

AUTOMATED AND WORKSHOP-FREE SAP HANA & S/4HANA FUTURE READINESS ASSESSMENT

HOW WEST TRAX & RED HAT WILL HELP SAP CLIENTS ON
THEIR ROAD TO HANA & DIGITAL EXCELLENCE

Peter Körner

Business Development Manager Enterprise Cloud Computing, Red Hat GmbH

25.4.2018

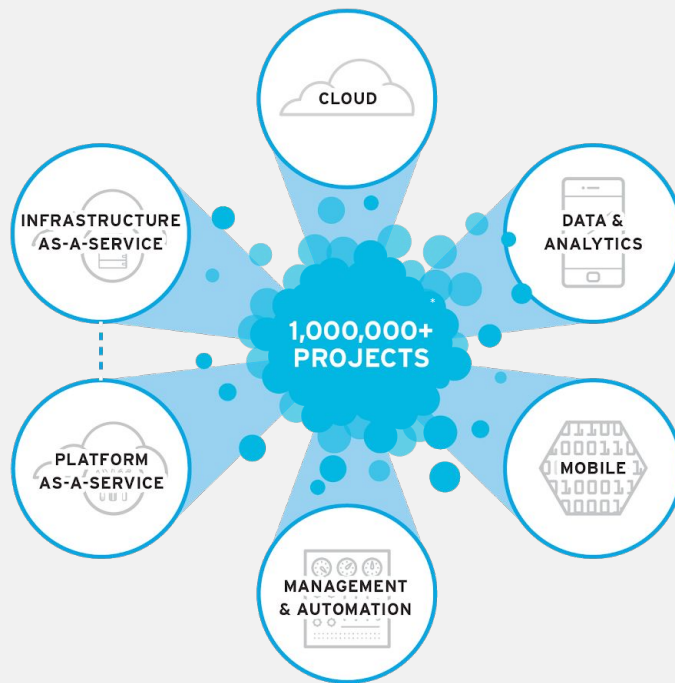
WHY ARE RED HAT & WEST TRAX ARE WORKING TOGETHER?

**“HELP CUSTOMERS TO CREATE
SYNERGIES BETWEEN TWO MAIN EVENTS
HAPPENING IN IT”**

DIGITAL TRANSFORMATION & DISRUPTION

SAP HANA & S/4HANA MIGRATION

OPEN SOURCE FUELS RAPID INNOVATION



GET BACK CONTROL OF YOUR IT-STACK

20%

- Added value
- Individual business models, services & products

80%

Hybrid Cloud
Storage
Network
Container
Platform
Services
Innovation

- Open Source based
- Interoperable
- Standardized, Open API
- Flexible
- No vendor lock-in

RED HAT MISSION:

To be the catalyst in communities of customers, contributors, and partners creating better technology the open source way.

WHAT HAS RED HAT TO DO WITH SAP?

FIT-TO-STRATEGY TECHNOLOGIES

SAPs Key Offerings

SAP HANA

SAP S/4 HANA

SAP Leonardo

SAP DATA HUB
VISIBILITY | INTEGRATION | SIMPLICITY

Red Hat Value

Making the **Datacenter** efficient

Making **Hybrid IT** simple

Powering the **Intelligent Edge**

Enabling **new business insights** from Big Data

... delivered by

automate manual tasks and speed up deployment and changes. Avoid errors and downtime with predictive analytics

providing hybrid cloud management with governance and policy based control, enabling e.g. self-service functionalities, chargeback, etc.

integrating non-SAP solutions and sources and unlock the value of enterprise data

streamline development, modernization and delivery of SAP extensions with container technology and microservices

Red Hat Offerings

Red Hat Enterprise Linux Insights, Virtualization

Ansible CloudForms

Fuse Decision Mgmt

OpenShift

AUTOMATED AND WORKSHOP-FREE SAP HANA & S/4HANA FUTURE READINESS ASSESSMENT

HOW WEST TRAX & RED HAT WILL HELP SAP CLIENTS ON
THEIR ROAD TO HANA & DIGITAL EXCELLENCE

Peter Körner
Business Development Manager Enterprise Cloud Computing, Red Hat GmbH

25.4.2018

CURRENT SAP CUSTOMER SITUATION

HANA & S/4HANA AS DIGITAL CORE FOR NEXT GENERATION BUSINESSES

SAP customers must migrate to SAP HANA platform and S/4HANA (Application Suite) by 2025.

- This requires abandoning Oracle, DB2, and Microsoft SQL Server
- Plus new infrastructure and Linux is the only certified operating system for the DB
- Today still hundreds of Unix database servers in the market
- This is not a simple migration, it is affecting various elements like custom code, interfaces, business processes etc.
- Fit-to-strategy, new technologies and architectures are required and need to be aligned with migration

S/4HANA “SIMPLIFICATION” LIST...



Simplification List for SAP S/4HANA 1610 FPS2



- It is planned to check the introduction of the Customer/Vendor Integration in the pre-checks and the technical Conversion procedure of SAP S/4HANA on-premise edition 1610. A system where the customer/vendor integration is not in place will be declined for the transition.
- The Business Partner Approach is not mandatory for the SAP Simple Finance, on-premise edition 1503 and 1605.

Business Process related information

Only SAP Business Suite customer with C/V integration in place can move to SAP S/4HANA, on-premise(Conversion approach). It's recommended but not mandatory that BuPa ID and Customer-ID / Vendor ID are the same.

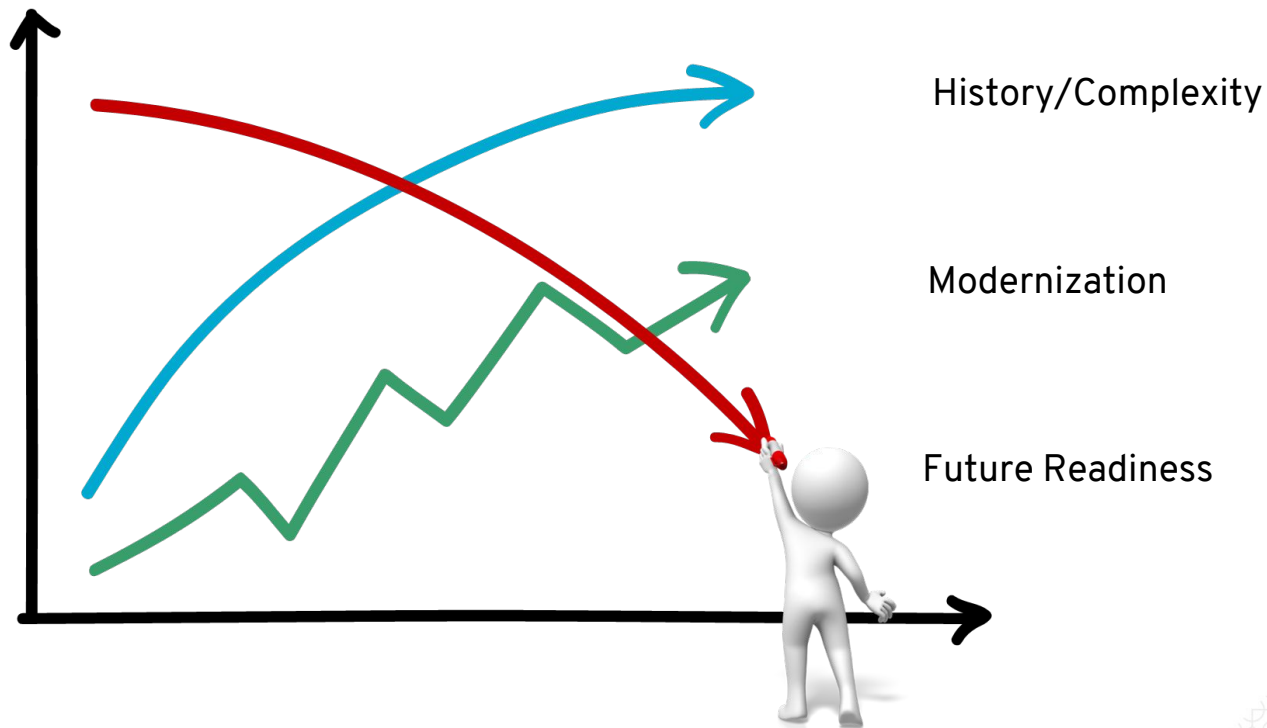
The user interface for SAP S/4HANA is transaction BP. There is no specific user interface for customer/vendor like known from SAP Business Suite (the appropriate specific transaction like XD01, XD02, XD03 or VD01, VD02, VD03 / XK01, XK02, XK03 or MK01, MK02, MK03 etc. are not available in SAP S/4HANA on-premise)

Transaction not available
in SAP S/4HANA on-
premise edition

FD01, FD02, FD03, FD05, FD06, FD0
FK01, FK02, FK03, FK05, FK06
MAP1, MAP2, MAP3
MK01, MK02, MK03, MK05, MK06, MK12, MK18, MK19,
V-03, V-04, V-05, V-06, V-07, V-08, V-09, V-11, V+21,
V+22, V+23
VAP1, VAP2, VAP3
VD01, VD02, VD03, VD05, VD06
XD01, XD02, XD03, XD05, XD06, XD07
XK01, XK02, XK03, XK05, XK06, XK07

Required and Recommended Action(s)

THE TRUTH ABOUT TODAY'S SAP LANDSCAPE

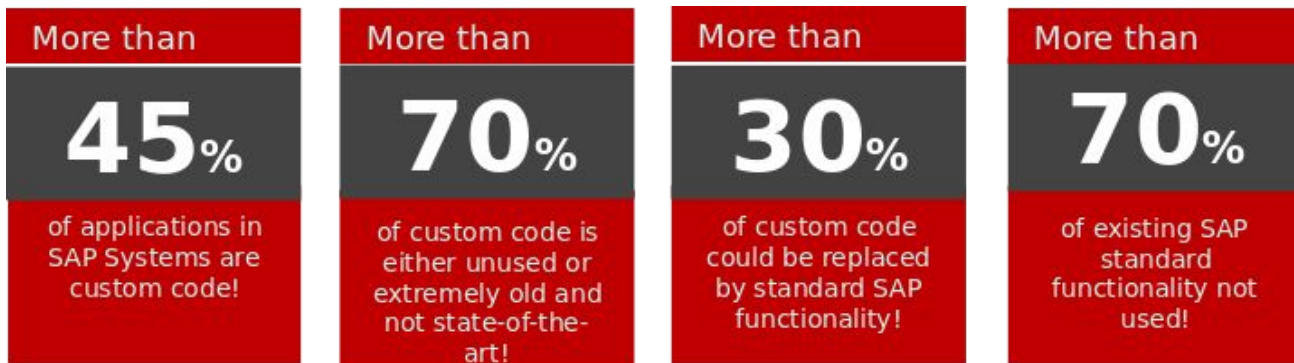


TYPICAL CHALLENGES - PROCESS & TECHNOLOGIES

From mature SAP landscape to Digital Excellence - But how?



THE FACTS



**>80% of current
Business Processes slow down Digital
Transformation and urgently require
modernization!**

Source: West Trax Benchmark Database: 1.600+ Benchmark Analyses in 15 Sectors

THE ROAD TO HANA STARTS WITH ASSESSMENTS...

...BUT TRADITIONAL APPROACHES DO NOT WORK WELL FOR HANA MIGRATIONS.

Interviews, Workshops, Questionnaires, 200 pages Powerpoint etc. delay the process, are unreliable, lead to wrong conclusions...

WHAT DOES WORK: AUTOMATED, TECHNICAL ASSESSMENTS

AUTOMATED/OFFLINE SAP ASSESSMENTS



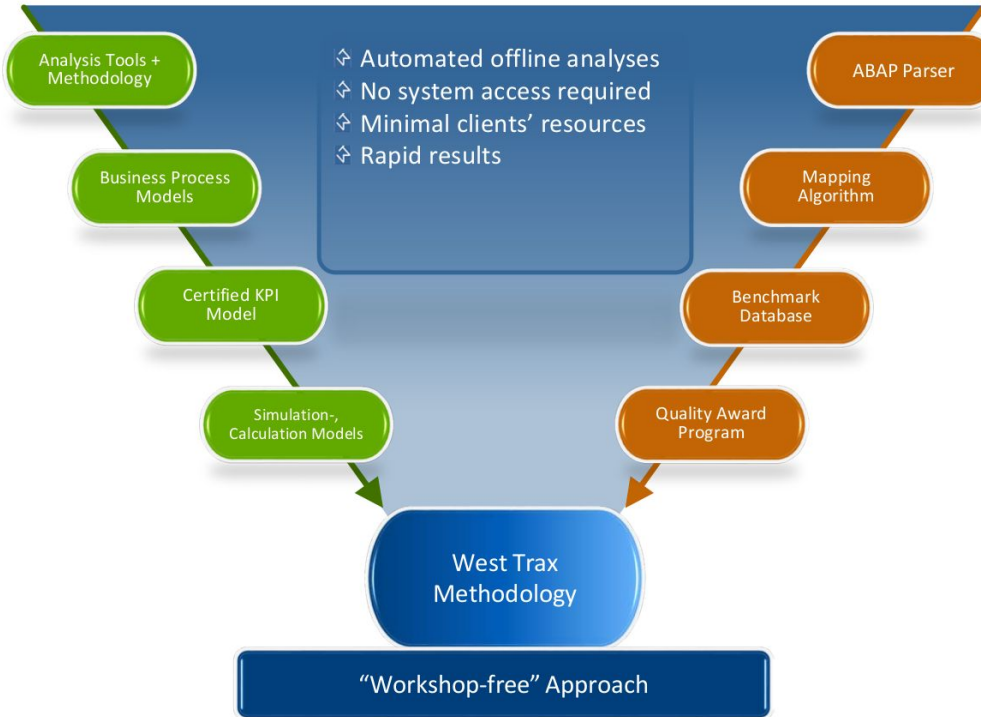
 **West Trax**
Independent Analyst and Advisor



- 15 years, 1600 Analysis
- 15 sector Industry benchmark database
- Global scope
- Partnering with SAP, Dell, T-Systems & others
- Facts/Data based, workshop free approach

HOW DOES IT WORK?

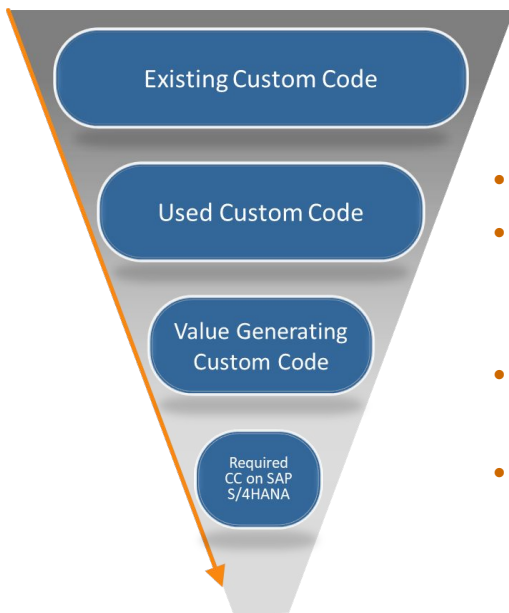
The West Trax Methodology



West Trax
Independent Analyst and Advisor

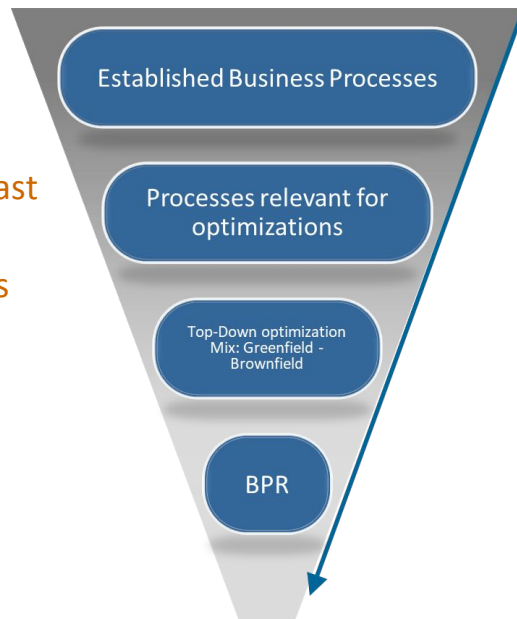
FIRST STEP IN TOOLCHAIN

West Trax Analysis help to set the right parameter and filters in project supporting tools:



Code Optimization

- Identification of ballast
- Focus on value generating processes and objects
- Reduction of project efforts and -costs
- Reduction of project durations



Process Mining / Process Modeling

SAP HANA & S/4HANA JOURNEY STARTS EARLY

Joint West Trax & Red Hat Assessment: Supporting strategic decisions at the right stage



Technology & Business Value Assessment:

Platform, IT-Automation, Cloud Computing,
App Development, Migration & Modernization



Automated Maturity Assessment

- CIO, CFO
- Group IT
- Architects
- IT-Strategiest

Technical implementation,
Projects, PoC, RFQ

INDEPENDENT, AUTOMATED FUTURE READINESS ASSESSMENT

From facts to a solution



Initial Analysis &
Transparency



Technologies
Products & Platform
Best practices
Strategic vendor



Partners

Customer relationship
Subject Matter Expertise
Implementation

TYPICAL CHALLENGES - PROCESS & TECHNOLOGIES

From mature SAP landscape to Digital Excellence - But how?



THE SUCCESS FACTOR

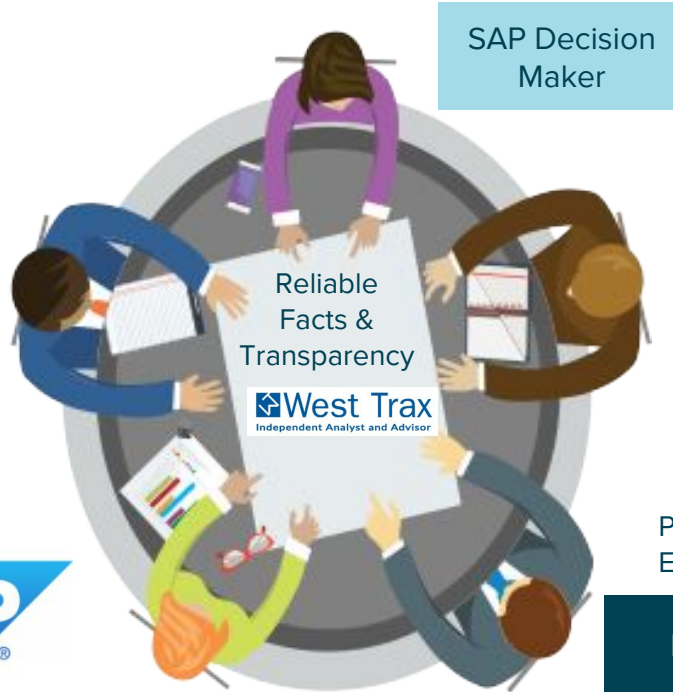
Common understanding between all stakeholders



Red Hat & Partners

Individual Client Roadmap
Facts based Business Cases
Focus: Customer Value

Best possible customer
value from HANA



SAP Decision
Maker

Open to new strategies

Process
Owner

Release old
processes & structures

Permit standardisation & Automation
Ensure & keep control

Internal IT

FUTURE READINESS ASSESSMENT STEPS



Total Migration and Innovation Journey & Benefits

On the road to SAP HANA and S/4HANA

Analysis

1-3 Weeks

West Trax Automated Assessments for Mature SAP Landscapes

Results To Advice for Strategy:

Precise Transformation Roadmap

Interpretation and Preparation

1-2 Months

Fact-based housekeeping reduces costs/efforts

SAP Readiness Check – Proof of technical readiness

Results-To-A dvice for Migration and Innovation Journey (End-to-End)

Execution

6-9 Months

Transformation project: Preparation
Transformation Migration
Handover

Red Hat and Partner Business & Technology Assessments

In time

Fact-based Processes & Technology

Fact-based definition of Fit-to-Strategy technology components guarantee innovations

SAP Transformation Navigator – Helps to define innovation roadmap

Define fact-based Project Roadmap / mitigates risk / reduces cost / accelerates project

Transformation project: Red Hat Technology Handover

What happens after an analysis?

Transparency for worldwide Instances

West Trax Analysis:

- Maturity of each SAP instance
- Supported Business Processes
- Customization
- SWOT Analyses

AddOns

- Data Quality (via Partner)
- Technical Requirements/ Infrastructure (via Technology Partner)

1. Fact-based decisions define strategy

- **Template Approach:** Should client define a worldwide template for the future requirements?
- **Greenfield/Brownfield:** Is one of the systems ideal for building the future master system or should a new SAP S/4HANA system be set up
- **Consolidations:** Are systems similar enough in terms of business processes to consolidate them and reduce number of systems?

2. Fact-based housekeeping reduces costs/efforts

a. Master/Target System

- **Custom Code:** Filter and archive code that does not deliver value in the future scenario
- **Background Jobs:** Identify jobs that do not deliver value in the future scenario
- **Document Types:** Identify document types that are required for the future scenario
- **Old Transactions:** Identify old transaction usage and update
- **Data:** Cleansing and Archiving
- **Fit/Gap Analysis SAP S/4HANA:** Identify and define tasks and efforts

b. Other Systems: Fit/Gap Analysis with Target System

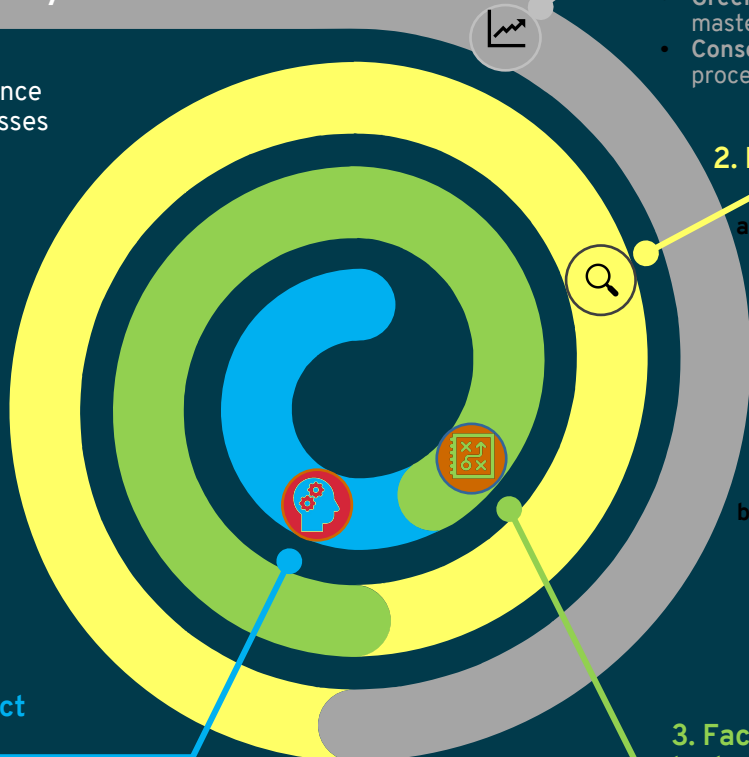
- Custom Code to be migrated
- Background Jobs to be migrated
- Document Types to be migrated
- Data to be migrated

3. Fact-based definition of Fit-to-Strategy technology components guarantee innovations

- Cloud/On-Premise/Hybrid
- Future Infrastructure
- DevOps etc.

4. Fact-based Migration mitigates risk / reduces costs / accelerates project

- Build resilient Project Plan incl. Business Case based on facts and transparency on current mode of global operations
- Deliver benefits for all involved parties by providing facts
- Keep project governance in hand



RESULTS TO ADVICE

FIT-TO-STRATEGY TECHNOLOGIES






RED HAT TECHNOLOGY LANDSCAPE



FIT-TO-STRATEGY TECHNOLOGIES BASED ON ASSESSMENT RESULTS (EXTRACT)

- Custom Code migration and modernization strategies
- Containerization & Innovation
- Interfaces, Open API and Legacy Systems Integration and modernization
- Common Platform and Infrastructure scaling
- Hybrid/Multi-Cloud Options and -management per Company Code
- Housekeeping, Automation & Quick Wins before migration
- Automation and DevOps strategies
- Data Monetization, API Management options
- Compliance/Governance, Chargeback & SAP Licensing optimization
- Accompanying Consulting Options

CONSULTING SERVICES & SOLUTIONS

 I.T. OPTIMIZATION	 AGILE INTEGRATION	 HYBRID CLOUD INFRA	 CLOUD NATIVE APP DEV	 I.T. AUTOMATION + MANAGEMENT
ACCELERATE & AUTOMATE SERVICE DELIVERY	API-CENTRIC INTEGRATION	CLOUD MIGRATION	API-CENTRIC INTEGRATION	ACCELERATE & AUTOMATE SERVICE DELIVERY
ADAPTIVE SOE	PROCESS-DRIVEN APPLICATIONS	CONTAINER ADOPTION PROGRAM	APP MODERNIZATION & MIGRATION	NETWORK AUTOMATION
APP MODERNIZATION & MIGRATION		NFV ADOPTION	PROCESS-DRIVEN APPLICATIONS	
OPEN MANAGEMENT FOR VIRTUALIZATION		OPEN MANAGEMENT FOR VIRTUALIZATION	CONTAINER ADOPTION PROGRAM	
STORAGE		STORAGE	OPEN INNOVATION LABS	

POSSIBLE OPTIONS: CONSULTING SERVICES & SOLUTIONS

- Discovery Sessions
- Smart Starts
- Pilots
- Architectural Reviews
- Design Workshops
- Innovation Lab

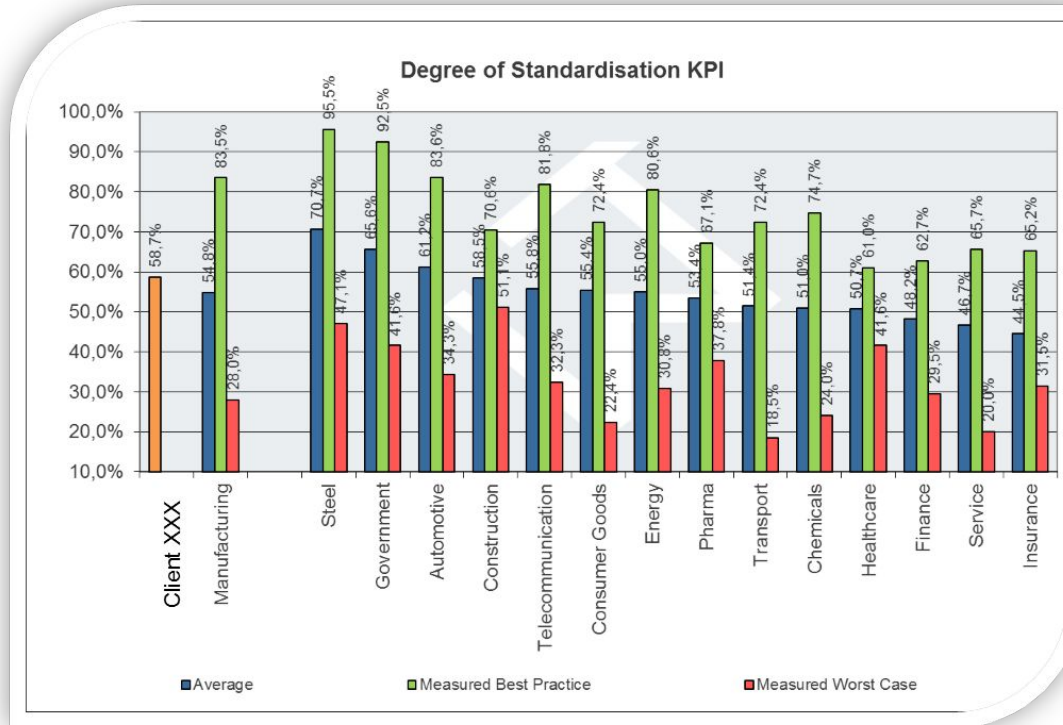
SAMPLE RESULTS

CONTENT OF FUTURE READINESS ASSESSMENT

- Degree of Standardization KPI plus market benchmark
- Absolute number of used SAP Standard transactions
- Used Standard transactions mapped onto enterprise areas
- Used Standard transactions mapped onto Core business processes of Top-3 enterprise areas
- S/4HANA Migration impacts - Fit/Gap
- Custom Code KPI plus market benchmark
- Absolute number of custom code transactions (Z-/Y-/customer namespaces)
- Unlogged Custom Code KPI plus market benchmark
- Absolute number of unlogged custom code transactions (Z-/Y-/customer namespaces)
- Custom Code Usage Frequency KPI plus Table Report with intensively used Custom Code
- Project Savings Calculator
- Trigger and Background Jobs KPI
- Maturity Level of analyzed system

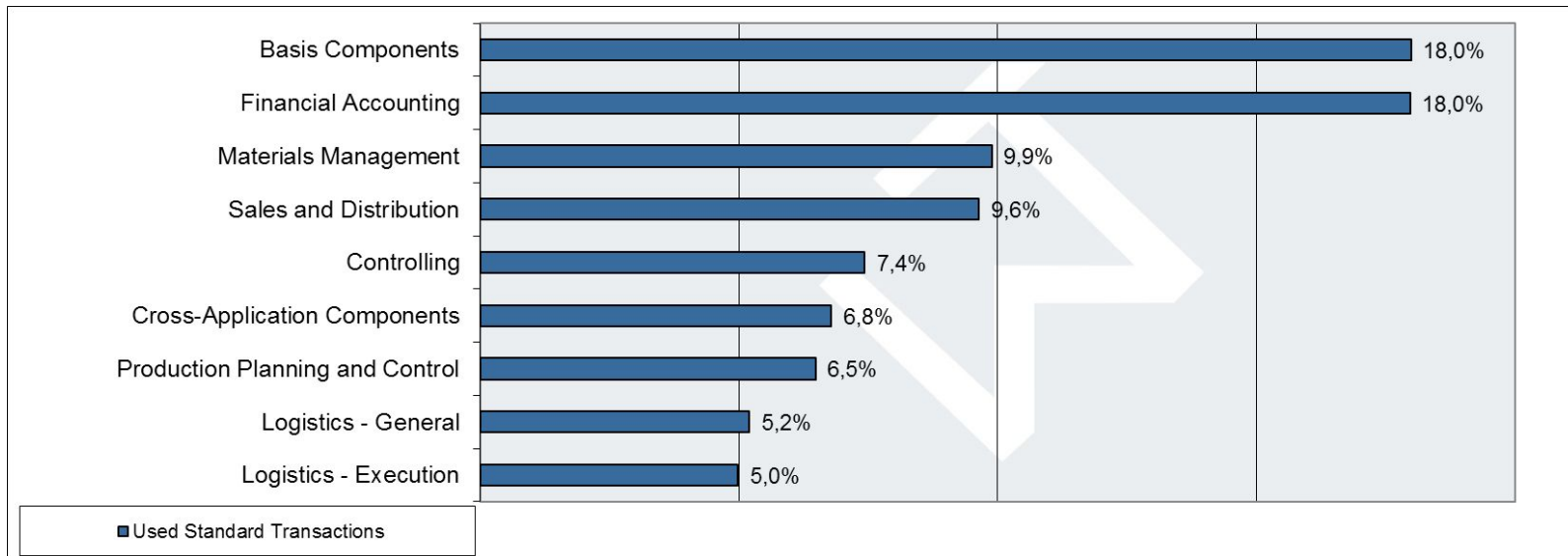
STANDARDIZATION KPI

58,7%, absolute number 3676



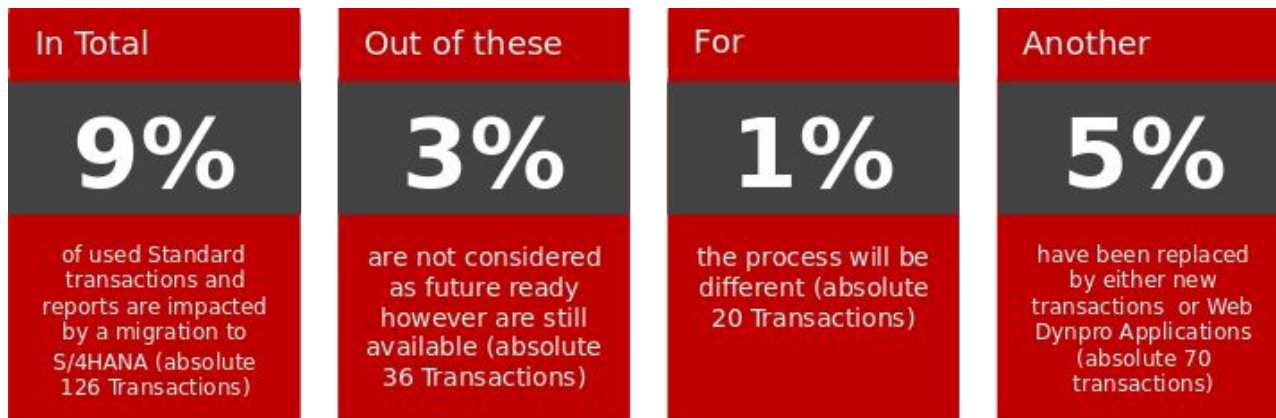
SUPPORTED ENTERPRISE AREAS KPI

Observation: Unusual high use of system/basis components



FIT/GAP ANALYSIS TO S/4HANA

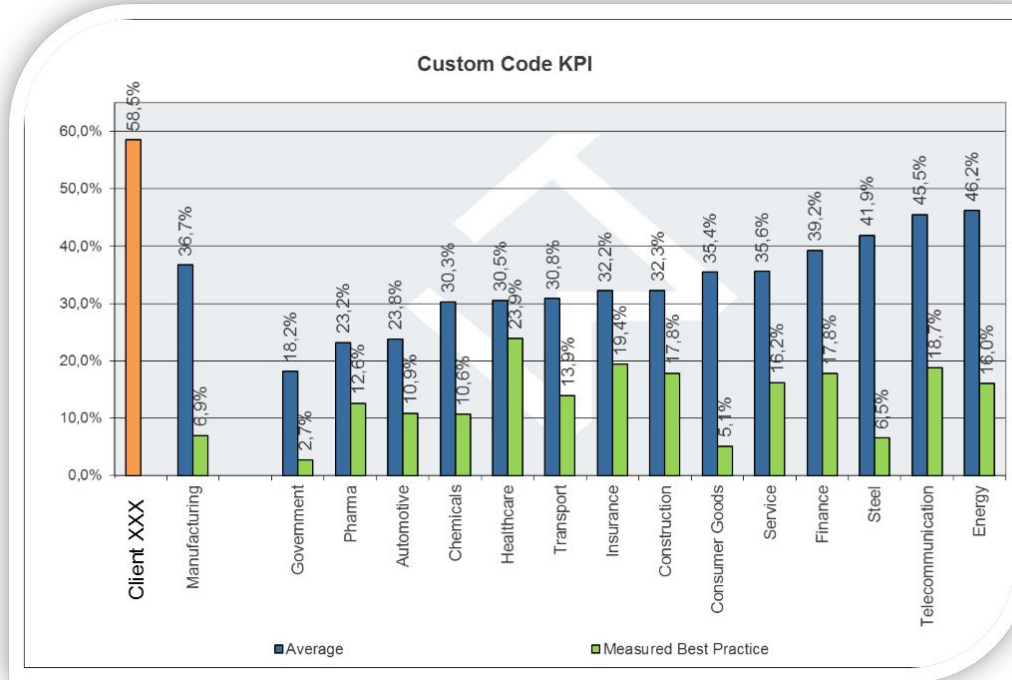
Sample results



Further impacts for custom code can be expected for instance by new tables and function modules.

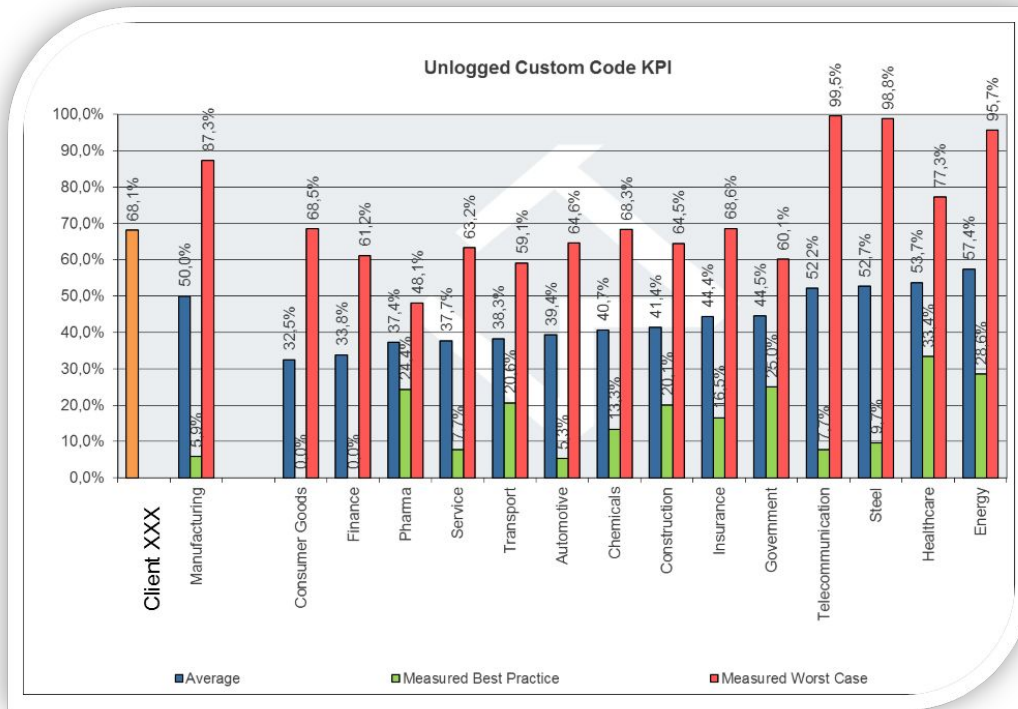
CUSTOM CODE KPI

High above Industry average, absolute number 6.129



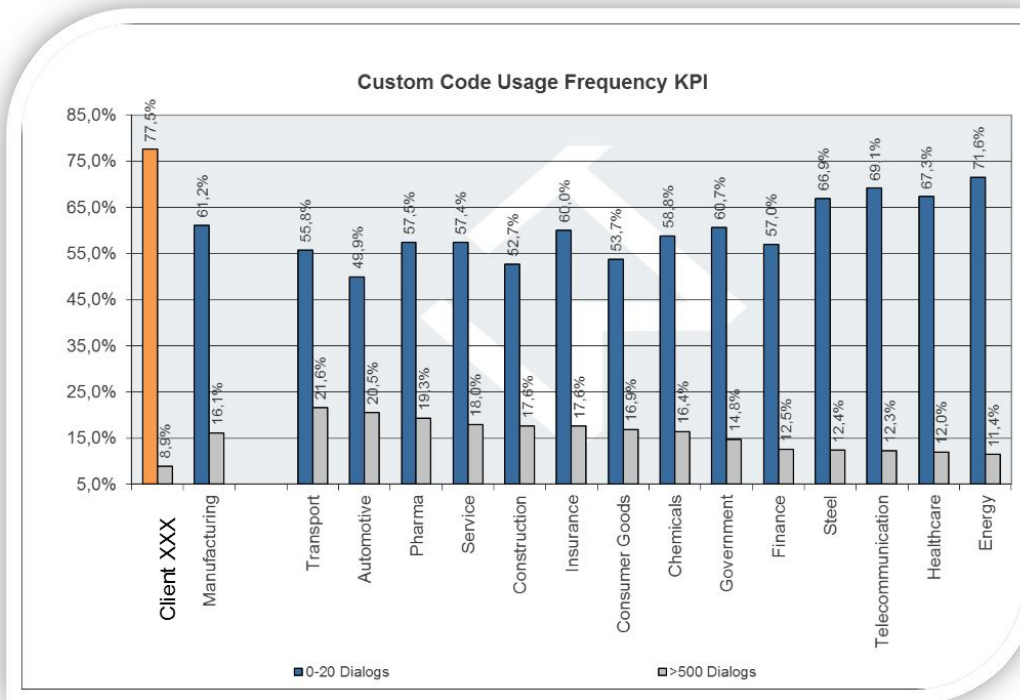
UNLOGGED CUSTOM CODE KPI

Even worse, absolute number 4.174



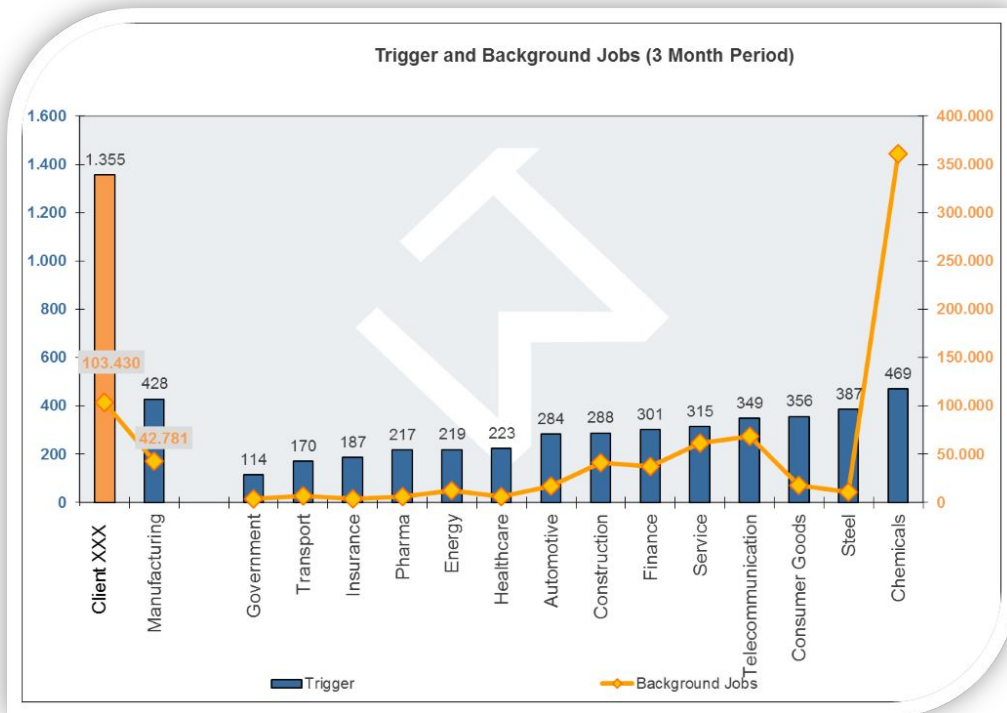
CUSTOM CODE USAGE FREQUENCY

Only 8.9% have been used intensively, absolute number 6.129



TRIGGER & BACKGROUND JOBS KPI

Much more than Industry standard



CUSTOM CODE NON-MIGRATION SAVINGS (SAMPLE DATA)



Dialogs	Number		Sum	No longer needed (Assumption)	
=0	430	unused CC	430	75%	323
<2	35				
<5	38				
<10	26	Rarely used CC	125	50%	63
<20	26				
<50	27				
<100	25				
<200	31				
<500	40				
<900	36				
>=900	214	Intensively used CC	250	20%	50
	928				

Calculator Project Savings

Average Migration Effort per CC (PD): 1

Calculation of Project Savings in Person Days (PD)

435 CC programs no longer needed x 1 PD Effort = 435 PD Effort that could be saved!

CUSTOM CODE/INTERFACES/FIT-GAP EVALUATION (SAMPLE DATA)

This custom code/interface is **adding value, differentiating from our competitors**. It's a business advantage.

SAP Custom code/basis summary:

Basis Components usage: 18%
Total custom code: 928
Intensively used: 250/486 (6/18 month)
Estimated non-migration savings: 435PD
S/4HANA Fit/Gap: 294/83/75/21 affected

We want others to maintain this code. SAP, partner.

We will maintain this code, enhance it, IN HOUSE

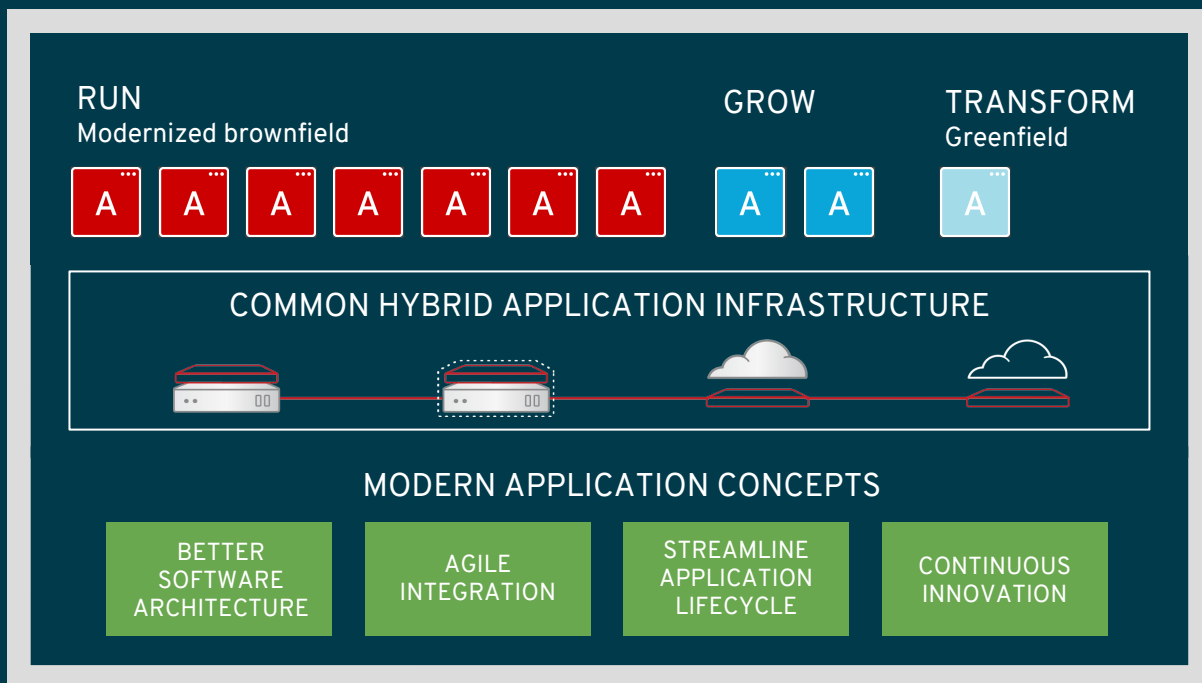
There is no differentiation in this custom code/Interface.

POSSIBLE OPTIONS: CUSTOM CODE/INTERFACES/LEGACY MODERNIZATION & MIGRATION (EXTRACT)

- Interfacing with SAP, Open APIs, Data Hub
- Re-develop & enhance In House or 3rd Party
- Embedded into Application Modernization & Migration methodologies
- New code - container based - inter-operates with SAP HANA & S/4HANA
- Deployment in PaaS (Hybrid-, Multi-Cloud)

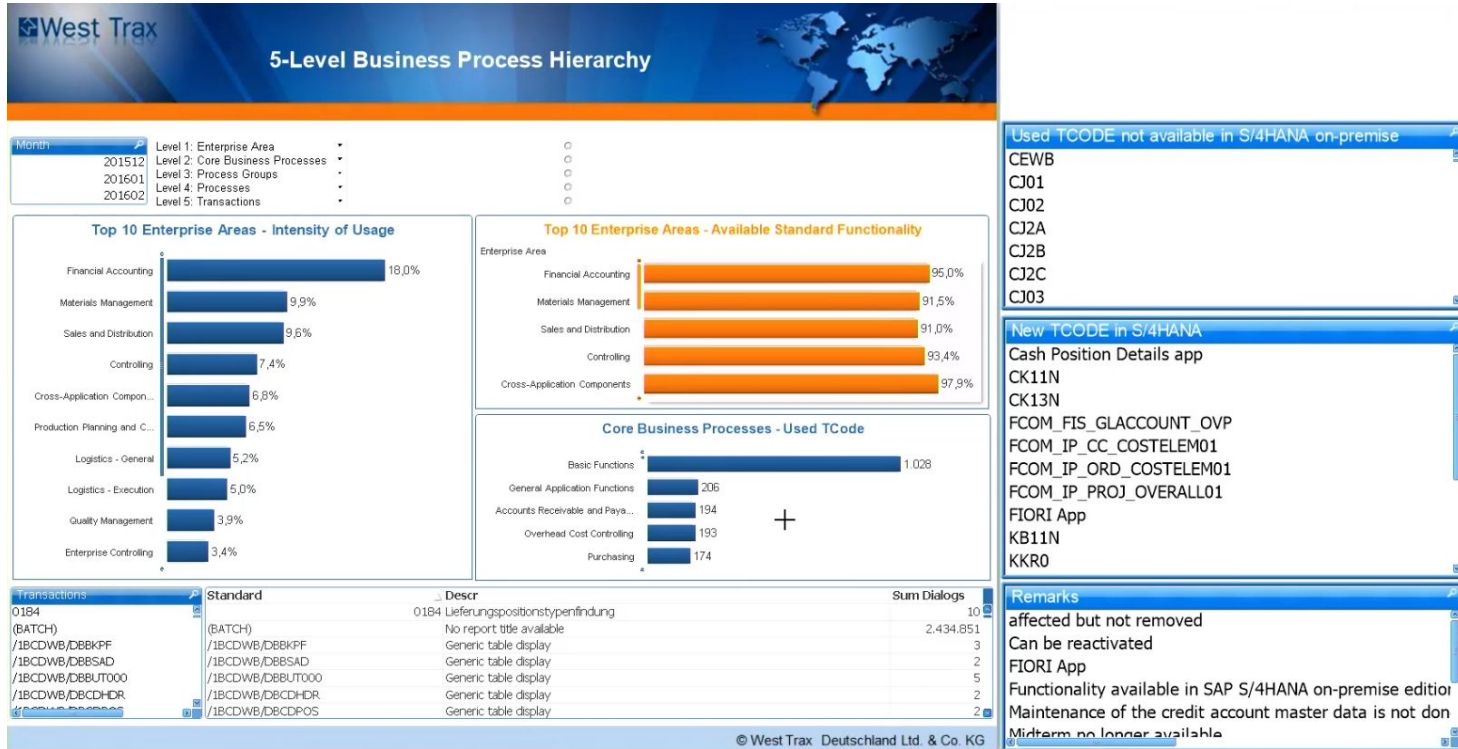
APPLICATION MODERNIZATION

One platform to support needs of today and tomorrow



DATA DRILLDOWN

5 Level insights and relations allow facts based conclusions



BACKGROUND JOB USAGE

Identifies migration & optimisation potential



RED HAT / WEST TRAX FUTURE READINESS ASSESSMENT

FUTURE READINESS ASSESSMENT:

- EUR 25k
- Independent of System size
- Orderable item at Red Hat or Partner/Distribution only
- Collaterals, Templates

OPTIONS:

- Red Hat Consulting assignments
- Red Hat Ready to Innovate Assessment
- IDC Cloud Readiness Assessment
- Joint campaigns
- West Trax Add on assessments



redhat.®

BACKUP SLIDES

CONTENT ASSETS JOINT ASSESSMENT

AUTOMATED, WORKSHOP-FREE SAP HANA & S/4HANA FUTURE READINESS ASSESSMENT

DATA SHEET

KEY BENEFITS

- Quick overview of cost reduction potential, and general system performance
- Support for executives making operational and strategic IT decisions in the next 12 to 18 months
- Benchmarking with systems of similar size provides important additional information on competitiveness of the system
- 1,600 benchmark data in 15 different industries
- No commitment of client resources
- No software installation, no system load
- Map results to modern cloud technology options and architectures
- Leverage container & microservices-based application development
- Accelerate time to market for new services and products
- Benefit from relevant open source innovations based on assessment results

A unique partner and vendor-neutral approach to gain transparency about the actual use in SAP systems and a common understanding between all stakeholders.

Red Hat and the independent analyst and advisor West Trax have developed a customized assessment for SAP customers to offer both analytics and advice on business processes and technologies. The assessment is designed to master the challenge of migrating from a mature SAP landscape to digital excellence.

The joint offering is aimed at all executives planning to prepare their SAP landscape for the introduction of advanced technologies and major life cycle changes in memory, S/4HANA, mobile computing, big data, cloud, real time business, IoT, DevOps, CI/CD, container-based SW development, IT automation and platform choices. The assessment provides an objective determination of the "as-is" situation and clear client actions to be taken to achieve the desired goals and benefits. Subsequent projects can be carried out with a reliable business case based on facts.

METHODOLOGY

The West Trax Future Readiness Assessment is based on a combination of the West Trax KPI Scan® methodology and the award-winning West Trax Maturity Model®. With the KPI Scan® methodology, the actual use of SAP® systems by end users will be transparent, including vulnerabilities existing in the operating and business processes. The data evaluation is conducted offline, no system access is required.

The maturity level of an SAP system is then determined in terms of its future readiness and the likely benefits of investments in new technologies and projects. The West Trax Maturity Model for SAP systems responds to the need to pre-position systems to optimize benefits of new technologies such as HANA and S/4HANA, on-premises and in the cloud. Similarly, benefits will be optimized by pre-positioning for projects and strategies around greenfield/brownfield, business process optimization, digital transformation, modern digital solution and services.



Fig. West Trax Maturity Model® for SAP Systems



facebook.com/redhatinfo
@redhatinfo
linkedin.com/company/redhat

DATA SHEET AUTOMATED, WORKSHOP-FREE SAP HANA & S/4HANA FUTURE READINESS ASSESSMENT

TARGET AUDIENCE

- CEO, CFO, CIO, CDO
- IT architects
- Solutions integrators
- Service providers

PRICING

- Fixed price per package

EFFORT FOR THE CUSTOMER

- 1 hour per system approx.
- Provision of standard tables and reports for guidance
- Completed questionnaire

AVAILABILITY OF RESULTS

- Approximately 12 weeks after receipt of data

DELIVERABLES

- Detailed analysis, executive report, selected use data
- Onsite Strategy Session based on the assessment results

PHASE 1: CONDUCT MATURITY ASSESSMENT – AN INVENTORY AND CLASSIFICATION

The evaluation is based on a process developed by West Trax. Its KPI model has been certified by the German chamber of commerce, IHK Darmstadt. During the inventory, various KPIs are measured and benchmarked against comparable installations within the client's own industry. The resulting metrics are interpreted, the system classified according to its maturity and projects that deliver value will be identified and documented.

PHASE 2: USE ANALYSIS – DETERMINATION OF POTENTIAL AND ACTIONS

The results of the KPIs and the industry benchmarking are integrated in the following areas: costs, productivity, performance and quality. Our unique assessment model highlights weaknesses, and determines the potential for cost reduction and optimization. Based on these results, measures are proposed to help the client migrate from the current situation to the best possible target state. Each action is described in detail and where possible supported by a cost-benefit calculation. This provides the client with a firm basis, on which to examine options and define priorities.

PHASE 3: MAP RESULTS TO IMPLEMENT MODERN CLOUD TECHNOLOGY OPTIONS AND ARCHITECTURES

Determine the details and facts that are necessary to implement the activities defined in phase 2.



facebook.com/redhatinfo
@redhatinfo
linkedin.com/company/redhat

redhat.com

EUROPE, MIDDLE EAST, AND AFRICA
0800 734 2835
redhat.com
europe@redhat.com

TURKEY
0800 4488206-40

ISRAEL
1 800 495 458

UNITED ARAB EMIRATES
800 40 4495 49

RUSSIA
+7 800 552 72 89
+7 800 352 72 89

KAZAKHSTAN
8800 333 7501

UKRAINE
0800 507 076

Copyright © 2018 Red Hat, Inc. Red Hat, Red Hat Enterprise Linux, the Red Hat logo, and other trademarks of Red Hat, Inc., registered in the U.S. and other countries, appear in the registered trademarks of other Red Hat clients, and other trademarks.

IDC Partner Spotlight
Sponsored by: Red Hat

Author:

Philip Carney,
Research Director,
IDC Europe

February 2018



Preparing for Transformation to a Digital Platform in the SAP HANA context with West Trax and Red Hat

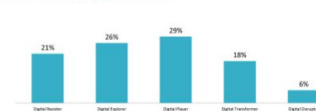
Digital Transformation and the Modernization Mandate

Across industries, IDC is seeing IT dramatically change how organizations run their businesses. As organizations move to exploit the four technology forces of IDC's 3rd Platform (cloud, mobility, Big Data analytics, and social business) — we are now seeing those businesses start to exploit *innovation accelerators* such as the Internet of Things, AI and machine learning, and robotics, to dramatically change their business and operating models. In this way, they can keep up with newborn digital industry challengers and gain competitive advantage to their peers.

This digital transformation, or "DX," of organizations across Europe has become a critical issue of competition and even survival. IDC research reveals that it is a board-level mandate for over 80% of companies, generally CEO-driven. Most organizations involved in a DX journey are defining a road map of initiatives starting with the implementation phases, and prioritizing the ones that will bring more benefits to customers.

But to undertake such a journey is a multidimensional issue. The fact that the majority of organizations are still in the early to medium stages of maturity shows that this is not as simple as buying a technology solution. DX requires organizations to radically rethink how they do business. IDC considers that there are in fact five key dimensions of digital transformation: leadership, workforce, multi-experience, information platform, and operating model. Organizations need to look at progressing in all of these dimensions; assessing where they are, before mapping out where they want to be and how to get there.

FIGURE 1
IDC MaturityScape Benchmark: Digital Transformation in Western Europe — Maturity Distribution Across the Stages



Source: IDC, European Digital Transformation Maturity Model Benchmark, 2017, n=403, May 2017

RED HAT TECHNOLOGIES FOR SAP CUSTOMERS

FIT-TO-STRATEGY TECHNOLOGIES

SAPs Key Offerings

SAP HANA

SAP S/4 HANA

SAP Leonardo

SAP DATA HUB
VISIBILITY | INTEGRATION | SIMPLICITY

Red Hat Value

Making the **Datacenter** efficient

Making **Hybrid IT** simple

Powering the **Intelligent Edge**

Enabling **new business insights** from Big Data

... delivered by

automate manual tasks and speed up deployment and changes. Avoid errors and downtime with predictive analytics

providing hybrid cloud management with governance and policy based control, enabling e.g. self-service functionalities, chargeback, etc.

integrating non-SAP solutions and sources and unlock the value of enterprise data

streamline development, modernization and delivery of SAP extensions with container technology and microservices

Red Hat Offerings

Red Hat Enterprise Linux Insights, Virtualization

Ansible CloudForms

Fuse Decision Mgmt

OpenShift



THE FUTURE OF BIG DATA: SAP VORA 2.0 ON RED HAT OPENSIFT CONTAINER PLATFORM

PARTNER TECHNOLOGY BRIEF



SAP Vora 2.0 running in
Kubernetes clusters on
Red Hat OpenShift Container
Platform empowers companies
to orchestrate data of any
volume, velocity, and variety.

Red Hat OpenShift Container

INTRODUCTION

Kubernetes is the leading open source container orchestration framework. Its support for rapid innovation, broad use cases, and ease of use have resulted in significant community activity and market adoption by governments, cloud providers, and other enterprises and vendors.

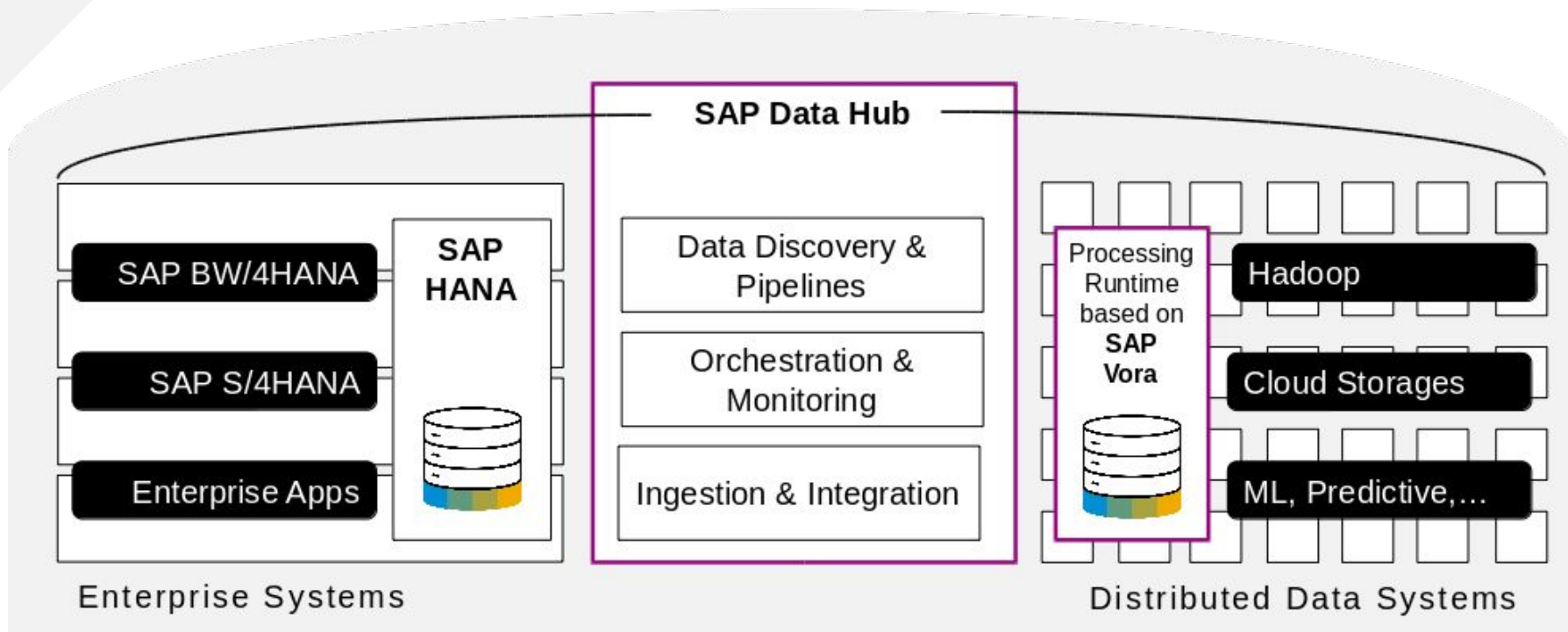
Together, Red Hat and SAP have developed an integrated solution for Kubernetes. SAP® Vora is an in-memory, distributed computing solution that provides actionable business insights from big data. Red Hat® OpenShift Container Platform delivers an enterprise Kubernetes environment for deploying and managing container-based workloads in production.

Running in Kubernetes clusters on Red Hat OpenShift Container Platform, SAP Vora 2.0 empowers companies to orchestrate data of any volume, velocity, and variety. As a result, companies can progress toward an integrated big data landscape founded on an enterprise hub for all types of data—including streaming, Apache Hadoop, transactional, Internet of Things (IoT), and location data.



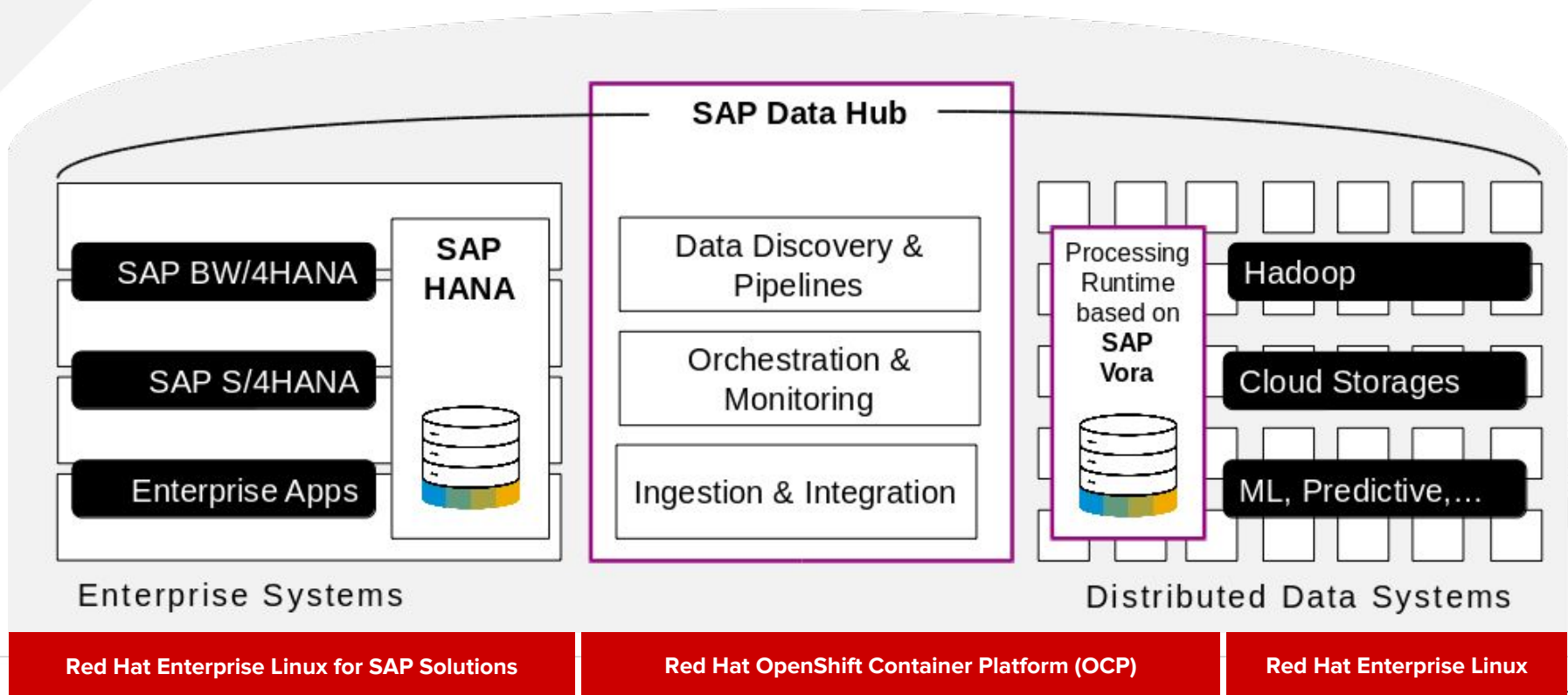
SAP Data Hub

Unifying Data Silos

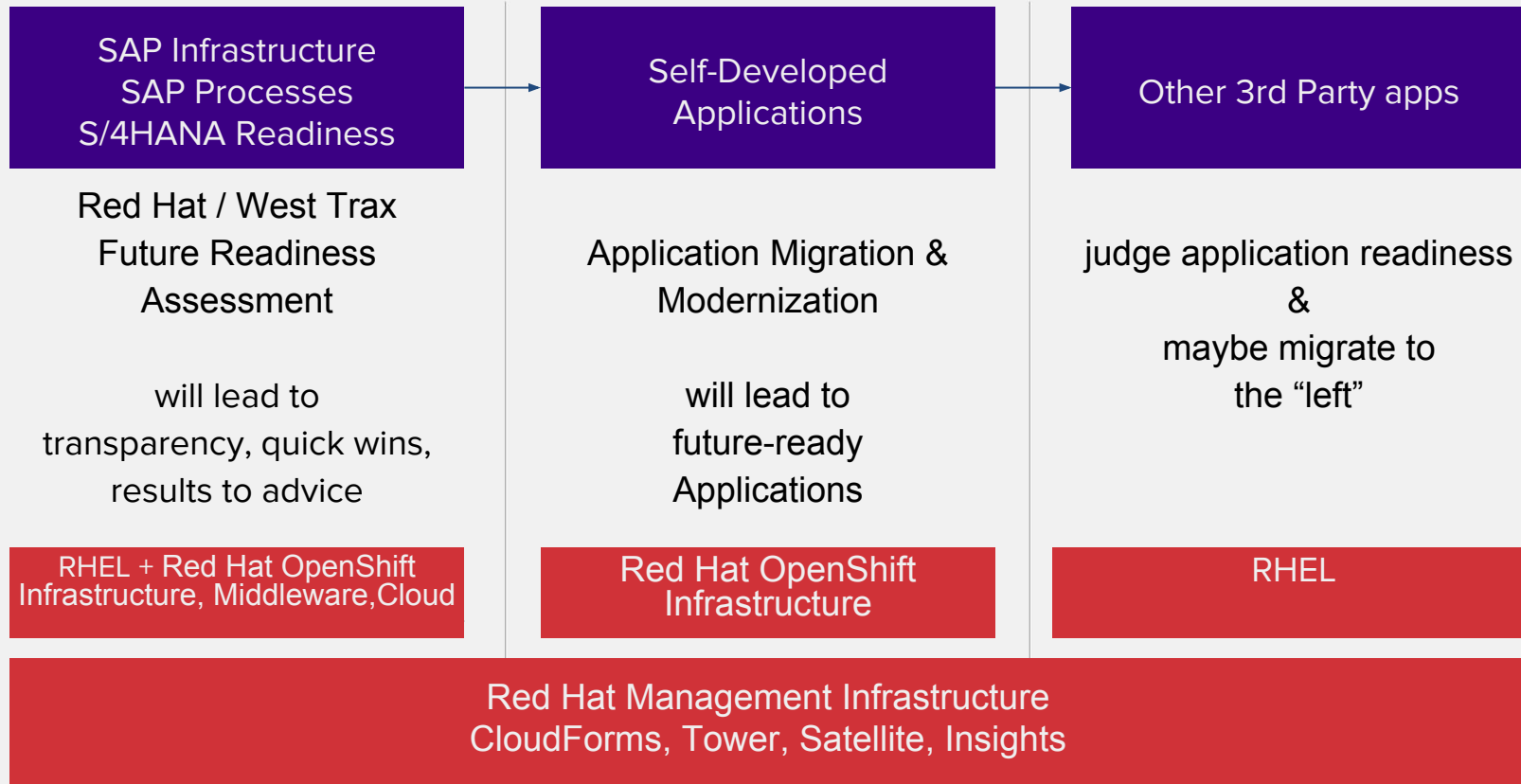


SAP Data Hub

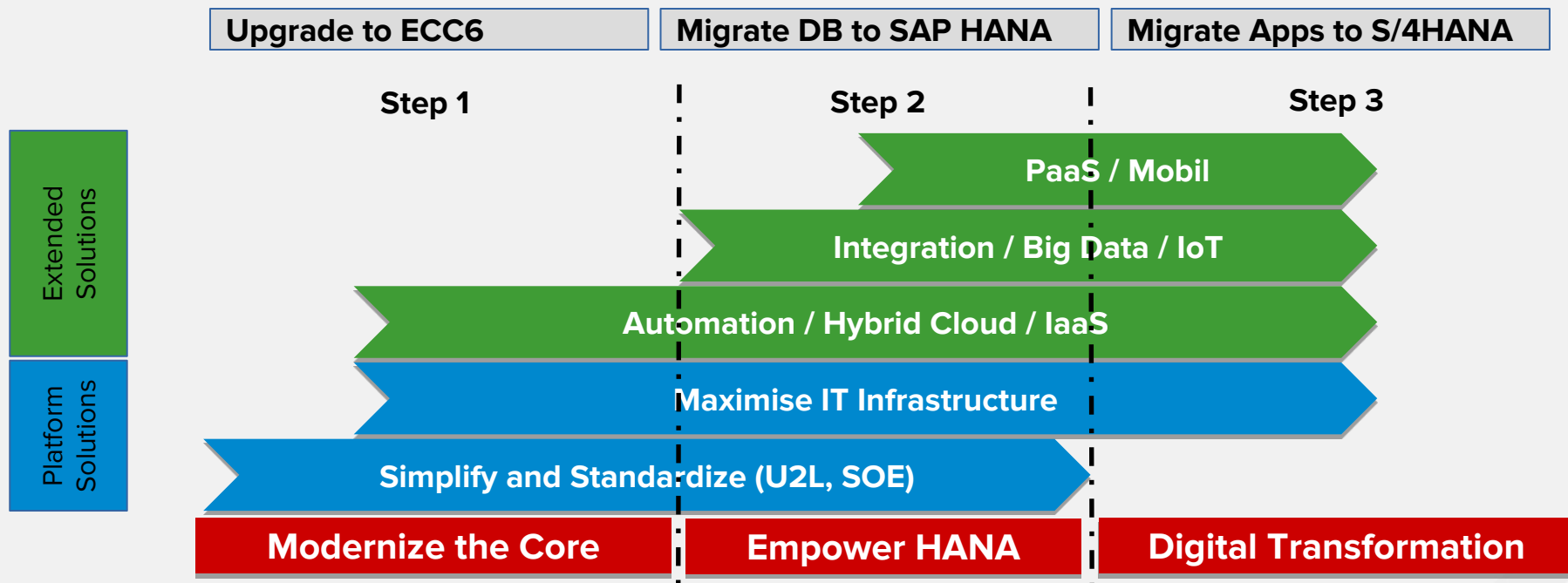
Unifying Data Silos



Road to Digital Excellence for SAP customers



SAP customer journey to S/4 HANA



Automation

RED HAT MANAGEMENT

RED HAT
SATELLITE



RED HAT
CLOUDFORMS



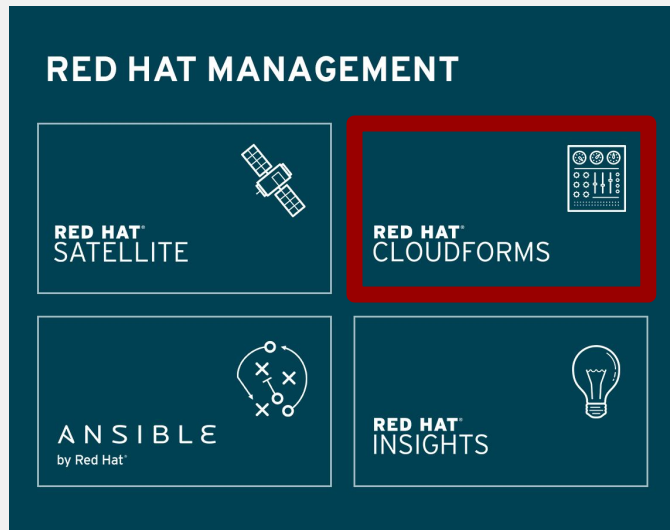
ANSIBLE
by Red Hat



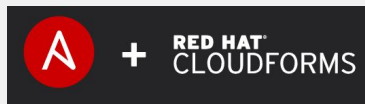
RED HAT
INSIGHTS



Automation



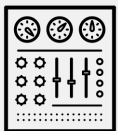
- Create a self-service catalog of standard SAP operations
- Automatically deploy workloads on-premise and in the cloud
- Seamless mgmt. of on-premise and cloud
- Migrate workload between on-premise / cloud
- DR scenarios from on-premise to Cloud



- deploy IT services across clouds, enabling users to automate a wide range of policies and processes with no coding or scripting required.

Use Case: Self-Service

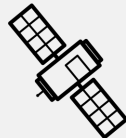
How CloudForms ties self-service, system deployment, and configuration together



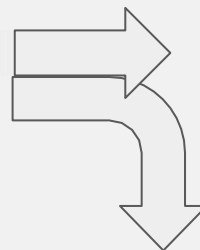
Order a service in the CloudForms self-service portal



Deploy four instances in the cloud



Pass control to Satellite for OS configuration, errata



Automatically deploy Insights client



Pass control to Ansible Tower for application deployment



CloudForms monitors progress and informs user when complete

Cloud Forms references



We saved almost 10 years of time and almost \$5 million in soft savings.

Jason Cornell, Manager of Cloud and Infrastructure Automation, COX AUTOMOTIVE



Our internal experts were spending too much time managing inefficient processes. We needed a solution that would help us standardize and automate these processes so we could reduce our time to market for new applications.

Don O'Connor, Managing Director, Technology Operations, Union bank

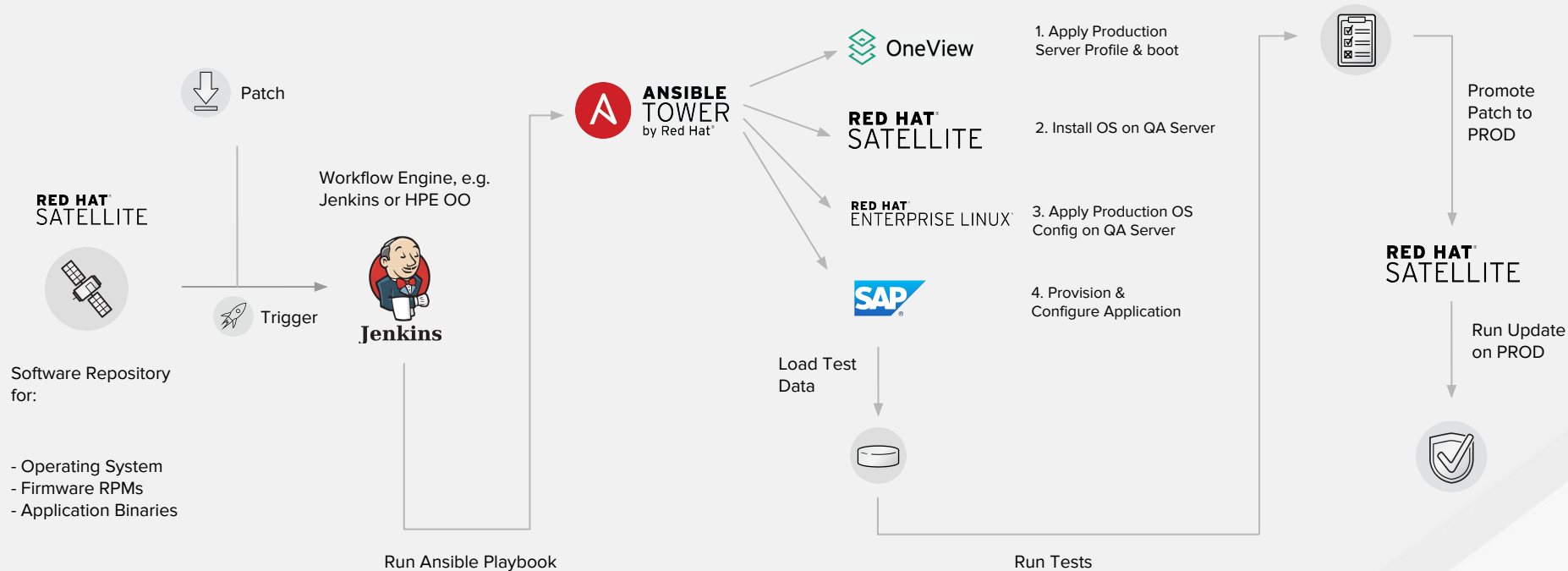
Automation



Ansible modules provided by HPE, Cisco, ... example playbooks as open-source

- Automated system provisioning using configuration management
- Set up a SAP (HANA) instance including best practices and tuning within less than 10 min.
- Orchestration enables faster deployment of changes into the production landscape.
- CI/CD and SOE for SAP HANA Infrastructure enables regular security updates in production environment, identical staging / production environments, replace of manual DR strategies
- Bare-Metal-as-a-Service
- Ansible Kick Starter: reduce implementation time e.g. for 6 node HANA scale-out environment from 7 to 3 days

Use Case: reduce risk of patching SAP landscapes



Ansible references



Allegiant Air improves self-service, efficiency, and management

Ansible Tower by Red Hat helps the travel company's in-house developers and engineers standardize on a common framework with consistent delivery, saving time managing systems and helping their DevOps initiative succeed.



FatMap reduces complexity, automates provisioning and business processes

The mapping company uses Ansible to automate high-resolution, 3D map-building, and processing service flows, and abstract away a highly mixed network environment. Because of this, the time spent provisioning machines and managing processes has gone from hours to minutes.



JCrew fully automates website deployment

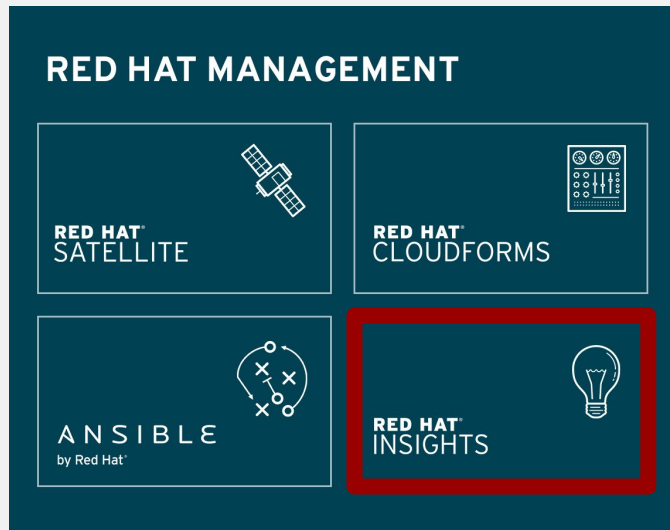
The clothing company simplified web deployment through automation. Moving from manual processes to a fully automated Ansible process changed the company's IT culture.



Amelco delivers continuously and quickly with self-service and orchestration

The trades-processing software company's financial and betting clients require many Linux®-based virtual environments. With Ansible, even these wildly different requirements can be automated and orchestrated with repeatable, reusable plays and Playbooks. This lets Amelco manage it all, more easily.

Automation



- In-depth analysis of the SAP infrastructure enables proactive management
- Mitigate risk / ensure compliance (e.g. configuration drifts)
- Increase stability and performance



- Automate IT remediation of critical issues through Ansible Playbooks
- also on RHEL instances deployed on AWS or Azure

Red Hat Insights - SAP Rules

The screenshot shows the Red Hat Insights web interface. At the top, there are navigation links: SUBSCRIPTIONEN, DOWNLOADS, and SUPPORT-TICKETS. The user is logged in as Markus Koch. The main section displays the host details for **hostname: mkoch131.coe.muc.redhat.com** with a UUID of 553ba3cbe899ec46810e3fdee4dbe7a2. Below this, there are two tables showing system information:

OS	RHEL Server release 7.2 (Maipo)
Hardware Platform	Unknown
BIOS Version	SeaBIOS 1.9.1-5.el7_3.2

BIOS Release Date	04/01/2014
Registration Date	21日前
Last Check-in	10時間前

Below the tables, there is a section titled "Expand All" with a dropdown arrow. It lists three findings:

- Performance > Decreased SAP application performance when using incorrect kernel parameters**
- Performance > Decreased application performance when not running sap-netweaver tuned profile with SAP applications**
- Security > Kernel key management subsystem vulnerable to local privilege escalation (CVE-2016-0728)**

Each finding has a summary bar showing Impact, Likelihood, and Total Risk, each represented by a yellow bar with a red dot.

- early notifications of minimum releases of certain packages
- check of correct kernel parameters
- new findings in SAP development will automatically be messaged

➡ higher stability, security and manageability of Red Hat based SAP landscapes

<https://access.redhat.com/blogs/2184921/posts/2849871>

Insights reference



“As a global leader in healthcare information technology, greater security and infrastructure intelligence are main priorities for us. Red Hat Insights enables us to be alerted to potential vulnerabilities across our active systems and provide remediation more quickly. The technology helps us prioritize risk resolution in our infrastructure”

Tim Erdel, Senior Director, Cerner Works technology improvement, Cerner

Automation



- Manage SAP System Lifecycle across Test/Dev, QA and Prod from a single UI
- Granular, consistent patching of dozens of systems with a single click

Unlock the value in enterprise data

... by integration into SAP HANA

Any Source

SAP Business Suite

Non SAP Data Sources

Cloud Sources

Network Devices

Complex Event
Data Sources

Data Sources
(HANA, Hadoop, Teradata, ...)

Integration Solutions

OpenShift

JBoss

- Fuse
- BRMS
- BPM
- Data Virtualization

Move, Transform, and Persist Data

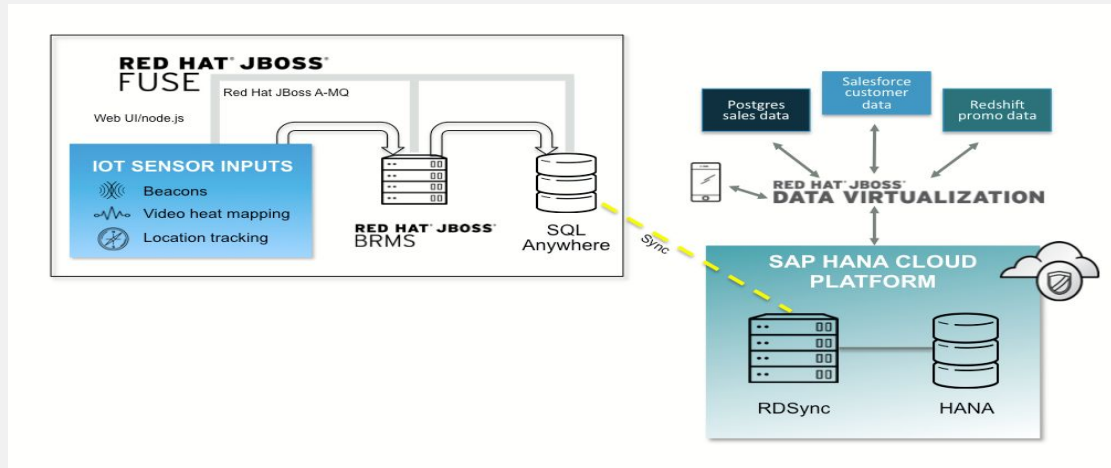
SAP HANA

Tables

Virtual Tables

Report on Data

IoT solution built with SAP



Red Hat JBoss Fuse 6.3

SAP® Certified
Integration with SAP NetWeaver®

**Certification
Date**

3 Nov 2016

Joint SAP and Red Hat Retail use case

- that takes in data from various in-store collection points
- uses it to trigger instant rules-based interactions with digital signage, customer mobile devices, kiosk interactions, or point-of-sale cross-sell or loyalty offers.
- at the same time, that in-store real-time data is being integrated with operational systems for deeper analysis that will drive long-term process improvements.
- JDV exposes data to a native Android app to alert the customer regarding e.g. current promotions

<https://www.redhat.com/en/about/videos/iot-and-big-data-red-hat-jboss-middleware-and-sap-hana>

Accelerate innovation

... delivered by PaaS

Status:

- more than 45% of applications in SAP Systems are custom code.
- ca. 70% of this code is old and not state of the art -> slowing down the digital transf.
- customers want to accelerate application delivery



- streamline application development and delivery
- easily manage applications across their lifecycle and across any environment
- harness the power of a web-scale microservices architecture
- eliminate silos while keeping operational cost down

OpenShift references



Deutsche Bank

<https://www.youtube.com/watch?v=SPRUJ5Z-Aew>



<https://www.youtube.com/watch?v=iJ7Ub87JkuE&list=PLEGSLwUsxfEh4TE2GDU4oygCB-tmShkSn&index=9>

aMADEUS

Innovation is what removes barriers and opens new horizons. The solution that we have built with Amadeus Cloud Services, using Red Hat OpenShift Container Platform, is an extremely good example of how innovation changes the game.

Olaf Schnapauff, CTO, Global Operations, AMADEUS



MACQUARIE

“Red Hat technology has helped us to work in a more efficient way, with speed and agility as the biggest outcomes. By continually using the platform, we expect huge benefits over the coming months and years. We're just at the beginning of the journey.”

Luis Uguina, Chief Digital Officer, Macquarie's Banking and Financial Services Group

How SAP and Red Hat deliver better business outcomes

Your next project

1

Making HANA the digital core



2

Unleashing the value of your enterprise data



3

Gaining insights from a universe of connected devices



4

Managing hybrid IT.
Your choice of where to deploy.

Business Outcomes

- Fastest Time to Value:
 - Speed-up deployments
 - Achieve your SLAs: avoid errors and down-time, reduce TCO
 - Increase flexibility: provide hybrid cloud and self-service
- Unleash the value in enterprise data:
 - Integration between SAP and non-SAP solutions and sources: *make HANA the digital core*
 - *Unleash the value in your enterprise data*
- Accelerate Innovation:
 - Deliver faster with containers and micro services, streamline development, including extensions of SAP
 - faster access to infrastructure resources, hybrid cloud and self-service functionalities