International Trends in RPA Adoption

Tejus Venkatesh
RPA Evangelist, UiPath
Began to build the first automation libraries and shared them with developers worldwide. We received very positive feedback throughout the years.

1st UiPath Desktop Automation product-line launched based on Microsoft Workflow Designer – specifically targeting the Robotic Process Automation (RPA) market. The first RPA journey was initiated with Sutherland and Dell to automate business processes.

First partnerships are concluded with several global BPO & Consulting Firms such as: Cognizant, Capgemini, Symphony, NIIT, Genfour, Virtual Operations, Symphony. Hundreds of processes begin to be automated using the UiPath RPA tool.

April 2016 – Launch of Front Office and Back Office Server suites. Launch of Studio Community Edition reaching 10,000 active members in 6 months. New office locations opened. Attracted top talent and grew our team from 25 to more than 100 people strong. Added more than 100 enterprise customers.

UiPath emerges as leading RPA software vendor as recognized by top industry analysts Everest and Forrester. The company continues to grow - teams are scaling up and new locations are opening globally.
Everest Group PEAK Matrix™
Robotic Process Automation (RPA) – Technology Vendor Landscape with Products PEAK Matrix™ Assessment 2018

Everest Group PEAK Matrix™ Assessment 2018

Leaders

Major Contenders

Aspirants

Star Performers

1 “Star Performers” are selected based on relative comparison of vendors’ total scores along both “Market Impact” and “Vision & Capability” dimensions between our previous and current assessment. Only the vendors who were assessed in our previous RPA products assessment were considered for Star Performer analysis.
UiPath is Ready to Serve your Global Business

CUSTOMER SUPPORT CENTERS IN BUCHAREST & INDIA
PRODUCT DEVELOPMENT CENTERS IN BELLEVUE, BUCHAREST AND INDIA
Industrial Evolution

1. Industrial revolution
   Introducing mechanical production machines powered by water and steam
   **Industry 1.0**
   End of the 18th century.

2. Industrial revolution
   Introducing mass production lines powered by electric energy
   **Industry 2.0**
   Beginning of the 20th century

3. Industrial revolution
   Through the use of electronics and IT further progression in autonomous production
   **Industry 3.0**
   70s and 80s

4. Industrial revolution
   Based on cyber-physical systems
   **Industry 4.0**
   Today

Source: DFKI/Bauer IAO

Level of complexity
“It's abundantly clear all the hype about rampant adoption has been warranted.”
Phil Fersht, HfS
What is RPA?

[Robotic Process Automation]

Automation that interacts with a computer-centric process with a software User Interface providing support.

RPA configures software that will automate the activities or tasks previously performed by humans.

Robotic automation uses a computer (a.k.a. robot) to run application software in the exact same way that a person works with that software.

RPA aims to replace repetitive tasks performed by humans, with a virtual workforce. Humans then make judgmental calls, handle exceptions and provide oversight.
“Can you imagine these growth figures for anything else?”
Michel Janssen, Everest

1. What level of growth are you expecting in your RPA efforts in 2018 compared to 2017?

A. No growth 5.3%
B. 26-100% 55.3%
C. 101-500% 32.9%
D. >500% 3.9%
From BPO to RPA

**Labor Arbitrage Driven**
- Centralized Processes (Shared Services)
- Transational processes delivered by outsourcers onshore, nearshore, offshore
- Outsourced Processes (BPO, ITO)
- Transactional processes delivered through onshore or offshore shared services

**Technology Delivered**
- Automated Processes through Scripting, BPM
- Basic automation of processes through scripts, macros and automation through software application such as Business Process Management solutions
- Globally Standardized Processes (GBS)
- Transactional processes delivered by outsourcers onshore, nearshore, offshore
- Automated Processes through RPA
- Automation of manual, repetitive processes with structure, semi-structured data delivered through Robotic Process Automation
- Processes through Cognitive, AI
- Process automation through computer vision, machine learning (ML), natural processing language (NPL), and artificial intelligence (AI)

**BENEFITS**
- Cloud Solutions, Software-as-a-Service, Self Service, Digital Solutions
- Optimization and Re-engineering (Lean, Six Sigma)
- Automation of manual, repetitive processes with structure, semi-structured data delivered through Robotic Process Automation
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**TIME**
Robotic Process Automation (RPA) Evolution

Driven by significant product innovation over recent years, RPA has evolved from tactical to strategic.

RPA 1.0 Assisted RPA

Objective:
- Improving worker productivity

Deployment:
- Worker’s desktop

Limitations:
- Partial automations
- Difficult to scale

RPA 2.0 Unassisted RPA

Objective:
- End-to-end automations
- Scalable and flexible virtual workforce

Deployment:
- Server (VMs)

Features:
- Work orchestration (scheduling/queuing)
- Centralized robot management
- Robot performance analytics

Limitations:
- Manual control and management of robots
- Managing screen and system changes

Move from RPA 2.0 to RPA 3.0 is accompanied by
- Expanding libraries of pre-built automations
- Increasing verticalization of solution
- Multi-tenancy

RPA 3.0 Autonomous RPA

Objective:
- End-to-end automations
- Scalable and flexible virtual workforce

Deployment:
- Cloud/SaaS (VMs)

Features:
- Auto-scaling
- Dynamic load balancing
- Context awareness
- Advanced analytics and workflows

Limitations:
- Processing unstructured data

RPA 4.0 Cognitive RPA

Use of Artificial Intelligence (AI) technologies including machine learning and Natural Language Processing (NLP) to enable:
- Processing of unstructured data
- Predictive and prescriptive analytics
- Automation of tasks that involve judgment

Everest Group Service Optimization Technologies
### RPA Adoption Across Processes And Industries

RPA is high priority for most global in-house centres

<table>
<thead>
<tr>
<th>Process</th>
<th>Industry</th>
<th>RPA Adoption Extent</th>
</tr>
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<tbody>
<tr>
<td>Cards activation</td>
<td>Cards activation</td>
<td>High</td>
</tr>
<tr>
<td>Frauds claim discovery</td>
<td>Frauds claim discovery</td>
<td>High</td>
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<tr>
<td>Claims processing</td>
<td>Claims processing</td>
<td>Medium</td>
</tr>
<tr>
<td>New business preparation</td>
<td>New business preparation</td>
<td>Medium</td>
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<tr>
<td>Reports automation</td>
<td>Reports automation</td>
<td>Medium</td>
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<tr>
<td>System reconciliation</td>
<td>System reconciliation</td>
<td>Medium</td>
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<tr>
<td>Bills of Material generation</td>
<td>Bills of Material generation</td>
<td>Low</td>
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<tr>
<td>Service order management</td>
<td>Service order management</td>
<td>Low</td>
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<tr>
<td>Quality reporting</td>
<td>Quality reporting</td>
<td>Low</td>
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<tr>
<td>Account setup</td>
<td>Account setup</td>
<td>Low</td>
</tr>
<tr>
<td>Meter reading validation</td>
<td>Meter reading validation</td>
<td>Low</td>
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</tbody>
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**FINANCE AND ACCOUNTING**
- Accounts receivable
- Accounts Payable
- General Ledger
- Invoice processing, from requisition to issue of purchase order
- Payroll, hiring, data management
- Customer service

**PROCUREMENT**
- Invoice processing, from requisition to issue of purchase order
- Payroll, hiring, data management
- Customer service

**HUMAN RESOURCES**
- Payroll, hiring, data management
- Customer service

**CONTACT CENTER**
- Customer service

**INDUSTRY SPECIFIC PROCESSES**
- Cards activation
- Frauds claim discovery
- Claims processing
- New business preparation
- Reports automation
- System reconciliation
- Bills of Material generation
- Service order management
- Quality reporting
- Account setup
- Meter reading validation
Indian Customers

Top exploratory tech in Digital Agenda

Most exploratory space with a few in POC stage and miniscule Pilots

Limited to generic processes like F&A, HR

Finding right use cases for scale

Business use cases are difficult to come by as of now

Processes not well defined, taking opportunity to define

Global Capability Centers

Most have passed the POC and Pilot Stages

Enterprise wide deals

BOT at every desk

Huge Automation potential

Significant amount of Business Use cases

Centralized Infrastructure managed out of India

Exploring adoption of AI, ML and NLP
Major barriers for RPA

There is still plenty of mistrust, even fear, on the security aspects, around the idea of having 100 bots on the enterprise system. RPA has access to a lot of information such as financial information, password, etc., hence security must be the top priority.
**NEVER AUTOMATE A BROKEN PROCESS**
Ensure the process is stable and mature before automation is applied.

**RPA SHOULDN'T ALWAYS SIT IN THE BUSINESS**
- RPA should be considered as 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 Centre of Excellence made of a mixture of Operations and IT people.

**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
- Don’t be tempted of quick wins by deploying RPA in siloed units – fragmented and difficult to scale – always start as an Enterprise rollout.

**THE SUCCESS OF RPA DEPENDS ON AN INSTITUTIONALIZED SPONSOR**
RPA needs an institutionalized Robotic Team led by a Sponsor - who initiates the idea of automation, underwrites resources and protects progress into business adoption and by an RPA Champion the RPA Evangelist in charge of the RPA successful deployment within the organization.

**BRING IT ONBOARD EARLY**
Bring on IT onboard early. RPA deployment has an impact on Infra, Security, Business Continuity and Disaster Recovery.
- Make sure your infrastructure grows together same pace with automation
- RPA must comply with the technology function’s governance and architecture policies.

**COMMUNICATE, COMMUNICATE, COMMUNICATE!**
- Pay careful attention to internal communications
- Engage a dedicated team of Change and Communication, in charge of raising awareness in the business of the benefits of automation and always keep the relevant stakeholders up to speed with the progress of the automation journey.
Busting the myths about RPA

4 common myths about RPA

**RPA IS MAINLY DRIVEN BY COSTS SAVINGS**

The truth is that... costs savings are only one of the key drivers amongst others such as strategical payoffs or operational benefits.

**ROBOTS WILL TAKE PEOPLE’S JOBS**

The truth is that... all recent studies performed on companies adopting RPA, show that the vast majority of these companies are focused on increasing the effectiveness and the efficiency of their human workforce instead of eliminating it.

**RPA WILL DEPLOY PERFECT ROBOTS, WITH 0% ERROR RATES**

The truth is that... while robots can replicate the activities their activities with 100% accuracy, changes in their “external” environment - may trigger errors.

**ROBOTS CAN THINK JUST LIKE HUMANS DO**

The truth is that... robots only mimic human behavior, combined with machine based cognitive intelligence but can also replicate human reasoning.

**THE ROBOTIC WORKFORCE WILL BECOME AN EXTENSION OF THE HUMAN WORKFORCE.**

**THE VIRTUAL AND HUMAN WORKFORCE WILL CONTINUE TO CO-EXIST.**
"If you can manage unstructured data as well as structured data, the opportunities for automation expand exponentially."
Steve Jones, Capgemini
Unlocking the AI Opportunity

Machine Learning

Classification and data extraction based on historic transaction data

MACHINE

Reason

Understanding the ramification of a business process

HUMAN-LIKE

Computer Vision

Reliable object recognition in images on the user interface, including Citrix. Converting semi-structured to structured and intelligent OCR

Language

Intent identification and information extraction of unstructured to structured data
Thank You
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