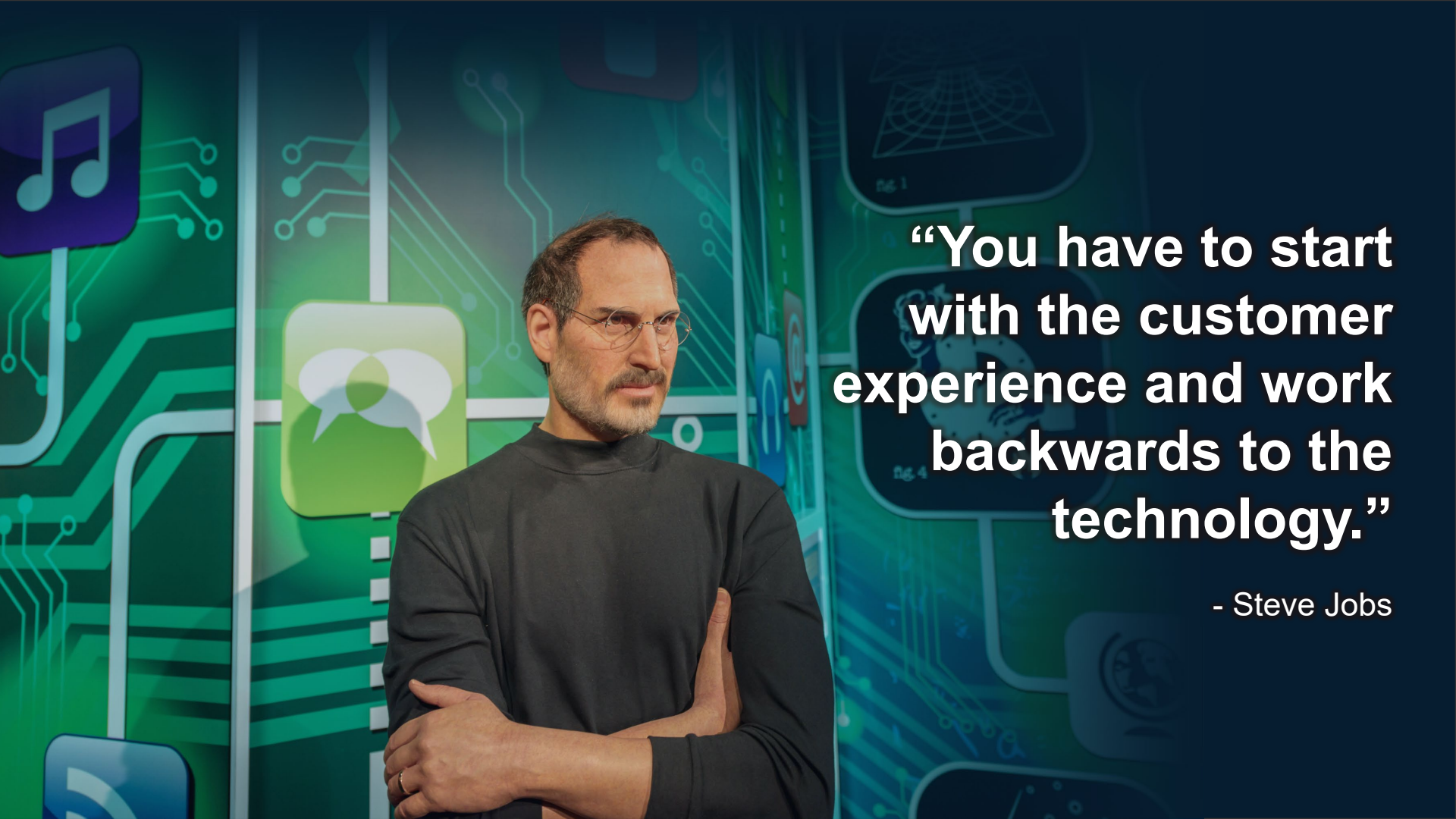


PRODUCT STRATEGY UPDATE

IUG PRESIDENTS MEETING
DECEMBER 5, 2019

Dr. Stefan Sigg
Member of the Executive Board
Chief Product Officer



A portrait of Steve Jobs, wearing his signature black turtleneck and glasses, with his arms crossed. He is positioned in the center-left of the frame. The background is a vibrant, abstract composition of green and blue tones, featuring stylized circuit lines, various icons (including a musical note, speech bubbles, and a globe), and faint text labels like 'Fig. 1' and 'Fig. 4'.

**“You have to start
with the customer
experience and work
backwards to the
technology.”**

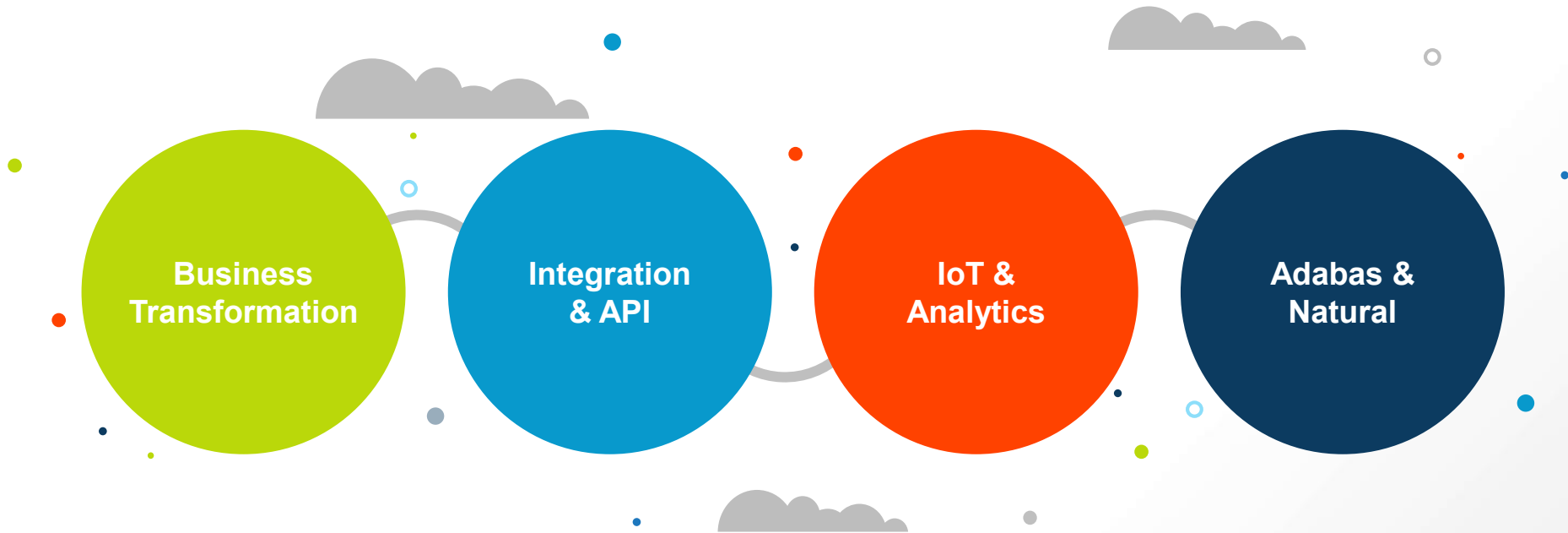
- Steve Jobs

OPERATIONAL EXCELLENCE, NEW BUSINESS MODELS, AND CUSTOMER INTIMACY



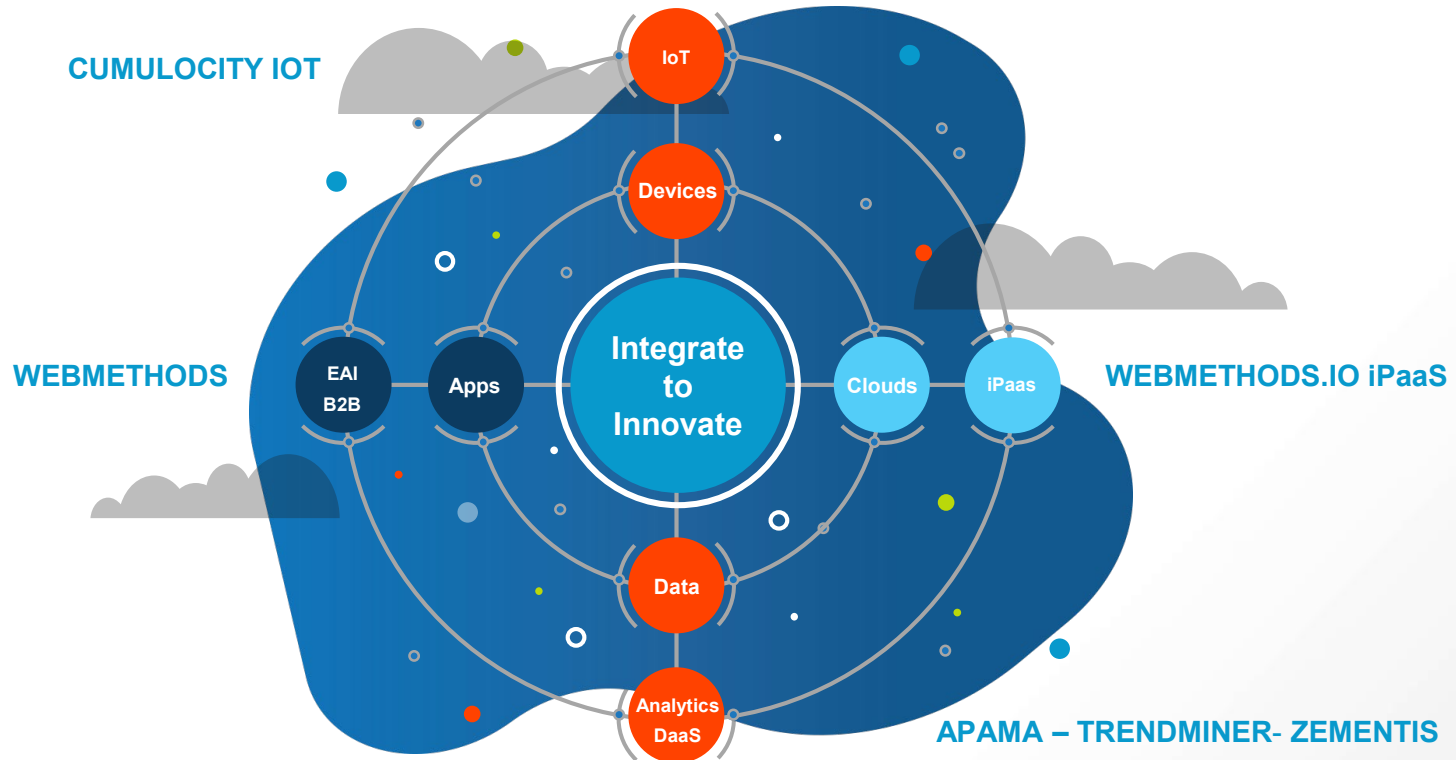
DRIVEN BY THE RIGHT PORTFOLIO

4 NEW BUSINESS LINES



INTEGRATE YOUR BUSINESS

INTEGRATE TO INNOVATE



IPAAS – WEBMETHODS.IO

A NEW GENERATION

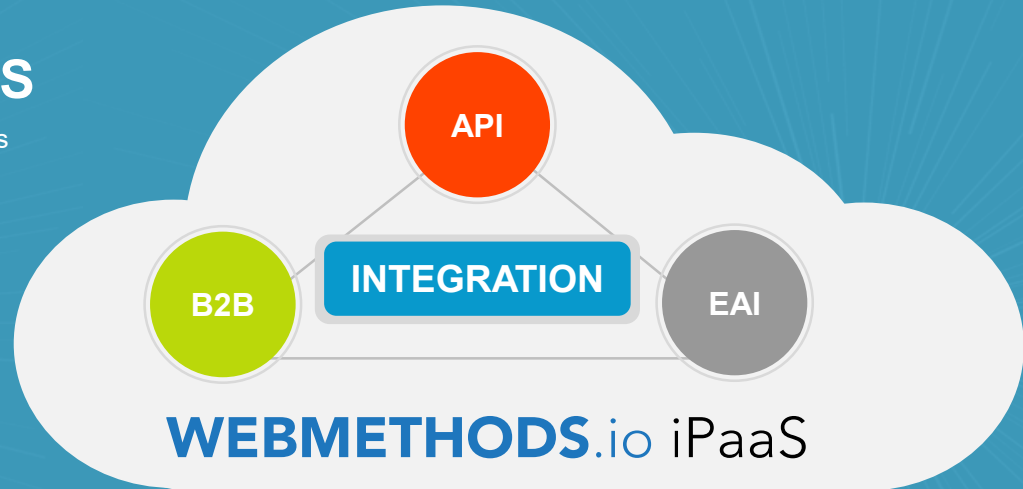


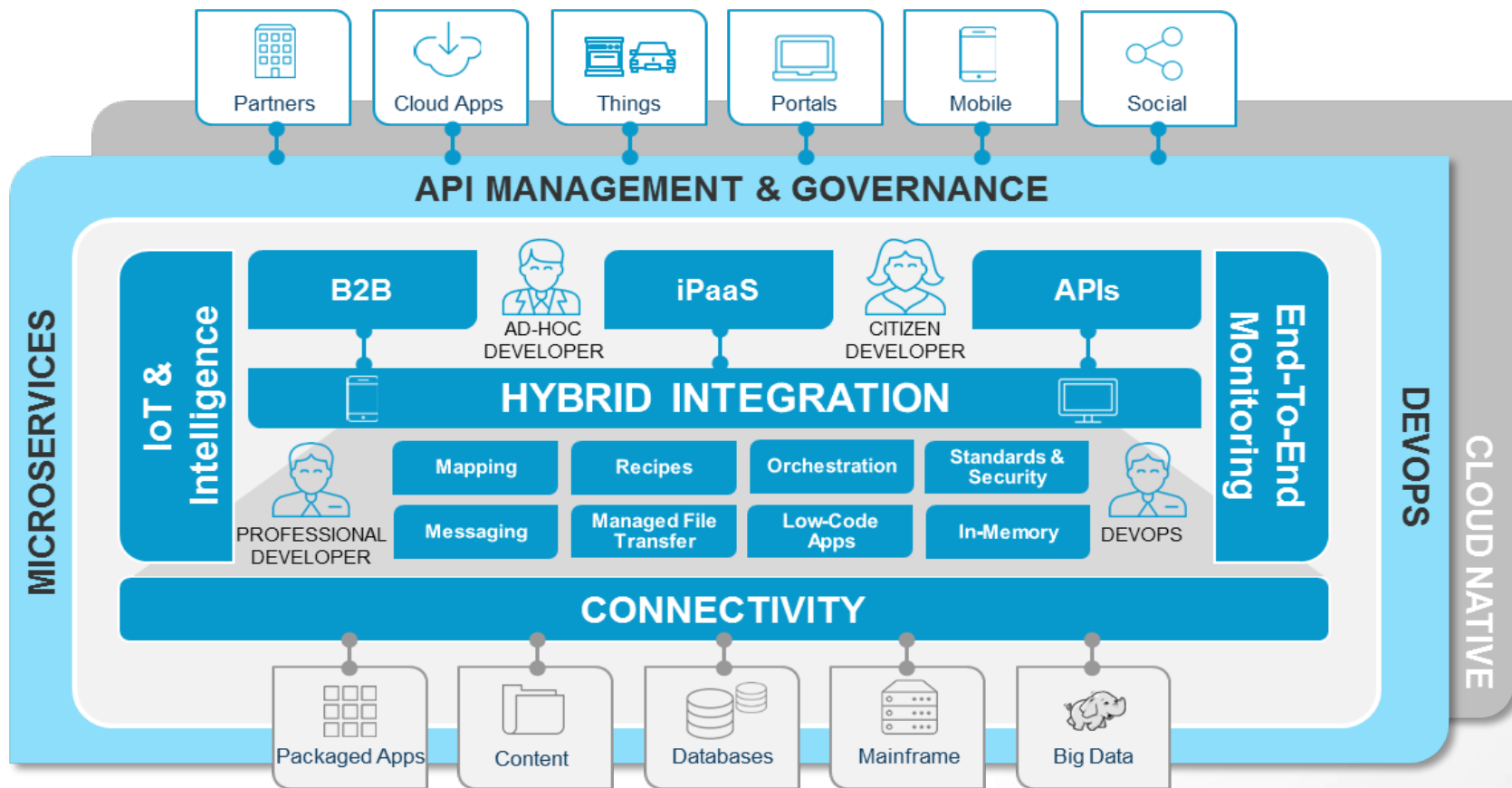
WEBMETHODS.io
iPaaS

MULTI-FUNCTION iPaaS

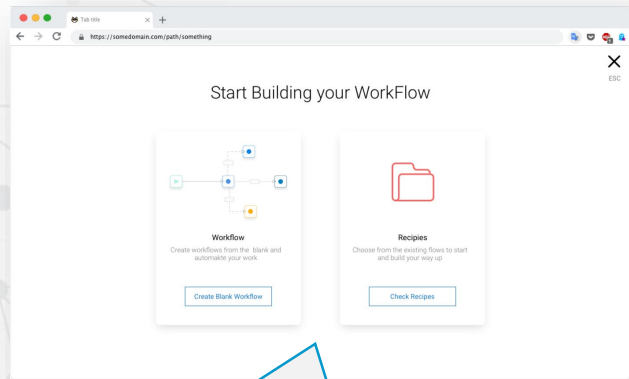
for LOW-CODE and HIGH-CONTROL developers
deployed across a MULTI-CLOUD infrastructure

- Cloud and Hybrid Connectivity
- Orchestration
- Guided development
- Recipes
- Monitoring

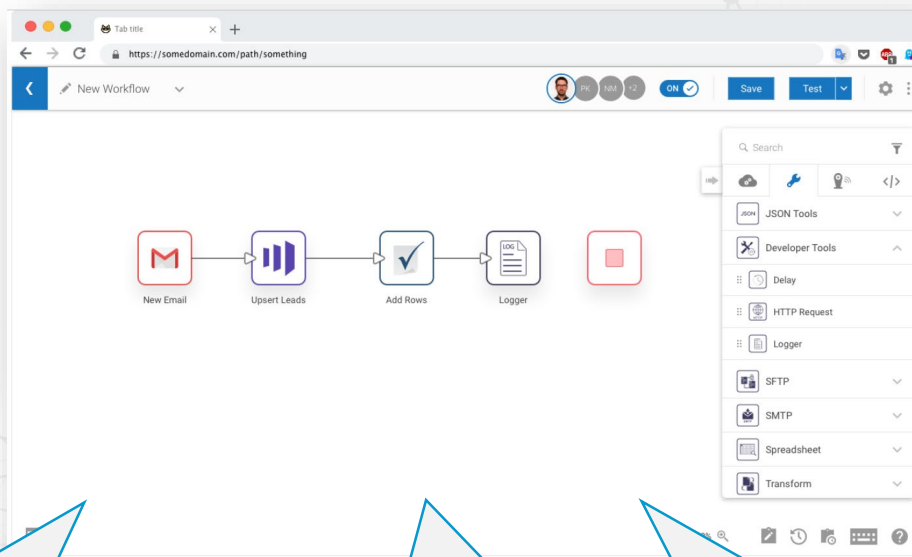




EASY TO USE – WORKFLOW ORCHESTRATION WITH WEBMETHODS.IO INTEGRATION



Start with a blank workflow or import a recipe to bootstrap your integration faster

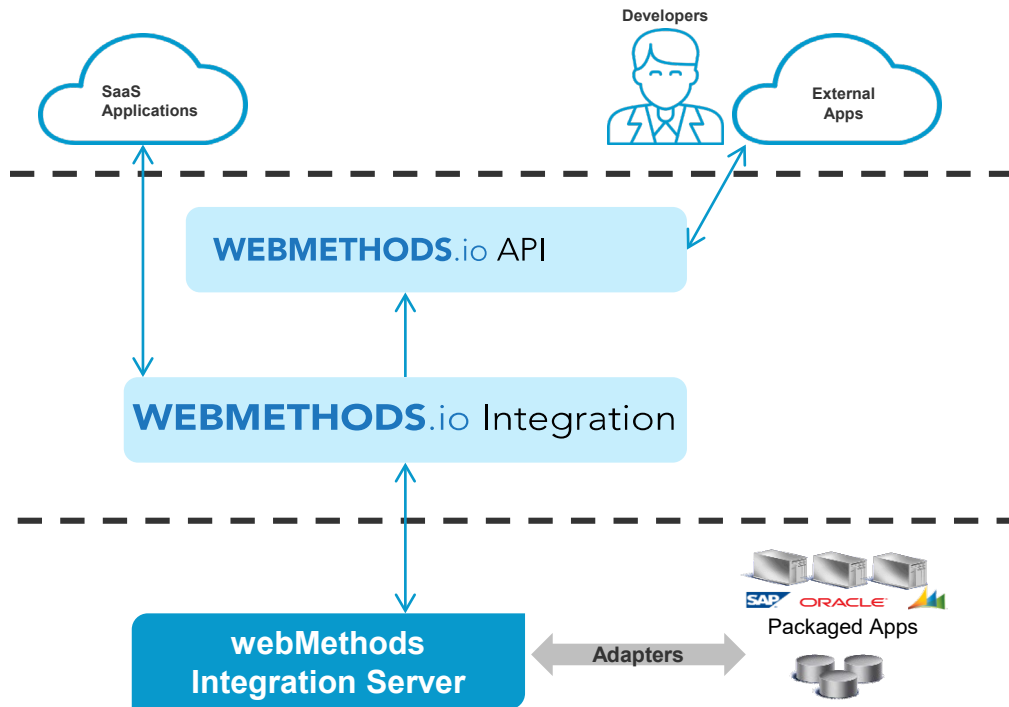


Horizontal service orchestration with easy configuration and drag and drop UI

Supports developer tools like conditions, switches, looping, custom actions using Node.js

Debugging, execution retry, error handling and more...

INTEGRATION & API MANAGEMENT WITH WEBMETHODS.IO IPAAS



Secure Your APIs

Develop APIs that let you easily expose your unique data and services in web apps, mobile apps and other connected devices.

API Gateway + Portal

Securely expose your APIs to third-party developers, partners and other consumers for use in web, mobile and Internet of Things (IoT) applications. With the API Gateway you can easily create APIs, define Service Level Agreement (SLA) policies, and seamlessly publish your APIs to API-Portal. Secures and manages the connectivity between mobile applications, external APIs and services and internal enterprise resources so companies can quickly build secure enterprise-grade mobile apps.

Integration as an API

Integration workflows is the business logic which power your API layer. Use webMethods.io to orchestrate your data between on-premises and the cloud, then surface this information via a RESTful API in the Gateway for others to use.

MERGING THE REAL AND DIGITAL WORLDS CONNECTING DATA TO MINDSPHERE



MindConnect SIMPLIFIES THE COMBINATION OF

MACHINE DATA with
DATA FROM ANY APPLICATION
ON-PREMISES OR IN THE CLOUD.

BUILDING APIS FOR INTEGRATION BRIDGING CLOUD AND ON PREMISES APPS



MULTI-LOCATION DEVELOPMENT TEAM SUPPORTING

3 MILLION

API CALLS PER DAY!

SIMPLE AND SCALABLE B2B INTEGRATION WITH TRADING NETWORKS

The background of the slide features a hand holding a white tablet. The tablet screen shows a Google search page with the URL 'www.google.com' and the Google logo. Overlaid on the screen are several large, colorful, hand-drawn arrows in various colors (red, orange, yellow, green, blue) pointing in different directions. A white text box is positioned in the lower-left quadrant of the image, containing the main headline and sub-headline.

MILLIONS OF EDI TRANSACTIONS

PER DAY RUNNING ON THE GOOGLE COMPUTE CLOUD WITH
NEW PARTNERS ONBOARDED IN HOURS

TREE REASONS TO REVISIT YOUR INTEGRATION SET-UP

KEEP UP WITH THE CHANGE AHEAD



Cloud Migration



Distributed IT



Integration of Things

VISION: MAKE IOT SOLUTION BUILDING EASY & FAST



CONNECT DEVICES

Connect a new device, consume live data and be able to trigger operations

< 5 minutes



ANALYTICS & DASHBOARDS

Analyze and visualize your data to gain insights and turn them into action

< 10 minutes



INTEGRATE APPLICATIONS

Integrate with existing enterprise applications, OT systems and cloud services

< 20 minutes



BUILD APPLICATIONS

Build & deploy data-driven applications easily to drive business value

< 30 minutes

CUMULOCITY IOT PLATFORM

OVERVIEW

Applications

Asset Performance
Management

Manufacturing
Operations Mgmt

Service
Management

Further Applications
...

CUMULOCITY IoT

Platform



SOLUTION ACCELERATORS



PROCESS & APPLICATIONS



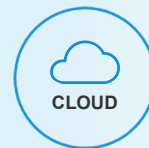
INTEGRATION & API



DATA & ANALYTICS



DEVICES



CLOUD



HYBRID



ON
PREMISE



EDGE

Devices

all verticals – all use cases – all networks



Challenge

for Operating & Manufacturing Companies

Improved efficiency, consistency, quality
for construction processes

- Reduction of operating costs
- Easiness of machine handling
- Real-time analytics
- Data mining to increase quality and machine availability





Solution

for DÜRR and its end users

Streaming analytics powered by the
ADAMOS IIoT Platform

- Toolkit for self-service real-time data analytics and algorithm
- Real-time streaming analytics
- Real-time quality control 'during production
- Intuitive UI for machine operators

AUTONOMOUS WIND FARM MANAGEMENT

ENERGY RESOURCES & PROCESSING



About Nordex

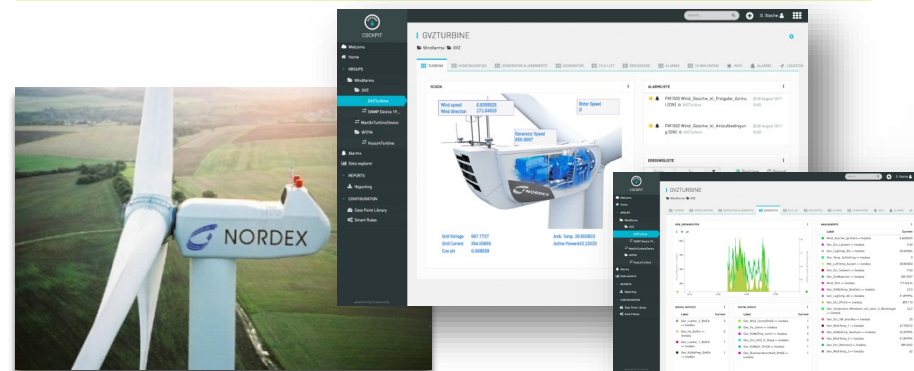
Nordex SE has installed wind power capacity of more than 23 GW in over 25 markets, generating sales of EUR 3.1 billion in 2017 with 5,200 employees. Nordex has wind turbine manufacturing plants in Germany, Spain, Brazil, the United States and India.

Business Need

Nordex was looking to autonomously manage the critical operation of their wind farms at both farm and individual wind turbine level based on data from numerous sensors. They were also looking at reducing the amount of data transferred back to the cloud: analyze and aggregate data onsite independent from the cloud as well as simplifying development with same software architecture from edge to cloud with identical APIs, data models and analytics

Solution

- Deployed Cumulocity IoT in private datacenter
- Managed IT equipment via SNMP protocol
- Integrated power converters via standardized OPC-UA interface using Cloud Fieldbus
- Email Agent for real-time events and statistics for operators
- File logging and data visualization
- Deployed Cumulocity IoT Edge (SCADA) including Apama for Complex Event Processing
- Managed up to 5,000 real-time parameters
- Operations: Remote Control of wind turbines start & stop



Benefits

- When the project is completed, Cumulocity IoT will be integrated into 1,000 wind farms and 8,000+ wind turbine generators
- Set up of real-time remote management and centralized monitoring system
- Monitor, gather and process real-time data (like anti-icing on turbines) to control industrial processes
- Remotely manage IT equipment
- Modernize data collection and management of outdated systems
- Visualize real-time data for better, faster decision-making
- Accelerate the commissioning process
- Same software architecture from the edge to the cloud with identical APIs, data models and analytics

Helping Global Manufacturing Companies **Improve** their Plant **Availability**, Production **Quality**, and Overall Asset **Effectiveness**

through self-service Search, Diagnostic and Predictive **Analytics** using Pattern Recognition and Machine Learning Technology.

TRENDMINER – KEY CAPABILITIES



Analyze



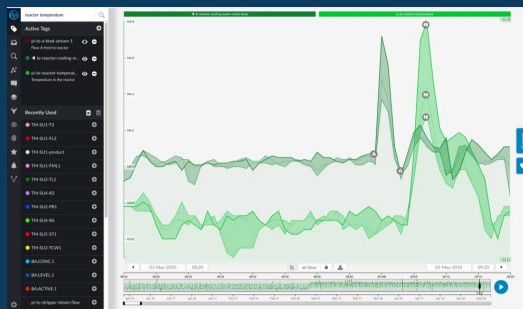
Monitor



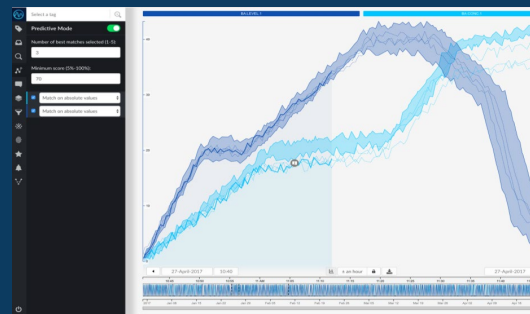
Predict



- Google like tag search
- Filtering & Overlays
- Pattern recognition
- Layer Comparison
- Recommendations
- Automatic shift detection



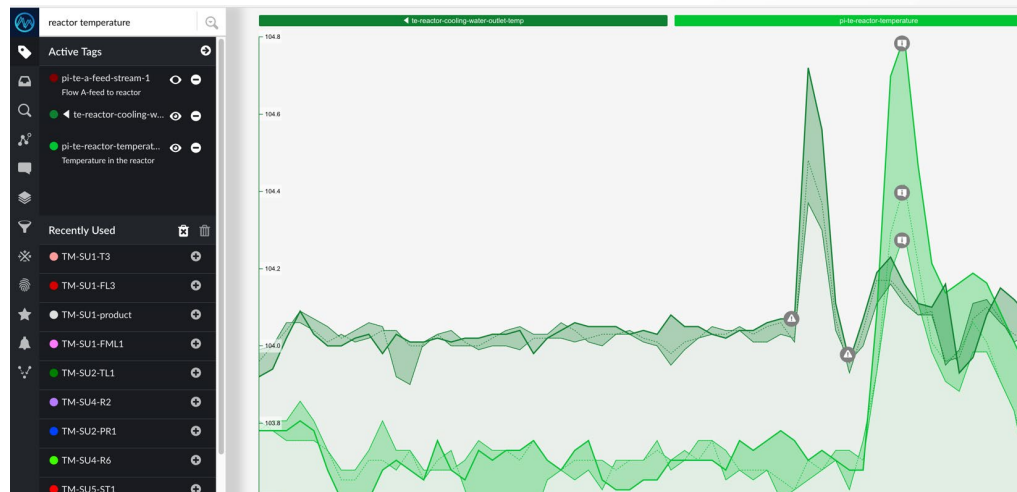
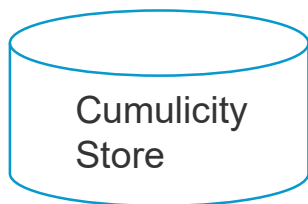
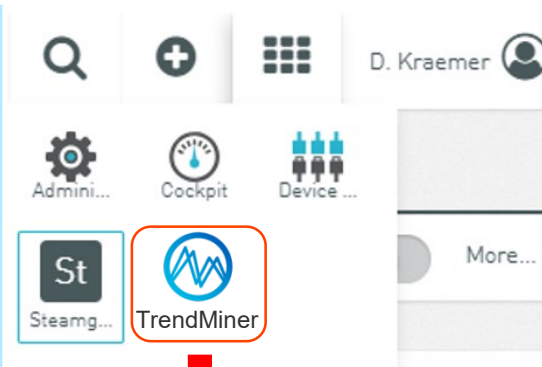
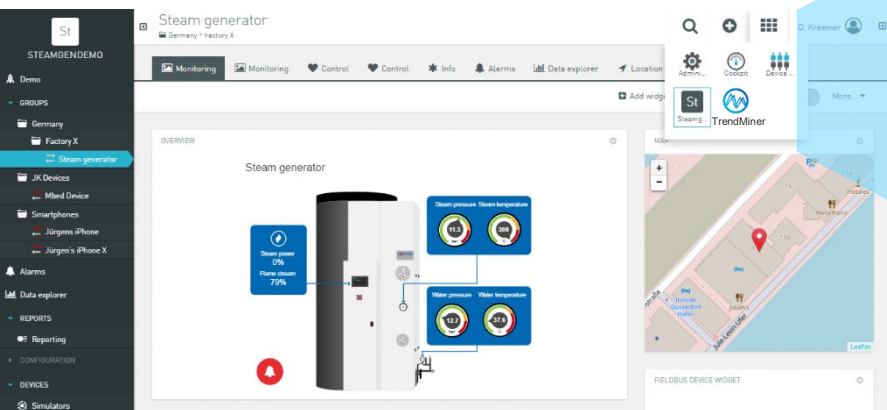
- Golden batch or transition
- Startup fingerprints
- Alerts & Notifications
- Automatically label events
- Detect failures and anomalies
- Monitor best operating zones



- Set up early warnings
- Soft sensor design
- Model free predictive mode
- Predictive maintenance
- Proactively trigger operators

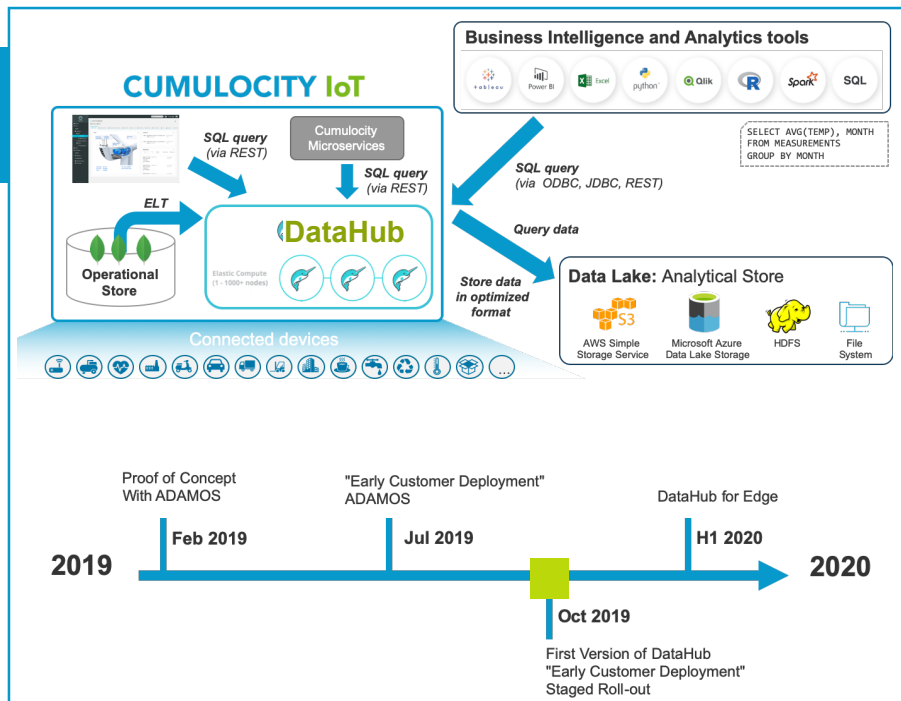
CUMULOCITY IOT TRENDMINER

SELF-SERVICE IOT ANALYTICS



CUMULOCITY IOT DATA HUB

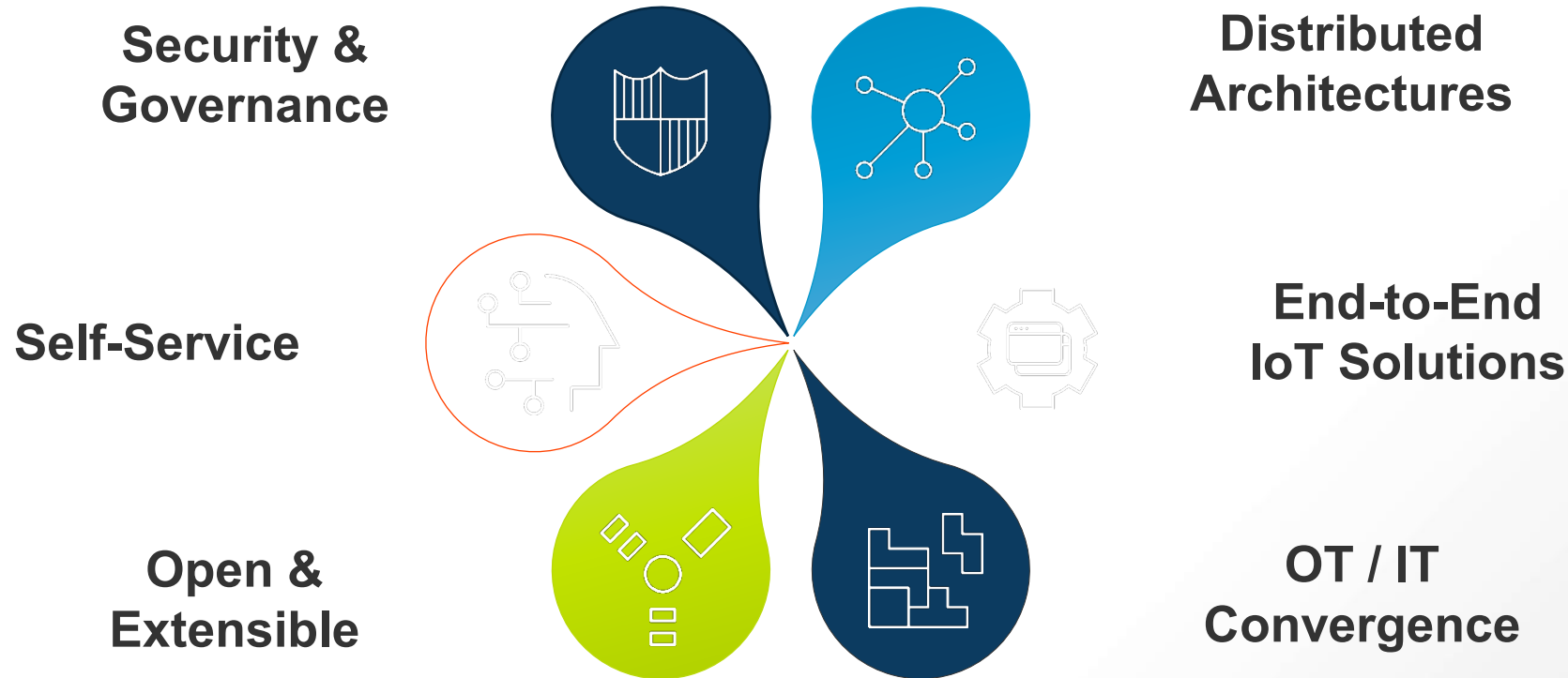
DATA-AS-A-SERVICE



Generating Valuable Insights From IoT Data

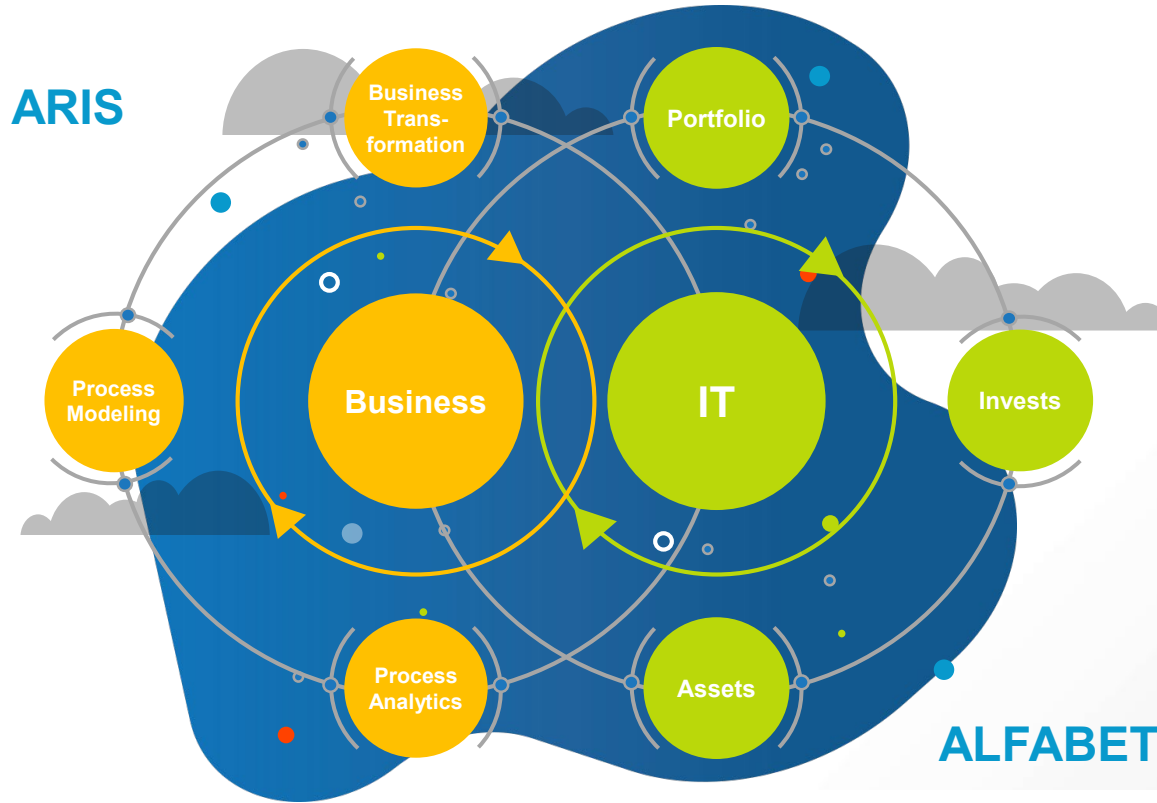
- 1 Scalable SQL querying over long-term IoT data
- 2 Long-term, cheaper, storage of IoT data in data lake (AWS S3 or Azure Data Lake)
- 3 Standard interfaces (ODBC & JDBC) to BI & data science tools
- 4 Alarms, Events, Inventory and Measurements IoT data exposed

IOT TRENDS DRIVING OUR PRODUCT STRATEGY



ACCELERATE YOUR TRANSFORMATION

ARIS & ALFABET



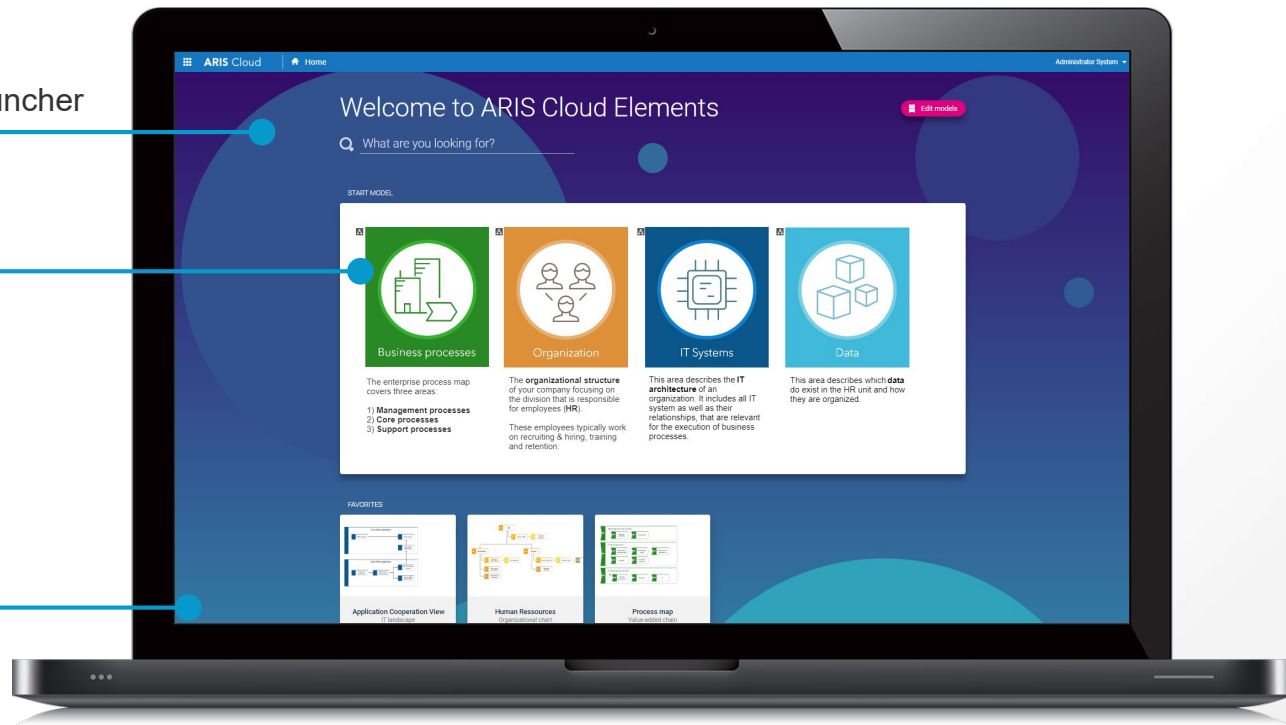
ARIS Cloud Elements

THE GREATEST START INTO THE WORLD OF PROCESS DESIGN

Friendly landing page with app launcher

New simple modeling

Fast deployment



ALFABET FASTLANE

THE FASTEST & EASIEST WAY TO MANAGE YOUR IT PORTFOLIO



PRE-CONFIGURED SAAS PRODUCT

No set-up required, instant
ITPM, easy to use



PERFECT FIT

Covering the essential
needs of new portfolio
management practices at
competitive cost and low
risk



DELIVER VALUE QUICKLY AND EASILY

Pre-defined reports, roles
and KPIs



BUSINESS OUTCOME FOCUS

Centered on business
questions and their data
requirements

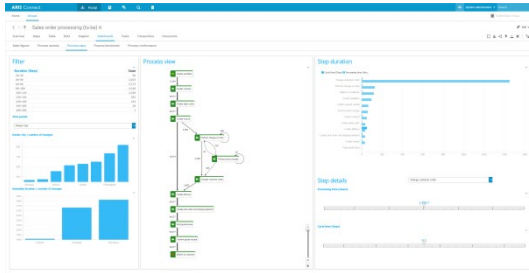


EXTENSIBILITY

Proven methodology and out-
of-the box meta-model. Fully
extensible into enterprise-
grade solution

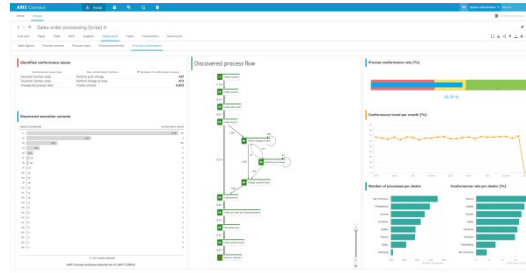
ARIS PROCESS MINING

CLOSING THE LOOP



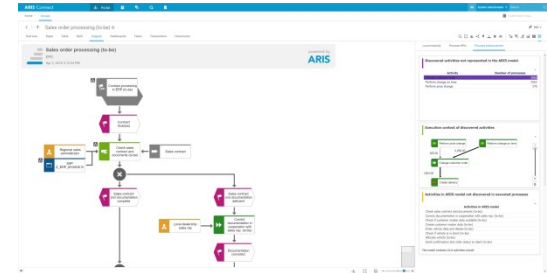
Process Discovery

- Automatic discovery of executed processes and corresponding KPIs
- Import discovered process models in ARIS



Process Conformance

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



Process Enhancement

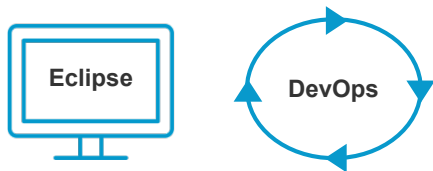
- Query internal and external KPIs
- Simulate process changes
- Enhance processes based on findings

PROCESS IMPROVEMENT

THE ADABAS & NATURAL 2050+ INITIATIVE

ADABAS&NATURAL

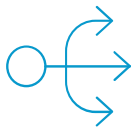
Apply Agile Development



Master Generational Change



Unlock Business Logic and Data



API
Enablement



Real-time
Data Integration

Leverage Digital Enablers

Hybrid Integration

API Management

Internet of Things

Analytics

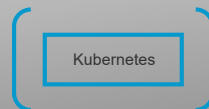
Modern and
Cost efficient
IT Platforms



Mainframe zIIP Offloading



Linux Re-hosting



Container & Multi-Cloud Deployment

WORKING FROM CX BACKWARDS

DESIRABILITY – FEASIBILITY – VIABILITY



Focus on well-defined use cases



Convergence of Integration & IoT



Cloud and edge scalability



Analytics and solutions



