

12 Building Blocks For Successful Digitalization. Do the Check!

DIGITALIZATION IS THE BASIS FOR COMPETITIVENESS AND GROWTH. Success is decided in three central fields of action: DIGITAL BACKBONE, OPERATIONS PLATFORM and CONNECTED ECOSYSTEM. But no manufacturing company starts digitalization „on the greenfield“ - where are you already well positioned and where do you have to catch up? Do the check!

FIELD OF ACTION

DIGITAL BACKBONE – For a Reliable Basis

The basis of Digital Transformation is a high-performance, integrated core of systems.

Basic Systems

Have you worked through transformation backlogs of your base systems and orchestrated a homogeneous, low-maintenance landscape?

Topics you should have in mind:

SAP S/4HANA | Microsoft 365 | AWS | Azure | Google Cloud



Expert's Tip

Many manufacturing companies choose systems with great potential for their IT stack - but use them in isolation next to each other. To unleash synergies, silos must be broken down and technology worlds strategically integrated.

[Learn more](#)

Cloud, Data & Infrastructure

Has your IT landscape - where it makes sense - already been transferred to the cloud, thus creating the strategic basis for a high degree of integration and structured data management?

Topics you should have in mind:

Multi- and Hybrid Cloud | Data Management | Interoperability | Portability | Cloud Security



Expert's Tip

There is no one cloud for all applications: Include all relevant aspects when planning your cloud strategy and combine the advantages of different solutions with smart hybrid and multi-cloud models. [Learn more](#)

Modern Workplace

Are you using the potential of digital workplaces for team and location-independent collaboration, faster processes, and satisfied employees?

Topics you should have in mind:

Integration | Governance | Workplace Security | Accessibility | Information Exchange | Change Management



Expert's Tip

Digital workplaces enable new forms of work organization and influence team spirit, the quality of collaboration and the costs of „New Work“. When designing, therefore, pay attention not only to productivity but also to acceptance and clean integration. [Learn more](#)

Cyber Security

Are your IT systems effectively protected against modern attack methods to detect threats in time, evaluate them and initiate countermeasures?

Topics you should have in mind:

Scoping of systems requiring protection | Security Monitoring | Runbooks for attack scenarios | Disaster Recovery



Expert's Tip

IT security requires more than the acquisition of costly security tools: Implement an ongoing, customized process and rely on managed services for technically complex issues! [Learn more](#)

FIELD OF ACTION

OPERATIONS PLATFORM – For Optimized Processes

Once the Digital Backbone is in place, processes can be automated, and data can be monetized.

Connected Machines

Do your machines communicate with each other, and can you transfer the process data to a data center - for higher performance, less downtime and better quality?

Topics you should have in mind:

Brownfield vs Greenfield | Interfaces | Edge Devices | Repository Management | Retrofit



Expert's Tip

With the help of edge devices, you can network machines of different ages and from different manufacturers with low effort, read out and merge the machine data in a secure way. [Learn more](#)

Digital Twin

Are you already fully exploiting the potential of virtual images to improve products, optimize processes and develop new data services?

Topics you should have in mind:

Data Governance | Big Data | AI | Manufacturing-X | Digital Asset Administration Shell



Expert's Tip

The challenge with the Digital Twin is less the technology, but the high demands on data standardization and data quality. The Asset Administration Shell plays a central role here as a cross-vendor and industry-neutral standard. [Learn more](#)

Software Optimized Production

Do special software solutions for your manufacturing niche integrate so smoothly into your evolved IT landscape that the planned return on investment can be achieved?

Topics you should have in mind:

Process Costs | License Costs | API | ISO Certification | ROI | Vendor Lock-In



Expert's Tip

Avoid a system uncontrolled growth, which makes structured data management difficult and reduces the added value of your applications. With a modular software approach, you can achieve startup agility even with technical debt. [Learn more](#)

Process- and Cost Efficiency

Do you use a central process management platform that provides valuable real-time insights and realizes savings through automation?

Topics you should have in mind:

Process Mining | Process Modeling | ISO 9001 | Automation | Simulation | Monitoring



Hyper-Automation combines different technologies such as Machine Learning, RPA, and AI. This allows you to automate increasingly complex tasks that would otherwise be handled by humans - a major advantage in times of skills shortages. [Learn more](#)

FIELD OF ACTION

CONNECTED ECOSYSTEM – für neues Wachstum

Manufacturing companies need strategies for further value creation and a crisis-resistant organization.

Data Sovereignty

Do you have a concept for the data economy, i.e., how to share data securely and in a value-adding way with third parties to save costs and open new revenue streams?

Topics you should have in mind:

Data Lakes | Data Platform | Interfaces | Governance | DSGVO | Business Models | Pricing



Make sure you have high security standards when you inject sensitive data into open and shared service or product ecosystems - from legal data protection regulations to the choice of hosting provider. [Learn more](#)

New Business Models

Do you use modern technologies to enhance your traditional core business with innovative services or implement completely new value creation models?

Topics you should have in mind:

Subscription | Equipment as a Service | Lot Size 1 | Partner | Platform Economy



To successfully combine your core business with innovation capability, you need more than just good ideas: If necessary, cooperate with partners who support you in the realization with technology competence and change management! [Learn more](#)

Digital Sales & Aftermarket

Are your marketing and sales departments fit for a modern customer journey that reaches, excites and engages customers on all channels - before and after the purchase?

Topics you should have in mind:

Digital Sales Folder | Mobile Sales | Self-Service Customer Portals | Marketing Automation | Chatbots



Customer experience management is highly technical today. Therefore, when selecting digital sales and marketing tools, make sure they are seamlessly integrated into your system architecture and data strategy! [Learn more](#)

Sustainability and Resilience

Are you equipped for sustainability transformation to meet regulatory reporting requirements, strengthen your image, and leverage green growth potential?

Topics you should have in mind:

ESG Reporting | Energy Management | Digital Product Passport | Green IT | Supply Chain | Green Business Models



Use the collected sustainability data from suppliers to design a resilient supply chain - for example, AI solutions can be used to predict bottlenecks and optimize supply chain processes. [Learn more](#)

How does knowledge of your strengths and weaknesses now become an individual roadmap? And which trends are relevant for the Digitalization of the Manufacturing Industry in general, regardless of your niche? Talk to us!



Achim Reupert

Expert for the Digital Transformation of the Manufacturing Industry

industrial.midcaps@arvato-systems.de



About Arvato Systems

Global IT specialist Arvato Systems supports major companies through Digital Transformation. About 3,300 staff in over 25 locations epitomize in-depth technology expertise, industry knowledge, and focus on customer requirements. Working as a team, we develop innovative IT solutions, transition our clients into the Cloud, integrate digital processes, and take on IT systems operation and support.

As a part of the Bertelsmann-owned Arvato Group network, we have the unique capability to work across the entire value chain. Through our strong strategic partner network with global top players such as AWS, Google, Microsoft, and SAP, we continuously strengthen our know-how and leverage the most advanced technology. We Empower Digital Leaders.

arvato-systems.com/manufacturing