Robotic Process Automation:
a hype or a proven technology?

Onur Pamuk | 8th of May 2019

ONUR PAMUK

Digital Transformation Consultant

- More than 3 years of experience in RPA
- Blue Prism expert
- Driven and passionate by digital technologies
- Dealt with more than 70 RPA processes across major companies

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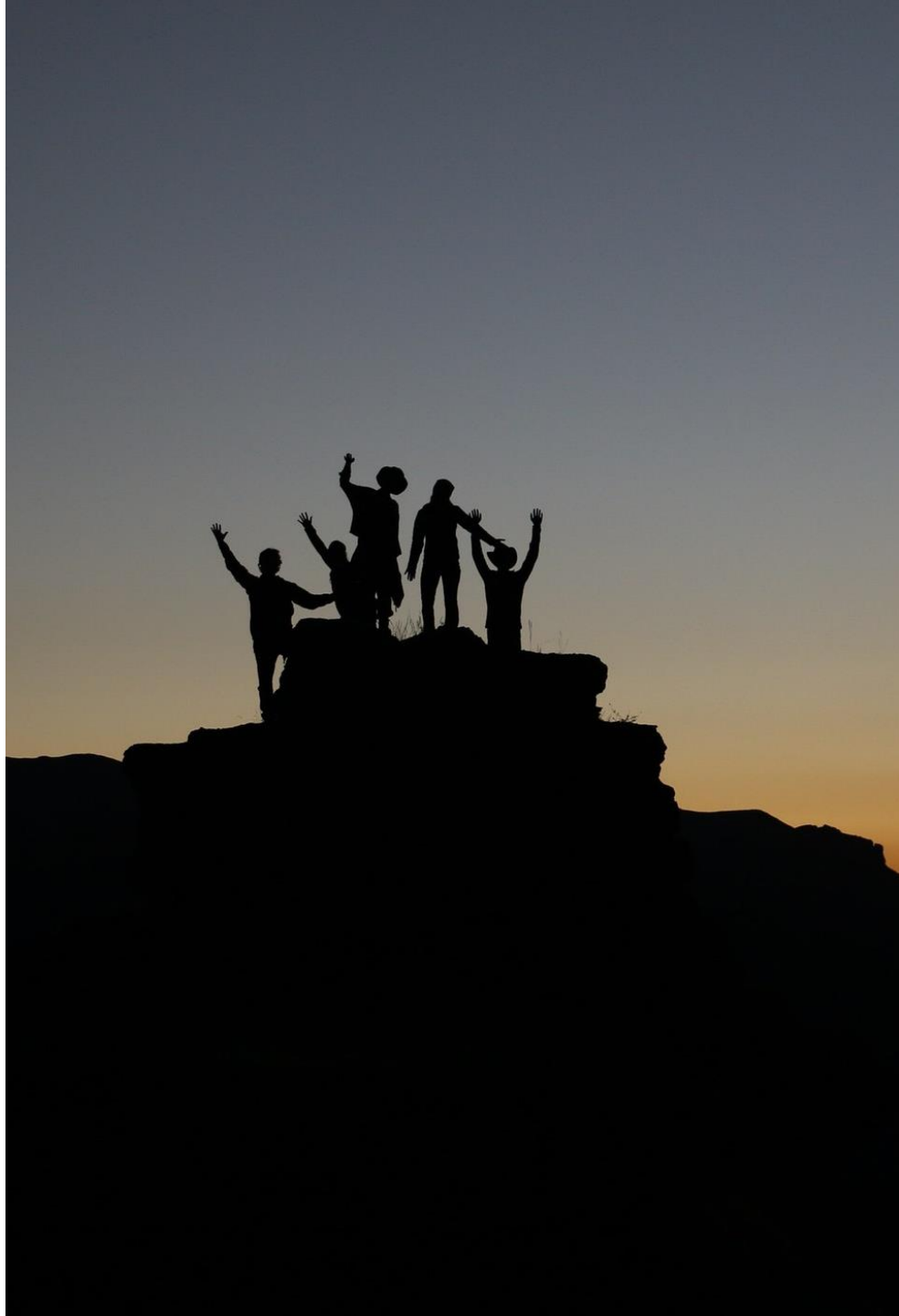
GROUP RENOTEC
RENOTEC
RENOVATING FOR THE FUTURE



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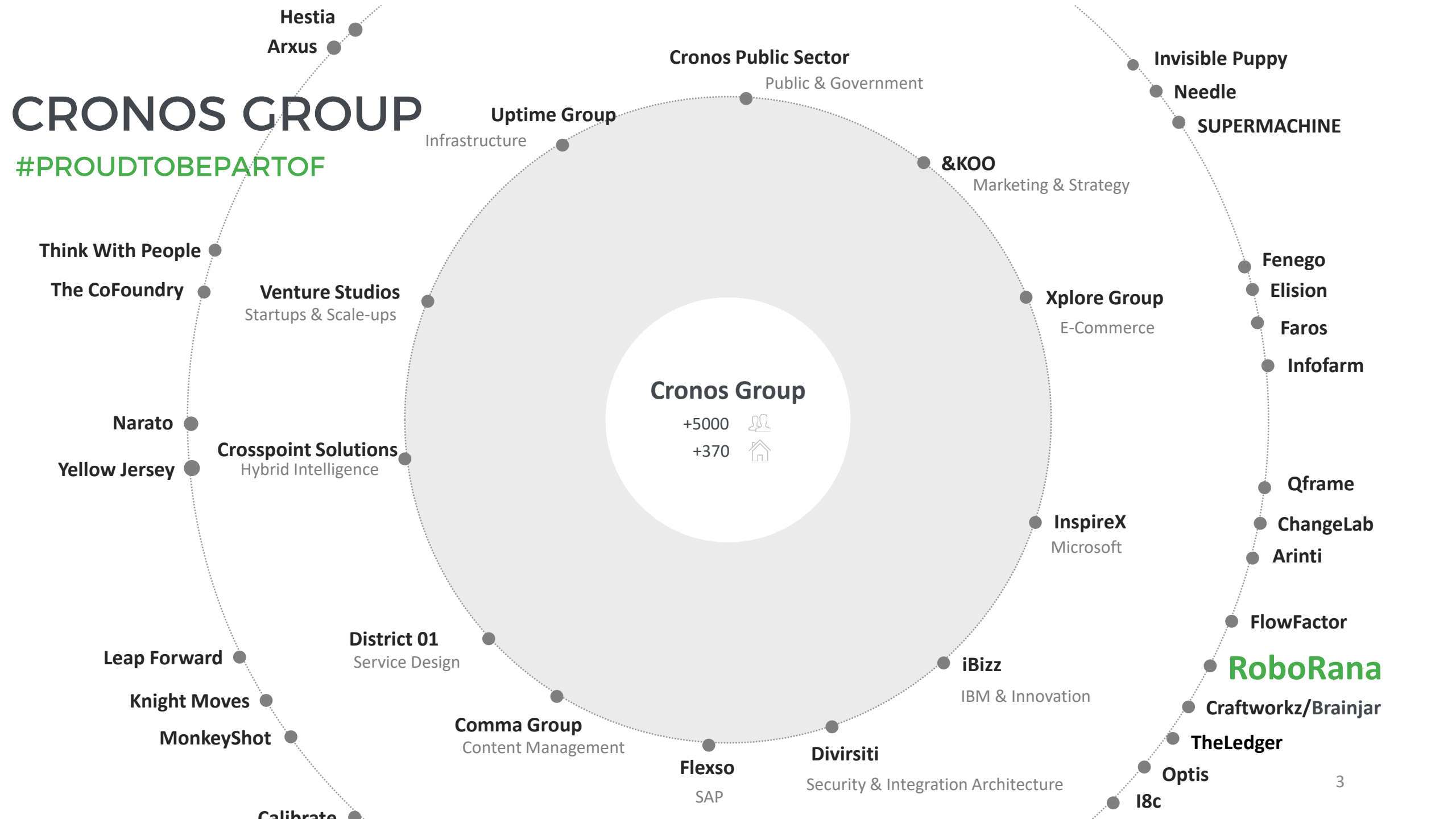

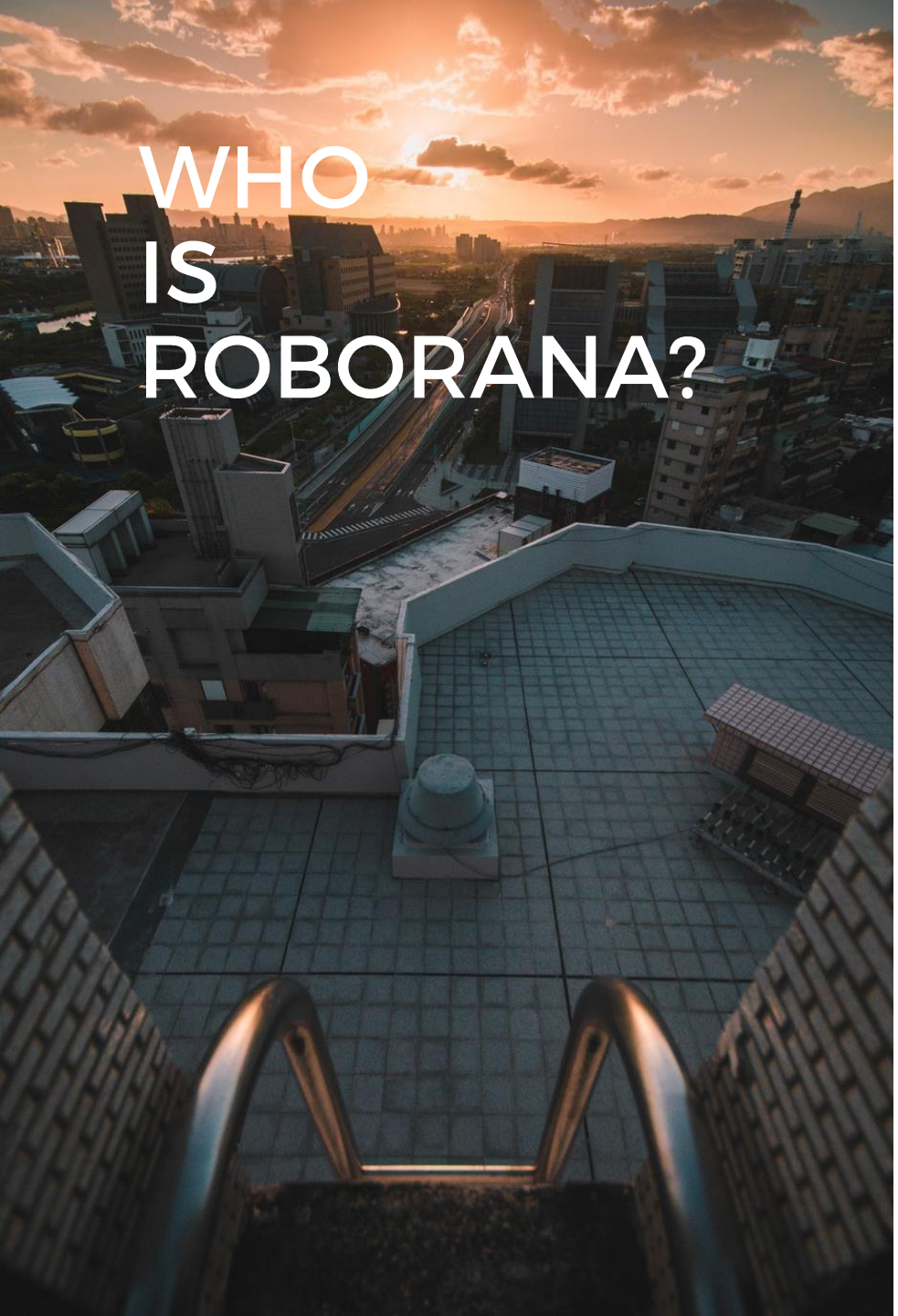

WHO IS ROBORANA?

ROBORANA

RoboRana is a fully fletched **Robotics Competence Centre**, within the Cronos Group, focusing on Robotic solutions such as Robotics Process Automation and Intelligent Automation.

Our core competences:

- Robotics Process Automation (RPA)
- Intelligent Automation (IA) – OCR/NLP/PROCESS MINING
- Partner of RPA market leaders

  AUTOMATION ANYWHERE UiPath blueprism
- We help organizations to innovate, to digitally transform and make repetitive processes more efficient

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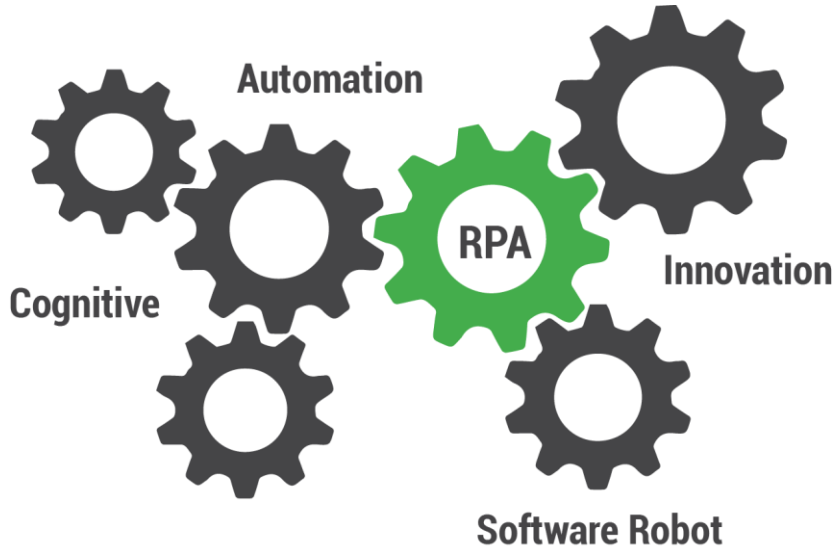
RPA AND INTELLIGENT AUTOMATION

ROBOTICS PROCESS AUTOMATION (RPA) is the automation of **repetitive, high volume** and **manual processes** with software robots that mimic human actions and connect multiple systems without changing the existing IT landscape.

INTELLIGENT AUTOMATION (IA) stands for the integration of **Robotics Process Automation with cognitive solutions** such as Natural Language Programming, Optical Character Recognition, Chatbots or machine learning.



ROBOTICS PROCESS AUTOMATION

RPA BY THE NUMBERS

85%

NUMBER OF A TYPICAL FIRM'S 900+ PROCESSES THAT CAN BE AUTOMATED WITH RPA

Cost reductions with RPA for onshore operations

Cost reductions with RPA for offshore operations

POTENTIAL RPA ROI IN THE FIRST YEAR **30%-200%**

140MIO

Number of FTE capacity that could be released by 2025

Estimated reduction with RPA in entry-level roles

$4.6BIO

ESTIMATED RPA MARKET IN 2021

20.000

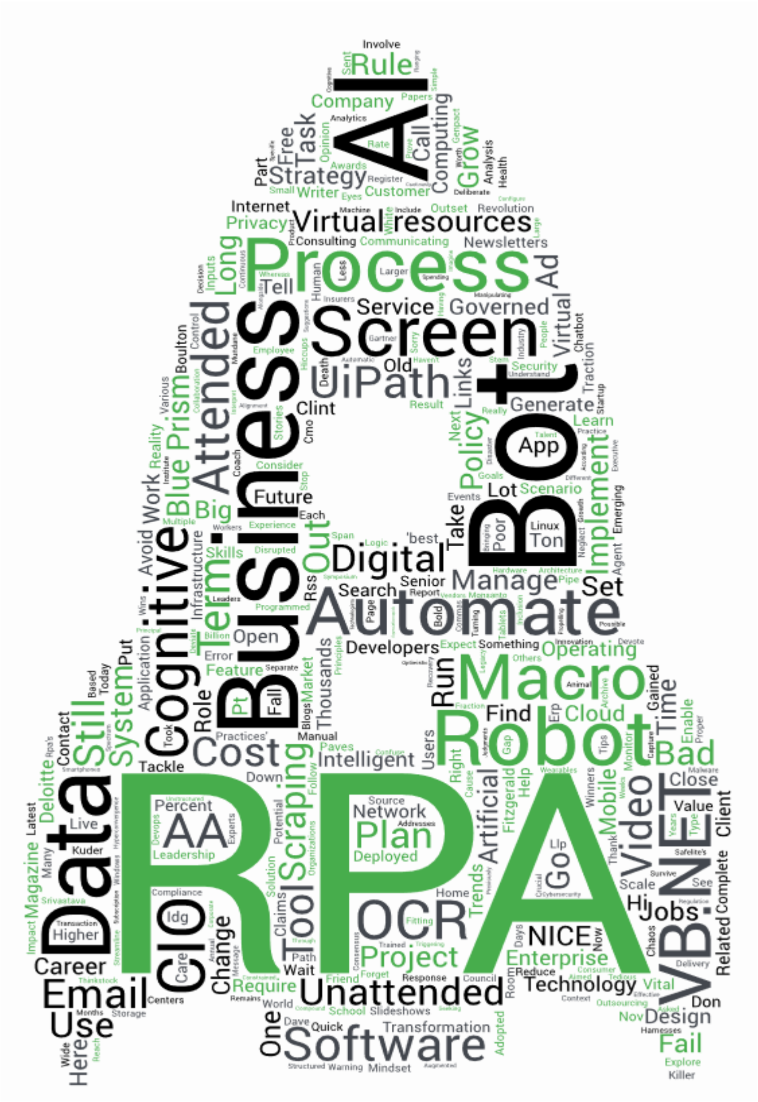
Number of people with RPA Developer Certification

Of BI Platforms will include Natural Language Generation and AI as standard features

ROBOTICS WHAT?

RPA IS MORE THAN ONE TECHNOLOGY

30+ years of **technology** combined in one platform



BENEFITS OF RPA AND IA

Organizations do not only save on costs, time and effort. RPA and AI also offer **a wide range of opportunities** to make data more consistent and processes more efficient:

UNATTENDED ATTENDED AUTOMATION

UNATTENDED

Automates 100% work

Few user interaction

Self-triggering robots

Server

Back-office

Fully-documented proccesses

ATTENDED

Automates 20% - 90% work

User interaction

Trigger by events

User's desktop

Front-office

Partially-documented proccesses

USE CASES

RPA AND IA CAN BE APPLIED IN EVERY DOMAIN WITHIN ORGANIZATIONS

FINANCE & ACCOUNTING

AP – AR – CONTROLLING – TREASURY

Sales order,

Order to cash

Collection

Procure to pay

Incentive claim

Record to report

Vendor setup

Trend tracking

HUMAN RESOURCES

R&S – ONBOARDING – HR SERVICES

Payroll

Benefits administration

Pay slip management

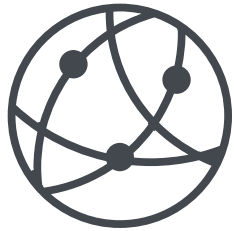
Time and attendance management

Recruiting process

Education and training

Compliance reporting

Expense management



SUPPLY CHAIN

LOGISTICS – OPERATIONS - PRODUCTION

Master data management

Work order management.

Demand and supply planning

Quote, invoice and contract management

Returns processing

Freight management

INFORMATION TECHNOLOGY

SERVICE DESK – HOSTING – SECURITY

Installations

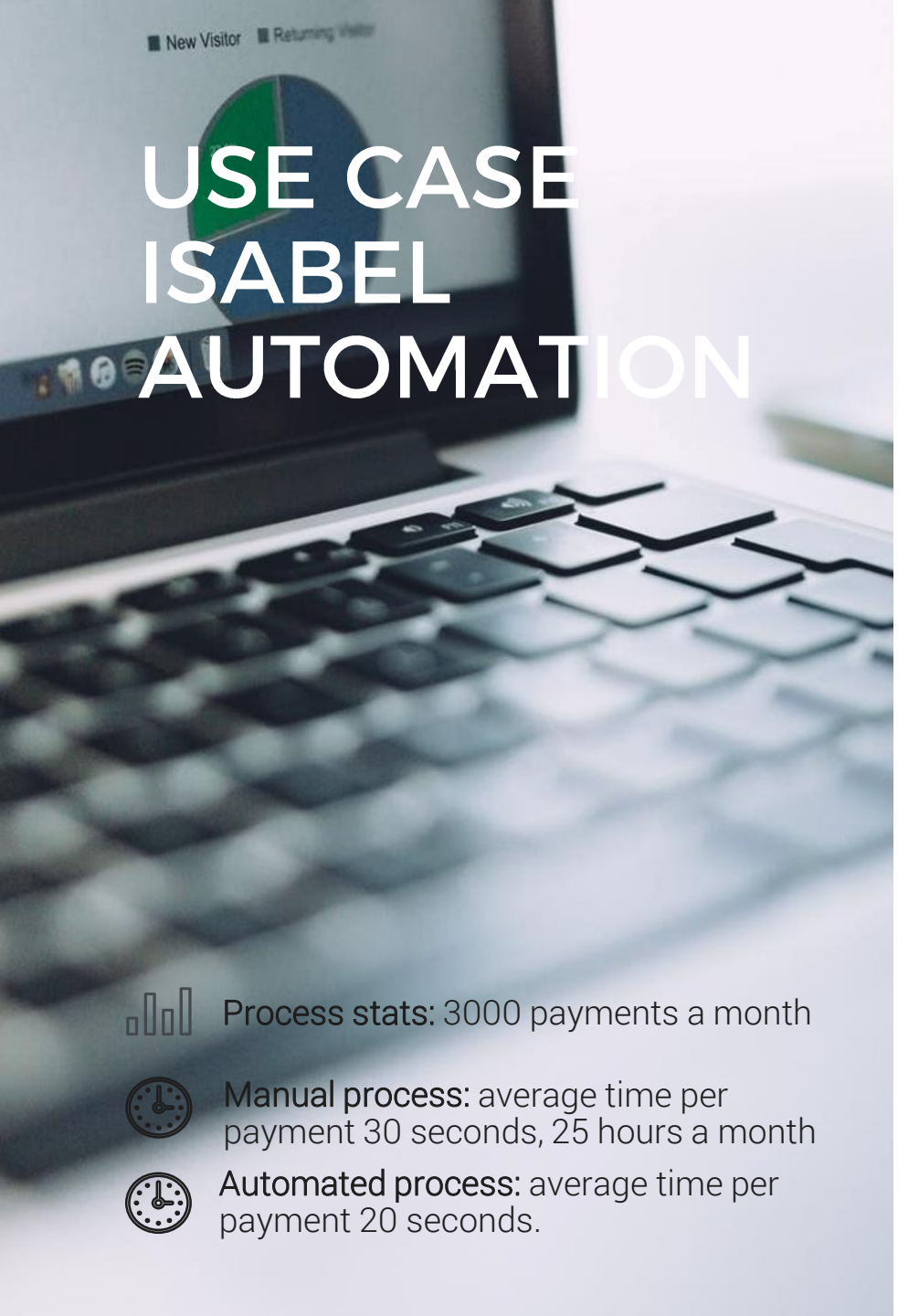
File transfer protocol download, upload and backup

Server application and monitoring

Synchronizing, deleting and emptying folders

File and email management.

ROBOTS
at work...



USE CASE ISABEL AUTOMATION

Process stats: 3000 payments a month

Manual process: average time per payment 30 seconds, 25 hours a month

Automated process: average time per payment 20 seconds.

Filtering payments

ISABEL

Payments in ISABEL are filtered to be processed by the robot.

Extract data

ISABEL

Specific data from the payments are extracted

Registration in Excel

Excel

The total of the payments are written in corresponding cell.

Assign payment to folder

ISABEL

Processed payment is placed in folder

USE CASE DATA CLEANING ORACLE

Manual process: 5 min. on average per part number to assign all missing organizations

Automated process: 30 s. on average per part number to assign all missing organizations

Sign in to Oracle

Oracle

Find part number

Oracle

Search for the given part number

Extract and compare

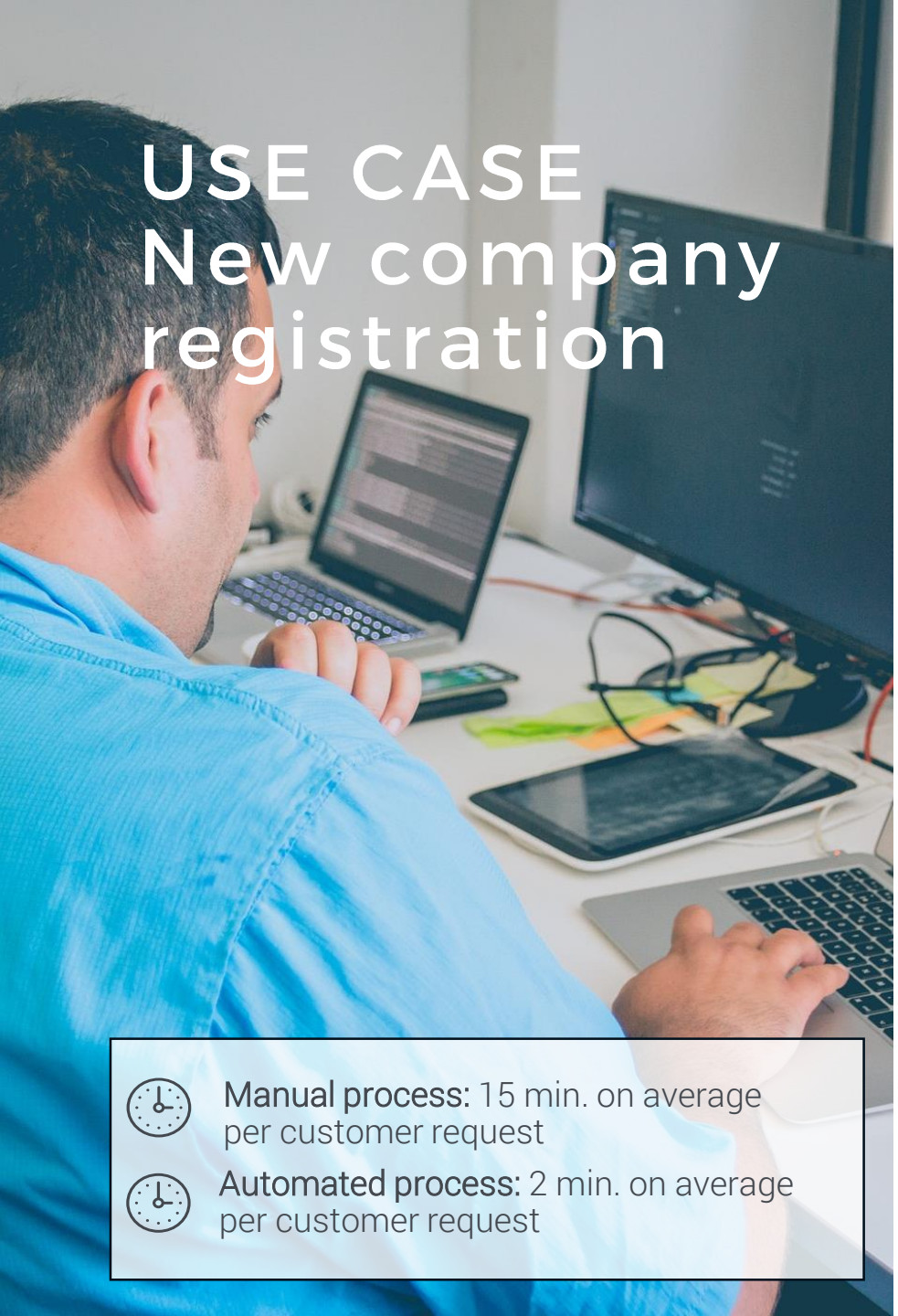
Excel

Compare the organizations with a predefined list

Update part number

Oracle

Assign all the missing organizations



USE CASE
New company registration

Manual process: 15 min. on average per customer request

Automated process: 2 min. on average per customer request

Online customer requests

Customer portal and E-mail with pdf attachments

New request are collected via an online portal. Information is consolidated and sent by e-mail. Robot scans inbox for new e-mails.

Extract customer data

Excel

Robot opens each pdf attachment, extracts customer data and logs the info in Excel

Launch application and log in

Web application

Robot launches a web application and logs in with username and password

Process customer data

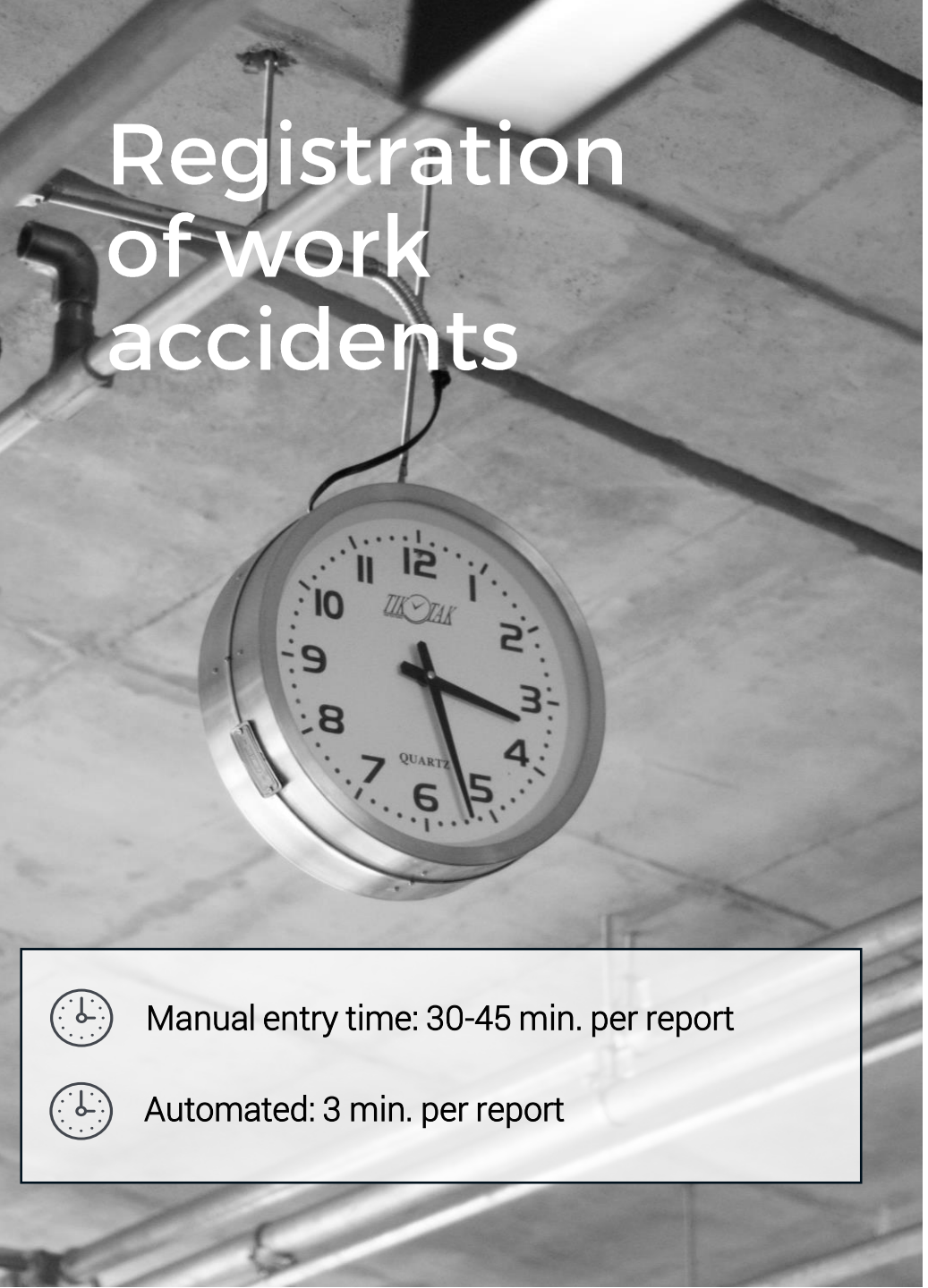
Web application

The robot registers new companies based on the customer data in different fields and screens and finishes the registration.

Send info to security officer

E-mail

The robot gives feedback to the administrator on exceptions. The robot also logs exceptions.



Registration of work accidents

Manual entry time: 30-45 min. per report

Automated: 3 min. per report

File work accident report

Insurer website

The robot enters fields in insurer web form.

Extract information

Excel

Work accident information is extracted from Excel sheets and entered in the corresponding fields.

Extract information from SAP

SAP

Specific information about the victim is required and is retrieved in the SAP system.

Save report

Insurer website Ethias

The report is ready for manual review and completion, before sending it to the insurer.

USE CASE GDPR – Right for information

Manual process: 2 days on average per customer request

Automated process: 10 min. on average per customer request

Online customer requests

Customer portal and E-mail

Information is collected via an online portal. Information is consolidated and sent by e-mail. Robot scans inbox for new e-mails.

Extract customer data

Excel

Robot extracts customer data and logs the info in Excel

Launch CRM and log in

CRM

Robot launches CRM application and logs in with username and password

Process customer data

CRM and web applications

The robot finds customers based on INSZ, opens 28 web applications and takes screenshots of each application with customer data.

Send info to security officer

E-mail

The robot consolidates screenshots in 1 document and sends it to the security officer

Send info to customer

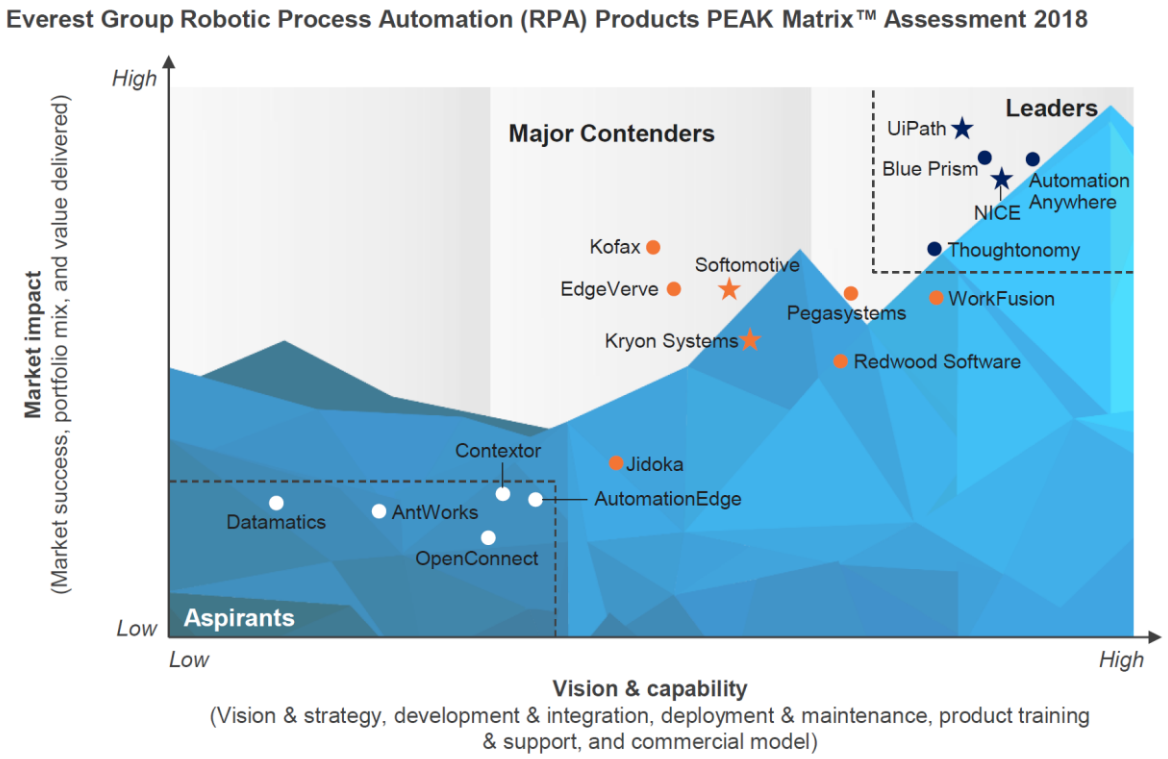
E-mail and SMS

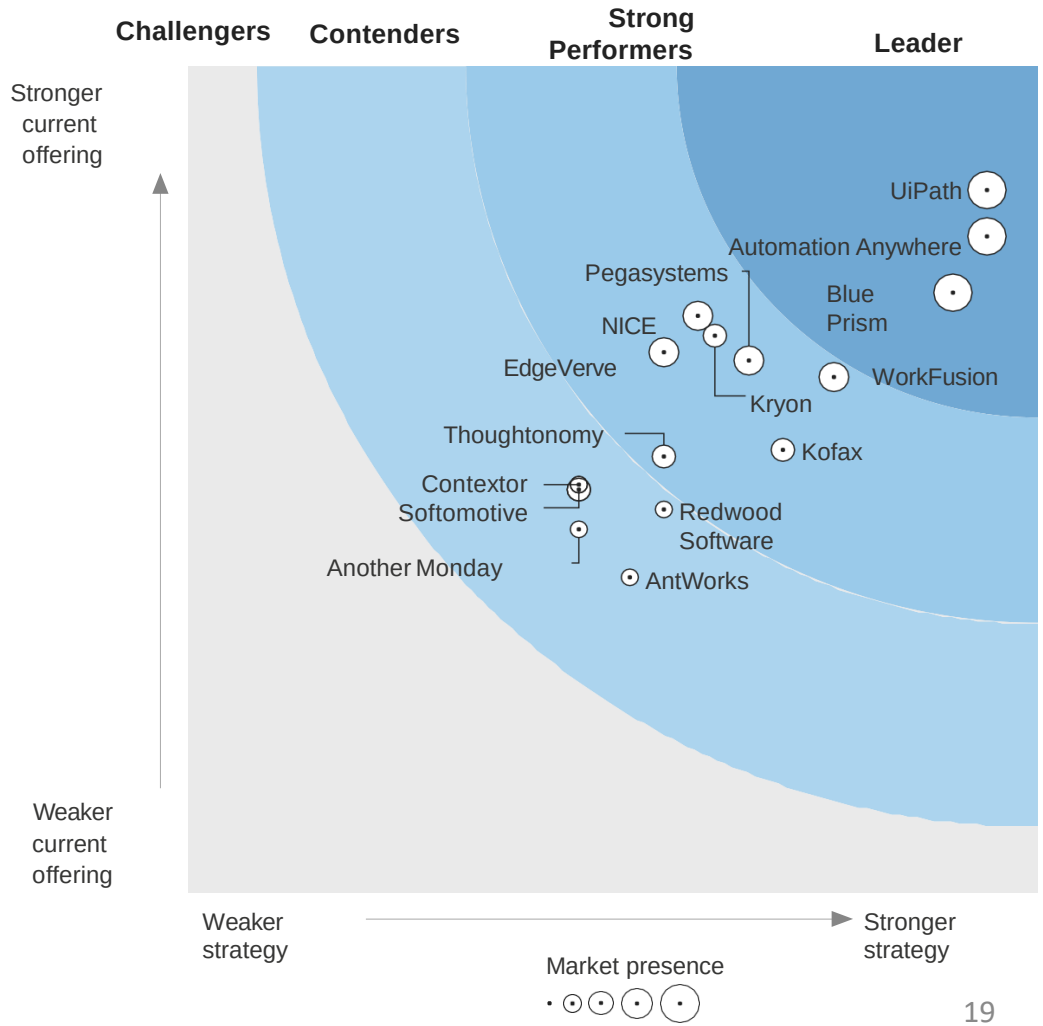
After validation, the robot sends an encrypted file to the customer. Access is granted by SMS verification code.


What about
RPA TOOLS?

RPA TOOLING

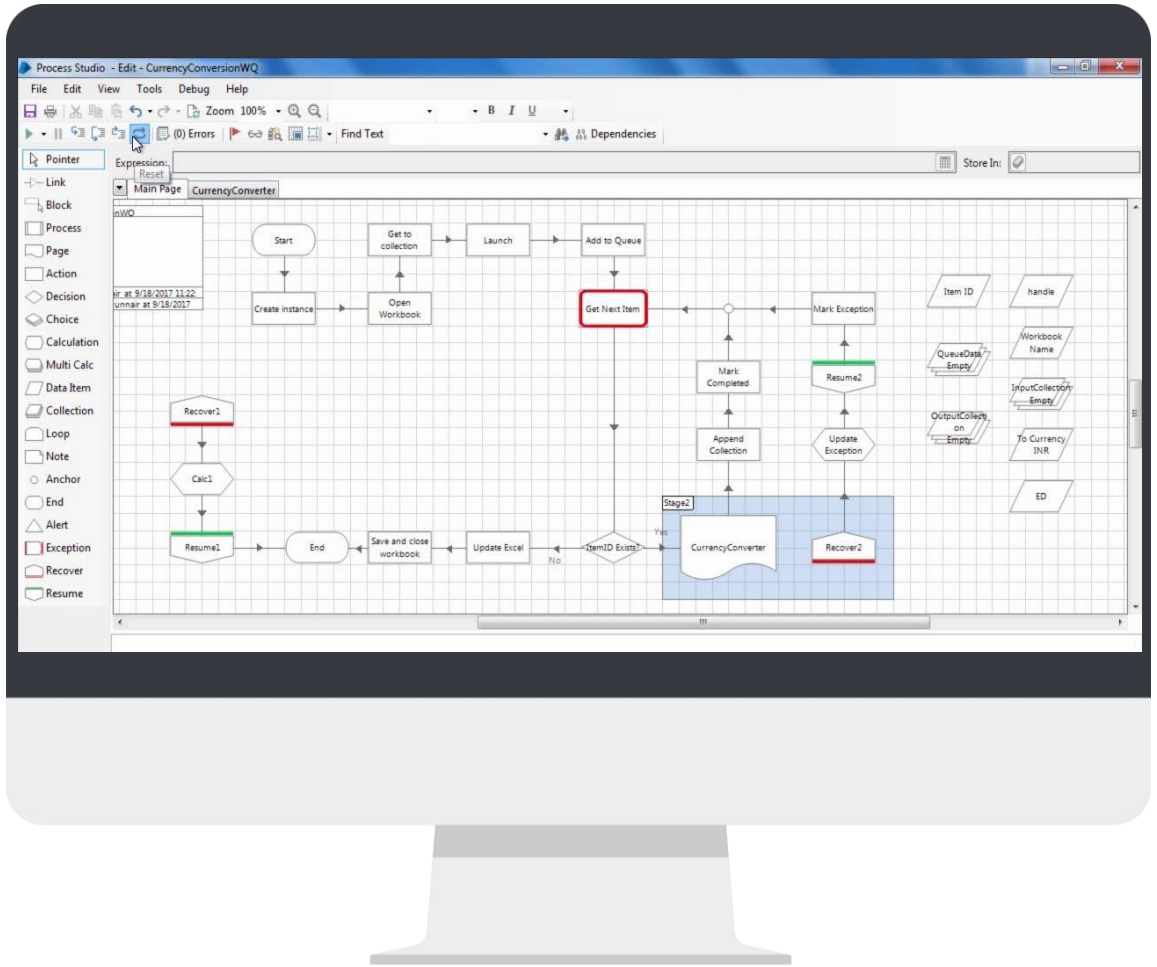
EVERST GROUP Q2 2018 - FORRESTER WAVE Q2 2018





RPA TOOLING

BLUEPRISM



Process Design

Process are defined using “drag-and-drop”, much like “Visio”.

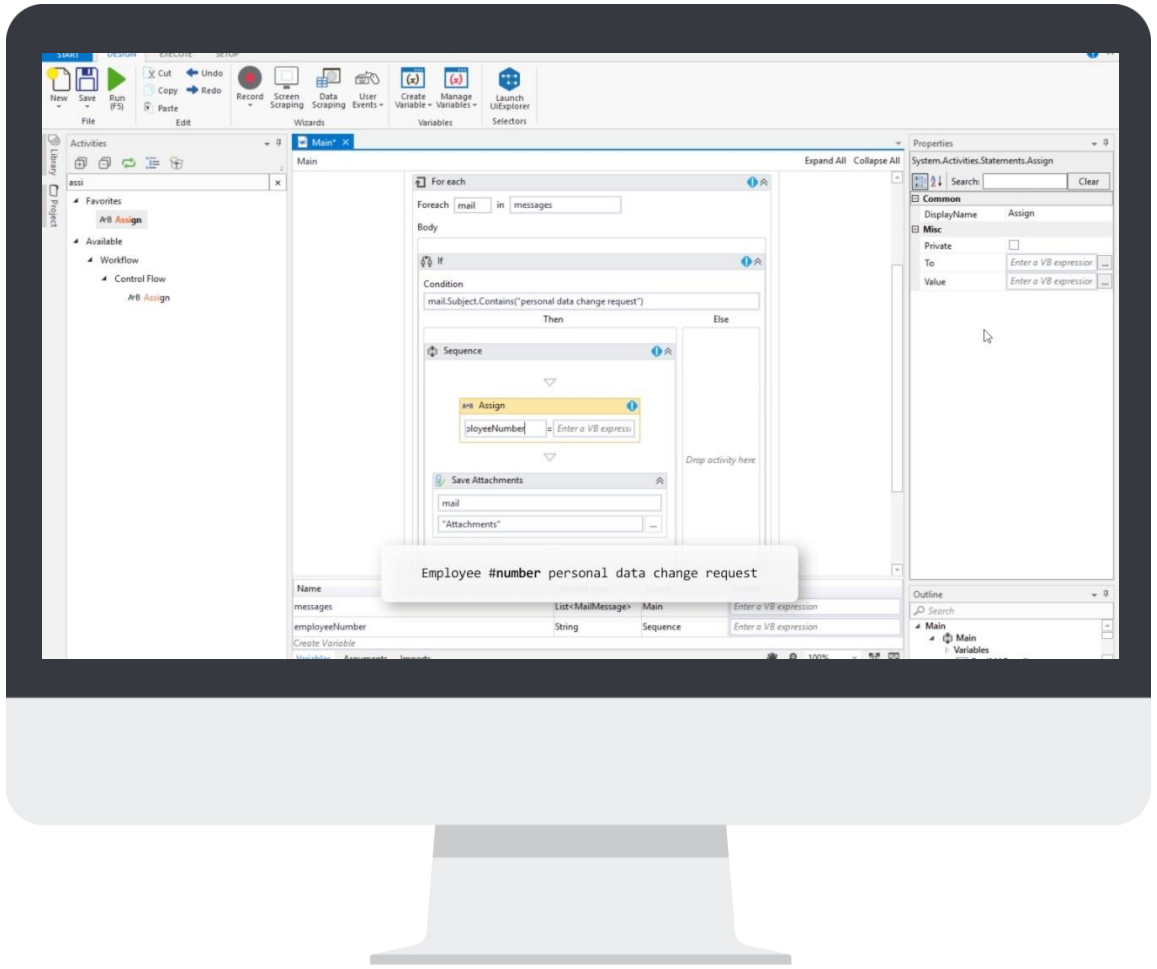
Implementing Actions and Logic

“click into” each object to define logic (e.g. formulas) or capture events.

Screen interactions captured using a set of ‘spy’ tools, for reading screens, entering data, selecting options and pushing buttons. Objects can be re-used for efficiency.

RPA TOOLING

UIPATH



UiPath

Process Design

Container based “drag-and-drop” components and user friendly recording capability.

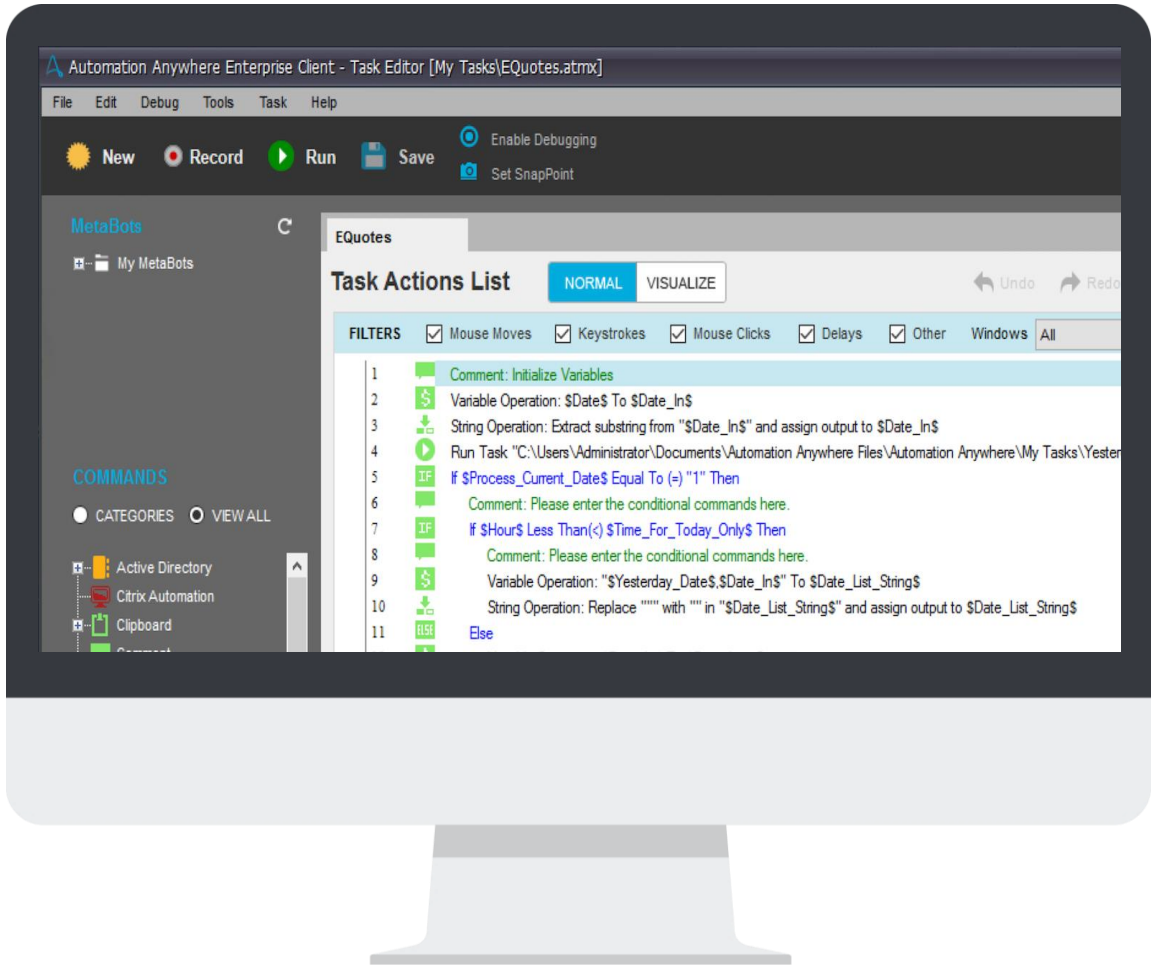
Implementing Actions and Logic

“click into” each object to define logic (e.g. formulas) or capture events in containers.

Screen interactions captured using a set of ‘spy’ tools, for reading screens, entering data, selecting options and pushing buttons. Objects can be re-used for efficiency.

RPA TOOLINGS

AUTOMATION ANYWHERE



AUTOMATION ANYWHERE

Process Design

Object oriented “drag-and-drop” and user friendly recording capability. More a line oriented approach.

Implementing Actions and Logic

“click into” each object to define logic (e.g. formulas) or capture events.

Screen interactions captured using a set of ‘spy’ tools, for reading screens, entering data, selecting options and pushing buttons. Objects can be stored in library and re-used for efficiency.

How to build a VIRTUAL WORKFORCE?

BUILDING A VIRTUAL WORKFORCE

CHALLENGES

RPA should always sit within the Business

- *RPA should be considered an operational asset – always run by business stakeholders with support from IT, subject matter experts, and process efficiency experts.*
- *Grow in-house RPA capability by building a Centre of Excellence made up of a mixture of Operations and IT staff.*

RPA is not a project. RPA is a journey

- *Plan to build a sky-scraper not a bungalow.*
- *Build internal RPA capability to evolve, leverage scale, and increase business value.*
- *Multi-skill the robots.*
- *Do not be tempted by quick wins and deploy RPA in silos – fragmented and difficult to scale – always begin with an enterprise-level roll-out.*

Never automate a broken process

- *Ensure the process is stable and mature before applying automation.*

The success of RPA depends on an dedicated sponsor

- *RPA needs an institutionalized Robotics Team led by a **Sponsor** - who initiates the idea of automation, underwrites resources and ensures progress towards business adoption, and by a RPA **Champion** - the RPA evangelist in charge of the successful deployment of RPA within the organization.*

Bring IT on-board early

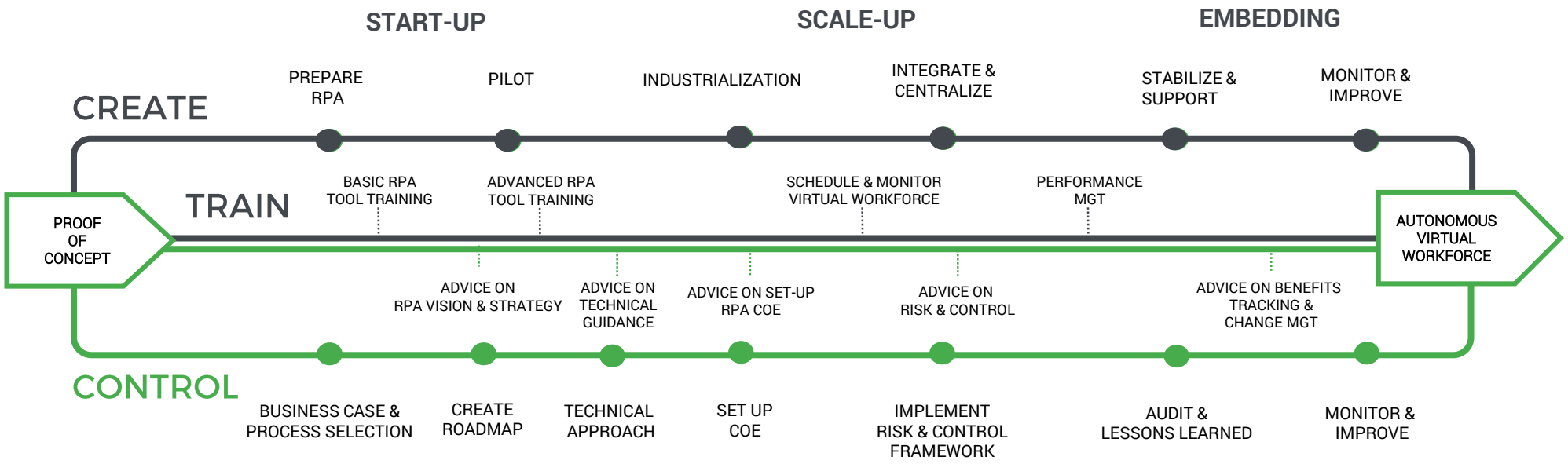
- *Bring on IT on-board early. RPA deployment has an impact on Infrastructure, Security, Business. Continuity and Disaster Recovery.*
- *Make sure the infrastructure grows together at same pace as automation.*
- *RPA must comply with the technology function's governance and architecture policies.*

Communicate, Communicate, Communicate!

- *Pay careful attention to internal communication.*
- *Engage a dedicated team of Change and Communication, in charge of raising awareness within the organization about the benefits of automation.*
- *Always keep relevant stakeholders up to speed with the progress of the automation journey.*

ROBORANA FRAMEWORK

CREATE – CONTROL – TRAIN

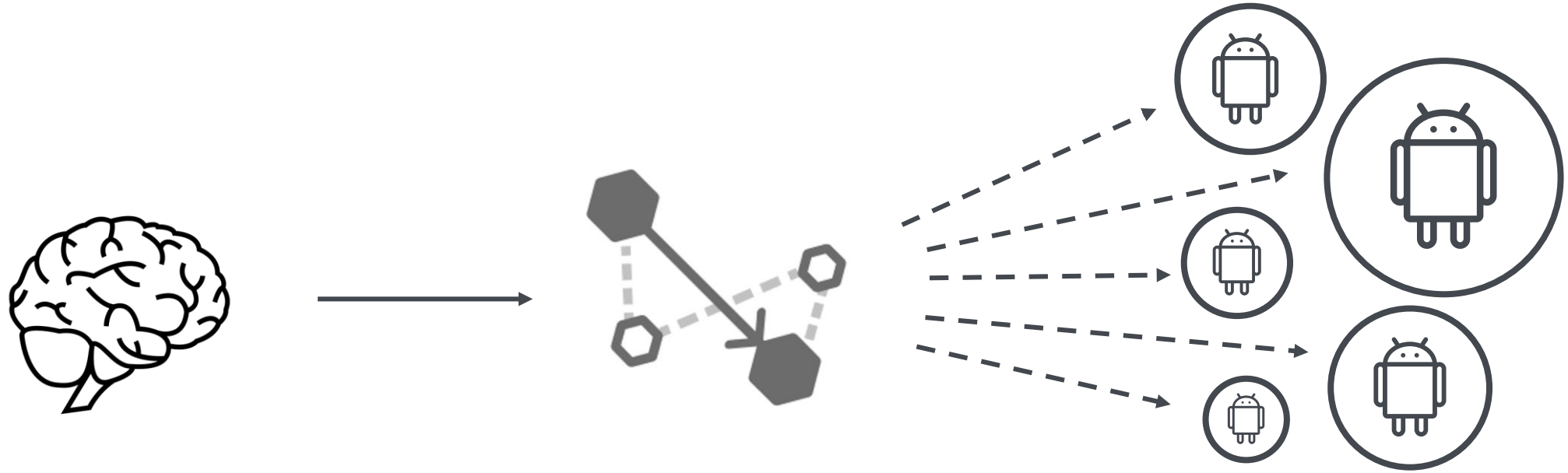


Our proven framework consists of 3 complementary tracks (CREATE, CONTROL and TRAIN) to successfully experience the RPA journey. Key is to create a robust RPA solution, built to scale and industrialize across the entire organization. Controlling, monitoring and continuous improving of the RPA initiatives play a fundamental role while building the solution. In addition, each step in the RPA journey is supported with training and expertise in various RPA subjects to ensure continuous improvements.


The future starts
today with
INTELLIGENT
AUTOMATION

FUTURE OF VIRTUAL WORKFORCE

#AI+RPA = IA



UNDERSTAND

AI learning capabilities to understand and structure context, adapt to users and systems:

iOCR, NLP, PROCESS MINING, CHATBOTS,

VOICE TO TEXT, COMPUTER VISION

ORCHESTRATE

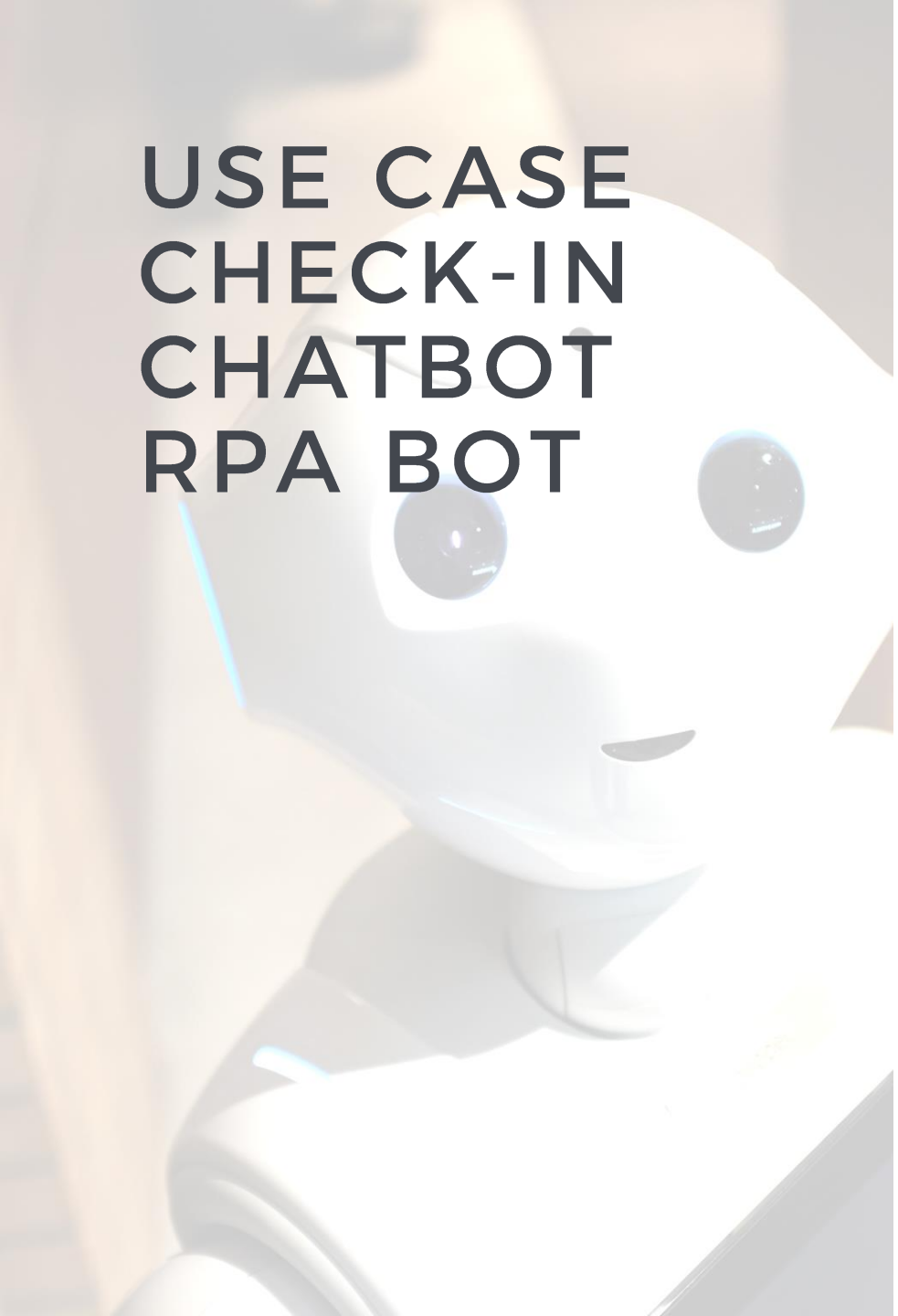
Auto-scaling depending on capacity + AI learning capabilities to handle judgment-oriented tasks:

MACHINE LEARNING

PREDICTIVE ANALYSIS

EXECUTE

RPA = to replicate human actions



USE CASE CHECK-IN CHATBOT RPA BOT

Interact with visitor

Chatbot

Greet visitor and ask input

Verify registration

Excel

Verify visitor registration

Wifi code & invite

Web

Generate Wifi code and send Slack invite

Print visitor badge

Dymo

Print badge with visitor name and company

USE CASE INCOMING INVOICES WITH iOCR

Manual process: 16 minutes for processing 4 invoices

Automated process: 3.5 minutes for processing 4 invoices

Receive invoice

E-mail

Robot scans inbox for e-mails with invoice attachments. When an e-mail is found, the attachment is saved in a dedicated folder .

Extract invoice data with OCR

ABBYY FlexiCapture

Specific invoice information is extracted from the PDF with OCR using an integrated ABBYY FlexiCapture solution.

Launch SAP and log in

SAP Fiori

SAP is launched with user ID and password and the transaction ‘Create incoming invoices’ is selected.

Process invoice data

SAP

The robot inserts the data from the PDF in SAP. G/L account, tax code and cost center are retrieved from a mapping table in Excel. The transaction is posted in SAP.

Move invoice

E-mail

The robot moves the invoice to a folder ‘processed invoices’.

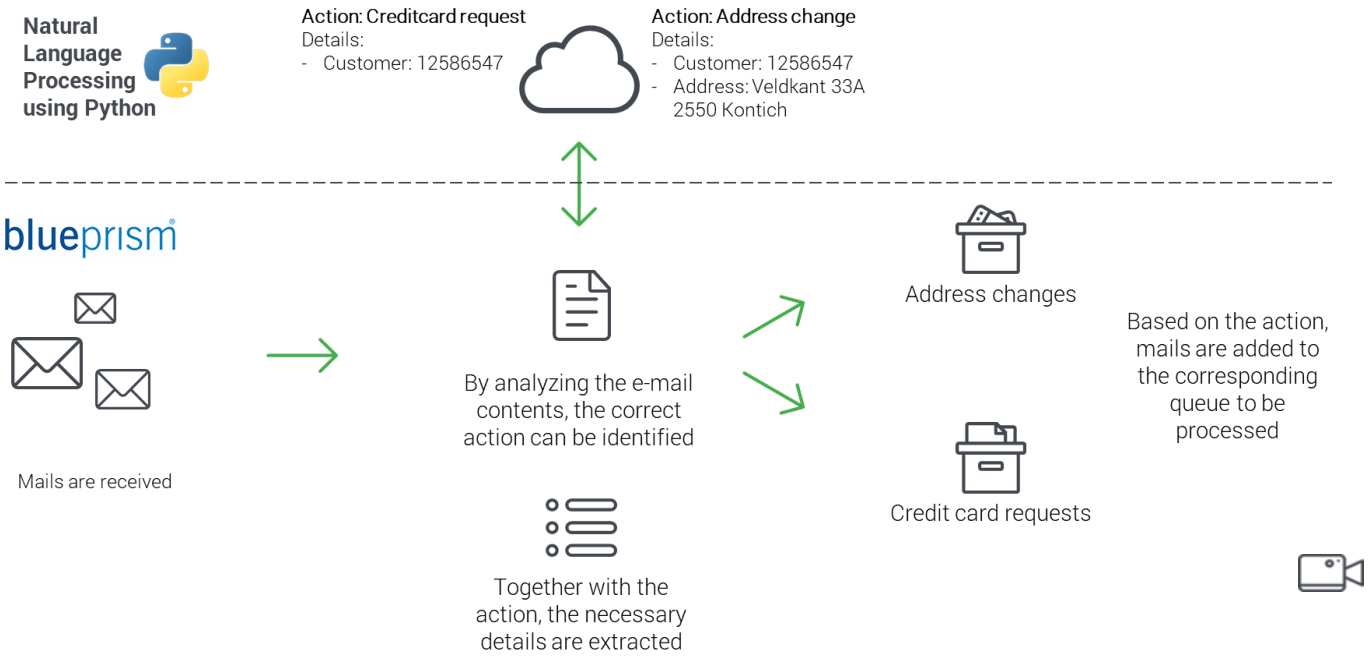
RPA + NLP

INTELLIGENT CONTENT EXTRACTION

We can categorize and understand unstructured data with the use of **Natural Language Processing** (**NLP**). With a trained algorithm, the robot can recognize which process action is required and execute the flow accordingly. NLP can also be used for translation and text-to-speech actions.

NLP enables RPA processes to:

- Understand meaning of text
- Identify certain entities
- Categorize documents



LET'S AUTOMATE TOGETHER

http://roborana.be

Veldkant 33B
2250 - Kontich

hello@roborana.be

twitter.com/roborana

+32 475 94 81 65

medium.com/roborana