

WEBMETHODS USER GROUP NORDIC

~~Predictive Analytics~~  
&  
Integration

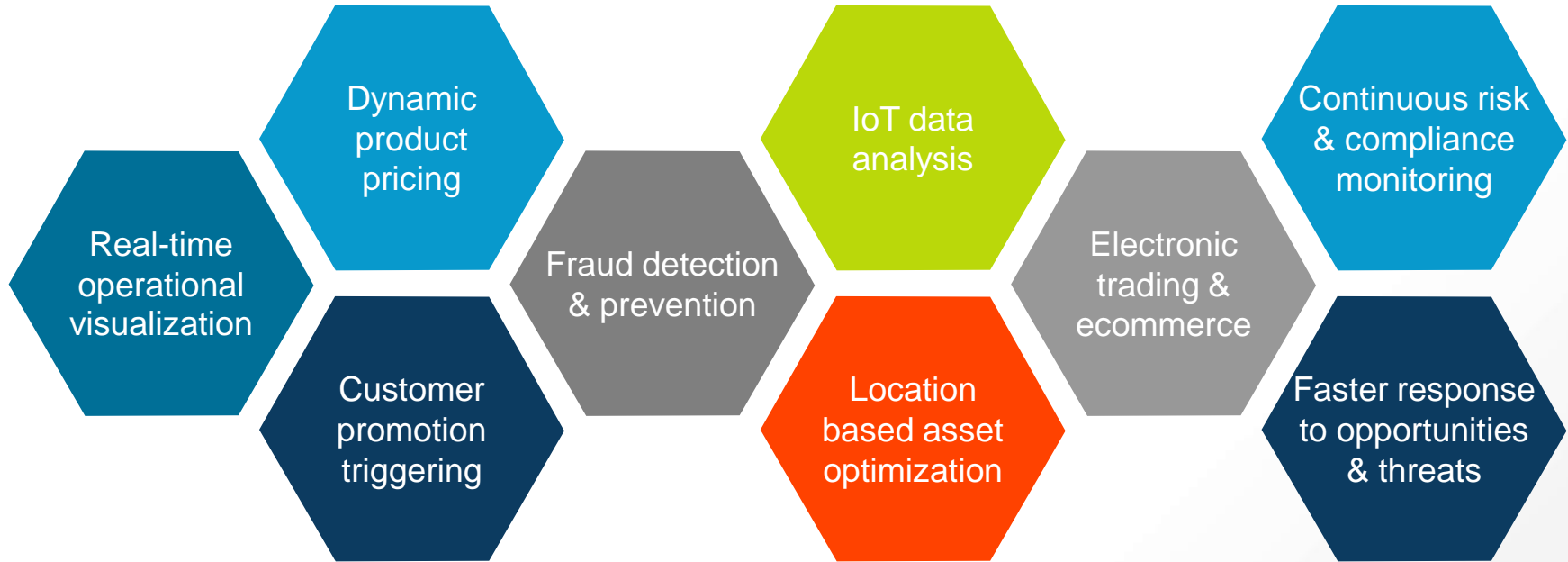
Thomas Lundström



# ANALYTICS....

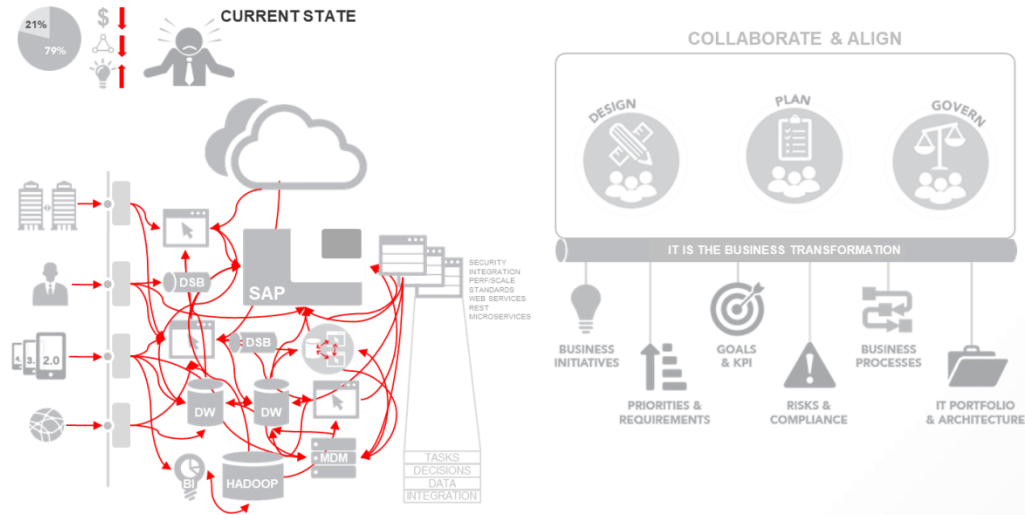
- **WIKIPEDIA:** Analytics is the **discovery, interpretation, and communication of meaningful patterns** in data and applying those patterns towards effective decision making. In other words, analytics can be understood as the **connective tissue between data and effective decision making**, within an organization.
- **TECHOPEDIA:** Analytics is the **scientific process** of discovering and communicating the meaningful **patterns** which can be found in **data**.
- **GARTNER: Advanced Analytics** is the autonomous or semi-autonomous **examination of data** or content using sophisticated techniques and tools, typically beyond those of traditional [business intelligence](#) (BI), to discover deeper insights, make predictions, or generate recommendations.

# ANALYTICS USE CASES

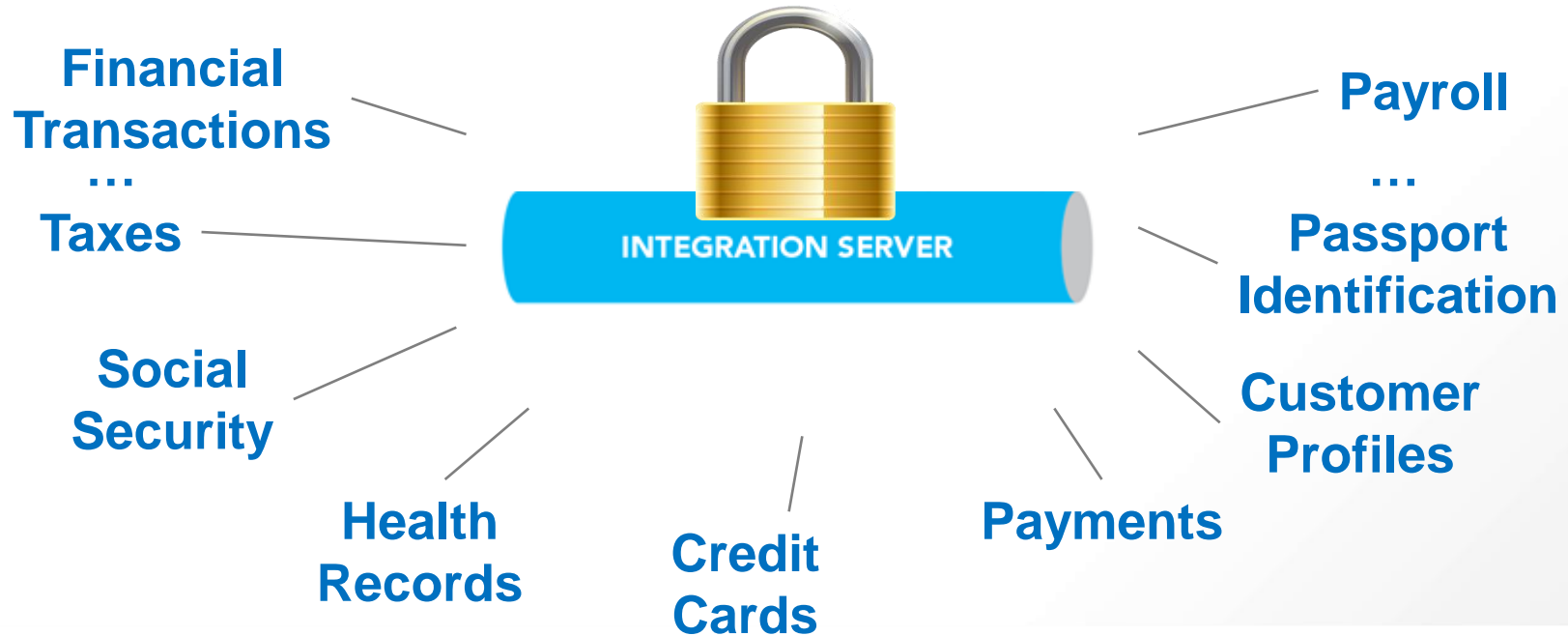


# INTEGRATION IS A FOUNDATION....

- Avoid the point to point tangle
- Connecting systems/solutions with on premise and other cloud applications



# LEVERAGE YOUR MISSION-CRITICAL DATA



# ANALYTICS, DRIVEN BY CAPABILITIES



# SUPPLY CHAIN PROCESS ANALYSIS THROUGH ARIS PPM



## OPPORTUNITY:

- Heineken leverages more than 50 ERP systems amongst its multiple enterprises and subsidiaries and was unable to determine if process standards were being followed across their multiple organizations
- Driving process improvements across multiple processes was extremely difficult

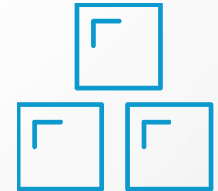
## RESULTS:

- Ability to compare the performance of the various procurement and sales units or breweries with each other
- Leverage shared economies of scale across the multiple organizations and breweries by standardizing processes which resulted in direct cost savings

SINCE PARTNERING WITH SOFTWARE AG :

# CRITICAL

END-TO-END SUPPLY  
CHAIN ANALYSIS,  
**SCALABLE SHARED  
SERVICES**



# SOFTWARE TRANSFORMS SOLAIRE RESORT & CASINO



Visual  
analytics



Process  
monitoring



## Customer Profile

Solaire Resort & Casino is a \$1.2 billion integrated luxury destination casino resort—ranked No. 1 in the Philippines.

## New Challenges

- Increasing competition
- Demand for real-time customer experience
- Need to integrate siloed back-end applications and create more integrated customer-related applications

## Key Benefits

- Deeper customer insight
- Differentiated customer experience
- Faster customer service and adoption of new applications
- Real-time analytics to power new marketing programs

## Personalizing the casino experience

In the digital age, understanding customer preferences has gone from science fiction to absolute requirement. Solaire selected Software AG for a winning hand—digitalizing all customer-facing operations, from touchpoints to back-office processes. The real jackpot: customer data is available and usable in real time, thanks to webMethods, which integrated previously siloed systems. With a new consolidated view of customers, Solaire can “build for differentiation” and use real-time analytics for more responsive marketing innovations. New apps can be introduced faster to improve the customer experience and create new customer data streams.

“Software AG technology is the enabling platform for our path towards intelligent marketing to drive our vision of differentiated customer experience. Our partnership is one of the keys to realizing our vision of delivering a superior experience to our customers.”

— **Kel Telford** | CIO, Solaire Resort & Casino



# SOFTWARE TRANSFORMS GLOBAL IMAGING LEADER

Global Printing & Imaging  
Company



## Customer Profile

This global leader in imaging and output technology solutions and managed print services has \$3.7+ billion in sales in 170+ countries.

## New Challenges

- Increased competition and SLA compliance issues
- A push for IoT-enablement and device tracking requirements
- Inefficient field maintenance and rising costs
- Lacking real-time visibility into partner supply chains

## Key Benefits

- Harnessed real-time location data via IoT sensors
- Achieved live visibility into all third-party business processes
- Automated predictive and maintenance service in 3 months
- Reduced equipment servicing costs by 40 percent
- Expects revenue growth due to better SLAs

## Predictive analytics for service excellence

Leading today's imaging solutions landscape requires taking innovation to the next level: learning to predict the future. Working with Software AG, the global leader in imaging built an Operational Intelligence Platform that harnesses the power of the Internet of Things, advanced streaming analytics and automated service requests for its widely distributed printer fleet.

By using Software AG's Digital Business Platform, the company has unlocked real-time sensor data to drastically boost internal efficiency and better coordinate with partner supply chains. And customers are coming out on top—with new services, better cost structures and a user experience beyond industry expectations.

Equipment servicing costs are down an astounding 40 percent, and revenue is forecast to grow by half. Meanwhile, the company's customers are thrilled by the newfound reliability—and the company has maintained the edge it needs to stay ahead of the competition.



# A REAL CUSTOMER PROJECT

## Scope of work:

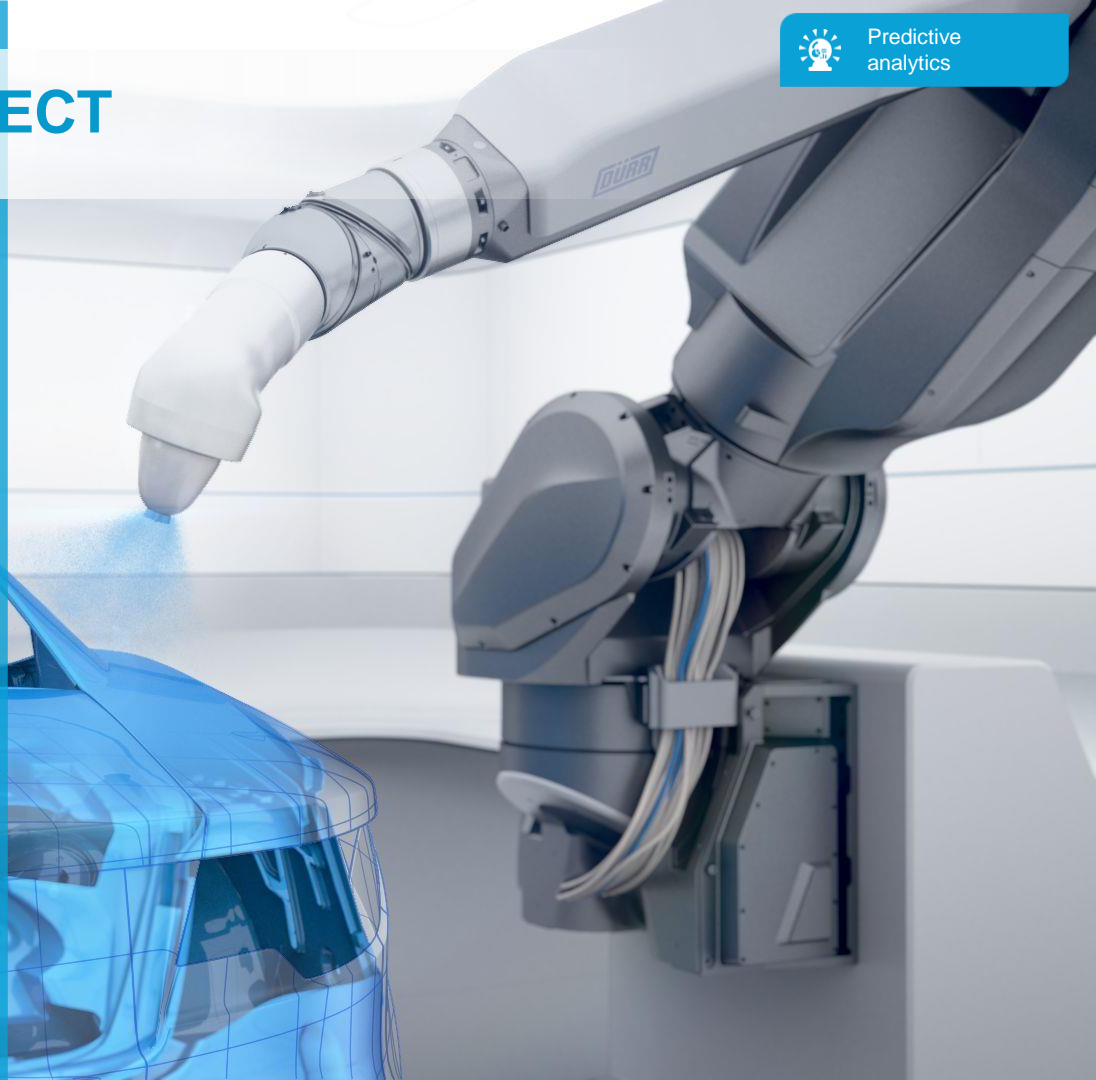
Detection of paint flaws in real time

## Technical solution:

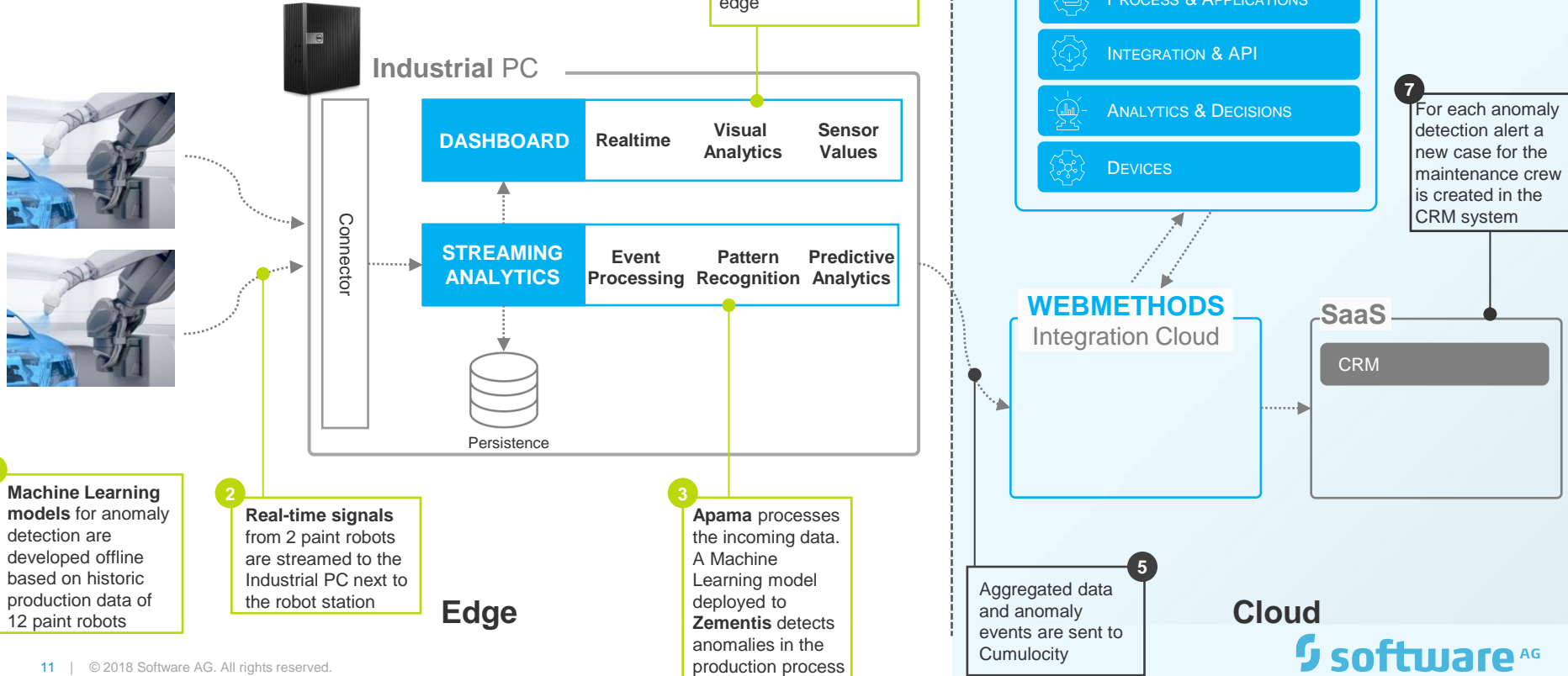
Edge Analytics, Machine Learning, IoT Platform

## Benefits:

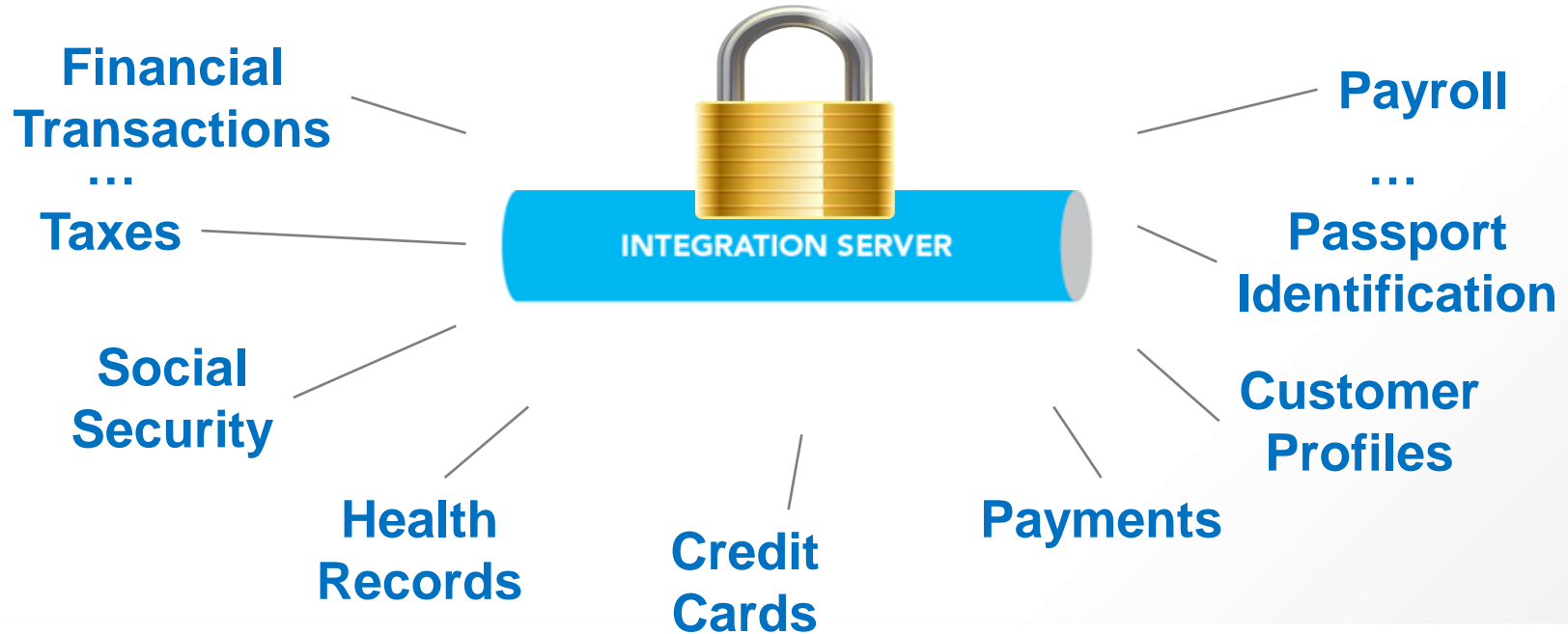
Condition monitoring,  
Increased quality



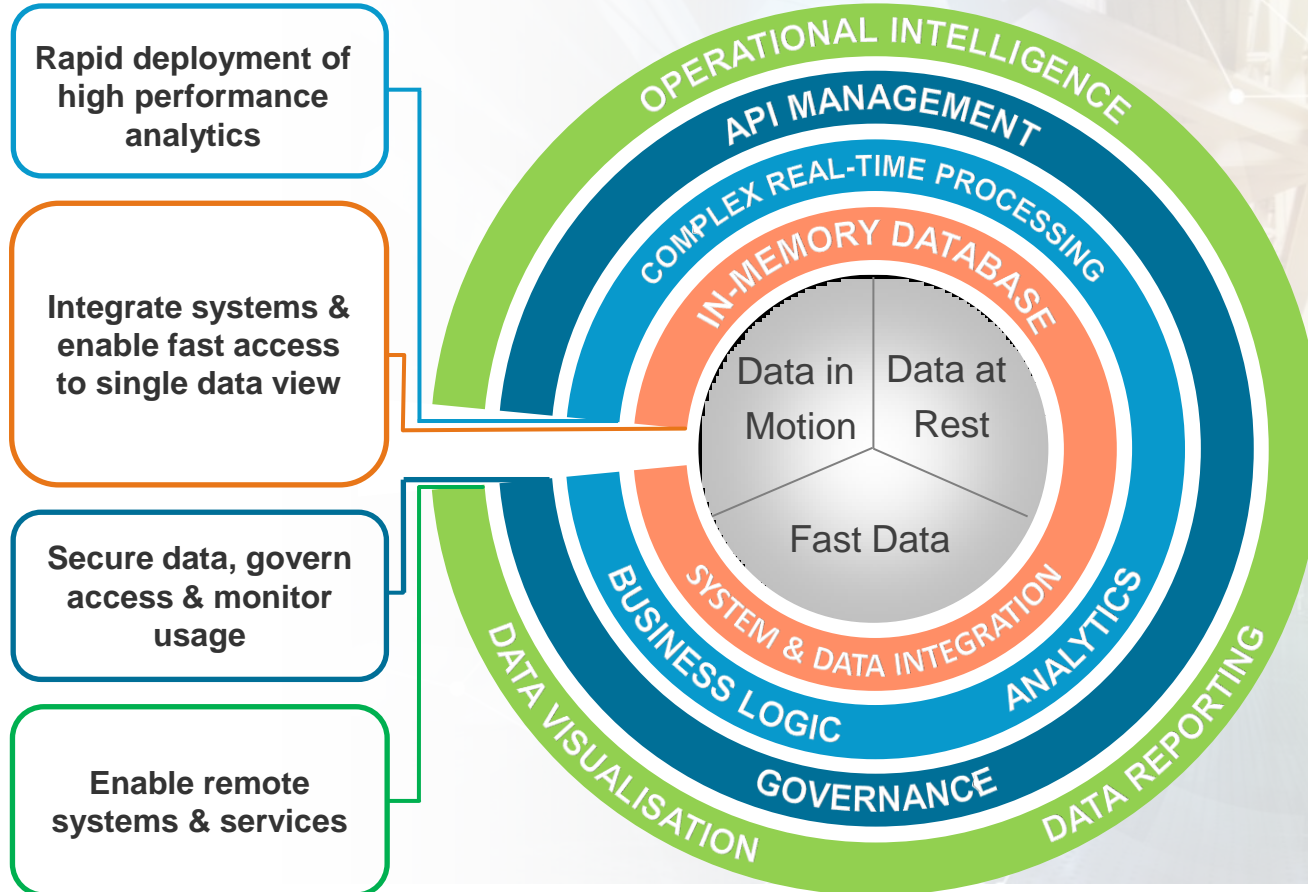
# ANALYTICS ON THE EDGE DETECTING PAINT FLAWS IN REAL-TIME



# LEVERAGE YOUR MISSION-CRITICAL DATA



# THE DATA CHALLENGE



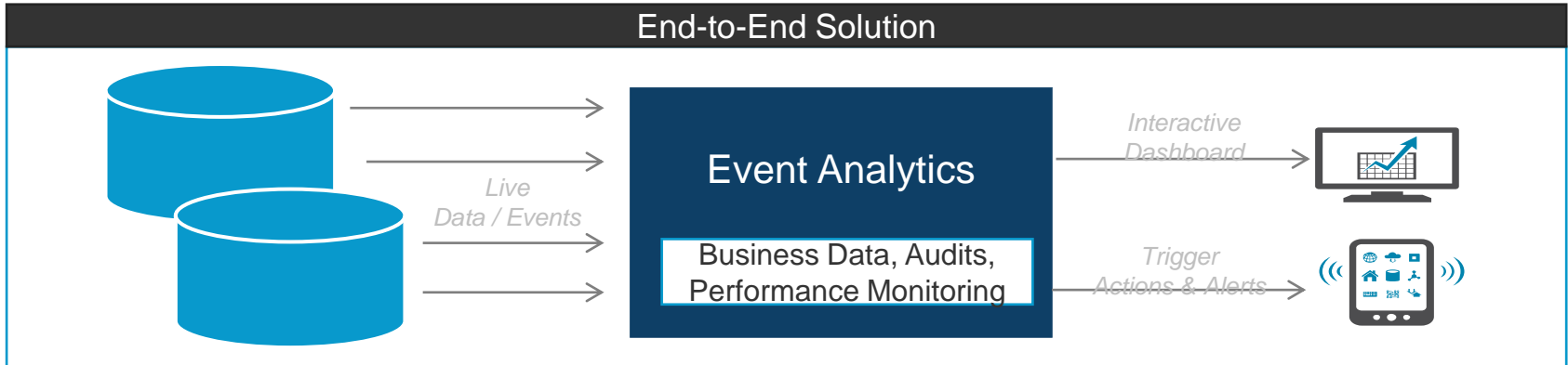
# SOLUTION: CONNECTED ANALYTICS

GAIN INSIGHTS INTO EVENTS TO IDENTIFY BUSINESS VALUE IN REAL-TIME

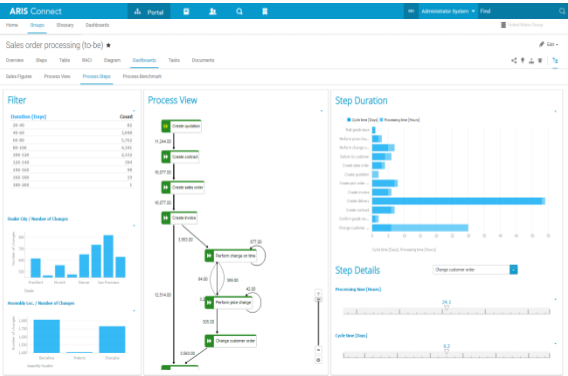
*Data Feeds*

Time is Critical

*Action*

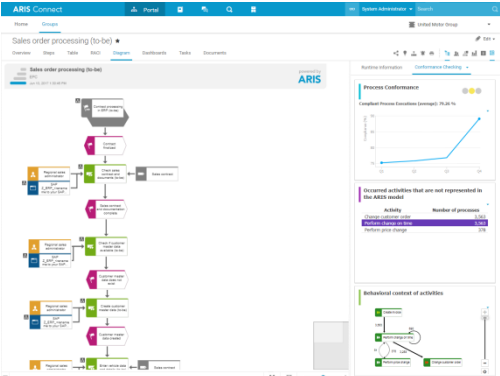


# INTEGRATED PROCESS MINING DIFFERENT USE CASES



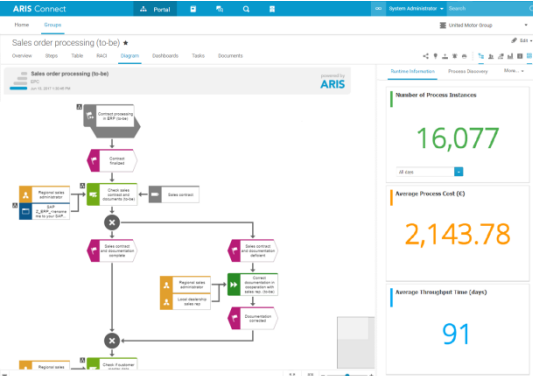
## Process Discovery

- Automated discovery of executed processes
- Export process models to ARIS



## Process Conformance

- Ad-hoc analysis
- Analysis dashboards
- Compare to-be and as-is process



## Process Enhancement

- Query internal and external KPIs
- Process simulation
- Enhance process based on findings

# PROCESS IMPROVEMENT

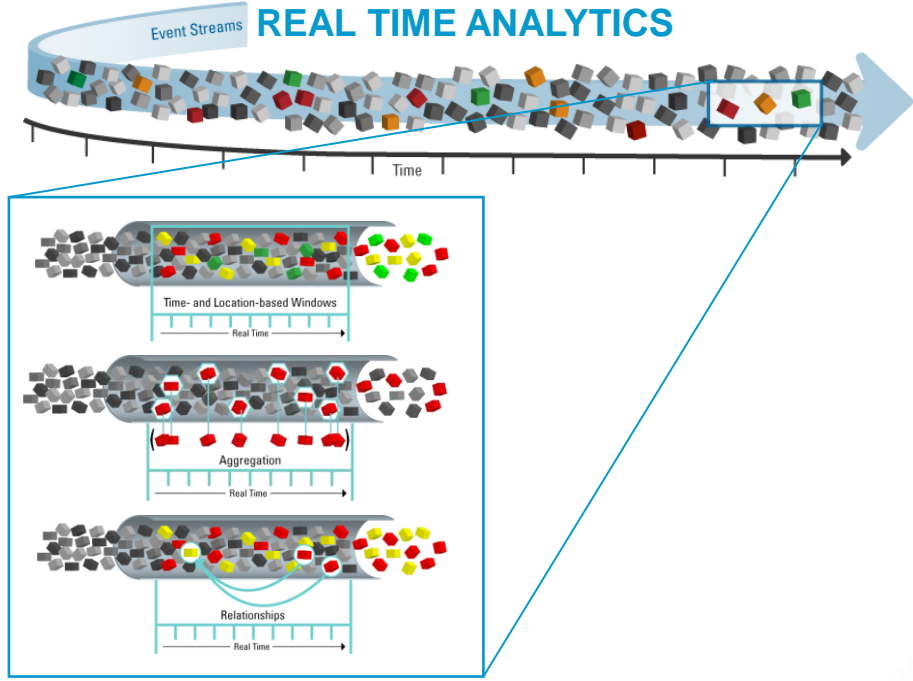


Pattern detection



Event processing

# HIGH VELOCITY/THROUGHPUT ANALYTICS



- Other sources:
- Location
  - Weather
  - Sites

## USECASES:

- Advanced Ticketing correlation
- Predictive Maintenance
- Proactive Field Services
- Equipment optimization
- Product quality
- ...

Real Time

Automated

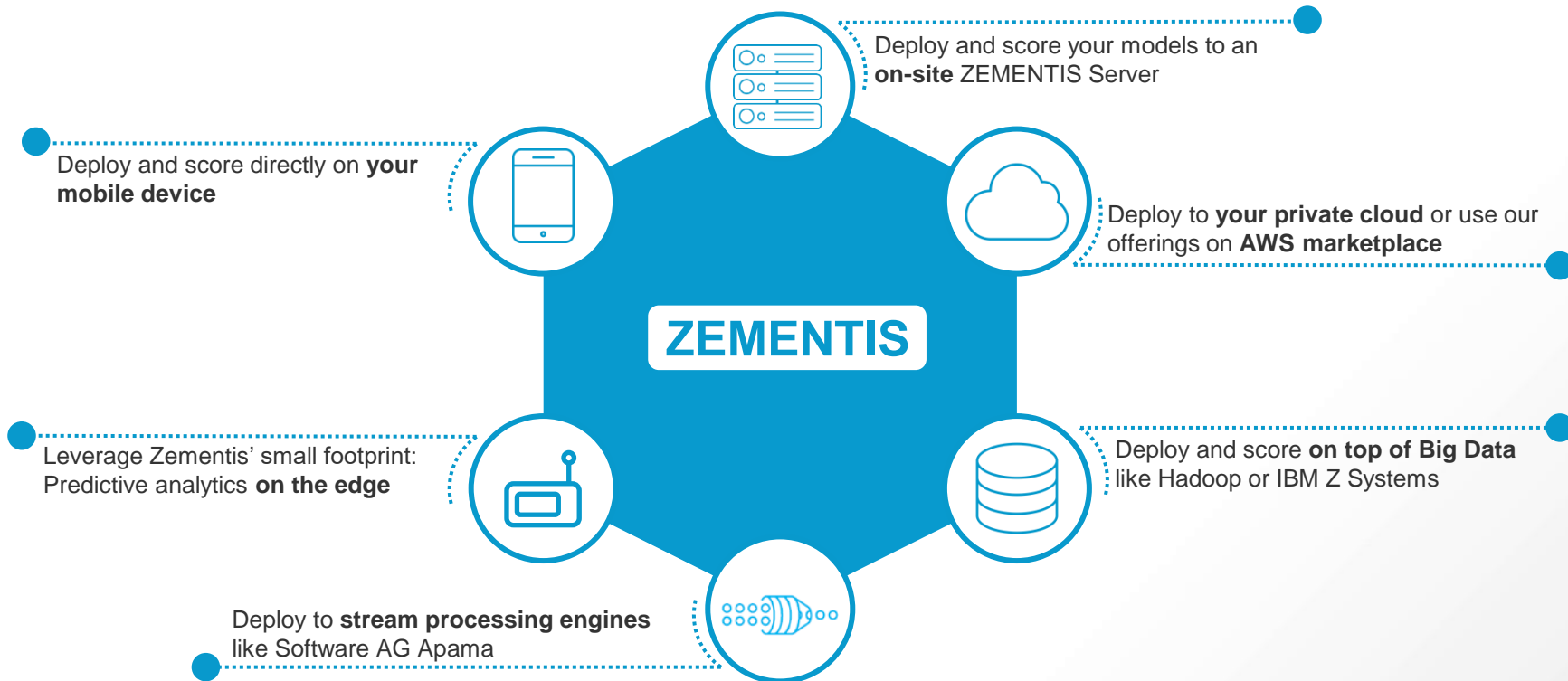
Low TCO



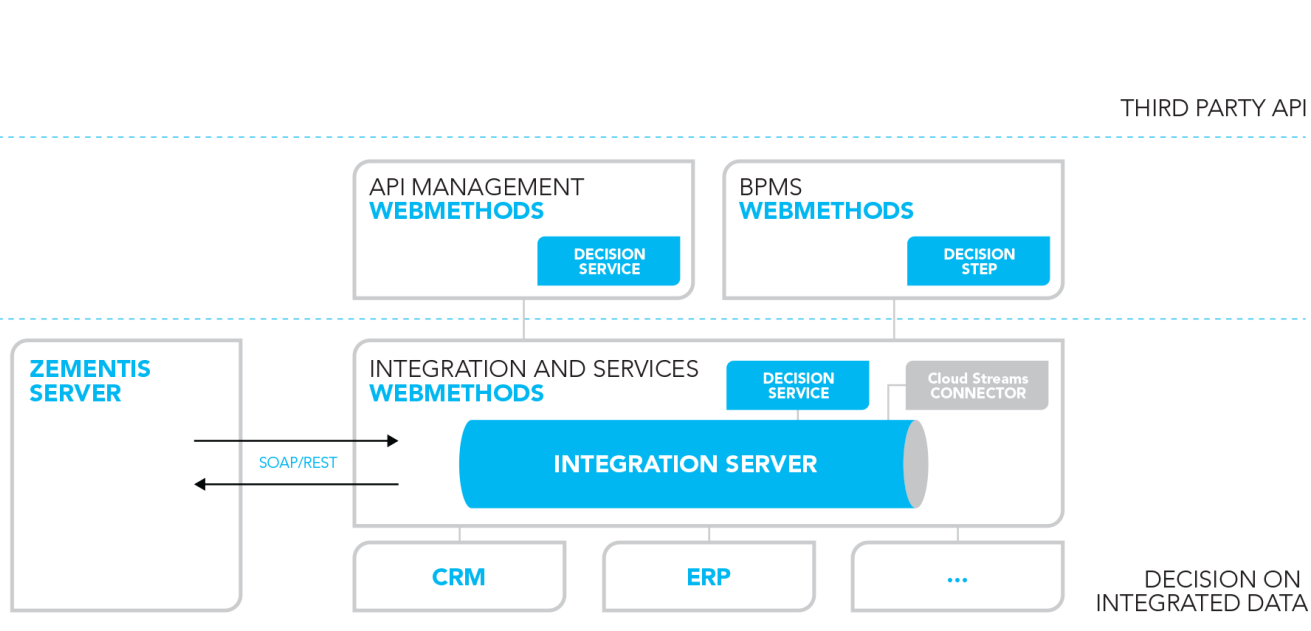


# OUR DEPLOYMENT AND PREDICTIVE ANALYTICS ENVIRONMENTS

## DEVELOP ONCE, DEPLOY EVERYWHERE



# INTEGRATION SERVER PACKAGE FOR ZEMENTIS

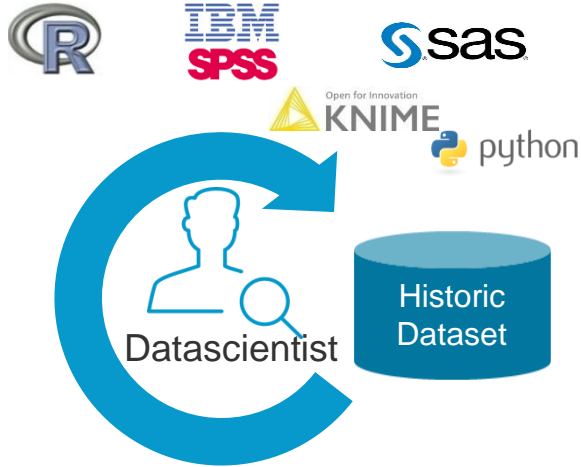


- Integrate AI to launch new products and services
- Quickly embed and execute machine learning models at any step of your business process
- Lower IT resource commitment to Data Science projects

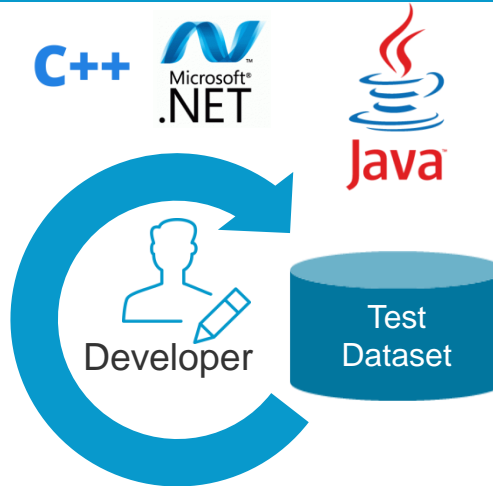
# MODEL DEPLOYMENT

## THE OLD WAY

### Develop model

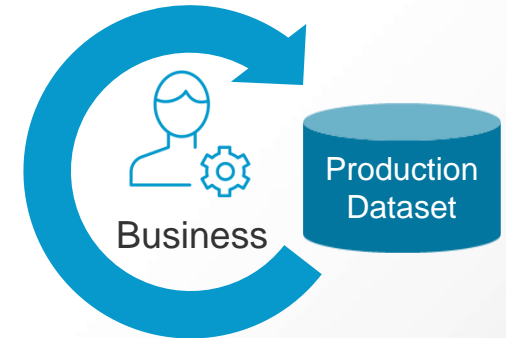


### Re-code model



### Use model

- Delayed insight
- Delayed value



Operational deployment cycle takes weeks or months

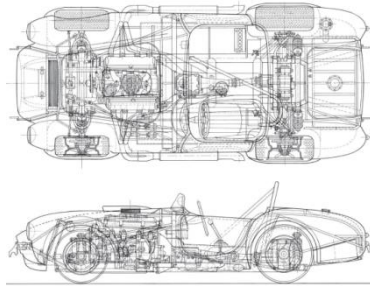
# DEPLOYMENT USING PMML

## BUILDING FROM "BLUEPRINTS"

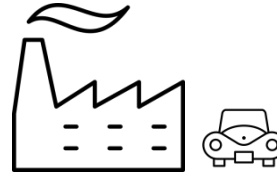
Design



Blueprint



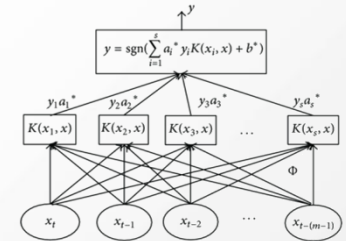
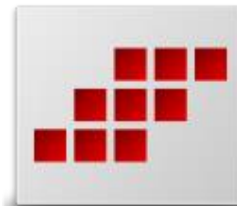
Construct



Realise



Zementis



# MODEL DEPLOYMENT THE NEW WAY

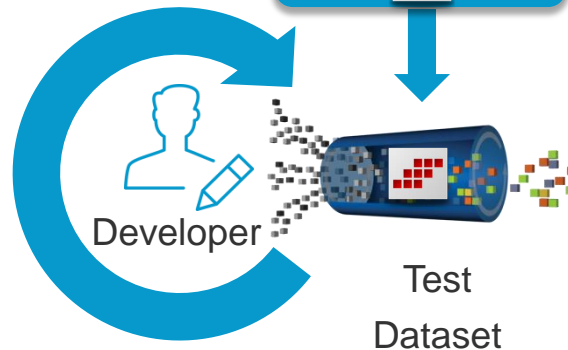
Develop model



Instantly deploy model

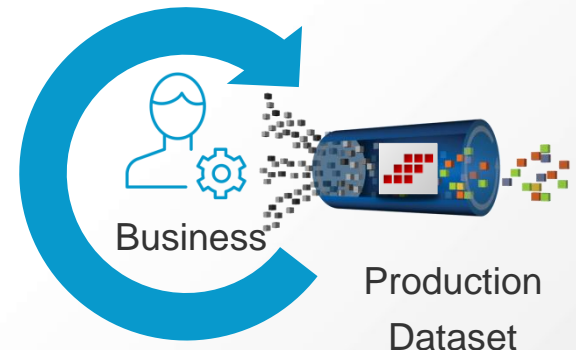
PMML

Zementis



Use model

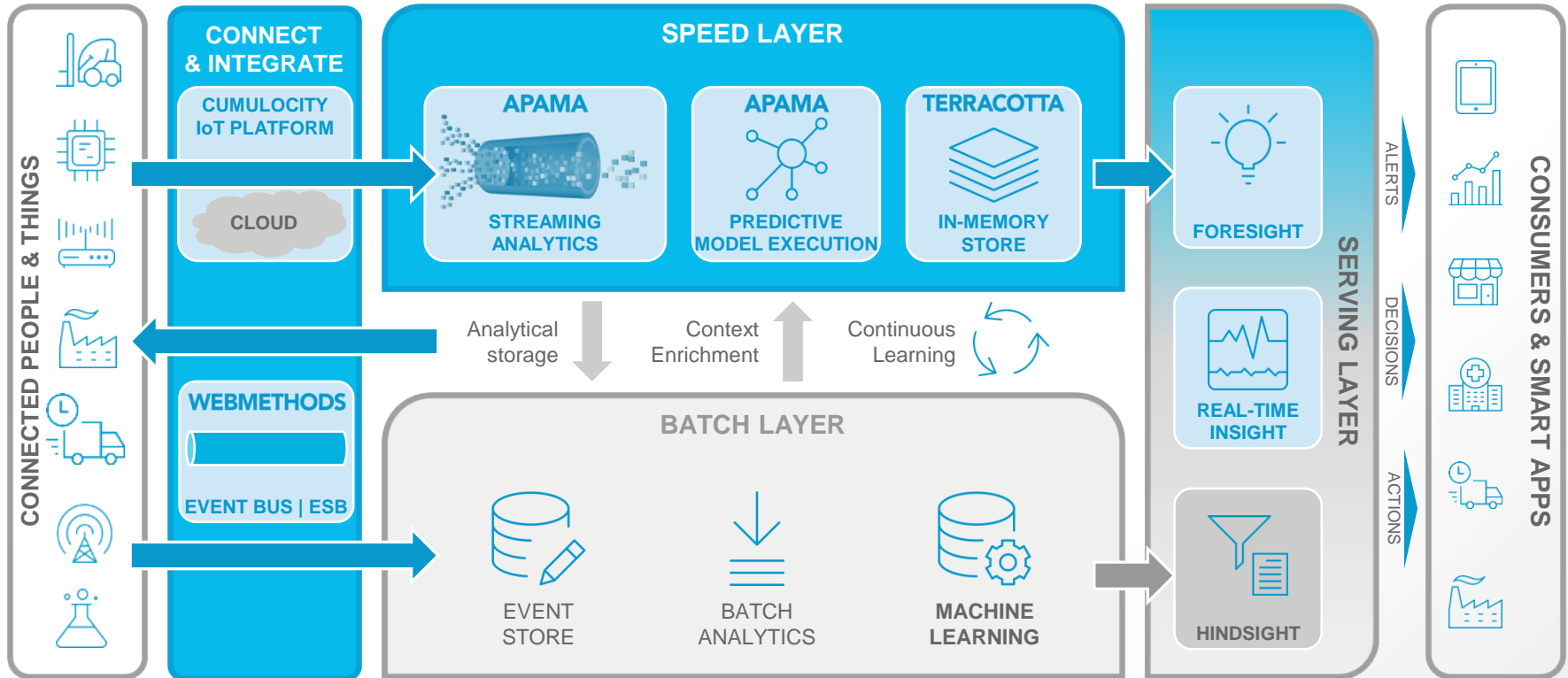
- Real-time insight
- Immediate value



Immediate operational deployment, no custom coding

# ASSEMBLE THE CAPABILITIES FOR YOUR USECASE

## ARCHITECTURE FOLLOWS THE LAMBDA ARCHITECTURE



# SUMMARY

- "Analytics" has many faces depending on the requirements
  - Can be applied on several levels: operational, tactical and strategic
  - Different capabilities needed
- Integration and data is a foundation, (leverage what you have and expand)
- Machine learning & advanced analytics can provide a mechanism to create a more proactive (rather than reactive) business

