

Successful R&I in Europe 2024 11th European Networking Event

Industry 4.0 Data Integration and Progressive Manufacturing Optimization

BEWELL TECHNOLOGY

Presenter: Alper Girgin



1. Bewell Technology

Our Works

- AI & Image Processing
- IoT
- Digital Twin
- Optimization
- Digitalization
- Asset Tracking Solution
- Smart Agriculture Application
- Smart City Application
- Health Application
- Digital Transformation Services

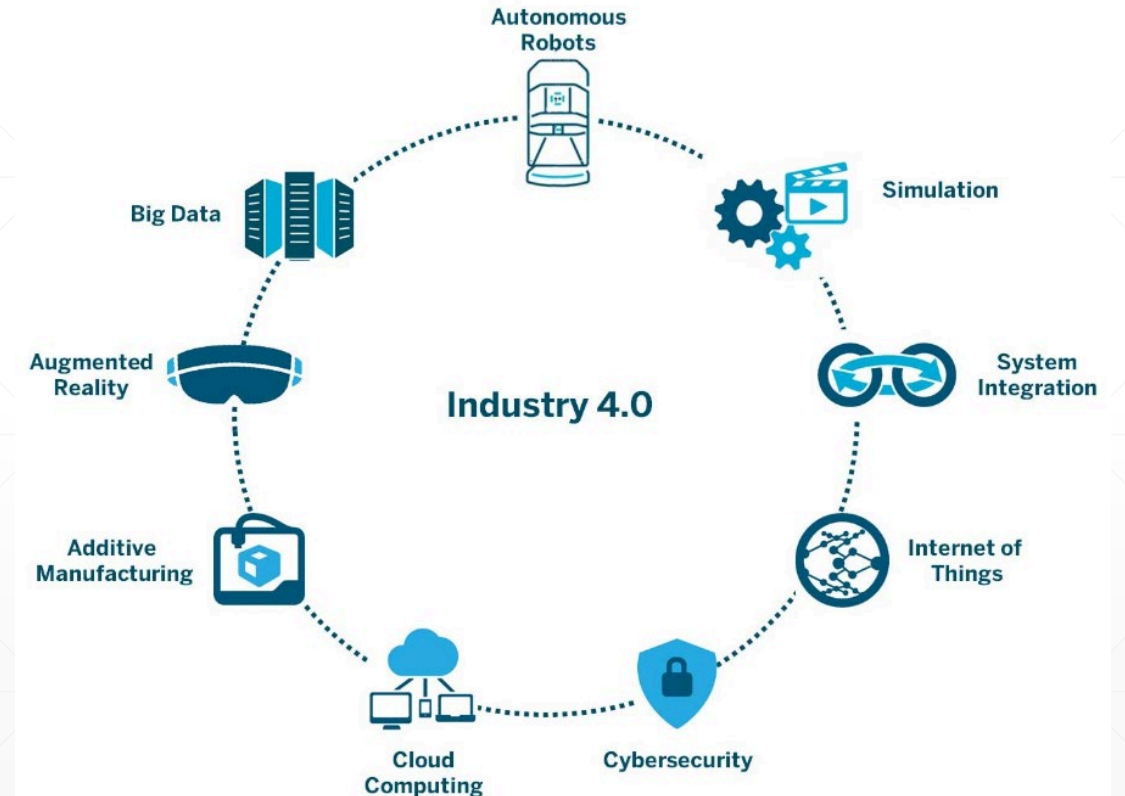


- We have developed our own gateway named 'Bewell Gateway,' providing us with comprehensive capabilities.
- With this gateway, we can receive data from sensors and edge devices, and through the gateway, we can transfer this data to the cloud environment.
- The versatility of our system extends to various protocols such as Bluetooth, LoRa, NB-IoT, MQTT, and more, enabling versatile and adaptable data transmission.
- With our gateway integrated with a 5G module, data transfer can be conducted using 5G infrastructure.

2. Project Idea

Industry 4.0 Data Integration and Progressive Manufacturing Optimization

- In today's world, the increasing complexity of industrial production processes and heightened competition necessitate companies to adopt data-centric approaches in manufacturing. The "Industry 4.0 Data Integration and Progressive Manufacturing Optimization" project is designed to address this need and transform manufacturing facilities into smarter, data-driven, and sustainable operations.



3. Project Objectives

- **Integration of Industrial IoT and Sensors:** Integration of high-precision sensors and Industrial IoT devices into manufacturing facilities. These devices will enable real-time monitoring of production processes and data collection.
- **Data Integration and Analytics Infrastructure:** Integration and analysis of data collected from manufacturing facilities on a centralized data platform.
- **Application of Artificial Intelligence and Machine Learning:** Implementation of artificial intelligence and machine learning algorithms on the data. This will be utilized in areas such as automatic production forecasting, error detection, maintenance predictions, and enhancing quality control.
- **Industry 4.0 Automation and Robotics Applications:** Automation of production processes and the creation of progressive manufacturing cells. This will increase production efficiency and reduce human errors.
- **Energy and Resource Efficiency:** Monitoring of energy consumption and optimization of resource usage. Development of smart energy management and sustainability strategies.
- **Employee Training and Compliance:** Training of facility employees in Industry 4.0 technologies and ensuring compliance.

4. Project Benefits

Project Benefits

- Increased production efficiency and optimization of production processes.
- Reduced operational costs and more effective resource utilization through data-driven decisions.
- Improved product quality and reduced defective products.
- Enhanced compliance with environmental sustainability goals.
- Competitive advantage and discovery of new business opportunities.

Looking for;

- Sensor and Industrial IoT Manufacturers
- Data Analytics and Integration Companies
- Artificial Intelligence and Machine Learning Solution Providers
- Automation and Robotics Technology Providers
- Energy Management and Sustainability Consultants
 - ✓ Partner type: Industry, SME, Research Institute, Universities
 - ✓ Countries: All European countries

Calls

- Related calls
 - ✓ Digital, Industry and Space

Thank You

Contact

Alper Girgin : alper.girgin@bewelltech.com.tr

Taşkın Kızıl : taskin@bewelltech.com.tr

+90 222 290 25 33

