Die Wichtigkeit vertrauenswürdiger Daten für die intelligente Unternehmenssteuerung

Christian Hecker

Chief Data & Analytics Officer
Intelligent Data & Analytics, SAP SE

THE BEST RUN SAP

"If you **can't measure** it, **you can't manage** it."

(Peter Drucker)

VS.

"The *important stuff* can't be measured!"

(Liz Ryan)

Trusted Data

How ID&A Contributes to the Intelligent Enterprise

ONE DATA PLATFORM
powered by SAP´s Business Technology Platform

**Data Management /
Trusted Data**

**Smart Insights &
real-time steering**

**Intelligent Data
& Analytics**

**Common Digital
Language**

**Fuel Business
Processes end-to-end**

Intelligent Data & Analytics
ONE DATA PLATFORM
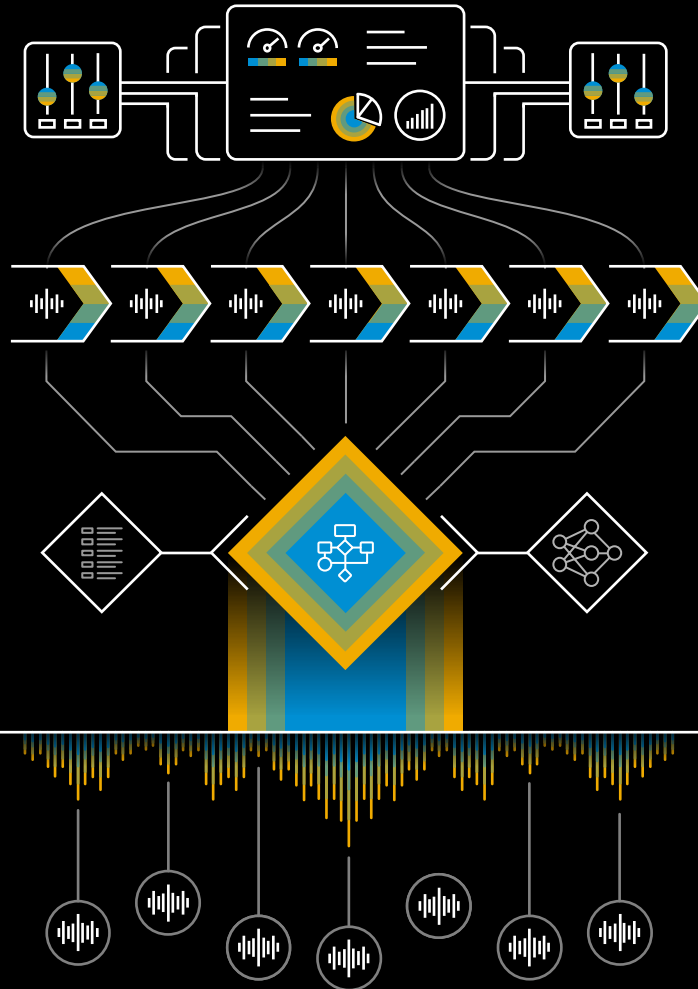*Powered by SAP Business Technology Platform*

Consumption Layer

Data Value Chain

Semantic Layer

Data integration Layer

Data Sources

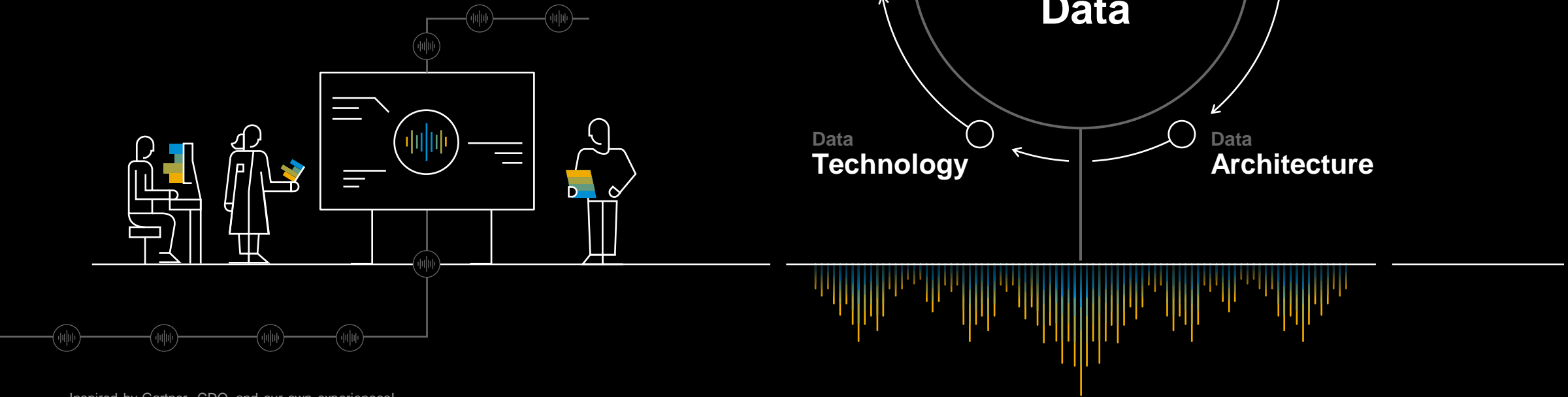Smart Insights &
real-time steering

Fuel Business
Processes end-to-end

Common Digital Language

Data Management /
Trusted Data

Trusted Data: How to ensure worry-free data?
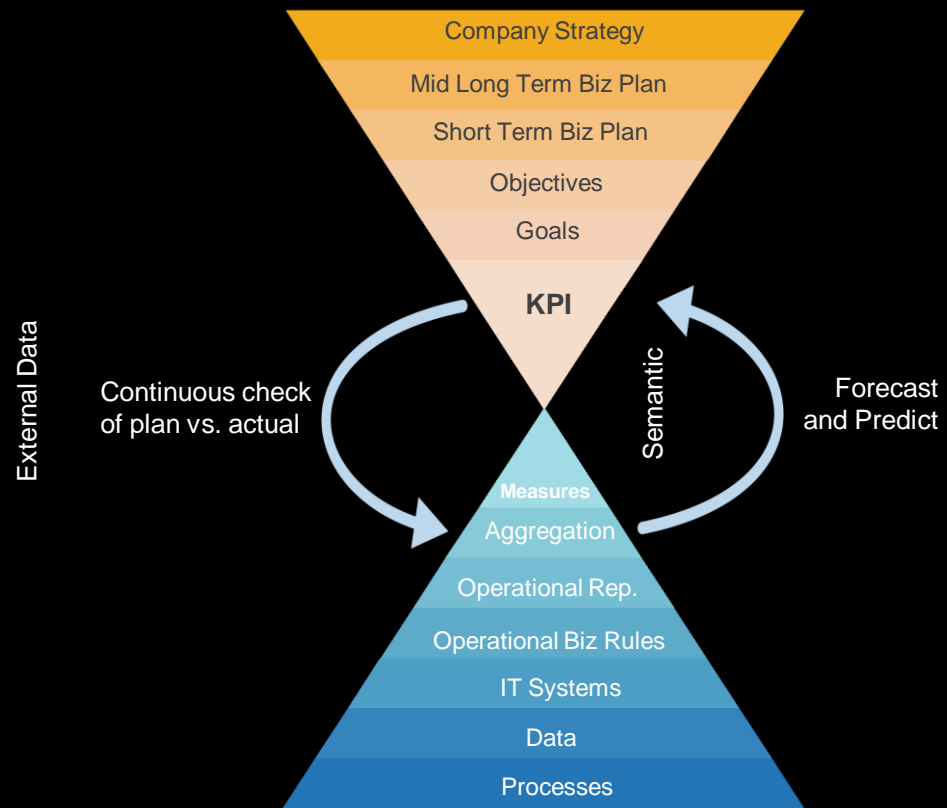
Disciplinary and **Collaboration** perspective

Data **Insights**

Data **Strategy**

Data **Operations**

Trusted Enterprise Data

Data **Governance**

Data **Technology**

Data **Architecture**

Semantic Layer: The need for a Common Digital Language

What Is Needed …
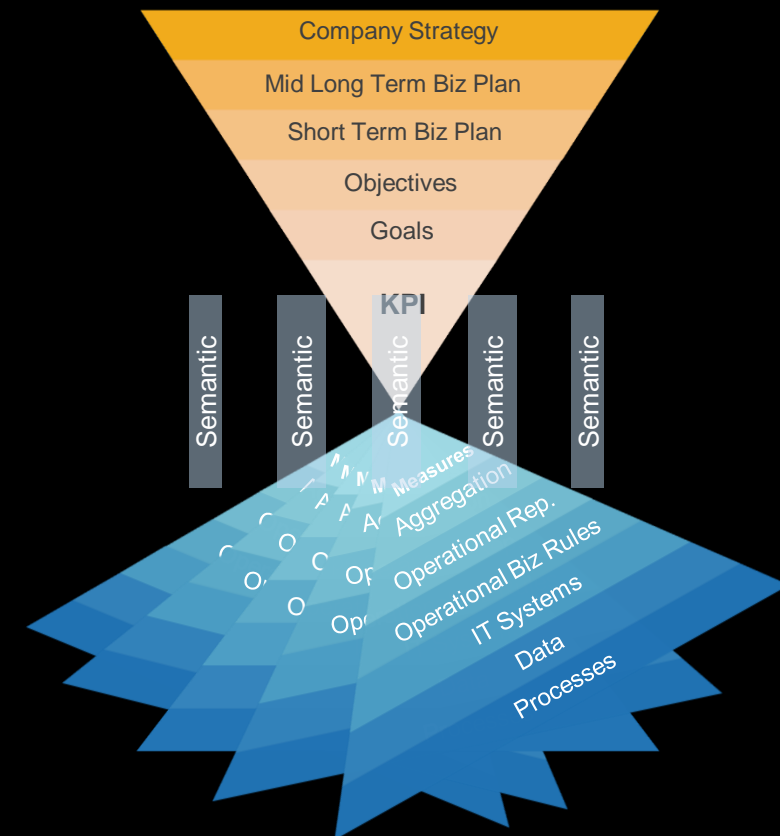
Company Strategy
Mid Long Term Biz Plan
Short Term Biz Plan
Objectives
Goals
KPI

External Data

Continuous check
of plan vs. actual

Semantic

Forecast
and Predict

External Data

Measures
Aggregation
Operational Rep.
Operational Biz Rules
IT Systems
Data
Processes

…vs. Usual Reality

Company Strategy
Mid Long Term Biz Plan
Short Term Biz Plan
Objectives
Goals
KPI

Semantic
Semantic
Semantic
Semantic
Semantic

Measures
Aggregation
Operational Rep.
Operational Biz Rules
IT Systems
Data
Processes

Intelligent Data & Analytics
ONE DATA PLATFORM
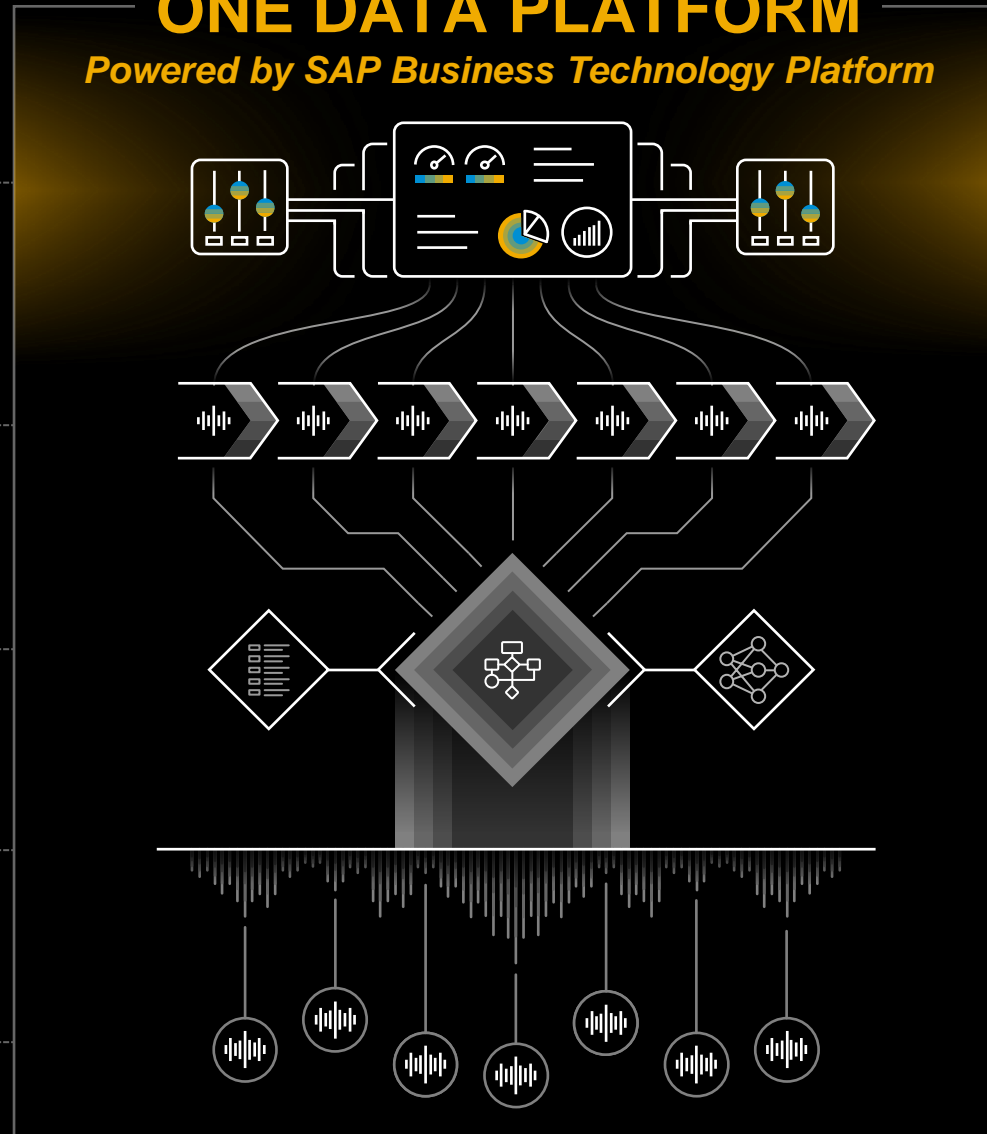*Powered by SAP Business Technology Platform*

Consumption Layer

Data Value Chain

Semantic Layer

Data integration Layer

Data Sources

**Smart Insights &
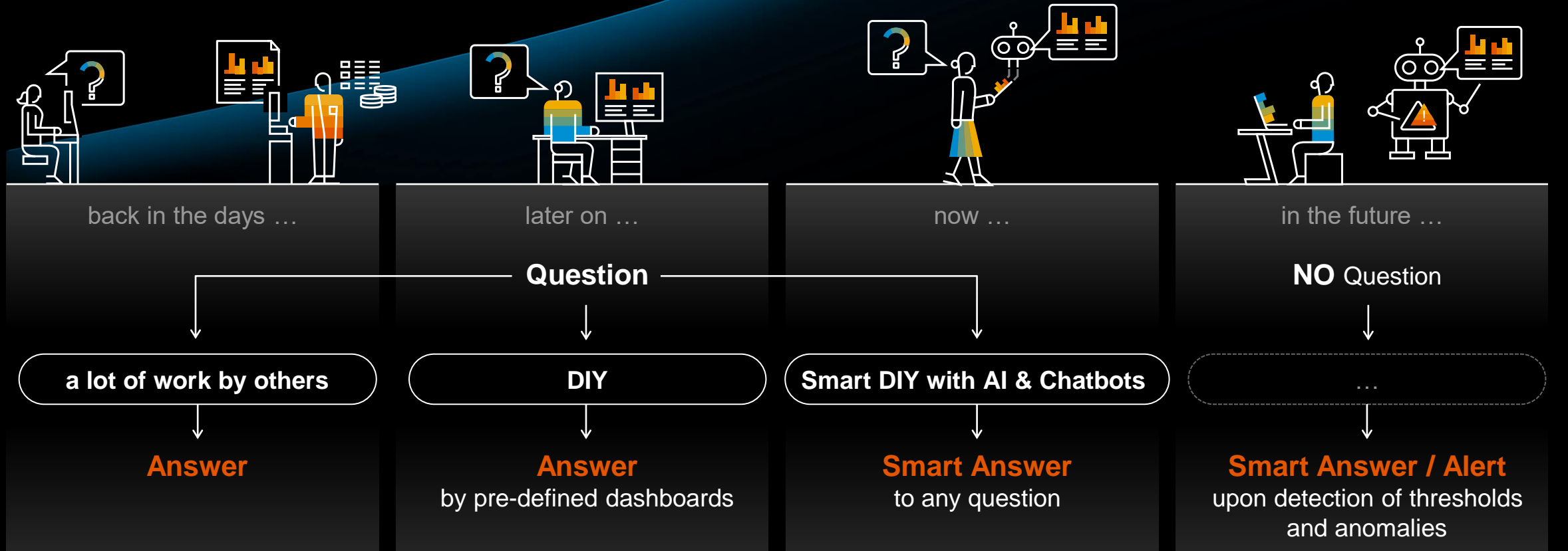real-time steering**

Fuel Business
Processes end-to-end

Common Digital Language

Data Management /
Trusted Data

Demo: Digital Boardroom

Consumption Layer: Evolution of Data Consumption

Level of
Intelligence & Automation

back in the days …	later on …	now …	in the future …

Question — **NO** Question

a lot of work by others	**DIY**	**Smart DIY with AI & Chatbots**	…

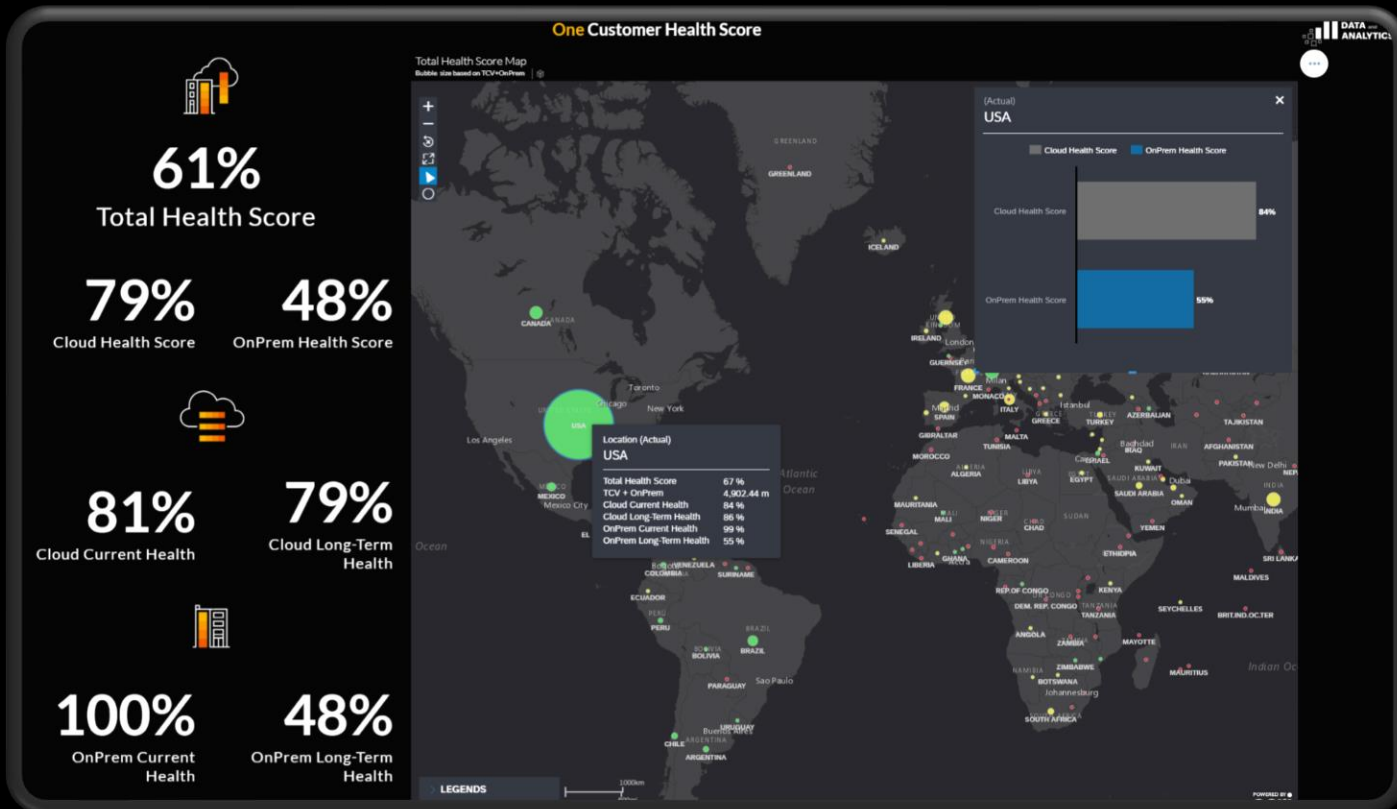| **Answer**	**Answer** by pre-defined dashboards	**Smart Answer** to any question	**Smart Answer / Alert** upon detection of thresholds and anomalies

AI Going Nuts!

Infused Intelligence

Customer Health Scoring for Concur
Churn

Predictive model scope

Prediction of health per LoB and aggregated health score to One Customer Health Score.

Reasons contributing to the current health score and derived actionables.
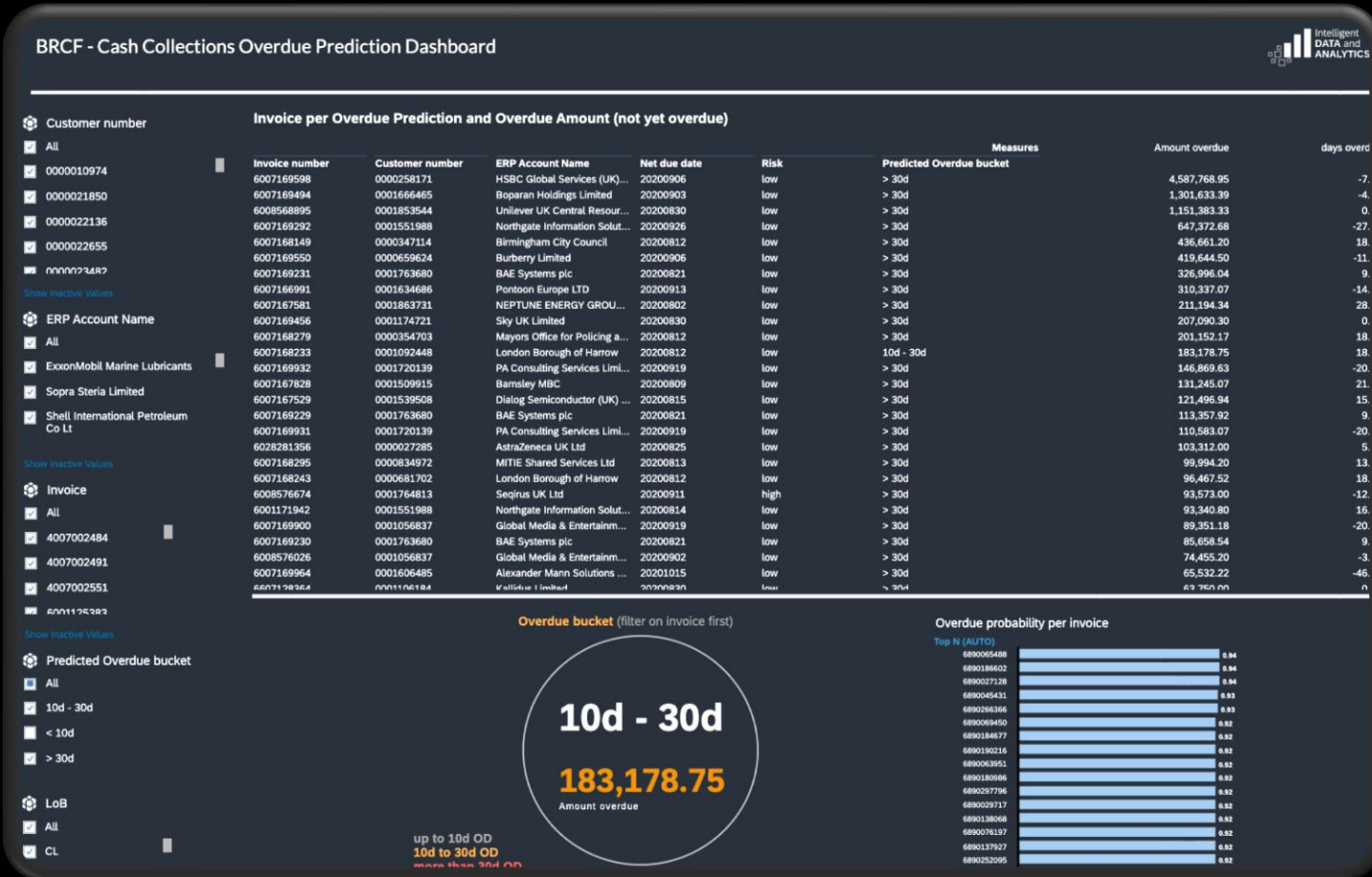
Technical workflow

BW + EDW → ADLS+ ADB → BW + EDW → SAC Dashboard

KPIs

> 85% accuracy & 3 times more churn correctly identified on live data

Overdue Predictive Model
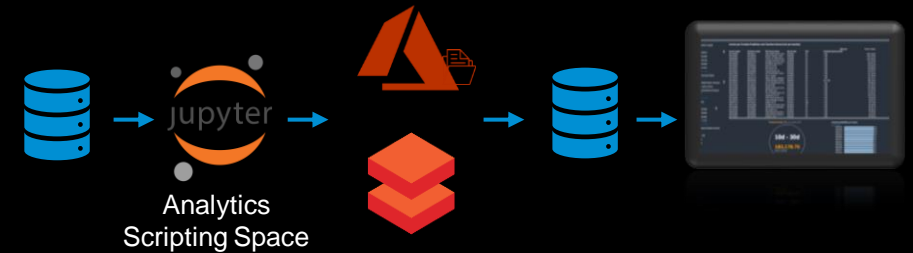## Cash Collections

Predictive model scope

Prediction of likelihood that customer will become overdue

Categorize customer in an overdue bucket before it will happen assigned to a certain risk on historical SAP data
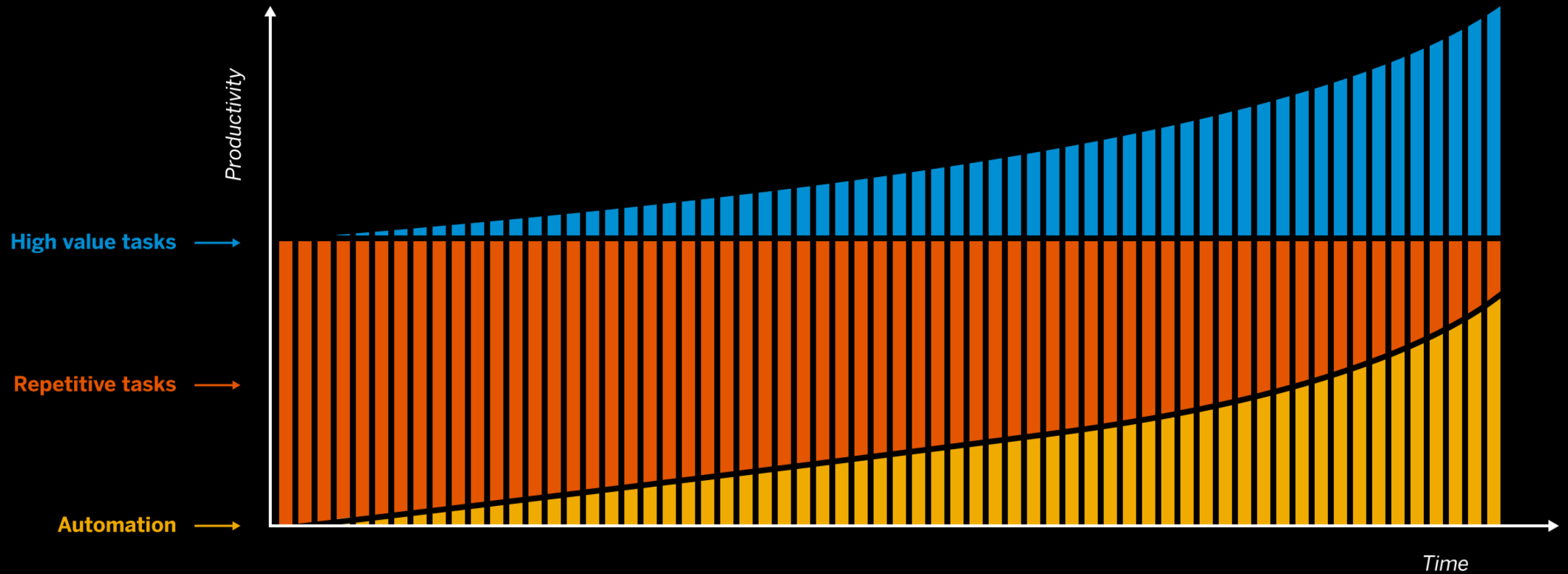
Technical workflow

Analytics Scripting Space

KPIs

83% accuracy & Increase cash flow by potentially up to 1 billion € worldwide

BRCF - Cash Collections Overdue Prediction Dashboard

Intelligent DATA and ANALYTICS

Customer number
- All
- 0000010974
- 0000021850
- 0000022136
- 0000022655
- 0000023482

Show Inactive Values

ERP Account Name
- All
- ExxonMobil Marine Lubricants
- Sopra Steria Limited
- Shell International Petroleum Co Lt

Show Inactive Values

Invoice
- All
- 4007002484
- 4007002491
- 4007002551
- 4001125383

Show Inactive Values

Predicted Overdue bucket
- All
- 10d - 30d
- < 10d
- > 30d

LoB
- All
- CL

Invoice per Overdue Prediction and Overdue Amount (not yet overdue)

Invoice number	Customer number	ERP Account Name	Net due date	Risk	Predicted Overdue bucket	Amount overdue	days overd
6007169598	0000258171	HSBC Global Services (UK)...	20200906	low	> 30d	4,587,768.95	-7.
6007169494	0001666465	Boparan Holdings Limited	20200903	low	> 30d	1,301,633.39	-4.
6008568895	0001853544	Unilever UK Central Resour...	20200830	low	> 30d	1,151,383.33	0.
6007169292	0001551988	Northgate Information Solut...	20200926	low	> 30d	647,372.68	-27.
6007168149	0000347114	Birmingham City Council	20200812	low	> 30d	436,661.20	18.
6007169550	0000659624	Burberry Limited	20200906	low	> 30d	419,644.50	-11.
6007169231	0001763680	BAE Systems plc	20200821	low	> 30d	326,996.04	9.
6007166991	0001634686	Pontoon Europe LTD	20200913	low	> 30d	310,337.07	-14.
6007167581	0001863731	NEPTUNE ENERGY GROU...	20200802	low	> 30d	211,194.34	28.
6007169456	0001174721	Sky UK Limited	20200830	low	> 30d	207,090.30	0.
6007168279	0000354703	Mayors Office for Policing a...	20200812	low	> 30d	201,152.17	18.
6007168233	0001092448	London Borough of Harrow	20200812	low	10d - 30d	183,178.75	18.
6007169932	0001720139	PA Consulting Services Limi...	20200919	low	> 30d	146,869.63	-20.
6007167828	0001509915	Barnsley MBC	20200809	low	> 30d	131,245.07	21.
6007167529	0001539508	Dialog Semiconductor (UK) ...	20200815	low	> 30d	121,496.94	15.
6007169229	0001763680	BAE Systems plc	20200821	low	> 30d	113,357.92	9.
6007169931	0001720139	PA Consulting Services Limi...	20200919	low	> 30d	110,583.07	-20.
6028281356	0000027285	AstraZeneca UK Ltd	20200825	low	> 30d	103,312.00	5.
6007168295	0000834972	MITIE Shared Services Ltd	20200813	low	> 30d	99,994.20	13.
6007168243	0000681702	London Borough of Harrow	20200812	low	> 30d	96,467.52	18.
6008576674	0001764813	Seqirus UK Ltd	20200813	high	> 30d	93,573.00	-12.
6001171942	0001551988	Northgate Information Solut...	20200814	low	> 30d	93,340.80	16.
6007169900	0001056837	Global Media & Entertainm...	20200919	low	> 30d	89,351.18	-20.
6007169230	0001763680	BAE Systems plc	20200821	low	> 30d	85,658.54	9.
6008576026	0001056837	Global Media & Entertainm...	20200902	low	> 30d	74,455.20	-3.
6007169964	0001606485	Alexander Mann Solutions ...	20201015	low	> 30d	65,532.22	-46.
6007128264	0001106184	Kallidus Limited	20200830	low	> 30d	63,750.00	0.

Measures / **Amount overdue**

Overdue bucket (filter on invoice first)

10d - 30d
183,178.75
Amount overdue

up to 10d OD
10d to 30d OD
more than 30d OD

Overdue probability per invoice

Top N (AUTO)

Invoice	Probability
6890065488	0.94
6890186602	0.94
6890027128	0.94
6890045431	0.93
6890266366	0.93
6890069450	0.92
6890184677	0.92
6890190216	0.92
6890063951	0.92
6890180986	0.92
6890297796	0.92
6890029717	0.92
6890138068	0.92
6890076197	0.92
6890137927	0.92
6890252095	0.92

Robotic Process Automation

Why Automation?

High value tasks

Repetitive tasks

Automation

Productivity

Time

Customer Account Address Update
Before Process

Change Request filled by End User
via EDX Service Catalog

Ticket

CRM

Dun &
Bradstreet

Various websites

Front-End

Back-End

Customer Account Address Update
Business Benefits

Experience
65% less steps to complete
a change request

Data Quality
Ensuring address
data accuracy

Efficiency
~6.000 hours saved per year
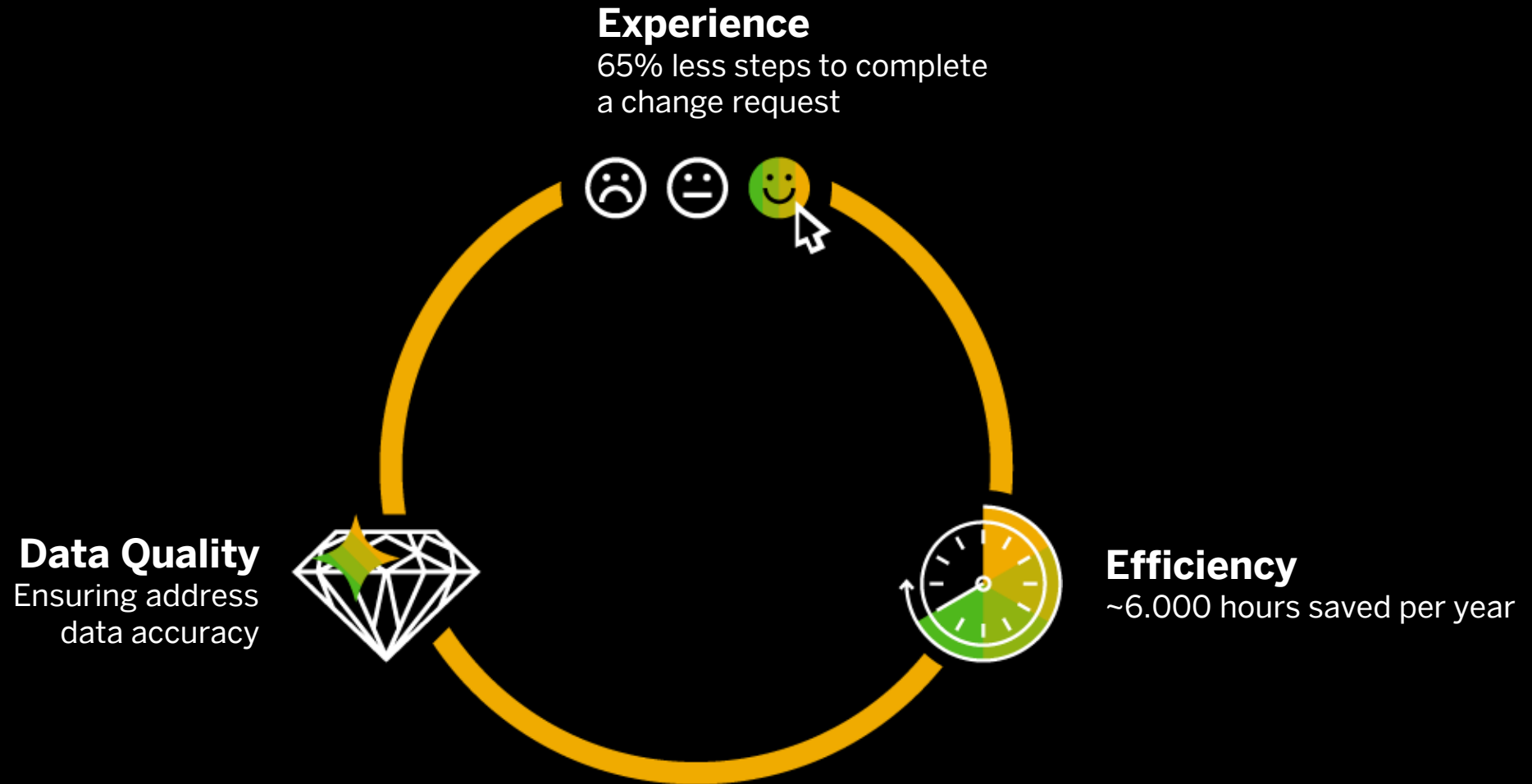
Organizational transformation
Bringing ownership together

Analytics

System

People

Process

Data

COO

Transformation Office

Transformational Programs

Global Process Office

Core E2E Processes

Intelligent Enterprise Solutions

Intelligent Data & Analytics

IT / Systems
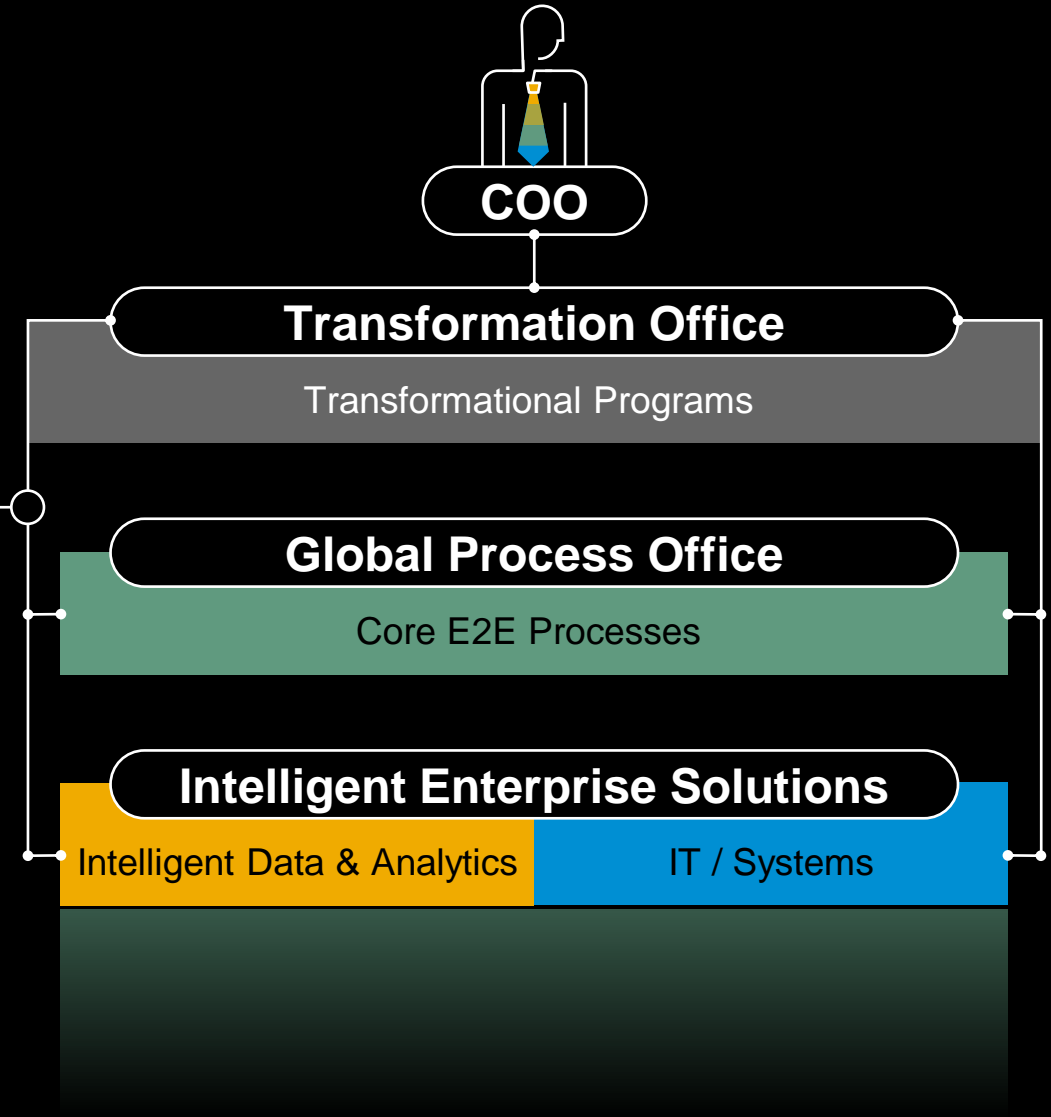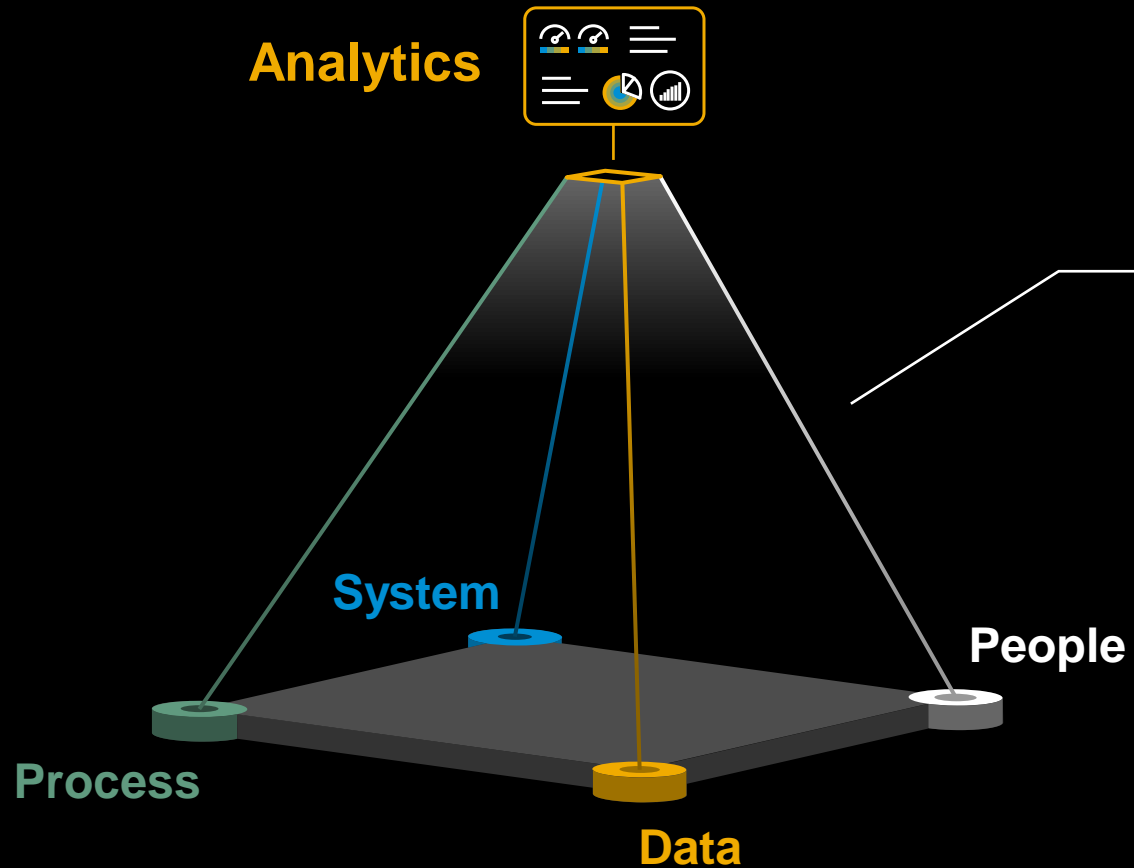
ID&A Achievements – Benefits to SAP as a whole

30% synergies through creation of central Data & Analytics unit and a central technical platform

Re-investment into SAP's Digital Transformation. Leveraged free workforce to drive state-of-the art technology usage

+10pp renewal rate increase thanks to predictive renewals @ risk analysis

+5pp forecast accuracy enhancement with predictive analytics & central planning engines

Harmonized data models enable 360° view on the customer and boost sales efficiency by +8pp

~70% of forecasted operating expenses automated e.g. via personnel expense engine

Thank you.

Follow us

www.sap.com/contactsap

THE BEST RUN **SAP**