



Getting Started with Apache NiFi Across Industries

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Agenda

- Connected Digital World Opportunities
- The Changing Data Landscape
- Industry Use Cases
- Attunity Replicate
- Q&A



DATA DRIVES OUR LIVES EVERY DAY

Mobile apps

Online shopping

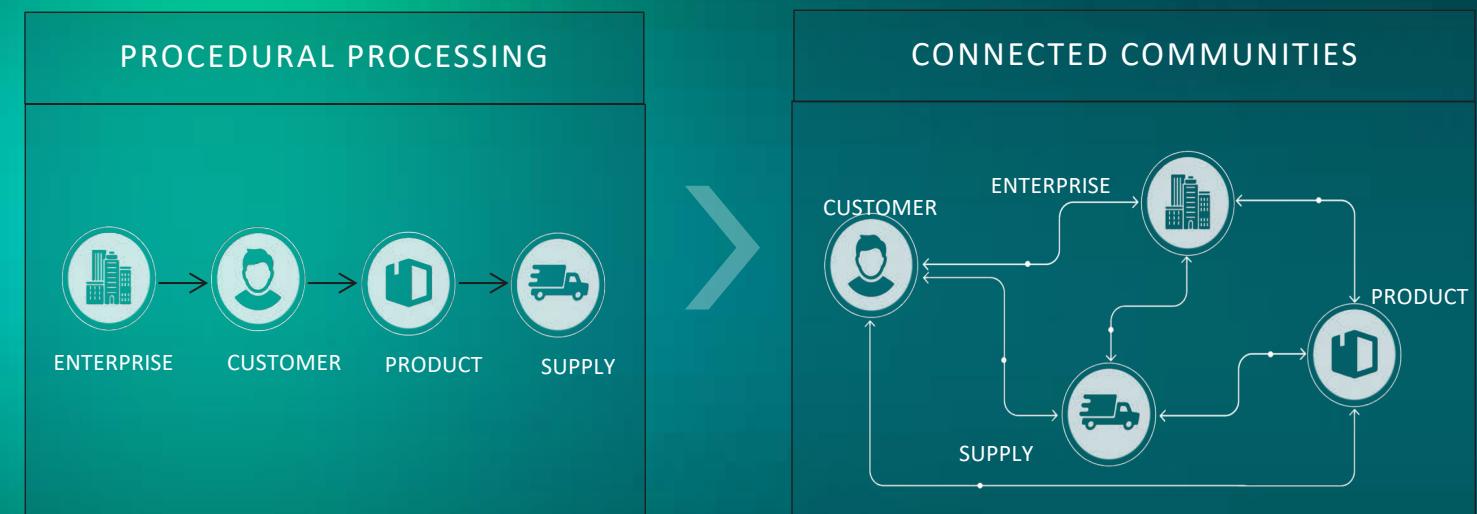
Medical records

Wearables

Music streaming



BIGGEST BUSINESS MODEL TRANSFORMATION SINCE INDUSTRIAL REVOLUTION



Opportunities to Create Business Value Across Connected Communities



MODERN BUSINESS MODELS

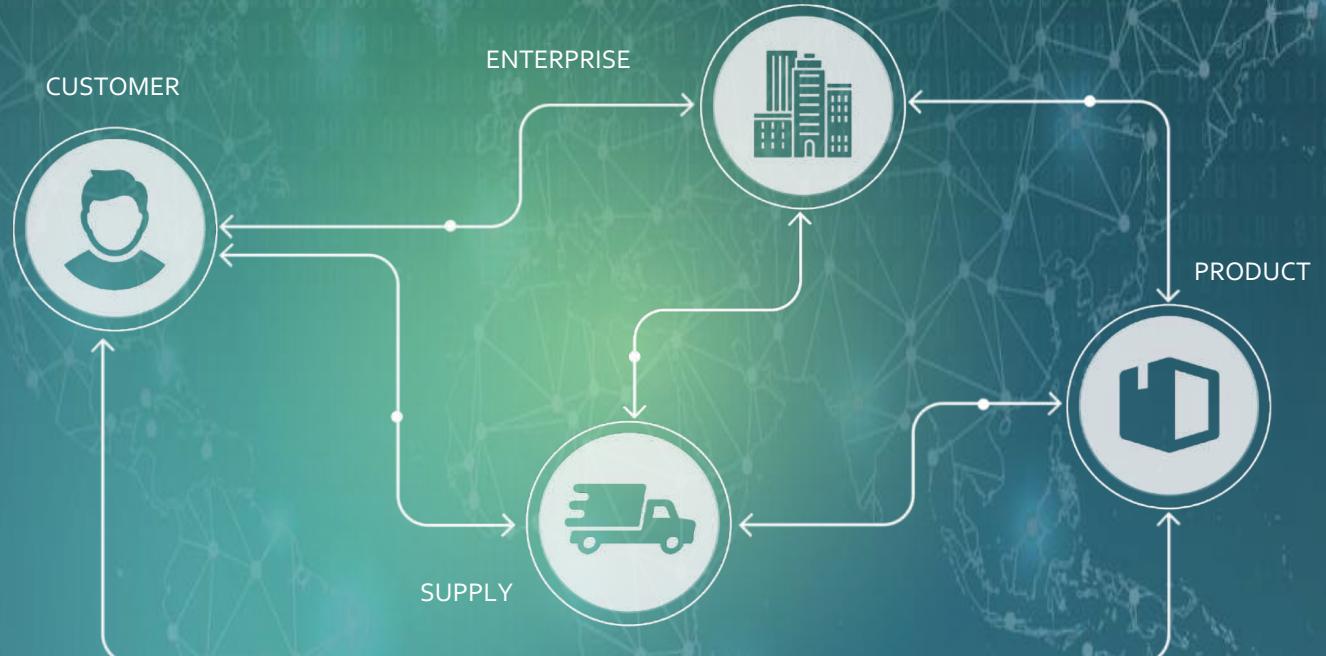
REQUIRES WE CREATE CONNECTED COMMUNITIES TO GET MORE BUSINESS VALUE

New models drive

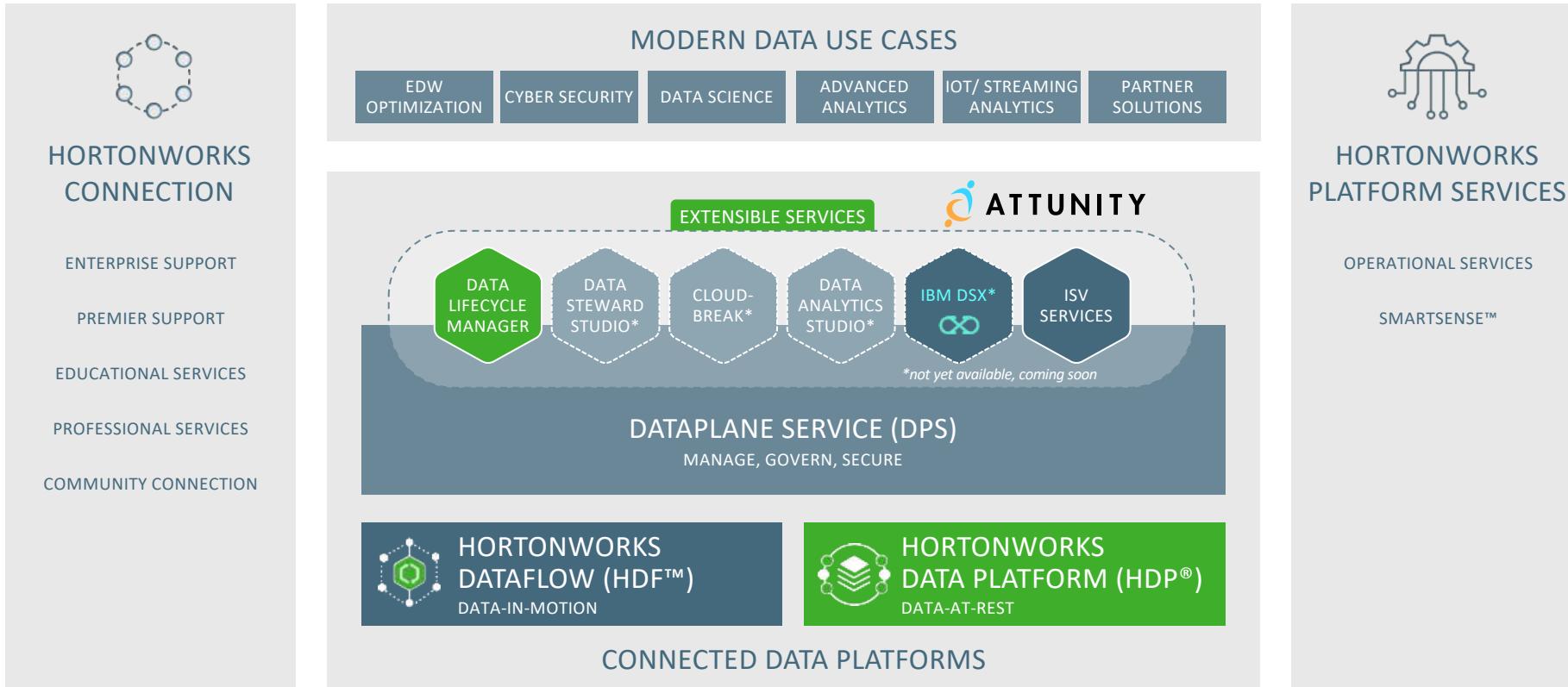
- Real-time visibility
- Product performance
- Customer satisfaction

With High-Velocity

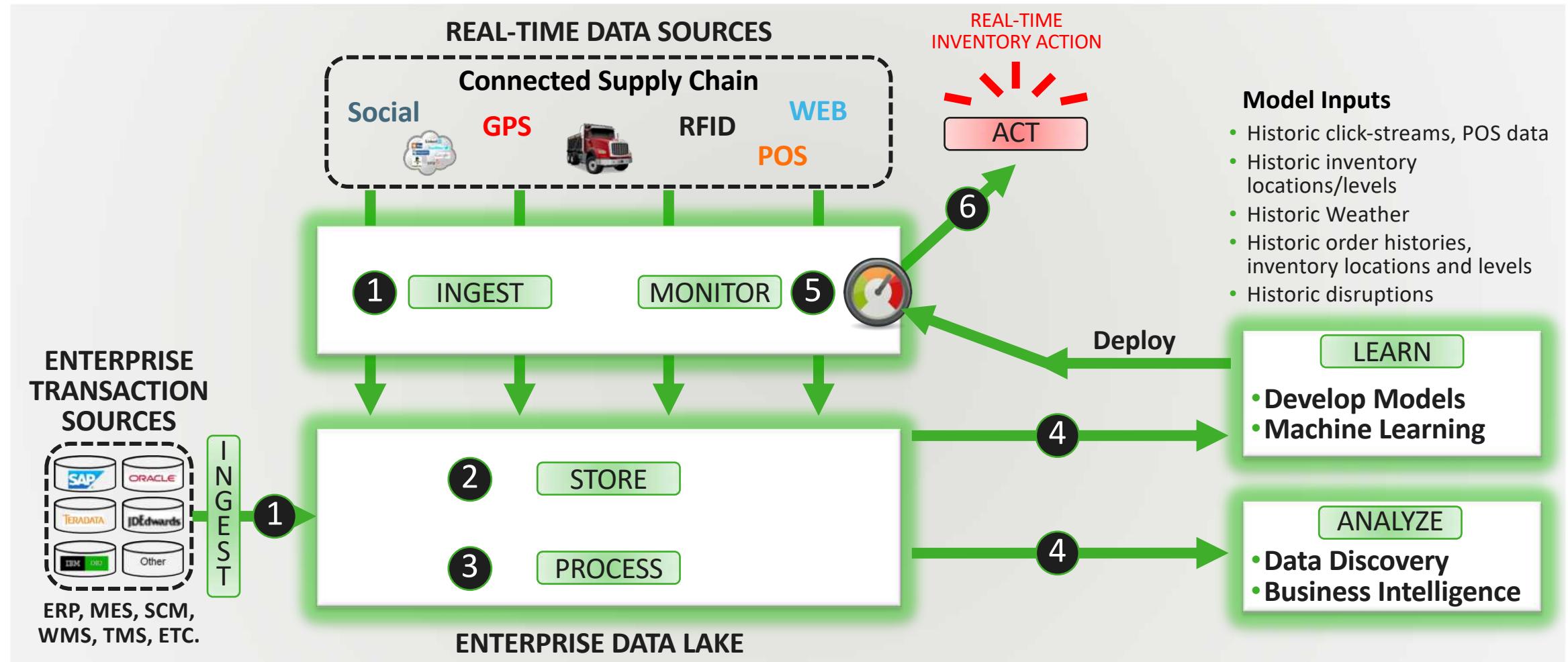
- Adjustments
- Remedies
- Responses



Global Data Management With Hortonworks and Attunity

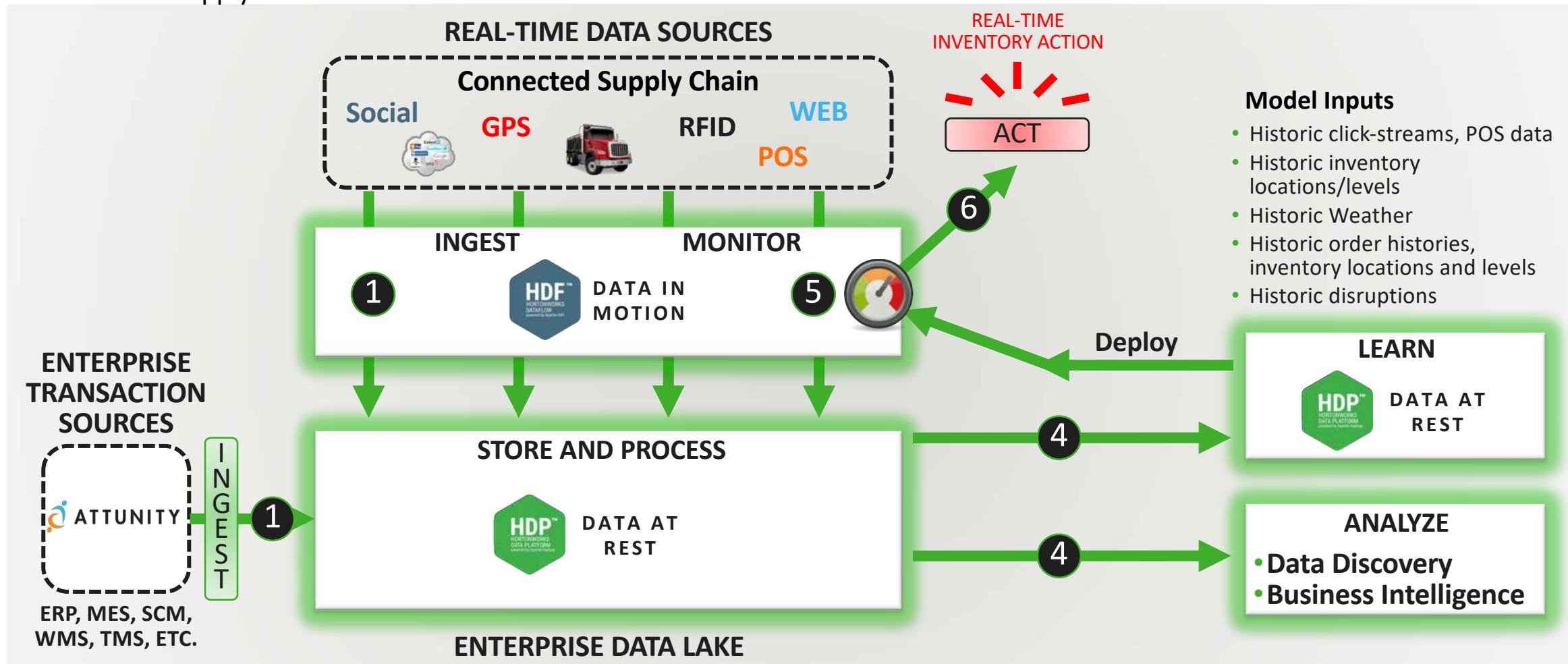


Example: Real-Time Supply Chain Analytics



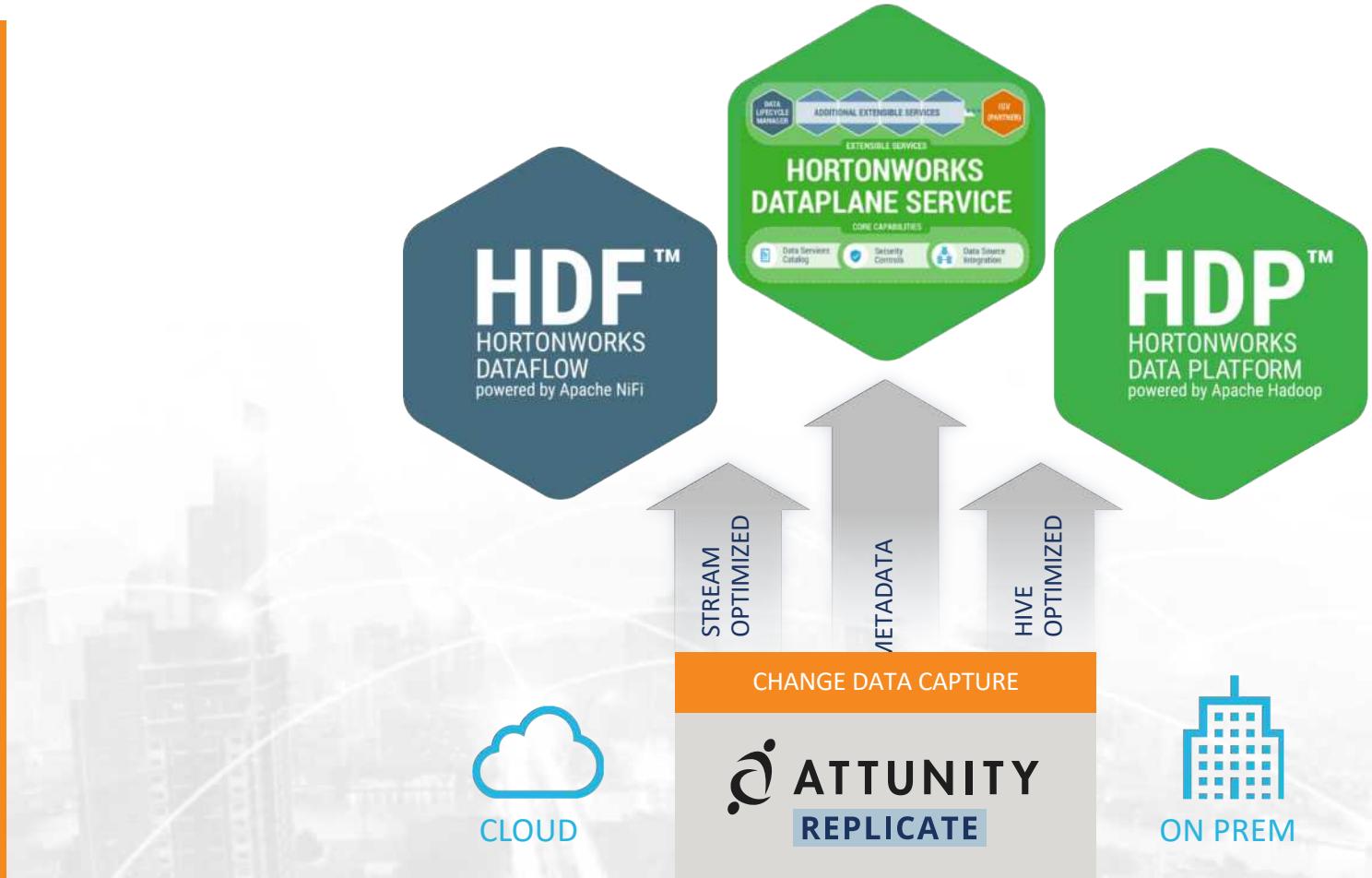
Hortonworks & Attunity for Real-Time Connected Industries

Illustration of Supply Chain



MODERN DATA INGEST

- CDC (log-based) for high performance, low latency and low impact
- Single platform for all key enterprise systems
- Hive-optimized for HDP and Stream- optimized for HDF
- Point-and-Click with NO coding and NO agents



WAREHOUSE



MAINFRAME



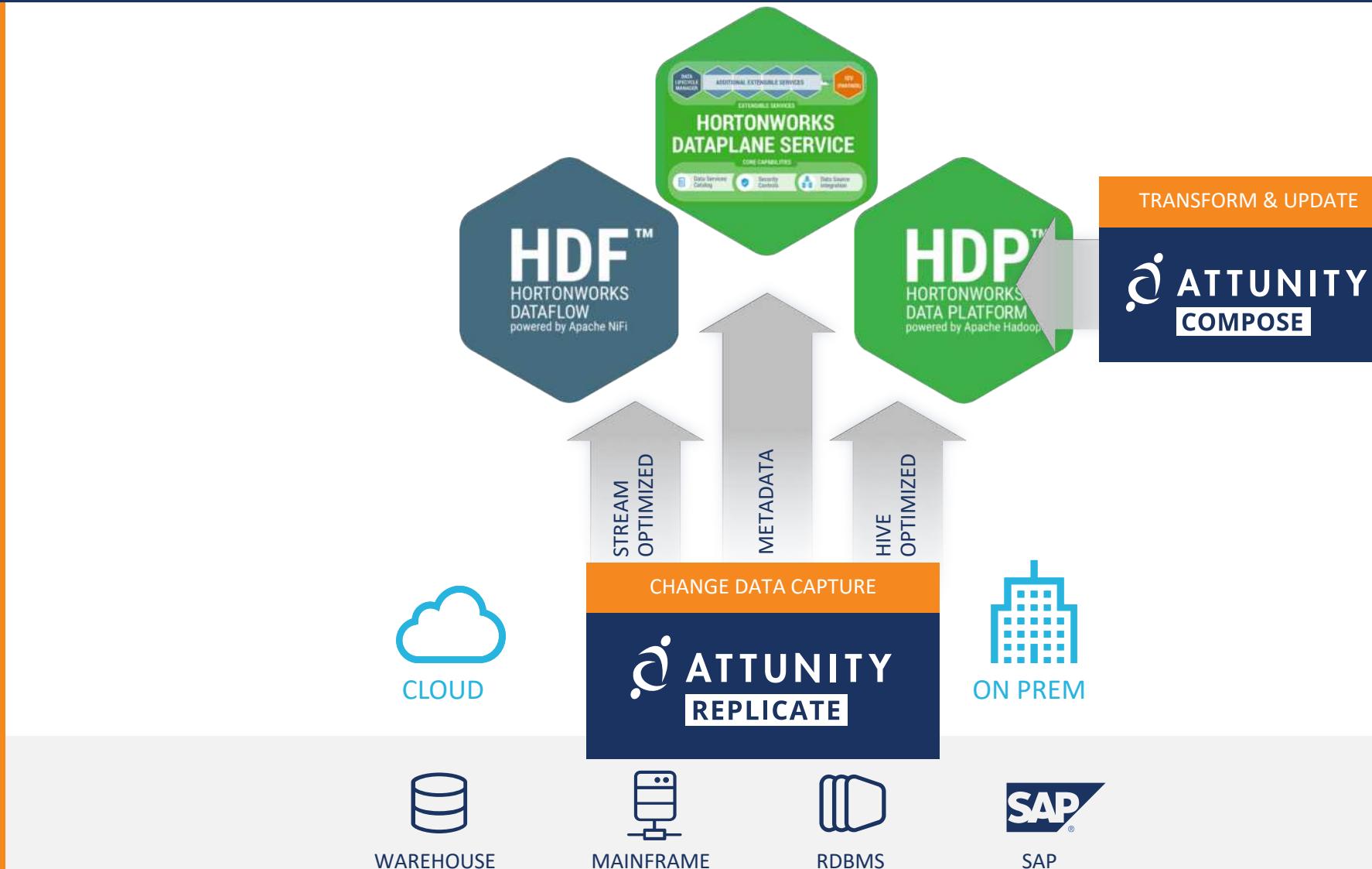
RDBMS



SAP

ATTUNITY + HORTONWORKS

- Hive-optimized for HDP and Stream-optimized for HDF
- Point-and-Click with NO coding and NO agents
- Automates creation of analytics-ready Hive dataset
- Reconciles source data and metadata updates
- Transformation processing pushed down to Hive

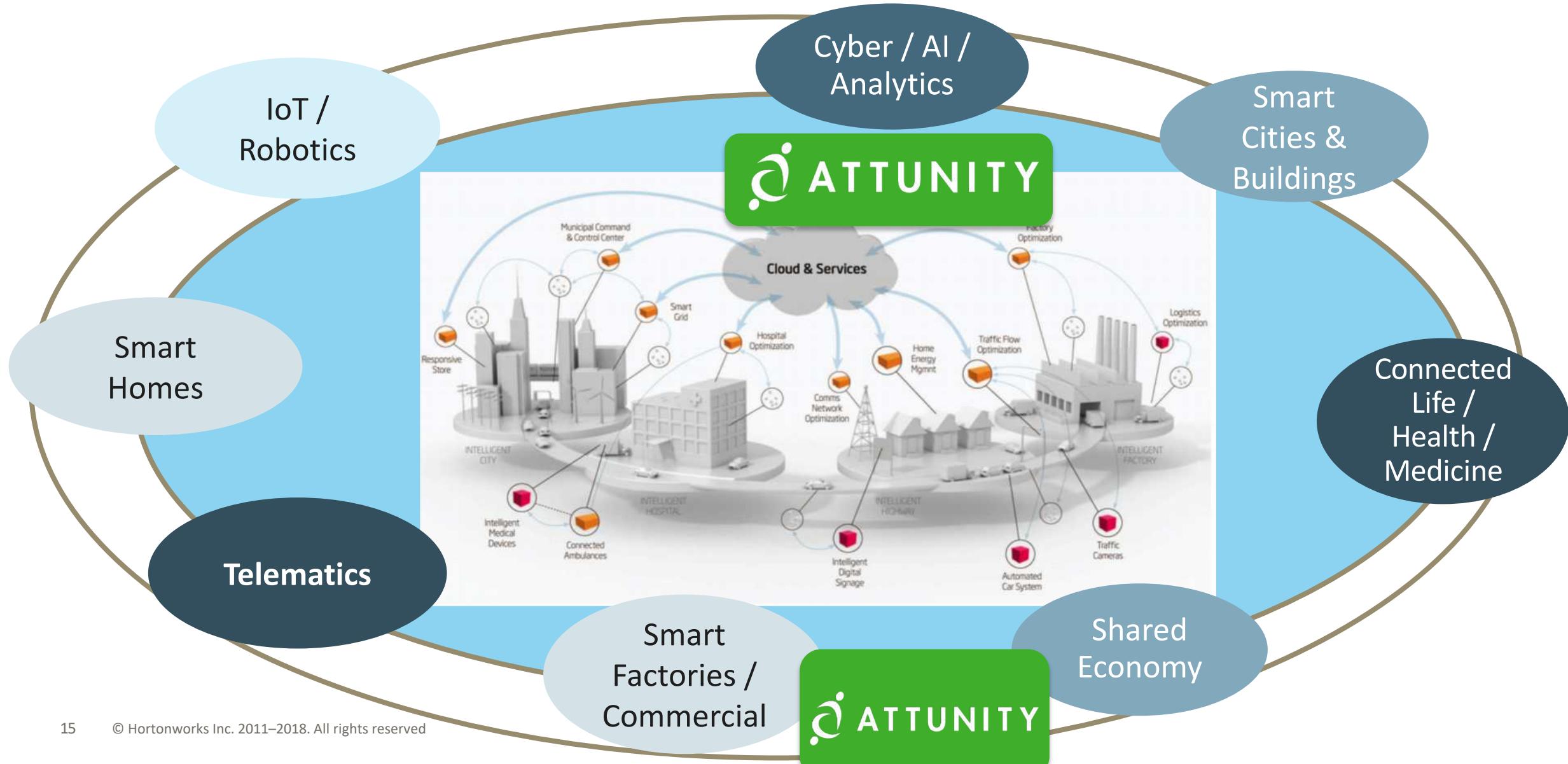




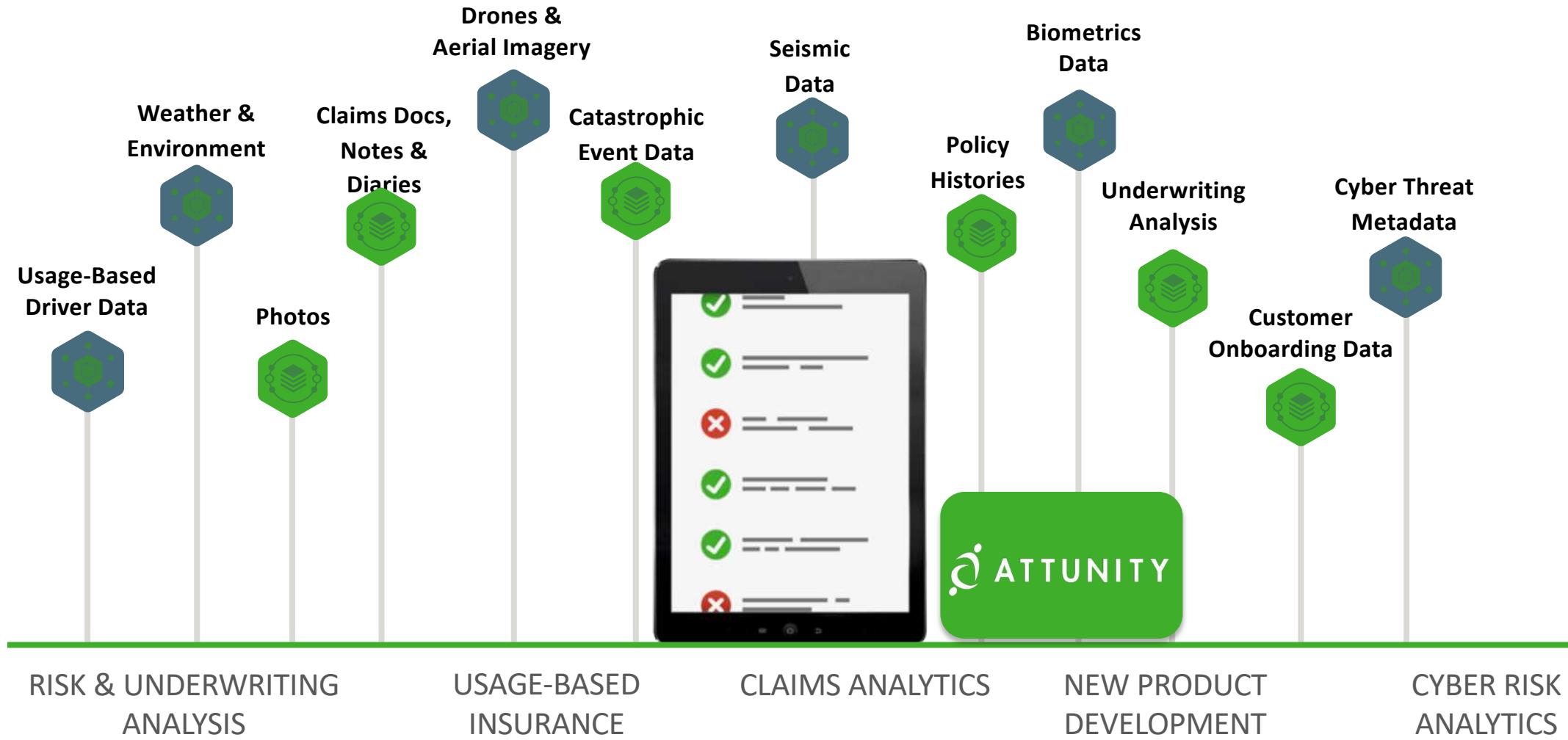
Industry Use Cases

Insurance Industry - Business use cases

Emerging Tech, Real-time data and the Connected World



Driving Actionable Intelligence in Insurance



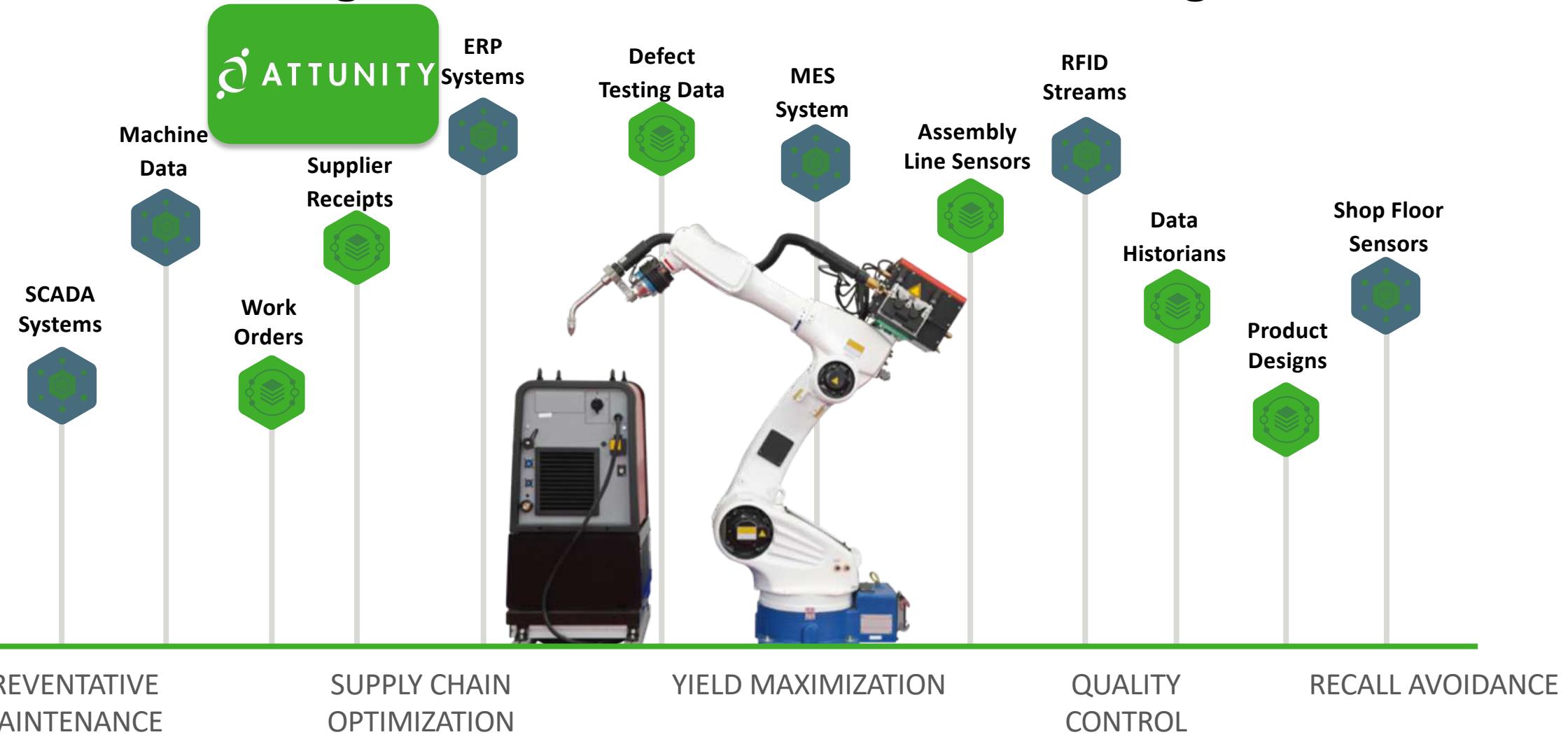
Nifi and Attunity Replicate in Insurance

Insurance

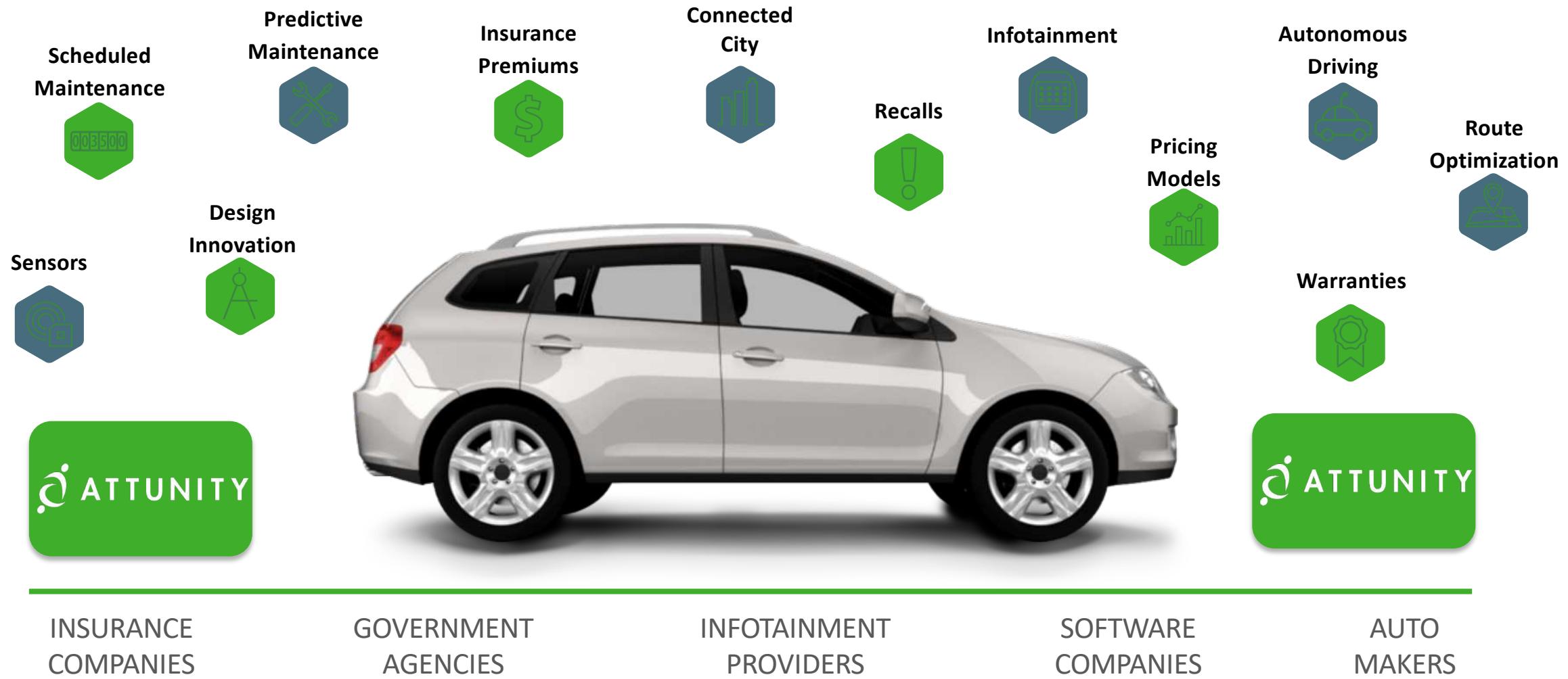
Risk & underwriting analysis; Usage-based insurance; Claims analytics; New product development, and cyber-risk analytics

- **Apache NiFi:** Usage-Based Driver Data, Weather & Environment, Drones & Aerial Imagery, Seismic Data, Biometrics Data, Cyber Threat Metadata, Catastrophic Event Data, Photos
- **Attunity Replicate:** Underwriting Analysis, Customer Onboarding Data, Underwriting Analysis, Policy histories, Claims Docs, Notes & Diaries

Actionable Intelligence Powers Modern Manufacturing



Data Drives the Connected Car – Must include SAP SCM, etc.



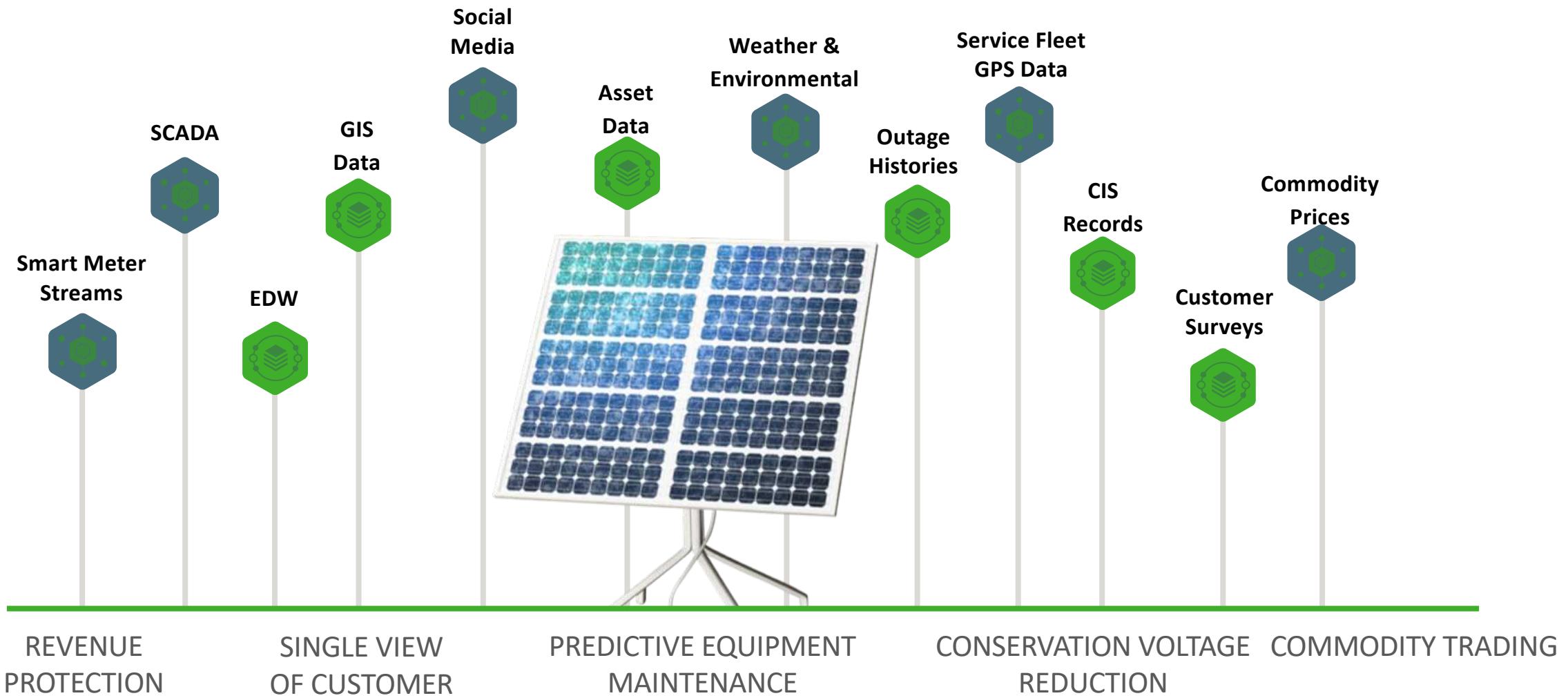
Attunity Replicate Enables Global Manufacturing and Automotive Transformation

Manufacturing

Preventative Maintenance, Supply Chain Optimization, Yield Maximization, Quality Control, and Recall Avoidance Development

- **Apache NiFi:** Machine Data, Testing Data, Assembly Line Sensors, RFID Streams, Shop Floors
- **Attunity Replicate:** Scada systems, Work Orders, Supplier Receipts, ERP Systems, MES, Data Historians, Product Designs

Actionable Intelligence Transforms Energy and Utilities



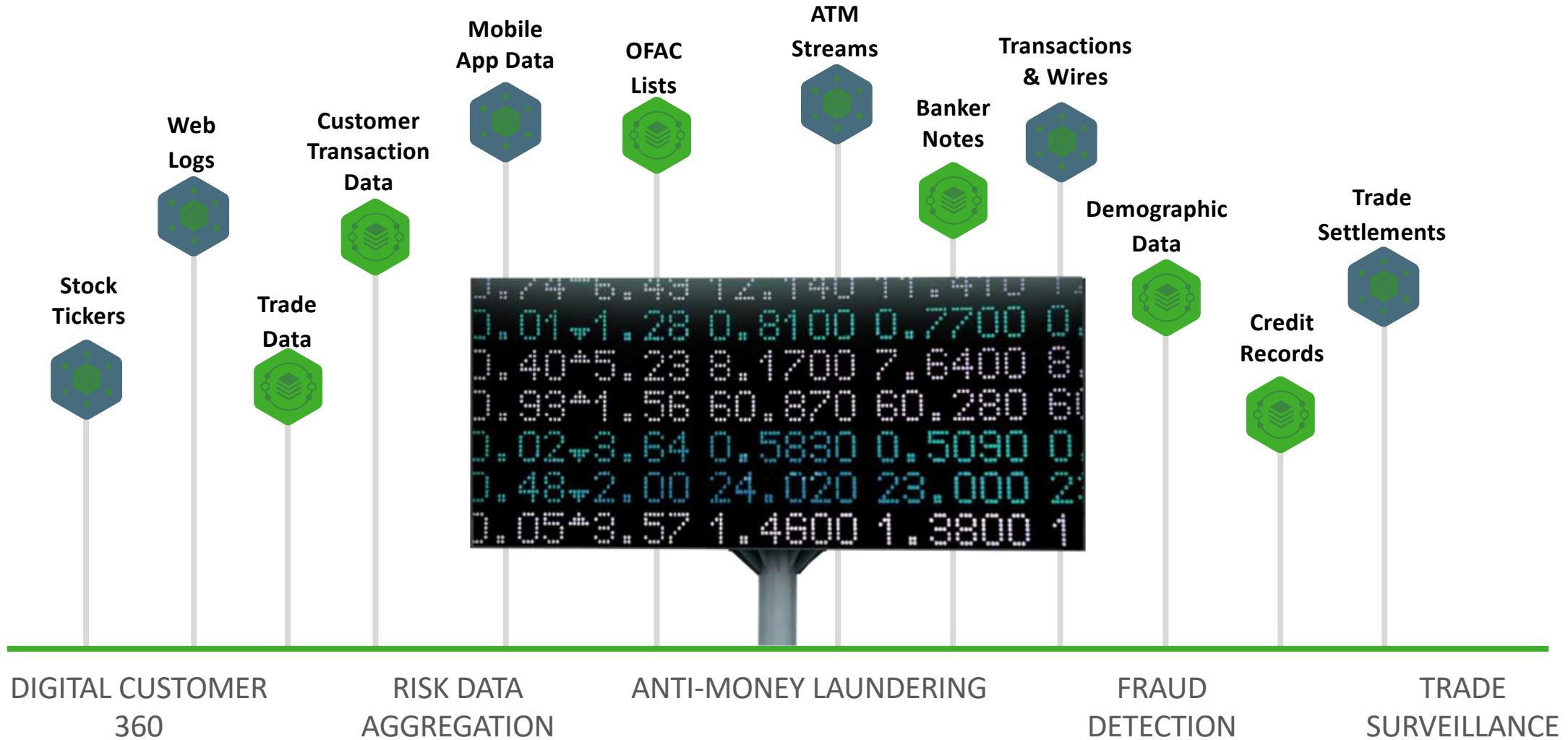
Attunity Replicate Provides Pumps More Relevant Data for Energy and Utilities

Utilities

REVENUE PROTECTION; SINGLE VIEW OF CUSTOMER; PREDICTIVE EQUIPMENT MAINTENANCE; CONSERVATION VOLTAGE REDUCTION; COMMODITY TRADING

- **Apache NiFi:** smart meter streams, GIS data, social media, weather & environmental, CIS record, customer surveys, commodity prices
- **Attunity Replicate:** SCADA, EDW, asset data, outage histories

Actionable Intelligence Powers Today's Financial Services



Attunity Replicate Connects You to Your Money and Integrates with Key Market Resources

Financial Services

DIGITAL CUSTOMER 360; RISK DATA AGGREGATION; ANTI-MONEY LAUNDERING; FRAUD DETECTION; TRADE SURVEILLANCE

- **Apache NiFi:** web logs, trade data, mobile app data, ATM streams, OFAC lists, transactions & wires, demographic data, trade settlements.
- **Attunity Replicate:** customer transaction data, OFAC lists, banker notes, credit records, stock tickers

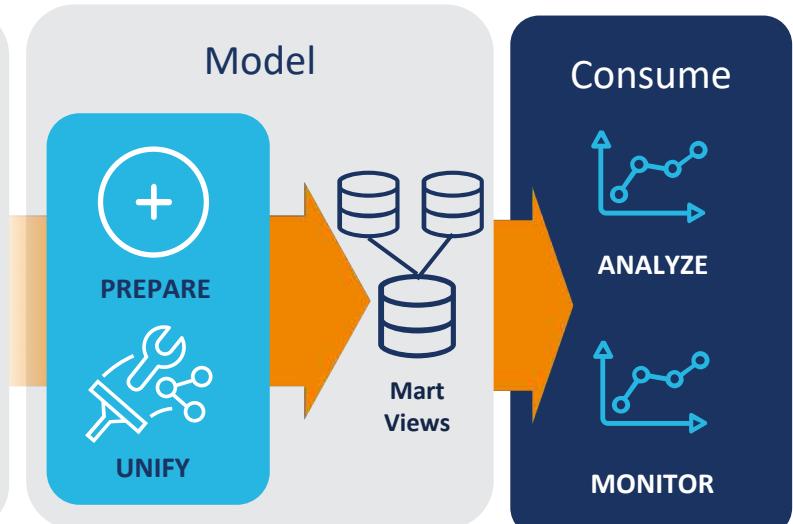
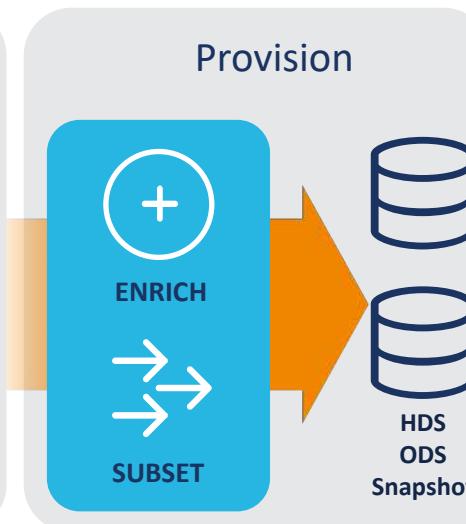
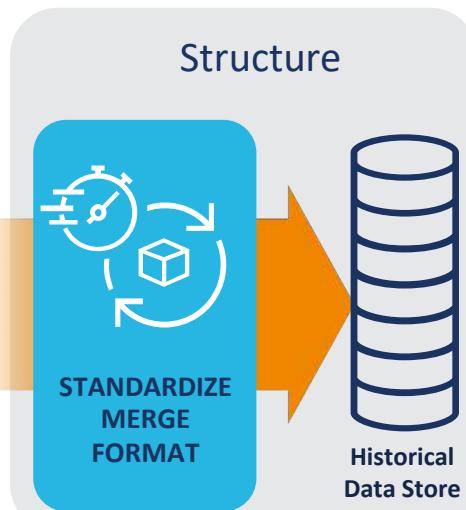
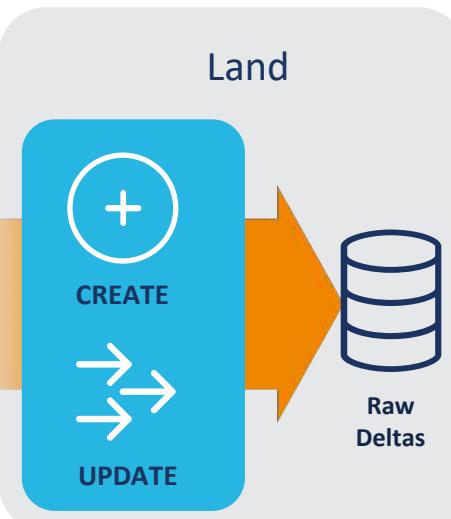


STREAMING REAL-TIME DATA

NEEDS AND CHALLENGES

Requirement	Detail
 Latency	Need to update data sets in near real-time
 Scale	High volume and variety of data ingestion
 Flexibility	Change platforms quickly
 Time to Value	Dependency on developers
 Performance	Negative impact on production
 Efficiency	Slow, disruptive full load replication

AUTOMATE YOUR DATA PIPELINE



Data ingested into data lake

Data continuously updated and merged into historic data store

Subsets created to meet analytic requirements

Create marts for queries and analysis

Why Attunity with Hortonworks?

Supporting The Use Cases of the Now and Future

Data Ingestion Solution of Choice



Change Data Capture

ATTUNITY
REPLICATE

Modern Data Platforms

EDW OFFLOAD WITH USAGE PROFILING

RAPID ODS WITH HIVE LLAP

DATA PLANE SERVICES WITH ATTUNITY

- Simple batch ingest (easy + metadata)
- Streaming CDC ingest (for HDFS, cloud)
- High volume offload from EDW (e.g. Teradata)
- Metadata replication (with DDL capture)



Packaging:

- ISV service
- Co-branded service
- HWX service

Change Data Capture

ATTUNITY
REPLICATE

EDW Usage & Analytics

ATTUNITY
VISIBILITY

Transform & Update

ATTUNITY
COMPOSE

Modern Industry Use Cases

Product Development

Product 360
Testing & Simulation
Optimization

Voice of Customer
Insights

Manufacturing Operations

Process 360
Quality & Yield
Optimization

Equipment Predictive
Maintenance

Process Flow
Optimization

Customers/Assets

Customer 360
Marketing & Sales
Personalization

Connected Asset &
Value-Added Services

Socially Enabled
Service

Website Optimization
Quality & Warranty
Analytics

Recommendation Engine
Predictive Maintenance

- Data Lakes
- Process Optimization
- Machine Learning & AI

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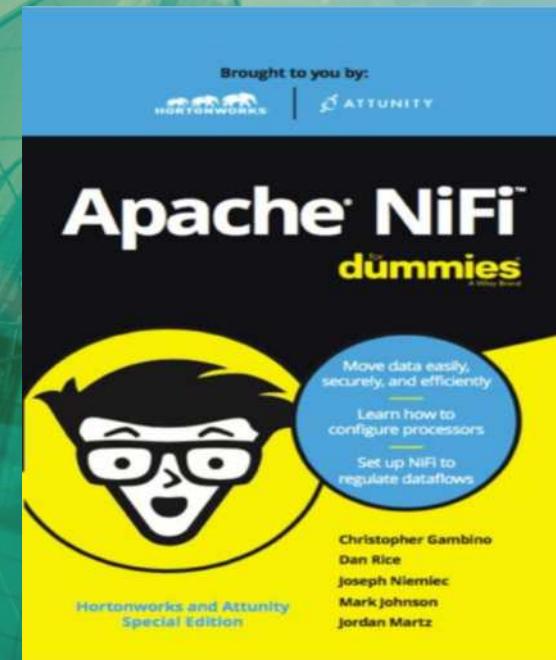
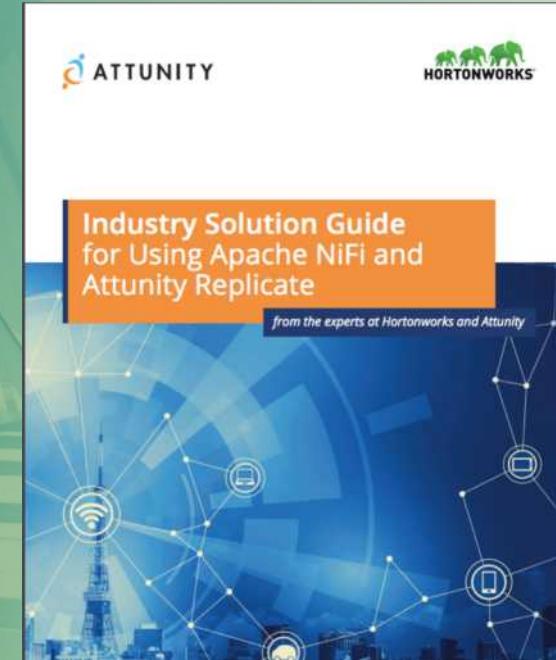
Questions?

Industry Solution Guide for Using Apache NiFi and Attunity Replicate

<https://hortonworks.com/info/industry-solution-guide-using-apache-nifi-attunity-replicate/>

Download Apache NiFi for Dummies Today!

<https://hortonworks.com/ebook/ni-fi-dummies/>





Thank you

For more information, go to: www.Attunity.com/nifibook