



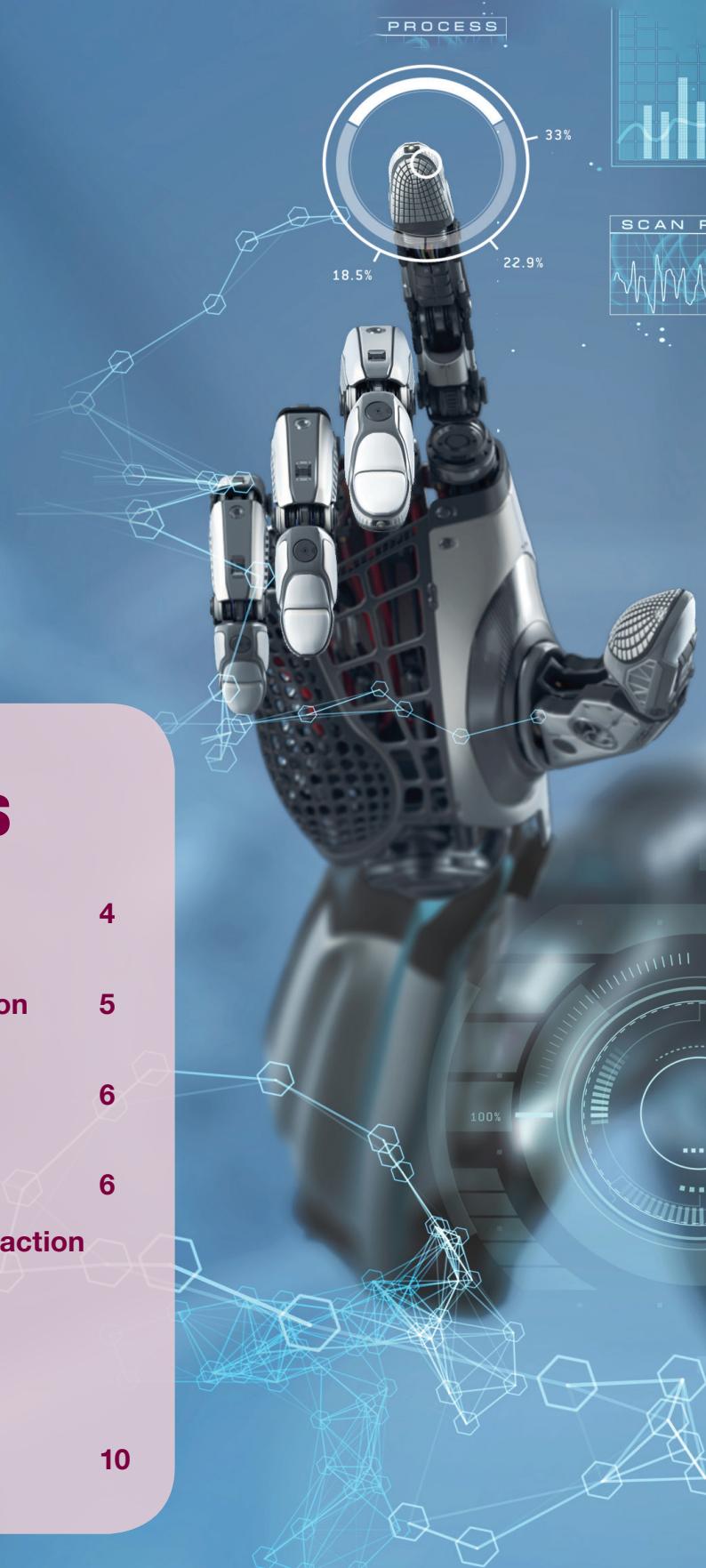
# Robotic process automation (RPA)

**The next revolution of Corporate Functions**



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**More than ever, Technology reached a tipping point in the optimization of Corporate Functions.**

Similar to robotization of production lines in the 90's, Corporate Functions are initiating today their **robotic transformation/revolution**.

We believe **Robotic Process Automation or RPA** is the lever that will take these Corporate Functions to the next level by:

- Improving employee and customer satisfaction
- Accelerating productivity gains
- Enhancing compliance

To reach these benefits, **RPA must be implemented on key Corporate Functions** that include repetitive, standardized and transactional processes and activities such as **Finance, Compliance, Treasury and Marketing**.

Within these Corporate Functions, not all processes and activities are eligible to RPA though, hence the need to select them carefully in order to **reap the maximum benefit from RPA implementation**.

An additional RPA **key success factor** consists of paying a particular attention to design an **appropriate implementation journey** sticking to company specifics.



# What is RPA compared to Traditional Automation?

Artificial Intelligence or **AI** is the intelligence machines are capable of. AI technologies have 3 major capabilities:

1. Capture information through vision and sound recognition, search or data analysis
2. Leverage algorithms and machine learning to provide inputs for interpretation of data
3. Make appropriate decisions and execute them automatically

## Traditional Automation



**Activities are performed by Humans, helped by technology**

- **Tools** are used to perform tasks
- **Employees bridge the gap** between automated string of tasks
- **Without human intervention**, end-to-end processes can not be carried out **autonomously**

### Illustration

Macro tasks in Excel Spreadsheets

Move data between screens

E-mails notifications

Complete online forms, PDFs

ERP transactions

Copy and paste  
Close and rekey into applications

## RPA + AI



**Activities are “outsourced” to Robots**

- **End-to-end processes** are carried-out by the robot
- **Robots** connect existing tools and the employee handles only **exceptions**
- **Cognitive technologies**, based on **artificial intelligence** expand RPA possibilities and help **reach the next level of performance**

### Illustration

Macro tasks in Excel Spreadsheets

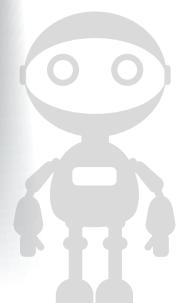
Move data between screens

E-mails notifications

Complete online forms, PDFs

ERP transactions

No manual copy and paste  
Close and rekey into applications



# Capgemini feedback on RPA implementation

## Technology Selection

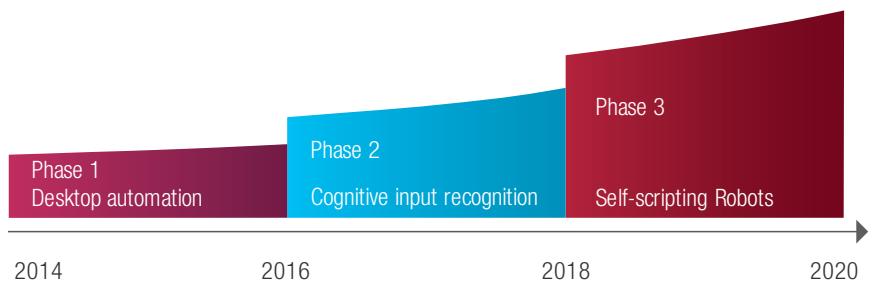
In 2014, Capgemini launched its internal RPA program. Dr. Marcus Esser describes the approach as follows: "We tested 6 leading RPA technologies and compared their capacity to perform simple tasks, such as identifying a company logo, extracting data. Finally, we decided to partner with Ui Path, based on criteria such as the possibility to program remotely and to deploy the robot without developing interfaces with existing applications".

## ROI

So far, we have automated **200 processes** on **50 robots** in our delivery centers worldwide, with a positive return on investment within a few months, **dividing running costs by 7.**

Capgemini  
in-house robots  
have processed  
**1,5** Million  
transactions since  
2015, equivalent to  
200 employees

"Process design  
is more relevant to  
the ROI than the  
technology used"



## Lessons learnt

"One of the main lessons we learnt", says Dr. Esser, "is that results vary widely from one process to another, depending on their design". The best results are obtained with activities which can be run in batch mode, don't require human decision making during the process and already include elements of automation. **The cost reduction in these cases can exceed 80%.**

The most recent improvement was to reduce human input to feed structured data to the robot. Capgemini hybrid RPA solution combines Robotics with Cognitive software, to structure the input and increase robots level of autonomy.

Capgemini wants to reduce the implementation cost for new robots, by reducing the time developers need to program the processes. Within 3 years, Capgemini will replace manual scripting by "intelligent sensors", which record tasks on a work station and interpret the patterns to auto-script the robots program.

# Corporate functions eligible to RPA

Functions		Examples of activities	
Finance		Data cleaning	Order management
Compliance		Payment processing	Compliance reporting automation
Treasury		Claims handling	Underwriting in banking
Marketing		Direct Debit	Automated marketing campaigns

## 3 benefits RPA brings to Corporate functions

### Improved employee and customer satisfaction

- Tedious repetitive tasks are delegated to robots
- Time generated to focus on customer care
- Empowered employees to perform more value-added tasks

### Accelerated productivity gains

- 1 robot replaces on average 4 FTEs
- Robot costs are on average 50% - 90% lower than off-shore / on-shore employees
- Quick development cycles, providing ROI in 3-6 months

### Enhanced compliance

- Traceability reduces risk of errors and secures consistency
- Automated Control steps increase compliance
- Systematic documentation of audit trail

**Delivery Excellence**

**Acceleration of ROI**

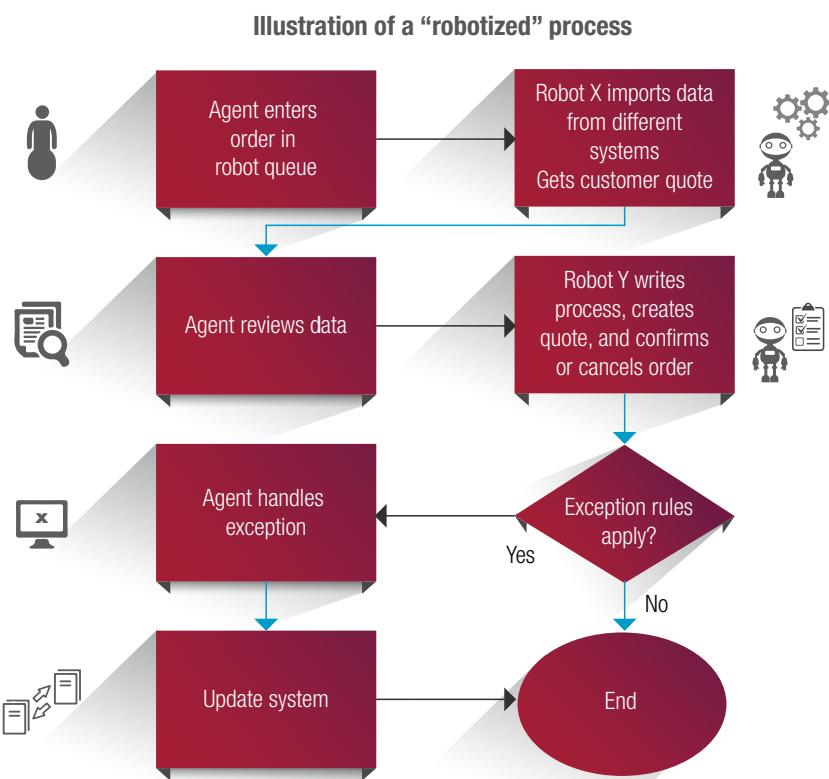
**Compliance to ever-growing regulation**

## Improved employee and customer satisfaction

Back office workers spend up to  
**80%** of their time on repetitive manual tasks, lowering performance and motivation.

RPA gives employees time on more intellectually stimulating activities, since tedious repetitive tasks are delegated to robots (example: formatting or copy pasting data files).

The robot can execute rule-based tasks, leaving employees with time to work on value-added tasks requiring judgement and soft skills, such as advising customers.



A recent field study shows that in many businesses “robots are welcomed as valuable team members because they do the work that humans don’t want to do”<sup>1</sup>

Feedback from early RPA adopters is positive, as employees see robots as assistants and feel that the company is empowering them to spend time on more satisfying work.

1. Study of the impact of RPA on the work environment, Professors Leslie Willcocks and Mary Lacity from the London School of Economics

## Accelerated Productivity Gains

When it comes to back office operations in Corporate Functions, a continuously pursued objective is productivity improvement. RPA provides a new productivity lever, on top of Lean initiatives and off-shoring.

Robots allow an easier labor arbitrage (see box below). They can therefore be used to replace employees, as they replicate human actions on a desktop interface.

*“Robotic Automation tools are up to 65% less expensive than offshore-based full-time employees<sup>1</sup>”*

Sourcing cost for Back-offices

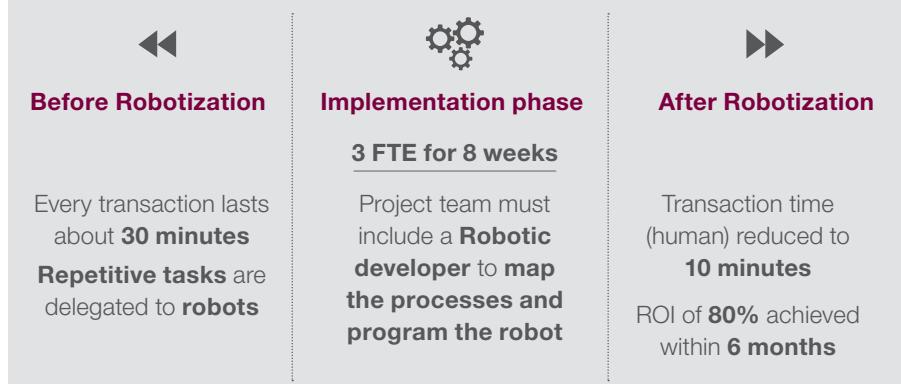


\*Average annual gross cost in common shared services centers locations

Robots are also more productive, as they work non-stop. They have 260 thousand working hours per year, compared to 32 thousand of an office clerk. This is 8 times more.

In, addition Robot implementation has a quicker return on investment than classic automation, as programming and setting-up of RPA for individual processes can be accomplished within few weeks without impacting the existing IT infrastructure. Typically, the ROI is **3-6 months**, but can vary widely depending on the process design and process environment. Picking the right target is crucial.

### Example of a process robotized in a British bank



*It is thus no surprise that the RPA market grows at a fast pace, doubling every 6 months and bound to reach 5 Billion USD by 2020<sup>2</sup>.*

1. Everest Group's Finance and Accounting Outsourcing Annual Report 2014  
2. Transparency Market Research.

## Enhanced compliance

In industries with constraining regulations, RPA provides a lever to manage increasing requirements for two reasons.

Firstly, transactions are recorded and steps are systematically applied, which prevent manual errors and provide full transparency to auditors.

Secondly, Risk and Compliance departments can use robots themselves to execute reconciliations and automate daily routine controls reducing the workload generated by routine tasks (see box below).

### Case study

As the requirements from regulators continue to increase, companies will rely more on robot workforce to face this challenge

#### “Automated control”

Recently, a British bank had to deal with a steep increase in high risk accounts and has turned to RPA to manage the associated workload. Every day, they mobilized 11 employees for 8 hours to control these accounts. The bank fully automated this activity programming 20 robot artefacts. The robotized cycle time was reduced by half to 4 hours.

*As the technology evolves and robots become more autonomous, new questions emerge, especially in relation with artificial intelligence. In a near future robots will be able to program themselves and continue learning as they work. If an error occurs, who will be to blame? These new risks mean that companies deploying RPA have to define a clear governance and think of the impacts that robotization will have on their organization.*



# A successful RPA implementation should follow a predefined journey

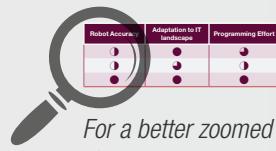
## 2 Optimize existing processes

- Seek **performance improvement areas** within processes having RPA potential
- Get rid of **redundancies** and **process inefficiencies** beforehand RPA implementation



## 3 Choose the appropriate RPA solution

- Choose whether you should:
  1. **Build** your own in-house solution
  2. **Buy** a market solution with a proven track-record
- Build **you KPIs** for productivity improvement tracking



For a better zoomed view, go to page 12

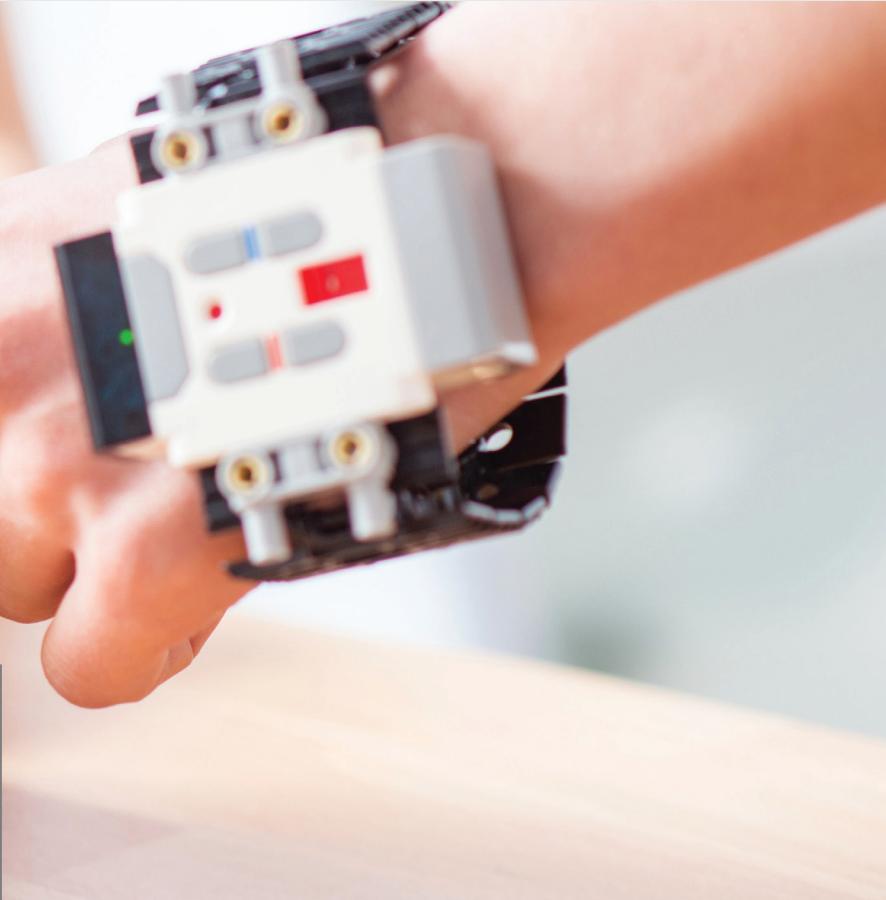


## 1 Define RPA perimeter

- Identify **RPA eligible processes and activities**
- Tell for each process whether it:
  1. Is **Ready** for RPA
  2. Has have **not** any robot automation **potential**
  3. Has have RPA potential, **but have to be adjusted first**



For a better zoomed view, go to page 12



## 4 Define the required span of control

- The **desired relationship** between your virtual and human workforce
- Define the “**man to machine ratio**” you deem appropriate



5

## Study impacts on the Target Operating Model

- Set up an **appropriate governance**
- Study **impacts on processes** not in the scope of RPA but that might be affected
- Review your **competency model**
- Map the **target organization**



For a better zoomed view, go to page 13



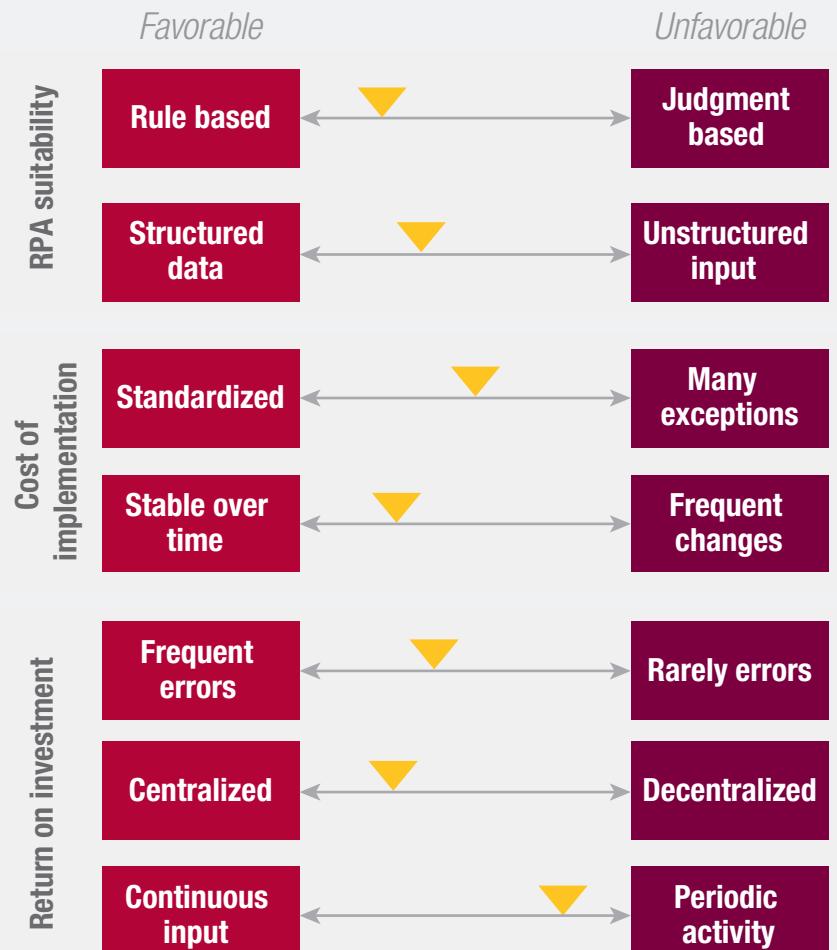
## 6 Build a deployment planning

- Plan **programming or solution integration**
- Plan **change management** actions
- Identify potential risks and build a **risk mitigation** planning



## Zooms on RPA implementation journey

### 1. Define RPA perimeter: Process assessment

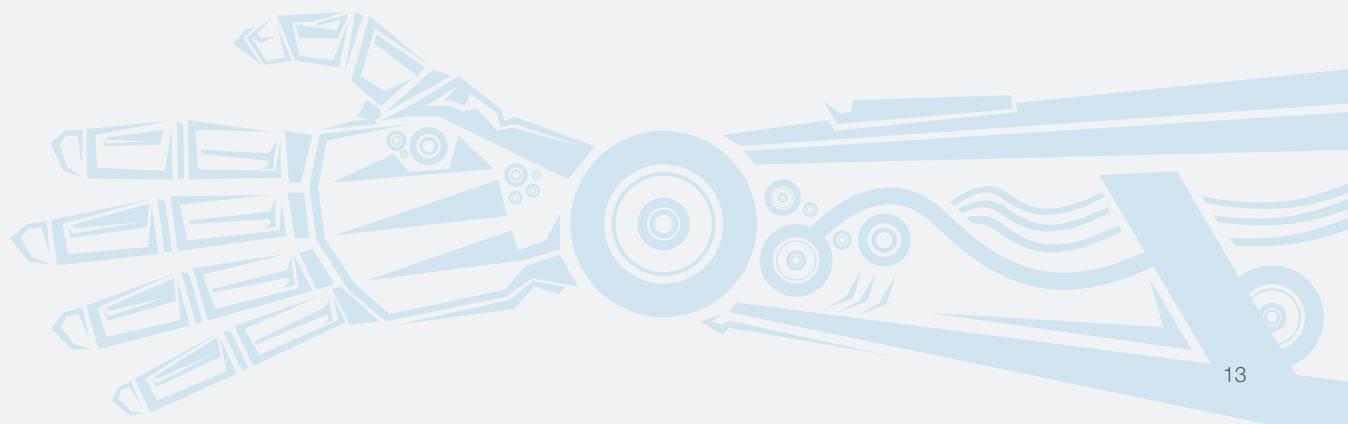


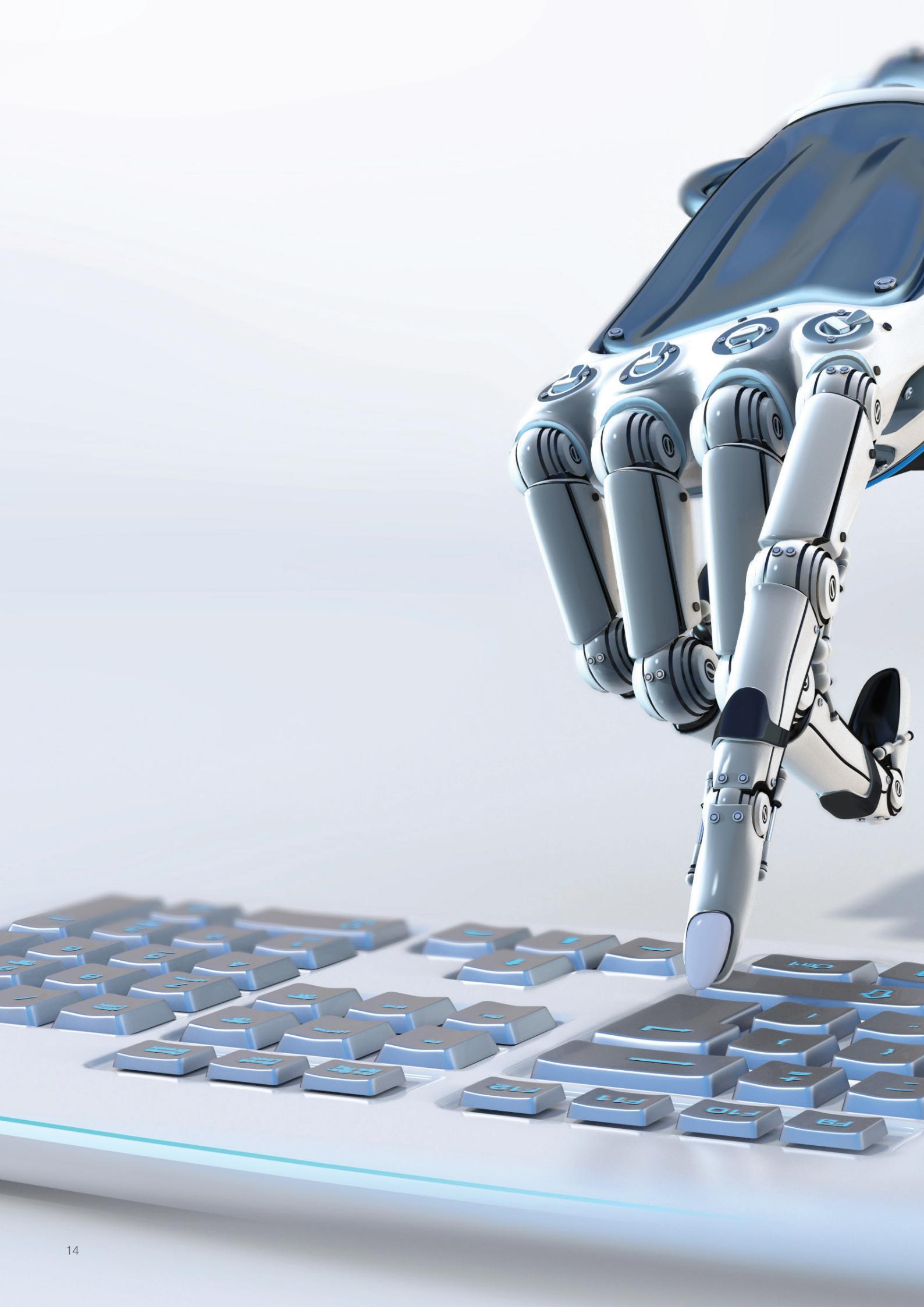
### 3. Select RPA solution

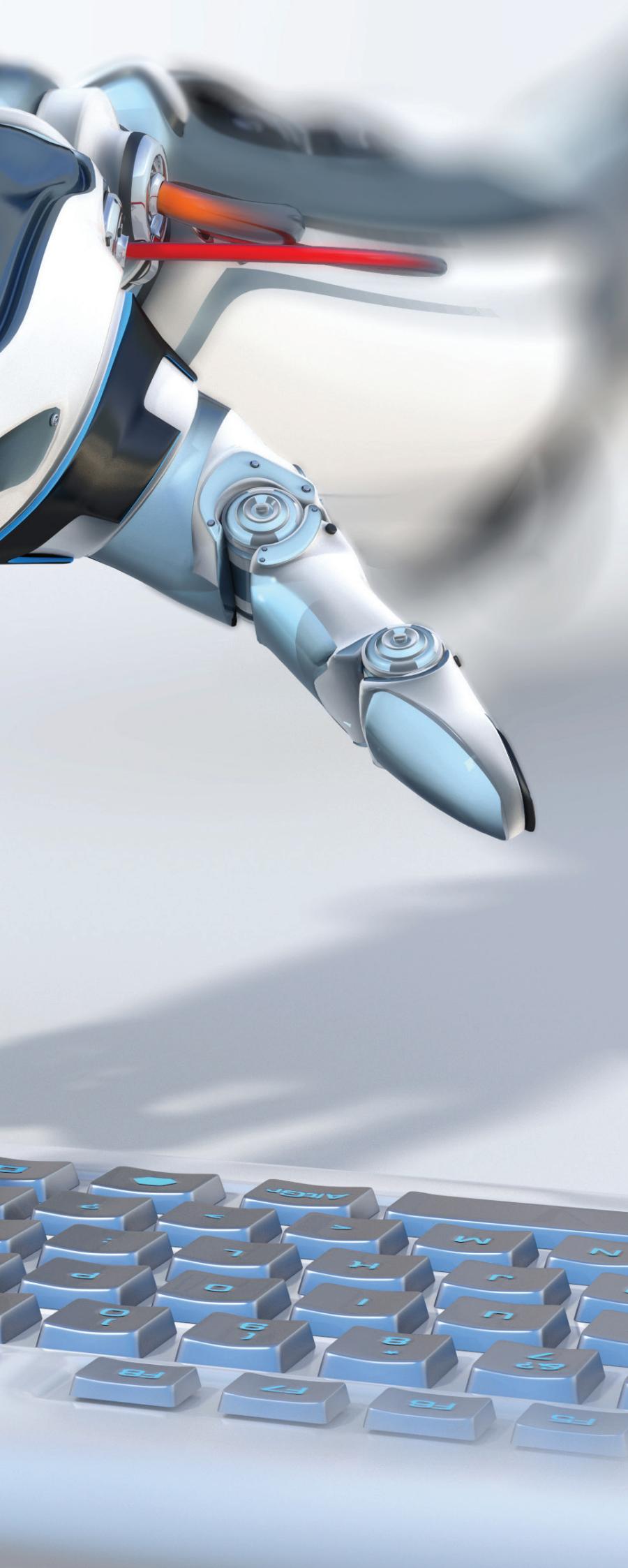
Robot Accuracy	Adaptation to IT landscape	Programming Effort
●	●	●
●	●	●
●	●	●

## 5. Impacts on the Target Operating Model

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