BOTS &
PEOPLE

AUTOMATION UNBUZZED

RPA 1x1

Content

INTRODUCTION

WHAT IS RPA?

Repetitive, monotonous and dull tasks eat up a lot of time in everyday life and are usually rather annoying and boring.

But that doesn't have to be the case, because precisely such tasks can be automated. Robot-controlled process automation helps to avoid having to press the copy-paste keys prayerfully every day or laboriously enter data into a system by hand.

INTRODUCTION

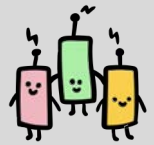
RPA is no T800

Robotic Process Automation is not about physical robots replacing humans in a company. RPA refers to the automation of business processes by digital software robots, so-called RPA bots. RPA automates repetitive, rule-based work tasks that rely on digital data. These tasks include queries, calculations, creating and updating records, filling out forms, generating reports, cutting and pasting, and other high-volume, transactional tasks that require moving data within and between applications.

RPA aims to improve efficiency, increase productivity and save money by supporting - or replacing entirely - the routine and error-prone digital processing tasks that are still performed by humans in many organizations.

RPA aims to improve efficiency, increase productivity and save money by supporting - or replacing entirely - the routine and error-prone digital processing tasks that many companies still rely on humans to perform. Done right, RPA not only saves companies time and money, but also frees up employees to focus on higher-value tasks:

220 working days
40 hours
1760 working hours



365 working days
168 hours
1760 working hours

60-80% resource saving*

*For standardized back-office processes, the average is usually 25 to 40 percent.

INTRODUCTION

How does a RPA-Bot work?

A software robot operates at the interface and user interface level by imitating the keystrokes and mouse clicks of human workers and completing the task in a manner similar to how workers log into applications, enter data, perform calculations, and log out. To do this, integration scripts are developed to retrieve information from systems and transfer it to other systems.

The scripts are designed to replicate the actions of a person interacting with these systems or documents, for which effective APIs are typically not available. An RPA tool works by mapping a process that the software robot can follow through computer paths and various data stores, allowing RPA to operate in place of a human.

Robotic Process Automation is not about physical robots replacing humans in a company. RPA refers to the automation of business processes by digital software robots, so-called RPA bots. RPA automates repetitive, rule-based work tasks that rely on digital data.
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INTRODUCTION

The origin of RPA

Robotic process automation, which automates routine digital tasks previously performed by humans, has a long pedigree dating back to the introduction of macros in the 1950s.
The term itself and the core technologies that underlie today's products are of more recent origin.

In the early 1980s, banks developed data scraping applications to capture data from various financial data services such as Reuters. In subsequent years, more sophisticated tools were developed to cut and paste data from mainframe terminal applications into more modern web applications.

The true origin of RPA is therefore difficult to pinpoint, especially since automation as a principle has been the driving force of IT for decades.

The spiritual forefather of the term Robotic Process Automation is undoubtedly Phil Fersht, founder and principal analyst of HFS Research, who first used the term "Robotic Automation" in the blog post "Greetings from Robotistan, outsourcing's cheapest new destination" in 2012.

A little later that year, Pat Geary, RPA chief evangelist and marketing director at Blue Prism, added the word "process" to describe a new category of automation that would complement business process outsourcing (BPO) and business process management.

Ultimately, RPA is based on key technologies: screen scraping, workflow automation and artificial intelligence.

Screen scraping is the method of collecting and

translating screen display data from one application so that another application can display it.

This is usually done to capture data from a legacy application and display it through a more modern user interface. It is sometimes confused with content scraping, which uses manual or automated means to rip content from a website. Very often, screen scraping refers to a web client that parses the HTML pages of the target website to extract formatted data.

Workflow automation is a technology that uses rule-based logic to automate manual work such as data entry. By leveraging self-operating processes that perform manual tasks, workflow automation can help companies save time and money, reduce errors, and increase productivity.

Artificial intelligence has the ability of computer systems to perform tasks that normally require human intervention and intelligence.

While each of these automation technologies is an advance in its own right, the development and deployment of robotic automation and its ability to combine, refine and redefine certain elements of all of these technologies actually makes RPA a very powerful technological platform.

So this are the Key Takeaways:

- RPA is the automation of business processes with digital software robots.
- RPA aims to improve efficiency, increase productivity and save money.
- RPA works at the interface and user interface level by imitating human workers.
- RPA does not replace humans, but takes repetitive processes off their hands.

CHAPTER 1

Advantages and tasks of RPA

The following chapter deals with the numerous advantages that Robotic Process Automation offers companies and which tasks can be taken over by a bot.

You will also learn the difference between an attended and an unattended bot.

CHAPTER 1

How companies benefit from RPA

The use of RPA brings numerous benefits to companies:

First, there is no need to waste human brains on tasks that can be performed much better, faster, and cheaper by software robots, often resulting in higher quality completions. Employees don't have to deal with simple, monotonous tasks, but can pursue the challenges that really drive the business forward. For example, there is more time to take care of customers or drive innovation. This allows employees to make higher-value contributions to areas such as customer satisfaction, innovation and scalability. Set up correctly, bots perform the process the same way every time and don't get tired, reducing errors and inconsistency.

Second, automation improves the time and accuracy of processes by eliminating human error and the need to correct it, can be eliminated. This also leads to a better customer experience, a higher NPS (Net Promoter Score) and lower customer churn. There is therefore an opportunity to sustainably improve the customer journey with the use of robotic process automation.

Third, it offers companies a way to automate parts of critical business processes without having to replace the costly legacy systems that support them because RPA works at the user interface level. Rather, RPA is also quick and easy to implement as well as flexibly adaptable and can be integrated well into legacy systems without complex and costly (interface) programming.

This is an advantage over other technologies that rely on interfaces and cannot function without them.

Fourth, RPA increases operational flexibility, improves the ability to audit automated processes, and provides insights that can be used to identify, analyse, and proactively improve existing problems in processes. It also reduces human interaction with sensitive data, reducing the potential for fraud.

A RPA-Bot has different tasks:

Almost all recurring routine tasks can be automated. Typical tasks performed by a software robot includes following.

Launching and using various applications:

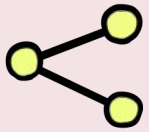
Open emails & attachments

Application registration

Move files & folders

Data processing:

Data-scarping in web (e.g. social media)



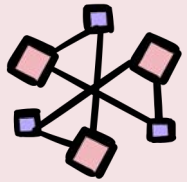
Follow logical if-then rules

Perform calculations

Extract data from documents

Put data into formular

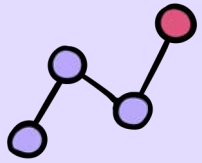
Reformatting data in reports or dashboards



Merge data of different sources

Copy & paste of data

Integration in company tools:



Connection to system- APIs

Read & write in databases

CHAPTER 1

Attended or unattended?

Attended (partially automated) and unattended (automated) RPA bots are two modes that can operate with or without human intervention.

RPA bots can operate in both attended and unattended modes. Usually focused on front-office activities, attended bots are created in a situation where it is not possible to automate the entire end-to-end process.

In such cases, the RPA bot is triggered by system-level events and works with human workers together to transfer data.
Unattended bots work independently without human intervention. They are designed to take over the time-consuming manual tasks and execute them in the background without requiring any input or intervention from a human worker.

An unattended software bot can perform repetitive, rule-based tasks - often back-office activities - that follow a predefined pattern or series of steps, the same way each time.

As a digital worker, an unattended bot is typically triggered remotely to run behind the scenes. Unattended bots can be triggered automatically by an event or launched at a specific time to run around-the-clock batch operations, for example, in a batch-mode model.

Unattended bots can retrieve unattended customer data from a table and automatically enter it into the required application. Predominantly, unattended bots are used in the back office, where large amounts of data are collected, sorted, analysed and disbursed.

When it is impossible to fully automate a process from start to finish, humans and software bots can combine their strengths to get the job done more efficiently. In other words, attended bots are created for processes that require human input.

Typically, the attended bot is manually triggered and operates locally on the employee's computer, performing the routine, rules-based components of the process while the employee focuses on work that requires expertise, human judgment, empathy, creativity, and/or strategic thinking.

Often, attended bots are used in more complex, longer-running or front-office processes where they act as virtual assistants. For example, an attended bot with a call center agent could be collaborate and transfer customer data from one system to another while the agent continues to talk to the customer. This increases efficiency and creates a better customer experience.

Whether an attended or unattended bot is the right choice depends on the time perspective and certain contextual characteristics. As a rule of thumb, attended bots for short-term efficiency and unattended bots for longer-term automation strategies.

A more differentiated decision regarding an optimal automation solution can only be made by carefully examining the contextual specifics.

CHAPTER 2

RPA APPLICATION

In the following chapter, you will learn more about which business processes can be automated and in which business areas Process Automation can be used (small spoiler: in really many!).

First, however, there is an overview of the most important criteria that should be used to identify and select potential processes for effective and worthwhile automation.

CHAPTER 2

How To: Identify processes for RPA

RPA is not suitable for every business process. The automation of a business-critical, long-running and complex business process is typically a task for the IT department, which uses API-based automation.

In this case, processes are automated across systems via the existing interfaces in the software used.
Market research firm Gartner noted in its July 2019 Magic Quadrant on RPA that the word task or task in the RPA acronym would be more accurate than process.

Processes that are best suited for RPA have high transaction throughput of structured digitized data with relatively fixed processing paths and/or user interfaces that do not change frequently and are rules-based.

RPA tools work best when they have direct access to the data and applications.
On the following page you will get an overview of the most important check-ups to get good RPA processes.

The five check-ups for good RPA processes:

- ✓ It is high volume and repetitive
- ✓ It relies on structured digital data
- ✓ It has clear business rules and little or no exception rates
- ✓ It is prone to errors when human labour is used
- ✓ It is time-critical or highly seasonal

Business processes and their associated applications should be stable before using RPA. RPA is well suited for simple applications that run at high volumes. In general, almost all data-driven business processes can be automated. Bots can take over repetitive processes.

Automation can start with simple tasks, such as filling out a template, but can end up taking on significant, more complex challenges in accounting, bookkeeping, human resource management or logistics.

For example, an RPA bot can automatically record employee time, monitor inventory levels and merchandise shipments, or generate billing statements.

Automating processes can also be helpful for customers if, for example, signatures are checked automatically or approvals are created independently. This makes back-office processes much more efficient.

CHAPTER 2

RPA application areas

Robotic Process Automation can be used in a variety of different areas:

RPA in Finance
Financial services companies need to write mountains of profit and loss reports. In most cases, employees type in the data manually. It's an error-prone, time-consuming and monotonous process that an RPA bot can do much faster and more efficiently after just one click.

RPA in customer care
Another starting point for process automation is customer centers. Often, employees have to put customers on hold to search for information together in different systems.

A robot can easily take over such processes while the employee continues to talk to the customer.

RPA in insurance
Insurance is another industry with many repetitive processes that lend themselves well to automation. Although insurance lags behind banks in RPA adoption, some insurance use cases are already being successfully automated. These include various claims processing operations, policy administration, underwriting, processes, regulatory compliance and more.

RPA in healthcare
For healthcare organizations, the accuracy and compliance of all internal processes is essential, as the health

and well-being of patients depend on them. For this reason, large hospitals in particular are using robotic process automation to streamline information management, insurance claims processing, payment cycles, prescription management and other processes. This results in fewer errors and a better patient experience.

RPA in retail

Retail companies are investing heavily in automation to improve the customer and employee experience. Popular applications of RPA in retail include fraud detection, inventory and order management, customer feedback processing, and customer relationship management.

RPA in personnel management

Taking a look at the HR industry, there are numerous processes that can be automated, especially in the HR area. From simple payrolls and reports, to talent acquisition and recruitment, to employee onboarding or an overview of the number of workers needed and further data management. HR departments can benefit from digital support and focus on tasks such as conducting hiring interviews or resolving conflicts.

Specifically, bots can take over resume screening, for example, and compare the information with the requirements from the job advertisement. The best candidates then receive an invitation to an interview, the others a rejection notice.

Furthermore, offers, for example for freelancers, can be filled out according to fixed templates.

If a new employee has to be trained, it is necessary to integrate new data into the system, such as mail addresses, access rights or passwords. Process automation helps here and automatically creates new user accounts.

Travel and expense reports can also be automated, saving a lot of paperwork. The employee database thus remains much clearer and error-free. To ensure the company's productivity, employee attendance can be tracked.

Summary

If a company wants to grow quickly, process automation can save a lot of time.

CHAPTER 2

Cross-industry examples

Human Resources: HR processes involve a lot of information management and standardization across many systems and applications, making them well suited for automation.

Finance and Accounting: This area offers many automation opportunities as the processes are mainly rule-based and require a high level of accuracy and speed. Some common RPA use cases in this area are order management, billing, accounting, and reconciliation.

Procurement: due to the structure of documents and data used in the processes, procurement is an excellent choice for automation. RPA applications here include invoice processing, purchase order management, and contract management.

CHAPTER 3

CHALLENGES

The introduction of Robotic Process Automation or the automation of already existing business processes naturally also involves various challenges that must be overcome.

The following chapter deals precisely with these problems and effective coping mechanisms.

CHAPTER 3

RPA & security risks

RPA also brings security risks, but not the ones that are widely expected. So far, there have been no major data breaches in RPA implementations.

That's largely because the technology functions as an upper layer and is not integrated with the lower layers where the data resides.

Nevertheless, there are security risks. These include fraud, inappropriate access to sensitive data, the potential to compromise system availability and continuity, and abuse of administrative privileges.

Change Management

Challenges posed by change, fears of job losses and media coverage can result in potential resistance and even sabotage automation plans. From the employee's perspective, automation is not always a positive issue. Many fear for their jobs.

Generally, however, the fear for their jobs is not the goal. This is also not the goal that companies pursue: The focus is more on error reduction and an increase in quality and productivity.

The decisive success factor for automation is therefore communication as part of change management.

CHAPTER 3

RPA & security risks

Companies should therefore:

- Inform employees transparently and at an early stage about the purpose and goal of automation
- reduce prejudices and fears and emphasize the necessity and advantages of automation
- actively accompany individual phases of the change process and mobilize employees for automation

In this case, communication is not a one-off task, but will accompany companies throughout the entire project. It is therefore advisable to develop standardized procedures and formats and to set up specific communication channels so that the project can be communicated successfully and efficiently.

The key is upskilling

Incidentally, process automation using RPA does not mean that people lose jobs.

On the contrary, they are relieved by the elimination of tedious routine tasks and can use their know-how specifically for more important challenges. In addition, more and more service providers are offering advanced training and recognized certificates in the area of process automation. This gives companies the opportunity to train their freed-up employees as automation experts and use them internally for the analysis and optimization of various processes.

Incidentally, this saves companies the cost of expensive consulting firms and external RPA developers.

CHAPTER 3

Here is a small list of possible job titles and education or training in the field of process automation:

- Automation Strategist
- RPA Developer
- Cloud Automation Engineer
- Citizen Expert

The future of process automation is not just reserved for companies.

Individuals who want to change careers or simply want to specialize will also have the unique opportunity to gain a foothold in a still young but rapidly growing field and make a career in process automation.

CHAPTER 4

RPA PROVIDER

With the increasing demand for RPA, the number of market participants is also growing.

And so the question arises for many companies: Who offers an RPA solution and which provider has the right solution for me.

In order to shed some light on the jungle of providers, we briefly present the most important market participants below (without claiming to be complete).

CHAPTER 4

Another Monday

Another Monday's product is built on an ecosystem of software agents that deliver the important characteristics of long-term stability and scalability. Another Monday views RPA as an enterprise-wide platform focused on sustainable value creation and governance of bots.

Another Monday's AM Ensemble platform with the AM Conductor, AM Composer, AM Recorder and AM Monitor introduces a client-centric architecture with a decentralized execution model where no centralized application is required to operate, manage and deploy a robot.

Combined with encryption capabilities and a separate message layer, these architectural principles stand in stark contrast to the relatively tactical focus of most competitors in the RPA market on automating tasks. Another Monday's RPA approach places its emphasis on completed transactions, which translates into a simple pricing model.

Another Monday applies a "pay per use" pricing model, with micropayments per successful transaction. Another Monday employs 125 people and is headquartered in Cologne, Germany. In August 2020, Another Monday was acquired by Hyland, a leading global provider of enterprise content services.

CHAPTER 4

AntWorks

AntWorks seeks to realize its vision of RPA and differentiate itself in the RPA market via its emphasis on artificial intelligence (AI), machine learning (ML) and related techniques, as well as its proprietary approach to a machine learning engine, natural language modeling and a data capture engine.

At its core is what AntWorks calls "fractal science," which the company uses to support image and pattern recognition instead of neural networks.

Customers can choose from a variety of services and modules from the ANTstein Version "Triangle" integrated enterprise automation platform.

AntWorks offers accelerator templates for vertical industries such as banking and capital markets, insurance, CPG and retail, healthcare and life sciences, high-tech and telecommunications, media and entertainment, and transportation and logistics.

AntWorks is headquartered in Singapore and says it employs 266 people, more than half of whom work in product development.

CHAPTER 4

Automation Anywhere

Automation Anywhere operates a Bot Store - a marketplace for existing bots suitable for various roles. These so-called "digital workers" are given job titles by the company, such as "digital employee onboarding specialist," which can identify, shortlist and onboard candidates. Also on offer are bots suited to specific tasks, such as autonomously converting text to speech.

The Bot Store is one of the largest RPA marketplaces in the world, with more than 1,000 pre-built intelligent automation solutions.

With a global network of 2,000 partners, Automation Anywhere has implemented over 2.4 million bots to support some of the world's largest companies across all industries.

Originally founded in 2003 as Tethys Solutions, the company took its current name in 2010 to reflect its focus on robotic process automation.

Automation Anywhere is based in San Jose, California, with more than 2,400 employees, about a quarter of whom work in product development.

CHAPTER 4

Automation Edge

AutomationEdge specializes in IT process automation, such as extraction, transformation, and loading (ETL) components. It offers a cloud-based RPA-as-a-Service offering as well as an on-premises RPA model.

AutomationEdge focuses on finance, IT service management (ITSM) and data operations, offering out-of-the-box connectors for leading mainframe, ERP and CRM platforms, as well as partnerships with leading ITSM vendors such as BMC, ServiceNow and Cherwell.

AutomationEdge has a marketplace of more than 400 pre-built bots developed by customers and partners. These bots are targeted at common business functions in verticals such as banking, finance, insurance, government and IT. In addition to these pre-built bot solutions, AutomationEdge has used machine learning models to provide intelligent support desk operations, customer engagement management and case management scenarios.

The company is headquartered in Pune, India, and employs nearly 200 people.

Blue Prism

The UK-based company Blue Prism counts companies such as eBay, NHS and Walgreens among its customers. The intelligent RPA platform is available in both on-premise and SaaS variants and sees industries such as the public sector, manufacturing and financial services as ripe for RPA implementation.

Blue Prism features a drag-and-drop interface based on linkable objects with actions and events, with created processes leaving a detailed, auditable path. The company was founded back in 2001. Blue Prism is headquartered in Warrington, UK, and employs more than 1,000 people.

Edge Verve

EdgeVerve is a subsidiary of Indian multinational Infosys and was founded in 2014 with a focus on enterprises. After acquiring Infosys' financial banking solution in 2015, the company offers this suite along with its AssistEdge RPA automation platform and AssistEdge Smart User Environment (SE), which has an end-to-end RPA service.

The company bills the evolution of RPA as "human-empowered automation" - a seamless interaction between human and digital workers. EdgeVerve is based in Bengaluru, India, and employs more than 2,000 people.

CHAPTER 4

Google

Google Cloud and RPA vendor Automation Anywhere announced a new partnership on March 15 that will see the vendors jointly develop AI- and RPA-based products. According to Google, Google Cloud will integrate Automation Anywhere's RPA capabilities into some of its services, including Appsheet , Apigee and AI Platform.

The partnership will also make Google Cloud the primary cloud provider for Automation 360, Automation Anywhere's cloud-native automation platform. In turn, Automation Anywhere becomes Google Cloud's preferred RPA partner.

Help Systems

HelpSystems offers a variety of IT management products in addition to its RPA offering. HelpSystems aims to provide an affordable RPA offering for enterprise and mid-market customers.

HelpSystems' Automate Enterprise version supports the basic functions of RPA, such as task automation, user interface interaction and management, and features a library of predefined actions and connectors, as well as an easy-to-use editor and performance summary dashboard. Licensing is based on traditional software licensing models. The company is headquartered in Minneapolis, Minn. HelpSystems employs approximately 1,200 people.

CHAPTER 4

Kofax

Kofax Kapow is an RPA platform with analytics and process information. Kapow Design Studio provides an intuitive, non-programmable robot design environment where designers interact with applications, websites and other data sources to visually map the automation flow.

Robot designers are able to integrate business logic to handle exceptions, transform data and send alerts to users as part of the overall robot automation. Kapow also includes a feature called "snippets," which are pre-built automation steps that can be reused by multiple robots and maintained separately from the robot. Kofax is based in Irvine, California, and employs more than 1,900 people.

Kyron

Kryon provides support for supervised and unsupervised RPA with strong differentiation around automatic recognition of task patterns in processes. In addition to its core product, Kryon RPA Platform, the vendor has strong process/task discovery capabilities.

Kryon Process Discovery uses machine learning to derive sophisticated task descriptions based on captured keystrokes, mouse clicks, data inputs and outputs from business users.

These discovery-focused tools provide visibility and insight into how tasks are completed, the result of which is then used to configure the automation of those tasks.

CHAPTER 4

Kryon's vision is to create a bot exchange marketplace, better analysis of employee productivity, predictive and preventive analytics, and in-product communication to optimize collaboration and coordinate RPA implementations.

The company is based in Tel Aviv, Israel, and employs about 100 people.

Microsoft

Microsoft Power Automate (formerly Microsoft Flow) is Microsoft's cloud-based workflow engine that automates workflows between apps and services.

Power Automate integrates with Microsoft solutions such as Office 365, SharePoint, Excel and Teams via connectors. Power Automate's own RPA feature, UI Flows, is a point-and-click way to turn manual processes into automated workflows using software frameworks that do not support API automation.

The Power Automate Desktop for creating automated desktop-centric workflows is the result of combining Softomotive's WinAutomation platform with existing Microsoft Power Automate capabilities following Microsoft's acquisition of Softomotive in early 2020.

Work or school account users can also download and log in to Power Automate Desktop without a license. In this case, the desktop flows are stored in the Dataverse database of the company's default environment on OneDrive.

Power Automate Desktop includes 370 pre-built actions that can be used to create flows across different applications. Microsoft is headquartered in Redmond, Washington state.

The company employs nearly 170,000 people.

NICE NICE®

NICE is a software technology provider of Workforce Engagement Management (WEM) solutions for customer service applications, case management and employee engagement.

The RPA offering of NICE Advanced Process Automation Suite, NICE Robotic Automation, NICE Desktop Automation and NICE Desktop Analytics complements the WEM capabilities, with a focus on supervised RPA.

NICE Advanced Process Automation is offered both on-premises and as SaaS, as well as public and private cloud options.

NICE Advanced Process Automation also includes specialized, mentored bots to extend workforce management functionality across a range of verticals, including finance, banking, telecommunications and manufacturing.

NICE Advanced Process Automation includes an embedded conversational agent known as NICE Employee Virtual Attendant (NEVA). NEVA provides process/task recognition and predictive analytics.

From an AI perspective, NICE has several built-in capabilities, including real-time voice guidance, NLP-based text analytics and unsupervised machine learning. The company is based in Hoboken, New Jersey, and employs about 7,000 people.

NTT NTT

NTT's RPA product was developed by NTT Group, NTT Advanced Technology (NTT-AT) and NTT DATA.

The number of employees involved in RPA is not broken down.

The WinActor RPA product is composed of WinActor, a personal-client-based RPA tool; WinActor Manager, a Web-based administration tool; and WinDirector, a Windows-based administration tool. WinActor is an easy-to-use drag-and-drop graphical RPA modeling tool that allows users to record their actions, creating the basis for these automations, which can then be extended through grouping and looping constructs.

Although the tool can incorporate enterprise applications and interaction with Web sites, it is best suited for automating standalone, PC-based tools.

NTT Group is headquartered in Tokyo, Japan, and employs more than 280,000 people.

Pegasystems

Pegasystems specializes in customer relationship management software.

The company's automation offerings are based on the Pega platform, which enables the creation of apps without code.

To maximize the impact of its RPA capabilities, Pegasystems' Opportunity Finder uses machine learning to find optimal areas for automation. Pegasystems offers RPA both as a standalone product (Pega Robotic Automation) for task automation and as a complement to its iBPMS product - Pega Infinity - for longer-term process choreography and business rules capabilities.

The capabilities will be delivered both on-premise and in the cloud via the Pegasystems Infinity offering. Pegasystems not only views RPA as a standalone product, but also aims to tightly integrate RPA with its BPM suite and associated CRM applications.

Pegasystems, based in Cambridge, Massachusetts, has nearly 6,000 employees.

Softmotive

softomotive
We talk automation

Softomotive's RPA platform consists of two different tools, ProcessRobot and WinAutomation.

ProcessRobot is the enterprise-level environment that supports distributed architecture and centralized management of RPA implementations. WinAutomation is a standalone, self-contained RPA tool designed for rapid deployment.

Softomotive's product was designed from the ground up to be vertically and horizontally scalable. The development environment uses a modern user interface that supports drag-and-drop, inline recording, comprehensive testing and exception handling, and effective data-level reuse mechanisms

The ProcessRobot Control Desk application also includes native functions for controlling deployment, testing for error-free execution and managing concurrency policies. The company is based in London, United Kingdom, and employs about 160 people.

Info: In 2020, Microsoft acquired Softomotive to add low-code robot process automation capabilities to Microsoft Power Automate.

UiPath

UiPath is an RPA specialist that offers several products to automate repetitive manual tasks, which the company claims is the future of work.

UiPath touts the ease of use of its automation designer. UiPath's robots are capable of working both attended, such as in help desks and call centres in collaboration with humans, and unattended. UiPath's RPA platform provides an intuitive user experience for business users, citizen developers and experienced IT developers.

It has relatively high security, resilience and integration capabilities.

Its more than 100 technology partners offering complementary technologies and tools enabled it to support integrations with major products and applications in the BPM, process mining, and AI fields.

Although the company is now headquartered in New York, it was founded in 2005 in Bucharest, Romania.

The company employs more than 3,000 people worldwide.

WorkFusion

WorkFusion likes to point to its roots in machine learning and AI research, emphasizing the intelligent side of its RPA capabilities and setting itself apart from its competitors with rapid deployment within 12 weeks.

WorkFusion Intelligent Automation includes RPA Express and enterprise-focused Smart Process Automation (SPA). An integrated BPM canvas enables developers to coordinate RPAs, with clear loops and machine learning elements.

Analytics provide the ability to drill down into individual cases and identify root causes of errors that impact machine learning and process execution.

With its patented Process AutoML technology, WorkFusion seeks to democratize machine learning for business professionals by eliminating the time-consuming and costly data science work associated with cleaning data, training models and validating automated work.

WorkFusion's Intelligent Automation Cloud Ecosystem, which boasts the intelligence, simplicity and scalability of its solution, is available in business and enterprise tiers, as well as a free Express version for personal automation projects.

The company is headquartered in New York City and employs nearly 300 people.

Conclusion

By selecting the right provider, companies can exploit the full potential of robotic process automation. But as diverse as the providers are, so too are the approaches taken by individual RPA providers.

Which solution from which provider is the best for the company and its automation strategy ultimately depends on the goals to be achieved with process automation, to what extent and in what time frame, and last but not least, on the processes to be automated..

CHAPTER 5

A LOOK INTO THE FUTURE

A good conclusion always includes an outlook on the future - as in this case.

What follows is an outlook on the golden future of Robotic Process Automation.

The focus here is on the technological milestones that are already in the starting blocks and the impact of process automation on the corporate world.

CHAPTER 5

Future of the RPA sector

The market for Robotic Process Automation is growing continuously.
Numerous companies are already using the technology. In a study of 141 companies surveyed by the consulting firm PwC, more than half said they were already working with robotic process automation.

More than a third of the companies that do not yet use bots intend to follow suit soon, according to the study. The most common areas of use are controlling, reporting, quality assurance and data validation. In some cases, companies even use RPA for customer contact (chatbots) or price negotiations.

Market leaders in the field of robotic process automation are, according to a study by the consulting institute BARC, the companies UiPath and Automation Anywhere.

In addition, Pegasystems, Blue Prism and Kofax offer RPA solutions. According to a market survey by consulting firm Gartner, the U.S. has so far dominated the software market with a market share of more than 50 percent.

The market for process automation is still very young and, with a market share of just under 850 million dollars, is also still relatively small. However, it is one of the fastest growing software areas in digitization. According to a study by Gartner, it grew by around 63 percent in 2018 and the market volume is even expected to triple by 2024.

CHAPTER 5

Output & Technology

There is no shortage of opinions about what the future of RPA will look like. According to the current state of robotic process automation and the latest trends, different types of development can be predicted.

What does the future of RPA look like? Automation and its impact on jobs will accelerate enterprise adoption of RPA technology as more companies reap the rewards of successful implementation of RPA and AI technologies.

In addition, there will be a convergence of digital and human workforces. Software robots will augment the work of humans by taking over the most tedious, repetitive tasks. This will lead to the creation of a digital workforce that works closely with the human workforce.

In addition, there is growing interest in new technologies that combine RPA and Artificial Intelligence. Through the use of Artificial Intelligence (AI) and Machine Learning (ML), Robotic Process Automation is becoming Cognitive Process Automation.

These tools can self-correct and learn from mistakes to continuously improve processes. Intelligent Automation offers much greater opportunities by automating judgment-based processes with unstructured and non-digital data.

Overall, technologies such as Artificial Intelligence, Business Process Management, Optical Recognition (OCR), Machine Learning (ML) and others will be

increasingly used in combination with RPA in the future to enable more effective automation. Although the popularity of RPA technology is steadily growing, analysts agree that companies that rely solely on RPA are falling short because, although software bot is an excellent start to automation, RPA offers limited opportunities for scaling.

The future of the technology lies in the convergence of RPA with machine learning, orchestration and advanced analytics, providing scalable solutions for enterprise-wide digital transformation.

BOTS & PEOPLE

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