Industry Innovations with SAP Leonardo: Automotive and Discrete Manufacturing Industries

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November 2, 2017
Unprecedented innovation in the automotive industry
Fueled by sensors, Big Data, hyperconnectivity, and the blurring of industry boundaries

**New business models**
Based on shared mobility and connectivity services, automotive revenue pools could expand by 30% or US$1.5 trillion.

**Asset optimization**
Up to 15% of new cars sold in 2030 could be fully autonomous.

**Diverse mobility**
30% of miles driven in new cars sold could be from shared mobility as early as 2050.

**Mobile solutions**
will change from one vehicle for all purposes to specific “shared” vehicles for specific needs.

Source: McKinsey
Digital leaders in automotive experience – **unforeseen technology barriers that inhibit innovation**

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<th>Technological innovation</th>
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Business risks caused by innovation gap

73% of automotive manufacturers’ C-level execs were convinced that the IoT would change their industry, but just 20% had a thought-through strategy for harnessing it*

35% of U.S. discrete manufacturers are currently collecting and using data generated by smart sensors to enhance manufacturing/operating processes**

38% currently embed sensors in products that enable end-users/customers to collect sensor-generated data**

15% of organizations have been able to move from reactive to predictive business by combining data from assets and sensors, with internal data***

Three essential traits of effective digital innovation leaders

Acquire capabilities
Successful digital leaders understand that they must acquire the needed capabilities and realize those that aren’t yet developed within their team.

Challenge everything
Effective digital leaders challenge everything, including the status quo and the historical norms that they have learned.

Be quick and data-driven
Digital leaders need to move to a cycle of continuous delivery and improvement, adopting methods such as agile development and live beta, supported by Big Data analytics, to increase the pace of innovation. To continually improve, digital leaders must continue to experiment.

“You always knew digital was going to change things, but you didn’t realize how close to home it would hit. In every industry, digital competitors are taking advantage of new platforms, tools, and relationships to undercut competitors, get closer to customers, and disrupt the usual ways of doing business. The only way to compete is to evolve.” James McQuivey, Forrester Research Inc.

Go from unrecognized technological barriers inhibiting innovation to…
Removing barriers to intelligently connect people, things, and businesses

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Value of intelligently connecting people, things, and businesses

What if I could manage the health of all our complex manufacturing assets – automatically?

What if I could manage the wallet of my digital consumers – automatically?

What if I could know the exact whereabouts of any order – from any supplier, to any customer – right now?

VP of manufacturing

VP of digital service

VP of supply chain
SAP Leonardo is our digital innovation system ...

Intelligently connecting people, vehicles, and businesses

- Flexible integration
- Innovative visualization
- Buses
- New business models
- Process automation
- System integration

- Spatial analysis
- Machine learning
- In-/outbound messaging
- UI building blocks
- APIs
- Trucks
- Cars
- Forklifts

- Analytics
- In-/outbound messaging
- UI building blocks
- Analytics
- In-/outbound messaging
- UI building blocks
That integrates today’s transformational technologies

**Internet of Things**
Connecting things with people and processes
Connected products, assets, and fleets to drive the Industrial IoT
Connected infrastructures, markets, and people to enable the Internet of Everything

**Analytics**
Insights that enable transformative actions
All analytics across your business
Embedded machine learning
New processes and applications based on insights

**Big Data**
Manage vast amounts of Big Data
Distributed storage and computing
Real-time insight discovery
Insights embedded into business processes

**Machine learning**
Intelligence enabled by learnings from data
Embed intelligence into enterprise applications
Integrate intelligence to solve common business challenges
Train and deploy deep-learning models

**Cloud platform**
Foundation for SAP Leonardo
Common foundation across applications and technology
(In-memory) real-time data management
Integration of things, people, and processes

**Blockchain**
Blockchain services embedded into business applications
Increased trust in peer-to-peer transactions
Full visibility of goods provenance and history of ownership
Increased auditability and decreased fraud

**Design thinking**
Innovative, engaging methodology
Uncover the opportunities for your digital transformation
Use the SAP Build tool to ideate and create rapid, interactive prototypes
Understand user needs

**Data intelligence**
Put data into business context
Trusted, real-time benchmarks
Decision-making scenarios
Data asset monetization
SAP Leonardo applied – across three automotive scenarios

Real-time platform
SAP has the market-leading in-memory platform – SAP HANA.

Business applications
SAP is a market leader for business process applications, and for mobile and business analytics.

SAP Vehicle Network
SAP offers a B2B marketplace for mobile car apps and services powered by SAP Cloud platform, part of SAP’s business networks group.
Strategic priority: Big Data
Driving high performance with SAP Business Suite powered by SAP HANA and the Internet of Things
Strategic priority: SAP Vehicles Network
A B2B vehicle and mobile-centric marketplace
How do we engage with customers to innovate using SAP Leonardo?

Unlike off-the-shelf software, innovation requires collaboration and idea sharing.
Next step: conduct an exploration workshop together

Find the right path
Strategize use cases
Build the road map to innovation

How do I see innovation in action?
Visit SAP Leonardo Centers in New York or Palo Alto, California
Thank you.

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