Intelligent Automatisering innen Finance

Hva skjer og er aktuelt for deg som kjører SAP?

SBN webinar
4. desember 2020

Presented by

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Building a better working world

Agenda

1. Hva er de viktigste trendene innenfor økonomiområdet?
2. Hva er de viktigste trendene innenfor Intelligent Automation?
3. Rollen til RPA og Intelligent Automation i kombinasjon med neste generasjons ERP-systemer
4. Deep-dive og eksempler

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1. **Hva er de viktigste trendene innenfor økonomiområdet?**
2. **Hva er de viktigste trendene innenfor Intelligent Automation?**
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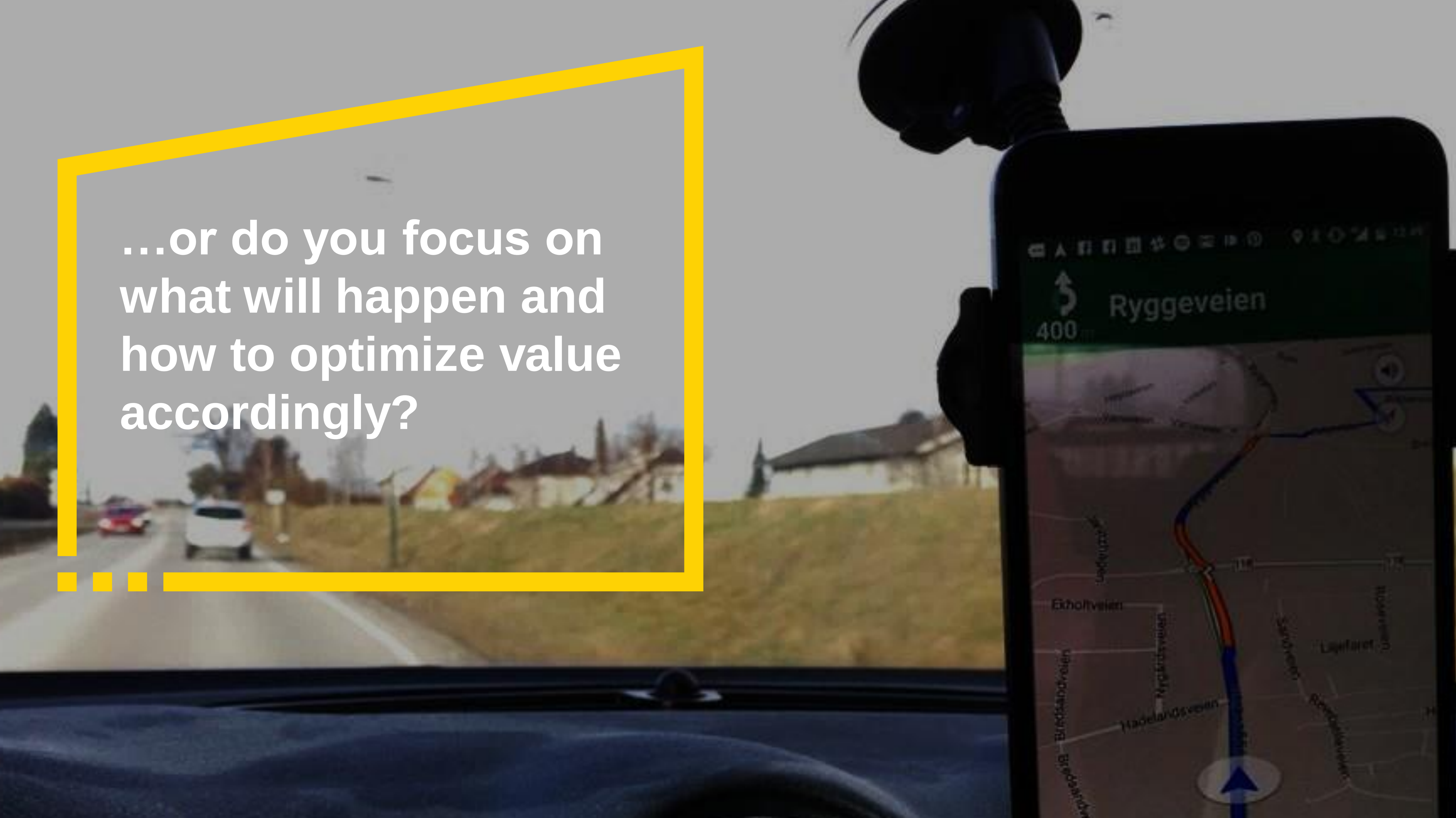
4. **Deep-dive og eksempler**


Do you spend most time on reporting and understanding what has already happened?

…or do you focus on what will happen and how to optimize value accordingly?



From CFO to CVO:

Find and protect value

Finance is evolving from traditional operations to true business partnership

External Communication

Representing the progress of achieving strategic goals to external stakeholders

Development of Business Strategy

Developing and defining the overall strategy

Funding Strategy

Funding, enabling and executing strategy set by CEO

Trusting the Numbers

Ensuring business decisions are grounded in sound financial criteria

Providing Insight

Providing insight and analysis to support CEO and other senior managers

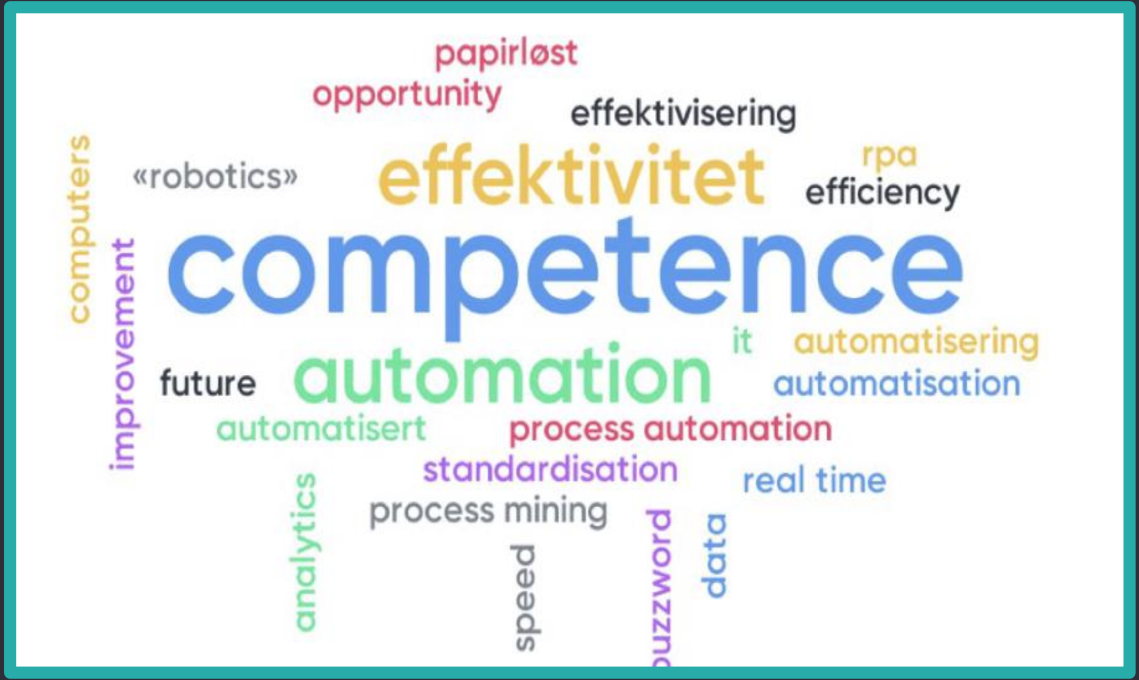
Strategic Goals Alignment

Leading key initiatives in finance that support overall strategic goals

We can automate rocket launches to space with synchronized landings

…but not finance?

Vi ser et sterkt fokus på kompetanseutvikling



Tema som vi opplever som spesielt relevante for våre kunder

Verdiskapning

Fokusområde

- KPIer, rapportering, forecasting og sensitivitetsanalyser
- Verdidriveranalyse
- Tilgjengeliggjøring av informasjon

Påvirkning på kompetanse

- Forretningsforståelse
- Analyse
- Problemløsning
- Kommunikasjon
- Endringsledelse

Påvirkning på organisering

- Virksomhetsstyring
- Finance Business Partner
- Finance Task force

Automatisering

Fokusområde

- Redusere tidsbruk, heve kvalitet og redusere kostnader
  - Neste generasjons ERP system
  - Visualisering
  - Closing tools
  - Robotics Process Automation
  - Automatisering av fakturahåndtering (Cloud OCR, RPA, maskinlæring)

Påvirkning på kompetanse

- Teknologi
- Driftsmodell
- Prosess
- Business case

Påvirkning på organisering

- Kompetansesenter og ekspertroller
- «Økonomi» IT

Byggesteiner

Fokusområde

Datakvalitet
- Økonomimodell
- Masterdata
- Kontoplan
- Internkontroll
- Regnskapsstandard

Prosesskvalitet
- Standardisering
- Process mining
- LEAN
- Dokumentasjon

Påvirkning på kompetanse

- Regnskap
- Prosessforbedring / Lean / design thinking
- Data governance
- Compliance

Påvirkning på organisering

- Finansiell rapportering
- Internkontroll
- Shared Services
- Prosesseiere
- Ekspertteam og roller

Can a digital future thrive without a solid analogue foundation?

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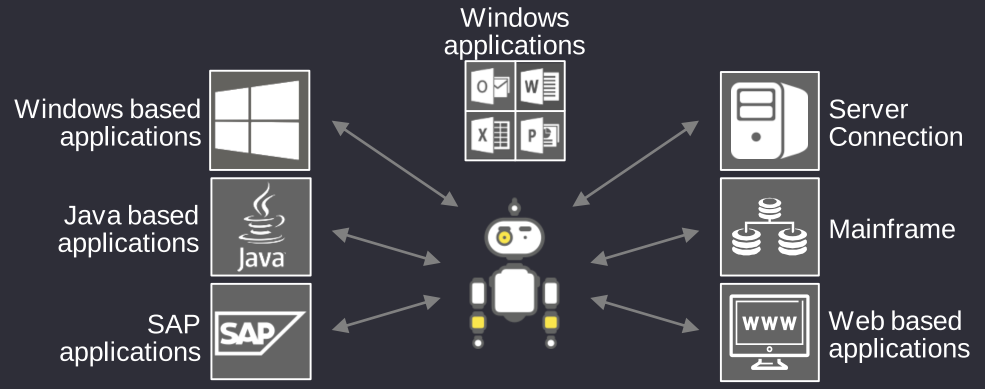
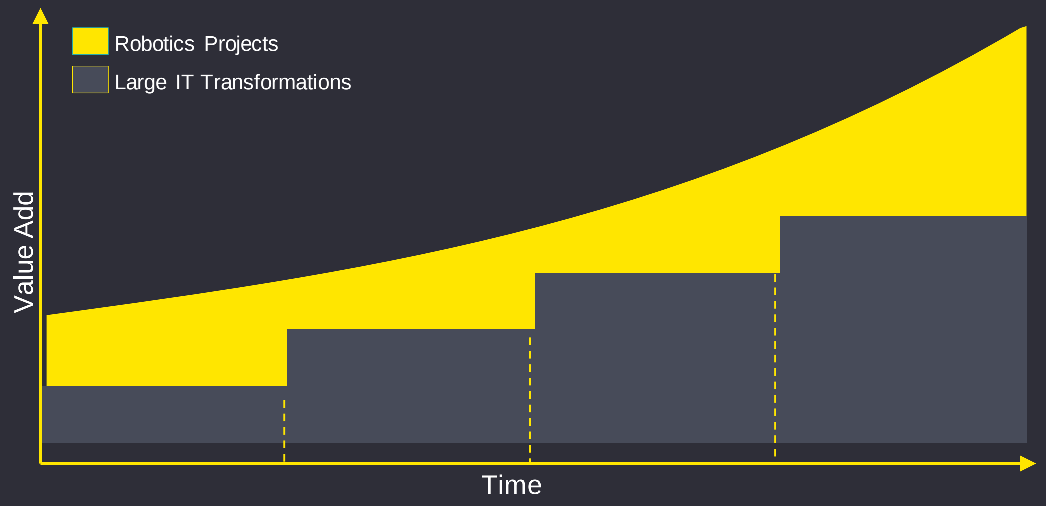
What is Robotics?
A rule based virtual employee performing repetitive tasks 24/7

RPA is a fast and agile solution, mimicking employees actions within existing business applications…

Integrating business applications





… but requires processes that are rules-driven and digital

Criteria for potential

RPA potential will be generated by processes …

1. … with **volume** and frequent processing
2. … spanning across **multiple systems**
3… based on **rules**
4… **structured** and **digital available**
5… with high **human margin of error**
6… prone to **few exceptions**
7… which **run directly** once initiated
8… with **little stakeholder** complexity

The Intelligent Automation journey is progressing in stages, from basic RPA to Artificial Intelligence

Stages of intelligent automation

4
Artificial Intelligence
Data analytics, insights, decision-making
<10%

3
Intelligent chatbots
Interaction with users (internal or external)
10% - 15%

2
Cognitive RPA
Manage unstructured data through machine learning & natural language processing
15% - 20%

1
Basic Robotics Process Automation
Repetitive, rule based, high volume activities
60% - 70%

Percentage volume of the enterprises, robotized process activities

Elements of intelligent process automation solution

Intelligent automation merges RPA and AI to solve business problems in processes

RPA is the use of technology to create robots (bots) which can repeat a preprogramed set of actions, based on human actions exactly the same way every time.

AI/Cognitive systems are by definition adaptive, interactive and learning. This technology consumes huge amounts of unstructured data and draws insights and correlations not visible to the human eye

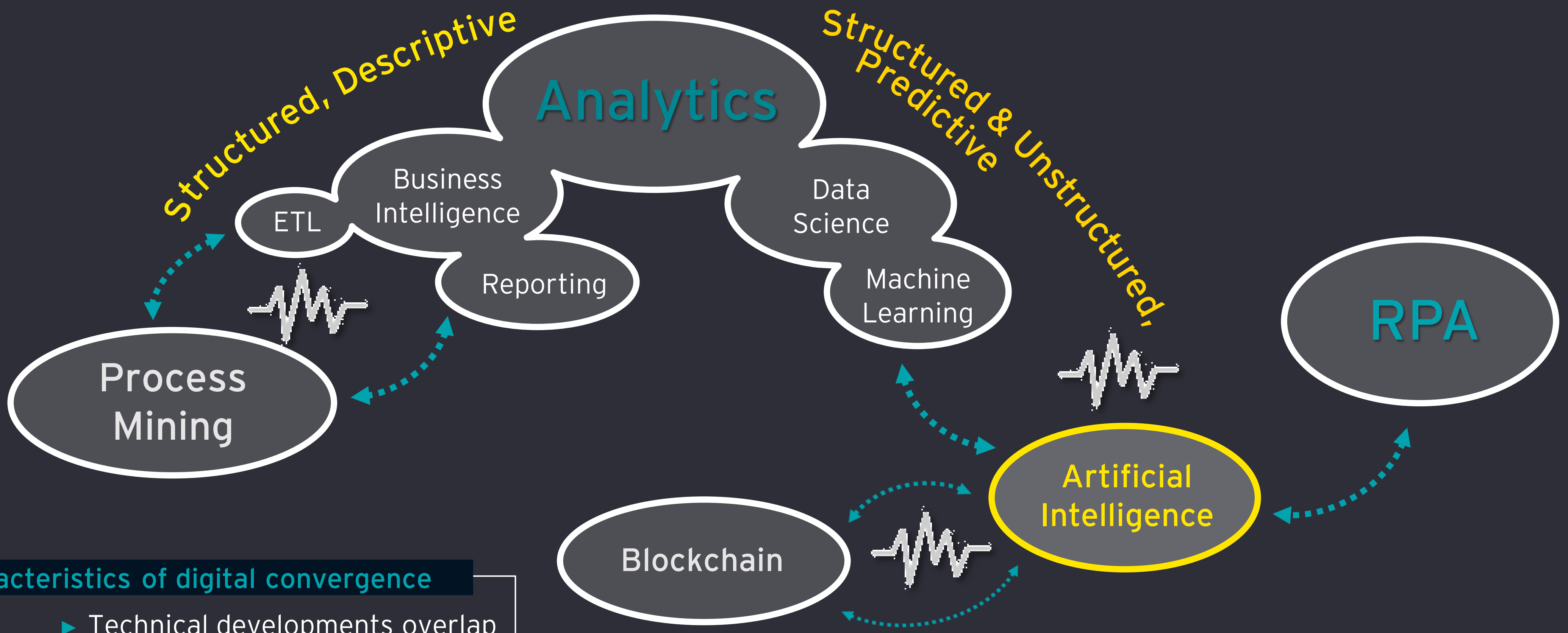
RPA is good for:

- Rule based processes with high volumes and low variability in inputs and outcomes required
- Processes which operate across a number of applications

AI/ Cognitive is good for:

- "Thinking" and interacting with humans as part of a conversation to generate insight
- Consuming the Variety, Volume and Velocity of data to provide new insight quickly

AI is a vital part of an increasingly converging field of digital disciplines



Characteristics of digital convergence

- Technical developments overlap
- Common problem statements
- Know-How transfers required
- Potential to lift organizational synergies

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RPA is part of the foundation of the Future of Finance

Controllership example

	Today	> 2020	2022	2025
		Major applications **deployed in the cloud**, controllership adopts standardized accounting workflows	Major vendors deploy RPA as a standard interface in cloud applications	Major vendors deploy standard use cases for **AI and blockchain** in cloud applications
Adopt digital capabilities offered by major vendors	On Premises Financial ERP	Cloud-Deployed ERP		Distributed Ledger for Financial Transactions Chat Bots for Financial Data Retrieval and Preparation
	On Premises Accounting Close Applications	Cloud-Deployed Close Application	Vendor-Embedded RPA Close Interface	AI-Driven "Prescriptive" Close and Reporting
Optimize accounting processes using RPA	Standalone RPA Software	Controllership-Managed Robotic Process Automation		
	Possible RPA steps	Inventory and **automate** all manual data transfers and process steps	**Rationalize** or **redeploy** redundant robots elsewhere in finance to cut costs	Assign robots to **interact with chat bots and AI assistants** to complete judgment-driven accounting tasks

Source: Gartner, 2019

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SAP has entered the Intelligent Automation landscape and are building a comprehensive RPA offering in a fast pace

SAP Intelligent RPA

- Strong market understanding and vision for ERP-focused automation.
- Beneficial for customers with SAP-heavy ecosystems as the RPA product is embedded with core iBPMS capabilities and built-in connectors for SAP S/4HANA, APAB and UI5.
- Robust company, well-established enterprise app partners, and large customer base globally.
- Transaction-based pricing independent of bot size or length of an automated task, and no indirect license fee as SAP does not charge for intra-SAP integrations.

Source: Gartner: Magic Quadrant for Robotic Process Automation, July 2020

Source: https://www.sap.com/products/robotic-process-automation.html

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Examples of where RPA can add value in Finance

Operational Accounting	Procure to Pay	General Accounting	Financial & External Reporting	Performance & Management Reporting	Budgeting, Planning and Forecasting	Policy, Controls, Governance & Compliance	Internal Audit	Treasury	Capital Management & Investments	Tax Planning & Accounting	Investor Relations
Loan Accounting	*Strategic Sourcing*	*Chart of Accounts Maintenance*	Financial Reporting	*Responsibility Reporting*	*Strategic Planning*	*Accounting Policy & Gov.*	*Risk & Control Framework*	*Debt/Equity Management*	*Capital Planning*	***Tax Planning***	*Stakeholder ID and Analysis*
Investment Accounting	Vendor Administration	Allocations & Adjustments	Regulatory Reporting	*Org profit reporting*	Annual Budget	*Regulatory Policy & Gov.*	*Functional Auditing*	FX Management	*Capital Structure and Asset level*	**Tax Accounting/ Tax data management**	*Stakeholder engagement*
Insurance Accounting	*Contract Negotiations*	**Journal Entry Processing**	Reporting	Product Profitability	Quarterly/ forecast	*Statutory Policy & Gov.*	*Consultation*	Liquidity Management	*Business Case Support*	**Tax accounting/ Analysis**	*Stakeholder relations*
Reinsurance Accounting	Accounts Payable	**Reconciliations**	Statutory Reporting	Customer Profitability	*Earnings Forecast*	*Mgmt. Accounting Policy & Gov.*		Cash Management	*Acquisitions & Divestitures*	**Tax accounting/ Preparation and review**	*Corporate Communications*
Fund Accounting	Requisitions & PO Processing	**Inter-company Transactions**	*Audit Support*	Fund Profitability		*Internal Process & Controls*		Capital Strategy	*Project Accounting*	**Tax compliance**	*Rating Agency Relations*
Accounts Receivable	*Payroll*	*Consolidation*		*Cost Development*		*SOX Compliance*		Bank Relations		*Tax controversy/ tax audits*	
Billing & Collections	Exp Accounting & Reimbursement	**Close**		Cost Allocations		*Tax & Treasury Policy*		*Treasury Strategy*			
Dispute Resolution		*Fixed Asset Accounting*		*Funds Transfer Pricing*		**Finance Master Data Governance**		Global Economics			
Policy Accounting		*Securities Pricing & Product Control*		*Ad hoc Reporting*							
		Legal Entity Mgmt/ maintenance		Analytics & Decision Support							

Eliminate Material Human Effort
Capacity and critical path
Reduce costly errors; improve quality
Refocus knowledge workers for greater value
Situationally valuable

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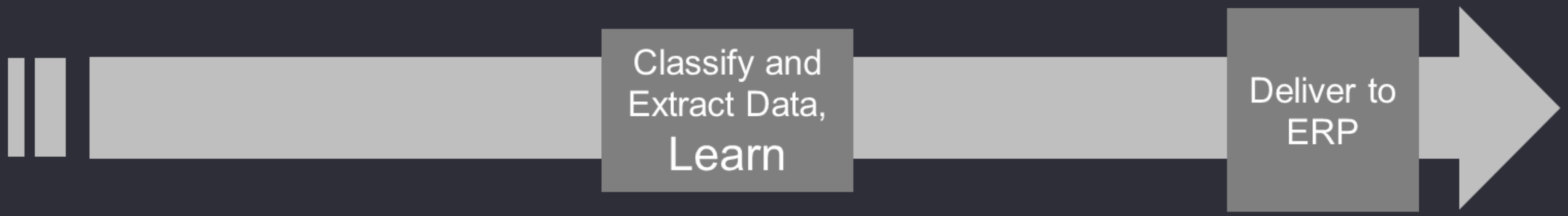
Different approaches to improving the Accounts Payable Process

The following three approaches constitute different ways of improving the Invoice Capture process

Approach	Description	Considerations
RPA	Automate "as-is" process and replace current Invoice Capture software component with RPA	• Implement on top of existing infrastructure • Reading and interpreting unstructured data with a rule based RPA process is not likely to increase automation degree • Heavily reliant on extensive keyword configuration • Reading line items is not feasible
RPA + specialized ML tool for data extraction	Enhance as-is process by increasing automation degree for both Invoice Capture and subsequent steps	• Quick and non-disruptive implementation on top of existing infrastructure • A specialized, ML fueled component is deployed to read invoices and convert to structured data • Both header and item data in scope, which makes automatic posting possible in subsequent steps
End-to-end transformation	Complete transformation of P2P process	• Complete overhaul of existing system landscape across end-to-end process • Stakeholder and system complexity high • The potential for improvement is wider, and includes e.g. item data, adding missing data, trigger master data changes and validation, PO, GR and IR matching, workflow, automatic posting

By combining RPA with cognitive technology specialized for reading and interpreting invoices, subsequent steps can be automated in the ERP system



Invoice

- Inbound invoices are received per email

Unattended robot

- Unattended bot **reads** and **classifies** emails
- Check if EHF is possible
- Content in attachments are read and returned as **unstructured data**

ML component*

- The unstructured data from the invoice is fed into a ML/deep learning model and returns an output of structured data
- ML model becomes **increasingly accurate** due to training and validation
- Both header data and **line item data** is in scope

Human-in-the-loop

- Invoices containing fields with a confident score below a predefined threshold are sent to human review and validation
- **Attended bot** or **third party Gui**

Unattended bot or integration

- Unattended bot posts invoices to ERP, either using SAP Gui or SAP BAPI

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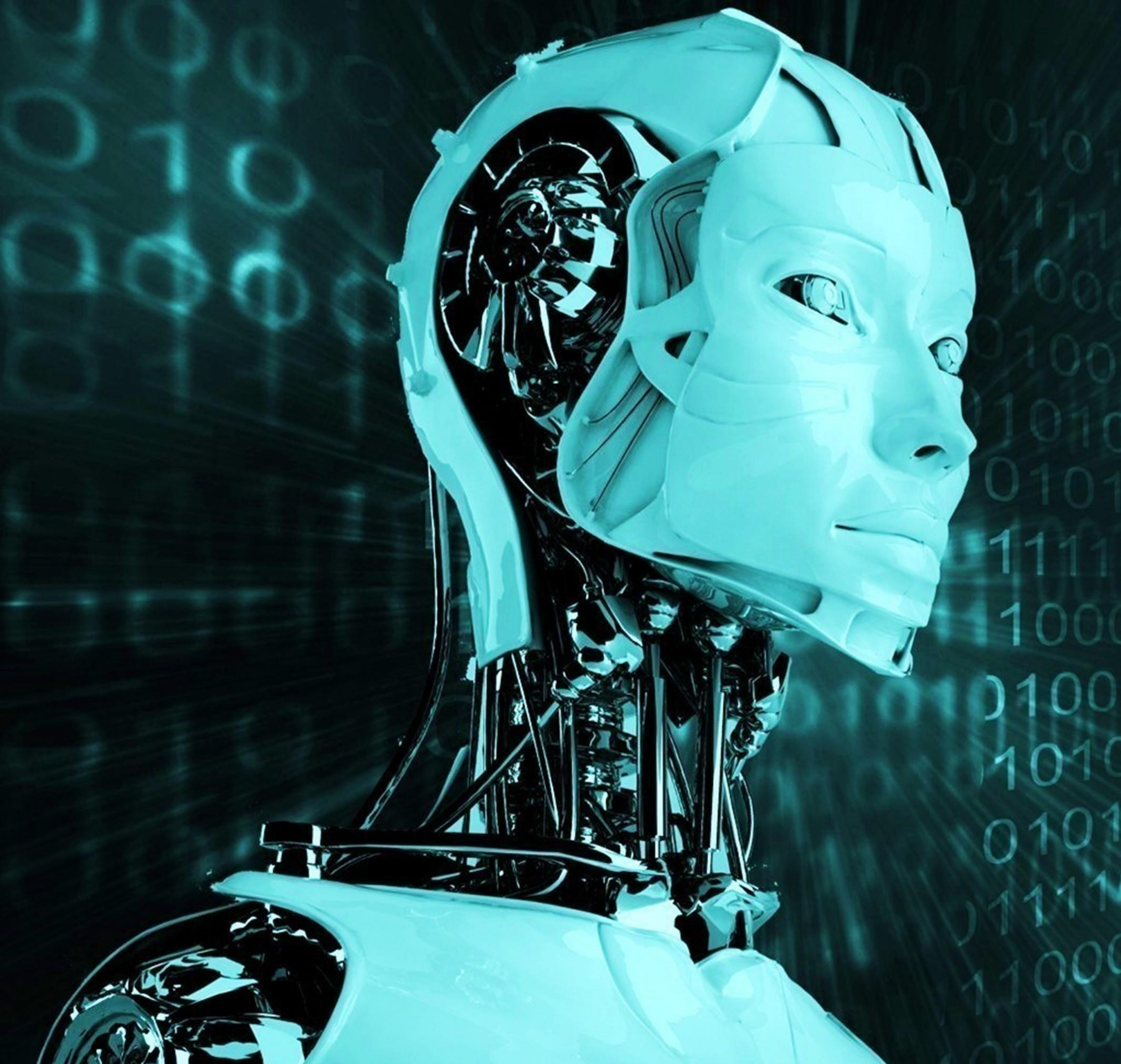
RPA enabled - Customer Experience and Retail Operations

Manage complaints - Incorrect Invoice (RPA vs existing process)

	1 Incorrect invoices are generated	2 Customers contact the utility company	3 Complaints are processed	4 Reasons are analyzed by Bots	5 Invoices are corrected
Existing Process	• *Incorrect invoices can be originated due to several reasons: incorrect dates, replication errors,, change of tenancy executed incorrectly*	• *Customers contact the utility company to open a complaint*	• *Agents process the customers calls or emails* • *Identify customer and create complaint: Level, Priority, Reason, Description, Department*	• *Identify the reason (e.g. incorrect particulars; processed due to replication error; …)* • *Distribution to responsible team* • *Invoice reversed, enter new reads and rebill the customer*	• *Offshore Team working to reduce the number of errors, but some of the workarounds are difficult to perform and they need constant support*
Intelligent Automation	CRM IS-U 1010110 1001001 1101010 • *Automatic analysis of ERP & CRM system looking for data that will generate incorrect invoices or any kind of complaint related to inconsistent data* • *Errors/Exceptions which can generate future complaints are fixed before the customer contact to open a complaint*	• *Emails are directly processed by bots* • *Calls are managed by an agent filling a simple form and move it forward to the bots*		Rules are applied Actions are done automatically • *Reasons are analyzed automatically by bots. Several rules are applied to identify the actions to be carried out* • *Processes to solve the incident are carried out by bots: Invoice reversed, enter new reads and rebill the customer*	• *Complaints are solved and the issue is automatically fixed. Rules and automatic actions can be updated to cover most of the types of complaints*



Questions?

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