they left out of the equation. In the run-up to 2030, Europe will continue to evolve into a service-dominated continent. And as fewer and fewer people are willing to take on production roles, it will inevitably be much harder to operate production facilities in Europe. And yet, the geopolitical tensions around the globe are making manufactur-

ers wary about investing in more production facilities outside of Europe. Europe's manufacturers will have no choice but to offset the talent shortage in production—at least in part—by investing in automation. This will be a huge step, particularly for the major industrial groups and SMEs that are still operating under a more traditional factory mindset.

### Inspiring employees for technical careers

The challenge is to get young people interested in technical jobs again. After all, the ingenuity of Europe's engineers was at the heart of the success of the "Made in Germany" brand and the origin story for decades of prosperity on the continent. It is worth going back to the "Europe, Inc." concept and the idea of creating a collective, performance-oriented European counterweight to the tech giants of Asia and North America. 66 percent of the companies in our survey are finding it difficult to fill IT positions (Fig. 13).<sup>23</sup> One way to overcome this shortage is to promote a tech-driven learning culture within the enterprise—and that requires the active involvement of senior management. From board level on down, it will be vital to introduce behavioral

<sup>21</sup> Deloitte (2023): Global Human Capital Trends, [2023-human-capital-trends-presentation\\_en.pdf](https://www.deloitte.com/global/human-capital-trends-presentation-en.pdf) (deloitte.com).

<sup>22</sup> Participant at ISLA's 2024 Service Leaders Summit.

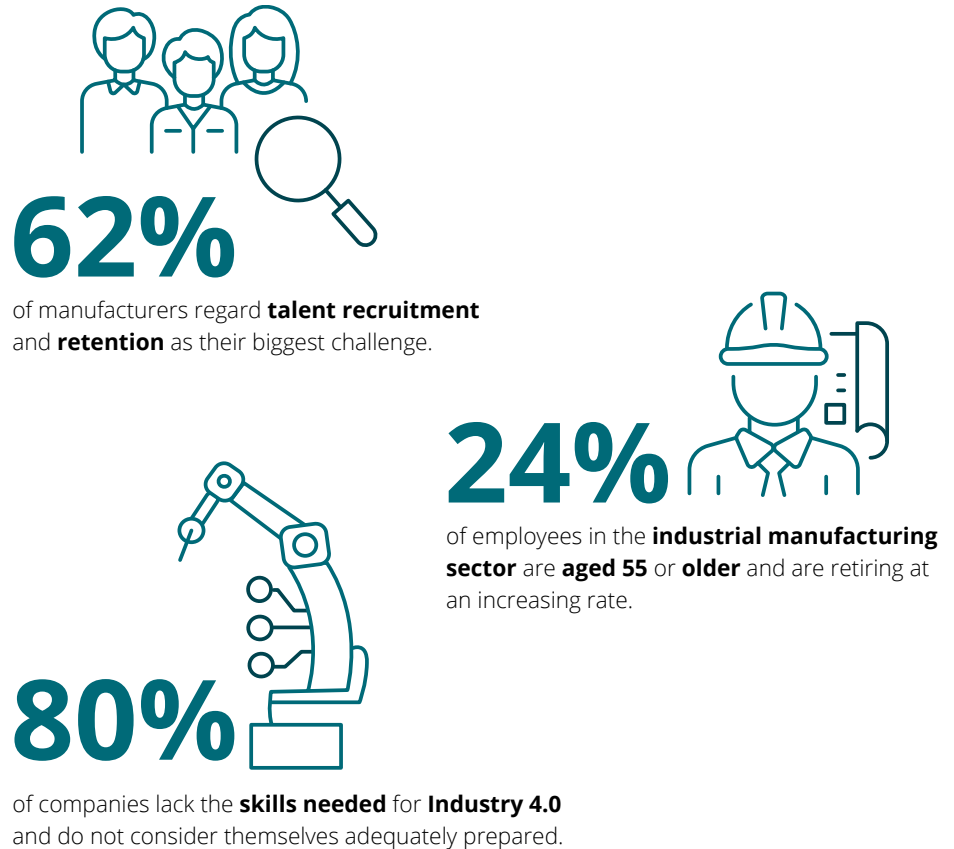
<sup>23</sup> Deloitte (2023): Enhancing Human Capital in the Industrial Products and Construction Industry.

changes through targeted feedback and coaching to grow these skills. One example here could be hosting “innovation weeks” where teams focus on new technologies with the support of expert presentations and individual mentoring.

#### Professional development remains key

Regular training is a crucial factor in ensuring international employees feel at home in a new work culture, and the same applies to IT upskilling and effective remote work. Training partnerships within the industrial manufacturing sector could unlock synergies that help everyone stay on top of the rapid changes, especially in the area of artificial intelligence. Building a skills-based organization remains a key focus as a means of attracting the right employees and assigning them to the right tasks.

**Fig. 13 – The growing challenges of finding suitable applicants for vacant positions**



“Closing the talent gap will likely require a multi-pronged approach that includes implementing flexible models including compressed workweeks, varied and split shifts, as well as floater roles to appeal to workers. Collaborating with educational institutions can help develop a workforce with the digital and operational skills necessary for the energy transition. For instance, ABB’s collaboration with Imperial College London in carbon-capture technology provides students with relevant skills.”

**Jean-Louis Rassineux,**  
**Senior Partner & Global Lead for Industrial Products & Construction,**  
**Deloitte, in his latest article for Forbes Magazine.<sup>24</sup>**

<sup>24</sup> Forbes (2024): How Can Manufacturers Expedite The Energy Transition?,  
<https://www.forbes.com/sites/deloitte/2024/07/26/how-can-manufacturers-expedite-the-energy-transition/>.



## What the experts in our network are saying

**Fig. 14 – Findings on the workforce of tomorrow from our interviews with the strategy experts in our survey and the VDMA committee <sup>25</sup>**



### Key message

88 percent of the respondents see skills-based team building and global teams as must-haves to mitigate the skills shortage and bolster innovation.

### Our assessment

Given the talent shortage and the ever-changing demands placed on the workforce, companies are investing more in professional development, team development, global recruitment and upskilling initiatives, particularly in technical and operational roles. This will help employers create more attractive workplaces, retain talent over the long term and find the right venues to recruit new talent.

<sup>25</sup> Deloitte (2024): Survey based on Deloitte's interviews and discussions in the period from May to July 2024, n=30.

# The strategic roadmap for 2030 is critical

The next few years will see a massive realignment in many domains of Europe's industrial manufacturing sector. Though the status quo seems increasingly difficult, the prospects are probably a lot better than they might appear—and yet, there are many companies in the sector that still have no clear idea of the road ahead.

The key here is to invest in the future with an agile approach and a set of tailored strategies. However, Europe's manufacturers have to be willing to support one another to succeed. This is the only way to sustain their leadership position in the sector in 2030 and beyond.

## What strategies make the most sense?

International, customer-centric, globally connected, sustainable, resilient, AI-driven and skills-based—these are seven principles that will lead companies to success in the run-up to 2030.

- Regional growth opportunities and risks require better management, whether it is developing sales markets, production locations and security strategies. The top issues in Europe are the shortage of skilled workers, energy costs and excessive bureaucracy.
- Industrial manufacturing companies have to take a more customer-centric approach and focus on the needs of their customers in order to shift their focus from simply manufacturing products to offering comprehensive customer solutions.

- State-of-the-art technology requires more digitalization, automation and artificial intelligence (AI), but the only way to succeed is for companies to work together and remain open to new partnerships—even as part of a horizontal alliance.
- Europe will take the lead in the area of sustainable business, though it may take some time. The key here is for the sector to set clear and ambitious sustainability targets without losing sight of adding value for the customer.
- In the end, the most important thing is to make industrial manufacturing companies more agile in their response to the issues outlined above, to take a more flexible approach to the way they allocate specialized talent as well as the broader workforce, and to build resilience in the face of change.

It is important to note that there is no “one size fits all” solution. Success depends on the scale and the specific demands of each company. The first and vital step is a detailed, in-depth analysis of the status quo to help you develop the best possible strategy for each of the areas mentioned above. Focusing on the right priorities is key when it comes to implementing such a comprehensive agenda.



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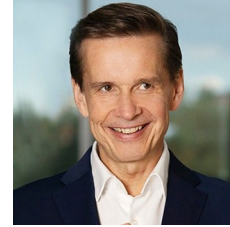
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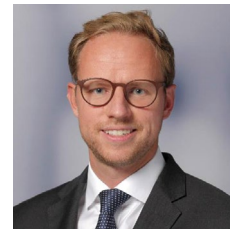
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