



3DEXPERIENCE®

DELMIA MAKE IT HAPPEN

January 2023

 **DASSAULT
SYSTEMES** | The 3DEXPERIENCE® Company



READ ME

Section 1: Corporate Overview

For more information:

<https://eu1-215dsi0708-ifwe.3dexperience.3ds.com/#dashboard:501bc385-6e47-46b7-9c39-aa8904630725/tab:oneJourney>

Section 2: DELMIA Global Operations Overview

- **Tailor your presentation to the industry, company, and audience – this deck is not designed to be used in its entirety**
- Additional industry and DELMIA materials can be found on MyOffer:
<https://dsex001-eu1-215dsi0708-ifwe.3dexperience.3ds.com/#dashboard:c2ea6077-f644-4f53-97ca-172476967e7e/tab>Welcome/app:MAP-CGNOHXIRC>
- This deck is designed as a high-level introduction to DELMIA, more detailed decks relating to the various disciplines are also available on MyOffer

Additional Material

- Customer Stories - find the DELMIA_AT series presentation:
<https://eu1-215dsi0708-ifwe.3dexperience.3ds.com/#app:MAP-CGNOHXIRC/content:assetId=5120.12635.52868.15068&format=PPT&tab=Catalog>
- Use customer slides relative to your audience

Questions

- Visit the DELMIA dashboard: <https://eu1-215dsi0708-ifwe.3dexperience.3ds.com/#dashboard:c2ea6077-f644-4f53-97ca-172476967e7e/tab>Welcome>
- Contact a DELMIA Marketing colleague

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About DELMIA

DELMIA's Impact on Today's Sustainable Global Operations

The Power of the Virtual Twin Experience – Beyond Digital Twin

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DELMIA Capabilities Summary

Key Considerations and the Way Forward

OUR COMPANY



A purpose-driven company

Combining Art, Science & Technology
for a more sustainable world

20,500 passionate people

From 135 countries
180 sites
One global R&D / 72 labs



Long-term driven

Majority shareholder control
Revenue: €4,86 billions*
Operating margin: 34,3%*

*Figures as of FY 2021 / Non-IFRS



15,000 partners

Software, Technology & Architecture
Content & Online services
Sales
Consulting & System Integrators (C&SI)
Education
Research

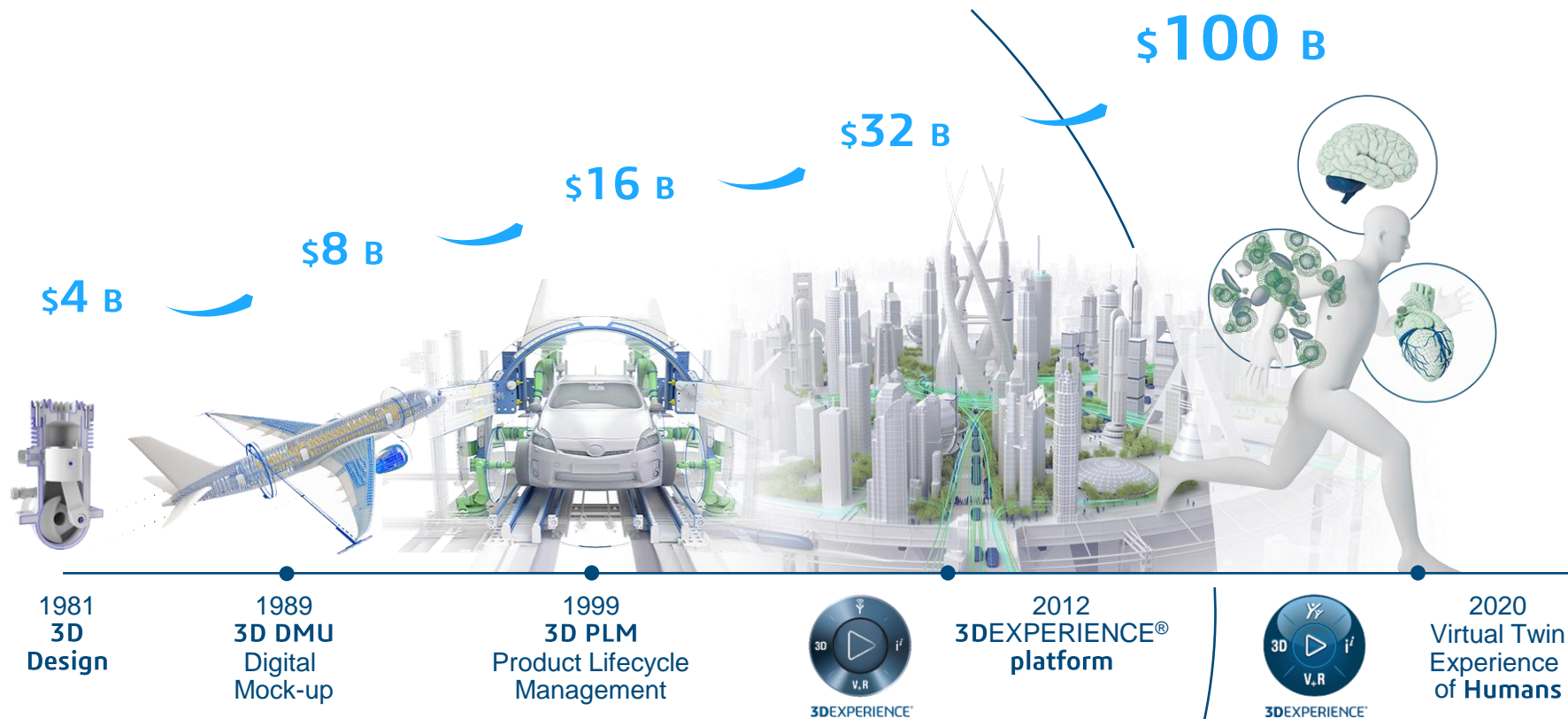


+300,000 customers

11 industries in 140 countries
29 million users
Game-changing
3DEXPERIENCE platform

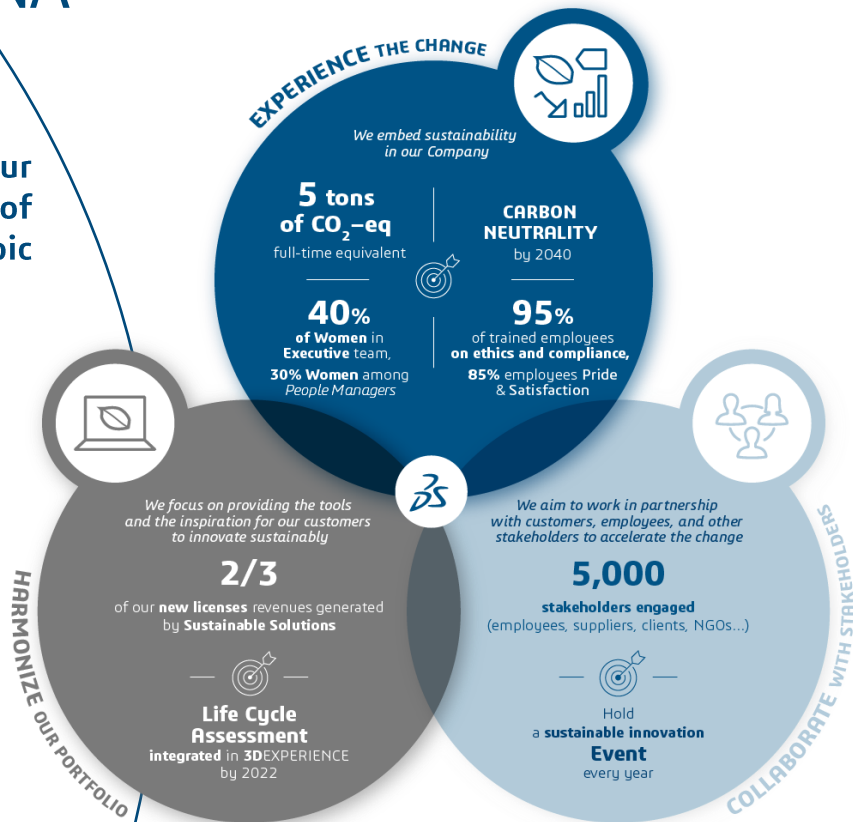


EXPANDING OUR ADDRESSABLE MARKET



Sustainability is part of our DNA

Our Sustainability Compass guides us, while our governance processes maintain a high level of accountability within our organization on the topic of Sustainability.



Unless mentioned, all targets are by 2025

OUR BELIEF



Virtual worlds **extend**
and **improve** the
Real world

OUR PURPOSE

“
Dassault Systèmes provides business
& people with 3DEXPERIENCE® universes
to imagine sustainable innovations capable
of harmonizing product, nature and life.
”



3DEXPERIENCE® POWERS OUR BRAND APPLICATIONS



MAKE IT HAPPEN

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ABOUT DELMIA

2,000 Passionate Customers

with 1.14M users from 11 industries

From suppliers, manufacturers, logistics and transportation providers, to service operators and workforces
Across discrete, batch, hybrid, and process manufacturing and services

Enabling Sustainable Innovation with the Virtual Twin Experience

Empowering the workforce of the future
Transforming supply chains to value networks
Building resiliency for future-proofing operations



Global Sustainable Operations

- Collaborative Operations with Data Sciences
- Industrial Engineering
- Supply Chain Planning & Optimization
- Manufacturing & Operations

3DEXPERIENCE Platform

Powered by the 3DEXPERIENCE® platform, DELMIA helps industries and service to **Collaborate, Model, Optimize, and Perform** through integrated decision support and real world data evidence

Connecting the Virtual & Real

Providing solutions to leverage the virtual world of modeling, optimization and simulation with the real world of operations with an actionable virtual twin experience.

MANUFACTURING LEADERS USE DELMIA

1 Build to Order / Build to Stock

- 8 of 10 top global automotive OEMs
- 60% of electric vehicle (EV) manufacturers
- Worldwide, **every second**, a new car is assembled with a part manufactured using DELMIA
- 50% of the world's largest **farm equipment manufacturers**
- 40% of the world's largest **construction equipment manufacturers**
- 9 of 10 world's largest **aircraft manufacturers**



2 Process Manufacturing

- 80% of rolled aluminum products worldwide are planned and produced using DELMIA

3 Batch Manufacturing

- 3 of 5 top global cosmetics companies



5 Repetitive Manufacturing

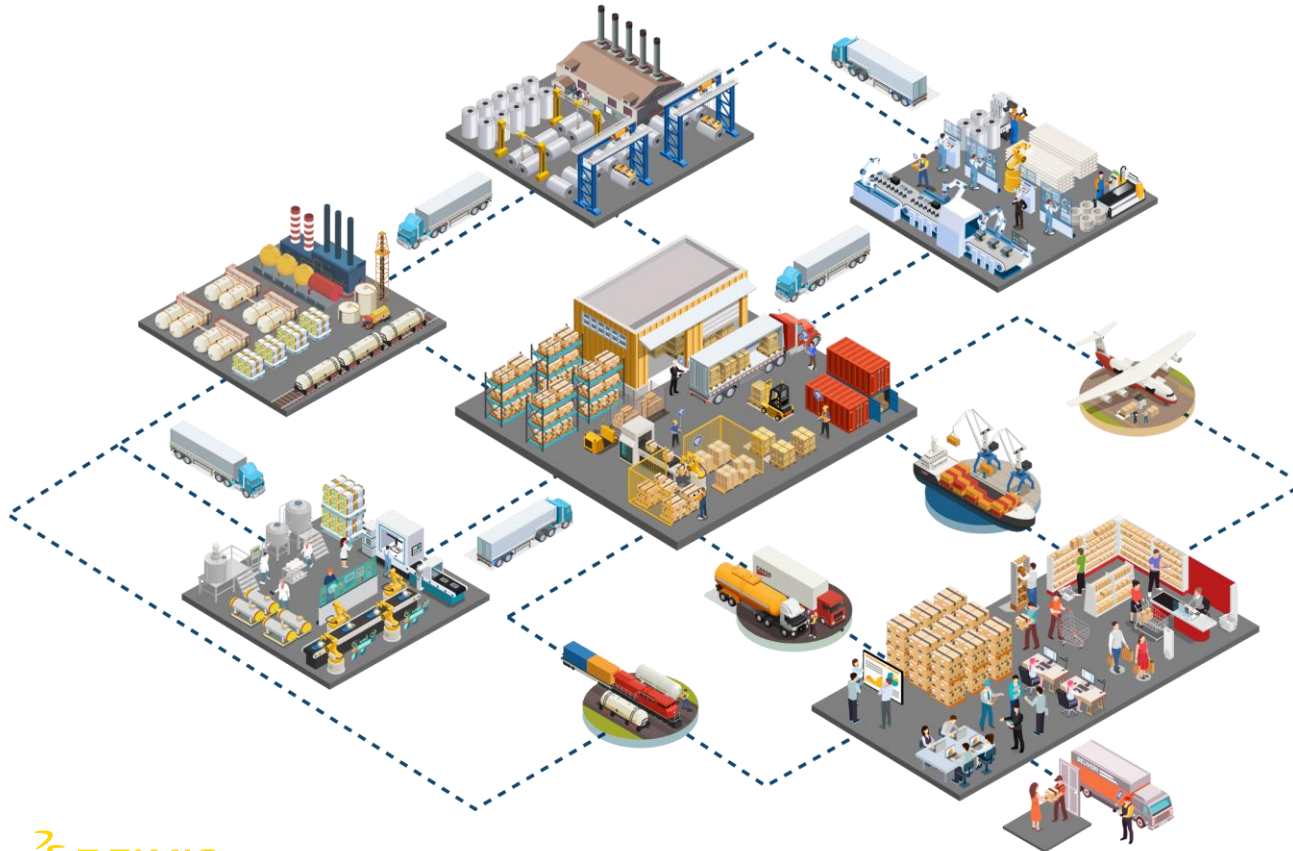
- 2 of the world's largest robotic surgery suppliers with **over 80%** market share
- 2 of 3 world's top orthopedic device suppliers



4 Hybrid Manufacturing

- 85% of the world's battery cell capacity is designed and produced using Dassault Systèmes

DELMIA SUPPLY CHAIN EXCELLENCE



- Multiple world records for supply chain optimization
- Roster air traffic controllers who manage **70%** of the world's airspace
- The world's largest liquid natural gas producers use DELMIA for fleet optimization
- Optimizing delivery of **more than 1.8 billion** global shipments annually
- **2 of 10** top logistics companies worldwide
- Supporting global retailers that supply more than **20,000 stores worldwide**
- **80%** of rolled aluminum products worldwide are planned and produced using DELMIA

DELMIA

MAKE IT HAPPEN



58
13,540
7
13

IRB 6700-1201
RUNNING
1320 W

DASHBOARD

23.6
17.4
82

A32 FLEET STATUS
423
6.2

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BUSINESS TRENDS



Innovative Technology



Digital Twins



Big Data Analytics



Supply Chain



Talent



Wearables



Security



Sustainability



**Manufacturing
Labor Crisis**



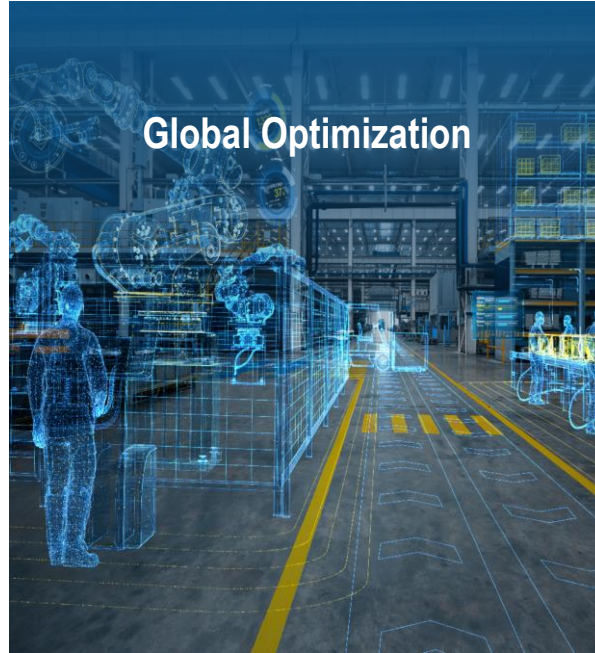
**Supply Chain
Disruption**



Sustainability

DELMIA SUSTAINABLE OPERATIONS

Converging Virtual Experiences and Real-World Evidence to Enable:



SUPPORTING THE WORKFORCE OF THE FUTURE

Sustainable Manufacturing Operations

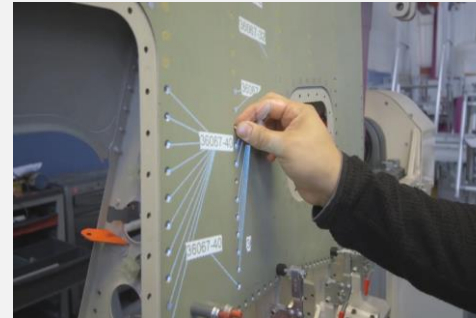
Virtual worlds improve

- Knowledge distribution (democratization)
- Worker safety
- Decision support through AI and experimentation
- Job satisfaction
- Operational accuracy and efficiency



Next gen is

- Making decisions that were previously unheard of or not possible
- Empowered with knowledge and know-how
- Requiring the use of technology
- Curious as to how their decisions impact business



SUPPORTING THE WORKFORCE OF THE FUTURE

Sustainable Supply Chain Operations

Virtual worlds improve

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USE VIRTUAL TWIN EXPERIENCE TO CREATE SUPPLY CHAIN RESILIENCY

SUPPLY CHAIN

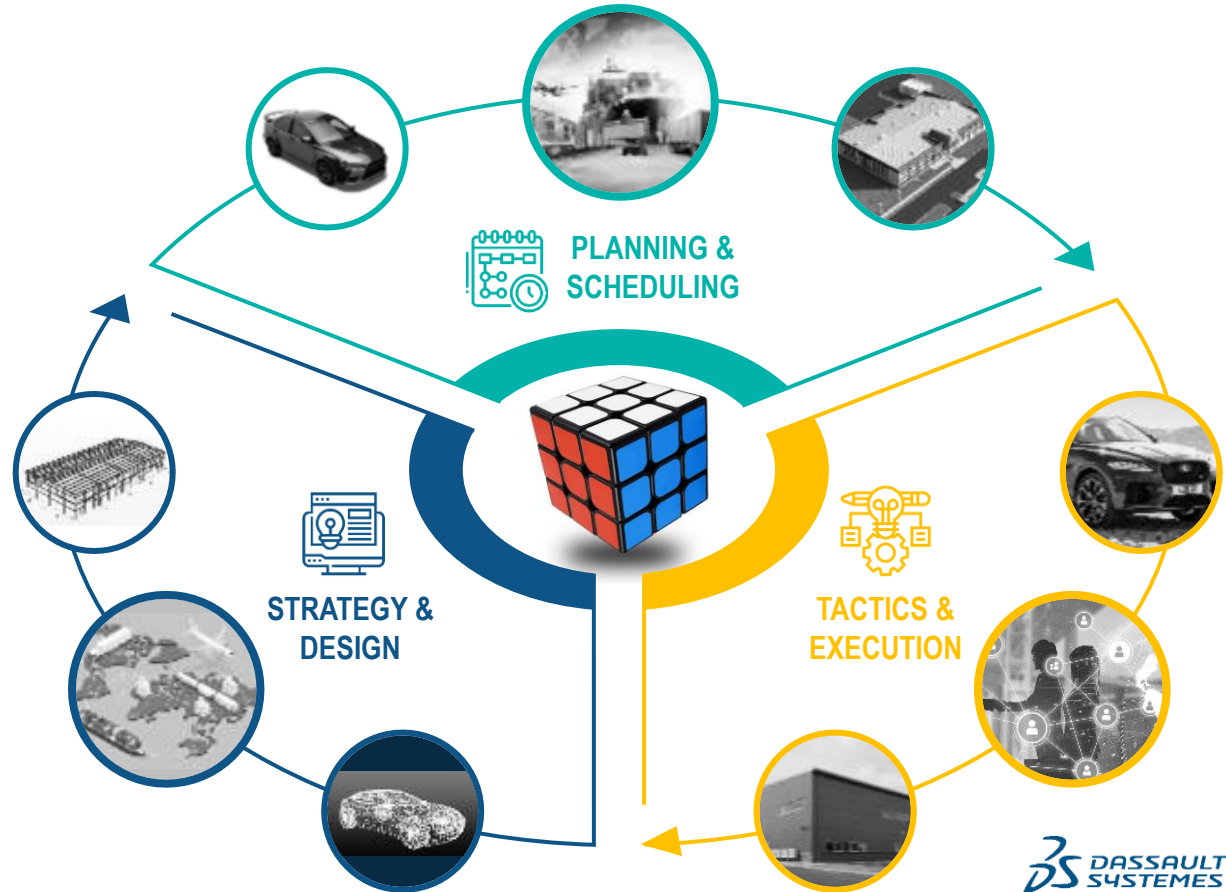
Models of Value Network,
Supply, Demand, Partners
Logistics Execution

RESOURCES

Models of Facilities,
Physical Assets, Machines
Workforce, Production Execution

PRODUCT

Models of Items, Process Plans,
Build Strategies



ORCHESTRATING VALUE NETWORK OPERATIONS



Virtual Twin Experience of Resources & Facilities



Virtual Twin Experience of the Product



Virtual Twin Experience of the Supply Chain

VIRTUAL



MODEL

• Data Sciences



OPTIMIZE

• AI/ML



PERFORM

• Knowledge of know-how

**MODEL
BASED**

3D

▶

i'

**DATA
DRIVEN**

V, R

3DEXPERIENCE

IMAGINATIVE | IMMERSIVE |
COLLABORATIVE | PREDICTIVE

REAL



PLAN

• Agile
• Planning



OPERATE

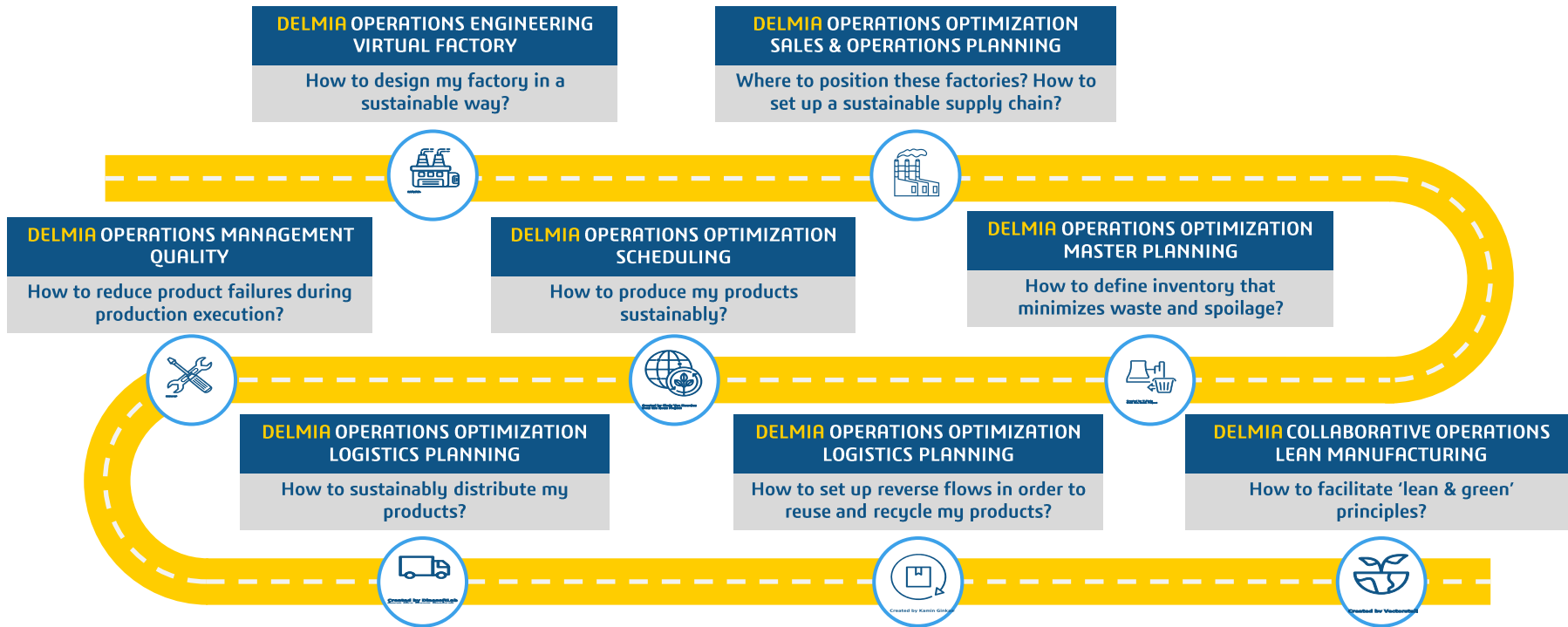
• Resource Utilisation



ANALYZE

• Continuous Improvement

EXAMPLES OF HOW DELMIA SUPPORTS SUSTAINABILITY



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DIGITAL TWIN DEFINITION



WIKIPEDIA
The Free Encyclopedia

[Main page](#)
[Contents](#)
[Current events](#)
[Random article](#)

Article [Talk](#)

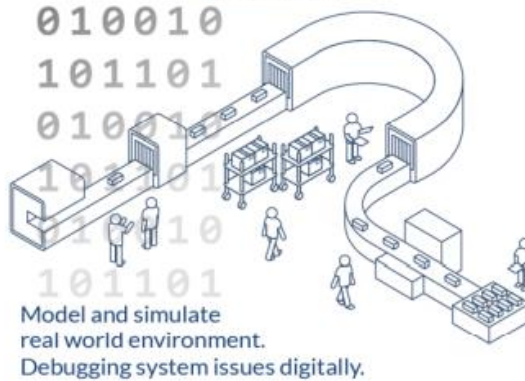
Digital twin

From Wikipedia, the free encyclopedia

A **digital twin** is a digital representation of an intended or actual real-world physical product, system, or process (a *physical twin*) that serves as the effectively indistinguishable digital counterpart of it for practical purposes, such as [simulation](#), [integration](#), [testing](#), [monitoring](#), and [maintenance](#).

TODAY'S STATUS OF DIGITAL TWINS

Digital Twin



Physical Twin

The **DIGITAL TWIN** is a static or a semi-dynamic digital model of objects where engineers can simulate the design/manufacturing process virtually to develop and validate systems using simulation without impacting the physical world first.

THE CHALLENGES OF TODAY'S DIGITAL TWINS



Access to real-time data

Often, there is no real-time data available or only from a limited amount of sources, and other times, there is no data at all.



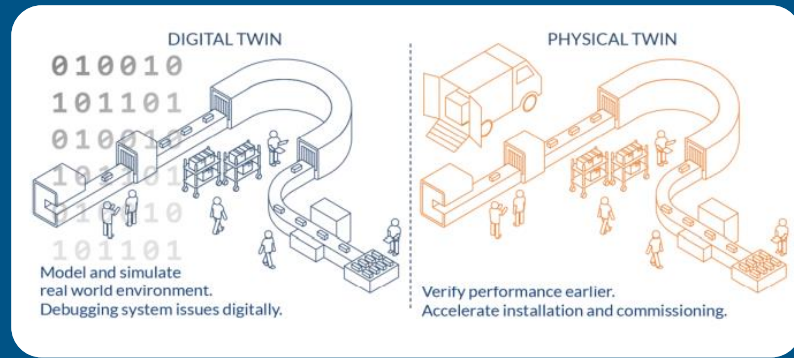
Lack of data standards and integration

Many experience difficulty in finding data available in a usable format. Can it be easily integrated into the data platform of the Digital Twin?



Sustainable and scalable

Digital Twins are purpose built, rigid and can be difficult to maintain over time or expand for new problem solving



DRIVERS FOR FUTURE TWINS



Increased pressure on raw materials



Supply chain carbon footprint



Attracting future workforce



Regulatory compliance



Changing consumer demands



OPERATIONS
VOLATILITY / COMPLEXITY



Fast-growing requirement for digital businesses



Mandate for sustainability



Increase in demand for EV and Autonomous Vehicles



Data, decision automation and AI

THE NEED FOR A PARADIGM SHIFT

INDUSTRY 4.0

Physical Resources



Digital Twin



Bound by Assets

Localized

Silo-ed

Transactional & Directional

End-to-End Continuity

Model-Based

Data Driven

Collaborative Decision
Support (AI/ML)

VIRTUAL TWIN EXPERIENCE



Bound by Imagination

Global

Collaborative

Real-Time, Closed Loop

UNIQUE VALUE | VIRTUAL TWIN EXPERIENCE FOR OPERATIONS



INNOVATION

MODELING +
SIMULATION



Value
Network



Factories, Warehouses,
Logistics, Service
Centers



Products and
Processes



DATA SCIENCE

BIG DATA + MACHINE LEARNING +
ARTIFICIAL INTELLIGENCE with
REAL WORLD EVIDENCE



COLLABORATION

VISIBILITY + AUGMENTED +
CONTEXTUALIZED ACTION

Long
Short



Unstructured

Structured

VIRTUAL TWIN EXPERIENCE FOR OPERATIONS

VIRTUAL

+

REAL

From Supply & Demand Planning to
Tactical Planning, and Logistics Planning
Supply Chain Data Sciences

**Collaborative
Operations**

Service Planning
Service Execution
Transportation Planning
Workforce Planning/Execution
Intelligence

Operational Planning/Scheduling
Production, Warehouse and Operations
Execution
Fleet & Crew Planning

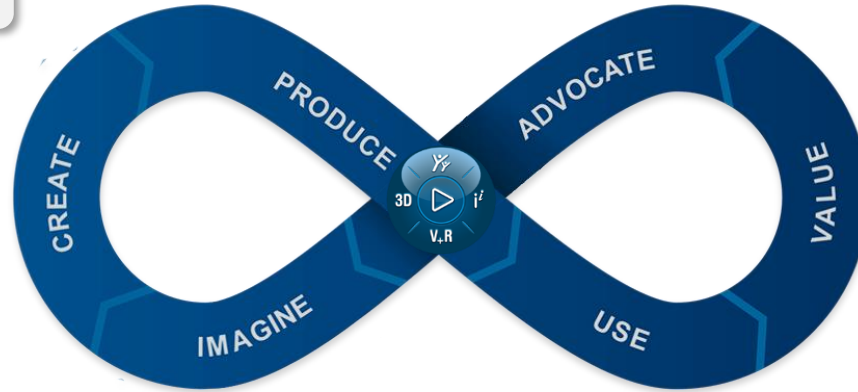
**Manufacturing &
Operations Management**

**Supply Chain Planning
& Optimization**

Construction Preparation
Process Engineering
Manufacturing Engineering

Product Engineering
Infrastructure /Construction
Engineering

Industrial Engineering



Strategic Planning

COLLABORATIVE

DATA DRIVEN

VIRTUAL TWIN EXPERIENCE FOR THE FUTURE FACTORY



Model & Simulate

Factories, lines, robots, machines, and worker interaction across the manufacturing processes



Collaborate

Bring engineering, production, quality, customer service together with a single model and version of operational truth



Plan & Optimize

AI/ML driven decision support for every facet of manufacturing including continuous optimization based on real-time shop floor data



Innovate

Create and simulate scenarios to explore new manufacturing processes, assets usages, and ways to improve the worker experience



Perform & Analyze

Synchronize, control, and execute tasks and activities perfectly throughout the manufacturing process



Sustain

Eliminate wasteful processes or costly materials with new innovative manufacturing techniques and material

VIRTUAL TWIN EXPERIENCE FOR THE FUTURE FACTORY

Business VALUE and IMPACT



Model & Simulate

Optimize robotics and automation for sustainable, efficient production – reducing cost and time



Collaborate

Accelerate the right decisions and minimize those risks that negatively affect costs, workers, customers and stakeholders



Plan & Optimize

Optimize efficiency and throughput for higher margins, yet enable flexibility to pivot to capture new revenue (or mitigate costs)



Innovate

Re-purpose capacity with lower costs, reduce CAPX projects, define new worker skills



Perform & Analyze

Augmented Reality supported execution that delivers Right First Time while reducing carbon footprint and worker hazards



Sustain

Sustainable engineering for environmental impact to remove waste, material usage, and electrical consumption

VIRTUAL TWIN EXPERIENCE FOR THE FUTURE SUPPLY CHAIN



Model & Simulate

The entire value network, from logistics, to sourcing, to manufacturing, customers, and services



Collaborate

Remove organizational, functional stakeholder barriers



Plan & Optimize

AI driven decision support to automate tasks, equipment/assets, and simplify decision making



Innovate

Simulate scenarios to explore new ways of working and new business models



Perform & Analyze

Transparency and visibility across supply chain stakeholders



Sustain

Assess and understand the variables impacting the carbon footprint

VIRTUAL TWIN EXPERIENCE FOR THE FUTURE SUPPLY CHAIN

Business VALUE and IMPACT



Model & Simulate

Optimize future requirements to capture market share or mitigate risk



Collaborate

Value Network excellence where everyone 'wins'



Plan & Optimize

AI driven decision support to manage efficiencies & disruptions



Innovate

Create new business models; minimize environmental impact



Perform & Analyze

Flawless execution with transparency and visibility for continuous improvement



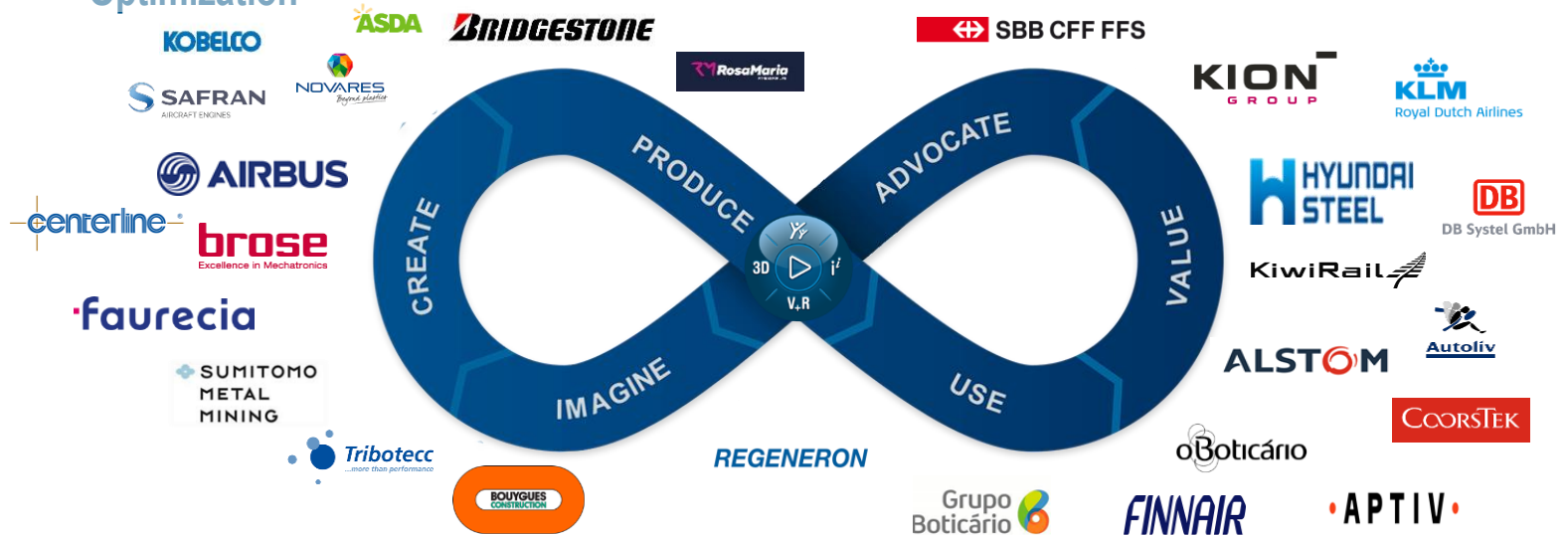
Sustain

Optimize supply chain & logistics for carbon footprint reduction

VIRTUAL TWIN EXPERIENCE FOR OPERATIONS

Supply Chain Planning & Optimization

Collaborative Operations



Industrial Engineering

Manufacturing & Operations Management

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DELMIA at centerline®

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Reduced tooling-related issues and rework by up to 90%.

DELMIA

DASSAULT
SYSTEMES



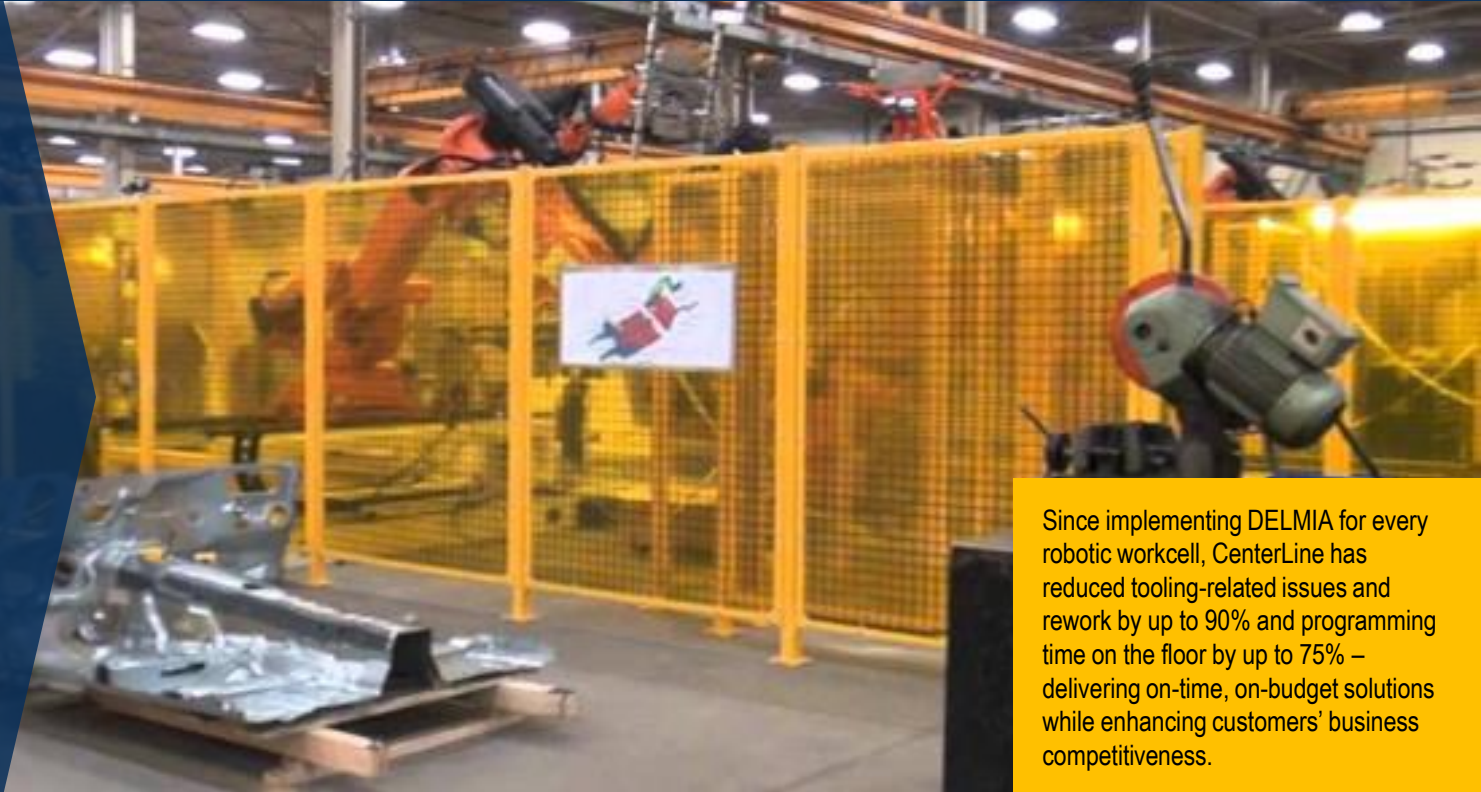
CenterLine (Windsor) Limited is a family owned Canadian company that builds custom automated welding and assembly lines as well as standard brand products for fastener welding, resistance welding (steel, high strength steel, hot-stamped steel, and aluminum), metal joining, metal forming and metal coating applications.

DELMIA Offer

Robotics Arc Welding & Spot Welding,
Off-line Programming

Customer Since

2017



Since implementing DELMIA for every robotic workcell, CenterLine has reduced tooling-related issues and rework by up to 90% and programming time on the floor by up to 75% – delivering on-time, on-budget solutions while enhancing customers' business competitiveness.



3DEXPERIENCE

DELMIA at  AIRBUS

DELMIA Apriso implementation explores the best materials, manufacturing and assembly techniques, as well as new technologies in aerodynamics and wing architecture.

 DELMIA

 DASSAULT
SYSTEMES



AIRBUS

MANUFACTURING OPERATIONS MANAGEMENT at Airbus UK



Increased demand in performance and production rates require a radical new approach to the design and manufacturing of aircraft wings. In Filton, a multifunctional team is working to create the wing of the future.

DELMIA Apriso Offer

MOM

DELMIA Users

Manufacturing Operators and Manufacturing Supervisors in Filton factory

Customer Since

Go-Live 2021

Challenge

- Support the challenging program of Airbus by delivering expected benefits from DELMIA solutions
- Accelerate solution delivery by leveraging a proven solution at Airbus D&S

DELMIA Apriso Benefits

- Digital continuity from design to manufacturing execution
- Connect, enable & empower Airbus workers around one solution

DELMIA Apriso Capabilities

- Delivered:
 - Complex Assembly base functionality
 - Dispatch work package
 - Operator and skill checking
 - Operation hold on issues \ NC
 - Insert an operation at a later stage (ex: create a rework operation)
 - Operation and steps certification
 - Component serial number tracking (manual or barcode entry)
 - Manual tracking of tool usage
 - Manual measurement capture



3DEXPERIENCE

DELMIA at • APTIV •

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APTIV realizes full traceability and process control with DELMIA, enabling automated material and quality tracking.



TRACEABILITY at APTIV (formerly Delphi) Ireland



APTIV is one of the largest global Automotive Tier 1 Supplier for automotive electronics. Specialty: powertrain, safety, thermal, controls & security systems; electrical/electronic architecture; in-car entertainment technologies. Headquartered in Dublin with 161,000 employees globally and revenue of \$15,165 billion (2015).

DELMIA Apriso Offer

Production, Quality

DELMIA Users

70 in the first plant, and expanding

Customer Since

2019

Challenge

- JEDEC guidelines are very challenging to implement for MSD using a manual tracking system
- In case of double-sided reflow SMT lines, it is necessary to monitor components placed on both side passes
- Prevent failure: Avoid processing components that have exceeded their allowable limit
- Avoid scrapping components that have not reached their maximum exposure
- Provide real-time relevant information and warnings for decision making

DELMIA Apriso Benefits

- DELMIA Apriso allows APTIV to track material exposure times automatically. Shop floor operators were provided with real-time process information right at their workstation

DELMIA Apriso Capabilities

- DELMIA Apriso provides real-time material and production process tracking for seamless end-to-end component traceability
- Allows client to conform to strict automotive safety standards based on regulatory compliance

APTIV is using DELMIA Apriso to provide fully automated material exposure tracking. The solution was configured to allow material handlers easy access to process conditions and material exposure parameters for each component as required.



3DEXPERIENCE

DELMIA at **ALSTOM**

DELMIA provides ALSTOM with a manufacturing solution to better plan, execute and optimize their operations.

DS DELMIA

DS DASSAULT SYSTEMES

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Alstom Transport develops and markets a complete set of systems, equipment and services for the railway sector. Headquartered in Levallois-Perret Cedex, France; employs ~28,000 people worldwide; serves customers in 60 countries; earned € 330 million on sales of € 5.9 billion in 2013/2014.

DELMIA Apriso Offer

Labor, Production, Quality

DELMIA Users

4,000 Users over 8 sites

Customer Since

2018

Challenge

- Transition to paperless work environment to gain agility
- Increase visibility, control and synchronization of operations
- Better plan new product launches
- Bring mobile devices down to the shop floor to improve efficiency

DELMIA Apriso Benefits

- Improve productivity and reduce costs
- Increase quality, traceability and genealogy to meet competitive and regulatory requirements
- Manage operations across multiple sites
- Achieve and sustain manufacturing excellence
- Synchronize people, processes, equipment, tooling & materials across enterprise operations
- Increased responsiveness to market changes

DELMIA Apriso Capabilities

- Directed work instructions with real-time visibility, improved agility and performance
- Higher quality and throughput achieved via operator self-inspection routines
- Production planning and process simulation enabled greater efficiency with product launch plans
- Tablets on shop floor increased efficiency



DELMIA at 



DB Cargo has used DELMIA Quintiq for several years across its Dutch, German and Danish networks all with positive experiences.



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PLANNING at DB Cargo Germany



DB Cargo is an international transport and logistics company founded as part of the second stage of the reform of the German railway system in the 1990s.

Annual output

1.5 million trains, 3,600 locomotives, 113,000 freight cars

DELMIA Quintiq Offer

Rail Fleet Planning, Scheduling & Operations (for Locomotive), Rail Crew Planning, Scheduling & Operations

Customer Since

2013

Challenge

- Manage large-scale efficiency improvements
- Manage driver qualifications
- Process traction knowledge
- Solve rail freight planning puzzles
- Optimize 5,300 freight trains running daily that cover 100 billion metric ton-kilometers annually

DELMIA Quintiq Benefits

- The planners now have a consistent and real-time overview of all of its operations
- The system in the Netherlands went live in 6 months and payback was achieved in less than 1 year
- Punctuality of the trains in the Netherlands went up from 80% to 90%

“We chose DELMIA Quintiq because they are able to deliver solutions configured to address all of our needs, empowering us to create a Europe-wide integrated operations network while reducing costs and improving customer service. DB Cargo has used DELMIA Quintiq for several years across its Netherland, German and Danish networks, and have had positive experiences and excellent results. We are excited to extend our relationship with DELMIA Quintiq.”

Oliver Barthel
CIO, DB Cargo GmbH

DELMIA Quintiq Capabilities

- DELMIA Quintiq was able to deliver solutions designed to address all DB Cargo's needs, allowing it to create a Europe-wide integrated network
- Solves intricate rail freight planning puzzles
- Takes numerous constraints into account, like route and traction knowledge, working time directives and regulations for an integrated planning of all locomotives and locomotive drivers
- Performs automatic checks in real-time on almost all regulations



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DELMIA at *FINNAIR*

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Finnair has configured the DELMIA Quintiq solution to support its ground operations workforce.





Finnair flies between Asia, Europe and North America. Its extensive network connects 19 cities in Asia and 7 cities in North America with over 100 destinations in Europe.

Founded in 1923, Finnair is one of the oldest continuously operating airlines in the world.

DELMIA Quintiq Offer Workforce Planning

Challenge

- Finnair needed a powerful workforce planning solution to manage the complexity of rostering hundreds of employees in maintenance, passenger services, cargo handling and catering
- The solution had to be capable of producing efficient schedules, ensuring compliance with working time regulations, labor laws and individual characteristics such as skills, shift preferences and vacation leave

DELMIA Quintiq Benefits

- Finnair partnered with and uses the DELMIA Quintiq solution to plan its ground operations workforce
- The centralized system provides all the functionality required by the company to handle the planning challenges of different departments, generating rosters that factor in all unique scheduling constraints

DELMIA Quintiq Capabilities

- With its modern planning system, Finnair can optimize its workforce and run leaner, smoother and more cost efficient operations
- Finnair planners now use a single solution to manage employee schedules across all departments, ensuring everything complies with all labor agreements and regulations
- Backed by powerful insights, they can plan ahead strategically and make truly informed decisions

External Use: 2021 [Customer Case Study](#)

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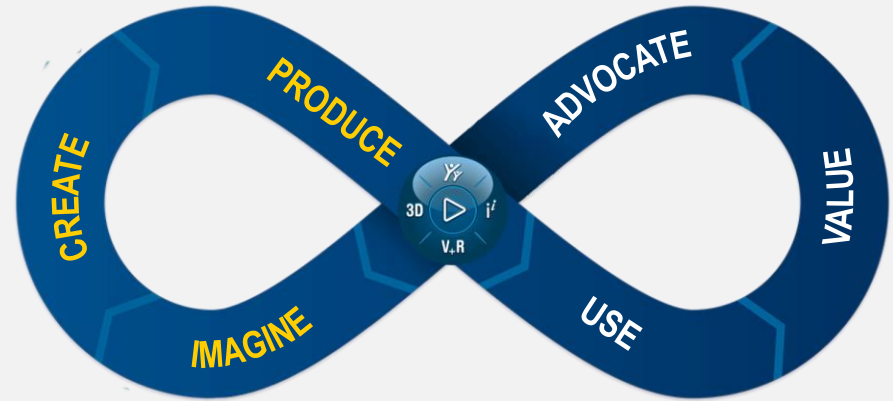
Key Considerations and the Way Forward

DELMIA | COMPREHENSIVE FOR ALL OPERATIONS NEEDS

Industrial Engineering

All operations' processes to reveal the art of the possible

- ▶ Enable innovation and efficiency virtually
- ▶ Extend visualization beyond product introductions to manufacturing and operations
- ▶ Plan, simulate, and model global operations with single 3D data model
- ▶ Virtually experience entire operations from design through operations in determining how to meet business objectives
- ▶ Simulate processes before the physical plant or production line even exists
- ▶ Virtually validate value networks, factory layouts, transportation/logistics plans, and workforce plans

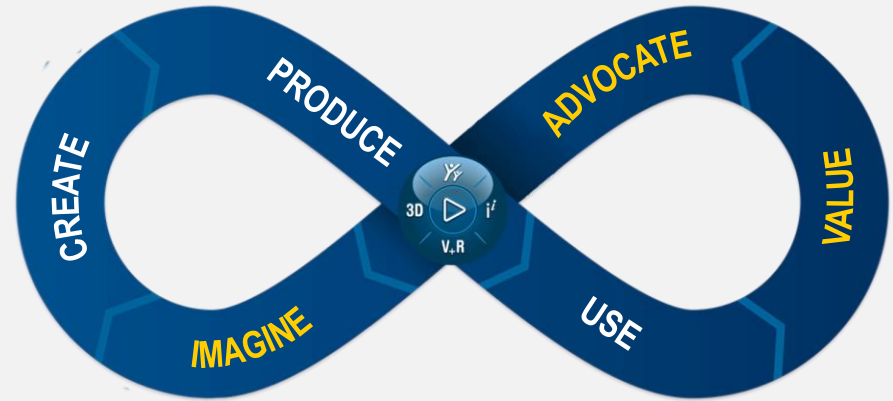


DELMIA | COMPREHENSIVE FOR ALL OPERATIONS NEEDS

Collaborative Operations

All stakeholders share a common understanding on one platform

- ▶ Digitalize Daily Meetings & Lean practices on the shop floor
- ▶ Build better teaming despite physical or organizational barriers
- ▶ Visualize 3D content and data within a digital Lean framework
- ▶ Explore new ways to solve problems and resolve issues
- ▶ Address operational waste, variability and efficiency
- ▶ Make “Lean thinking” core to business, teams and culture
- ▶ Modern, interactive solution accessible to everyone on the cloud

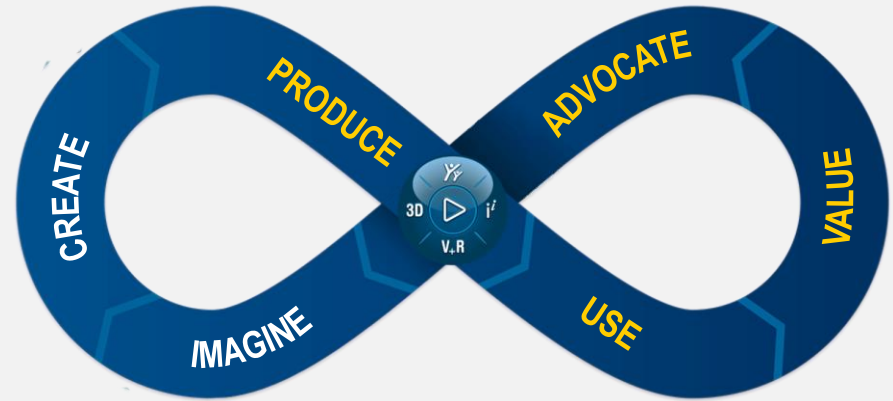


DELMIA | COMPREHENSIVE FOR ALL OPERATIONS NEEDS

Manufacturing & Operations

Performing operations in the Value Network to deliver excellence and customer satisfaction

- ▶ Achieve and sustain operational excellence in executing orders, tasks and activities in day to day operations
- ▶ Improve visibility into, control over and synchronization across manufacturing operations and supply chain processes on a global scale
- ▶ Drive performance with direct tasking and real-time exception handling that minimizes disruption
- ▶ Model-based, data-driven digital user experience for informed tactical decision making
- ▶ Establish a common set of best practice operational processes that can be created, managed, and governed holistically on a global scale
- ▶ Augmented Reality for improved process, execution, quality and workforce productivity & satisfaction
- ▶ Reduce Waste with machine connection; automated poka-yoke for all processes
- ▶ Integrate the Virtual with the Real by displaying real-time KPIs and activities in the Virtual Twin for maximum analytical capabilities

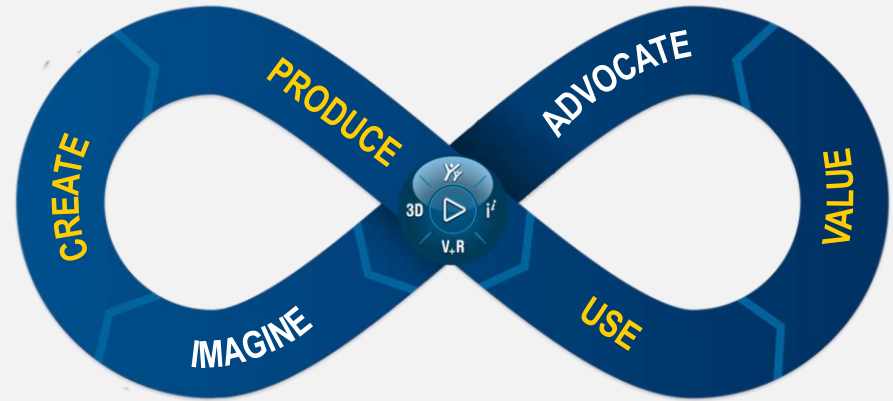


DELMIA | COMPREHENSIVE FOR ALL OPERATIONS NEEDS

Supply Chain Planning & Optimization

Maximizing business objectives, synchronization and efficiency to achieve results across the Value Network

- ▶ End to end supply chain optimization for control, visibility and lasting **resiliency** across your value network
- ▶ Reality-based planning, scheduling and optimization for complex business processes within supply chain, logistics and workforce operations
- ▶ KPI-driven planning across all time horizons (strategic, tactical, operational) always in sync with the realities of the business
- ▶ The best combinations of heuristic approaches, optimization, and machine learning
- ▶ Unlimited what-if scenario analysis
- ▶ The entire planning spectrum: Sales & Demand Planning, MPS, Detailed Scheduling as well as Workforce and Logistics planning
- ▶ Build a resilient supply chain to confidently plan for the future and react instantly
- ▶ Push AND Pull – Supply Chain Optimization to supplement electronic kanban



AGENDA

Corporate Overview

About DELMIA

DELMIA's Impact on Today's Sustainable Global Operations

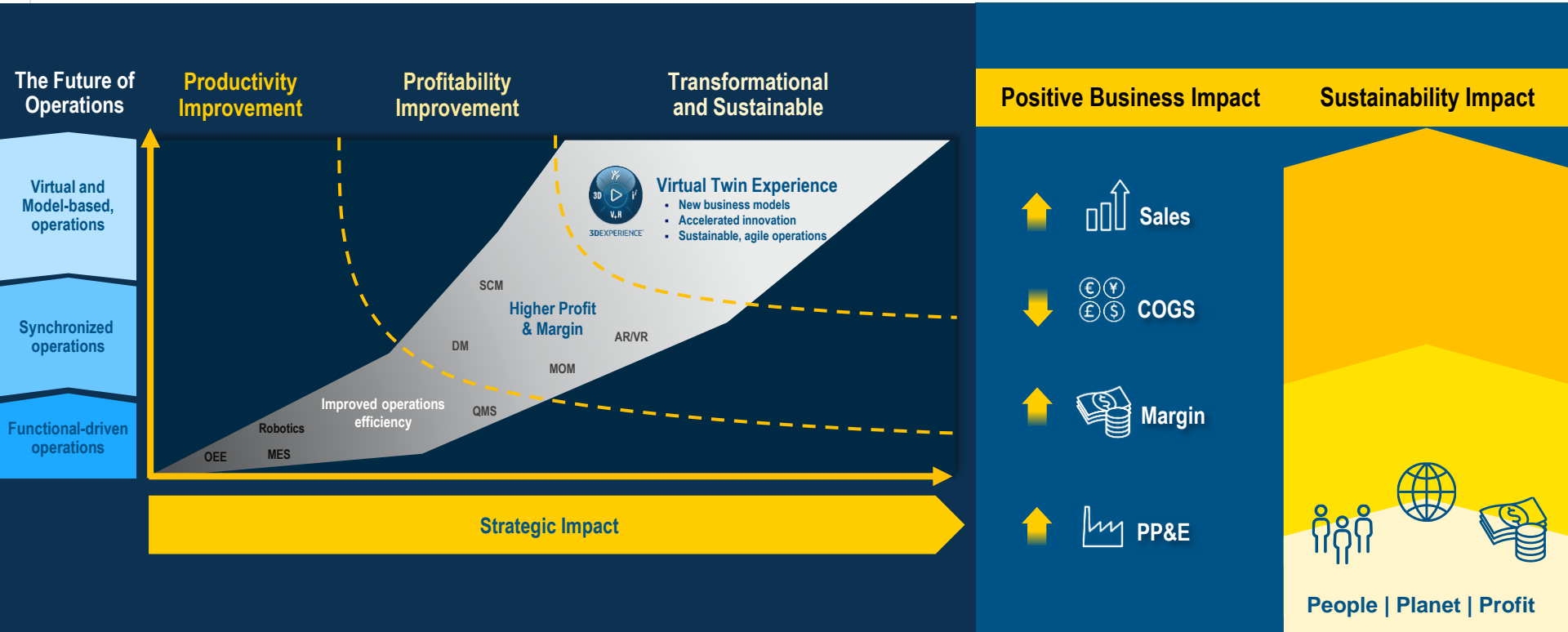
The Power of the Virtual Twin Experience – Beyond Digital Twin

The Virtual Twin Experience in Action

DELMIA Capabilities Summary

Key Considerations and the Way Forward

THE PATH TO EXCELLENCE WITH VIRTUAL TWINS



KEY CONSIDERATIONS OF VIRTUAL TWINS



Transparency is critical

Identify, classify and correlate data, processes, and outcomes across the organization to ensure all stakeholders have a clear understanding



Information and data are key

Make sure data structures utilized can be easily used, exchanged, and understood for teams to leverage in making decisions



The cloud is your friend

Cloud-based computing, storage, analytics and artificial intelligence/machine learning services enable you to build and deploy solutions quickly and affordably



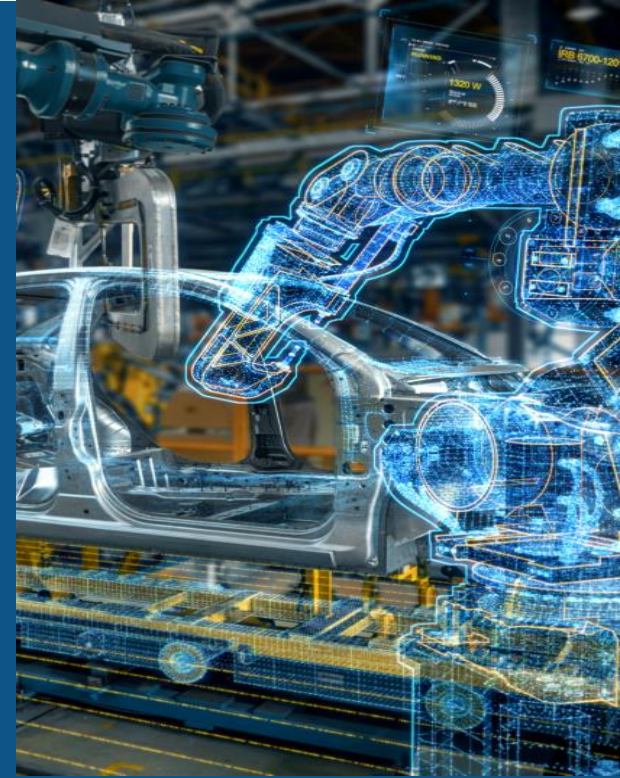
Virtual Twins evolve

As a product has a lifecycle, so do virtual twins. The virtual twin will morph in response to objectives, scope, performance, technology, and business change



Leverage new technology

Bring together V+R with Augmented Reality, AI/ML, optimization technologies, etc.



HOW TO **PREPARE** FOR VIRTUAL TWINS



Define clear objectives and goals

Identify and map out clear goals and objectives to achieve with clear executive sponsorship



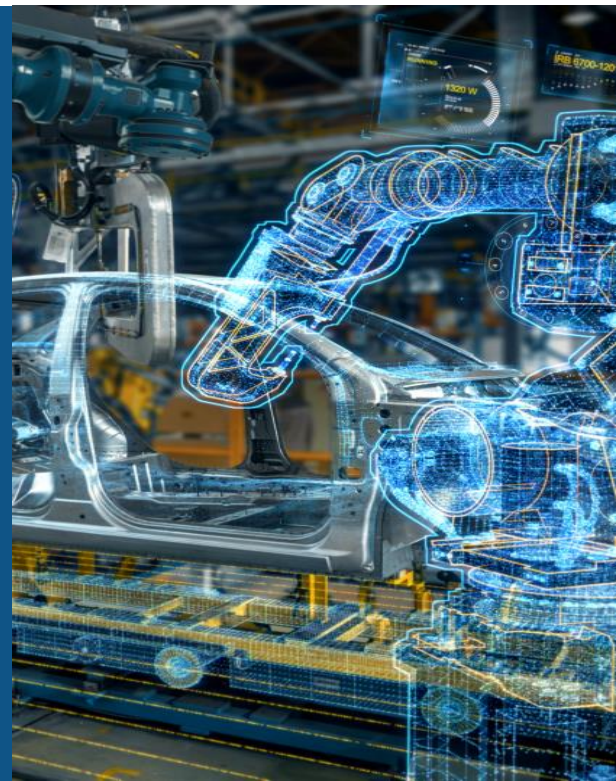
Organize a great team and empower the workforce

Train business heads, IT managers, data analysts, and others on the power of both technology and creativity to imagine solving problems and working differently



Find the right Partner

Invest in and work with business and technology partners who can provide capabilities and model-based platforms to build a connected ecosystem for creating closed loop Virtual Twins



THE WAY FORWARD



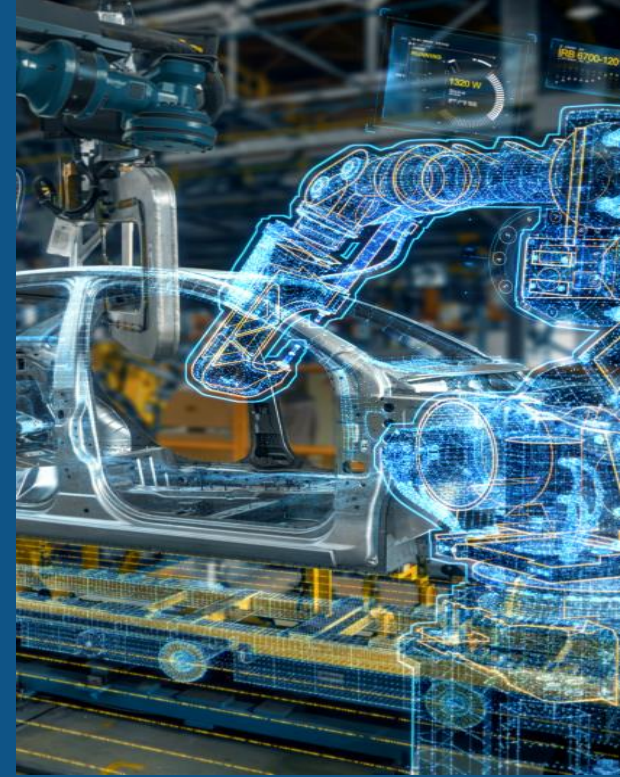
Have a vision, purpose for transformation with strong leadership and management



Rethink the way you work, redefine roles and jobs, and how to solve problems



Partner with companies who can support your efforts, enabling the organization with Virtual Twins



WHY DELMIA

- ✓ Over 2,000 customers across 11 industries
- ✓ Recognized industry and market leader
- ✓ Proven in manufacturing and supply chain operations
- ✓ Unique V+R across design, supply chain, manufacturing, and service
- ✓ The Virtual Twin Experience supports both sustainability and business

