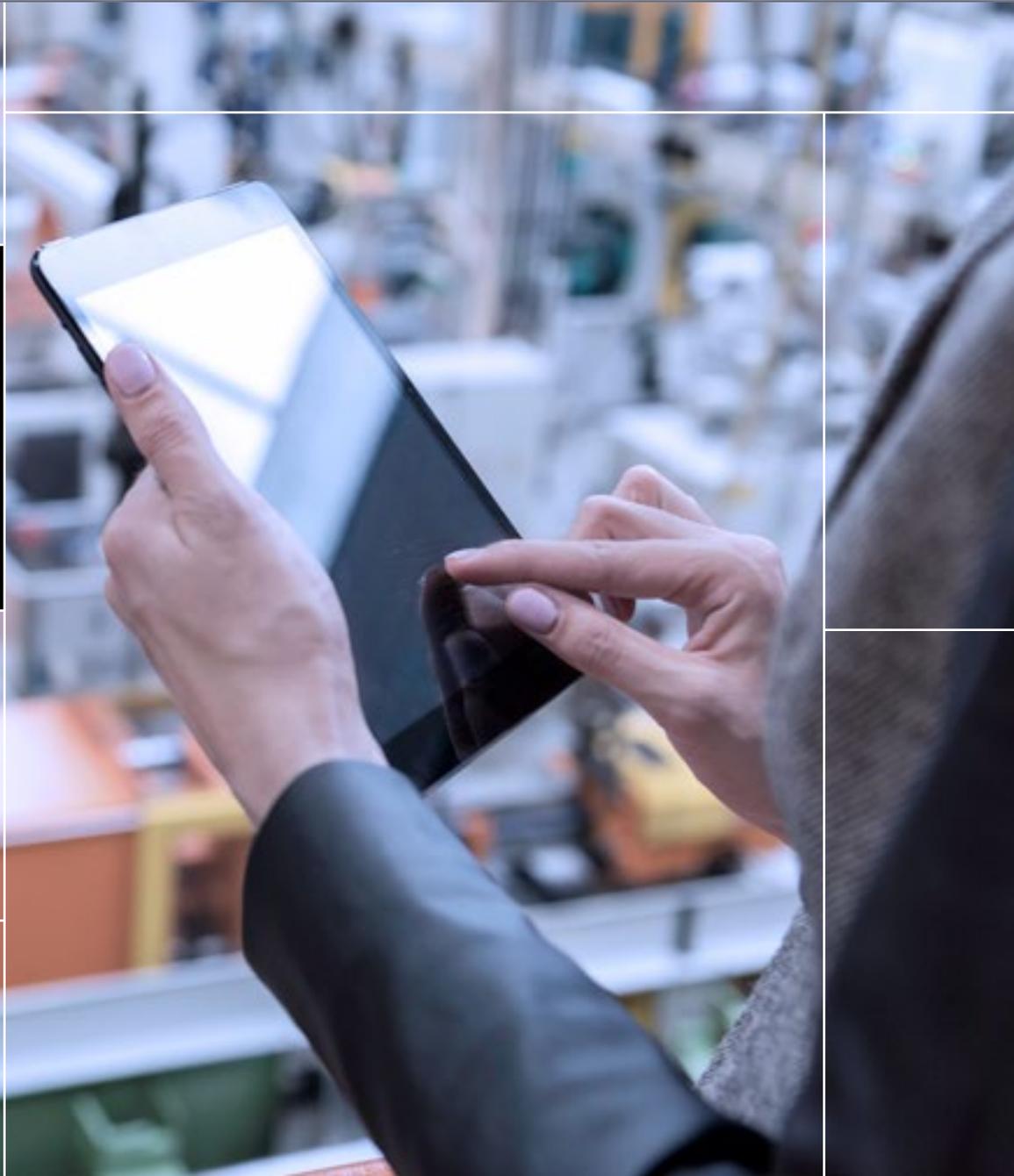


MAPR: THE CONVERGED DATA PLATFORM FOR MANUFACTURING





SOLVE COMPLEX MANUFACTURING CHALLENGES USING BIG DATA

The manufacturing industry is the most important segment for increased automation and digitization. Manufacturers tend to focus on optimizing cost, balancing supply with demand, and improving predictability. With low-cost Internet of Things (IoT) hardware, it is now possible to digitize factories, plants, and equipment better than ever before, but the real value is in deriving business benefits from this data.

The MapR Converged Data Platform (MCDP) enables the industry to mine into the operational data by tapping into all data—sensors, operational applications, precision robots, and fleet management—to converge it onto one platform for processing and analysis, regardless of where the data is located. MCDP enables simultaneous analytics and applications, so manufacturers can connect machines, people, and analytics to derive business value from the digitization revolution that this industry is undergoing.

Supply Chain Visibility

Manufacturers require insights into production levels, inventory and capacity availability, quality levels, and order status from all their suppliers in order to stay on-track with their production deliverables.

Productivity Boost

With data-centric digital manufacturing concepts using product lifecycle management (PLM) and the advent of the Industrial Internet, manufacturers can directly impact their bottom line by improving production efficiencies and reducing costs.

Forward-Looking Predictive Analytics

Ensuring that factories run 365x24x7 requires preventive and predictive maintenance built into the business workflow to leverage every available data asset for big data and advanced analytics predictive modeling.

Fleet Management and Route Optimization

Manufacturers can analyze GPS and real-time truck route data to compare planned vs. actual routes and minimize material wastage.



MAPR OFFERS A MODERN DATA SYSTEM TO MEET THE DATA NEEDS OF A MODERN MANUFACTURING COMPANY

Leveraging of data from machine and operational applications to ensure uptime and availability of equipments.

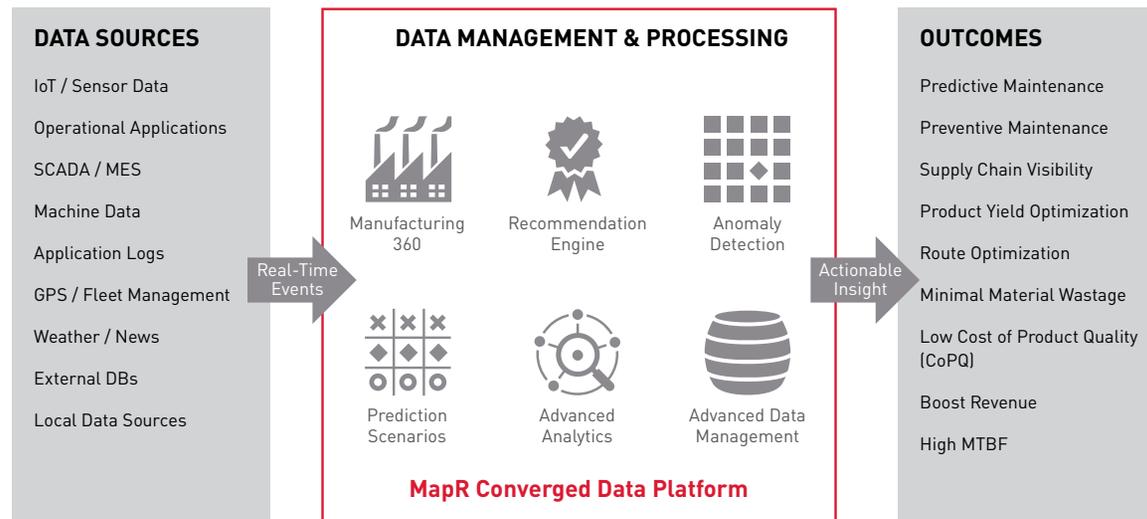
Prediction of supply disruptions due to weather conditions or changing geo-political scenarios.

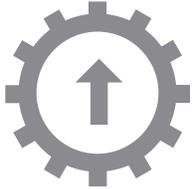
Ingestion of real-time Internet of Things (IoT) sensor data in an enterprise data hub for flow monitoring and better yield.

Tight integration with supervisory control and data acquisition (SCADA) and manufacturing execution systems (MES).

Analysis of GPS and real-time truck routes to optimize fleet utilization and minimize material wastage.

Advanced image data analysis to maximize First Time Yield (FTY).





**BOOST
PRODUCTIVITY**



**BOOST
REVENUE**



**MINIMIZE SUPPLY
DISRUPTIONS**

OPTIMIZE OUTPUT OF SMART FACTORIES

Enables better visualization, intelligent correlation analyses, and modeling complex processes to optimize output.

As individual parts or the entire equipment come to repair age, service technicians can be aligned for support to minimize downtime.

INCREASE MEAN-TIME-BETWEEN-FAILURES

The MapR Platform can quickly combine and analyze a variety of structured and unstructured log data in a single clustered platform. This enables manufacturers to gain critical machine insights before failures.

Best-in-class yield management by continuously ingesting fabrication and processing data to maximize product yields.

EXTRACT CRITICAL INSIGHTS TO ENSURE SUPPLY PREDICTABILITY

Weather, world events, political situations—all play a role in ensuring supply continuity for manufacturers relying on parts and supplies from all around the world.

Allows manufacturing firms to tap into unstructured weather and news data to offer real-time supply predictability, predict disruptions, and streamline logistics.

OVERVIEW

“One of the key reasons we chose MapR was because of its **high availability and disaster-recovery capabilities**. We have six data centers; if we lose one, it can fail over to another. We require automatic failover between clusters.”

“We’ll be able to bring together all information about every time HP touches a customer. We’ll combine silos into one dashboard so we can provide a better customer experience. This will be a game changer for HP.”



“The MapR Converged Data Platform provides by far **the best technology for the integration of existing applications**. In the growing field of data processing, this is an absolute must.”

Thomas Kriegel, Head of Virtual Vehicle Management, Processes & Methods, PDM for AUDI AG



MapR **performance and scalability** allows handling of 90,000 tests per file, up to 200K files/run, 50 runs per day. This **increases wafer yield** by improving performance of yield management system at a much lower cost per terabyte.

A large wireless chip manufacturer

SOLUTION

SUMMARY

Manufacturers require a connected factory solution that also integrates with their manufacturing floor assets, investments, and legacy IT infrastructure. They require a solution that is easy to use, flexible to allow for constant innovation, and resilient to meet market demands for their products. Traditional data management models and processing techniques simply cannot scale, are not economical, or are unable to handle the demands of this industry. With the MCDP—one platform, all data, across every cloud—manufacturers finally have a scalable, secure, and flexible platform at the core of the solution to outperform the competition.

SOLUTION

With MapR, manufacturers can harness the power of all their data. They can strike a good balance between constant production upkeep, assurance of just-in-time delivery of goods, and high yield management on the one hand, while reducing cost of product quality on the other. The MapR Platform enables easy ingestion of any kind of data—including temperature and pressure sensors, weather, machine logs, process software, and logistics—and fast processing of this data in a single platform. With secure, timely access to all this data, manufacturers can now avail better supply predictability to match product demand, ensuring near 100% equipment uptime.

CONTACT US

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