SAP Leonardo
Connecting Things with People and Processes

Eugenio Moya, Business Development Manager, IoT and Digital Supply Chain LoB, SAP
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EXTERNAL
Globally, 47% of **business application users waste more than 10% of their day waiting on technology** to deliver content, data, or results after they interact with a business application. That adds up to more than 24 working days lost per year.

Source: Oxford Economics, Mind the Gap Infographic
Why IoT is Important …

- Enable a step-change in productivity
- Reimagining new business models and processes
- Changing how people will work
- Manage and mitigate risk

**Business Value Benchmarks**

**Productivity improvements**
e.g. lower maintenance costs (up to 60%), or lower capital appropriations (25%)

**New business models** resulting in higher net promoter scores that deliver 15%-25% faster revenue growth than the industry average

**People process optimization**
leading 10 to 30% higher productivity in the form of higher outputs and lower costs

**Lower risks** e.g. better worker safety or lower claims payout (5-10%) in insurance industry

Every “Thing” is Connected

- Customers and users are more informed and empowered
- Data is available 24/7
Every “Thing” is Intelligent

- Machine Learning
- Artificial Intelligence
- 3D Printing
- Predictive Processes
- Products are Smarter
Every “Thing” in the Moment

- Online Ordering
- 2-Hour Delivery
- Real-Time Decisions
- Predictive Analytics
Visibility across the business network of both structured and unstructured data:

- **Business Systems**
- **IoT Enabled Devices**
- **Sentiment Analysis**
- **Weather Patterns**
- **Traffic Reports**
- **Etc.**
SAP provides a highly innovative IoT solution portfolio which extends the digital core with adaptive applications, big data management and connectivity to enable:

- New Business Processes
- New Business Models
- New Work Environments
SAP Leonardo Innovation Portfolio

SAP Leonardo Bridge

Connected Products
- Product Insights
  - Goods and Equipment
  - Supply Networks
- Fixed Asset Insights
  - Manufacturing Execution
  - Manufacturing Networks

Connected Assets
- Mobile Asset Insights
  - Logistics Safety
  - Logistics Networks

Connected Fleet
- Building Insights
  - Construction
  - Energy Grids

Connected Infrastructure
- Market Insights
  - Rural Areas
  - Urban Areas

Connected Markets
- People and Work
  - People and Health
  - People and Homes

Connected People

SAP Leonardo Edge Computing

Technical Services
SAP Leonardo Foundation
Business Services

SAP Cloud Platform / SAP HANA Platform

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Connected Products

- Design and manage smart products lifecycle
- Connect, monitor, control and distribute products in the field
- Manage, track and control inventory across the networks
Connected Products

Retail customer: Millions of Devices with limited insight

- Monitor vending machine activity; trigger automatic alerts
- Monitor stock levels and trigger timely replenishment.
- Capture consumer interaction
- Understand consumer buying and product usage patterns
Connected Assets

- Connect, monitor and tightly control manufacturing equipment
- Optimize asset performance throughout its lifecycle
- Manage a network of assets to identify and resolve issues before they happen

Connected Asset Intelligence Network • SAP Predictive Maintenance & Service
SAP Manufacturing Execution • SAP Manufacturing Integration and Intelligence
“Reduce maintenance costs by 8 to 10% – Increase asset utilization”
Connected Fleet

- Collect, map, store and analyze fleet and vehicle data in real time
- Perform safety analysis of drivers and assets to reduce accidents and improve safety
- Maximize your logistics strategy and comply with regulations across the global network

SAP Vehicle Insights
SAP Vehicle Networks
SAP Connected Parking
SAP Track and Trace

* Future release
Connected Fleet

5,000 hours less truck time each day
2x Increase in cargo handling
Connected Infrastructure

- Leverage real time information to manage and maintain properties
- Manage construction projects to deliver on time and within budget
- Optimize energy utilization by integrating processes and information

SAP Track and Trace* • SAP Manufacturing Integration and Intelligence

* Future release
Annual spend for asset maintenance reduced by 1-2%
Connected Markets

- Interact in digital and physical marketplaces to improve personal experiences
- Leverage data from agricultural machines and equipment to increase efficiency and predictability
- Optimize energy, vehicles and assets across the urban footprint

SAP Network Logistics Hub • SAP Connected Agribusiness
SAP Connected Goods • SAP Connected Parking
Connected Markets

Real-time monitoring of vital farm processes
Tracking of work targets as defined in the crop planning process
Better management of farm and planted areas
Connected People

• Improve safety through real time connectivity to environmental and safety practices
• Leverage a connected health network focused on patient outcomes with lower healthcare costs
• Make home life more comfortable, efficient and secure with connected energy and security systems
Enabling real-time medical response for diabetes patients

SAP & Roche: Fighting Diabetes with Personalized Treatment
SAP Leonardo Bridge

- Empower people to do their jobs better in a role-based environment
- Access data from products, assets, fleets, and the environment to make informed decisions
- Connect and collaborate with partners
- Leverage predictive analytics and machine learning to automate decisions and manage by exception
SAP Leonardo Foundation and Edge

- Delivers best of breed business services to rapidly build IoT enabled applications
- Leverage standard technical services to process high velocity of data with the ability to stream analytics and run predictive scenario
- Deliver intelligent edge applications that ingest data irrespective of connectivity, latency or device protocols
SAP Leonardo & Digitizing Business: The Big Picture

UI Layer (SAP Leonardo Bridge)

Enterprise Management – The Digital Core

R&D

Supply Chain Planning

Manufacturing

Logistics

Sales

After Sales Service

Procurement

FROM PROCESSES TO NETWORKS

PRODUCTS

“THINGS”

SAP Leonardo Apps

SAP Leonardo Foundation

SAP Cloud Platform / SAP HANA Platform

SAP Leonardo Edge Computing

Network Log. Hub

Connected Goods

Track & Trace

Connected Mfg.

Vehicle Insights

Predictive Main.

Asset Intelligence Network

PEOPLE
Jump-Start Program for the SAP Leonardo Portfolio
Three Steps to Delivering Outcomes

- **Software and Service** to implement customer’s IoT use-case
- Proof with real data - **Productive Pilot**
- **Reduced Risk** with fixed price and fast deployment in 3 months
- Customer success beyond pilot - delivers **business case** and deployment roadmap for next phases

![Diagram showing three steps]

**Three Steps to Delivering Outcomes**

1. **Explore**
   - Calibrate the jump-start program with business and IT stakeholders.
   - Document your vision, scope, and backlog.
   - Kick off the prototyping of the SAP Leonardo solution that you selected.

2. **Prototype**
   - Narrow down on one core business process.
   - Redesign the business process or model with real-world data.
   - Demonstrate your vision with rapid prototyping.

3. **Implement**
   - Turn your prototype into a live pilot project.
   - Provide the software as a service for a limited time.
   - Define future processes on your road map for the Internet of Things (IoT).

**Timeline**

- **1 Day**
- **1 Week**
- **3 Months**
Key Takeaways

**IoT as enabler for the 3 Value drivers**
New Business Processes - New Business Models - New Work Environment

**SAP Leonardo connect things with people and processes**

**Think Big, Start small – Leonardo Jump-Start Program**
Thank you.

Contact information:

**Eugenio Moya**, Business Development Manager EMEA, IoT and Digital Supply Chain LoB, SAP
eugenio.moya@sap.com