



# IT-Cluster

needs and challenges for digital transformation





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**Cluster Manager**

IT-Cluster

# The IT-Cluster



**196**

Partners from all over Austria

**77%**

Small and medium-sized enterprises

Largest IT cooperation network in Austria

## Benefits

- Successful positioning
- Tailored support
- Access to- and information on funding
- Cooperative project support
- Learning from the best (e.g., ERFA)

## ITC-Team



Over **260** personal company contacts per year

## Cooperation

**16** projects with **50** companies and **€ 3,35 Mio.** project volume

**16** Advisory councils

## Key Topics

- Business Software
- Information Security
- Industrial Data

## Supporting organisation



**250**

Events

**6000**

Participants in 11 years

## Focus initiatives



INITIATIVE  
**CONNECTED  
MOBILITY**  
DIE SMARTE ZUKUNFT  
[WWW.CONNECTED-MOBILITY.AT](http://WWW.CONNECTED-MOBILITY.AT)



# Our Partner





# IT-Cluster

FUTURE. DIGITALIZATION. FOR SMEs.



# The future of digitalization is driven by three major factors:

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- Automation:

👉 Automation becomes a crucial opportunity for SMEs to optimize their operational processes and **save time** and **resources**. By automating business processes, SMEs can increase **productivity**, reduce **costs**, and enhance **competitiveness**. A prerequisite for this is the Digital Thread (data consistency).

- Artificial Intelligence (AI):

👉 Artificial Intelligence (AI) provides SMEs with the opportunity to make **data-driven decisions** and gain valuable insights into **customer behavior and market trends**. SMEs can also use AI to create personalized experiences for customers and enhance the **effectiveness** of their marketing and sales strategies.

# The future of digitalization is driven by three major factors:

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The Internet of Things (IoT):

👉 The Internet of Things (IoT) enables SMEs to utilize connected **devices** and **sensors** to collect and analyze **real-time data**. This data can contribute to improving **operational processes**, **reducing energy consumption**, and **optimizing the supply chain**. Through IoT, SMEs can also offer innovative products and services based on the needs of their customers.



# Opportunities for SMEs in Digitalization

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## 👉 Competitiveness:

In an increasingly digitized world, companies without adequate digital presence may struggle to remain competitive. SMEs may feel disadvantaged compared to larger competitors already leveraging digital technologies.

## 👉 Efficiency Improvement:

Digitalization can help optimize business processes, leading to cost reduction and increased efficiency. SMEs, with limited resources, can particularly benefit from this efficiency boost.

## 👉 Market Expansion:

Digital technologies can assist businesses in exploring new markets and reaching customers on a global scale. For SMEs operating in limited geographic regions, this presents a significant opportunity.



# Opportunities for SMEs in Digitalization

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## 👉 Innovation:

Digital technologies also provide SMEs with the opportunity to develop innovative products and services that differentiate them from competitors and can generate new revenue streams.

## 👉 Future Viability:

Digitalization will become increasingly crucial in the future, and businesses that do not embrace digital technologies may face challenges in long-term survival. **SMEs should seize the opportunity now to build their digital presence and prepare for the future.**



# Challenges



often do not

ng

# Dangers of digitalization

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## 👉 Cyber Attacks:

- Cyber attacks on SMEs can result in **data loss**, **operational disruptions**, and **reputational damage**. SMEs must implement appropriate security measures such as **firewalls**, encryption, and **employee training** to minimize the risk of cyber attacks.

## 👉 Rapid Technological Change:

- The rapid pace of technological change and the need to keep up with competition can pose challenges for SMEs. They must adapt to the latest technologies and trends to remain competitive. This requires a high degree of flexibility, adaptability, and a willingness to change in terms of business processes and corporate culture.

# The following aspects must be taken into account for a successful digitalization strategy

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**Developing a clear strategy:** SMEs should clearly *define the goals* they want to achieve through digitization and outline specific measures required to reach these objectives.

**Involving employees:** It's crucial to engage employees early in the digitization process to consider their needs and ensure they receive the necessary skills and training.

**Optimizing processes:** SMEs should carefully analyze their processes to identify areas where digitization can be applied to enhance efficiency.

**Planning investments:** Digitization often requires investments in technology, infrastructure, and training. SMEs should carefully plan their investments, ensuring a proper balance between costs and expected benefits.

# Technologies and trends of the future

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- Cloud
- No-Code / Low-Code
- Mixed Reality
- AI / ML



# Thoughts on AI



- AI is often used to increase efficiency in production.
  - Error if we only look at it that way
    - Example:



- Using **image recognition technologies**, AI can identify defects or irregularities in products before they reach the end consumer.
- Optimization of **supply chains**. AI can analyze your data to optimize inventory levels. Companies can respond quickly to market demand.
- In production, AI enables the **adjustment of manufacturing processes** in real-time to enhance efficiency and productivity. Through machine learning, production facilities can autonomously optimize themselves.

# Thoughts on VR / AR (Mixed Reality)



One example of applying Virtual Reality (VR) in the food industry is **employee training**.

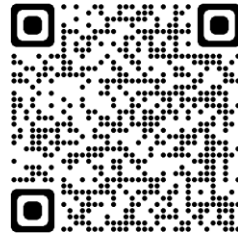
With VR, companies can **create virtual environments** where potential customers can experience products before they are physically produced.

In logistics, VR can help **optimize warehouse and shipping processes**. Employees can use VR glasses or headsets to gain a virtual view of inventory, leading to more efficient picking and packing operations.



# IT-Cluster

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# Contact and Information

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