



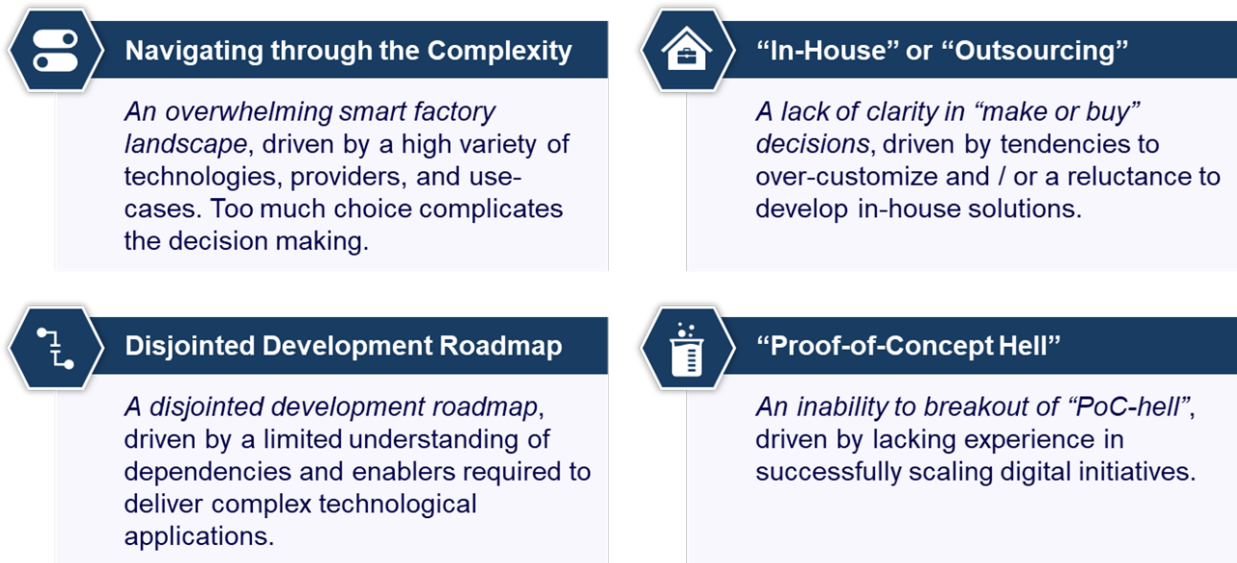
# Smart Factory Navigator: Empowering digital transformation in manufacturing

“ We aim to make digitalization of the manufacturing industry accessible and bring Smart Factory as a unique value differentiator and competitive edge for global manufacturers. Our ecosystem and framework empower clients to benefit from a practical approach to jumpstart their journey to smart factory, from blueprint to reality. ”

Arvind Pal Singh,  
Global MLEU Consulting Head at Cognizant

## Multiple Challenges in Manufacturers' Way on the Path to 4.0

Few events have shaken-up the global economic landscape as much as the Covid-19 crisis. With supply chains and manufacturing capacities yet to fully recover and stabilize, the challenges of the last years have come to represent a real eye-opener for many in the manufacturing space. Transformative change is required for players to move from reactive to truly adaptive production networks. While some – dubbed “Lighthouses” by the World Economic Forum – have successfully pushed the boundaries of 4<sup>th</sup> Industrial Revolution technologies to solve this challenge, most lag behind. In fact, it is estimated that 80% of production digitalization projects fail. Many factors hide behind this astonishing statistic, including:



But how can manufacturers successfully prioritize their digitalization initiatives and simultaneously ensure to be aligned to their strategy?





## Cutting Through the Noise of the Smart Manufacturing Use-Case Landscape with the Smart Factory Navigator:

To tackle these challenges, Cognizant collaborate with the Smart Factory Navigator AG to offer its clients a comprehensive solution to start Smart Factory planning, reignite stagnating initiatives, and drive the identification and development of new use-cases. The Smart Factory Navigator Framework [the SFN-Framework], has been developed during a 5-year joint research phase at the University of St. Gallen and the University of Applied Sciences of Eastern Switzerland to standardize the smart factory landscape. The SFN-Framework consists of over 800 digitalization initiatives, condensed into 44 of the most promising digital use-cases for manufacturing businesses to become leaders in smart manufacturing. Cognizant aligns all relevant stakeholders to a shared vision and practical plan to translate real business problems and challenges into successful digital initiatives. The end-to-end partnership between Cognizant and Smart Factory Navigator (SFN AG) ensures the implementation of Smart Manufacturing Roadmaps successfully and scaled. This brings several benefits to the manufacturing industry:



Overall, this consulting approach provides a clear guideline for manufacturing business on their journey to the smart factory. The following example of Emmi AG will showcase the impact of Cognizant Consulting and the Smart Factory Navigator on a Manufacturing Execution System (MES) target state design.

## How Emmi AG Leveraged the Smart Factory Navigator to Kick-Start its MES Transformation Journey



Emmi AG is a Swiss dairy company that produces and distributes high-quality dairy products in around 60 countries. The company has over 50 of its own production sites in eleven countries. In 2022, the company had more than 9,000 employees, of which around 70% were working outside Switzerland.

In the past, the company has grown organically and inorganically with a focus on global expansion. Emmi relies on a balanced product and country portfolio to deliver strong brand concepts. It also benefits from a strong innovation pipeline, an agile set-up, and a locally anchored supply chain.

### To MES or Not to MES – A Strategic Question

Like many manufacturers, Emmi relies on a Manufacturing Execution System (MES) to drive decision-making around production output optimization, waste reduction, and quality management. Through years of development, today's MES is based on an off-the-shelf solution which has been customized, contributing to higher maintenance & support costs.

This approach could complicate the ability to explore new cutting-edge use cases to enhance the capabilities of their system.

Recognizing these challenges, many companies are now considering the development of an in-house MES solution. The goal is to create a system that not only improves upon the existing customized solution but also integrates the ability to develop and scale market-leading capabilities into its development roadmap. Low-code and no-code platforms are emerging as a promising approach, enabling rapid development and easier maintenance of tailored MES solutions.

Emmi called upon Cognizant and SFN AG to explore the potential of their current MES system and identify the future capabilities required to support new use cases for smart manufacturing. Specifically, they aimed to understand what it would take to deliver a system that not only enhances the existing solution but also incorporates the development and scaling of market-leading capabilities into its roadmap.



## Asking the Right Questions to Address the Real Challenges

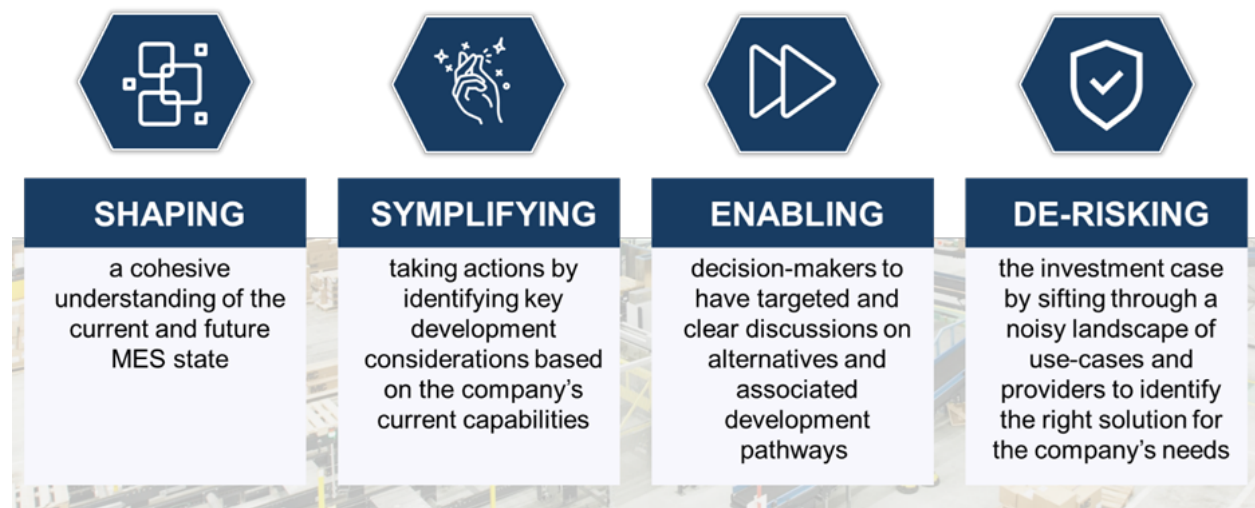
Cognizant and SFN AG worked with key Emmi AG stakeholders to shape and establish a common understanding of the existing MES capabilities and covered use cases. This created a clear view of the company's current state, highlighting its digital maturity across all relevant areas.

Building on this understanding, Cognizant and SFN AG supported Emmi AG in elaborating a long-term and comprehensive view of the TO-BE state of a comprehensive and future-ready MES. Starting with a gap analysis, key fit considerations were highlighted across the dimensions of people, processes, and technologies. This provided a strong understanding of critical development areas and priorities when creating the solution. Leveraging the SFN-Framework, the dependencies between use cases were further examined, emphasizing the links between them, which created a solid foundation for shaping a development approach.

Benchmarked against the desired future state of the MES, we provided the company with a set of scenarios to achieve its ambitions. Furthermore, a set of recommendations based on experience and best-practices were elaborated to support the decision-making capabilities of senior leaders.

## From Doubts to Solutions with the Smart Manufacturing Navigator

Cognizant and SFN AG's combined approach enabled significant advantages for Emmi. In particular, we helped with:



“ By utilizing the Smart Factory Navigator, we have validated and further developed our MES vision. The use case framework will serve as a shared foundation in our factories moving forward. ”

Patrick Müllener

Head of Business Solutions & Data Value Creation | Emmi Schweiz AG

## Next Steps

If you dear reader, are dealing with the following questions to get your Smart Manufacturing journey on track, then we should talk:

- Are you feeling lost in the complex world of smart manufacturing, where you have to deal with a multitude of technologies, providers, and use-cases?
- Do you have a clear vision of what you want to achieve, but not sure how to get there?
- Do you find it hard to decide whether to build your own solutions or buy them from others, and how to avoid unnecessary customization or duplication?

Cognizant and SFN AG supports you with every step of the process, from defining your strategy, to implementing, and scaling your use-cases. We have the knowledge and the experience to help you transform your business with smart manufacturing, and we can deliver solutions that can adapt to different sites, geos, and customer segments.

### Reach out to our experts:



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