

Towards Industry 5.0

plain
concepts

Accelerate the journey to building your sustainable, resilient and human-centric organization. Overcome today's smart factory challenges, extend the data-centric approach and prepare for tomorrow's virtual revolution.

INDUSTRY 4.0

HYPERCONNECTED

SMART

DATA-CENTRIC

AUTONOMOUS



DIGITAL
TWIN



INDUSTRY 5.0

SUSTAINABLE

VIRTUAL

HUMAN-CENTRIC

RESILIENT



Navigate towards efficiency and flexibility while highlighting a **sustainable, human-centric** and **resilient** approach to **industry 5.0**.

Accelerate your **Smart Factory journey** and **sustained value delivery** unlocking the pivotal role of AI in the factory of the future. Increase productivity and uptime, optimize sustainable production and processes, achieve autonomous machines and sites, and **merge** the **physical** and **virtual worlds**.

Connect your environment for real-time interaction and reporting, and achieve automation, smart actions and prediction from data. **Re-apply success** globally, perform process-scale adjustment and continuous insight-based evolution of processes. **Support, assist** and **empower** your **workforce** with task and environment insights leading to safety recommendations and warnings while you relieve them of low-value tasks.

Industry 5.0's vision becomes reality with our state-of-the-art **technology solutions** and **products**, to lay the foundation for this modern industrial revolution.

Build a solid foundation for your **Smart Factory Virtual World** and experience, and seamlessly evolve to the **Metaverse**. Quickly and effectively **digitalize** your physical world and real environments to repeatedly enable fast and accurate **Digital Twins** of your space and assets.

We help you understand and visualize your virtual environments to extract the maximum value and consistently **implement** unprecedented organization-wide **simulation** processes and capabilities.

Construct your **Virtual Environment** for testing new and emerging processes, discovering improvements and opportunities.

Unlock and integrate end-to-end smart factory potential and **capabilities** to connect all production and logistics processes, making your business more intelligent, efficient, sustainable and resilient.

Our Vision

Physical

Smart Factory Metaverse & Ecosystem

Digital

Capture & Digitize the Real World

- **Cost-Effectively Digitize** Physical World and Real Environment, spaces and assets.
- Ensure reliable operations with **Dynamic** and **Autonomous** data capture.
- Fast **Digital Twin** enablement. Perform point cloud scans of your physical environments and their contents to create accurate, up-to-date digital twins.

Understand - Visualize - Simulate

- **Use AI** to effectively understand the captured data and turn it into insights. **Extract** and infuse more value to the point cloud scans.
- **Virtual Simulation Spaces** of your facilities, assets and operations.
- **Integrate** and **Synchronize** your physical spaces with their digital twin and virtual replicas based on consistent collected data.
- Unprecedented high performance **3D rendering** capabilities.

Build & Integrate

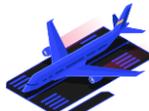
- Build a foundation for the **Modern Data-driven Industrial Revolution** and enter the Connected Industry.
- Digitize to provide new ways of networking and automating your value chain, deriving more value and **boosting efficiency**
- **Optimize** your production and logistics processes connecting equipment, interfaces, and components. **Integrate** smart and self-learning capabilities and cutting-edge technology towards the smart factory, making your business more intelligent, efficient, and sustainable.
- Enable continuous data exchange in your **Data-driven Ecosystem**. Collect, consolidate, and evaluate your data to make use of it, extract valuable insights and achieve predictions.



Manufacturing Industry 4.0



Energy and Natural Resources



Logistics 4.0



Smart Cities Connected Environment



Solutions for multiple industries to extend the **Smart Factory concept** and **prepare** for **tomorrow's Virtual Revolution**.

Our Products & Solutions

DIGITAL TWIN CREATION

Capture & Digitize the Real World



Use **3D scanning Point Clouds** to document and gather data while maintaining simple and easily integrated workflows.

Create **Digital Twins** of worksites, facilities or assets and identify reworks sooner.

Integrate multiple & varied integrated **Sensors** and **Payloads** from our Top Vendor partners.



UNDERSTAND & ENRICH DATA DIGITAL TWIN ENABLEMENT

Understand – Visualize – Simulate



Our **3D multi-device and multi-platform graphics engine** is designed for corporate applications. It provides enterprise solutions with 3D, Augmented, Virtual and Mixed Reality capabilities in mind.

A flexible and versatile tool to create unique visual experiences, tailored to the needs and functionalities of all kinds of industries.

- Point Cloud visualization: **+1 Billion** points display on the fly.
- Adaptable to existing client environments and many UI technologies.
- Multiple integration options: BIM, CATIA, STL, live video, 3D mapping and more.
- Create immersive AR/VR/XR experiences.

DIGITAL TWIN INTEGRATION

Build & Integrate



Our **Smart Industry Accelerator Platform for Data-driven ecosystems**

Data acquisition, combination and integration from multiple sources. Centralized data processing, storage, analysis and visualization to extract valuable insights and improve business decisions and performance.

Align business needs & technical challenges – **Data platform approach**

- Design an architecture to scale.
- Define and implement a set of components to stay flexible, expandable and cost efficient.
- Identify the optimal approach to manage quality and classification of data.
- Develop strong security and data access management.
- Convert data into valuable insights.



Bespoke services on multiple solution areas and technology practices to support any imaginable solution.



Cloud & Security



AI



eXtended Reality



Blockchain



Web App Dev.



IoT



Data & Analytics



UX/UI Design



Low-Code



Mobile Apps



QA & DevOps



Modern Workplace

How industry 5.0 can be applied to your business?

Capture and Simulate

- Digitalize physical entities from point Cloud
- Semantic segmentation & 3D point cloud labeling
- Achieve digital twins and virtual simulation spaces
- Scan to BIM services

Create and optimize a more resilient end-to end Supply Chain

- Demand forecasting
- Energy forecasting and optimization
- Optimize safety stock reserves

Start developing assistive capabilities for your factory and drive towards achieving autonomous.

- AI-powered automation to optimize equipment and processes by sensing and responding in real-time.
- Anticipate and optimize for multiple conflicting goals.
- Worker safety and health monitoring improvement. Task and environment insights leading to human-centric safety recommendations and warnings.
- Worker assistance with hazardous and risky tasks.
- Reduce expert knowledge overload. Automate low value tasks.

Achieve sustainable goals and Optimize costs. Establish Operational Agility and efficiency

- Optimize the use of Commodity/ Materials
- Automated quality control & inspection - Zero waste, Zero scrap, Zero rework.
- Predictive maintenance. transform maintenance from reactive to proactive and increasingly prescriptive, reducing downtime and improving Overall Equipment Effectiveness (OEE), performance and productivity.

Take the first step with a Discovery Workshop

Let's understand your business, strengths, weaknesses and state of technological maturity to design business cases that bring value to your company. Collaboratively take **high-ROI use cases** from ideation to adoption.

If you want to know more about our Industry 5.0 approach visit:

www.plainconcepts.com/hannover-messe-2022/



Customers

AIRBUS



About Plain Concepts

We are a multinational company founded in 2006 that define ourselves as a software development Boutique. Our goal: delivering quality and value to customers, helping them in their digital transformation process. We have been involved in more than 2,400 projects, contributing passion and reliability while deploying disruptive advances such as: Artificial Intelligence, Data, IoT, Extended Reality, Cloud Computing and even Robotic-based software services. We are more than 450 specialized employees spread across our offices.

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SPAIN

UK

AUSTRALIA

NETHERLANDS

ROMANIA

GERMANY

Technology Partners:



We'll be glad to hear from you: Info_de@plainconcepts.com

Notes