KELLTON TECH

THE EPIC MONSTER IN "TECHIETOWN"

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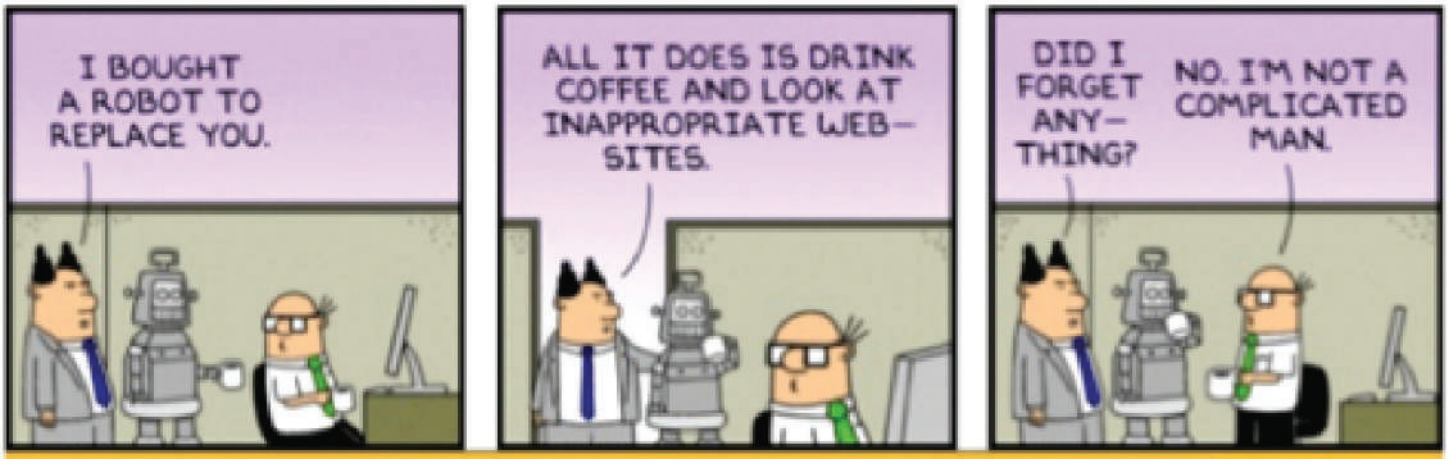
Taking the Robot Out of Humans

Market forces drive organizations to make frequent and granular changes to the way they work. They often compensate by adding people to fill the gaps between system performance and desired results so as to meet the customer needs in a more efficient manner. This change can cause the human workforce to perform "like robots." Back office processes are mundane, repetitive, and ripe for errors when tedium sets in. Instead of focusing on customers, teams end up performing repetitive tasks without engagement. Tasks are completed at the expense of the communication with customers when employees can use their human skills and process knowledge to improve customer experience.



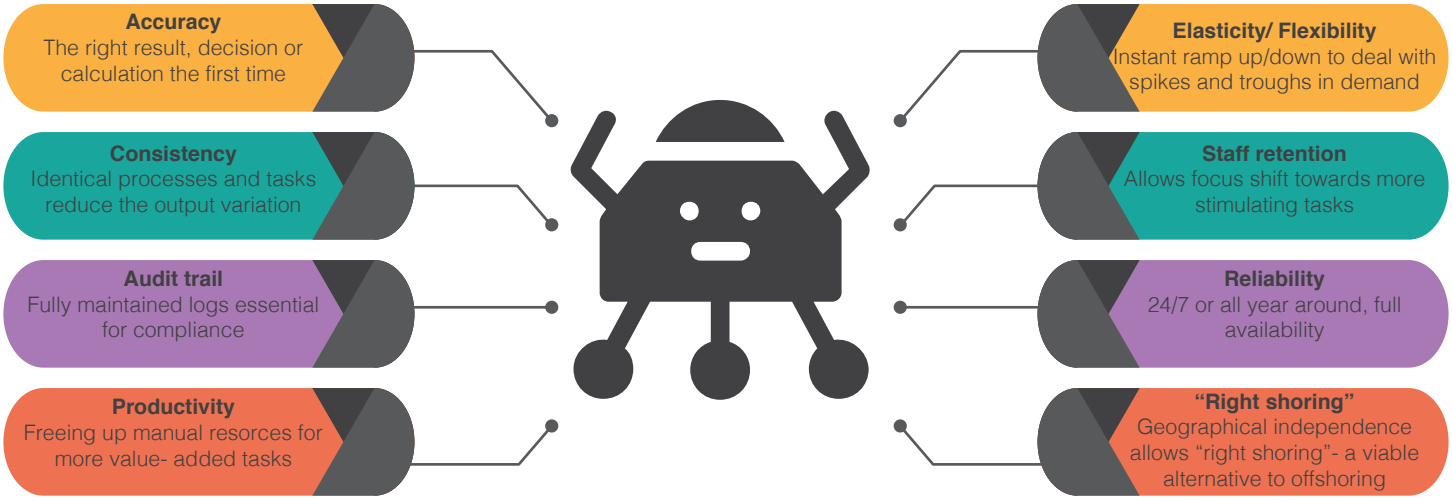
Customer service has always been a key business differentiator. However, recent technological progress, need for more consumer choices, and eroding loyalty have led to sub-standard experiences for customers. Therefore, it is important for businesses to stay on top of what customers need. This can be done by integrating new channels to help businesses interact on customers' own terms, which is why we are currently looking at how we can use popular messaging platforms such as WhatsApp to deliver tailored communications in real-time. The industry also needs a next wave of improvement as the business process service models are maturing and pressure is mounting on the organizations to unlock new benefits. One technology that is rapidly gaining traction in enabling this is **Robotic Process Automation.**

Robotics Process Automation (RPA)—"The Virtual FTE"

Robotics Process Automation refers to the use of sophisticated computer software that automates rule-based processes without the need for constant human supervision. It is defined by the Institute for Robotic Process Automation (IRPA) as 'the application of technology that allows employees in a company to configure computer software or a 'robot' to capture and interpret existing applications for processing a transaction, manipulating data, triggering responses, and communicating with other digital systems.' In other words, RPA "robots" are revolutionizing the way we think about and

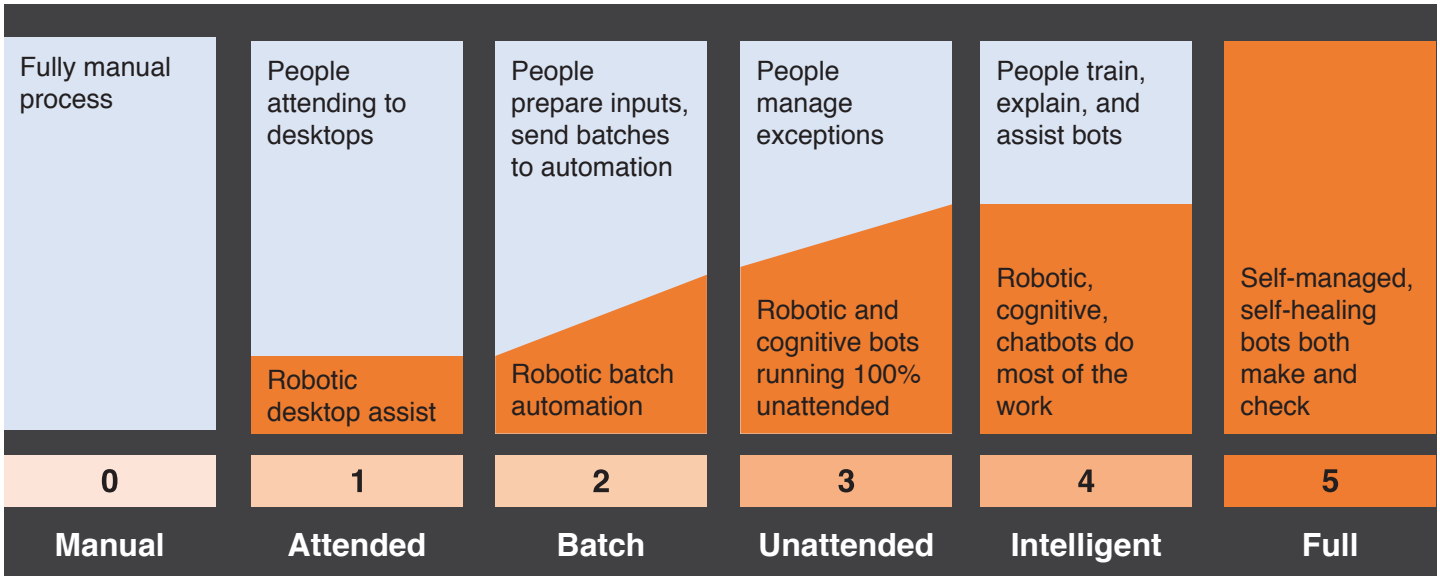
administer business processes, IT support processes, workflow processes, remote infrastructure, and back-office work. RPA provides dramatic improvements in accuracy and cycle time and increased productivity in transaction processing by shifting people from dull, repetitive tasks. It is a new alternative to improve productivity and unlock higher ROI than ERP implementations and shared services centers (offshoring) implementation. It is the first step and necessary foundation in the enterprise digital operation journey, before implementing cognitive, chat-bots, and artificial intelligence.

Through RPA any industry/firm can achieve the following benefits:



Levels of Automation

There are 'six' levels of "Automation" which can be implemented on a system as per the clients need.



Level 0: Manual

At this level, work is done manually, but it does not mean that the technology is not used. For example, in cars, drivers use automotive technology but they do it in an

"analog way" by fueling, driving, and navigating cars and car fleets manually. Similarly operations team also uses workflow technology, but does it in an analog way by installing software, mapping processes, and managing workloads.

Level 1: Attended Automation

At this level, helper bots enter the scene. For example, in cars, there is a cruise control and lane departure warnings, but driver still needs to drive the car 99% of the time under most conditions. Similarly in an operations team, team members do their work in an old fashioned manner—use desktop most of the time followed by the use of 'Bots' that record simple tasks such as copy-paste across multiple application windows. This level is described as "Assisted Robotic Process Automation (RPA)" or "Robotic Desktop Automation (RDA)."

Level 2: Batch Automation

At this level, industrialization of automation begins. For example, 'Parking' which drivers do very often under fairly predictable conditions can be automated. Similarly, in the IT world, Bots are created by process owners and batches of common, simple tasks that are prepared manually without any assistance. If something goes wrong, automation aborts with an "exception" and a person is assigned to figure out what to do and restart it again. This level is referred to as "batch RPA" or simply "RPA."

Level 3: Unattended Automation

At this level, automation begins. For example, in cars, driving can be automated under pre-defined conditions and alerts are sent to the driver when intervention is needed. In an IT world, at this level the ability of the automation platform is synched with manual interventions such as data-driven exceptions or review/approve tasks, without aborting automation. This level is known as "unattended RPA."

Level 4: Intelligent Automation

At this level, automation system is starting to learn. For example, the car does not ask for the driver intervention under the unexpected conditions and uses the real-world inputs. However, it uses driver's decisions to improve the future performance of both the car and the fleet. In operations, automation is not simply click on buttons. It is about collecting and analyzing data to automatically match workloads of people and bots, identify bottlenecks, and route workflows. Work changes from completing process tasks to training bots, explaining learned behaviors, and managing bot-people workforce is an important part of this level. This level is called "Intelligent Process Automation (IPA)" or "Smart Process Automation (SPA)."

Level 5: Fully Automated

This level is a future state. Cars of the future won't have steering wheels.It will be safer

and the people will be able to focus on managing auto fleets, planning destinations, and spending their time on non-driving while moving. The operations team don't use technology. Scripted robotic bots and machine learning models work in the same manner as switching gears and paper maps. The operations of the future will manage customer experience workloads, source and plan their digital workforce, and serve customers

RPA Hurdles

Entering untested waters without adequate due diligence is fraught with various risks. Same is the case with RPA. Despite all the hype generated by RPA, the ground reality does not seem to match the heightened expectations.

The four biggest hurdles that organizations usually face as they rush to get into the automation bandwagon are:

RPA IMPLEMENTATIONS

- How to make the project scalable
- Proof of concept
- Identify right use case
- Set-up a center of excellence (COE) before moving into robotics
- Subject matter expertise on RPA
- Understand what the prerequisite are for RPA
- Lack of knowledge on RPA implementation
- Things get out of control if the project is not managed properly
- Setting up some kind of enterprise frame work to the get most out of it
- Business case - future trend impact
- Speed of implementation
- Come up with a RPA strategy
- Realize benefits
- Understand the processes and the business requirement quickly for the project team to quote this in the software
- Scope of the project may delay project completion
- Develop a rapid RPA deployment strategy

SYSTEM AND TECHNOLOGY

- Ability to work between two different Systems/ Applications
- System security compatibility
- Choose the right vendor/partner
- Technology challenges faced due to regulatory issues
- Scalability of the vendor
- Find the right solutions and tools
- Non-disruptive technology
- Security of RPA solution

PROCESSES

- Standardization of global processes
- Maximize efficiencies
- Non- standardized processes
- Select initial processes to go into RPA

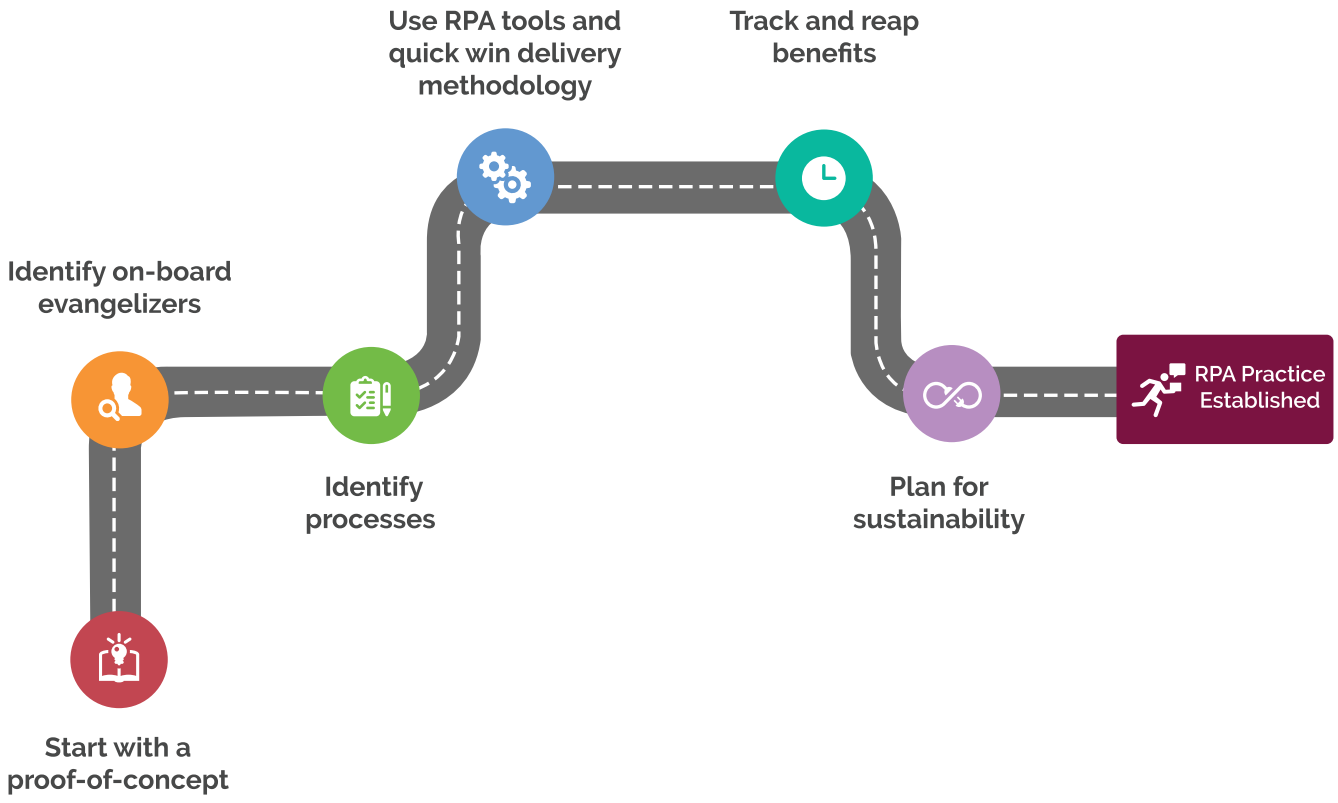
ORGANIZATION AND CHANGE MANAGEMENT

- Positive business cases
- Re-skill existing employees to move up the value chain
- Resistance from people and internal employees
- Change management and cultural shift
- Establish a proper governance structure in place
- Sell the concept to the higher management /stakeholder
- Fear in the mindset of people due to the fear of loosing jobs
- Lack of employees with expertise and skills in this space
- Get buy in from the customer
- Manage expectations
- Organizational readiness

Levers of Successful RPA Implementation

RPA may sound simple and enticing as a quick bang for the buck initiative, but when it comes to putting Bots in production, it requires well-orchestrated execution and strong leadership to derive benefits out of it. While majority of the organizations are in early adoption stages with PoCs and pilots, it is imperative to understand the on-ground challenges and essential levers to put Bots into production.

The top 10 levers to be considered for successful RPA implementation journey are:



1. Start with a Proof of Concept

Showcasing RPA through a quick working Bot PoC video, triggers the enthusiasm and is essential to get the initial buy-in from the process owners

- For PoC, choose an activity that everyone in the organization understands, configure automation, and screen record the Bot performing the same activity
- Showcase this PoC video and its impact in order to evangelize the concept of RPA among the process owners
- Share the vision of RPA
- Try implementing the PoCs through multiple RPA tools, which also gives an opportunity to evaluate and select the right tool that fits well with your organization's application landscape

2. Identify and On-board Evangelizers

RPA challenges the way in which the operations team are performing the tasks, leaders are being measured, and processes are engineered

- Identify first set of functional / operational leaders who are excited about RPA, supporters of change, and on-board them into core operational committee
- Implement initial few productions in their processes
- Core team should be from the organization itself and not from the outsourcing service providers, since the objective of the RPA conflicts with their interest
- Organization can take help from tool agnostic independent advisory firms to shape this journey

3. Choose Processes Wisely

Success of RPA projects is as good as selecting the right candidates / processes for implementation. Almost 60% of RPA projects fails or benefits owing to wrong process selection. Many a times, business leaders with limited practical RPA knowledge and heavy prejudice, choose wrong processes and end up wasting significant effort in force-fitting RPA in that process. By seeing this result, other business leaders lose trust on RPA. Therefore, choosing the first set of processes is very critical, as the success of the implementation would lay precedent for adoption of RPA across other processes in the organization. Process selection has to be done only after thoroughly understanding the possibilities and the limitations of RPA.

4. Set Low Expectations

There is a lot of hype around RPA. Even the benefits estimated in the business case are theoretical and high as compared to what RPA can achieve on ground. Some business leaders come with a notion that Bots would take over the entire process and completely replace all the human FTEs in the process. However, in reality, BOTs are capable of performing only some of the activities within a process and human FTEs need to perform rest of the activities alongside Bots. Implementing Bots and automating activities does not release FTEs from day 1, but gradually over a period of time.

5. Use Complementing Tools

RPA tool need not be the only tool of choice to automate activities. Consider having a set of complementary tools or point solutions that are ready with the help of internal IT / tool team.

While performing automation feasibility assessment, select the right tools based on the nature of the activity. For example, consider OCR tools for extracting data from raw files, SaaS-based ETL tools for data transformation, excel macro for data computation /

formatting etc. RPA being a UI-based tool can work well with other tools and play orchestrator roles of stitching together automation of other tools. This way the scope of automation is not limited to only what RPA tool can do.

6. Make IT an Integral Part of the Journey

RPA is definitely a business-led program, but not keeping IT involved from the beginning of the journey will lead to disappointments. Unlike other IT implementations that take months and years, RPA takes weeks to go-live. Hence, IT should also be prepared and nimble enough to setup environment and provide Bots infrastructure in a short notice.

IT need to ensure that a robust architecture is in place to allow flexibility of Bots between processes and BOTs to scale up / down based on the peaks and turfs in the volume of transactions. In some organizations, we have seen IT teams bringing in information security issues and protocols just before the go-live. Hence it is important to keep the IT team apprised enough of the processes to be automated and seek sign-off before making investment in the configuration.

7. Robust Solutioning Focus

In successful implementations, not more than 30% of the time is spent on configuration of Bots in the RPA tool. However, significant effort is spent in understanding the processing activities at keystroke level, its variations, trigger points, and non-functional requirements such as work volume variations, SLA commitment etc.

Based on the understanding, robust 'To-Be' state of the processes need to be designed bi-furcating Bot and human activities with clear exception handling mechanism. The solution design should be refined throughout the implementation process based on the constant feedback from the process team members.

8. Follow Quick Win Delivery Methodology

RPA implementations are faster and their chances of success rise if agile methodology is followed and the configuration is broken into several small incremental configurations.

Following a waterfall delivery methodology and covering all the requirements at once before the configuration is not possible, as most of the variations and exceptions reside in the memory of process associates and are not documented well. Configuration of Bot has to be first done for 'happy-path' scenario (scenario with no exceptions or variations throughout) and tested. Once the configuration is tested, incrementally add variations and exception handling with immediate testing at each step. It is imperative to have the process team members sit alongside the RPA configuration team to provide frequent feedback and inputs for incremental configuration.

9. Track and Reap Benefits Continuously

Ultimate benefits of RPA are derived only when man-hours effort saved through automation result in reduction of FTEs. It is important to have a baseline of time and effort spent on the manual activities to track the post automation benefits. Business process team should take the ownership of tracking benefits through quantifiable framework based on Bot run logs. When the BOT run process reaches stabilization and when man-hours saving are realized, business team should look at redeploying / reskilling the manpower. The team should publish a dashboard regularly to bring in accountability and transparency in the success of the program

10. Plan for Sustainability

Once the first set of implementations has gone-live and the methodologies are tried, tested and finalized, establish a Center of Excellence (CoE) to industrialize these methodologies. Design operating model, comprehensive toolkit across the implementation phases, and define governance and performance tracking mechanism. Parallely, the organization can build a support mechanism team to provide ongoing support to the existing automation and take care of re-configuration to accommodate process / application changes.

Setting-Up RPA COE

As organizations move forward in their RPA journey, they always need to put the best foot for setting priorities, creating a strategy map, standardizing procedures, and identifying best practices for business process improvement. A CoE provides visibility on the advantages of implementing robotic process automation and helps the company catch on in areas that might otherwise be resistant to change.

A strong, well-managed CoE will take care of important elements that are often overlooked in the rush to achieve tactical benefits, such as standards, service levels, and process ownership and governance.

Before setting-up a RPA COE, an organization needs to execute a check-list so as to achieve the required end result.

Where are we?

Self-awareness is the first step towards change. Since RPA will fundamentally change the way companies operate , it is important to have a clear picture of the capabilities and skillsets you'll need to manage and scale your RPA delivery.

How ready we are to start ?

Your robotics council will be responsible for ensuring that the scope, direction, and outcomes are in line with the needs and expectations. Be sure to nominate a fully dedicated and well-rounded team of champions that can understand the challenges, opportunities, and benefits for the entire organization.

Where do we want to go?

At this point, it is important to set the direction of your RPA journey and communicate the key objectives for successful implementation. Don't just base your business case on the initial project(s), but create a comprehensive roadmap that highlights broader opportunities and long term results.

What practical steps should we take?

CoE is vulnerable to encountering obstacles and challenges associated with crosss-departmental interaction. Establishing an effective governance process to set the specific guidelines, steps, and resources to follow will facilitate collaboration and communication.

How to manage the journey?

Setting up a change management mechanism can help employees understand the benefits of RPA, lesson fears, and provide the guidance and support to help them cope with the organizational impacts.

How do we keep going forward?

Embrace continuous improvement. As with most new, innovative technology, RPA is evolving at an accelerated rate. It is the CoE's responsibility to be at the crux of any new development and ensure that practices, procedures, and implementations are updated accordingly.

Process Suitability

Which processes can I automate using Robotics Process Automation? This is one of the most common questions an IT vendor asks from their clients.

RPA is neither a silver bullet nor a panacea for all your corporate headaches. As an independent consultant, IT vendors often advise their clients that all their processes are not suitable for automation. The thumb rule is to be as selective as choosing your spouse so that you can live happily ever after with your bots, instead of going through a messy divorce.

Some of the parameters that organizations must verify before selecting any process for 'automation' are:

1. Feasibility Assessment

Feasibility assessment determines the suitability of the candidate processes for automation. This is one of the critical functions performed by RPA Centre of Excellence. Organizations must use a scored checklist and assess each candidate process based on the following dimensions:

- Business drivers
- Technology landscape
- Process attributes
- Others
- Data attributes

For each dimension, there is a list of attributes which are desirous of automation. We need to identify the candidate process that fulfills the checklist.

2. Transaction Volumes

Higher the transaction volume, stronger is the business case for automation. In other words, RPA only makes (commercial) sense when your daily transactions reach a certain threshold. That means low volume transactions should not be automated.

3. Rule-based Process

The chosen process must be structured and rule-based i.e. there should not be a need for a human to make a judgment call. The availability of the entire process documentation is often a good litmus test for the criteria. However, with increasing maturity of Artificial Intelligence and Cognitive Automation, this is no longer a hard and fast rule.

4. Digitization

If your input data is not digitized, you may need to consider technologies like Optical Character Recognition (OCR) to digitize all your hardcopies. RPA tools already support OCR capabilities. Administratively and logistically, organizations need to plan as this is a complex task.

5. Application Stability

It is necessary to ensure stability of underlying applications. In RPA deployments, the process involves disparate IT systems (e.g. ERP, CRM, email, Excel, etc.), and bots interface with these systems through the Graphical User Interface. There are potential compatibility issues due to frequent application maintenance, upgrades, etc. Organizations must understand the implications and reconfigure the bots to handle these application changes.

6. Retrain-ability

Organizations must understand that the employees may be replaced by Bots and they should be retrained and up-skilled. This is important if your industry is highly regulated, scrutinized, or unionized.

RPA Tools Assessment

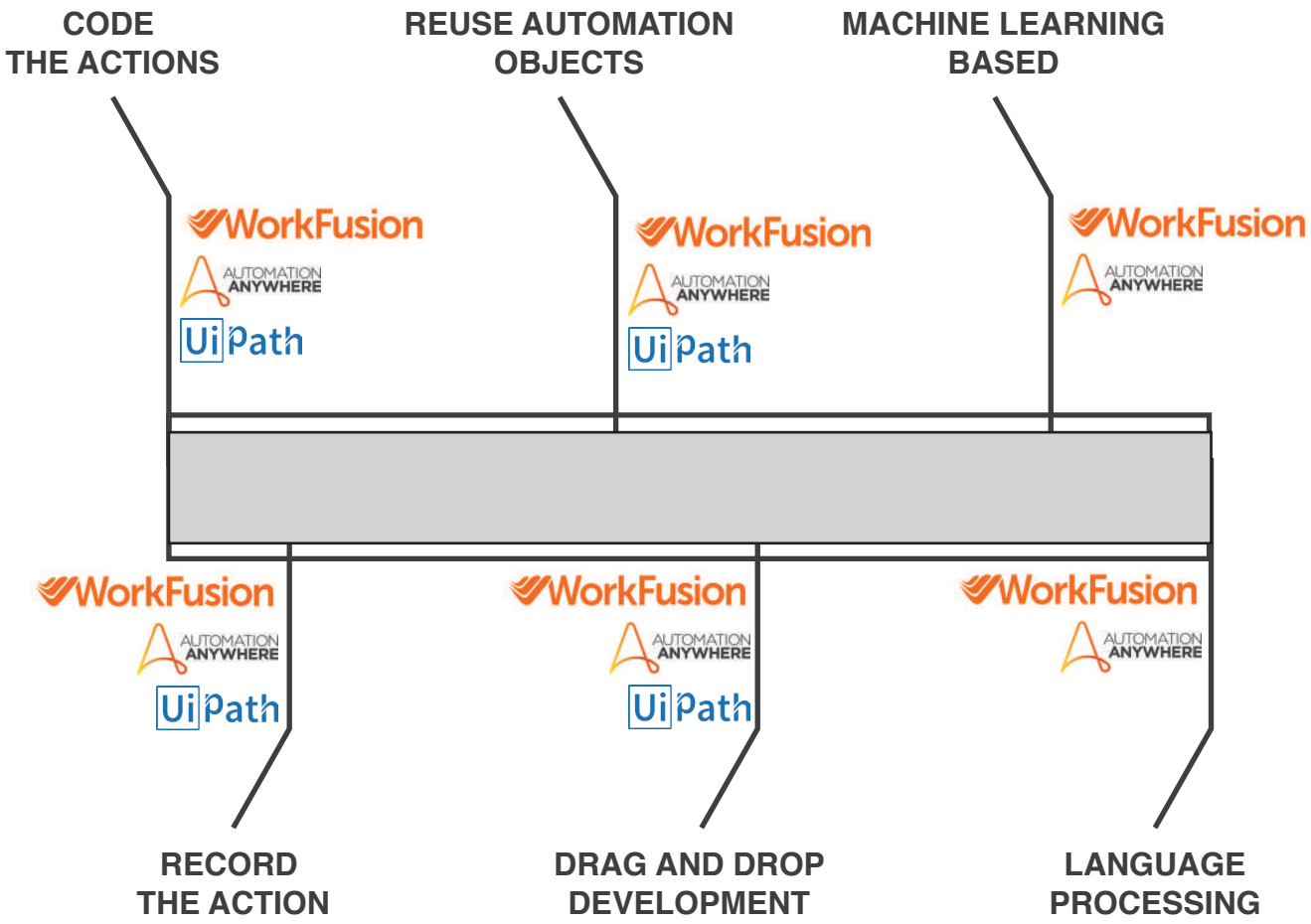
While performing automation feasibility assessment, selecting the right tools based on the nature of the process is very important. Due to the availability of various RPA tools, organizations must understand their suitability to the organization as it varies in-accordance to the ‘client requirements,’ ‘budget,’ and other parameters such as:

- Key features
- Automation creation options
- Training and support
- Final assessment score (Based on multiple parameters)

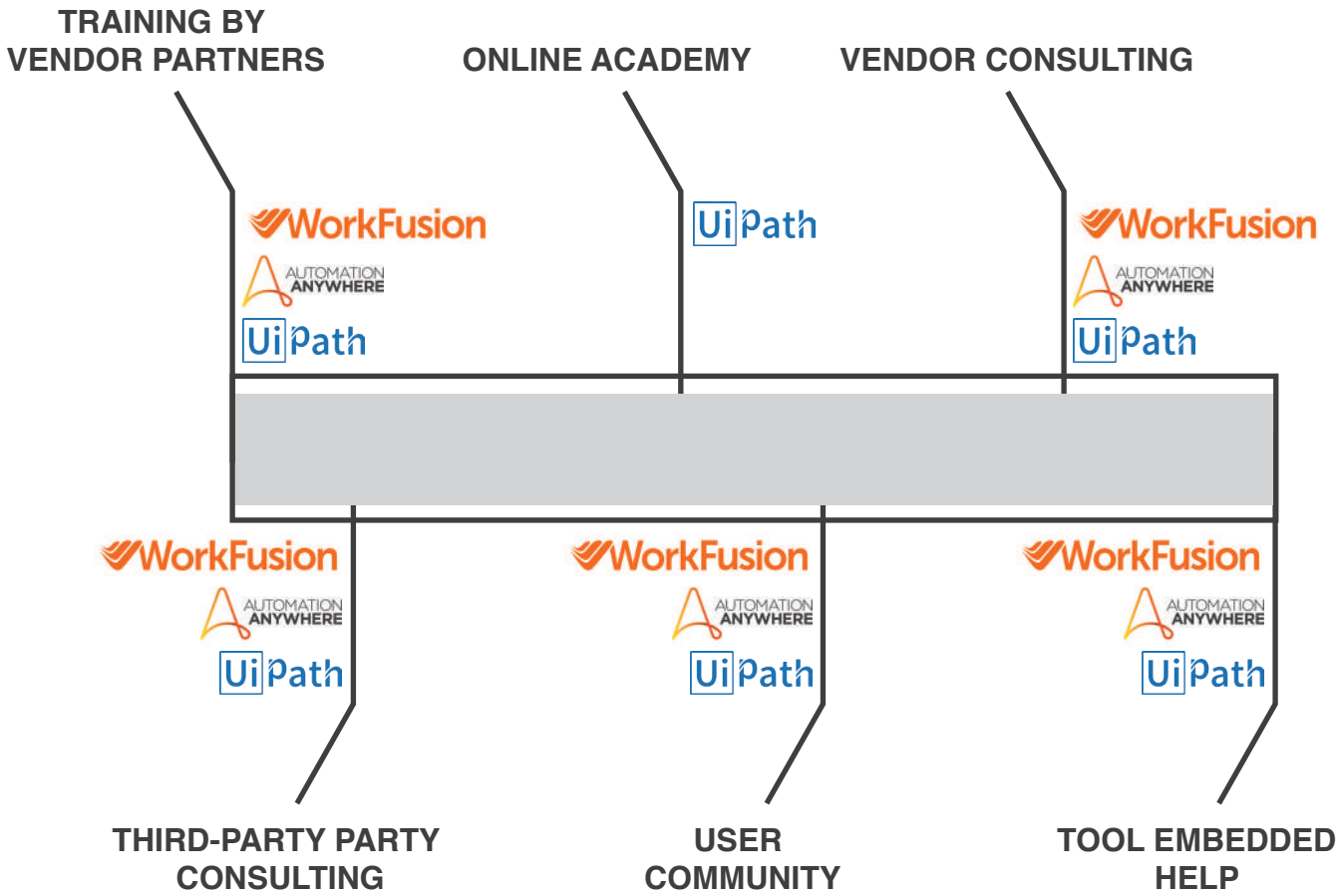
1. Key Features

WorkFusion	Automation Anywhere	UiPath
In-built connectors	In- built connectors	In- built connectors
Roll-based access	Roll based access	Roll based access
Task scheduler	Task Scheduler	Task Scheduler
Collaboration	Collaboration	Collaboration
Unstructured data management	Unstructured dat management	Unstructured dat management
Project management	Project Management supports	Project Management supports
Disaster management	Disaster Management	Disaster Management
Dynamic bot scaling over cloud	Dynamic bot scaling over cloud	Automation Management
Automation management	Automation Management	Performance Analytics
Performance analytics	Performance Analytics	Backward compatibility
Backward compatibility	Backward compatibility	Context Awareness
Context awareness	Context Awareness	Change management
Change management	Change management	Automation Libraries
Six-sigma compliant	6 sigma compliant	Credential vaults
Automation libraries	Automation Libraries	Work queues
Credential vaults	Credential vaults	In-built version control
Work queues	Work queues	Modularity & reusability
Multi-tenancy	In-built version control	Rules engine
In-built version control	Modularity & reusability	Process mapping
Modularity & reusability	Rules engine	Audit-Trail
Rules engine	Process mapping	
Process mapping	Audit-Trail	
Audit-trail		

2. Automation Creation Options



3. Training and Support



4. Assessment Score

RPA Tools	Score/ Rating		
	WorkFusion	Automation Anywhere	UiPath
Current Offering	**3.09**	**3.69**	**3.53**
Bot development and core functions	2.3	3.7	3.25
Control room, system management, reporting, and resilience	3.45	2.8	3.8
RPA analytics	3	3.66	3.66
Architecture	2.99	4.33	3.99
Breadth of use case	2.15	4.1	2.75
Deployment, governance, and security	3.68	3.66	3.66
Strategy	**3.25**	**4.25**	**4**
Vision, execution, and strategy	3.25	4.25	4
Market Presence	**2**	**4.5**	**2**
Installed base	2	4.5	2

RPA Case Studies

1. Lead Generation Activities

Automation of Manual 'Lead Generation Activities'

Problem Statement

There are monotonous/manual tasks that a 'Business Development Executive' does—Capture replies of email sent through campaigns in response management sheet.

For these activities, the executive capture replies (Daily) for 2 hrs.

- Open around 60-70 mails
- Copy and paste the response of all 60-70 replies in response management sheet manually

$ spent in Lead Generation Activities

- Average Salary of 'Business Development Executive' (Annually) : $15000 per annum
- Average Salary of 'Business Development Executive' (Monthly): 15000 / 12 = $1250 per month
- Average Salary of 'Business Development Executive' (Daily): 1250 / 20 = $62.5 per day
- Average Salary of 'Business Development Executive' (Hourly): 62.5 / 8 = $7.8 per hour
- Number of 'Business Development Executive': 10
- $ Spend in "Capturing Replies" (Daily) = 2 X 7.8 = $15.6 per day
- $ Spend in "Capturing Replies" (Monthly) = 20 X 15.6 = $312.5 per month
- $ Spend in "Capturing Replies" (Annually) = 12 X 312.5 = $3750 per annum
- $ Spend in "Capturing Replies" (Annually) for all Business Development Executive = 10 x 3750 = $45000 per annum

Solution

Using RPA concept, Kellton Tech has automated this task and now 'replies' of all the mails are captured on a daily basis without any manual intervention.

Benefits

We have saved $45000 per annum

2. Project Management Activities

Automation of Manual 'Project Management Activities'

Problem Statement

There are monotonous/manual tasks that a 'Project Manager' does—Resource Timesheet Filled Status (Daily). For these activities, a Project Manager spends 15 minutes i.e. 0.25 HRS

- Login to PMS
- Fetch timesheet report
- Identify resources who have not filled the timesheet
- Notify them to fill the timesheet

$ Spent in Resource Timesheet Filled Status

- Average Salary of Project Manager (Annually): $20000 per annum
- Average Salary of Project Manager (Monthly): 20000 / 12 = $1667 per month
- Average Salary of Project Manager (Daily): 1667 / 20 = $83.4 per day
- Average Salary of Project Manager (Hourly): 83.4 / 8 = $10 per hour
- Number of Project Managers : 30
- $ Spend in "Resource Timesheet Filled Status" (Daily) = 10 X 0.25 = $2.5 per day
- $Spend in "Resource Timesheet Filled Status" (Monthly) = 20 X 2.5 = $50 per month
- $ Spend in "Resource Timesheet Filled Status" (Annually) = 12 X 50 = $600 per annum
- $ Spend in "Resource Timesheet Filled Status" (Annually) for all Project Managers = 30 x 600 = $18000 per annum

Solution

Using RPA concept, Kellton Tech has automated this task and every resource who has not filled the timesheet receives notification (email), looping his/her reporting manager on a daily basis without any manual intervention.

Benefits

- We have saved $18000 per annum

  Project Managers were able to utilize their time in other productive tasks

3. Front Desk Activities

Automation of Manual 'Front Desk Activities'

Problem Statement

There are monotonous/manual tasks which a 'Front Desk Executive' does—Good Morning Mail(Daily). For these activities, a Front Desk Executive spends 20 minutes i.e. 0.33 hrs

- Search Google for 'Good Morning' quotes
- Check the duplicacy of finalized quote
- Open mail mailbox and draft a new mail with—Group Mailing List, Subject, Good Morning Quote, and Send

$ Spent in sending Good Morning Mail

- Average Salary of Front Desk Executive (Annually): $10000 per annum
- Average Salary of Front Desk Executive (Monthly): 10000 / 12 = $833.3 per month
- Average Salary of Front Desk Executive (Daily): 833.3 / 20 = $42 per day
- Average Salary of Front Desk Executive (Hourly): 42 / 8 = $5 per hour
- Number of Front Desk Executive: 1
- $ Spend in sending "Good Morning Mail" (Daily) = 1 X .33 = $0.33 per day
- $ Spend in sending "Good Morning Mail" (Monthly) = 20 X .33 = $6.6 per month
- $ Spend in sending "Good Morning Mail" (Annually) = 12 X 6.6 = $79 per annum

Solution

Using RPA concept, Kellton Tech has automated this task. 'Good Morning' mail is triggered to everyone on a daily basis without any manual intervention.

Benefits

- We have saved $79 per annum
- Front Desk Executive was able to utilize time in more productive tasks

About Author

Amandeep Kathuria works as Sr. Business Consultant Delivery with Kellton Tech Solution Limited. He analyses and discusses client requirements, create the skeleton of the new project with wire-frames, and do client interactions, gap analysis, solutioning, and delivery team coordination.