

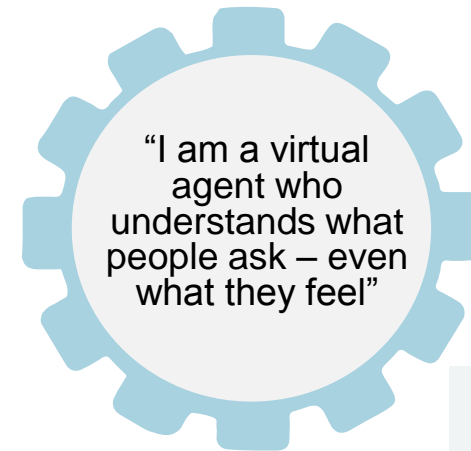
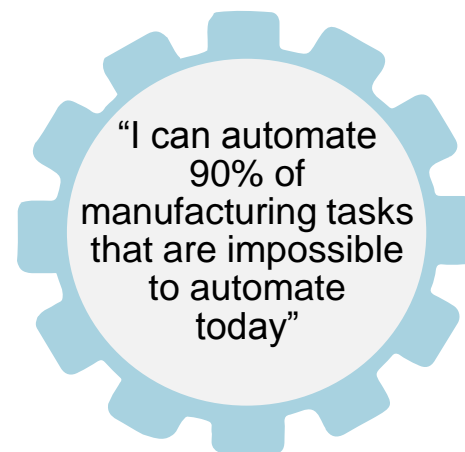
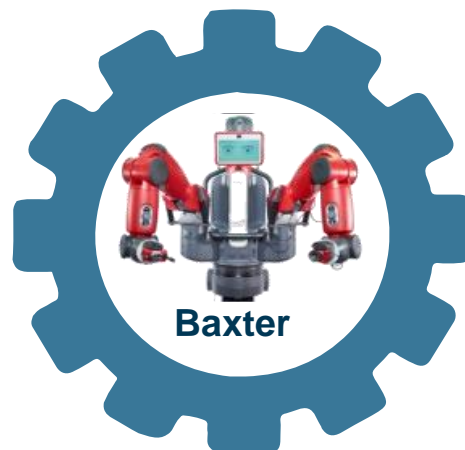


Robotic Process Automation (RPA) within Danske Bank

Zeeshan Rajan
zr@danskebank.dk

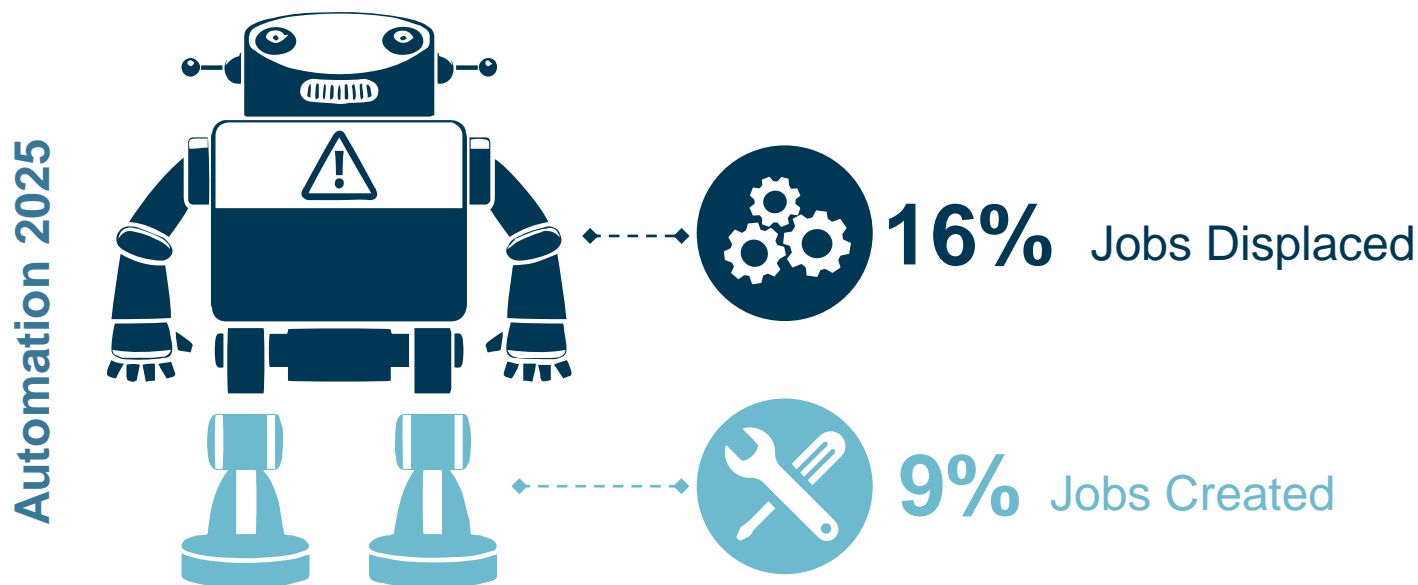
Presentation to Deloitte Finance Agenda
7th Sep 2016

THE ROBOTS ARE COMING...

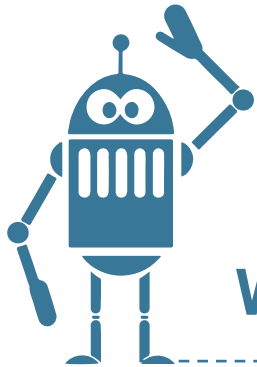


THE ROBOTS ARE COMING..... TRANSFORMING HUMAN WORKFORCE

Automation by 2019 — 25% Jobs Transformed



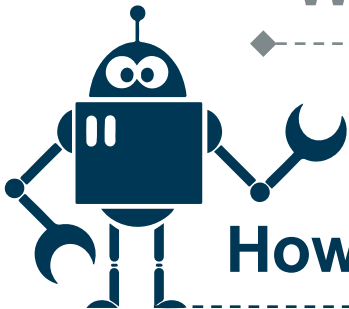
Robotics and automation – will fundamentally change the way companies operate



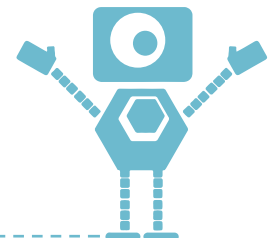
What is Robotic Process Automation?



Why has Danske Bank chosen Robotics as a key initiative?

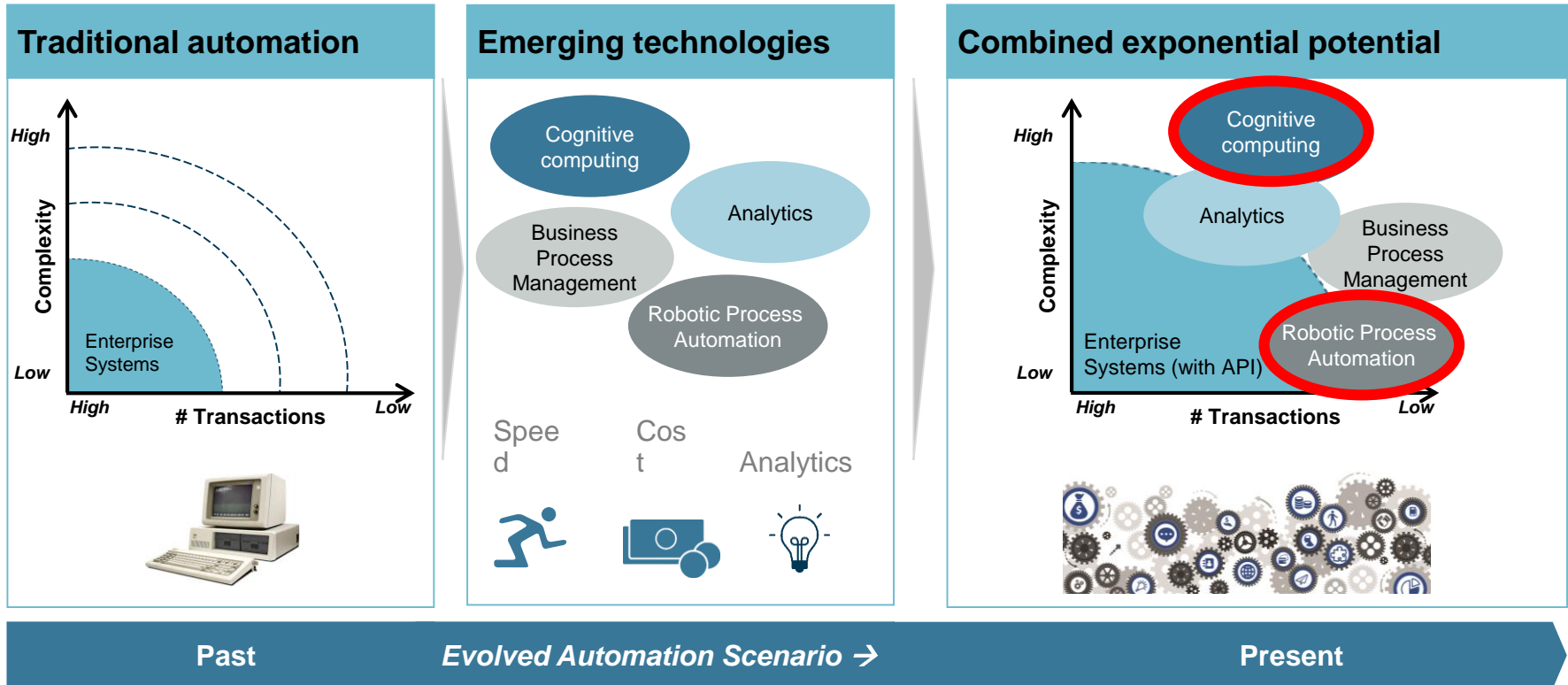


How is Danske Bank deploying Robotics across the organization?



Useful advice

New automation technologies evolving



ROBOTIC AUTOMATION SPECTRUM

RULE-BASED

Macros

Winrunner
Screenscraper

Robotic Process Automation



COGNITIVE

Digital/Virtual Assistance



Cognitive Computing



Robotics is an excellent tool for the tactical and operational level



	Level	Objectives	Project types	Approaches
Change the Bank	Corporate/ BU strategy <ul style="list-style-type: none"> • Moonshots • Market disruptive initiatives 	<ul style="list-style-type: none"> • Customer experience • Future revenue • Market disruption 	<ul style="list-style-type: none"> Market disruptive initiatives (moonshots) Strategic business projects 	Co-creation
	BPO/PSO change agenda	Tactical <ul style="list-style-type: none"> • End-to-end process transformations • Customer journeys 	<ul style="list-style-type: none"> • End-to-end optimization of customer experience 	<ul style="list-style-type: none"> End-to-end process design Agile Iterative Waterfall
Run the Bank		Service Owners <ul style="list-style-type: none"> • Continuous Improvement 	<ul style="list-style-type: none"> • Quality • Customer experience • Cycle time • Efficiency 	<ul style="list-style-type: none"> Robotics & BMP IT Tasks Lean in departments/frontline Daily continuous improvement (root-cause analysis)

What is Robotic Process Automation

- **Robotic software** can rapidly model and deploy automation across different digital landscapes
- **Automate** current tasks **as if a real person** were doing them across applications and system
- Individual delivery teams or process excellence resources can do it without extensive IT training or help



Tangible Benefits

45% increase in ability of employees to focus on customers

40% reduction of average process execution time

HUMAN
errors eliminated

BYPASS
system
integration
challenges

24/7 operational & up-time

3 months payback in deployment

A good RPA candidate

RPA Robot Simulation — Two robots running at the same time

Process Description ¹

Remittings from 3rd party; Danske Bank

- The process at hand registers payments from customers who have paid part/all of their debt
- The process includes: book keeping, updating limitation date and “restancekode”, editing risk profile, handling follow-up dates

Benefits

- Pressure taken from peak time due to
 - Time savings (90 sec vs 38 sec per case)
 - Reduced expenses (no overtime)
- High quality output

High volume

42000 cases per year

High process maturity

Process is established, functioning and stable

Digital trigger

Running every Tuesday, when new data is received from 3rd party

Rule-based

All process steps are rule-based (If..., then...). Even for exceptions rules can be created



1. For an overview of the process flow please see Appendix

Organisation around RPA to achieve scale

CoE to develop capabilities and scale



Key Questions?

- Org placement
- Factory setup
- Support team structure

Embarking on Robotic Processing Automation journey?

Practical advice/recap



**Start small
Be realistic**



**Robust Robot
monitoring**



Engage



**Be ready when
Robot fails**



**Communicate
success — create
awareness**



Strong governance

Thank you !

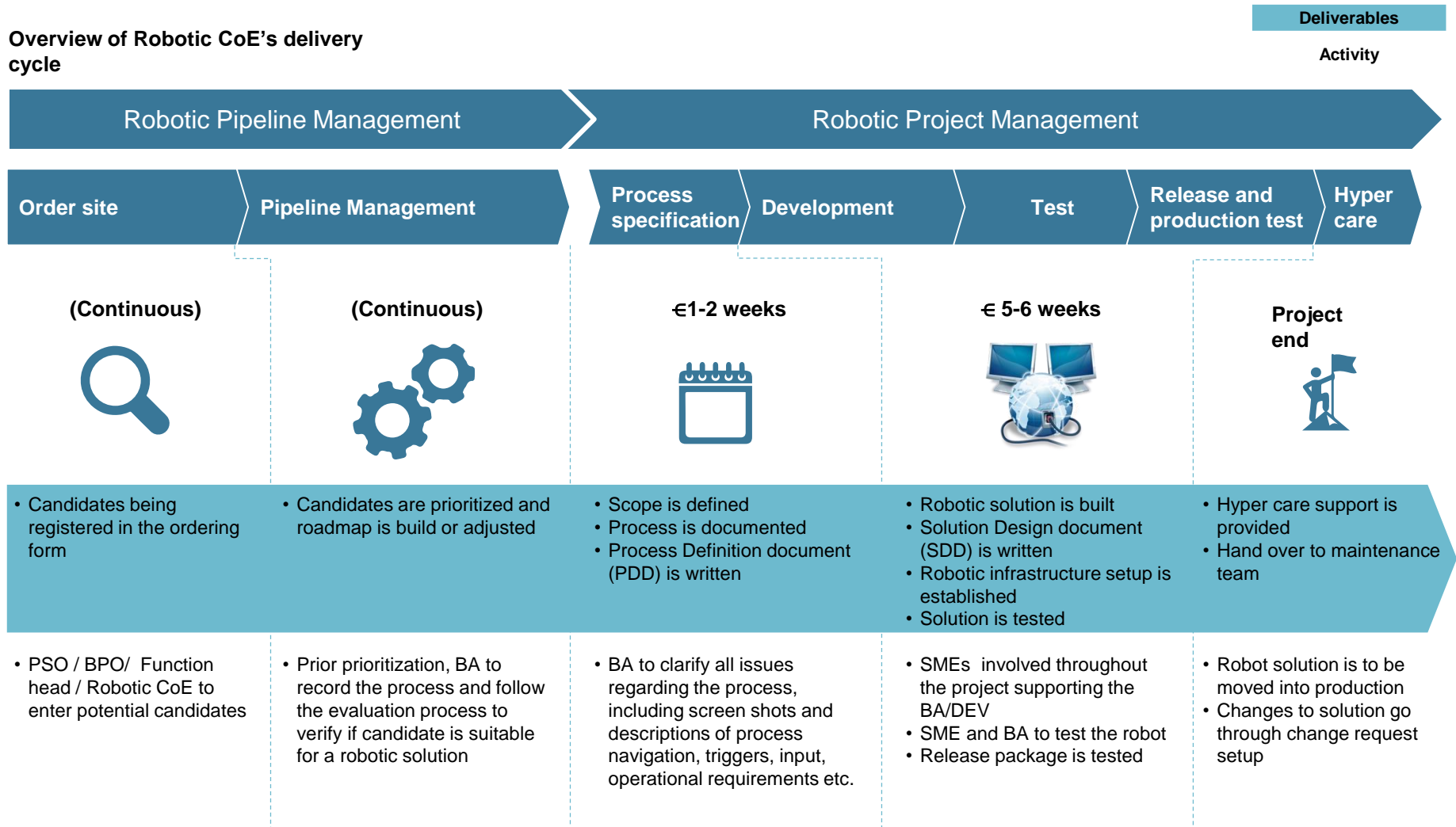


Appendix

Robotics Center of Excellence (Robotics CoE)

Robotics CoE delivers robotic solutions through a streamlined factory setup within 6–8 weeks




Overview of Robotic CoE's delivery cycle



Stakeholder involvement across the task lifetime

Role	Continuous			~2 Weeks	~4 Weeks			~2 Weeks		
	Candidate Identification	Registration	Prioritization	Mapping	Design	Main Flow	Functionality and Exceptions	Test	Release	Hyper care
Delivery Lead	<ul style="list-style-type: none"> Coordinate analysis of several processes Align business needs with processes 			<ul style="list-style-type: none"> Coordinate several process DLs with PSOs Align processes with business needs 	<ul style="list-style-type: none"> Align with CoE, so development can be conducted accordingly Coordinate multiple development efforts 			<ul style="list-style-type: none"> Ensure the process(es) meet business expectations Work with the business to coordinate future perspective 		
Business Analyst	<ul style="list-style-type: none"> Estimate benefits for automation and a shortlist of pilot opportunities Facilitate candidate identification with SMEs 			<ul style="list-style-type: none"> Document process in PDD 	<ul style="list-style-type: none"> Set up control flow managing the robot If needed extend and finalize PDD 			<ul style="list-style-type: none"> Implement robot in organization Monitor tests Establish controls for monitoring the robot 		
Developer	<ul style="list-style-type: none"> Provide pre-screening input 			<ul style="list-style-type: none"> Provide input for PDD screening 	<ul style="list-style-type: none"> Develop robot based on PDD Initiate creation of SDD 			<ul style="list-style-type: none"> Update robot based on input from test Finalize SDD Assist in handover of the Robot 		
Subject Matter Experts	<ul style="list-style-type: none"> Provide input for process assessment Identify potential processes 			<ul style="list-style-type: none"> Provide detailed input on processes and rules 	<ul style="list-style-type: none"> Provide answers for possible questions and decide on proper handling of edge cases 			<ul style="list-style-type: none"> Validate test cases 		
IT	<ul style="list-style-type: none"> Impact on legacy systems Performance assessment Identity and access control Provide development environment 			<ul style="list-style-type: none"> Assess impact on legacy systems 	<ul style="list-style-type: none"> Make systems available Prepare Test and Production environments 			<ul style="list-style-type: none"> Validate test cases Monitor system status 		
Maintenance	N/A			N/A	<ul style="list-style-type: none"> Prepare Test and Production environments Move solution from development into test environment 			<ul style="list-style-type: none"> Move the robot from testing into production 		

Example of robotics candidates under development

Name	Objective and description	Cost and Benefit
<p>WM: ODD document check</p> 	<ul style="list-style-type: none"> • Develop robot to automate part of annual ODD process for International Banking • Robot saves documents in right places and collect necessary information for validity reviews 	<ul style="list-style-type: none"> • Development time (1FTE): 3-4 weeks • CASE: Efficiency saving of 1,1 FTE; Improved quality • Payback: 36 days
<p>PB: On-boarding process</p> 	<ul style="list-style-type: none"> • Automate the 20-30 minutes advisors spend typing information from onboarding tool to the customer portal 	<ul style="list-style-type: none"> • Development time (1FTE): 3 weeks • CASE: Efficiency saving of 6,7 FTE (27.300 cases per year); Reduced errors • Payback: 5 days
<p>GO: Close accounts</p> 	<ul style="list-style-type: none"> • Automate the final step in Selling Home cases • Validate if loans have been redeemed and collateral has been deleted. Closing accounts and releasing money for customers 	<ul style="list-style-type: none"> • Development time (1FTE): 4 weeks • CASE: Efficiency saving of 1,7 FTE • Payback: 7 months

