The **Digital Capability Center Venice (DCC Venice)** was launched in 2011 and offers a unique environment where you can see and touch Industry 4.0 and learn about the end-to-end transformation of a simulated company from achieving lean excellence to becoming a digitized industry leader.

Utilizing the model factory enables organizations to formulate best practices, build capable teams and internal experts, leverage a test bed for Industry 4.0 technology PoCs and achieve performance breakthroughs.

The DCC helps you to explore ways to tackle challenges that you may face in your own businesses and gain insights into the key digital solutions and technologies that will help you achieve key imperatives:

- Learn how to start, scale, and sustain your digital lean manufacturing transformation
- Build digital capabilities
- Enable collaboration in the ecosystem, e.g., define standards, build strategic partnerships
- Manage data as a valuable asset

An overview of the DCC Venice's training offer

- Create a vision for what is possible with digital lean and learn how it could make your operations viable and sustainable
- Envision your company's future state and begin to develop a digital lean transformation road map tailored to your business needs
- Focus on key Industry 4.0 themes to understand the supporting technology, work out where it is relevant and how to best implement it
- Create the prerequisites needed to put in place the right capabilities for starting and sustaining a digital transformation

The McKinsey and PTC collaboration

The DCC Venice is a joint venture between McKinsey & Company, the world's leading management consulting firm, and Confindustria, the industrial association of the region. Since the advent of the Industry 4.0 revolution, the DCC Venice has been nurturing fruitful collaborations with cutting-edge technological players like PTC.

PTC has contributed its powerful technology and considerable expertise in computer-aided design, product lifecycle management, the Internet of things (IoT), and augmented reality to this most important of collaborations. Come to the DCC Venice to see the insights gained in applying these technologies through the lean manufacturing use cases and learn how to adapt them such that you can use them in a variety of practical applications across a wide range of industries.

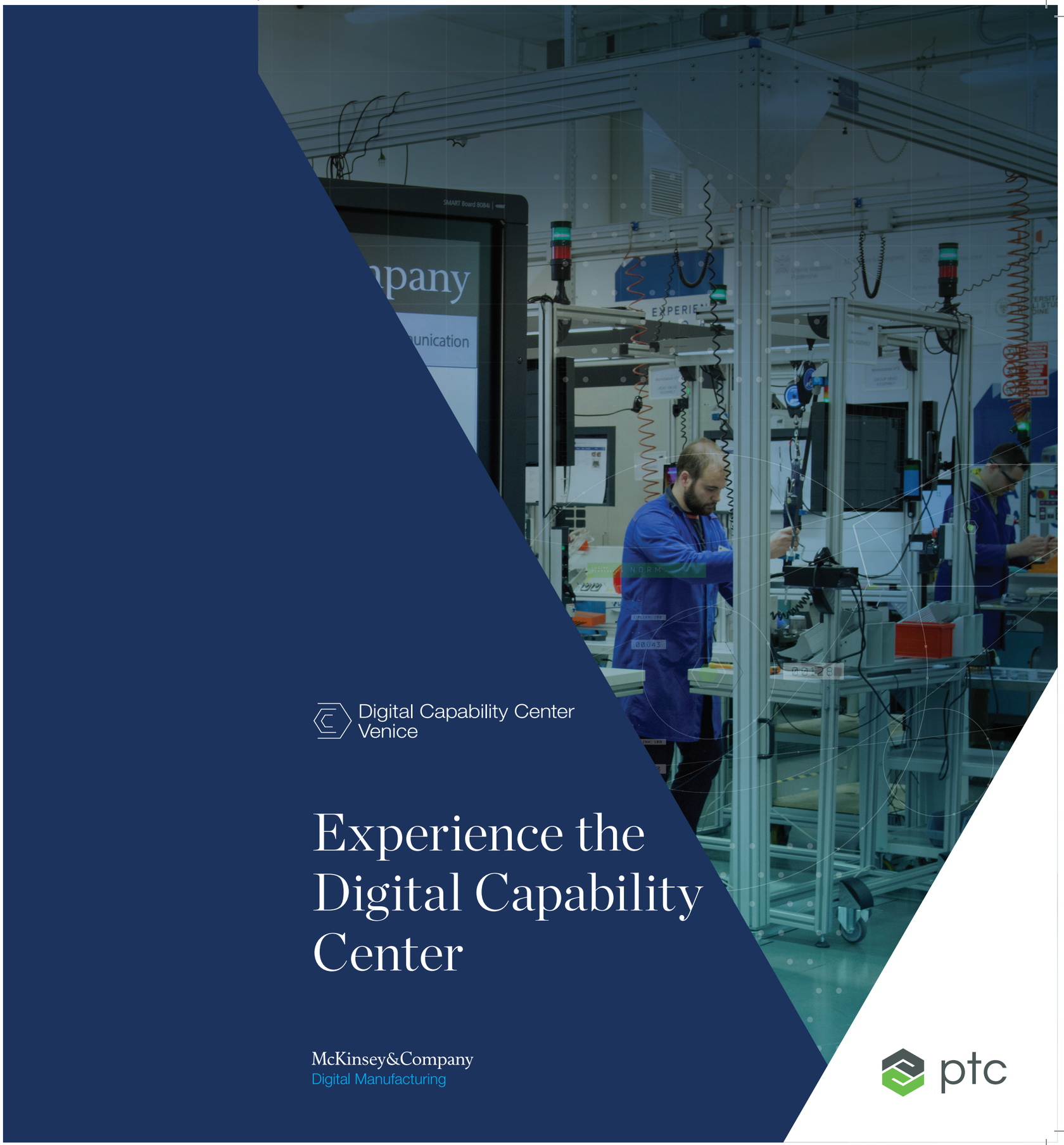
The DCC Venice facility

Via Casabianca, 3, 33078 Zona Industriale Ponte Rosso PN, Italy

https://capability-center.mckinsey.com/locations/dcc-venice

McKinsey&Company

Digital Capability Center
Venice



Digital Capability Center
Venice

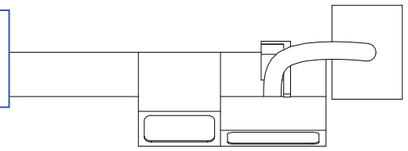
Experience the Digital Capability Center

McKinsey&Company
Digital Manufacturing

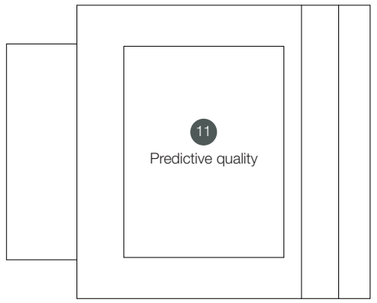
ptc

Experience the Digital Capability Center in augmented reality

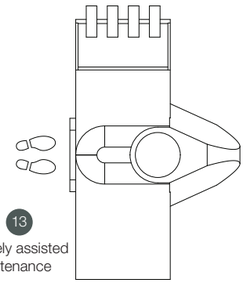
(Map provided separately)



12 Condition-based maintenance

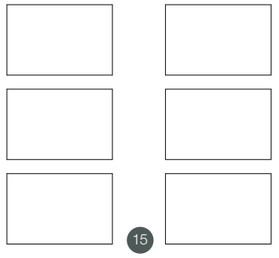


11 Predictive quality



13 Remotely assisted maintenance

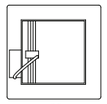
14 Smart packing and digital warehouse management



15 Cybersecurity IT infrastructure

ThingMark

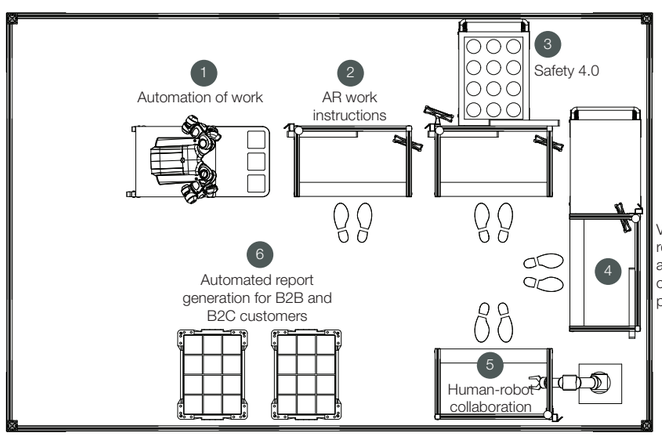
16 Adaptive quality management



10 Additive manufacturing

17 Digital product development and modularization

9 Digital analysis



1 Automation of work

2 AR work instructions

3 Safety 4.0

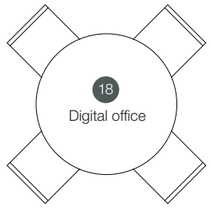
8 Real-time value stream mapping

7 Smart energy management

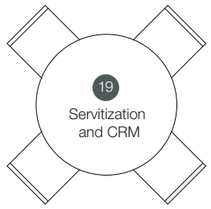
6 Automated report generation for B2B and B2C customers

4 Visual recognition and adaptive operating procedure

5 Human-robot collaboration



18 Digital office



19 Servitization and CRM

21 Smart connected product (fridge)

20 Digital performance engine

Step 1
Download the free Vuforia View app from the App Store (iOS) or Google Play (Android).

Step 2
Open the app and point your device at the VuMark above to begin the AR experience.

Step 3
Tilt and move your phone around so as to be able to see the Digital Capability Center from all angles.

The Digital Capability Center with its motto “Explore – Try – Apply” is a learning factory focused on Industry 4.0 manufacturing

The Digital Capability Center (DCC) offers capability building programs empowering manufacturing and service companies to successfully realize lean, agile, and digital transformations. The DCC Venice has seized the opportunity to enhance its existing manufacturing process and introduce deep insights into digital transformation. Participants experience every stage of the digital journey – from the digital waste walk to the implementation of several digital use cases, including smart performance management, predictive maintenance, digital quality management, and man-machine collaboration.

The DCC focuses on process optimization and techniques for lean and agile operations supported by digital manufacturing. It is host to several digital manufacturing use cases to showcase the art of the possible and the sheer breadth of what can be delivered today. Among the many impactful digital use cases from the various DCC technological players, McKinsey and PTC have collaborated to develop several intriguing use cases leveraging PTC technology.

Design for manufacturing

- Guarantees a flexible, quick, and error-proof translation of BoM features to production line tasks through a complete digital product definition, digitizing assembly processes to calculate and reduce manufacturing times and costs
- Increases productivity and speeds up the new-hire onboarding, enables remote training, and increases product quality while introducing AR in manufacturing

Design for modular product

- Designs, produces, and maintains a modular product family to increase marketability and competitive differentiation, and works towards achieving a more effective management of product complexity
- Scales enterprisewide product information through AR
- Lowers product and development costs by anticipating, identifying, and eliminating deviations and maximizing the reuse of data and IP

Digital manufacturing asset management

- Enables real-time monitoring and predictive diagnostics of assets to automatically trigger and proactively initiate service teams to minimize downtime, increase the quality of the fabrication pieces, and identify maintenance leaks before they occur
- Connects factory assets to provide role-based views via connected applications and augmented reality experiences, and to deliver assembly instructions for increased operator productivity and improved production quality
- Combines, analyzes, and delivers insights from assets and operators into unified real-time visibility of KPIs for increased operational performance and improved decision making

Smart connected service

- Provides technicians with efficient access to the right information to fix all issues the first-time around
- Reduces on-site repair visits providing remote access to operational parameters, remote file transfers, and remote software updates
- Combines, analyzes, and delivers insights from product population to shift business to a more service-oriented business model