BEAT THE ZUGSWANG

Nihilent
evolving ideas

/ Humanizing Technology

Rajeev Dev
Digital ERP Head, Nihilent

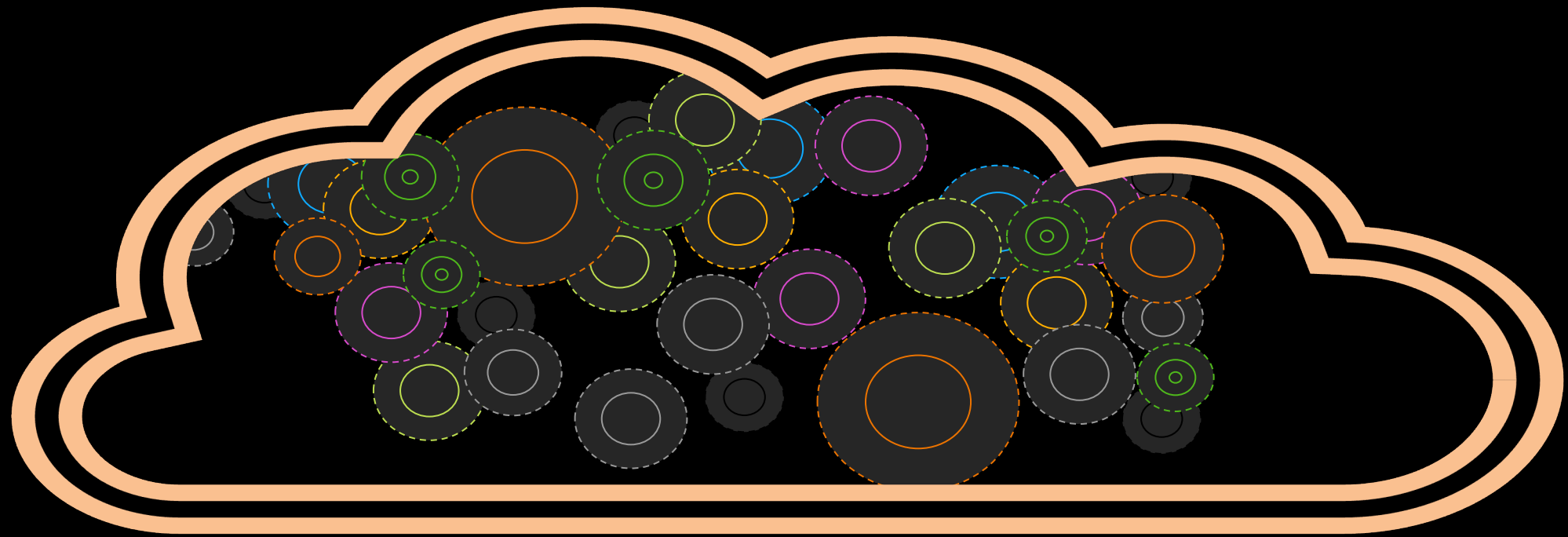https://www.linkedin.com/in/rajeev-dev-a4a237/
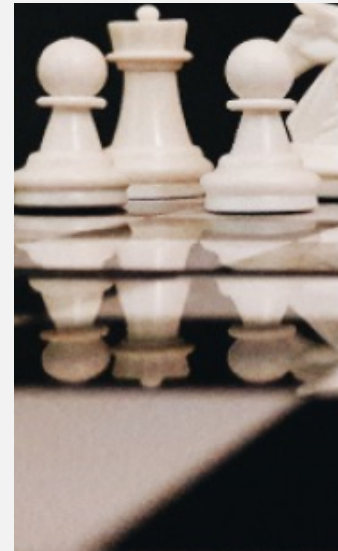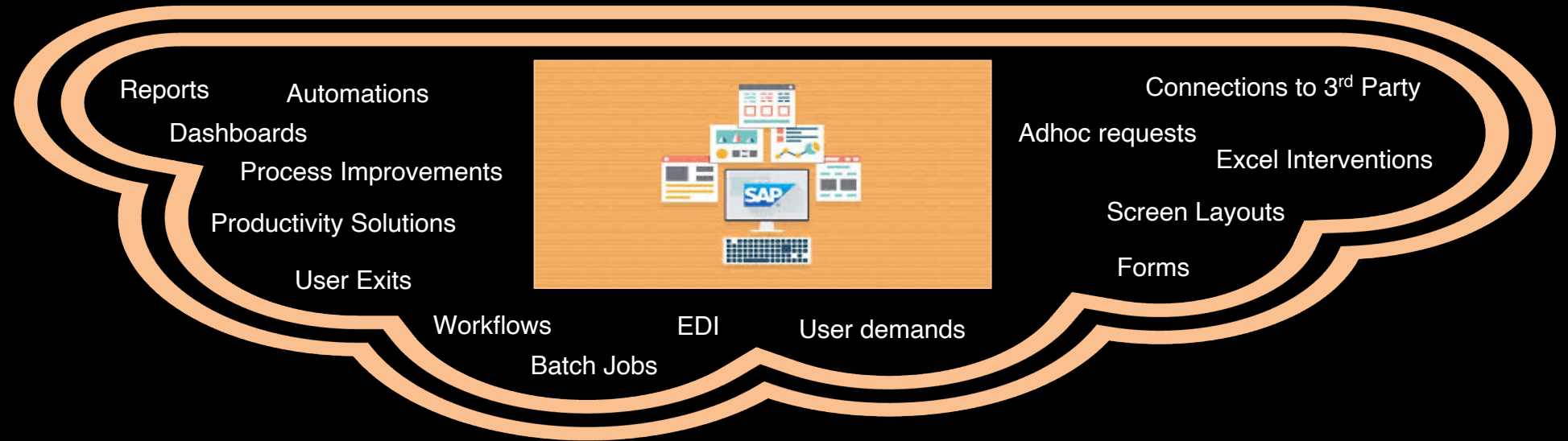
Zugzwang

[/ˈzʌɡzwaŋ,ˈzuːɡzwaŋ/]
Derivation - German
A chess term referring to a situation in which the obligation to make a move in one's turn is a serious disadvantage

THE REALITY

Enterprise Solutions

LCNC Solutions

Cloud Applications

SaaS solutions

Platforms

Legacy Applications

SYSTEM OF RECORD

Reports   Automations

Dashboards

Process Improvements

Productivity Solutions

User Exits

Workflows   EDI   User demands

Batch Jobs

Connections to 3rd Party

Adhoc requests

Excel Interventions

Screen Layouts

Forms

SAP

THE ASPIRATION

SUSTAINABILITY at the top of the agenda

CONNECTED Supply Chain

Enhanced Customer EXPERIENCE

DATA Driven Decision making

OPERATIONAL excellence

VISIBILITY across the organization & beyond
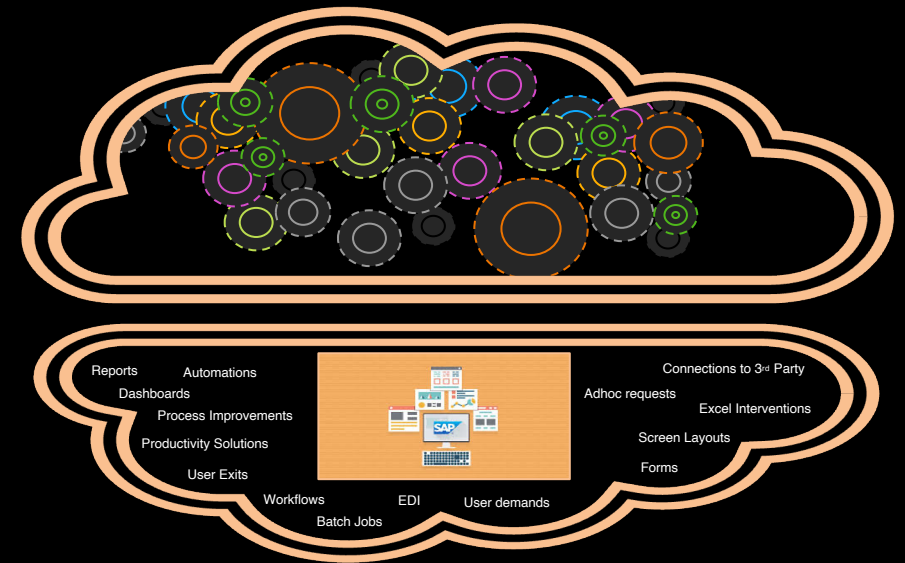

Enterprise Solutions

LCNC Solutions

Cloud Applications
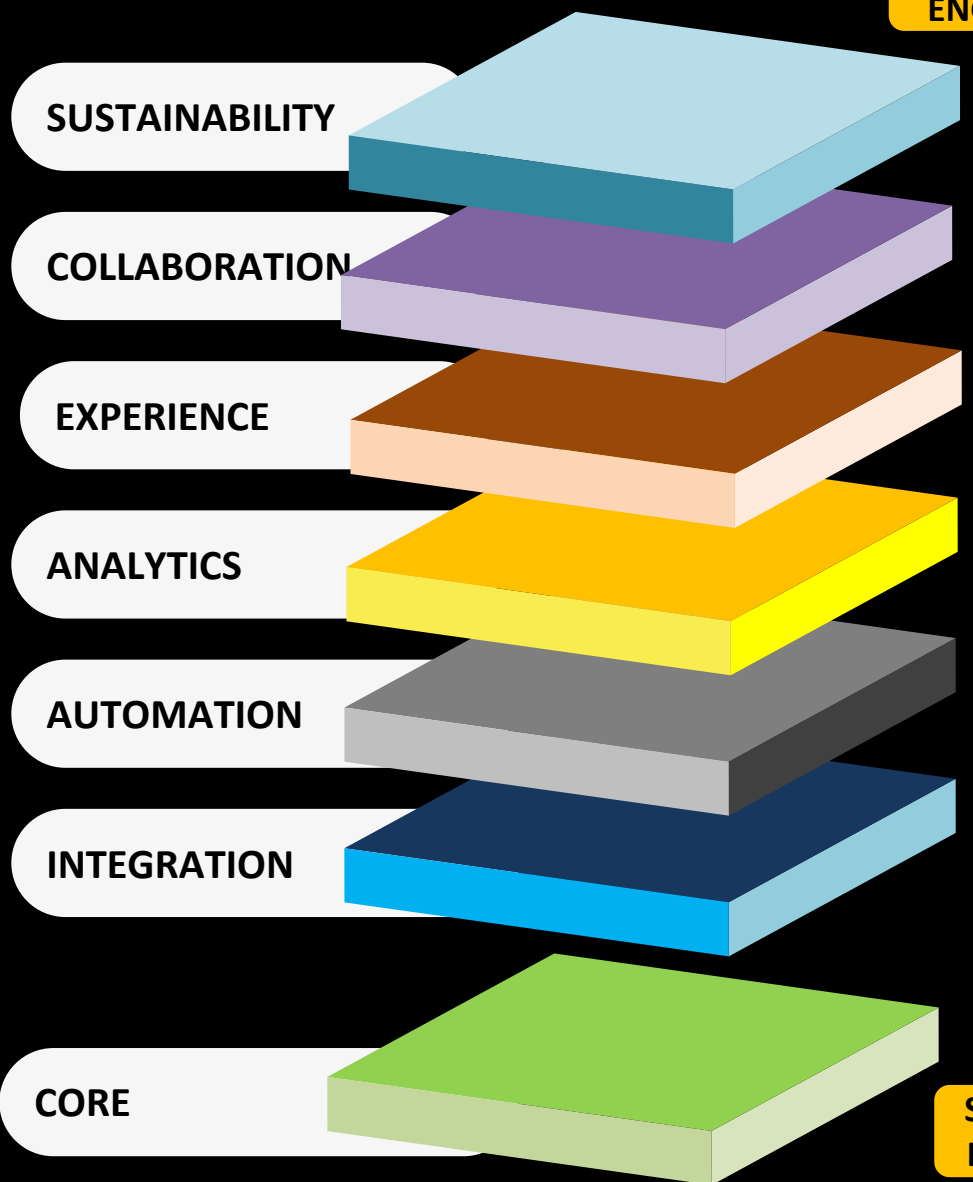
SaaS solutions

Platforms

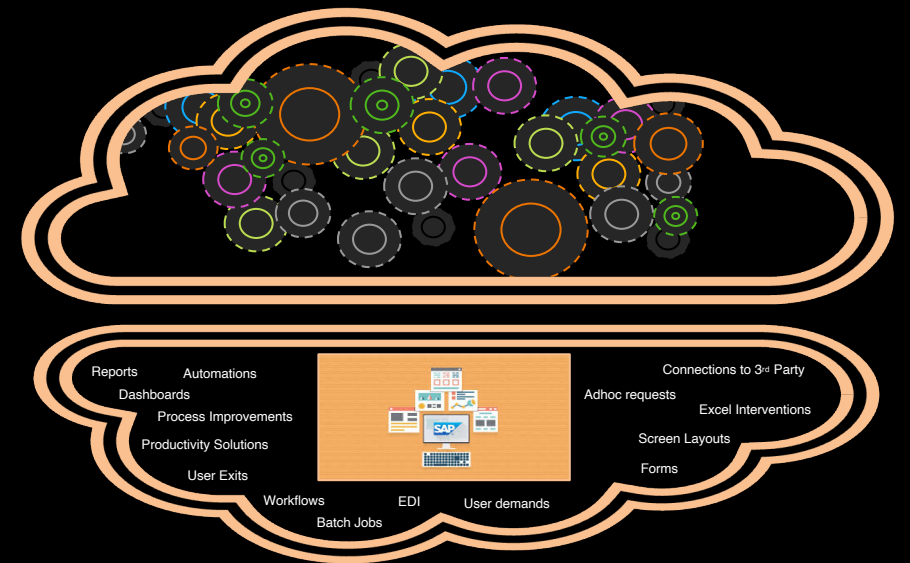Legacy Applications

SYSTEM OF RECORD

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Productivity Solutions
User Exits
Workflows   EDI   User demands
Batch Jobs

Connections to 3rd Party
Adhoc requests   Excel Interventions
Screen Layouts
Forms

THE **SOLUTION**

System of ENGAGEMENT

- SUSTAINABILITY
- COLLABORATION
- EXPERIENCE
- ANALYTICS
- AUTOMATION
- INTEGRATION
- CORE

System of RECORDS

Rise above the CORE
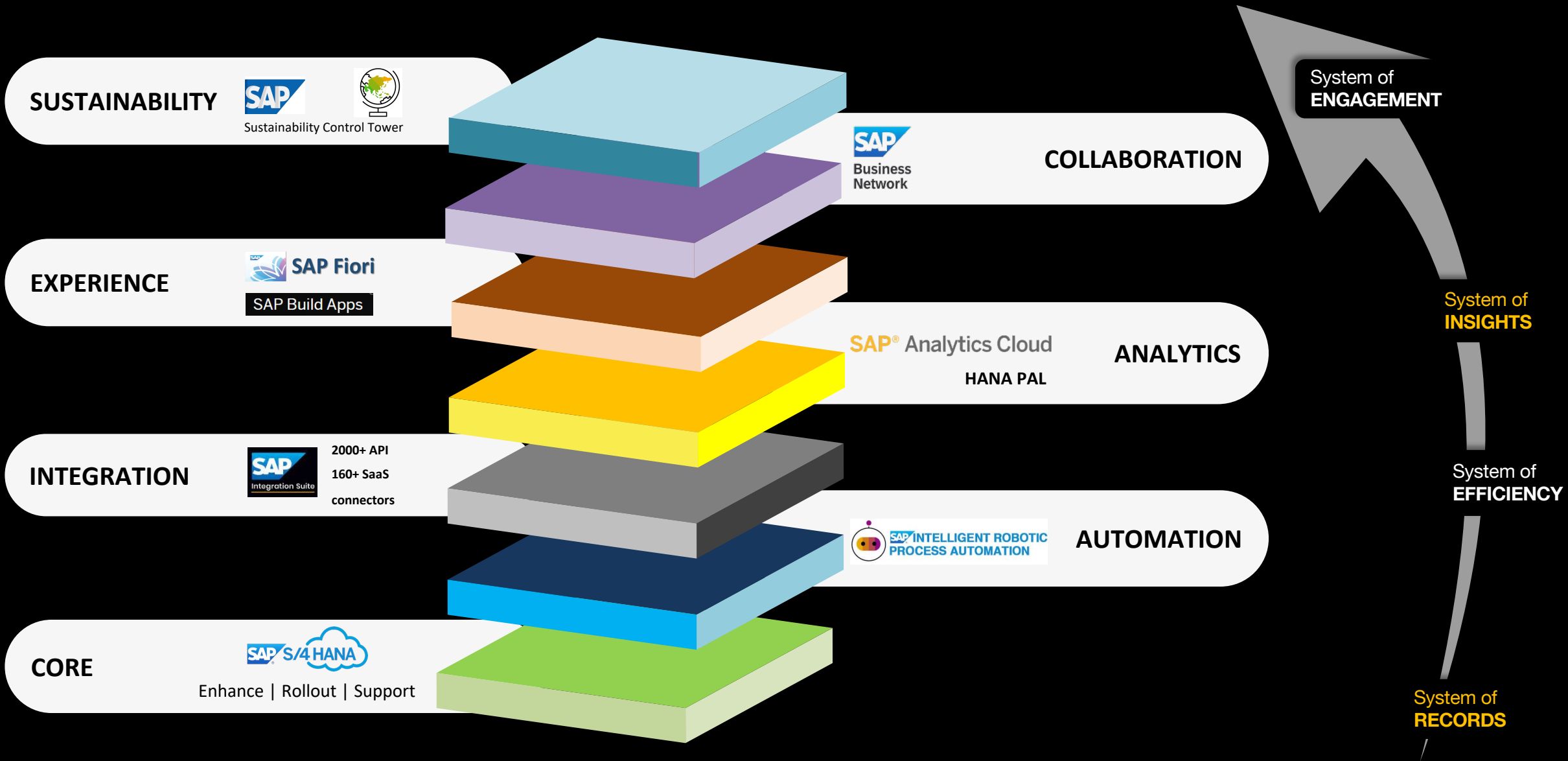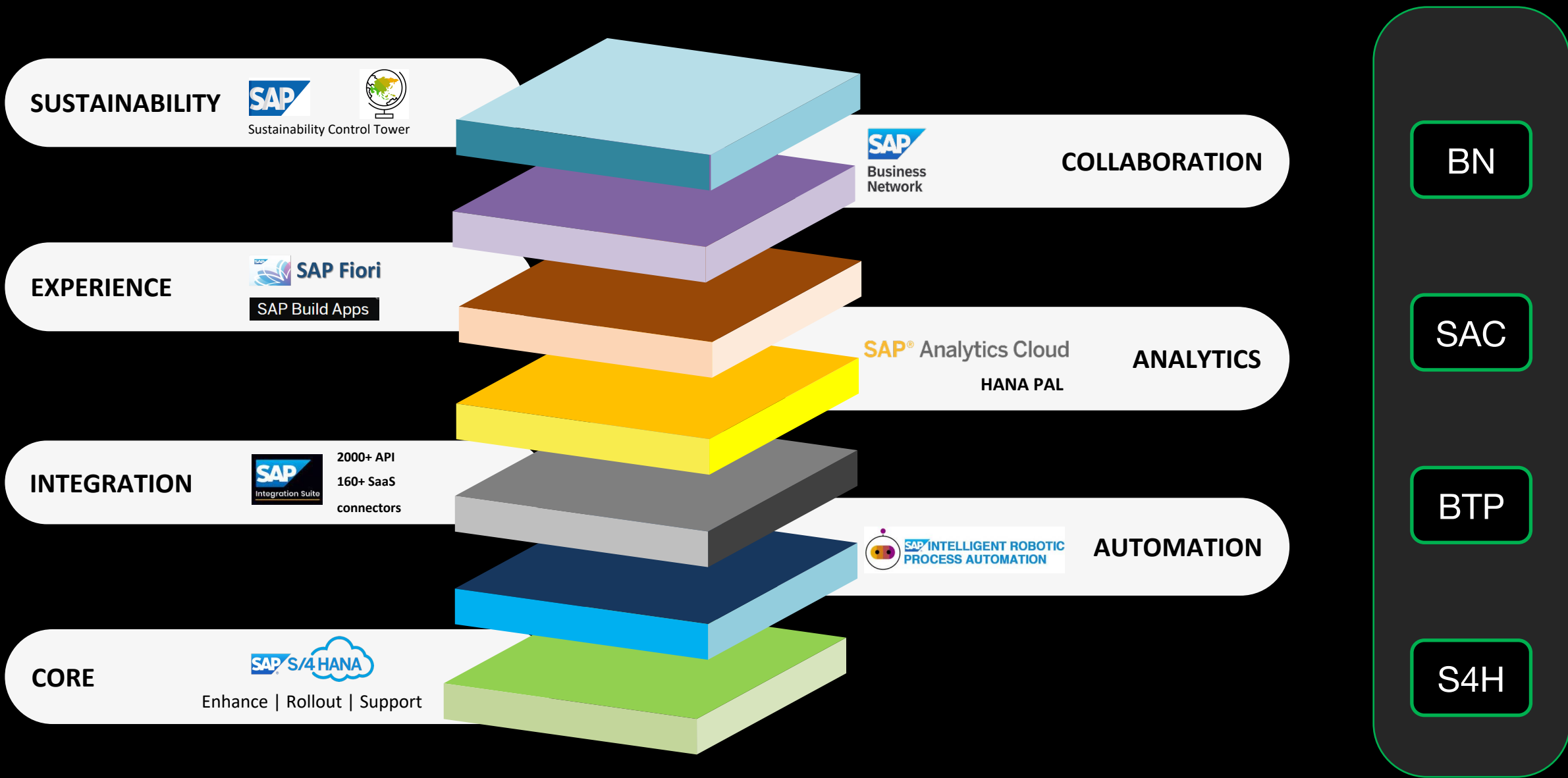
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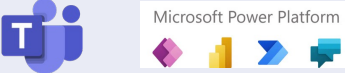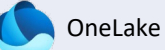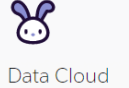
S U S T A I N A B I L I T Y at the top of the agenda

C O N N E C T E D Supply Chain

Enhanced Customer E X P E R I E N C E

D A T A Driven Decision making

O P E R A T I O N A L   excellence

V I S I B I L I T Y   across the organization & beyond

The Solution Providers

PROVIDER	SAP	Microsoft	salesforce	Others	Nihilent
COLLABORATION	SAP Business Network — Logistics, Ariba, Asset Intelligence	Microsoft Power Platform, SharePoint	Salesforce CDP — Innovations for Smarter Customer Interactions		iVen, iCON, iMission, iNGAGE, iDEAL, iTORQ
EXPERIENCE	BTP — SAP Fiori	Microsoft .NET, SharePoint	salesforce experience cloud	servicenow	Artoreal, emoscape
ANALYTICS	SAP Analytics Cloud, SAP Datasphere	Fabric, OneLake, Power BI, Synapse	tableau, Data Cloud	amazon REDSHIFT, databricks, snowflake, BigQuery	RESENSE
INTEGRATION	SAP Integration Suite	Azure Data Factory	MuleSoft	servicenow, boomi	
WORKFLOW	SAP Build Process Automation	Microsoft Power Platform	MuleSoft RPA, SALESFORCE FLOW	servicenow, UiPath	
CORE	SAP SuccessFactors, SAP S/4 HANA	Microsoft Dynamics, Office 365	Sales, Service, Marketing, Commerce, Vlocity		

RISE IS NOT AN UPGRADE

ECC Universe

CO - Controlling
Cost Center Accounting
Internal Order Accounting
Product Cost Accounting
Profit Center Accounting
Profitability Accounting
Project Accounting
FI - Financial Accounting
Accounts Payable
Accounts Receivable
Balance Sheet
Bank Accounting
Cash Flow Statement
Credit Management
Fixed Assets Accounting
General Ledger
IAS, US GAAP, Local GAAPs
Profit & Loss Statement
Segment Reporting & Notes
Tax Accounting
LE - Logistics Execution
Delivery Processing
Transportation Execution
MM - Materials Management
Contract Management
Demand Determination
Direct Material Procurement
External Service Procurement
Goods issue
Goods Receipt
Inventory Controlling
Invoice Verification
Material Valuation
Physical Inventory Management
Purchasing Statistics
Reservations
Source Determination
Source Selection
Stock Transfer
Vendor Evaluation
PP Production Planning
Batch Management
Materials Requirements Planning
Production
Production Statistics
Sales and Operations Planning
QM - Quality Management
Quality Control
Quality Engineering
SD - Sales and Distribution
Tax
Automatic Partner Determination
Automatic Text Handling
Availability Check
Billing
Credit Management and Credit Check
Inquiries
Pricing
Product Listing & Exclusion
Product Substitution
Quotations
Sales Activities
Sales Analytics
Sales Orders

Remove

Subtraction is equally important

Lift

Migrate

BN

SAC

SAP BTP

App Dev | Integration | Automation | Experience

S/4HANA Core

Public Cloud
OR
Private Cloud
(Choice of hyperscaler)

Nihilent Confidential @ 2023
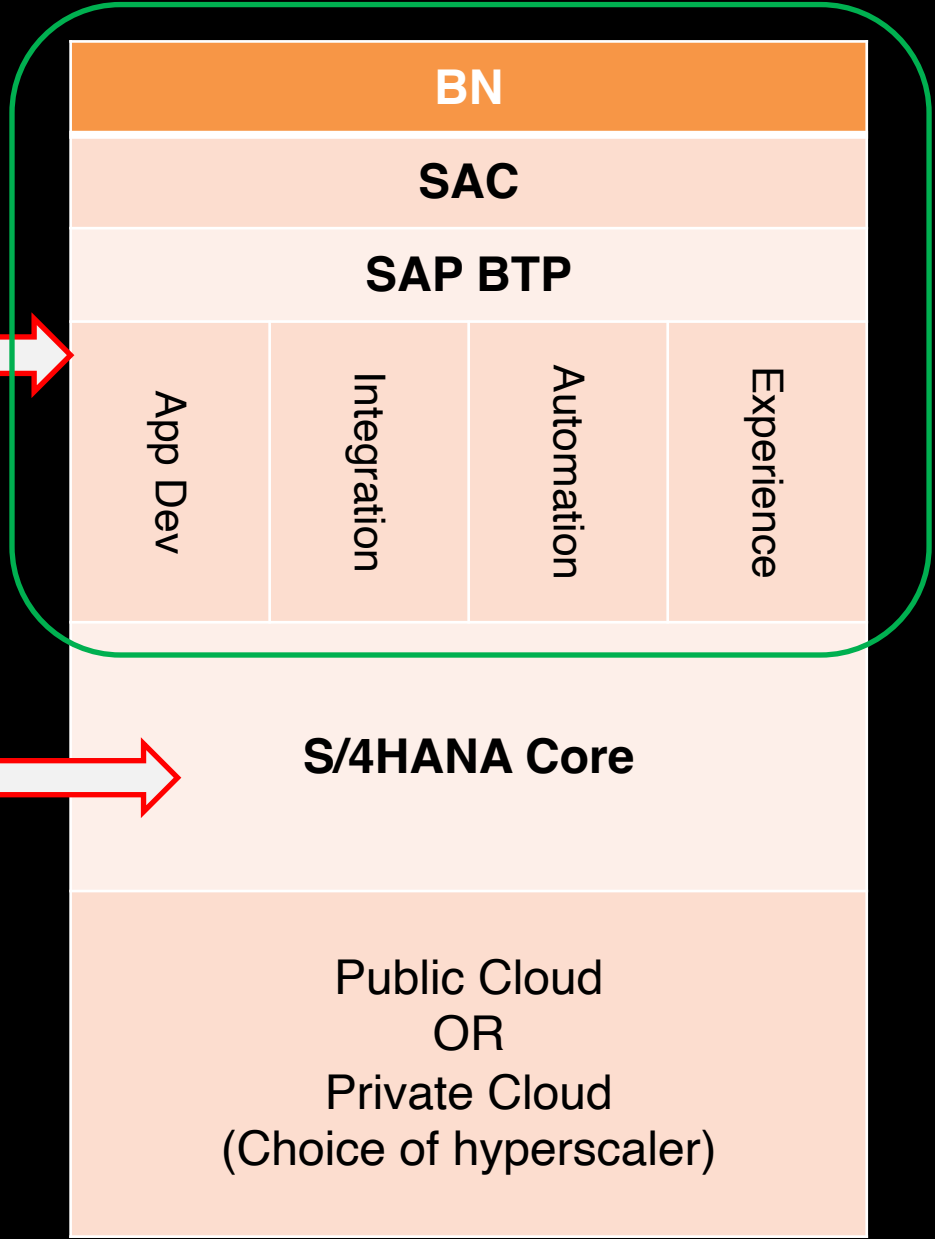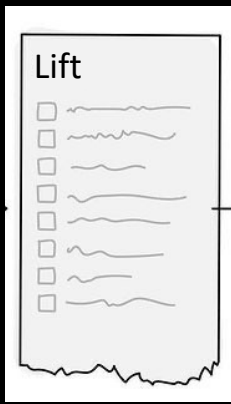
RISE IS A TECHNOLOGICAL ADVANCEMENT

ECC/S4 On Prem
CO - Controlling
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Product Cost Accounting
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Automatic Text Handling
Availability Check
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Credit Management and Credit Check
Inquiries
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Product Listing & Exclusion
Product Substitution
Quotations
Sales Activities
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Sales Orders

Distribute Your Current SAP Landscape Between S4H, BTP, SAC & BN

You will end up spending in all of these 4 buckets

Keep the Core Clean

BN

SAC

BTP

Integrations

Automations

Experience

Data Services

S/4HANA

Not Only Tech, The Way We Access Is Also Advancing

ERP use in 20th Century System
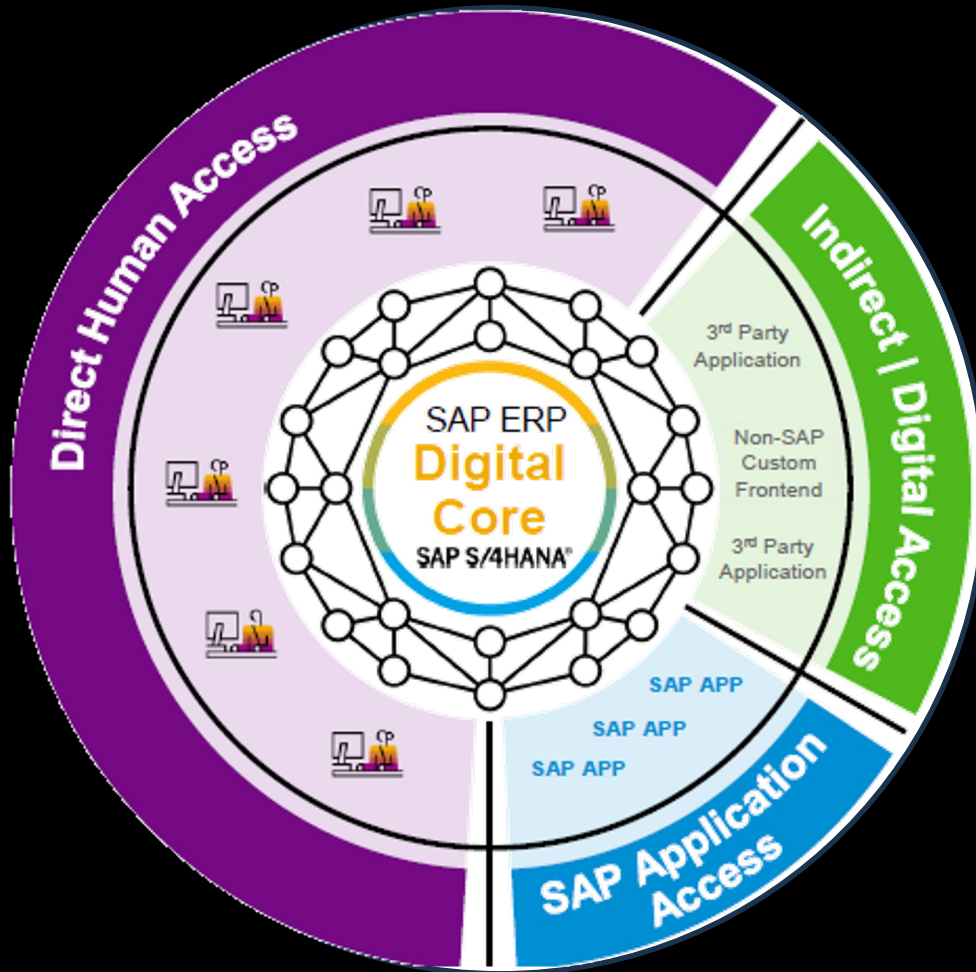
ERP use in 21st Century System
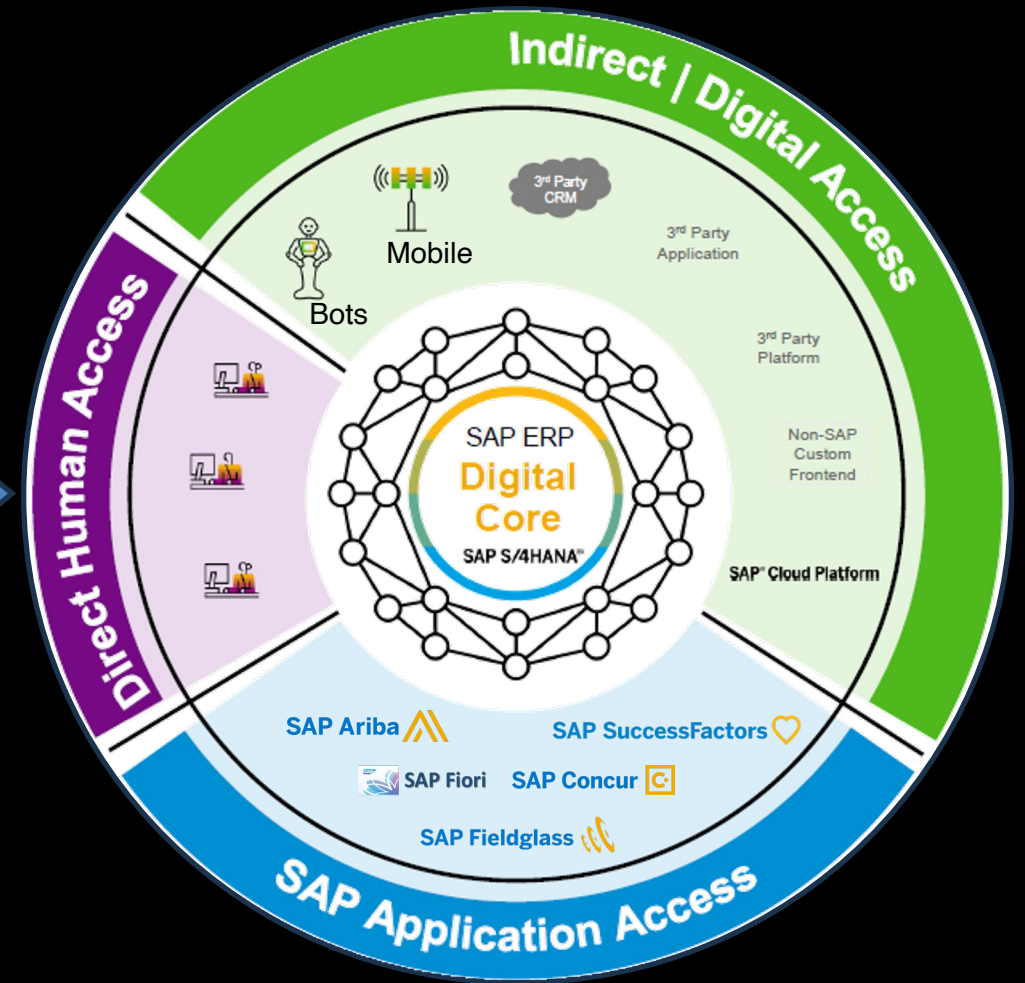
THE JOURNEY ALSO NEED CHANGE

THE **CHOICE**

THE **PATH**

Keep the Core Clean

THE **EXECUTION**

THE **INTEGRATIONS**

THE **AUTOMATIONS**

THE **EXPERIENCE**

THE **DATA**

THE **INSIGHTS**

THE **COLLABORATION**

THE **INNOVATION**

Public Cloud

Private Cloud

SAP

Rise / Grow
ECC → Rise
S4 (O/P) → Rise

Powered by **ZOOM** — Industry Specific Qualified Solution

Greenfield
Brownfield
Bluefield

POWERING **SAP BTP**

SAP **Integration Suite**

POWERING **SAP BTP**

SAP **Build Apps**

POWERING **SAP BTP**

SAP **Fiori Apps**

SAP **Datasphere**

SAP **Analytics Cloud**

SAP **Business Network**

Logistics
Suppliers
Asset Operators

SAP

Introducing Joule

S4H

BTP

SAC

BN

MY ROADMAP

RISE
COMPONENTS

BN
SAC
BTP
S4HANA

D — BN
To be enabled separately

C — SAC
with pre-defined CXO dashboard
and KPIs

B — BTP
with set of defined
interfaces, custom workflows
and Fiori Apps

A — S4HANA
Brownfield / Greenfield migration as
per functional modules in scope

Nihilent
evolving ideas

/ Humanizing
Technology

From Core **To Clean Core**

Your Universe

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Cost Center Accounting
Internal Order Accounting
Product Cost Accounting
Profit Center Accounting
Profitability Accounting
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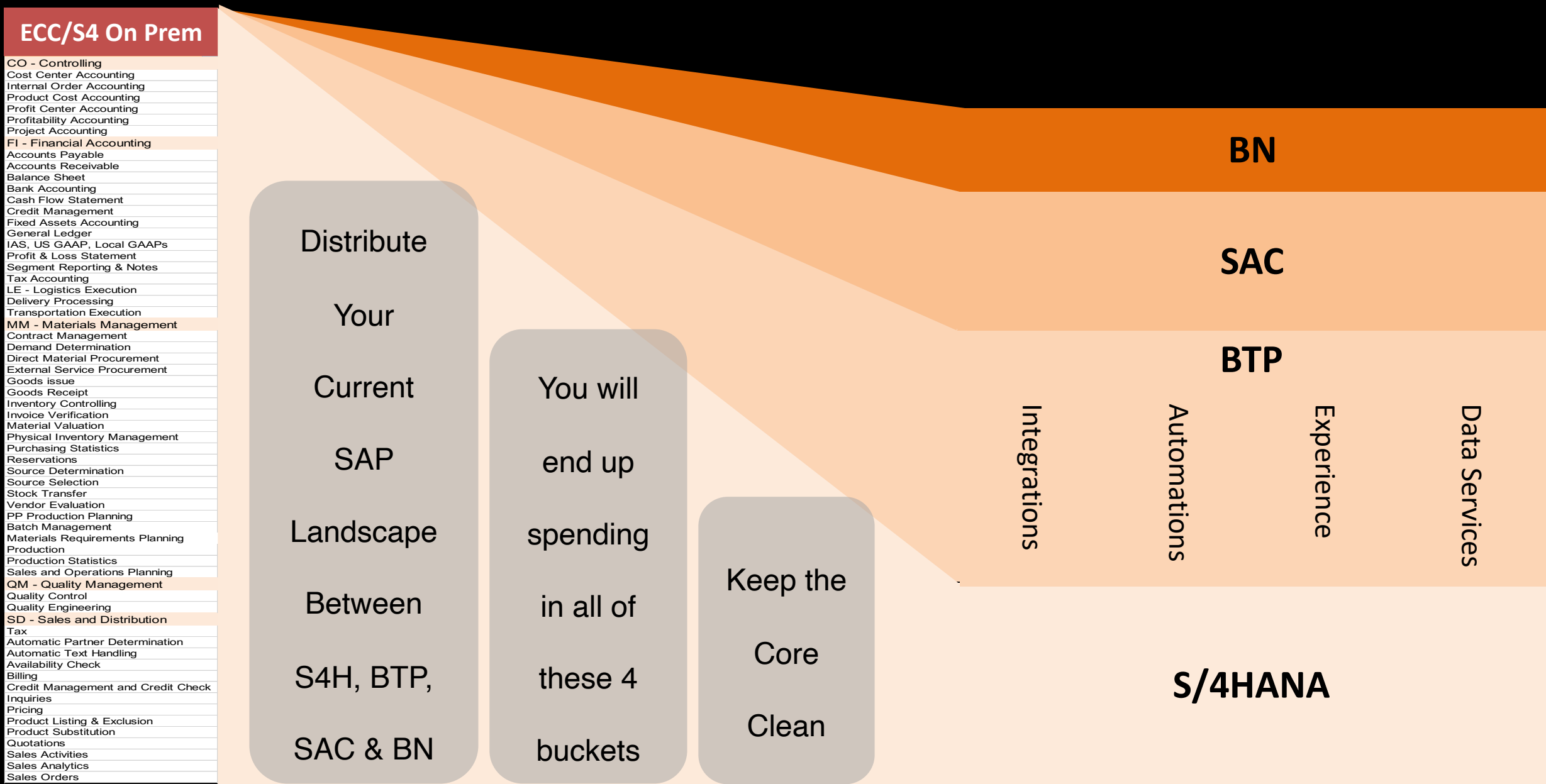QM - Quality Management
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Pricing
Product Listing & Exclusion
Product Substitution
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Sales Analytics
Sales Orders

Universe

Clean Core

BTP

Integrations
- API Management
- Event Driven
- Point to Point
- Hybrid
- Service Oriented
- B2B Management
- Hub & Spoke

Automations
- Attended Bots
- Unattended Bots
- iRPA Bots
- 3rd Party Bots

Experience
- Customer Experience
  - Acquisition
  - Conversion
  - Retention
  - Referral
- User Experience

SAC

Data
- Existing
- Structured
- Semi / Unstructured

Analytics
- Dashboards
- Predictive Analytics
- Prescriptive Analytics

BN

Collaborations
- Logistics
- Asset Intelligence
- Suppliers
- Sustainability

PRE-PACKAGED INTEGRATIONS

B2B Management

Build and Consume EDI interfaces like EDIFACT, ENCOM etc..
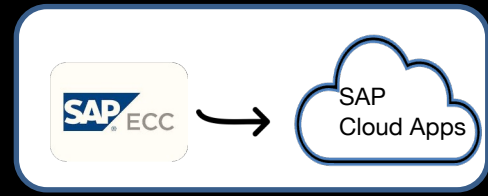
Hybrid

On-premises SAP ECC system with a cloud-based SAP SuccessFactors instance

Hub & Spoke

SAP ERP with multiple external systems using SAP BTP Integration Pod as the central hub for data exchange and process orchestration.

POWERING SAP BTP

Point to Point

SAP SuccessFactors with a specific payroll system

Service Oriented

Consuming third-party APIs within SAP S/4HANA to extend its capabilities, e.g. integrating with a payment gateway or a tax calculation service
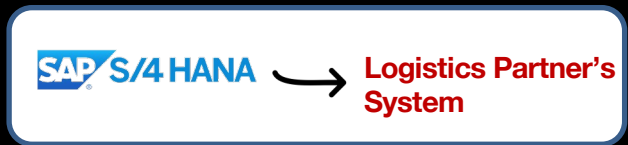
Event Driven

Real-time integration between SAP S/4HANA and a logistics partner's system, where inventory updates and delivery status changes trigger events

API Management

Build Rest API to connect to any 3rd party application using industry standards like Yaml

Finalize Integrations

API Management | Point to Point | Service Oriented | Hub & Spoke

Event Driven | Hybrid | B2B Management
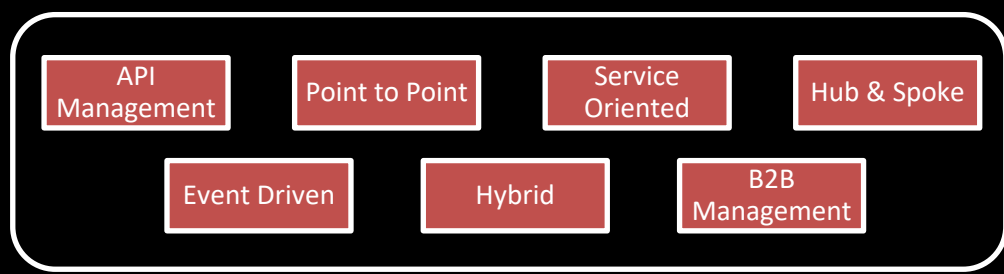
Sno.	Type	Source	Target	Details of Integration
1	Point to Point	Success Factor	Payroll app	SAP SuccessFactors with a specific payroll system
2	Event Driven	S4H	Logistics partner system	Real-time integration between SAP S/4HANA and a logistics partner's system, where inventory updates and delivery status changes trigger events
3	Service Oriented	S4H	Payment gateway	Consuming third-party APIs within SAP S/4HANA to extend its capabilities,
4	Service Oriented	S4H	Tax calculation Service	Consuming third-party APIs within SAP S/4HANA to extend its capabilities,
5	Hub & Spoke	CRM	S4H	SAP BTP Integration Pod as the central hub for data exchange and process orchestration.
6	Hub & Spoke	S4H	eCommerce	SAP BTP Integration Pod as the central hub for data exchange and process orchestration.
7	Hub & Spoke	S4H	Logistics Company	SAP BTP Integration Pod as the central hub for data exchange and process orchestration.
8	Hybrid	SAP ECC	Cloud App	On-premises SAP ECC system with a cloud-based SAP SuccessFactors instance
9	B2B Management	S4H	EDI to partners	Build and Consume EDI interfaces like EDIFACT, ENCOM etc..
10	API Management	S4H	3rd Party Application	Build Rest API to connect to any 3rd party application using industry standards like Yaml

FROM DATA **TO INSIGHTS**

MANAGEMENT

POWER USER

BUISNESS USER

SAP Analytics Cloud

1

SAP BW/ 4HANA

SAP Datasphere

2

3

SAP Data Intelligence

SAP HANA Cloud Data Lake

5

Core

SAP ECC

SAP S/4 HANA

Non-SAP Applications

Cloud Apps

SAP SuccessFactors

SAP Ariba

SAP Concur

SAP Fieldglass

4

Other Data sources

IoT, Events, Logs, etc.

Documents
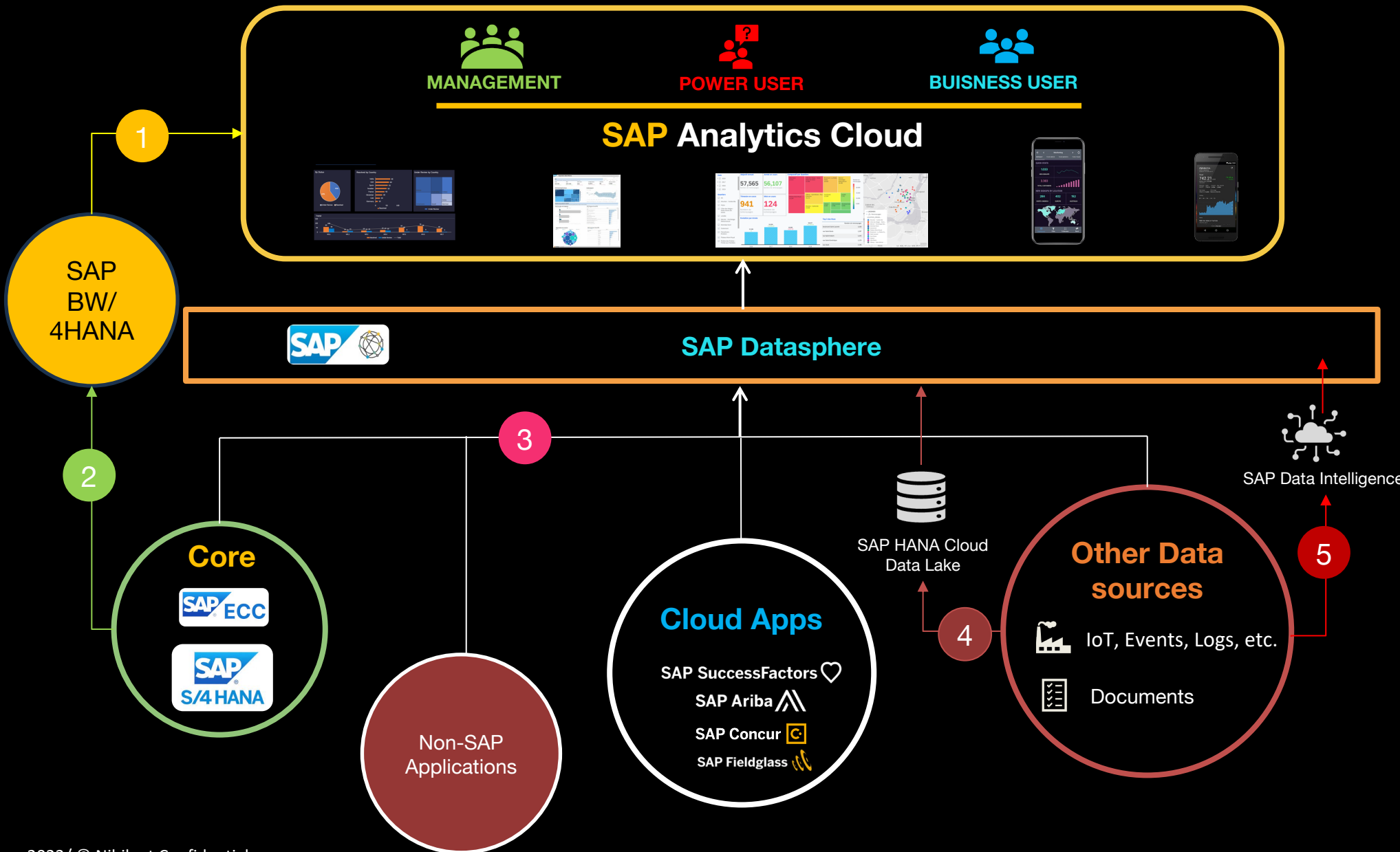
1. Directly using SAC Live and Import connections, taking advantage of available SAP developed business content

2. Complex data modelling and historical analysis on SAP ECC / S4H leveraging BW/4HANA

3. Unified structured data from multiple data sources via SAP datasphere

4. Semi and Unstructured data is replicated to an Object store (e.g. SAP HANA cloud Data lake)

5. Combining multiple data stores together and exploring Data science activities via SAP Data intelligence

Finalize Data Sources

Type	Source	Target	Details of Integration
Existing	SAP BW/4HANA	SAC	Directly using SAC Live and Import connections, taking advantage of available SAP developed business content
	ECC / S4H	SAP BW/4HANA	Complex data modelling and historical analysis on SAP ECC / S4H leveraging BW/4HANA
Structured	Non-SAP	Datasphere	Unified structured data from multiple data sources via SAP datasphere
	Cloud Apps	Datasphere	
	SAP ECC / S4H	Datasphere	
Unstructured	IOT Events Logs Documents	SAP HANA Cloud Data Lake	Semi and Unstructured data is replicated to an Object store
		SAP Data Intelligence	Combining multiple data stores together and exploring Data science activities via SAP Data intelligence

Finalize Data Science Use Cases

| Dashboards | Predictive Analytics | Prescriptive Analytics |

Category	Use Case	Details of the Use Case
Sales & Marketing	Dashboard	Sales Analysis, Sales Trend Analysis, Top 10 Brand-wise sales, Sales Plan vs Actual, Open Orders/Backlog, Delivery performance, Customer Fulfilment – Service Levels
	Predictive Analytics	xxx
	Prescriptive Analytics	xxx
Production & Planning	Dashboard	Actual Production by month, Target vs Actual Production, Rejection ratio, Rework, Plant Stock, Production Cost
	Predictive Analytics	xxx
	Prescriptive Analytics	xxx
Suppliers	Dashboard	No. of active suppliers, Procurement Cycle Time, On Time Delivery, Open PO & PR Ageing, Price Trend of raw Materials, Procurement Analysis by Material Group / Material / Vendor
	Predictive Analytics	xxx
	Prescriptive Analytics	xxx

Finalize **Automations**

| Attended Bots | Unattended Bots | iRPA Bots | 3rd Party Bots |

Process	Bots	Details of the Automation
Order to Cash	Attended	
	Unattended	
Procure to Pay	Attended	
	Unattended	
Hire to Retire	Attended	
	Unattended	

Finalize **Experience**

| Customer Experience | Acquisition | Conversion | Retention | Referral |

User Experience

Finalize **Collaborations**

| Track & Trace | Asset Intelligence | Suppliers | Sustainability |

Platformization **of the Old Core**

ECC Universe

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Availability Check
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Credit Management and Credit Check
Inquiries
Pricing
Product Listing & Exclusion
Product Substitution
Quotations
Sales Activities
Sales Analytics
Sales Orders

REMOVE

Master	Division	Activity	Source	Target	Type
Healthcare	Operations	HIPAA	HCMS		Point to Point
Healthcare	Operations	LHE for cross enterprise workflows	Salesforce		Hub & Spoke
Healthcare	Operations	Integration engineer	HCMS		Event driven
Healthcare	Finance	Payer- provider integration	HIMS		Service oriented
Healthcare	Finance	Pay for performance	Payroll		Point to Point
Healthcare	Finance	Bundled payments	Pricing		Point to Point
Healthcare	Clinical Application Adoption (MU 2/3)	EHR, CPOE	SuccessFactor		Hybrid
Healthcare	Clinical Application Adoption (MU 2/3)	Departmental systems (eg. Med management)	SuccessFactor		Hybrid
Healthcare	Finance	Disease management	PharmaOne		API Management
Manufacturing	Information technology (IT)	Connection Security In Factories-Cybersecurity	CyberOne		B2B Management
Manufacturing	Operations	Web integrated RPA	SAP		B2B Management
Manufacturing	Operations	Warranty	Concor		B2B Management
Manufacturing	Operations	Field Service & Support	Concor		B2B Management
Retail	Sales & Marketing	Proprietary Products-Establishing supplier base	SAP		B2B Management
Pharma	Manufacturing	Usage Based Information Management Solution	SAP		B2B Management
Pharma	Manufacturing	Centralised Batch Monitoring	SAP		B2B Management
Supply Chain	Logistics	Contract & Expand logistics network	SAP		B2B Management
Supply Chain	Distribution	Order Fulfillment Rate	Concor		B2B Management
Supply Chain	Distribution	Transportation Costs	TM		B2B Management
Supply Chain	Order Management	Overall order fill rate	SAP		B2B Management
Supply Chain	Order Management	Fill rate for each product	Ariba		B2B Management
Supply Chain	Order Management	Percentage of late shipments	SAP		B2B Management
Supply Chain	Inventory Management	On hand stock	SAP		B2B Management
Supply Chain	Inventory Management	Items on hold	SAP		B2B Management
F&B	Sales & Marketing	Sales of infusers and strainers are projected to rise	SAP		B2B Management
F&B	Operations	Reduce Carbon Footprints	SAP		B2B Management
F&B	Operations	Biomass Boiler (To Heat Distillery Year Around)	SAP		B2B Management

MIGRATE

Master	Division	Activity	Source	Target	Type
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Integrations
Automations
Experience
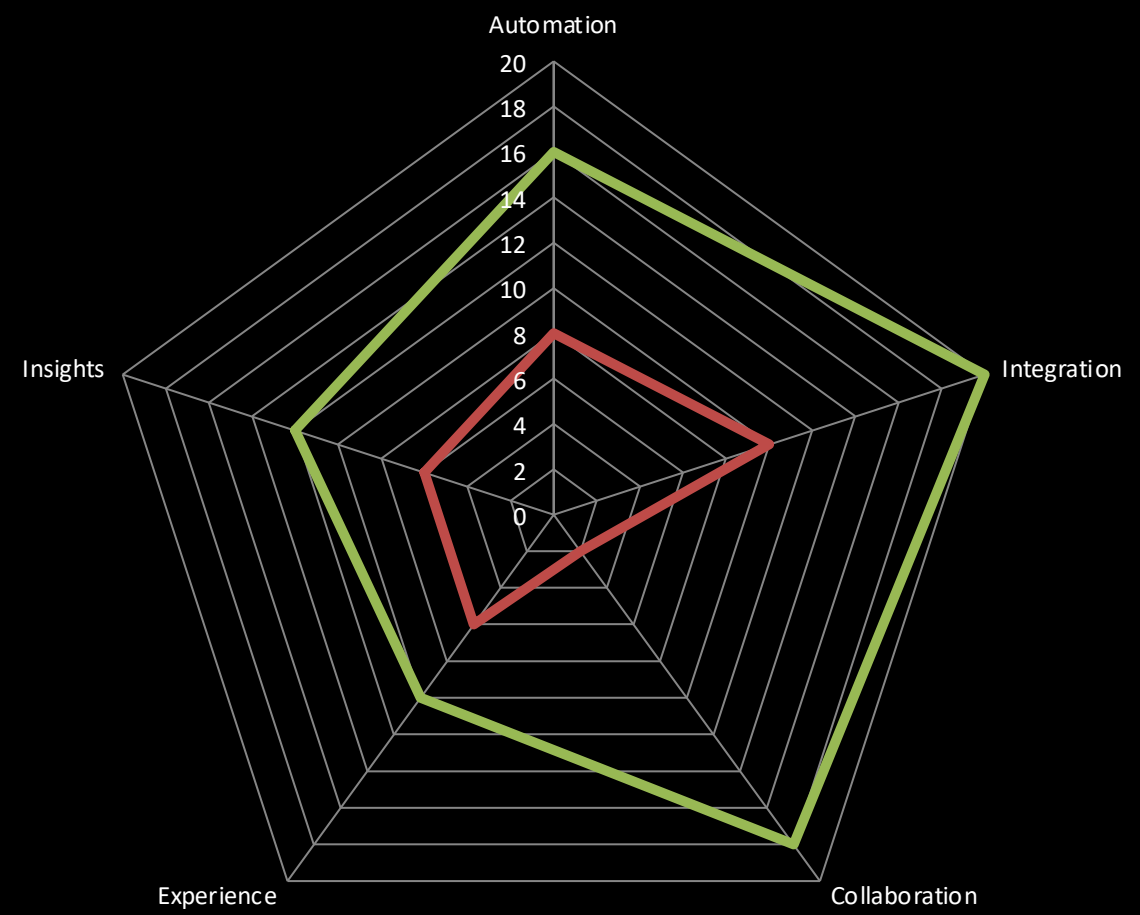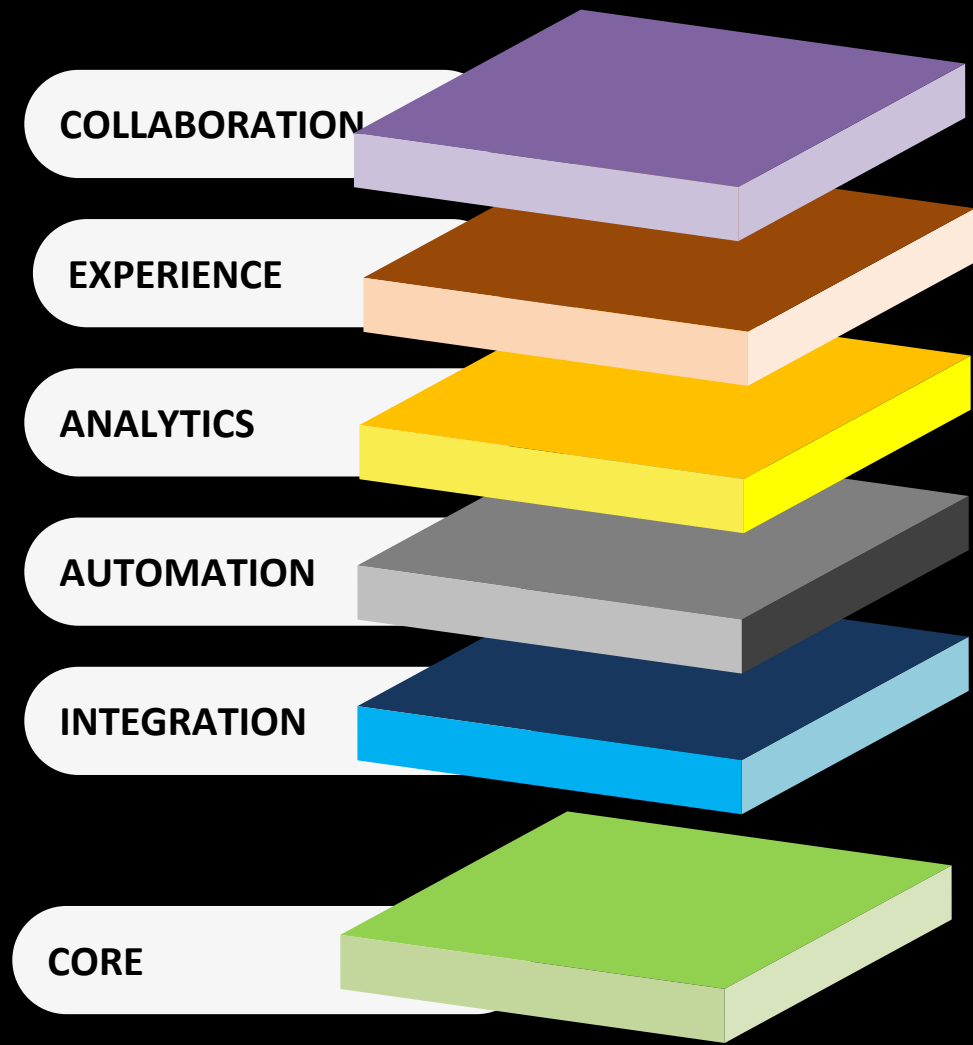## Data Engineering
SAP Analytics Cloud
Business Network

Clean Core → **Beyond the Core** →

YOU ARE AS GOOD AS YOUR WEAKEST LINK

NEW SAP NEW METHODOLOGY

Humanizing Techno/ogy

Discovery	Migration to S4	Extensions with BTP Enablement	Datasphere with SAC Enablement	Business Network Starter Pack

Assessment

- Public Vs Private
- Greenfield Vs. Brownfield
- Migration Path
- BTP extensions
- BTP Integrations
- BTP Automations
- BTP Experience
- Data Engineering
- Data Visualizations
- Business Network LBN
- Business Network AIN
- Business Network Ariba

Discovery/Prepare Phase · **Realize Phase**

System Requirement → Maintenance Planner → SI - Check → Custom Code Preparation

Application – Specific Preparation Activities

Simplification Item Catalogue

Pre - Conversion

SUM · Application Specific

Data Migration
Software Update
Data Conversion

Conversion · Post - Conversion

Integrations / **Automations** / **Experience**

Data Engineering / **SAP Analytics Cloud**

Business Network

- ✓ Readiness Check
- ✓ Maintenance Planner
- ✓ BSR
- ✓ SAP Signavio
- ✓ Archiving tools

- ✓ SAP Integration Suite
- ✓ API Management
- ✓ Build Apps
- ✓ BTP Document services
- ✓ SAP Extension Suite
- ✓ Visual LCNC
- ✓ Digital experience

- ✓ DW cloud
- ✓ HANA cloud
- ✓ Non-SAP data sources
- ✓ Datasphere
- ✓ AI / ML models

- ✓ Assessment
- ✓ Enablement
- ✓ Implementation
- ✓ Adoption
- ✓ Productization
- ✓ Analytics