Industry 4.0 @ Datwyler
How to be future proof

Agenda

About Datwyler
Industry 4.0 @ Datwyler
Critical success factors
Outlook
Stability and strength of a large industrial group

- Swiss origin, established in 1915
- Revenues of approx. CHF 1,300 million
- >8000 employees
- Focused industrial player with two divisions: Sealing Solutions & Technical Components
- Listed on the SIX Swiss Exchange

Technical Components division

- Maintenance, Repair, Operations
- Automation / Robotics
- Electronic Design Engineers
- Home/Consumer Electronics
Datwyler Sealing Solutions: multi-industry player

International presence with more than 7,000 employees

Europe 45%
> 3,000 Employees
Sales CHF > 550 m

America 15%
> 1,000 Employees
Sales CHF > 160 m

Asia 40%
> 2,600 Employees
Sales CHF > 170 m
Our unique core competencies as a strong base for leading market positions

- **Material & Simulation Expertise**
  - Development of high-performance materials for various applications
  - Surface treatments
  - Experts in simulation

- **Engineering**
  - Development of tailor-made sealing solutions from prototype to large-scale production
  - Interdisciplinary teams
  - Co-engineering with customers

- **Processing Quality**
  - Capability to set industry standards and deliver best-in-class manufacturing programmes
  - Zero-defect-philosophy
  - Large-scale production

- **Global Services**
  - International manufacturing locations and worldwide support
  - Global manufacturing standards

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- Critical success factors
- Outlook
Our challenges

- Diversity of technologies
- VUCA world
- War for talent
- E-mobility
- Megatrends in Healthcare
- Worldwide footprint
- M&A strategy

Our values and strategic priorities

DRIVE PROFITABLE GROWTH

INCREASE AGILITY

ACCELERATE DIGITALISATION
The Datwyler Production System

The Datwyler Production System is a long-lasting improvement program to foster the lean culture and to achieve operational excellence.

It is a holistic and structured approach to change for the better.

The model is based on our company values and lean principles that guide us in our everyday work.

The principles are clustered around five fundamental elements supported by methods and tools.

Highly automated production

...cells and lines
Identify opportunities of Industry 4.0
Example: Health Care activities

A first high-level prioritization of the digital field development potentials has been conducted – representing the basis for an in-depth analysis.
Critical success factors

- Solid IT backbone: building blocks
- Digital office environment
- Business Process Management
- Learning organization (expert network)

Building blocks for the digitalization to support the business processes

FOUNDATIONS
SAP as anchor of the business architecture of the future to harmonize systems and processes:
- S/4 HANA - ERP
- Shopfloor - SAP MII
- Orchestration Upgrade
- SAP SuccessFactors

SALES CHANNEL SHIFT
Use the web as a channel for sales to accelerate the pipeline and business growth.
- CRM – SAP C4C delivers a consistent omni-channel experience

ADD-ONS
Implement add-ons to further centralize information and create a connected and open architecture:
- SAP Central Finance
- Business Warehouse for HANA
- Integrated Business Planning
- EQMS SharePoint

DATA & ANALYTICS
Transactions and analytics in real-time & real-time big data insights:
- Predictive Analytics
- Cognos
- Tableau and other visualization tools
Datwyler application landscape

Digital office environment for all Datwyler employees
The Digital Concept – road map

- Define level of standardisation
- Define standardised process
- Get stakeholder understanding and support
- Define interfaces
- Define KPI(s) of new process
- Define software needs (if any)
- Define communication channels (if any)
- Make action plan for implementation including cost & benefits overview
- Get approval for implementation from executive team

Business Process Management

- Identify processes
- List all processes
- Priorise processes
- Define process owner
- Complete project charter
- Review current processes
- Review applicable regulatory and customer requirements
- Review business objectives
- Identify gaps
- Define current KPI(s)
- Identify best practices and system gaps

- Map ‘AS IS’ situation
- Document and validate new process
- Map ‘TO BE’ situation
- Implement new process
- Monitor new process and collect data
- Experiment and improve
- Correct where needed
- Track and analyse KPI(s)
- Review and evaluate the results
- Compare situation before and after (KPI)
- Measure progress against milestones
- Measure progress against milestones
- Deploy new process (e.g. on limited scale)
- Effectiveness verification
- Implement TO BE situation
- Map TO BE situation
- Define level of standardisation
- Define standardised process
- Get stakeholder understanding and support
- Define interfaces
- Define software needs (if any)
- Define communication channels (if any)
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Global Technology Management
Expert network

A structure for knowledge management
Tools
Health Care Plant in Middletown
Our show case of Industry 4.0

The new state-of-the-art plant is fully supported by our new IT systems—SAP Mii and SAP S/4 Hana. This plant is used as a showcase and the solutions built here will be rolled out to other DSS locations in the future.

**Paperless production**
- All activities within the shop floor will be fully supported by SAP Mii to avoid any manual entries on papers.
- Data entry and data collection will be done either automatically through machine connection or via terminals, mobile devices at each machine.
- Digital traceability for the whole supply chain from the vendor to the final customer.

**Automation and integration**
- High automation and IT integration of crucial processes.
- Automatic dosing system, automatic moulding and trimming system, AGVs for automatic material replenishment, full integration of laboratory equipment for test result transmission.
- Seamless communication via RFID.

**Digital backbone**
- Robust and redundant IT infrastructure with two local server rooms and global applications on the cloud.
- Newest ERP with S/4 Hana.
- Fully integration and shop floor connectivity with SAP Mii.
- Critical machines operated by Wonderware Archestra.

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**Smaller projects** enabled with SAP MII

- **AGV project**: Automatic guided vehicles for material replenishment from the filling department to the moulding department. Integration with SAP Mii and paperless material replenishment.
- **RFID project**: Track & Trace via RFID to reduce manual effort and improve transparency on the shop floor.
- **Data mining**: Analysis of big data from our critical machines to improve performance, decrease down time, and improve the preventive maintenance cycles.
Other examples of innovative solutions

3D printing
Industry 4.0 in Tool-room.
RPA in finance
Simulation software
Intelligent energy monitoring
Augmented reality
...

Metal Laser Sintering enables inserts to be produced within 2 days!

*Machining can be done in the same printing step or post-printing*
Non-digital tools

Shop Floor Management Boards

Visual Management

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Further Digital transformation as part of the Datwyler strategy

- Solid IT backbone: building blocks
- Digital office environment
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NO MATTER WHAT
THE FUTURE HOLDS

I am happy to answer your questions!
Thank you