



ARIS | PROCESS MINING & DASHBOARDING

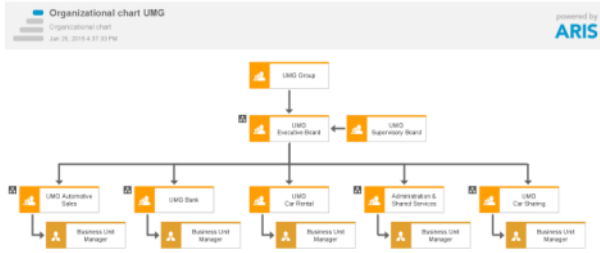
USER GROUP NORDIC

Dr. Julian Krumeich
Senior Product Manager ARIS

ARIS REPOSITORY

A DIGITAL REPRESENTATION OF YOUR COMPANY

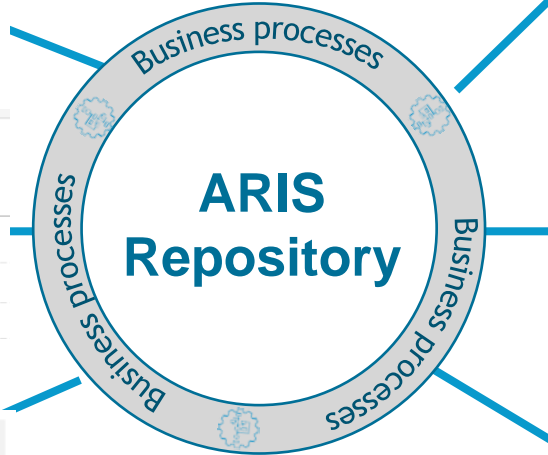
ORGANIZATION



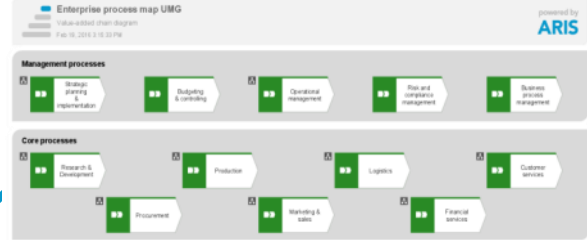
CUSTOMER JOURNEYS



PRODUCTS



PROCESSES



IT SYSTEMS

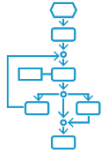


RISKS



ARIS PROCESS MINING

DISCOVER THE REALITY OF YOUR PROCESSES



**Designed
process**



**Implemented
process**



**Executed
process**

YOU CAN ONLY IMPROVE WHAT YOU CAN MEASURE!

Integrated Process Mining with ARIS



delivers transparency which is mandatory for a
successful process optimization &
business transformation

ARIS PROCESS MINING. THE ANSWER TO...

“Orders are often changed, they get blocked or rejected. How can we maximize ZERO touch orders?”

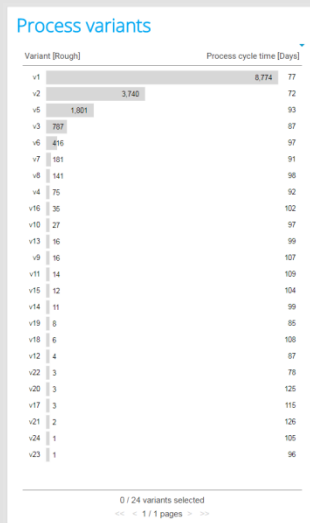


ARIS PROCESS MINING

MAXIMIZE ZERO TOUCH ORDERS

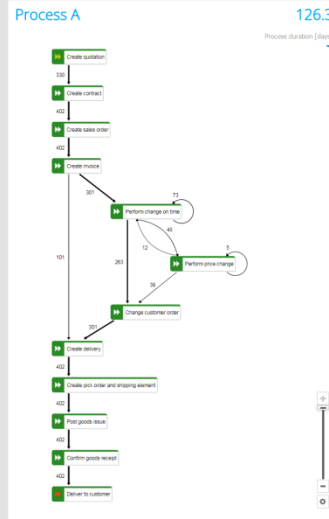
See process variants

Get **immediate insight** into the variety of process executions. Spot **most frequent process variants** and analyze their **impact on the process cycle time** or any other KPI.



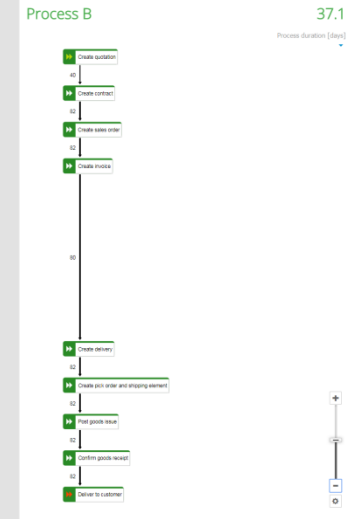
Get rid of “Long Runners”

Spot process variants with **long-running cycle times** or recurring **manual cycles and interventions**. Get to the **root causes** for this behavior and initiate actions to get rid of them.



Establish the “Happy Path”

Identify so-called **happy paths** in your process executions and **implement measures** to establish them as the **to-be standard**.



ARIS PROCESS MINING. THE ANSWER TO...

“How can we harmonize our procurement process globally?
What are the differences to today?”

Marketing Overview

It is a pleasure to offer an organization the focus resources on the greatest opportunities to increase sales and increase the company's profits. Marketing strategy is vital to the success of a company and achieves the strategic objectives of a company's customer and contribute to its objectives. The objectives will be based on how you will measure your sales and marketing activities.

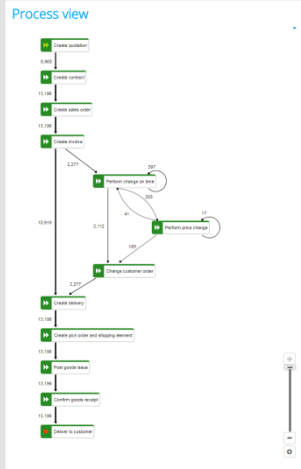
Product Categories	Profit per Year				
	2013	2014	2015	2016	2017
General Goods	+620.82	+13.9	+120.02	+7207.75	+80.82
Health & Medical	-13.9	+82.94	+239.74	-229.00	-13.9
Art Supply	+82.94	+829.82	+82.94	+239.74	+82.94
Kids & Baby	+659.02	+7207.75	+659.02	-13.9	+659.02
Kitchen wear	-229.00	-229.00	+7207.75	+82.94	+82.94
Fashion	-797.74				

ARIS PROCESS MINING

STANDARDIZE PROCUREMENT PROCESSING

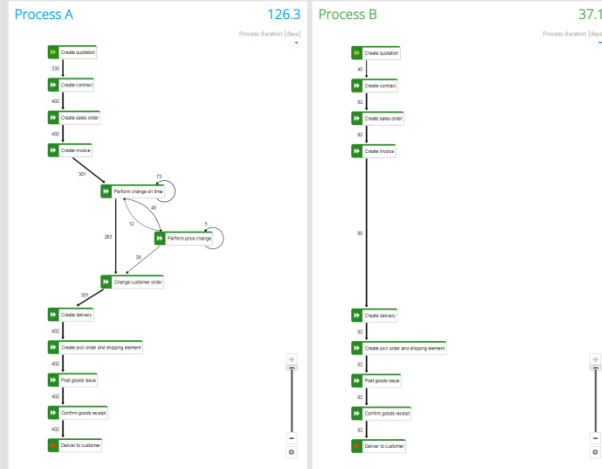
Discover process

Discover the **actual execution** sequence of your processes to gain **full transparency** on process reality.



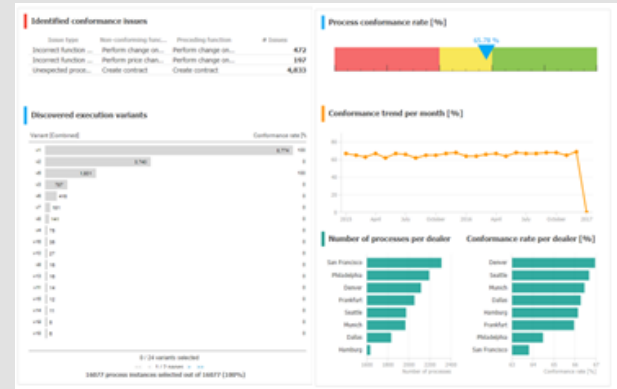
Benchmark variants

Analyze and benchmark your **process performance** based on **arbitrary dimensions** such as time or location.



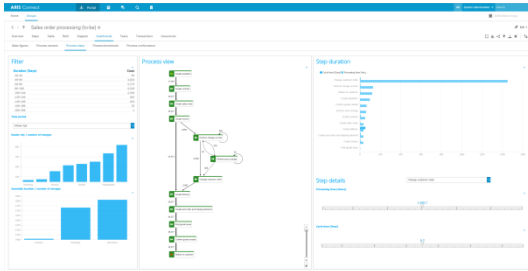
Conformance Check

Compare your **to-be process design** with the **actual as-is execution** in order to spot not standard-compliant process behavior and conformance issues.



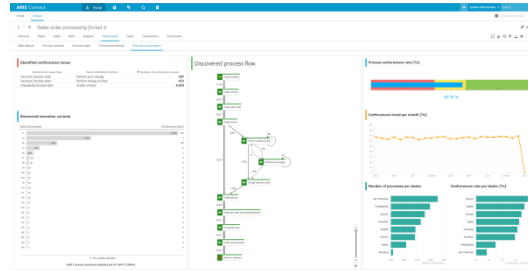
ARIS PROCESS MINING

THREE DIFFERENT USE CASES FOR PROCESS IMPROVEMENT



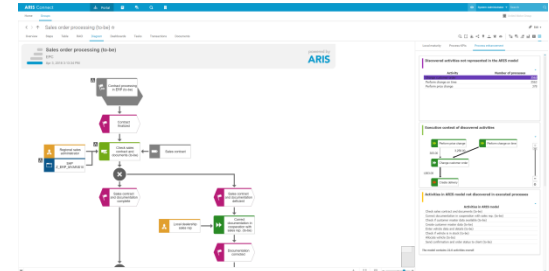
Process Discovery

- 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



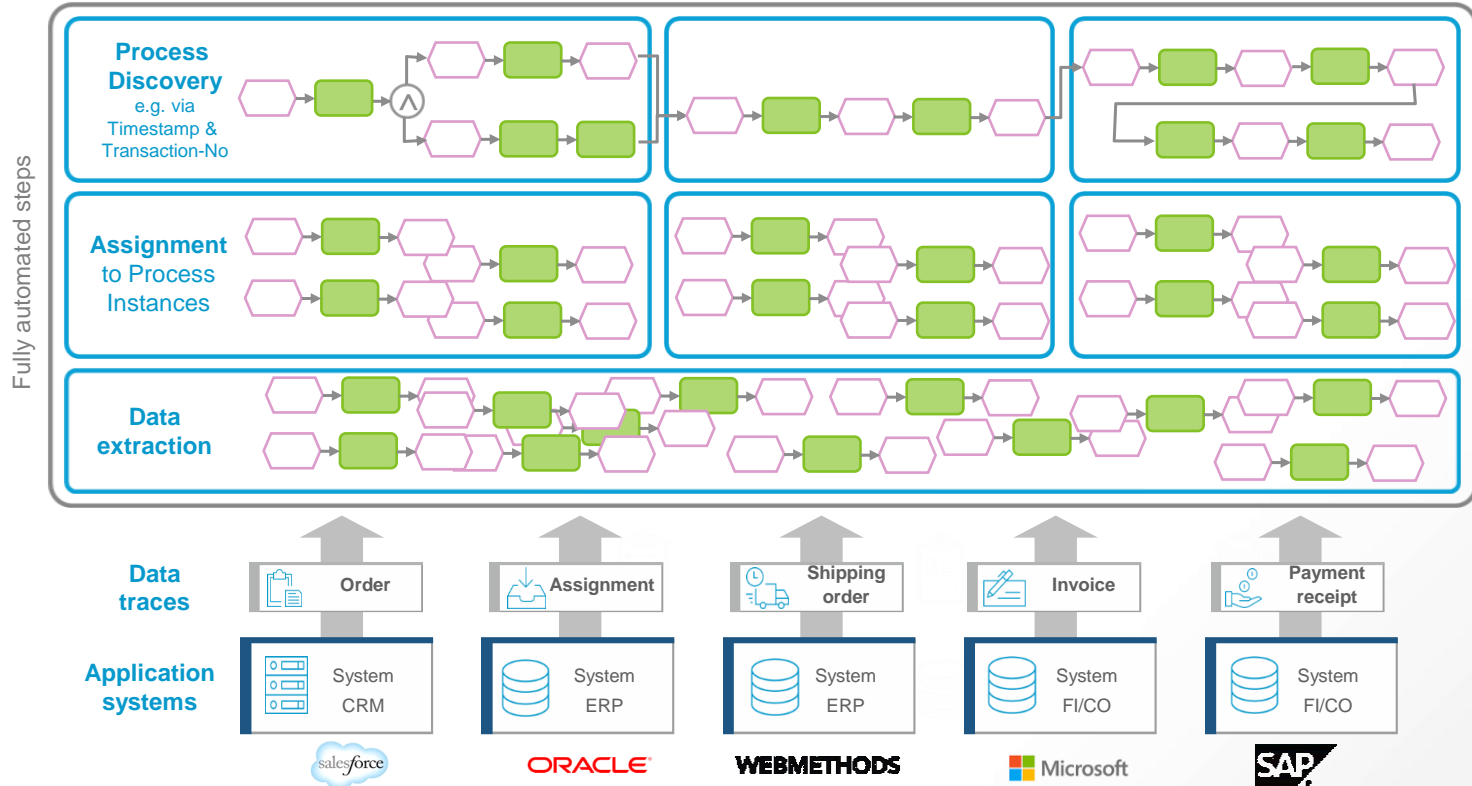
Process Enhancement

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

PROCESS IMPROVEMENT

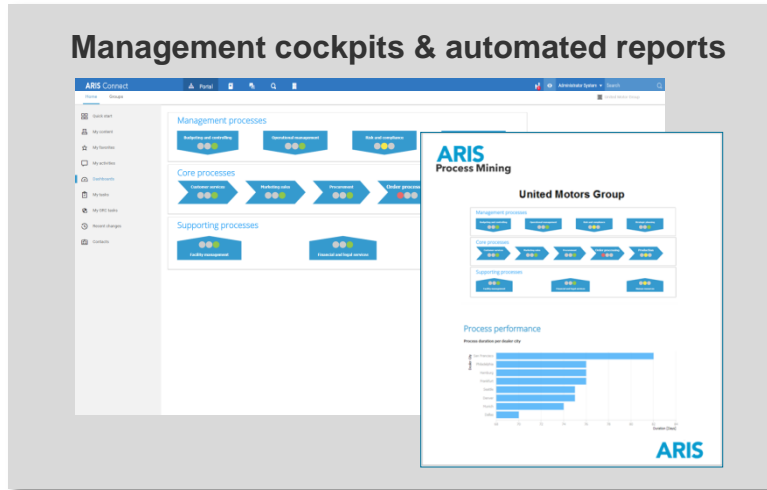
PROCESS DISCOVERY

ANALYZE END-TO-END CROSS-SYSTEM PROCESSES

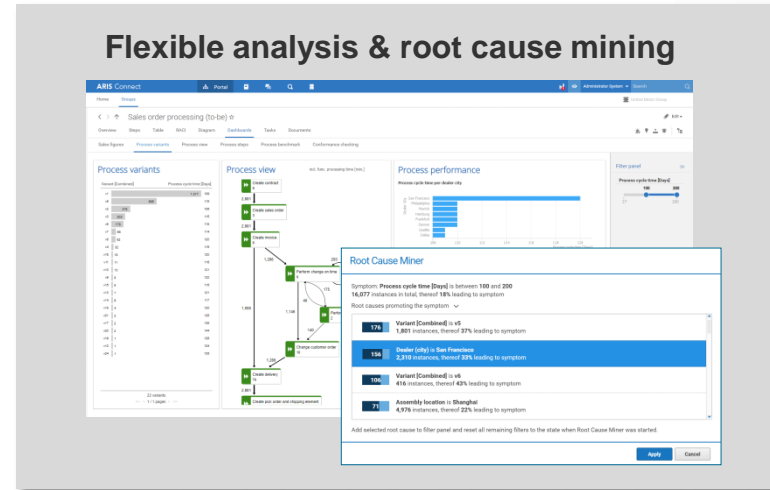


ARIS PROCESS MINING SUITABLE FOR ANY PERSONA

MIDDLE TO TOP MANAGEMENT



PROCESS ANALYSTS & LINE OF BUSINESS





LIVE DEMO – ARIS PROCESS MINING

- Quick start
- My content
- My favorites
- My activities
- Dashboards
- My GRC tasks
- Recent changes
- Contacts

Process landscape

Portal usage

Publications (Piwik)

Global maturity level

Process change management

Human task management

Collaboration overview

More... ▾

Management processes

Budgeting and controlling



Operational management



Risk and compliance



Strategic planning



Core processes

Customer services



Marketing sales



Procurement



Order processing



Production



Supporting processes

Facility management



Financial and legal services



Human resources



NAVIGATE
to corresponding
process for
detailed analysis

PROCESS PERFORMANCE AT A GLANCE

DISCOVER
existing
process variants

Process variants

Time period

Whole year

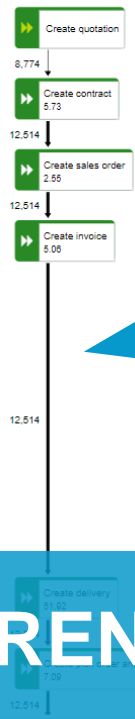
Variant [Combined] Process cycle time [Days]

Variant [Combined]	Process cycle time [Days]	Count
v1	77	8,774
v2	72	3,740
v5	93	1,801
v3	87	787
v6	97	416
v7	91	181
v8	97	141
v4	92	75
v10	102	35
v10	97	27
v9	106	10
v13	99	16
v11	109	14
v15	104	12
v14	99	11
v19	85	8
v18	108	6
v12	87	4
v17	116	3
v20	126	3
v21	78	3
v6	97	3

2 / 24 variants selected

12514 process instances selected out of 16077 (78%)

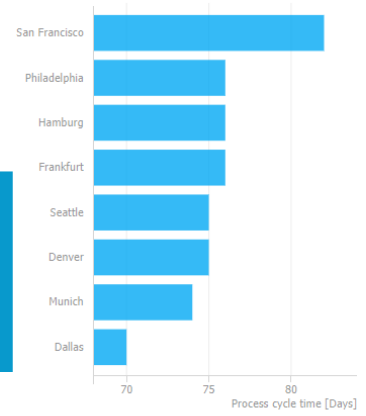
Discovered process flow



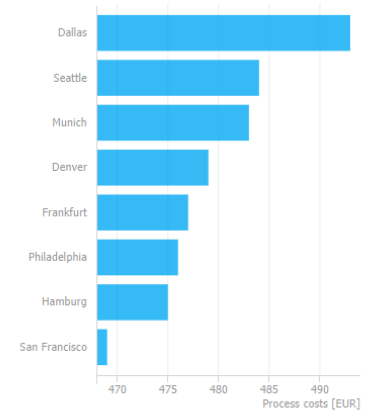
EXECUTION
SEQUENCE
of selected
variant(s)

Process performance

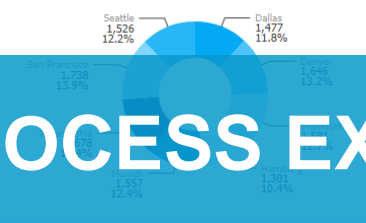
Process duration per dealer city



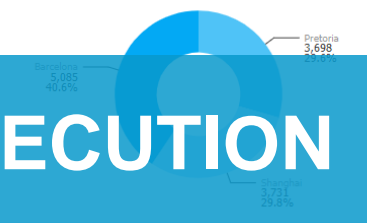
Process costs per dealer city



Number of processes per dealer city



Number of processes per assembly location



FULL TRANSPARENCY ON PROCESS EXECUTION

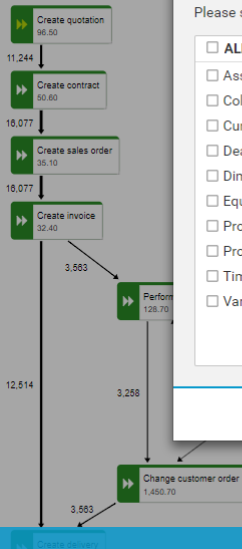
Process variants

Variant [Rough]	Process cycle time [Days]
v1	8,774
v2	3,740
v5	1,901
v3	787
v5	416
v7	181
v6	141
v4	75
v18	35
v10	27
v13	16
v9	16
v11	14
v15	12
v14	11
v19	8
v18	8
v12	4
v22	3

0 / 24 variants selected

1 / 2 pages

Process view



FLEXIBLE ADDING OF FILTERS during dashboard runtime

Edit filter panel

Please select the filter(s) to be used in the filter panel.

- ALL ↑
- Assembly location
- Color
- Current process status
- Dealer City
- Dim: Order number
- Equipment
- Product
- Production location
- Timely goods issue
- Variant [Combined]

Ok

Cancel

Can be **ACTIVATED** whenever needed

Filter

Click to add filter(s) ...

DYNAMIC FILTER PANEL

INTERACTIVE FILTERING & DRILL-DOWN

Sales order processing (to-be) ★

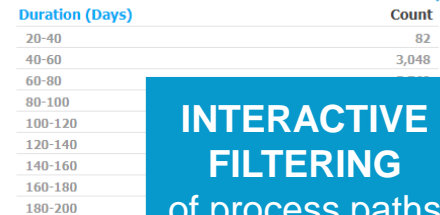
Edit

[Overview](#) [Steps](#) [Table](#) [RACI](#) [Diagram](#) [Dashboards](#) [Tasks](#) [Documents](#)

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[Sales Figures](#) [Process View](#) [Process Steps](#) [Process Benchmark](#)

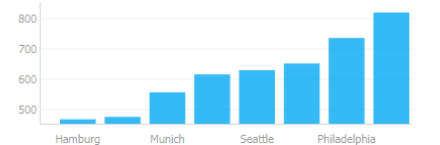
Filter



Time Period

Whole Year

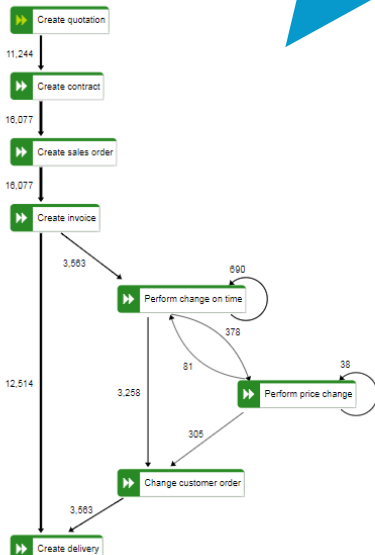
Dealer City / Number of Changes



Assembly Loc. / Number of Changes

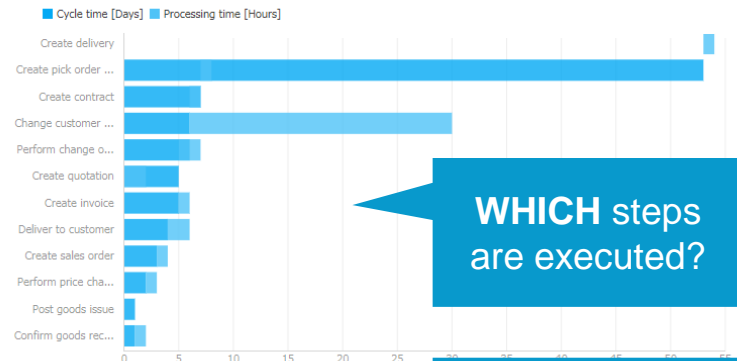


Process View



PROCESS STRUCTURE
shows real behavior for
the selected processes

Bar chart showing Cycle time [Days] and Processing time [Hours] for various steps.



WHICH steps
are executed?

Step Details

Processing time [Hours]

HOW are the
steps executed?

DYNAMIC ANALYSIS OF PROCESS BEHAVIOR

Sales order processing (to-be) ☆

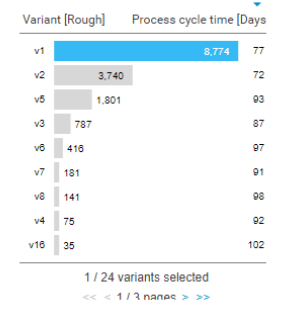
Edit

Overview Steps Table RACI Diagram **Dashboards** Tasks Transactions Documents

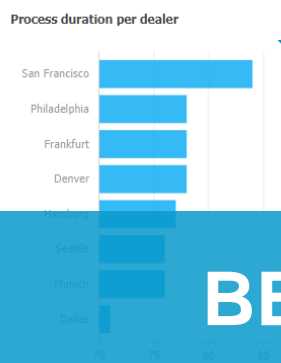
[Icons]

Sales figures Process discovery Process variants Process steps Process benchmark Process performance **Process variant benchmark**

Variant filter



KPIs



Variant A

71.8

Process duration [days]

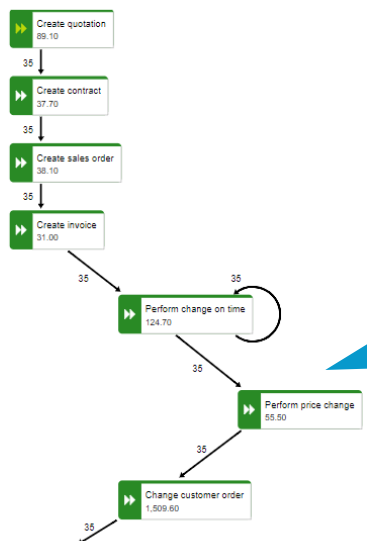


BEST PERFORMER
due to lean processes
& **HAPPY PATH**

Variant B

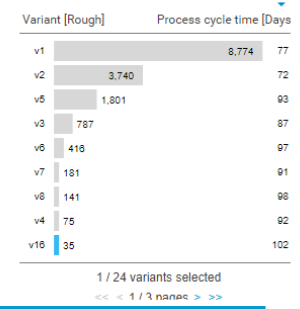
84.1

Process duration [days]



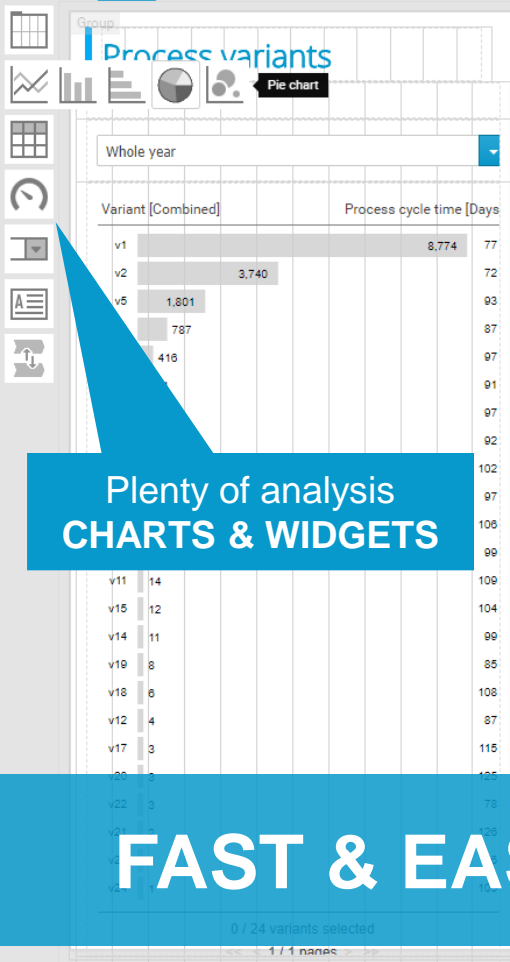
Process WEAK POINTS
identified in
behavioral pattern

Variant filter

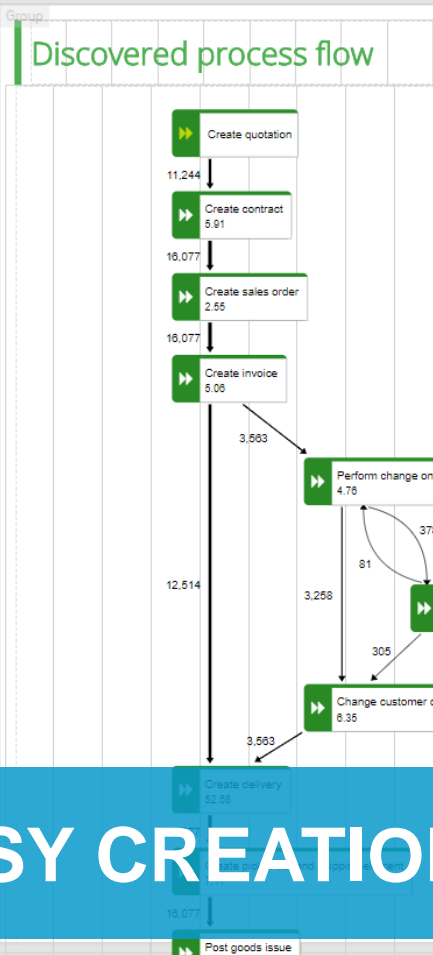


BENCHMARK END-TO-END PROCESSES

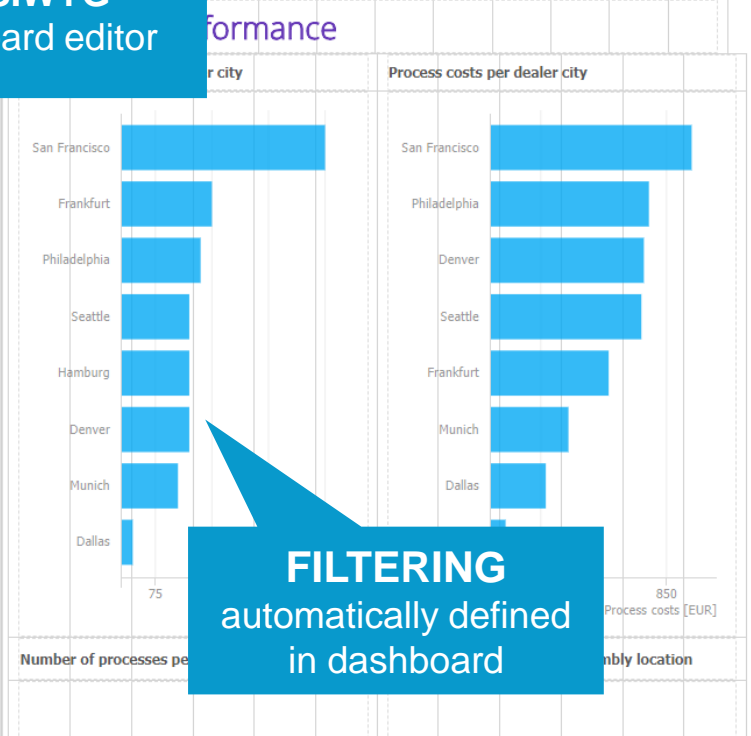
Tab 1



Plenty of analysis CHARTS & WIDGETS



WYSIWYG dashboard editor



FILTERING automatically defined in dashboard

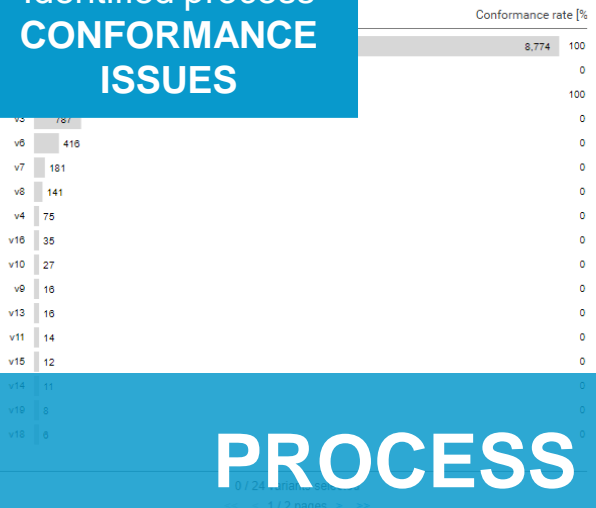
FAST & EASY CREATION OF PROCESS MINING

Process CONFORMANCE RATE

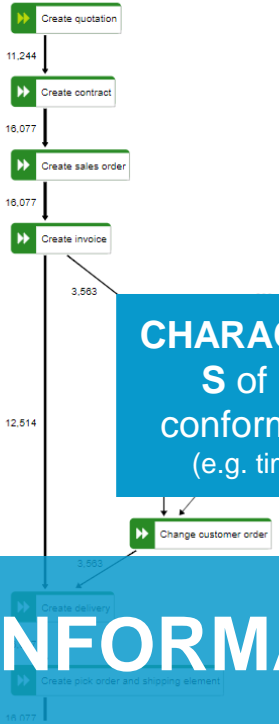
Identified conformance issues

Issue type	Non-conforming func...	Preceding function	# Issues
Incorrect function ...	Perform change on...	Perform change on...	472
Incorrect function ...	Perform price chan...	Perform change on...	197
Unexpected proce...	Create contract	Create contract	4,833

Identified process CONFORMANCE ISSUES

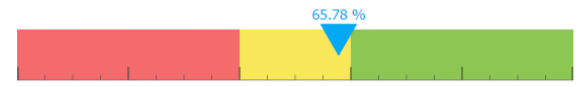


Discovered process flow

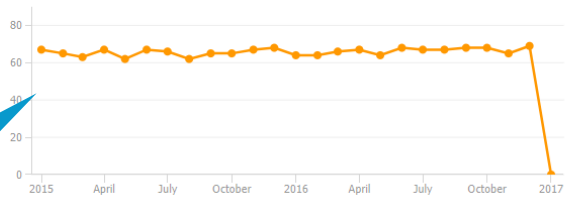


CHARACTERISTICS of process conformance rate (e.g. time periods)

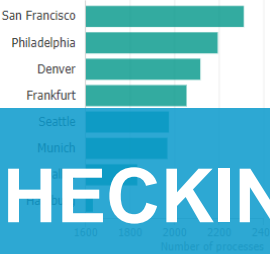
Process conformance rate [%]



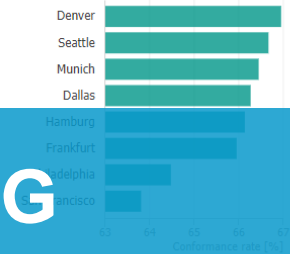
Conformance trend per month [%]



Number of processes per dealer



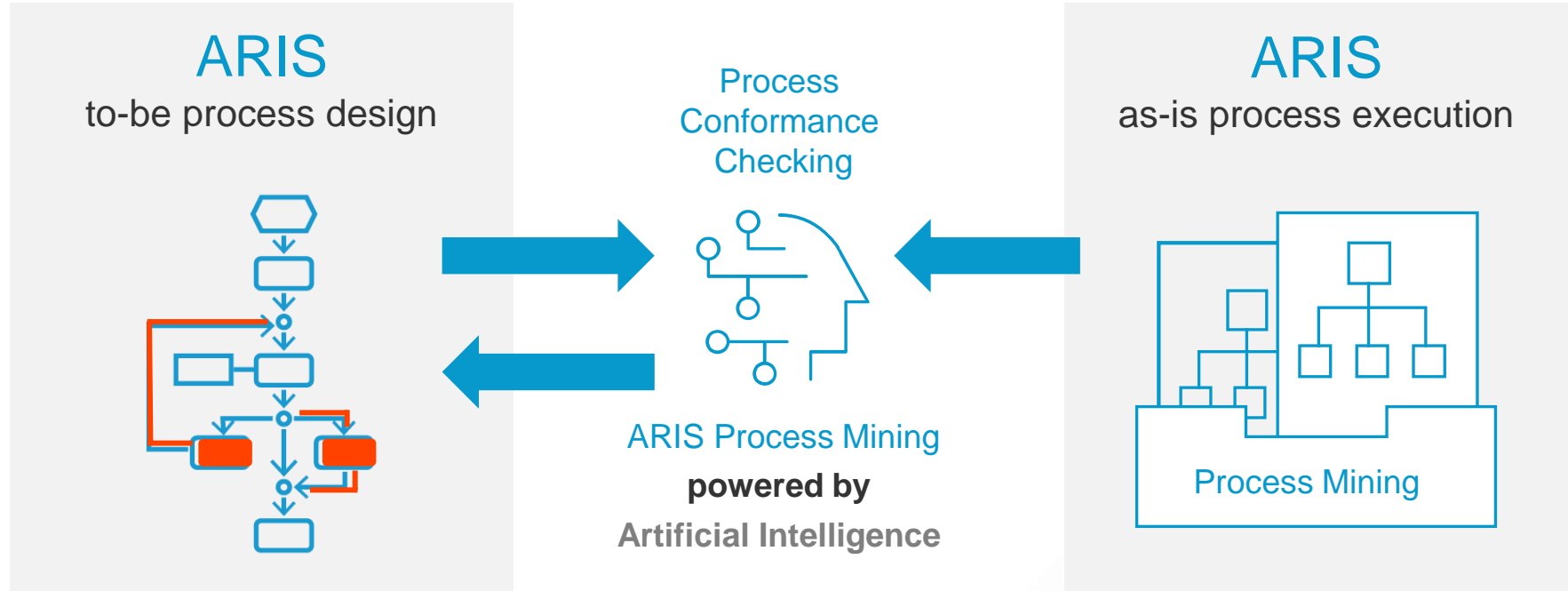
Conformance rate per dealer [%]



PROCESS CONFORMANCE CHECKING

ARIS PROCESS MINING

PROCESS CONFORMANCE CHECKING POWERED BY AI



ARIS PROCESS MINING

AUTOMATED PROCESS ANALYTICS BY ROOT CAUSE MINER

The screenshot shows the ARIS Connect interface with the 'Root Cause Miner' tool active. The symptom is 'Process cycle time [Days] is between 100 and 200' with 16,077 instances, 18% of which lead to the symptom. The tool has identified four root causes:

Count	Root Cause	Total Instances	Percentage Leading to Symptom
176	Variant [Combined] is v5	1,801	37%
156	Dealer (city) is San Francisco	2,310	33%
106	Variant [Combined] is v6	416	43%
71	Assembly location is Shanghai	4,976	22%

The interface includes a filter panel on the right and 'Apply' and 'Cancel' buttons at the bottom of the tool window.

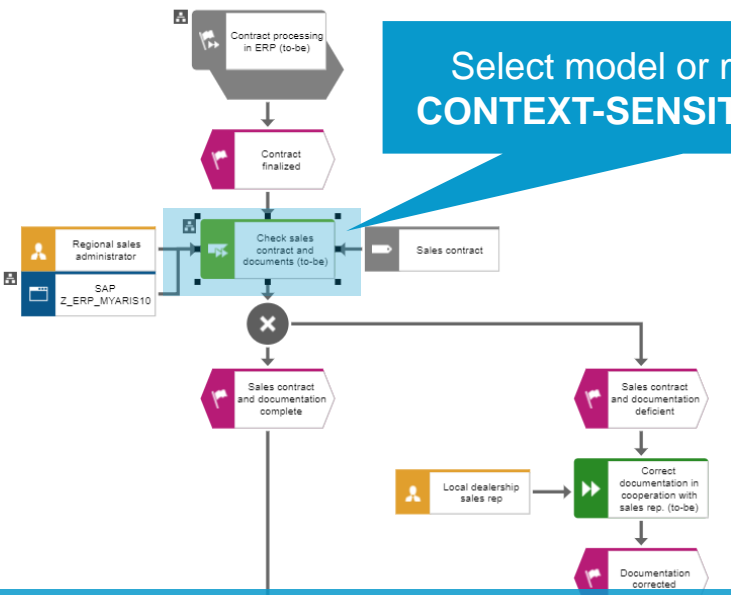
Interactively specified symptom
for which root causes should be identified

Identified
ROOT CAUSES

Selection of a root cause
for further analysis

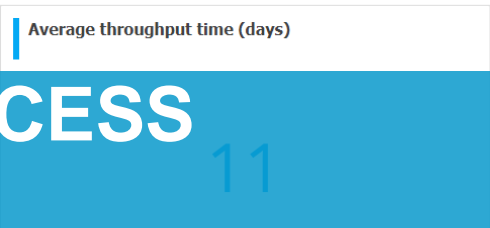
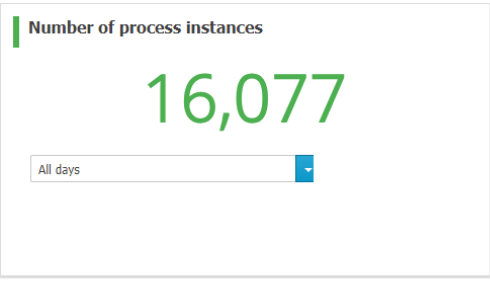
Sales order processing (to-be)
 EPC
 Apr 3, 2018 3:13:34 PM

powered by
ARIS



Select model or model elements for
CONTEXT-SENSITIVE INFORMATION

See **CORRESPONDING KPIs** and start to analyze



CONTEXT SENSITIVITY & PROCESS ENHANCEMENT

“Awareness is [...] understanding what makes a business successful and appreciating the factors that influence success”

Source: <http://www.allaboutcareers.com/careers-advice/looking-for-a-job/commercial-awareness-understand-it-develop-it-use-it-to-your-advantage>

ARIS AWARE

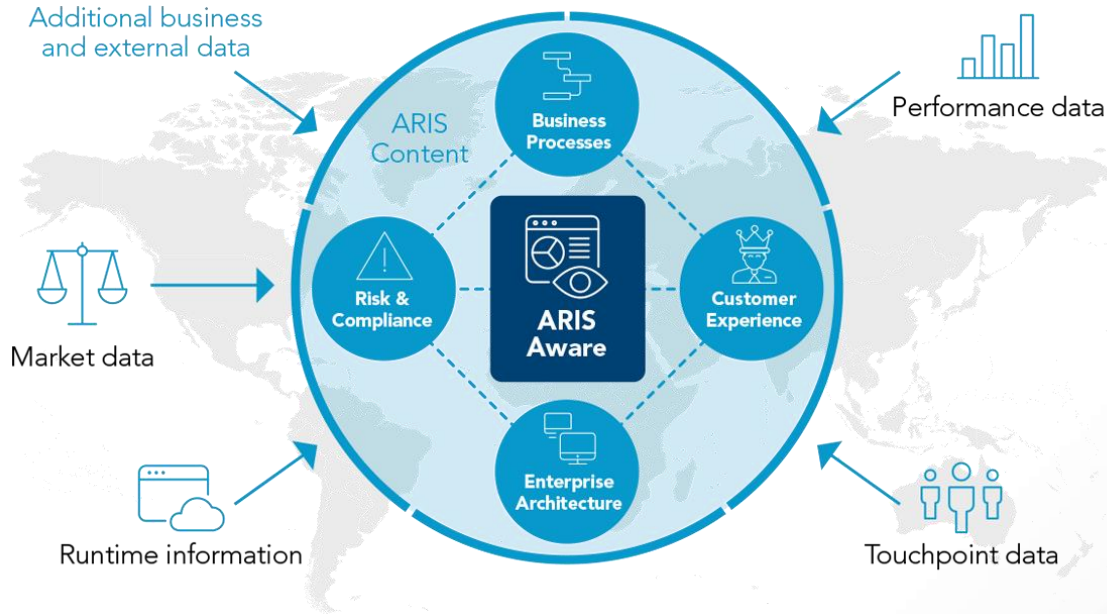
THE KEY FOR CLEAR INSIGHTS & BETTER DECISIONS

ENRICHED ARIS CONTENT

connect internal and external data & derive new insights

CONTEXT-SENSITIVE DASHBOARDS

build dashboards once and use them in different contexts



INTERACTIVE ANALYSES

interact with models and charts to get the details

OUT-OF-THE-BOX USE CASES

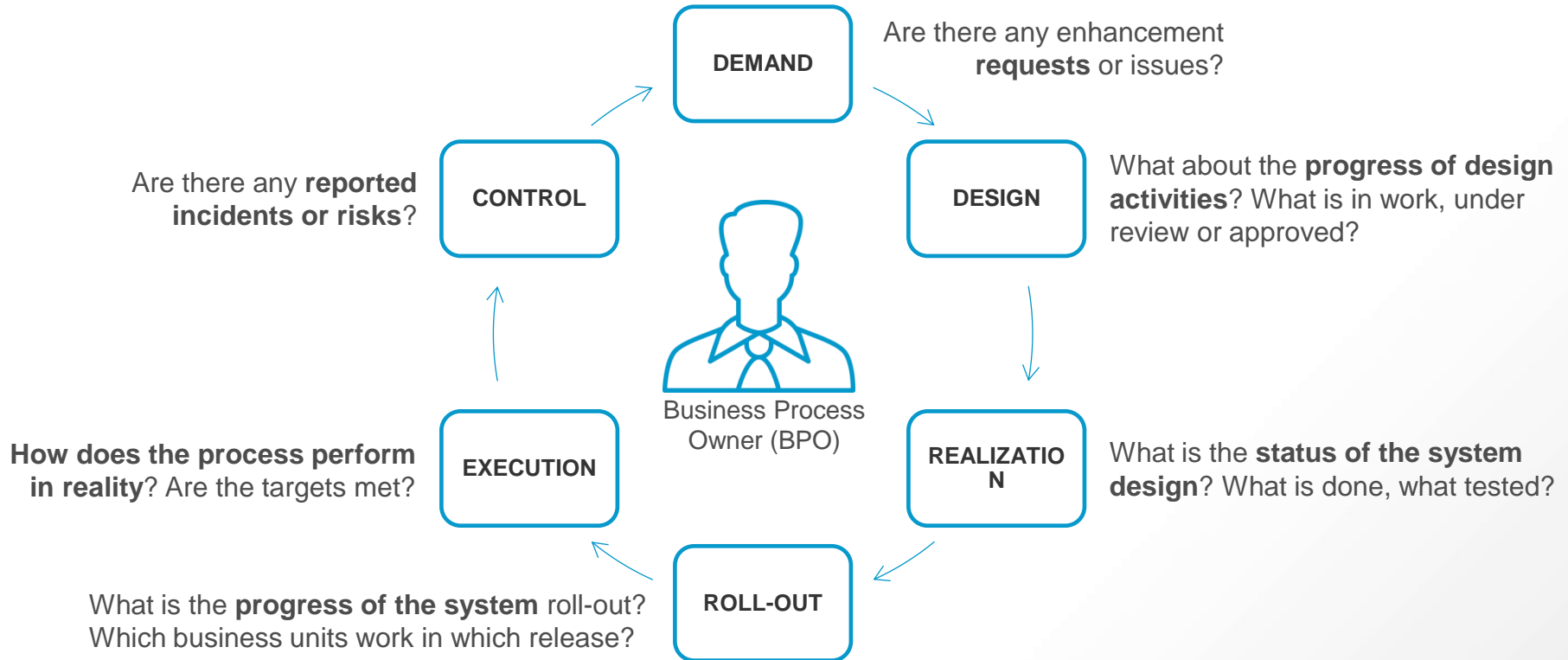
use predefined chart solutions & templates

STAKEHOLDER SPECIFIC KPIS




provide specific information for each level of business

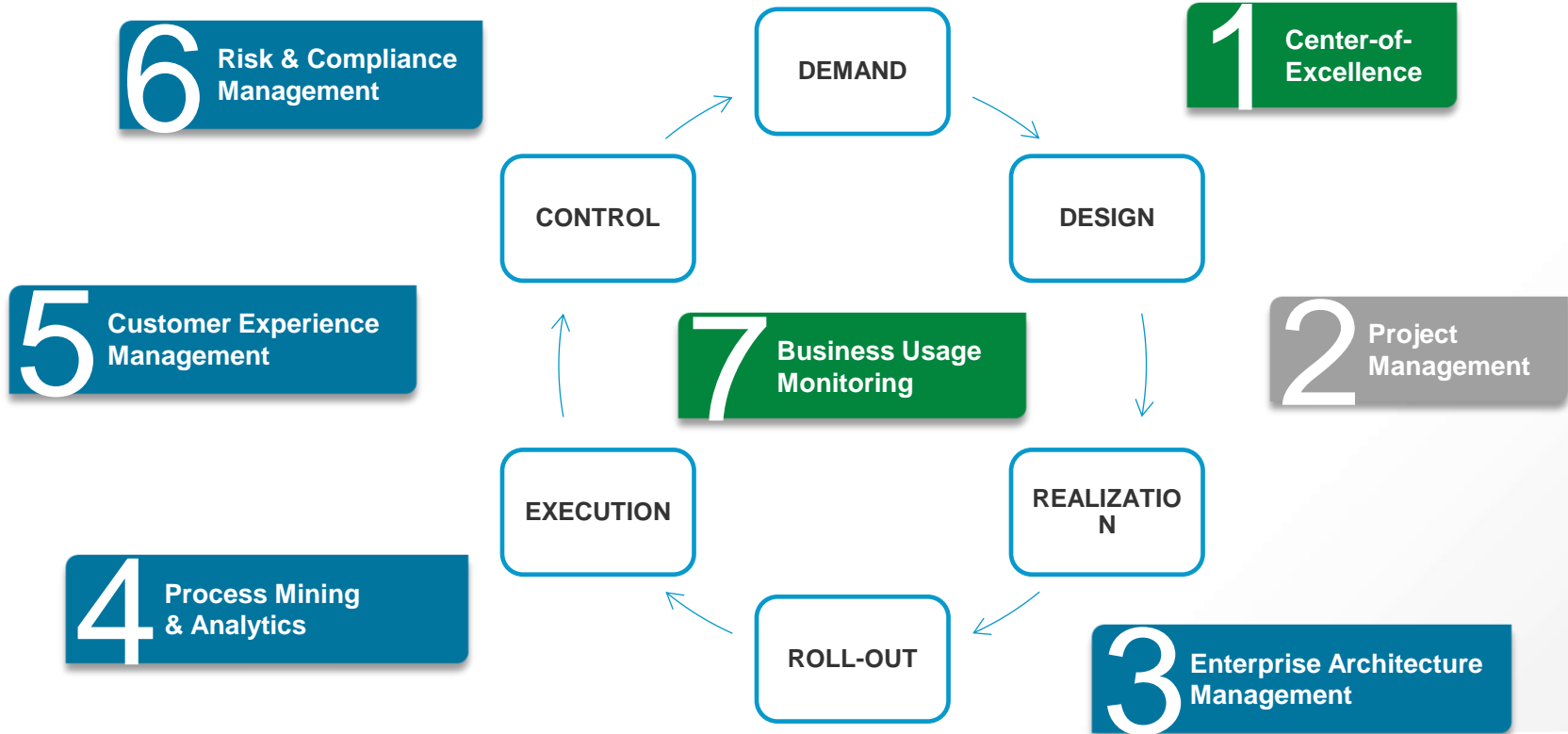
ARIS AWARE

A DAY IN THE LIFE OF A BUSINESS PROCESS OWNER

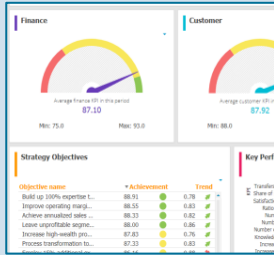


ARIS AWARE CUSTOMER-DRIVEN USE CASES

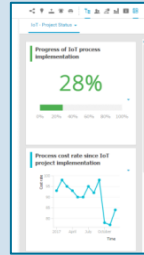
Ready-to-use solution 
Out-of-the-box template 
Future use case 



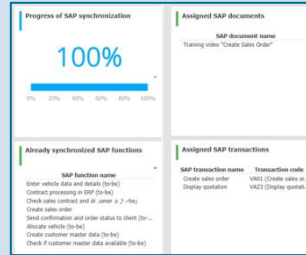
ARIS AWARE OUT OF THE BOX USE CASES



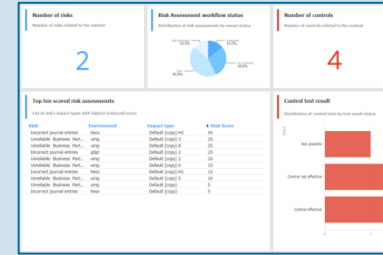
Strategy



Internet of Things



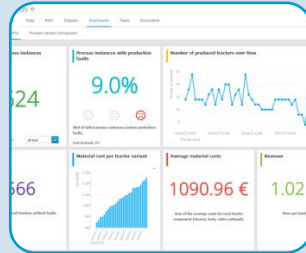
SAP Synchronization



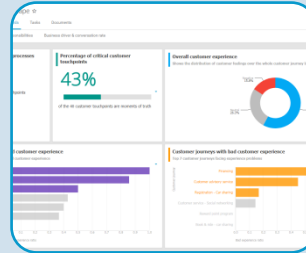
Risk & Compliance



Center of Excellence



Process Performance



Customer Experience



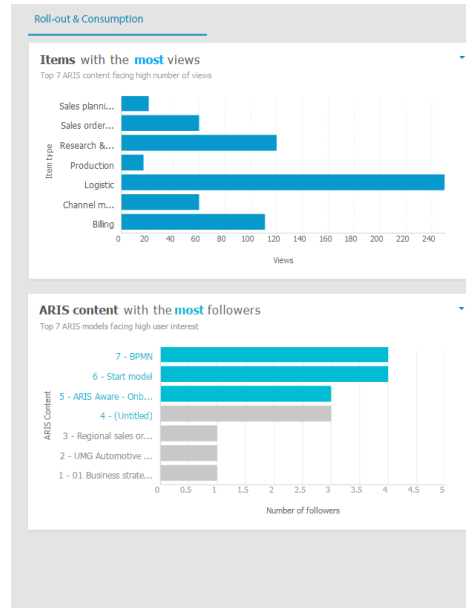
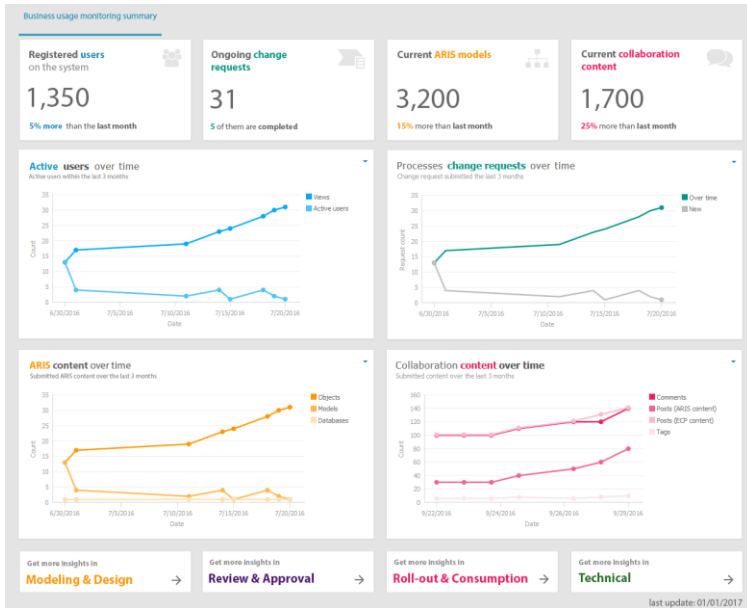
Enterprise Architecture



Business Usage

ARIS AWARE BUSINESS USAGE MONITORING

How to deliver the right information to the right people at the right time? Analyze, how users interact with ARIS and its content to learn what they need!



How often has a model been clicked by our users?

What should we focus on when we do the next content release?

Which tabs are being clicked most?

What technology is used by our user groups?

What are the most searched terms?

ARIS AWARE DASHBOARDS IN ARIS CONNECT

home dashboards
typically without a specific context

dashboarding tab
separated model-related dashboards for different personas, topics or use cases

overview dashboards
improve the models' fact sheet

side-by-side dashboards
assigned to (meta-) content

The screenshot displays the ARIS Connect interface with several key components:

- Navigation:** Top menu includes Overview, Diagram, ARIS Aware, Tasks, Documents. A left sidebar lists a hierarchy: 1. Strategy, 2. Processes, 2.1 Process architecture, 2.1.1 Core processes, 2.1.2 Management processes, 2.1.3 Support processes, 2.1.4 Business processes, 2.1.5 Information systems, 5. Data, 6. Products, 7. Risk & Compliance, 9. Libraries, 2. Alphabet content. Below this are 'ARIS Aware - Onboarding' and 'Start model' options.
- Home Dashboard (Top Left):**
 - Processes with pending change requests: 33 change requests submitted within the last 3 months.
 - Change request count: Average 33.
 - Processes change requests over time: Line chart showing an upward trend.
 - Processes with the most change requests: Horizontal bar chart.
 - Process owners with the most change requests: Horizontal bar chart.
 - Processes in realization step (request state): Donut chart.
 - Summary of change requests: Table with columns Step, Date, Owner, Status.
- Overview Dashboard (Top Right):**
 - Aggregated processes maintaining progress: 29% of the mandatory data has been maintained.
 - Aggregated model count for current process: 41 processes captured for this process area.
 - Processes release rate: Donut chart showing 12% released, 88% complete.
- Dashboarding Tab (Middle):**
 - Enterprise process map UMG.
 - Management processes: Strategic planning & implementation, Budgeting & controlling, Operational management, Risk and compliance management, Business process management.
 - Core processes: Research & Development, Production, Logistics, Customer services, Procurement, Marketing & sales, Financial services.
 - Support processes: Human Resources, Finance, Legal, Communication & information management, Facility management.
- Side-by-Side Dashboard (Right):**
 - Aggregated processes maintaining progress: 12% of the mandatory data has been maintained.
 - Mandatory attributes summary: Table with Attribute and Status columns.
 - Processes age distribution: Donut chart showing 13.4% < 1 Month, 86.6% 3-12 Months.

“Awareness is [...] understanding what makes a business successful and appreciating the factors that influence success”

Source: <http://www.allaboutcareers.com/careers-advice/looking-for-a-job/commercial-awareness-understand-it-develop-it-use-it-to-your-advantage>



STOP FIRE FIGHTING PROCESS BOTTLENECKS



BE IN FULL CONTROL OF PROCESS MANAGEMENT

WHY ARIS PROCESS MINING?

BRING **YOUR PROCESS REPOSITORY** TO LIFE

COMPLEMENT **YOUR PROCESS MANAGEMENT LIFECYCLE**

LIFT **YOUR ORGANIZATION** TO THE NEXT BPM MATURITY LEVEL

» *Software AG focuses on the depth of process mining functionality as well as on the breadth of operations.*

Our survey revealed that Software AG focuses significantly more than its competitors on process models and contextualization.«

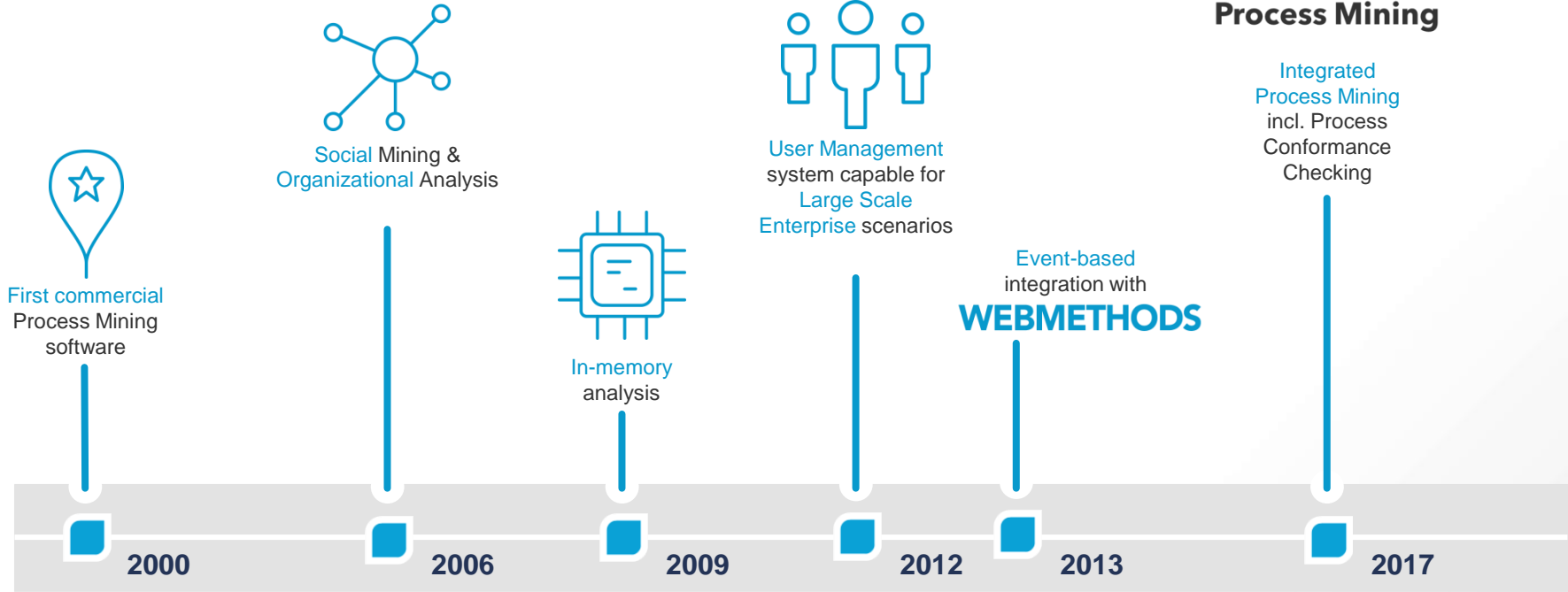
Gartner®

Source:
Market Guide for Process Mining, 2018



ARIS PROCESS MINING

AN ONGOING HISTORY OF SUCCESS



MATURE – INTEGRATED – INNOVATIVE

ARIS PROCESS MINING

GLOBAL CUSTOMER COMMUNITY



WHAT OUR CUSTOMERS SAY

Reducing unrewarded complexity
saves millions

PHILIPS

Reducing **incomplete card applications** saved **hundreds of thousands of Swiss francs**

Leading specialist in payment solutions

Process costs reduced
by more than **20 %**

CosmosDirekt.

\$2 Million yearly savings through improvement of order processing and provisioning

Telecom Service Provider

Processing time
decreased
by **17%**



Release close to **€20M**
in assets **back to the business**

Leading global bank

Optimized process times by
identifying process
weaknesses



Hundreds of hours saved when monitoring the processing of correspondence

Leading specialist in payment solutions

Cost savings by **standardizing processes**

International brewing company

software AG



Dr. Julian Krumeich

Senior Product Manager ARIS

Products:

ARIS Process Mining & ARIS Process Performance Manager
ARIS for SAP Solutions

Special topics:

IoT-driven Business Transformation with ARIS



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