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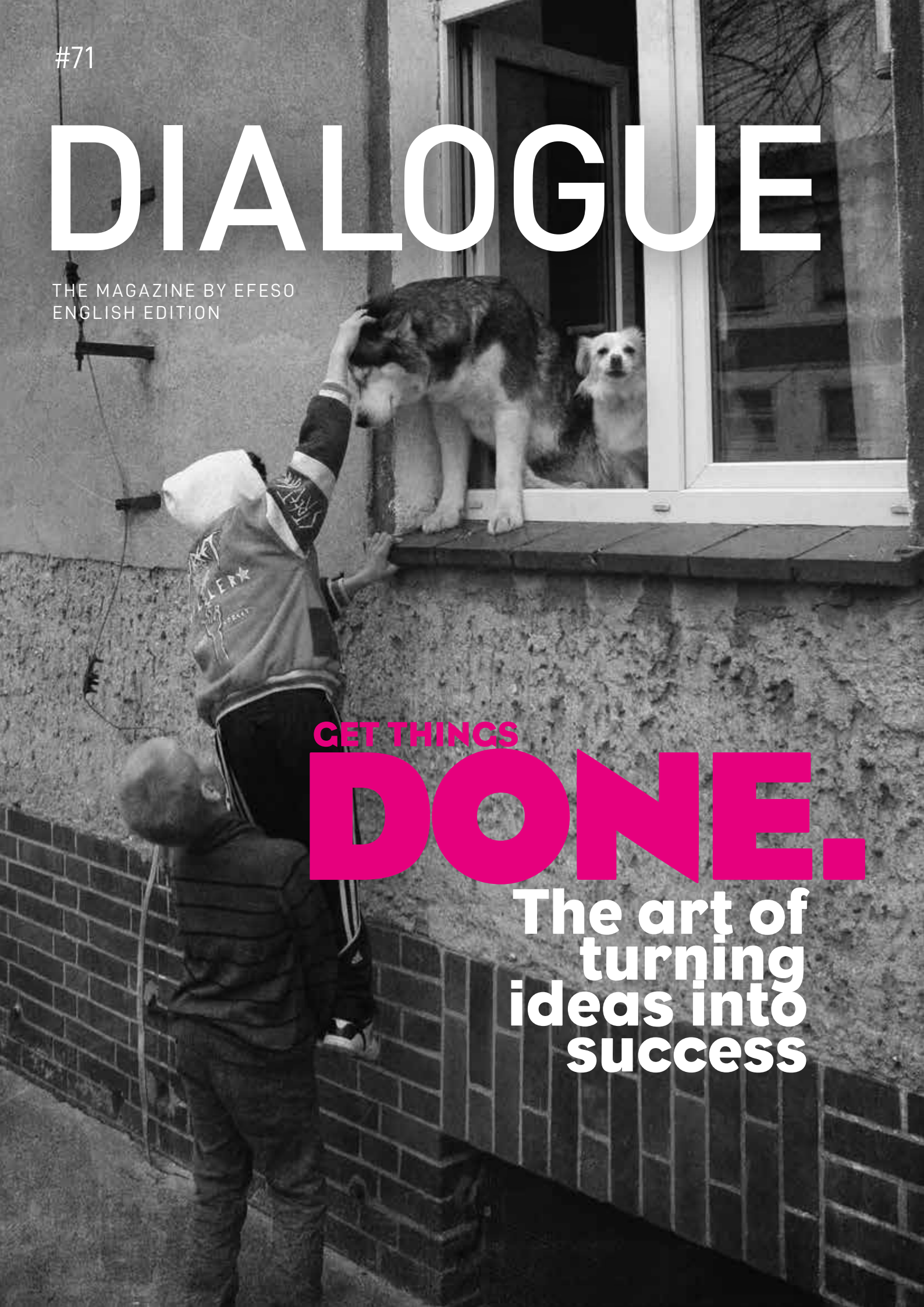
DIALOGUE

THE MAGAZINE BY EFESO
ENGLISH EDITION

GET THINGS

DONE.

The art of
turning
ideas into
success



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Entrepreneurial action is inherently creative and visionary, beginning with a strategic outlook. However, its true value is measured by execution. Great ideas can only make a difference once they are translated into practice.

The prosperity of Western industrialized nations has been built on the interplay of four key factors: intellectual freedom and the willingness to innovate; cultural and institutional frameworks that enable and foster innovation; the capability to effectively and efficiently translate new ideas into products and structures; and the political skill to establish them on a global scale. Over the past two centuries—marked by numerous disruptions since the dawn of the Industrial Revolution—these factors have remained a constant source of strength, and continue to be today.

However, cracks are beginning to show. While Europe remains a powerhouse of research and creativity, leading the world in patent applications per capita and innovation intensity, behind only Japan and South Korea, recent trends are cause for concern. OECD studies indicate a steady decline in Europe's innovation intensity in recent years, widening the gap between Europe, Japan, and the United States.

At the same time, European companies face increasing complexity. Structurally, this is evident in diverse resource dependencies, fragile supply chains, high tax burdens, an increasingly autonomous regulatory landscape, deteriorating infrastructure, and unfavorable financing conditions. Socially and politically, Europe has spent the past two decades engaged in cultural conflicts and distributional debates rather than focusing on strengthening its competitiveness and defining its role as a globally competitive, self-sufficient player in an increasingly volatile and dynamic world.

Against this backdrop, the manufacturing industry is sailing into strong headwinds as it adapts to shifting market conditions and technological disruptions. The core challenge lies in managing multiple transformation processes simultaneously within a short timeframe—where, in the past, even a single transformation would have demanded an organization's full attention for an extended period. Success requires not only developing groundbreaking ideas but also aligning them with the right goals, inspiring people to embrace change, and effectively and efficiently implementing shifts across business models, processes, structures, technology applications, leadership approaches, and new products.

This is the true art of “getting things done.” In this edition of DIALOGUE, we explore many facets of this art and examine the key success factors that help companies strengthen their innovation capabilities, operational effectiveness, and execution power.

Wishing you an inspiring read,



Sebastian Diers
Managing Director
EFESO DACH





“The operations sector is the true backbone of strategy”



Interview with **Bruno Machiels**,
Co-CEO, EFESO Group

Across businesses, public organizations, and politics, we are witnessing an increasing difficulty in establishing a shared understanding and reaching agreements on goals and actions. What are the reasons behind this trend?

There are several reasons, but speed and complexity play a major role. The world is becoming more complex and ambiguous. Agreements must be based on shared assumptions or beliefs—something that is much easier in a stable environment than in today's rapidly shifting landscape.

Another key factor is expertise. Navigating complexity requires specialized knowledge, but experts often operate in silos, deeply immersed in their fields. While they may excel individually, they are not always effective at collaborating with others. However, solving complex problems demands efficient cooperation and the integration of diverse perspectives and belief systems.

Additionally, in a more complex world, it is easier to craft compelling stories that sound credible, even if they are not grounded on widely accepted facts. Without a solid factual basis, multiple contradictory viewpoints can emerge, leading to conflicts.

Finally, reaching consensus takes time, something in short supply today. Decisions often need to be made quickly, which can lead to shortcuts. As a result, some stakeholders may feel excluded or dissatisfied and may later challenge the decision-making process.

Don't we have enough facts to make clear decisions?

I would argue that we have access to more facts than ever before. However, in a rapidly evolving world, identifying which facts are relevant is not always straightforward. Take electric vehicle batteries, for example. Scientific advancements occur almost weekly, yet if a company builds a facility for battery material production, it must remain operational for years. Technology will continue to evolve, so what kind of production environment should a company focus on? How can business decisions be made? This highlights a broader challenge: even when decisions are fact-based, they may not be built on solid ground. Experts from different fields interpret facts through their own lenses, and they may struggle to understand each other's perspectives. Furthermore, as AI continues to transform industries, it brings enormous potential for value creation, but also adds another layer of uncertainty.

How does this development affect the way strategies are created?

That depends on the sector-specific life cycles. Sectors like nuclear energy, oil, aviation, automotive, and electronics all operate on different timeframes, requiring distinct planning approaches. In the past, a great deal of effort was spent defining the final state. Today, while there is still a general vision of where they want to go, the focus has shifted toward identifying and executing the most relevant next step—acknowledging **that the end goal will continue to evolve**. This is why we now pursue a strategy of movement, continuous learning, and adaptation rather than a strategy of positioning.

From a risk-return perspective, companies must be willing to place more strategic bets. Many organizations have historically minimized risk by avoiding bets, but today, taking calculated risks is often essential for progress. Given the inherent uncertainty, businesses must adopt a portfolio approach—managing a diversified set of bets rather than relying on a single predetermined path.

How should companies balance an overarching vision, long-term plans, and short-term goals?

That depends on the nature of their objectives. If a company has a singular, well-defined goal—such as landing on Mars—it cannot afford to be overly flexible in its vision. However, in most industries, long-term goals must evolve over time.

It is essential to stay open to alternative paths and maintain a flexible long-term framework while combining it with highly precise short-term goals. Taking steps in the right direction is always better than standing still. Companies must keep moving in an environment of constant change, even if not every step is perfect.

The ability to strike the right balance between long-term and short-term thinking strongly indicates a company's maturity. Some companies foster this balance by ensuring career progression is tied to both short- and long-term thinking, while others prioritize immediate results, often creating a cycle of short-termism. In this regard, the shareholder structure plays a crucial role—publicly traded companies, for example, often face greater pressure to focus on short-term gains.





In the world you describe, the focus seems to shift from the classic, long-term understanding of strategy toward excellence in operational processes?

Given the uncertainty, instability, and rapid change, agility becomes the key. Companies must cultivate what I call proactive responsiveness—the ability to anticipate and adapt to shifting conditions effectively.

On paper, with plans and concepts, this seems easy to achieve. The real challenge lies in execution. How can multiple bets be placed simultaneously without compromising quality or cost structure? How can complexity be increased without leading to self-destruction? In an environment of constant movement, the ability to adapt and respond intelligently holds more tangible value than strategy itself.

This is why operations are no longer just in focus when something goes wrong. Operations, by its very nature, involves making bets—every decision about how to structure and adapt operations directly shapes a company's strategic options.

How well are companies prepared for the changing role of operations, and what does this mean for the self-perception of management?

In a more complex world, companies must engage all key stakeholders, leveraging deep expertise while ensuring they can drive multiple changes simultaneously. The micro and macro dimensions of the company must be aligned so that when something goes wrong, it can be corrected and adjusted quickly. This is why the flow of information, and the continuous adaptation of the company's global perspective are so crucial.

However, companies have different DNAs. Some organizations are led by executives with strong operations backgrounds, allowing them to appreciate operations' strategic importance in a dynamic environment. Others tend to promote leaders from finance or sales, who may not fully grasp the operational complexities.

At the same time, many operations experts struggle to influence strategic discussions. Their deep knowledge is invaluable, but if they lack the skills or mindset to engage in broader business conversations, the quality of strategic decision-making suffers. Today, the strategy only holds value if it fully accounts for operational realities, constraints, and capabilities.

How should leaders deal with these changes, and how do you experience this yourself?

First, leaders must accept complexity and uncertainty are the norm. Otherwise, they risk either becoming paralyzed by fear or denying reality altogether.

Second, they must deliberate on managing multiple bets simultaneously, communicating and contextualizing these efforts effectively. Most people struggle with tolerating the risks associated with making bets. No one wants to see their CEO as someone juggling multiple balls in the air—yet that is exactly what they are doing. Above all, leaders must empower, trust their employees, and stay connected with them. Those on the front lines often have a more accurate understanding of reality than those in leadership positions. A leader's role is to synthesize different perspectives, integrate them into actionable scenarios, and ensure the organization moves forward.

Ultimately, leadership in today's world requires a balance: the ability to shape reality while remaining open to being shaped by it.

"Innovation must be relevant"



Interview with **Walter Matuschek**,
 Founder & CEO, Matuschek
 Design & Management GmbH

More than ten years ago, astronaut Buzz Aldrin famously said, "You promised me Mars colonies. Instead, I got Facebook." Are we still capable of developing big ideas and bringing major projects to completion?

Two fundamental and complementary aspects come to mind. The first is the question of relevance. A mission to Mars could have immense significance for humanity's survival and resource security. Instead, we got social media. Of course, communication is highly relevant. But in this form and with this kind of content? That's something I would question. Of course, there are still meaningful innovations and long-term visionary projects, but primarily in the U.S. Projects like SpaceX or Hyperloop would be almost unthinkable here. We get caught up in complex regulations and national agendas, subsidizing preservation rather than innovation. We lack a globally competitive, sustainable investment, and venture capital ecosystem. Innovation and major projects require risk appetite, decisiveness, and enthusiasm—qualities that, especially in these times, are in

short supply. As a result, many of our innovations are merely incremental improvements, a series of facelifts, making products increasingly similar and interchangeable, rather than truly advancing them meaningfully.

However, we must also acknowledge that groundbreaking, highly relevant innovations like the iPhone cannot be forced. These are leaps that happen once a decade, yet our expectations have skyrocketed, and I believe they simply cannot be met at this scale.

What is the second aspect?

Innovation culture. Globally, we are moving toward a new conservatism—a reliance on familiar things that provide security in uncertain times. But security does not foster innovation. That's why we need to foster the spirit of innovation and ensure institutional support actively. We need to actively support innovation and ensure institutional backing. Current funding models are unsustainable, and we fail to strategically invest in

Europe's few true technology champions—companies like ASML and ZEISS, which are years ahead of global competitors. Instead of channeling resources into groundbreaking technology, subsidies often maintain the status quo—preserving profits rather than fostering innovation. At the same time, companies need people who are truly passionate about innovation. And when that passion is combined with competence, experience, creativity, and perseverance, we are on the right path.

In recent years, security, efficiency, and cost reduction issues have moved even further into focus. What impact does this have on innovation processes?

The increasing number of product recalls in industries is partly due to decisions being driven by short-term cost-cutting rather than long-term reliability and quality. This short-sighted approach ultimately leads to multi-billion-dollar recalls and erodes customer trust. German industry, for example, has always been built on quality, but quality cannot be managed through cost controls alone. What is needed is a quality mindset in product design, performance assurance, relevance, innovation, and uniqueness.

And this brings us back to our work: When we design, we first seek to understand a company's core. What defines it? What makes it unique? What excites its employees? And it is this core that we must translate into design in technology, usability, aesthetics, and sustainability. Unfortunately, many companies today no longer truly understand who they are or what they stand for. They have lost focus on their product—yet it was precisely their products, not financial markets or regulations, that made them successful.

What needs to happen for an innovative idea to become a successful product in the market?

The key is integrated development, where the product, business model, infrastructure, technologies, patents, and market positioning are conceived and developed together. Without this holistic approach, an innovation has little chance of achieving sustainable success or relevance. A great electric vehicle is useless if there is no charging infrastructure, no functional software, no trust in quality and service, and no positive

product image. Even in financial markets today, it seems that the product itself is not the main focus, but rather the bet on the product. And to justify that bet, convincing, integrated application scenarios are necessary.

Do the geopolitical and economic changes we are witnessing also affect innovation?

The regionalization of global markets could lead to less ambitious and globally conceived innovations, with fewer efforts to ensure they function on a worldwide scale. In general, we are currently seeing a strong focus on initiatives that generate quick revenue, reduce costs and personnel, and streamline project portfolios. This approach is understandable, perhaps even unavoidable in the short and medium term. However, in the long run, this mindset comes with significant strategic disadvantages that we cannot ignore. Without the ability to develop truly relevant innovations, we will not be able to sustain our prosperity and global position.





Interview with **Christoph Wotzka**,
Partner, EFESO Group

What does the Idea-to-Value approach stand for?

Ideas must create tangible value—whether in revenue, margins, or competitive positioning—and generate returns as quickly as possible. Achieving this requires a strong, agile innovation ecosystem that operates efficiently from product development to full-scale production. However, reality often falls short of this ideal. Development processes are frequently too expensive, results are underwhelming, and margins are uncompetitive. Many companies struggle to pinpoint the root causes in their product development cycles or hesitate to address them head-on.

Have the conditions for product development changed in recent years?

The Idea-to-Value process has become significantly more complex. We now see high market dynamics, short product, technology cycles, new dependencies, and additional dimensions to consider. Geopolitically driven regionalization of economic zones impacts the entire corporate process chain. Innovations must now be conceived within a regional framework. Established supply chains are under pressure, and procurement and production costs are rising. The emergence of new industrial hubs, such as the Middle East, are becoming competitive factors. Add this to the challenging financing environment combined with increasing investment pressure.

These factors slow down decision-making, which is a delay companies cannot afford. While cost-cutting dominates corporate agendas, businesses must also take a future-oriented approach to innovation. Ignoring this balance will make it difficult to stay competitive in the next five years.

How can companies meet this challenge?

Simply put, products must be brought to market as quickly as possible. This requires streamlining and shortening all processes along the product development chain, making development cycles more agile and market driven. Many companies are dealing with bloated process landscapes that have built up over the years, making core processes unnecessarily complicated. In some cases, it is worth questioning the excessive layers of security and approvals, which often lead to unnecessary loops and delays.

At the same time, companies need to define target costs for a product early on and track them throughout the initial process phases. This approach allows for an early and accurate assessment of a product's market potential and competitiveness.

The key is to develop a well-founded cost model early in the process, one that can be validated and refined as the product matures.

What role do data-driven technologies play, and are companies fully leveraging their potential?

Many organizations remain trapped in outdated resource-based thinking—assuming more staff and materials lead to better outcomes. But “more is better” no longer applies. Today, a small, highly skilled team using advanced digital tools can drive meaningful innovation.

Digital Twins and other advanced modeling tools offer companies a chance to cut time and costs while boosting flexibility. However, adoption remains too slow in many industries. In contrast, companies in other regions are often more open and adaptable, giving them a competitive edge.

Opportunities also exist in supply chain management, where regionalization demands localized expertise. With data-driven decision-making, companies can significantly improve speed and efficiency. Similarly, in manufacturing, digital machine control and AI-powered video analytics can maximize output from existing facilities, delivering major cost and time savings.

Is “Idea to Value” also a leadership and cultural challenge within companies?

Absolutely. Like any transformation, this process involves risks and mistakes, both of which are crucial for real progress. Companies must allow for controlled risk-taking while fostering creativity and equipping the right people with the necessary resources. Many companies today are driven by security and cost concerns, but fear is a poor advisor when it comes to innovation.

Beyond that, a company can only be successfully steered toward the future if it has a clear vision. However, many companies start their strategic discussions based on their existing resources and current position rather than asking where they want to go. This often leads to repeated strategic missteps, such as poor procurement decisions, lack of strategic planning, outdated production systems, and no clear vision for future products. Ultimately, companies must embrace their potential and allow themselves to pursue what they truly aim to achieve.



“Supply chains suffer from organizational silos”



Interview with **Dr. Christoph Kilger**,
Founder & CEO,
aioneers Technologies



Supply chain projects are often complex. What are the key factors for successfully managing such initiatives?

The first crucial factor is the individual capabilities of employees. On one hand, proficiency in working with models is becoming increasingly important, especially in digitalization. Planning systems, Excel sheets, databases, AI applications, and programming environments all serve as supply chain models, where we simulate, analyze, understand, and make decisions before transferring these insights back into reality.

On the other hand, pragmatic intelligence is essential. Companies need people who not only understand operational processes but can also collaborate effectively, navigate interpersonal dynamics, and convince supply chain partners.

The second key factor is effective management systems that provide clear guidance to employees, departments, functional areas, and entire process chains. These systems must identify decision-making needs, prepare and justify decisions, and ensure their implementation. A central question here is whether a process is fully digital, such as ordering materials, or whether it has a physical component, like improving incoming goods inspections. In the physical world, far more constraints exist. For instance, while an inventory account can be strategically overdrawn in a planning tool, physical stock cannot be expanded beyond its limits. Most importantly, a management system must learn from execution and feed insights back into the process for continuous improvement.

This feedback loop is often neither formalized nor systematically managed. There is great potential to use digital solutions to support every phase of a process and better prepare for unexpected events.

Can you give an example?

After the financial crisis of 2008/09, the economy rebounded unexpectedly quickly in 2010. Demand surged, but supply chains were empty, leading to months of disruption before material supply stabilized. Today, models help companies anticipate and manage such developments more effectively. One example is monitoring early indicators, such as changes in lead times in the semiconductor industry. Since semiconductors sit at the very start of industrial value chains and inherently have long lead times, an increase in delivery times can signal a turning point in market trends. Overall, we can now identify more influencing factors and interdependencies, leverage data-driven insights, and make significantly better predictions to navigate uncertainty.



How much does the success of cross-company projects depend on achieving a shared definition and interpretation of goals?

That is an excellent and complex question. In academic research, there are two typical perspectives on this issue. One views supply chain management primarily as the integration of different value chain stages and the coordination of information, material, and financial flows, with the goal of enhancing the competitiveness of the entire supply chain.

The other perspective sees the value chain as more shaped by competition between individual companies, with only partially integrable objectives. In practice, hybrid models tend to dominate. Individual corporate goals always take priority, but there are many cases where companies collaborate to achieve cost advantages, improve availability, and ultimately provide the best possible solution for the end customer. For example, we are implementing a “Vendor-Managed-Inventory” (VMI) concept for a packaging manufacturer and a global consumer goods company, where cost savings are shared between both parties.

Beyond that, I believe that environmental and social impacts will play an increasingly important role in defining and interpreting goals within the value chain. However, for this to happen, sustainability goals and individual corporate objectives must either be largely aligned or any conflicts between them must be addressed through external regulatory frameworks.

Are there key aspects that are essential for every successful supply chain, despite all the differences?

Large organizations need to be functionally structured in order to operate efficiently. However, supply chains do not adhere to these internal boundaries—they cut across all functional areas. Decisions made in one department impact others, and supply chains often suffer from organizational silos. Improving supply chain management is only possible when functional areas collaborate, and ensuring this cooperation is the responsibility of top management.

To achieve sustainable improvements, I would highlight three key factors. First, the availability of accurate and constantly updated data is essential for building reliable models. The second factor is corporate culture, which must promote openness in working with other departments, suppliers, and customers. “Divide and conquer” does not work in supply chain management. The third factor is openness to technology, including decision-support systems and AI, which will play a crucial role in bridging gaps between functional areas, suppliers, and customers in the future.

How strongly do these issues shape the technological platform of aioneers?

These topics were fundamental to the design of our technology. This applies to our Closed Loop Learning approach, as well as to our decision-making and problem-solving modules for supply chains. The same goes for our Control Tower solution, which consolidates and links cross-functional data to identify deficiencies, areas for improvement, and opportunities for cross-functional collaboration.

What does it mean to you personally to bring things to completion? What experiences have you had as a scientist, consultant, and entrepreneur?

For me, success provides the energy to take the next steps. However, it's important to recognize that people are different—some are highly resilient under pressure, while others struggle much more quickly. That's why it's crucial to understand how far you can take people along on a journey. But most importantly, you need to find the right teammates. Working as a team makes you faster, more secure, and more resilient, reducing the risk of losing direction or motivation. If you want to tackle something difficult, the first question you should ask is who you are doing it with.



“Supply chain resilience is now the key driver in footprint projects”



Interview with **Dr. Thomas Troll**, Senior Partner & **Dr. Kai Magenheimer**, Partner, EFESO Group

The world is becoming more fragmented politically and economically, and the likelihood of disruptive developments is increasing. What does this mean for the topic of “Global Manufacturing Footprint,” specifically how production networks can be made future-proof?

DR. THOMAS TROLL: Regionalizing value creation is not a new factor in footprint decisions. However, what has changed significantly over the past three years is the importance of supply chain resilience, which has become a central driver in the evolution of production networks. Additionally, costs and energy availability have gained significant importance.

DR. KAI MAGENHEIMER: The criteria and influencing factors for location decisions are shifting, creating new solution spaces. High-wage locations are becoming attractive again due to political stability, increased automation, factory flexibility, and challenges in finding qualified employees elsewhere.

Do these changes increase the complexity of planning and decision-making processes?

TT: Yes, the demands on resilience and flexibility in manufacturing footprints have increased, which in turn has made planning more complex. More scenarios need to be considered, and supply chain stability has become a more critical factor in decision-making. The goal is to equip production sites with flexible production lines and equipment, allowing for a highly adaptable network. Ultimately, the future of manufacturing footprints lies in greater flexibility within existing structures, which presents significant challenges for both products and technologies. There are also exciting research projects in this area, in which we are actively involved.

KM: Another key aspect is the dynamic nature of planning. Traditional static footprint designs can no longer meet modern requirements. Instead, companies need models that can continuously adjust to evolving conditions. The focus should be on solution-neutral design principles that allow corporate strategy, market conditions, network structures, and technologies to be fine-tuned over time. This approach enhances resilience and delivers cost savings in the medium term.

Resilience and adaptability are also guiding principles of the Future Factory. What role do they play in the development of global production networks?

KM: Companies can only build a resilient and flexible network if the factories involved are designed accordingly. This is why the Future Factory concept is rapidly gaining importance. However, a Future Factory can only fully realize its potential if the design of the production network allows for flexibility. That’s why it is crucial to always consider the big picture and develop both aspects, factories, and networks, in alignment with each other.

Steel and concrete cannot simply disappear, and people cannot be relocated at will. Doesn’t flexibility have its limits?

TT: The key challenge is distinguishing between long-term strategic goals and short-term implementation and investment constraints. Every company must master this balancing act. Behind every plant is a workforce with specific skills, manufacturing expertise, and cultural dynamics. As a result, companies sometimes build production capacity rapidly to meet regional demand but fail to effectively integrate these facilities into the broader global network.

What does “Manufacturing Excellence” mean?

TT: Manufacturing Excellence means striving for the highest possible standard and having the ability to deliberately develop toward that standard. We saw a clear example of this in a recent footprint project: A factory in high-cost Denmark was able to operate the same technology as an Eastern European site with only one-third of the workforce, making it highly competitive. This was achieved through strong leadership and an entrepreneurial mindset among employees who never accepted the status quo and continuously sought opportunities for improvement. Identifying and harnessing such hidden potential is essential and challenging in footprint projects.

Where do ambitious footprint projects most often lose momentum and impact?

KM: One major risk is implementing only isolated aspects of the project instead of working toward the bigger picture. In the realignment of a strategic network, not everyone can be a winner. This is a challenge for corporate leadership, which must focus on the overall value of the network and be willing to make difficult but necessary

decisions. If the primary goal is to keep everyone happy, then perhaps the project shouldn’t be started at all. A strong footprint strategy must be backed by a clear model and governance structure, as ignoring key assumptions can leave a company in a weaker position than before.

TT: Another approach that does not work is forcing strong regional sites into a global network on paper, which often fails in practice. Many companies have powerful regional facilities, and if these sites are suddenly expected to function within a tightly integrated network, the right organizational structure and governance must be in place—and, more importantly, must be actively embraced. In the past, many initiatives have failed due to leadership challenges, resulting in little actual progress.

KM: Footprint projects also struggle with short reporting cycles and decreasing executive tenure. Leaders who stay in a position for only two or three years have little incentive to pursue long-term, transformative, and potentially risky projects—especially under capital market pressure. As a result, decisions are made half-heartedly, individual plants are relocated or closed, but there is rarely a mid-term strategic network plan.

Manufacturing excellence

**“Engaging
with future
topics is
essential
for every
company”**



Interview with **Daniel Weiss**,
Co-Founder & CFO, Motius

Motius develops innovative prototypes, products, and processes based on the latest technologies. What defines emerging technologies, and where is the boundary between them and established technologies?

Emerging technologies are those that are not yet fully integrated into our daily lives but have the potential to fundamentally transform them. What sets them apart is their ability to create entirely new capabilities rather than just incremental improvements. Even major inventions, like the automobile, did not fundamentally change the concept of transportation—it remained a ground-based movement from point A to point B. The real question is whether new technologies enable us to do something entirely different. Understanding this distinction is encouraging, as it highlights those incremental innovations, while impactful, remain manageable and should not be feared.

New technologies also bring new challenges. For example, air pollution and the lack of fueling infrastructure only became problems with the invention of the car. How do you see this connection?

I believe this reflects a fundamental, cyclical process. The impact of one technology creates the foundation for the next wave of technological advancements. Climate tech, for instance, is emerging to combat climate change, a problem created by the technologies of the industrial age. Similarly, new ideas

and companies are addressing data quality issues, a challenge that only arose due to process automation.

However, this cycle is not just about solving newly created problems. Technologies are reshaping social, political, and economic structures at an accelerating pace. Digitalization, for example, creates greater equality opportunities, allowing developers from economically weaker regions to access global job markets through digital collaboration. Every technology has both positive and negative aspects. Our collective responsibility is to amplify the positive impacts while viewing the negative aspects not as roadblocks but as incentives to drive further innovation.

Where does Europe stand in the development of emerging technologies?

We need larger budgets for major initiatives to ensure that technological breakthroughs do not only happen in the U.S. and China. Europe has a solid foundation in fundamental research, and public funding mechanisms are effective in this early phase. However, the challenge lies in the next step—translating fundamental research into emerging technologies and identifying the first real-world applications. This requires a unique perspective, and the public sector should take a stronger role as a customer rather than merely selecting and funding specific technologies. Instead, large-scale framework contracts should be created, allowing companies to compete under market conditions. The second U.S. aerospace revolution is a great example of how this approach can work.

At the same time, companies must allocate more R&D budgets toward application-agnostic research, allowing them to commercialize the results into products later on. Engaging with future-oriented topics is essential for companies of all sizes and industries, and for society as a whole. I believe that every company should dedicate a certain percentage of its resources to this. If we fail to invest in mid- to long-term topics and focus too much on short-term cycles, we inevitably end up managing a slow decline rather than driving progress.

How can goals and success criteria be defined in the context of radically new technologies?

For some topics, it is critical to achieve a clear return on investment within a set timeframe and to keep market conditions in mind. A purely technology-driven approach can be risky if it fails to integrate customer and business perspectives early enough. At the same time, exploratory phases are essential. Teams must have freedom to experiment without expecting an immediate EBIT improvement from every project. In these cases, the vision comes first, without a clear roadmap, target product, or KPIs. OpenAI's story is a great example of this approach.

Every successful emerging tech project has both an exploratory phase and a ROI-driven phase. The key is to find the right altitude and target orientation for each initiative. Companies must be clear about where a project currently stands on this spectrum

and where they want to take it. Making this discussion transparent and developing a shared position is the starting point of every client project for us.

What is the relationship between radical innovations and existing structures? Is legacy a driver or a barrier to change?

It is remarkable that research can build on existing knowledge and insights from other fields, creating a self-reinforcing and accelerating global innovation system. Even the biggest breakthroughs are often incremental at their core, recombining and expanding existing elements in new ways. This is why open innovation approaches and the ability to leverage existing technologies are essential for rapid progress. However, innovation doesn't exist in a vacuum—it must integrate with existing structures, habits, and roles. This process often comes with friction, costs, and cultural resistance. In Weiss' experience, the biggest obstacles to transformation are rarely technical but cultural. Successfully implementing deep change requires strong leadership, risk-taking, and intensive change management.

In complex projects, circumstances can change dramatically during development. How do you best handle that?

There are two key aspects to consider. First, working on radical innovations requires thinking at a higher level of abstraction. First-principle thinking

helps companies stay focused on the fundamental value a technology creates, and provides, rather than getting distracted by short-term volatility. Second, companies must remain agile, constantly questioning their plans and willing to pivot if necessary. Too often, organizations push forward with outdated digitalization projects simply because they were already started—an approach that rarely yields positive results. Balancing operational agility with a strong foundational vision is key to executing large-scale initiatives successfully.

What drives Motius as a company and you to stay on course during difficult times and keep your vision in focus?

For us, it is essential to regularly reflect on why we do what we do and align our work with our North Star. We aim to improve the world through as many great and successful ideas as possible. We want to create an environment where this mindset is actively lived—both within our company and in collaboration with our customers and partners. This also includes embracing change, being ready to learn new things, and accepting failure as part of the process. In my experience, many people prefer to comment on what others are doing rather than taking action themselves. Instead of driving solutions forward, they often look for reasons why something won't work. We want to break this pattern, push important topics, and bring as many people as possible along on the journey.

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struction





“Ambitious goals can no longer be achieved alone”



Interview with **Dieter Wittbecker**,
Head of Eco System Partner,
EFESO Group

Industrial complexity is increasing across multiple dimensions. In this context, can ambitious projects still be executed independently?

Especially in manufacturing industries, large-scale initiatives can no longer be implemented without partners. However, I would not say that complexity alone is the main driver of this shift. More critical is the combination of market dynamics and increasing specialization. The business environment is evolving at a rapid, sometimes disruptive pace. To keep up and remain competitive, companies must accelerate initiatives significantly. At the same time, these topics require deep expertise that no company can fully develop and maintain across all relevant fields—whether in R&D, supply chain management, footprint strategy, or beyond.

This is particularly evident when it comes to efficiency improvements, which are currently of existential importance for many businesses in today's challenging economic climate. Here, process optimization and technology must go hand in hand to fully unlock potential quickly and effectively. In highly developed, high-wage locations in Central and Northern Europe, significant improvements are no longer achievable without the integration of digital technologies. At the same time, technology can only deliver its full impact if it is built upon optimized processes. To achieve this balance, companies need partners who provide specialized expertise while sharing an operational and cultural foundation. That's why we intentionally refer to this as an ecosystem.

How should roles be distributed within such an ecosystem?

Each company must clearly define its core competencies and identify the critical interfaces it needs to master. For example, in an Operational Excellence project, we design future-ready processes, define objectives and use cases, and provide vendor- and solution-neutral specifications for the technical configuration—but we do not handle implementation ourselves. This is where collaboration becomes essential. A deep understanding of project needs and goals is required to design an effective technology concept and bring the right partners on board. We rely on our ecosystem and involve partners whose expertise is best suited to generate the desired value.

What are the most common mistakes you observe in the interaction between process and technology?

One key mistake is approaching the problem from the technological solution first. This often leads to



companies purchasing and implementing tools before clearly defining their objectives and requirements. As a result, businesses end up trying to fit their processes into the tools they have rather than ensuring that technology is tailored to their needs. You can't run a proof of concept without first developing a concept. If the fundamental goals and requirements remain vague, many solutions end up being overly complex and fail to address the most relevant use cases effectively.

Can you give an example?

One project in the automotive sector particularly stood out, involving one of our ecosystem partners. After a detailed and structured definition of use cases, a driverless transport vehicle was developed that was custom-built to meet the client's specific needs. It was developed and produced locally and still turned out to be more than 50% cheaper than an off-the-shelf solution. This was achieved by eliminating all unnecessary functionalities, keeping the solution precisely aligned with the defined use case.

In complex projects, goals are often reinterpreted, resized, or adjusted during execution.

How can this be prevented?

The foundation of any successful project is a clear goal definition that remains consistent throughout the entire project cycle. To ensure this stability, two perspectives must be integrated. From a top-down perspective, there needs to be clarity, decisiveness, and commitment from the responsible leadership. This ensures that the

vision remains intact and is only adjusted in response to major shifts in external conditions. If changes are necessary, all decision-makers must fully understand the impact on project outcomes, timelines, and budgets.

At the same time, a bottom-up approach is essential. Future users of processes and solutions must be involved early and extensively. This allows strategic goals to be gradually refined and broken down into reliable, well-defined use cases, which then serve as a solid foundation for the technical aspects of the project. This structured setup phase prevents an overwhelming influx of change requests, keeping the core project objectives on track. Additionally, it fosters transparency by identifying unavoidable goal conflicts early, enabling proactive resolution.

Will the ability to build and manage an ecosystem of partners become a competitive advantage in the future?

That depends strongly on the industry and business model. However, the answer is a definite yes in industrial operations, where we operate as EFESO. This applies not only to our clients but also to ourselves.





**"A
project
needs
the right
culture
to successfully
cross
the finish line"**



Interview with **Gudrun Degenhart**,
Board Member,
INDUS Holding AG

As a long-term investor, INDUS acquires, holds, and develops industrial companies. What are the key factors in your investment decisions?

We invest in successful mid-sized companies with strong cash flow, excellent products and processes, and a sustainable market position. These businesses typically operate in specialized niches where they hold a leading position and are differentiated from competitors. Many of these companies are still owner-managed, often without an internal successor. In such cases, the owners stay on for a transition period to pass on their knowledge and preserve the company culture. We passionately believe in entrepreneurship. It is a critical factor for a company's continued success, and so we need to be fully convinced by the management team. They must be true leaders, capable of bold decision-making and long-term execution, with the ability to shape the future successfully. We do not claim to understand every business model better than the management teams themselves. However, our role is to identify the key capabilities needed to ensure a company's future success. With us, these companies have the opportunity to take the next step. We support them in international expansion, such as entering the North American market, where we have a strong network, or in developing new technological fields.

Our economy and society are undergoing a profound transformation. Yet, there is a growing perception that we have lost the ability to manage large-scale projects. How do you see this development?

Many aspects of our past strengths are now under pressure, including the engineering expertise that has long enabled us to successfully execute large-scale innovation projects. I come from a project-based background, and I am concerned about this trend. We have become too cautious, and hierarchies and controlling processes now take up too much space. Too often, people are involved in projects for political reasons rather than their actual expertise.

We have also lost confidence in company culture. However, successful projects require the right culture, that promotes open, fair, and trust-based communication, anticipates problems and conflicts early, and ensures clarity on what truly needs to be achieved. In my experience, when things are clearly explained, and people work together on implementation, they engage in difficult challenges and find impressive solutions. They follow through and get things done.

How important is the willingness to embrace new things as part of this culture?

Innovation always leads to growth and progress, even if the effects are not immediately visible. That is why it is crucial to remain committed to innovation and to stay open-minded. For a long time, incremental improvements to existing products were enough for German manufacturing companies, as they could rely on steady demand. But that world is now changing at an accelerating pace. Suddenly, companies realize that machines, once thought to be exclusively produced in Germany, are now being manufactured in China or India. Over the next few years, we will be facing major challenges and will need to rethink our approach. The good news is that mid-sized businesses remain highly experimental and adaptable.

The lag in digital transformation among European industrial companies is often cited as a key reason for declining productivity. What is your perspective on this?

The industrial and digital worlds are merging, and their future is interconnected. For mid-sized industrial companies, digitalization presents immense opportunities, especially in leveraging existing expertise to drive productivity improvements. Of course, digital transformation needs to accelerate, but there has already been impressive progress, even among smaller companies in our portfolio.

Can you give an example?

One standout case is Raguse, a highly specialized company in the heavily regulated medical device market. Raguse has not only digitized its production using AI but is also continuously extracting new knowledge from its digital infrastructure. This knowledge is fed back into production and planning, driving sustained productivity improvements. Such innovations reduce workload, allowing teams to focus on higher-value, creative processes. That is why we actively encourage our companies to engage with new digital trends and explore increasingly impactful applications.

Does this require new approaches to innovation management?

I have been involved in building innovation management systems for many years, and I still believe that systematic approaches and tools are important. In the end, it always comes down to people—people who are willing to debate ideas and potential, take calculated risks, and make bold decisions about what they believe in.



Sometimes, experimentation is necessary, even within a small, dedicated part of the business. When you ask successful entrepreneurs how they pursued innovative ideas, many will tell you it was a bet—and that they faced strong opposition. They pushed forward in situations where nine out of ten people would have given up. The determination to persevere and find solutions is a fundamental part of entrepreneurship.

Despite all the systemic factors, does it ultimately come down to individuals willing to drive things forward?

Yes, and also to the networks surrounding them. Collaboration and mutual support make people more successful. Right now, I am looking at two images that say, "Creating Connections" and "Leveraging Networks". These were from our last annual general meeting and reflect our core philosophy. We are committed to facilitating productive exchanges between our portfolio companies, partners, researchers, and consultants, as well as fostering curiosity and a willingness to learn.

INDUS
ACCESS

“The challenge for most organizations is unlearning what they have done for years”



Interview with **Dantar Oosterwal**,
Senior Vice President,
EFESO Group



What drives the innovation process, and where do we lose speed and performance?

The most important attributes are cadence and flow. Cadence corresponds to cycle time in manufacturing, while flow represents the time it takes for projects to be completed. When I speak with executives, they all know their production or service cadence. But when asked about innovation, they are often naive: “What is your innovation rate? What does your innovation flow look like? How does it support your business objectives?” These questions are usually difficult to answer.

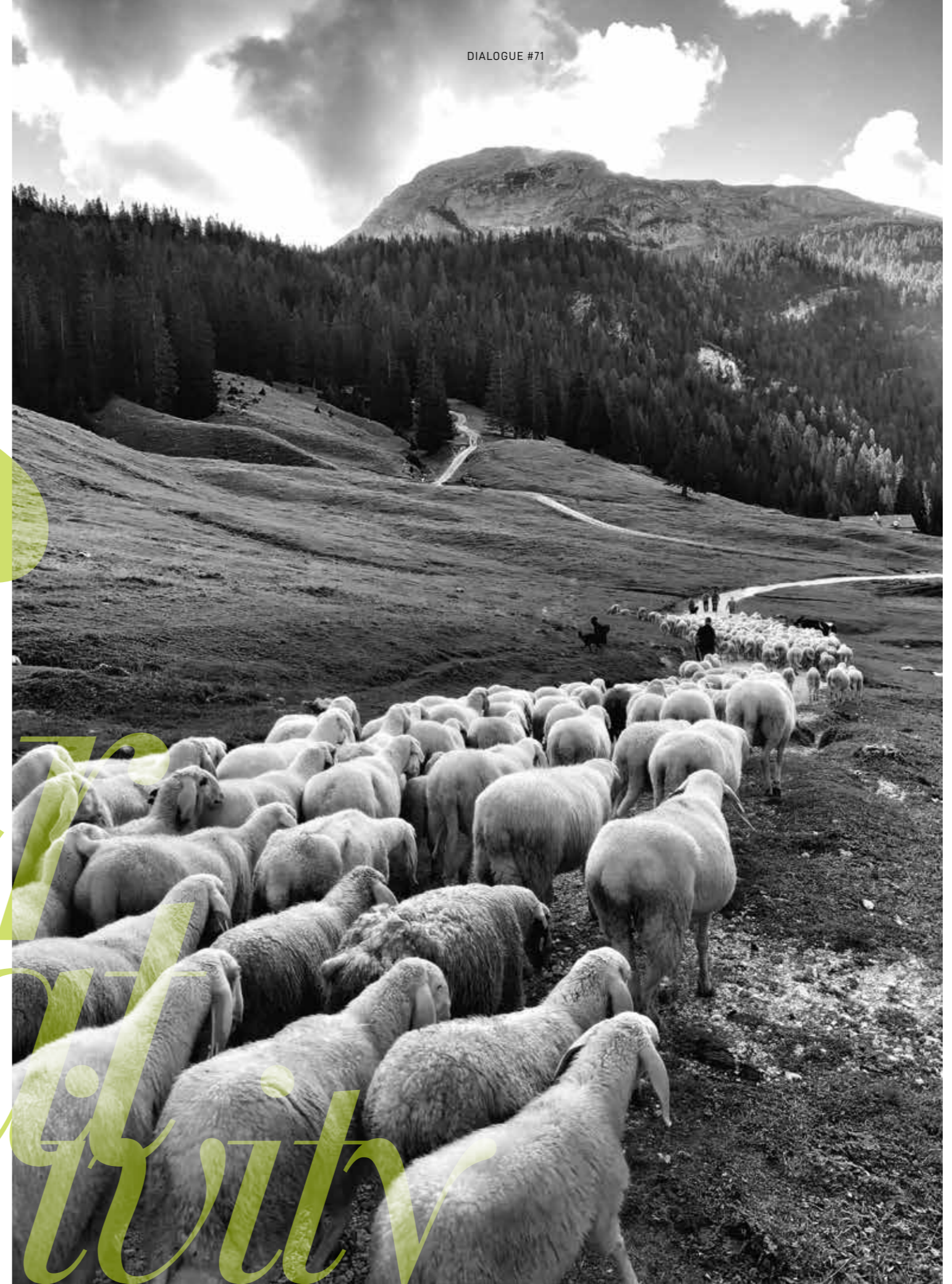
Understanding the necessary innovation rate and aligning it with business needs is fundamental. We call this “cadence” because it is the metronome that keeps the entire organization in sync. If this cadence is missing, you find yourself in firefighting mode, constantly reacting to crises. Pushing forward major projects without setting a cadence and structured flow leads a company from one crisis to the next, trying to solve problems with increasing resources. Once a cadence is established, it becomes possible to introduce additional tools and determine which business goals need to be achieved through innovation. The concept of cadence is about understanding how many projects of which type, in which sequence, and at what speed are required to achieve revenue and profit targets.

Creativity and efficiency are often hard to reconcile. How should we handle this tension?

There are several aspects to consider. People want to be creative, but not when it comes to the process. I cannot imagine someone like Leonardo da Vinci randomly placing his paint differently every day. No, the colors were always in the same place on his palette.

The process must be standardized, it should be a tool that allows creative energy to be focused on the product. Once this mechanism is established, an extraordinary level of creativity can be unlocked. When I joined Harley-Davidson and took over Product Development & Product Planning, we made the mistake of investing as much creative energy into the process as we did into the product. In reality, the process should be predictable—almost boring.

Additionally, there needs to be a firewall between creativity and execution. If you only focus on the creative aspect, you will never bring anything to market. On the creative side of this wall, there must be a free flow of ideas, at least ten times more ideas than can actually be executed. On the execution side, cadence and flow take priority. You know your growth targets, understand how many projects of which type and in which sequence are needed, and pull the required number of ideas through



this firewall. This is done based on lean development methodologies, project standards, and structured time and resource planning. In the end, you achieve both high efficiency and remarkable creativity. This is what we see at Apple, every year, they release a new product at the same time, defining their cadence. The same applies to other innovative and successful companies and is what we implemented at Harley-Davidson.

Can you explain how you arrived at this approach?

When I started at Harley, we struggled to complete projects and wasted a lot of creative energy on the process. This changed when we began working with the system dynamics team at MIT. For four years, every summer during our product launches, PhD students analyzed our development portfolio and processes.

Over time, we built system dynamics models of our development system and market launches, which helped us identify why projects were delayed and ineffective. I then had the privilege of working with Dr. Allen Ward, who specialized in lean development techniques. Together, we found solutions for the issues revealed by our models and laid the foundation for lean product development. Ultimately, we were able to unlock the team's creative energy while aligning cadence at the firewall, just like in a factory. This resulted in a constant flow of great ideas and a healthy competitive environment on the creative side, as we had far more ideas in the pipeline than we could execute. This process, called the vortex, allows ideas to evolve and connect in new ways.

What does this approach mean for leadership?

Leaders need to understand how the innovation process impacts company performance and objectives, just as they do in production. The innovation process must be structured; otherwise, it becomes a chaotic stream of ideas. Management must establish the necessary mechanisms to control this process. Within the previously mentioned vortex, we use a method called the Consumer Technology Matrix. This helps leadership define strategic goals, align ideation with these objectives, ensure that idea generation remains customer-centric, and establish a structured feedback mechanism. This requires hard work, but it is also highly rewarding.

Can the increasing speed of trends lead product development in the wrong direction, or cause products to miss their market demand?

Of course, trends shift. But on the timescale, we are discussing, that's usually not the real problem. The real issue lies elsewhere. When I joined Harley-Davidson, I wanted to understand what was not working. I analyzed the successful and unsuccessful projects from the past five years, and a clear pattern emerged. We often assume something is feasible or important to customers, commit to it, and later discover that we were wrong. Reviewing our history, I found that 90–95% of problems stemmed from this issue.

If you lack a connection to the business and customers do not have a structured feedback mechanism, you are in trouble. You start projects based on assumptions, only to realize they were incorrect later. For example, you might think customers want combustion engines, then assume they want electric motors, only to find out later they are not ready for them yet. When this happens, you are suddenly in firefighting mode, a crisis.

And firefighting mode is toxic for the entire organization. Without a clear cadence and a strong business connection, constant crisis management takes over. Many companies are permanently stuck in this cycle, making it their default development process.

How do you break free from this cycle?

There are four fundamental elements: Systems and processes to detect anomalies early. Once a cadence is established with standard projects, visual management tools can be used to identify issues. The ability to solve problems quickly and learn from them. In manufacturing, there is a predefined "help chain." If an issue arises on the assembly line, a mechanism ensures that production resumes swiftly. Innovative companies use these problems as learning opportunities to refine their systems.

Applying learnings consistently. Organizations should not face the same problem twice. Learning from past mistakes should be deeply embedded in the company's culture.

Leadership engagement. Many managers are disconnected from innovative processes and do not fully grasp their complexities. However, leaders can pinpoint issues and address them effectively by introducing cadence and structured systems. This final element is crucial. Leaders must lead and be effective in the process.



Are goals and KPIs useful in innovation processes, and how should they be set?

Goals and KPIs are critical, from strategic growth objectives down to process and idea flow management. Often, companies place innovation on the critical path without fully understanding the scope of the required innovation or the actual steps involved. I refer to this as false-positive feasibility. Deep, transformative innovations should not be rigidly planned without first addressing knowledge gaps. In product development, our primary task is to bridge the gap between what we know at the start of a project and what we must know to execute it.

Ironically, most companies fail precisely because they don't ask the critical upfront questions: "How big is our knowledge gap? Can we close it within the planned timeframe?" Companies that adopt a set-based development approach—a key principle in lean methodologies—become progressively faster by accumulating and leveraging knowledge across multiple design decisions. This iterative learning process not only reduces rework but also accelerates innovation. That's why we consistently shorten development time in every company we work with—often by more than half.

How difficult is it for companies to adopt this new perspective on innovation?

The biggest challenge is not learning a new approach but unlearning what has been done for years. If you are a CTO, you reached that position by doing things a certain way. When someone comes in and says, "We're doing something completely different now," it feels risky.

At Harley, I had the advantage of system dynamics models, which clearly showed me what I was doing wrong and why I needed to adapt. That is why we focus on explaining the principles, the reasoning, and the methodology, and demonstrate them through pilot projects, leading to real transformation.

What is your vision for innovation in our fragile and dynamic world?

Today, we face numerous challenges, not only at the corporate level but also on national and societal levels, where we are constantly putting out fires. At every level, those who innovate the best, the fastest, and the most efficiently will be the ones who succeed. That is the key, that is what innovation can achieve.

I went into consulting because I feel it is my duty to help people understand the transformative power of innovation. I hope that more people will embrace these ideas and put them into practice because that is the only way forward.



Interview with **Prof. Armen Avanesian**,
Philosopher, Literary Scholar,
Political Theorist, and Chair of
Media Theory at Zeppelin University
Friedrichshafen

**“Companies
must embrace
different
system logics”**

Our economic system heavily relies on quantifiable goals. Is this mathematical understanding of goals still relevant?

The quantification of goals is, at least in part, an illusion or a helpful trick. If we define today what we will have demonstrated tomorrow, essentially knowing the outcome of a process in advance, then, in many cases, nothing genuinely new emerges. This is something I have observed in academic settings.

This raises the question of whether goals that can be quantified and empirically evaluated are necessarily the most desirable. Additionally, goals should be set based on criteria that will be relevant in the future, that, in a way, reach from the future into the present. Otherwise, we risk making things measurable in a way that does not foster real innovation or qualitative change.

Another critical factor is the dynamic nature of our environment—not only does it change over time as we work toward a goal, but it also evolves as a direct consequence of that work. Traditional quantification methods, however, rely on the assumption that at least some, if not most, of the variables remain constant. As a result, even if predefined numerical targets are met, the actual value of the achieved outcomes may shift significantly over time, depending on the broader context.

Companies are increasingly facing goal expectations that go beyond Milton Friedman's famous dictum: "The business of business is business." What consequences does this have for the quantitative understanding of goals?

From a systems theory perspective, every system communicates only with itself. In this sense, an economic system is inherently inaccessible to the logics and communications of political, ecological, and cultural systems. These aspects are not quantifiable and do not follow the monetary logic of a business. This raises the question: In times of radical transformation, can we still operate purely as businesses, or must we incorporate cultural, political, and ecological dimensions into our calculations in ways we have not done before?

The changing contexts are making this traditional form of goal setting increasingly obsolete across larger economic and societal domains. Adjustments are needed, perhaps ones that were not typical in past industrial innovation cycles. Western logic has always relied on fixed points, boundaries, goalposts, and clear distinctions regarding who acts, who decides on goals, how they are defined, and when they are achieved. However, throughout history, major transformations have always brought these questions to the forefront.

If we now realize, whether explicitly or implicitly, that the parameters are shifting in ways that go far beyond the usual "times are changing" narrative, there is a real danger that established goals and goal-setting mechanisms may become counterproductive. They could hinder adaptation to new contexts, prevent the development of radically new capabilities, and keep organizations locked into outdated trajectories. For decades, we have not had to change fundamentally. But the assumption that we can successfully navigate these ongoing transformations with our current cultural evolution and ingrained patterns may now need to be reconsidered.

Given these changing contexts, how do the acceleration of change and the blurred vision of the future we seem to have come into play?

I always argue against the reflex to see acceleration everywhere. The perception that everything is speeding up, and the notion that the future is disappearing, are as old as modernity itself. The problem is that this perspective fails to capture the deeper shifts in temporal structures that underline it.

Rather than acceleration, I would argue that we are experiencing too much future in the present. We are bombarded with assumptions about what lies ahead, and these increasingly detailed and pervasive forecasts constantly pull at us. I call this hyper-anticipation. What is missing, not only in companies but also on a planetary level, are institutions that can develop criteria for determining goals achievable within specific timeframes and what it means to act democratically and responsibly with this deep temporal knowledge of the past and the future.





This also touches on what I call biographical deep time. Our growing knowledge about the world brings us into contact with time scales that are foreign to us as a species. We live chronologically, setting goals for the future based on past experiences. But we are now increasingly aware that our actions create complex, interconnected effects that can extend over millions of years. This knowledge is cutting deeper into our personal and collective biographies, confronting us with a time experience that lies beyond human biological perception. And, of course, this has profound implications for how we formulate goals.

Does this mean we should abandon the concept of goals altogether?

No, because it is anthropologically impossible not to set goals. Even scientific research can only function if reflexive models and mechanisms for verification and course correction are in place. So, I would not argue for the abolition of goals. But we do need to think about them differently. We have become accustomed to a certain form of stability; this applies to large areas of society and the economy. And if we allow a truly deep-time analogy: humanity as a whole has existed in a relatively stable state throughout the Holocene, the past 10,000 years during which civilization as we know it emerged.

From an evolutionary perspective, however, Darwinian slow evolution is only a model for stable and relatively calm periods. In other situations, there is simply no time for gradual adaptation. Instead of minor corrections, survival depends on exaptation, the ability to repurpose existing capabilities for entirely new functions. Evolution does not set goals, and it is not about “survival of the fittest” but rather “survival of the most flexible.”

In times of radical change, the bigger question becomes: What else can a company do, and what is it capable of? This requires different ways of thinking, new logics, and goal-setting modes that extend beyond traditional system boundaries.

Future

“Without a clear vision, transformation breaks down into isolated use cases”



Interview with Dr.-Ing. Olaf Sauer,
Deputy Director, Fraunhofer
Institute for Optronics,
System Technologies, and
Image Exploitation (IOSB)



Interview with **Dr.-Ing. Olaf Sauer**,
Deputy Director, Fraunhofer Institute for Optronics,
System Technologies, and Image Exploitation (IOSB)

Is it just an impression, or are we increasingly struggling to realize ambitious projects?

When I started at the Fraunhofer Institute for Optronics, System Technologies, and Image Exploitation (IOSB) about 20 years ago, we were commissioned by a corporation to develop and deliver a large production control system, a mega-project. The system is still in use today. However, I doubt whether such a project could be quickly decided and kicked off in today's environment. At the time, a small group of decision-makers was involved, with a clear strategy and a willingness to take risks and assume responsibility. Of course, we need rules. But today, we are often confronted with sprawling committees and compliance regulations that make decision-making processes lengthy or even prevent decisions from being made at all.

Despite this, in 2022, the Fraunhofer IOSB successfully launched the Karlsruhe Research Factory for AI-integrated production during the COVID-19 pandemic. So, it is possible.

We completed the factory on schedule and largely within the planned budget. The key to success was having a clear vision and a defined goal for the factory: creating an environment to research how production processes can be rapidly industrialized and how theoretical knowledge can be transferred into market-ready industrial applications. Additionally, we appointed dedicated project leaders who were passionate about the project and drove it forward with determination.

Large-scale projects in Europe rarely start on a green-field site. Does this make change more difficult?

When working within an existing system, you cannot just wipe the slate clean and ignore dependencies, structures, and constraints. Additionally, organizations have an inherent resistance to change. This is why it is sometimes beneficial to remove the people driving innovation from the influence of the existing system, allowing them to develop hypotheses and test new ideas without constraints. We need a better balance between rules and participation on the one hand and risk-taking and leadership on the other, along with the freedom to make pragmatic and fast decisions. Otherwise, we may no longer be capable of executing large projects.

How do you see the relationship between having a strong vision and taking pragmatic implementation steps?

A future vision ensures that direction and goals remain clear. We frequently engage with companies that want to implement individual digital applications. This is not necessarily wrong, but without an integrated digitalization roadmap, there is a risk that transformation will fragment into isolated use cases and trendy solutions. New technologies emerge rapidly, and we need the ability to assess whether a new technology is relevant to the big picture and how it impacts specific elements of the roadmap. When taking small steps, it is crucial to understand the direction they should lead.



Pragmatic

But doesn't a long-term roadmap require reasonably reliable extrapolation?

Of course, we cannot predict when—figuratively speaking—the next tanker will block the Suez Canal. But, having an incomplete extrapolation is still better than having no vision.

At the same time, we should strive to improve the quality of our forecasts. This is only possible with an interdisciplinary and diverse team that brings together different perspectives. We need young professionals who develop new technologies and approaches, but we also need experienced individuals with intuition, those who can quickly assess whether certain decisions endanger or support goal achievement.

How important is it to stay committed to a strategic goal despite unforeseen events and uncertainties?

During my time in the industry—before joining Fraunhofer—I had a colleague whose guiding principle stuck with me: “Do not let short-term requirements distract you from long-term goals.” Every technological development encounters uncertainties and challenges that must be managed or circumvented. However, none of these should derail us from a strategic goal—provided we still believe in its validity. A prominent example is electromobility. Europe currently has only one gigafactory and still has a long way to go regarding know-how for production processes and manufacturing systems. If our long-term goal is to enhance resilience and sovereignty in the production, disassembly, and recycling of battery cells and packs, then we must be willing to endure the tough development process. We cannot allow distractions, setbacks, or detours to keep us from persistently pursuing this objective. In today's fast-paced world, this is sometimes difficult to communicate, and even harder to maintain.

In your opinion, what is crucial for keeping ambitious projects on track and successfully bringing them to completion?

A great example is the drive technology specialist SEW-Eurodrive, which won the INDUSTRIE 4.0 AWARD a few years ago. The company built a new factory implementing a matrix production system, a forward-thinking, long-term concept.

The key to success lies in being guided by a clear vision while following a structured approach: Defining the strategic product portfolio, establishing corresponding processes and dimensions, ensuring flexibility and adaptability, describing criteria that make a factory future-proof. Only after these elements are in place should factory layout be designed. If you start with the layout, you typically end up with a slightly improved version of what you already have. And that won't move us forward.



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“Operational flexibility and a strong vision are essential”



Interview with **Zuzana Halasova**,
Senior Expert, EFESO Group

Do we need to rethink how we plan and set goals?

There's no way around it. In recent years, the framework for business operations has changed significantly, the world has become too dynamic for traditional twelve-month cycles. However, this shift has not yet fully arrived in management practice. It's not just about making organizations more agile and flexible; we also need to rethink how we define goals. Two perspectives are particularly important: First, we need to increase operational flexibility by working with hypotheses rather than rigid forecasts when setting goals. Instead of setting fixed objectives, why not define a goal corridor and regularly assess whether the hypothesis still holds or if new opportunities and challenges have emerged?

Second, a more open and flexible approach to planning should be combined with a strong and clear vision of the desired future state. Successful startups rarely rely on highly structured planning and strategy processes, as these do not align with their fast and flexible approach. But as companies grow, they need something that provides orientation without reverting to traditional planning methods. This shifts the focus to different questions: Why do we exist? What do we want to achieve? How well does our company's purpose align with the values and purpose of our employees? Can we inspire enthusiasm for our shared vision?

What is necessary to embed this mindset in an organization?

The roadmap, vision, and implementation should be regularly discussed and refined. This way of thinking and working requires deep-seated change, especially

vision

in environments historically defined by rigid rules and clearly structured processes. Future-oriented leaders must increasingly see themselves as social architects. They need to initiate, design, and facilitate communication at various levels and across different forums. This includes structured meetings on current tasks and projects, as well as agile sprints. But it also requires other formats focused on depth, creativity, and innovation, spaces for alignment, recalibration, and discussion of core priorities. These discussions should encourage diversity of thought and open-minded exploration to make possibilities visible and expand the space for solutions.

A few years ago, Amazon executives Colin Bryar and Bill Carr provocatively asked in the Harvard Business Review whether we had taken agility too far. How do you see it?

I believe the opposite is true. Agility as a principle is often misunderstood and not implemented rigorously enough. Agility does not mean a loss of direction and control—quite the contrary. Greater flexibility requires clear frameworks and rules. A goal corridor helps define absolute priorities: which top issues are critical and non-negotiable. Alongside this, clear roles and responsibilities allow employees to act with greater autonomy and independence.

On the other hand, unclear structures and a lack of vision and leadership intent hinder self-directed, flexible action just as much as a lack of necessary skills and resources. Additionally, different organizations require different mindsets, particularly regarding the balance between reliability and innovation. In manufacturing, for example, stable processes, employee health, quality control, and continuous improvement play a crucial role. These specifics must be taken into account. But when the right conditions are in place, an agile-thinking and agile-acting organization will succeed.

What challenges does this transformation pose for leadership?

Many leadership teams have been successful with certain approaches and methods for 20 years or more. Recognizing that major aspects of this model must change is difficult. Leaders often lack personal experience with innovative approaches, and it is human nature to tackle new challenges with familiar patterns. This challenge must be addressed consciously. It requires organizational maturity, and reflection, as well as new formats for goal setting and strategy development.

A helpful exercise is to start with a blank sheet of paper and ask: If we could throw everything up in the air and start fresh, how would we make decisions?

How would we act? This shifts the mental framework, opening space for new possibilities and encouraging more open and radical thinking. In other words, leaders must increasingly work both in the system and on the system.

Sometimes, a roadmap turns out to be a dead end. How should companies handle this? That's an inherent part of venturing into new territory. Perhaps a company pursued an idea too early, entered the wrong market, or encountered shifting external conditions. When that happens, the organization must be able to pivot quickly and decisively. Of course, this requires an organizational culture that supports such decisive action.

Should the organization be bold so that individuals don't have to be?

I would like to see more clarity for leaders and employees regarding where and when they are expected to take risks. If people are given more freedom, they must also be relieved of fear, so they feel empowered to navigate that freedom confidently, make decisions, and accept failure as part of the process. Of course, not every mistake is acceptable. Certain areas, such as workplace safety, product reliability, discrimination prevention, or ethical considerations, should remain zero-tolerant, zero-error domains. That is why organizations must engage in thoughtful reflection and transparent discussions about which types of mistakes are acceptable and, in some cases, even desirable, because without them, hypotheses and ideas cannot be tested or implemented quickly.

Agility



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EFESO Management Consultants is a leading international operations consulting firm and transformation partner for the manufacturing industry, with approximately 1,000 employees across 35 locations worldwide. Together with our clients, we set new standards for performance, resilience, and productivity, driving significant value creation across the entire value chain.

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We ensure the long-term success of these transformations through training programs and leadership development. Additionally, we maintain strategic partnerships with leading technology companies and highly specialized experts, providing our clients with access to top-tier expertise in key areas.

EFESO's work is consistently recognized for its quality of results, efficiency, and innovation, earning top rankings in major industry assessments.

Since 2013, EFESO has been honoring the best industrial digitalization solutions with the INDUSTRIE 4.0 AWARD, one of the most prestigious international industry awards.

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