Becoming a digital enterprise

Staying competitive by embracing Digital Transformation
Agenda

1. About Us
2. Background on digitalization and digital transformation
3. Why going into digital transformation
4. How to understand, plan, measure and control your digital journey
5. Intro to Low-code VS RPA, Mendix & MindSphere
6. Case Studies
7. Q&A
About Us

Certified digital transformation consultant with 8+ years of experience in project management and 11+ years in design for manufacturing and delivering end-to-end strategic operational improvements initiatives requiring high quality and fast-paced execution.

Co-founder of Pyron Technology, an innovative consultancy firm established to disrupt, engage and implement Industry 4.0 technologies in the "virgin market" of South-East Europe.

He is a certified Digital Transformation Expert (by the Austrian Chamber of Commerce), Project Management Professional (PMI-PMP) and EBRD International Consultant.

Pyron Technology has been established on the principles of providing holistic services in the implementation of Industry 4.0 technologies and digital transformation.

With large experience in project management, management consultancy and establishment of innovation centres for Industry 4.0 in the Middle East and Europe, Pyron Technology has been created.

In collaboration with large industry 4.0 technology leaders, consultants and engineers all over Europe and the world we are bringing a unique experience, industry-disrupting technologies and radical new approach to the business itself.

Pyron Technology is an advocate of the European Technology Council (EUTECH), a network of forward-thinking companies on the digitalization of Europe and the World.
About Us

IT Director with more than 15 years experience as consultant, PM and Program Manager in SAP ERP environment in different industry market mainly manufacturing & retail in different countries in Europe.

Co-founder of MOST Engineering & IT Solutions, a young and innovative consultancy firm established to pioneer and support digital transformation journey in the South East Europe market including classical consultancy services in SAP ERP domain.

He is a certified PRINCE2-Agile Project Management, ITIL with strong background in SAP products.

MOST Engineering & IT Solutions has been established on the principles to drive digital transformation with focus on the Serbian market, leveraging Industry 4.0 leader solutions.

With large experience in project management, management consultancy and established partnership with major leader in Digitalization as Siemens Digital Software Industries we aim to provide unique guidance in the journey towards become a Digital enterprise.

Collaborating also with our partner from the Italian SAP market we provide guidance and assistance from back office till operation and “on the field” solutions.
The level of digitalization per each industry represents a great indicator of possible improvements and expansion of digitalization.
Background on Digital Transformation

DIGITIZATION

DIGITALIZATION

DIGITAL TRANSFORMATION
Why Digital Transformation?

“To survive disruption and thrive in the digital era, incumbents need to become digital enterprises, rethinking every element of their business.”

Technology and Innovation for the Future of Production: Accelerating Value Creation
World Economic Forum, Mar 2017
Why Digital Transformation?

55% of European companies stated the COVID-19 pandemic has increased the demand for digitalization.

46% of companies reported that they have grown more digital.

61% of companies in the European Union have already implemented advanced digital technology.

26% of EU businesses have not invested in digital transformation at all.
Why Digital Transformation?
Digital Journey – Understanding through Digital Maturity Index Assessment - DMI

**Where are we on our digital journey?**
DMI analysis provides a view on organisation’s transformation status vs market and industry best-in-class

**How to progress with our digital transformation?**
DMI recommendations provides detailed and actionable initiatives that are prioritised to accelerate the transformation journey

**Do we spend our budget on the right stuff?**
DMI roadmap creates a customised and deliverable plan of action that is aligns and balances budget and vision
Digital Journey – Understanding Digital Maturity Index – 6 dimensions and 120 topics

governance
Administration
Performance
Analytics

innovation
Idea Management
Expansion
Culture

technology
Applications
Infrastructure
Data & Analytics

customer
Offerings
Experience
Analytics

operations
Processes
Industry 4.0
Analytics

people
Capabilities
Culture
Analytics
Digital is not a priority yet. Organisation still needs to prepare for the long journey.

A bunch of digital initiatives have been launched. Data is considered a valuable asset. Technology, processes and management are integrated.

Basic digital capabilities have been built. Data is considered a valuable asset. Technology, processes and management are integrated. Digital capabilities are well-developed. Customer focus and innovative mindset are essential. Integration is complete; optimisation and simplification are in progress.

Customer focus, process optimisation, agile working and innovative culture are well-established. Channels are integrated. Systems are highly secure. Real-time data is used to run the business, predict future scenarios, and make simulations.
Digital Maturity Index - Benefits

Understanding of the Current State
- Rationalize current maturity level
- Identify strong and weak areas
- Understand broader picture of digital maturity

Benchmarking
- Group Benchmark (compare against group average)
- Industry Benchmark (compare against industry peers)
- Delta Benchmark (compare against past performance)

Target Setting
- Define Digital Vision
- Set Maturity Targets
- Define Maturity Roadmap
Digital Journey - Planning

List of Initiatives

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Notes:
- Actions to be taken based on the Initiative to increase savings and efficiency.
- Initiatives are dependent on the organizational structure and resources available.
- Continuous improvement is key to maintaining a competitive edge.

Recommendations:
- Develop a clear roadmap for each initiative.
- Assign clear ownership and accountability for each initiative.
- Monitor progress and adjust strategies as needed.
- Foster a culture of continuous learning and improvement.

Digitopia

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Digital Journey – Measuring Progress

1. Progress Review
   • Review Status
   • Review Roadmap
   • Review Team

2. Progress Review
   • Review Progress
   • Benchmark Update
   • Executive Update

3. Progress Review
   • Business Benefits
   • Lessons Learned
   • Prepare for DMI2

DMI PLUS

DMI Service

Company Internal Effort

2nd Year Engagement

On-boarding

Planning & Organisation

Execution of Digital Transformation Journey

DMI

DMI PLUS

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DMI
Introduction to Low Code & IIoT Solutions

Mendix & Mindsphere – Siemens Software
Today’s challenge

“We need it now!”

We need to take new ideas and products to market quickly

We need to streamline and automate our operations

We need to digitalize our customer experience

“IT supply”

“We have an 18-month backlog!”

I’m not able to respond fast enough to new business requirements

My existing systems are not flexible enough

I need to stay in control
The Mendix way

Business Agility

IT Control

- CITIZEN DEVELOPER
- BUSINESS ANALYST
- BUSINESS ENGINEER
- PROFESSIONAL DEVELOPER

No code
Low-code
Code

Mendix makes development less “code intensive”, more inclusive and much faster
Mendix is the fastest and easiest way to build, integrate and extend applications.

Build apps 10x faster with 70% fewer resources.

Unleash Domain Experts, while IT stays in control.

Unlock and extend your data and systems.
Why enterprises choose Mendix

- Leverage your entire workforce for software development
- Develop solutions with uncompromising architecture
- Create engaging experiences for employees and customers
- Proven execution at any scale
- Connect ecosystems across any device, from any location, on any cloud
Pioneer & market leader in two disruptive platform categories

Enterprise low-code application platforms

Multi-experience development platforms

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MindSphere

The industrial IoT as a service solution
“The industrial IoT brings computers from IT to operational technology, opening up vast possibilities for instrumentation, leading to major efficiency and productivity gains”

*Competitive Landscape for industrial IoT Technologies and Solutions* Gartner, May 2018
Why should you act now?

85% of potential assets remain unconnected.

Technology and Innovation for the Future of Production: Accelerating Value Creation World Economic Forum, Mar 2017

64% of respondents are either engaged in or planning an IIoT project in the next year.

Technology and Innovation for the Future of Production: Accelerating Value Creation World Economic Forum, Mar 2017

It is the beginning of the era of digitalization

- Few organizations are currently realizing the full value of the IIoT, but it’s only a matter of time

Early adopters receive the biggest gains

- Opportunity to proactively build major competitive advantages

More than half the market is investing in the industrial IoT

- Become industry leader with optimized processes
Why should you act now?

If you don’t act now, you risk:

- Falling behind competitors who are already digitalizing
- Asset downtime and excessive wear and tear
- Wasted materials used in manufacturing processes
- Worker safety and productivity
- Diverted human capital and business resources
- Excessive overhead from sub-optimal process

“Simply stated, there is more at stake with IIoT deployments, where systems failures and downtime can result in life-threatening or high-risk situations.”

What is the industrial IoT? [And why the stakes are so high]
Network World, Feb 2018
Data-driven services based on MindSphere enable new business

MindSphere – an industrial IoT as a service solution

- Gain immediate insights on whole fleet as well as individual assets using own, Siemens or partner apps
- Transform insights into actionable results to increase uptime and efficiency

Configure data collection as well as connectivity quickly and easily

Virtual World
Real World

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How it works
End-to-end Industrial IoT

CLOUD LEVEL

MindSphere

INDUSTRIAL EDGE MANAGEMENT

DATA TO CLOUD

EDGE APP TO DEVICE

FACTORY LEVEL

Enhances transparency and drives deep operational insights

Transfers device data to cloud for storage and analysis

FIELD LEVEL

Connects legacy and new equipment for improved processes

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Strong open ecosystem emerging around MindSphere, opening new opportunities for our customers and partners

Consulting/strategy partners
- McKinsey & Company
- PwC
- TATA

Application Developer
- evosoft
- SAP
- PwC
- Senseye

System Integrator
- Atos
- OMNETRIC Group
- Accenture

Technology Provider
- Microsoft Azure
- Accenture
- IBM Watson
- SAP

IaaS Provider
- Microsoft Azure
- Atos

Connectivity Developer
- BluVision
- TATA
- EYEA Consultancy Services

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MindSphere & Mendix work together

**Build IoT applications**
connect products, plants, systems and machines to harness data with advanced analytics.

- Connect assets and upload data to the cloud
- Collect, monitor and analyze data in real time
- Gain insights that improve efficiency and profitability
- Add apps that increase the business value of your data
Use cases

Mindsphere & Mendix success stories
Mindsphere Case study

Festo

Asset performance management

Challenges
- Understanding all phases of a machine’s lifecycle to help customers improve productivity
- Meeting end-customer IP, data and process security demands along the way

Transformation results
- IIoT implementation that enables secure access to device and machine data
- System to supply digital products in a way that matches customers’ architectural and technical needs

Value
- A solution that provides the same level of security as existing physical systems
- Ability to create new value for customers in a streamlined way and without focusing on prerequisites, like enabling secure device access
- Partner ecosystem to enrich end-user solutions
Mindsphere Case study

Eisenmann SE
Condition monitoring

Challenges
• Poor transparency into plant machine performance and health
• Data silos that inhibit cross-team collaboration
• Limited availability of IoT solutions that can be integrated with existing systems

Value
• Integration with existing plant systems
• Reduced upfront IT costs and elimination of over-provisioning
• Minimized asset failure and downtime
• Shared knowledge-base and collaborative learning across business

Transformation results
• Ability for customers to collect real-time data from plant machines
• Adoption of cloud-based pay-per-use business models
• Greater, centralized transparency into plant machines
Securing and Expanding Key Operations with Software

Contract Logistics app processes orders from ecommerce systems to a custom warehouse management system, preventing 7-figure customer churn and securing four Fortune 100 accounts worth millions per year.
Taking an Engineering Culture

Agile

Continental transforms its legacy IT landscape, starting with aging Lotus Notes applications.
THANK YOU
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