## **RPA** Overview

#### TABLE OF CONTENTS

- What is Robotic Process Automation (RPA)?
- What is the Objective of the UT System RPA Initiative?
- <u>How is the program governed?</u>
- What is the Robotic Process Automation Operating Model (ROM)?
- <u>Are Digital Workers safe and secure?</u>
- What is the process and time commitment to automate a process?
- What process can be automated? What processes has UTS automated?
- How do I determine what to automate?
- Who is IASG? What services does IASG provide?
- Has RPA delivered value to UTS?
- <u>How do I Get an RPA Program Started?</u>
- How Do I Build a Process Automation?
- <u>How do I get started?</u>



## What is Robotic Process Automation (RPA)?



# **RPA:** Robotic Process Automation Described

What is **RPA?** 

RPA is the application of software "robots," not physical robots, that mimics human action and connects multiple systems through automation without changing the existing IT landscape

## RPA is integrated in an existing IT infrastructure



As a renewal of the existing IT landscape is not required, a high level of automation can be reached without major effort. RPA uses established control mechanisms and can communicate with all systems. Therefore, no interface has to be created.

#### **RPA** is a software



RPA is a computer software that runs repetitive, rule-based processes. The software is trained based on functional specifications and can be adjusted at any time.

#### **RPA** simulates an employee



The software robot has access to diverse applications with an ID or a password. The robot can gather information or change data. Consequently, business and administrative processes can be fully automated.

#### Capabilities

ASG

- Log into applications
- Enter data from excel
- Collect, move data and files
- Formulate data
- Fill in forms

#### The University of Texas System Intelligent Automation Services Group

- Open emails & attachments
- Extract structured and semi structured data from documents
- Scrape browsers
- Report generation
- Read databases
- Follow if/then decisions

Powering Success with Intelligent Automation

# USE CASE CHARACTERISTICS

- Tedious, repetitive tasks
- High-volume transactions
- Rules-based answers
- Manual work prone to errors
- Tasks performed outside office hours
- Existing work supported by algorithms or macros





appropriate details



## **RPA Use Case Examples**

<ul> <li>Finance &amp; Accounting</li> <li>Billing / Invoicing</li> <li>Payments processing</li> <li>Cash application</li> <li>Reconciliations</li> <li>JE support</li> <li>Costing</li> <li>Fixed Assets</li> <li>Incentive claims</li> <li>Closing procedures</li> <li>A/R follow up &amp; credit analysis</li> <li>Reporting</li> <li>Grant Closing procedures</li> </ul>	<ul> <li>HR Services</li> <li>Recruiting</li> <li>Onboarding</li> <li>Payroll processing</li> <li>Benefits administration</li> <li>Time &amp; attendance management</li> <li>Education and training</li> <li>Off-boarding</li> <li>Compliance Reporting</li> <li>Position number reconciliations</li> </ul>	IT Services • Software Installations • Data migrations • Application testing • Server application monitoring • Identity & access management • Security monitoring • Help Desk management • Policy distribution & compliance reporting	<ul> <li>Higher Education</li> <li>Course registration</li> <li>Enrollment process</li> <li>Transcript Evaluation</li> <li>Shortlist candidates</li> <li>Attendance management</li> <li>Eligibility criteria check</li> <li>Schedule meetings</li> <li>Equipment reservations</li> <li>Student Withdrawal Expense</li> </ul>
<ul> <li>Risk &amp; Controls</li> <li>Quality audits</li> <li>Compliance audits</li> <li>Internal audit enablement</li> <li>Security tracking &amp; monitoring</li> <li>Technical threat &amp; vulnerability management</li> <li>Access management</li> </ul>	Supply Chain   Spend categorization & reporting  New vendor setup  Contract creation & updates  Contract compliance audits  Contract reporting  Quote & invoice management  Returns processing  Freight management  Inventory management  Capital equipment requests	Revenue Cycle • Eligibility Checking • New patient appointment requests • Patient pre-arrival and arrival • Claim denials • Credit balances • Medically Unlikely Edits • Billing inquiries • Code changes • Identify payor and physician underpayments/overpayments	<ul> <li>Customer Relationship Management</li> <li>Customer setup and master data mgmt.</li> <li>Password resets</li> <li>Appointment scheduling</li> <li>Downloading customer profile to Contact Center employee</li> <li>Automated Contact Center reporting</li> <li>Anticipate customer needs and follow up</li> <li>Pareto ranking of issues</li> <li>Automating internal reporting of customer inquiries and issues</li> </ul>
Highlighted use cases are those th	at IASG have worked.		

Updated 2/15/2024



Powering Success with Intelligent Automation

## To Learn More About RPA

#### Please refer to the resources and webinars located at

https://www.utsystem.edu/offices/collaborative-business-services/intelligent-automation-services-group



## **Objective of UT System RPA Initiative**



7

# **Background and Program Objectives**

- Started in 2018, this initiative has a significant opportunity to help each UT System institution "to do more with the same." Automating manual, mundane, repetitive, rulesbased tasks that can be done outside of normal business hours may be very advantageous in controlling administrative costs in the years ahead.
- Key objectives
  - Reduce operating cost and/or increase revenue
  - Increase productivity, reduce errors and improve quality
  - Reduce exposure to risks and enhance compliance
  - Enhance customer service
  - Increase employee satisfaction
  - Improve information available for decision-making and planning
- Programed managed by UT System Office of Collaborative Business Services-Intelligent Automation Services Group



## How is the program governed?



## **Governance Framework**

The governance framework is established to focus on RPA development, financial planning, resource management, and control and risk management. The framework promotes cross campus collaboration, and tracks program scalability and value.







# **RPA Governance Body**

#### UT System OCBS Executive Committee

- Approves strategic direction, annual OCBS work plan and budget, projects and related budgets and monitors performance.
- Members comprised of Chief Business Officers from each UT System Institution.

#### UT System RPA Operating Committee

- Members comprised of representatives from institutions that are appointed by CBO
- Develops and recommends activities to the EC that achieve the RPA Strategy, operationalize lessons learned, and deploy new process automations.
- Develops RPA program expertise and shares knowledge
- Serve as Institution's communication conduit and RPA champion
- Recommends use cases and program improvements

IASG is a division of the UT System Office of Collaborative Business Services (OCBS) that provides the following services:

- Webinar & Education Programs
- Business Process analysis for automation
- Automation Design and Development
- Hosting and Monitoring Services
- Consulting Services



## What is the Robotic Process Automation Operating Model (ROM)?



## Purpose of Robotic Process Automation Operating Model (ROM)

The ROM is to be used as both a reference guide and tool to help guide IASG and Institutions through the RPA journey. It contains seven integrated pillars to ensure value realization. It demonstrates a formally structured, reusable framework and processes for a sustainable RPA Operating Model that will allow the program to consistently apply <u>methodologies</u> and <u>deliverables</u>. Elements include governance, roles & responsibilities, ideation, deployment, and support.

IASG has established templates that are available to each institution, such as functional and design documents, unit testing scripts. In addition, IASG can provide the expertise in best practices and standards related to topics in ROM.



#### **RPA Operating Model (ROM)**

Seven integrated Pillars to ensure value realization										
Vision	Organization	Governance and Pipeline	Delivery Methodology	Service Model	People	Technology				
<ul> <li>•1.1 Program Purpose         <ul> <li>Benefit definition</li> <li>Executive sponsorship</li> <li>Funding availability</li> </ul> </li> <li>•1.2 High Level Business Case         <ul> <li>Program targets</li> <li>Alignment w/ other                 improvement programs</li> </ul> </li> <li>•1.3 Business &amp; IT Readiness         <ul> <li>Business risk considerations</li> <li>System strategy compliance</li> <li>Vendor management</li> </ul> </li> <li>•1.4 Value Measurement         <ul> <li>Performance Management</li> <li>Benefits Realization</li> </ul> </li> </ul>	<ul> <li>•2.1 RPA Program Structure</li> <li>• Model options <ul> <li>• (Centralized vs Federated)</li> </ul> </li> <li>• Maturity model <ul> <li>• Roles &amp; responsibilities</li> <li>• Skills assessment</li> </ul> </li> </ul>	<ul> <li>•3.1 Policies &amp; Standards</li> <li>•Program Governance</li> <li>•Process Prioritization</li> <li>•Development Protocols</li> <li>•RPA Risk &amp; Controls</li> <li>•SLA Agreements</li> <li>•Asset Management</li> <li>•3.2 Readiness Assessment</li> <li>•3.3 Opportunity ideation</li> <li>•3.4 Opportunity assessment &amp; Prioritization</li> </ul>	<ul> <li>4.1 Implementation methodology and design</li> <li>4.2 Develop User Stories &amp; Test Cases</li> <li>4.3 Liaison with development teams</li> <li>4.4 Agile Approach</li> <li>4.5 User Acceptance Testing • Define participants • Modifications</li> <li>4.6 Performance testing • Modifications &amp; tuning</li> <li>4.7 Migration to production • Determine bot scheduling • Documentation sent to asset management</li> <li>4.8 HyperCare • Knowledge transfer • Transition to ongoing management model</li> <li>4.9 Continuous operations • Execute &amp; monitor process change</li> </ul>	<ul> <li>•5.1 Daily</li> <li>Bot scheduling</li> <li>Real time monitoring of RPA applications, IT infrastructure</li> <li>Reporting framework</li> <li>Incident Management and SLA adherence</li> <li>•5.2 Periodic</li> <li>•Management of Change Control tickets</li> <li>•Communications with application owners</li> <li>•Communications with IT &amp; Security</li> <li>•Institutional Integration</li> <li>•Infrastructure improvements</li> </ul>	<ul> <li>6.1 Stakeholder &amp; Change</li> <li>Management <ul> <li>RPA Toolkit</li> <li>Change Champion Network</li> <li>Coaching &amp; Communications</li> <li>Training</li> </ul> </li> <li>6.2 Talent Management <ul> <li>Define Future State Roles</li> <li>Assess Current Roles &amp; needs</li> <li>Define Learning Strategy</li> <li>Create Learning Personas &amp; Pathways</li> <li>Implement &amp; Monitor</li> </ul> </li> </ul>	•7.1 Infrastructure •7.2 Access Management •7.3 Hosting Options				



The University of Texas System
Intelligent Automation Services Group

15

## **Additional Resources**

- The UT System RPA ROM can be found at the <u>UT System OCBS</u> <u>Resources website</u>.
- Foundation and principles of the Blue Prism ROM can be found at <u>ROM Hub - SS&C Blue Prism Community</u>
- Blue Prism ROM Certification Blue Prism University | Homepage



## Are Digital Workers safe and secure?



# Digital Workers are Safe Because...

Security Access and Privileges

 A digital worker is assigned access and privileges like a human worker. Their credentials are stored in a secured credential manager within the Blue Prism application.

Separation of Duties

• Roles of system admins, developers, and bot controllers are segregated within the application.

**Security Audits** 

- Digital identity and access management is provisioned with an audit feature that allows tracking of all activity performed by the digital worker.
- Digital workers only follow prescribed rules.

End to End Encrypted Data



## Information Security and the Digital Workforce Webinar

The Information Security and the Digital Workforce Webinar is a presentation shared by a Blue Prism Enterprise Architect that covers security governing principles. Topics include network security, credentialing, access restrictions, user profiles, authentication, authorization, encryption, and the architecture design.

A copy of the video and presentation can be found the at the <u>UT</u> <u>System OCBS Webinar website</u>.



## What is the process and time commitment to automate a process?



# **Build a Digital Worker**



#### **Roles & Responsibilities Per Process**





22

## How do I determine what to automate?



23

## Automation "Use Case" Characteristics

- Tedious, repetitive tasks
- High-volume transactions
- Rules-based answers
- Manual work prone to errors
- Tasks can be performed outside normal office hours
- Existing work supported by algorithms or macros



### Opportunity ideation Use Case Characteristics for RPA

Business Unit Support will identify and submit processes as potential RPA opportunities. All submissions **must** include and meet the following minimum conditions<sup>1</sup> to be recognized as a suitable candidate:





The process contains a **defined set of tasks** required for execution

A process is deterministic if:

- There is a sequential series of tasks with fixed start and end conditions
- There is no randomness or judgement (i.e., the process is rule based) in outcomes



Digitized (Electronic)

The data required for the process can be **accessed electronically** 

Examples of digitized storage include:

- Local PC drive
- Shared network drive
- ▶ IT Application / database



#### Documented (Well Defined)

The process is transcribed with the  $\ensuremath{\text{appropriate}}\xspace$   $\ensuremath{\text{details}}\xspace^2$ 

Critical details include:

- All business process owners
- Instructions for executing each process task
- Key business/ system exceptions and corresponding workarounds

<sup>1</sup> Additional criteria may be introduced at various stages of the RPA program to reflect the goals and scope <sup>2</sup> Keystroke documentation will not be required at the identification phase



25

High-level business case Analytics helps validate overall goals, allocate goals to specific areas and prioritize further assessment and implementation activity play a role?

Coverage – <i>Creating the funnel</i>	Opportunity identification and roadmap creation			
<b>Pipeline size</b> : Typically ratio equals 3x opportunities identified to realized savings target	Revenue Cycle			
<b>Functional breadth</b> : In order to generate sufficient opportunities program scope should consider multiple functional areas	Finance Function			
Actual benefit realization: Full benefits are usually realized 2-3 months after deployment therefore it is important to identify quick wins				
Implementation pipeline: Opportunity pipeline should include functional and technical diversify to allow for parallel workstreams Benefit realization - <i>Maximizing the funnel throughput</i>				
<ol> <li>Materiality - Identify largest dollars and FTE's including areas of high growth (potential cost avoidance)</li> </ol>	Process identification			
2. Most variable labor - Focus on contingent labor, outsourced tasks, Global Business Services (GBS) and OT for retained FTEs				
<ul> <li>3. Easiest path to realization <ul> <li>Executive sponsorship</li> <li>Discreet activities (HC 100% dedicated to activity)</li> <li>Maximum concentration (transactions and FTE) per tower</li> <li>Non-customer facing or critical process</li> <li>Limited impact to existing systems</li> <li>Existing skills for RPA technology</li> </ul> </li> </ul>				
<ul> <li>4. Complexity/ feasibility <ul> <li>Data quality/ integrity</li> <li>Process and/or system stability</li> <li>Compliance sensitivity</li> </ul> </li> </ul>	Prioritization analysis           Business Case & Roadmap         Jan'17         Feb '17         Mar'17         Apr'17         May'17         Jun'17         Jul'17           Process 1         Process 2         Process 3         Process 4         Process 4			



# **Opportunity/Process Assessment Success Factors**

#### Approach

- Identify process automation opportunities by function / institution (pre-work by institution to gather needed information on process, sub-process, task, etc.)
- Process owners participate in workshops over a three-week timeframe for two to four hours to review a selected Function (Finance, Budgeting, Rev Cycle, Supply Chain, or HR) for automation potential and value



- Inventory of processes by functions
- Process documentation available
- Headcount and effort tied to processes available
- Availability of Process Owners during Opportunity/Process Assessment workshops
- Minimal competing initiatives during workshops





## What process can be automated? What processes has UTS automated?



## UT System Institutions' Projects in Production

## Value Achieved From Feb 2019 thru FY24-\*Q4 (Aug 2024)

UTA	UTEP	UTPB	UTSA	UTT
Grant Close	Grant Close	Grant Close	Grant Close	Review & Validate
Feb 2019	May 2023	Apr 2023	May 2023	Mar 2019
\$139,756	\$163,490	\$49,477	\$61,707	\$270,016
Sahara UTS142 Notifications			TRS Recon	TMHP Medicaid
Close Announcement Nov			TRS to HCM Aug 2023	Jan 2023
2023, Reminder Notice Dec			TRS HCM to GL Feb 2024	\$12,361
2023,			TBD	
30 Day Past Due Jan 2024			Missing Receipts	Grant Close
60 Day Past Due Feb 2024,			Aug 2024	Jan 2024
90 Day Past Due Mar 2024			\$4,078	TBD
Apr 2024				TRS Reconciliation
\$148 750				May 2024
Ş140,750				
				Fixed Assets Reconciliation
				Aug 2024
				TBD
UTSWMC	UTHSCH	UTHSCSA	UTMDACC	UT System Admin
TMHP Medicaid	Review & Validate	TMHP Medicaid	Payor Under/Over Payment	LBB Reporting
Apr 2021	Feb 2019	Mar 2020	Apr 2022	Nov 2021
\$11,203,010	\$1,493,286	\$18,126,954	\$1,335,873	\$108,250
MR Records/Denials BCBS		<b>Clinical Trials Invoice Creation</b>	TMHP Medicaid	GPO – Power Automate
\$262,900		Aug 2024	Jul 2022	Aug 2023
		TBD	\$1,706,172	TBD
			Agency Nursing Timekeeping	
			Dec 2023	
			TBD	
The University of Texas System	*Total Hours Sav	ed 94,643 (54 FTEs)		
* Sorvices Crown	Aggregate Value	e Achieved \$35M		*Collecting Q4 data
Services Group				

Updated 10/3/2024

29

## Automations in Development Academic Institutions

Submitted Institution	New / replicate	Process Area	Process Name	Description	Target Completion – FY24	Status
UTSA	New	Student Services	Loan Refund	Parent Plus Loan refund processing utilizing Banner report AR_F404 Loans_Holds_Rpt (student info) and the TSARREV (refund amt), and generate voucher in PeopleSoft.	Q4	Build
UTSA	New	Payroll	Pre-Distribution Audit	Replicate finding source of funding discrepancy when paysheets are open This particular process would need more details but could be used at other UTShare institutions.	Q4	Build
UT System Admin	New	Supply Chain	HUB Reporting	Monthly HUB reporting that pulls a report of expenditures, removes exceptions, reconciles that data against the TPASS report, and delivers the output report to a shared network folder.	Q4	Build
UTRGV	Replicate	Grants Finance	Grants Close	Identify and create workbooks for grants that are ready to be closed. Prepare the workbook for each grant for the Grant Specialist to review.	FY25	Design
UTT	New	Student Services	Patriot Promise Management	Run five queries from PS CMS production, clean up such as deleting rows, merging cell data, calculations. Produce a single output file of students eligible to receive the Patriot Promise distribution. If permitted to allow digital worker to batch upload.	FY25	Design
UTT	New	Student Services	Federal Reconciliation	Reporting spend by running several queries such as UT Share Balance, Awards, Disbursements, and COD reports. Compile data and identify discrepancies.	FY25	Design



## Automations in Development Health Institutions

Submitted Institution	New / replicate	Process Area	Process Name	Description	Target Completion – FY24	Status
UTHSCSA	New	Research	Clinical Trials Office Invoice Follow-up	Creating a report of invoices over 120 past due	FY25	Design
UTMDACC	New	Nursing Services	Agency Nursing Monthly Timekeeping	Provide monthly time calculation out of Kronos and calculate to daily time, including overtime for each nurse for an entire month. This report will capture any Kronos corrections made to the nurse's time for the month. The data will then be separated by the nursing agency and an: 1. Accounts Payment voucher is created 2. Payment created for the nursing agency	FY25	Design (Consulting MDACC)



## Automations in Proof of Concept

Submitted Institution	New / replicate Process Area		Process Name	Description
UTPB	New	Student Services	Transcript Evaluation	Collect course and testing from undergraduate transfer transcripts.
UTMDACC	New	Accounts Payable	Invoice Processing IDP Solution	Create PeopleSoft vouchers from invoices

These automations utilize Intelligent Document Processing (IDP) with testing being conducted on five different products.



## Automations in Evaluation or Pre-Design

Submitted Institution	New - Replicate	Process Name	Description
UTA	New	Award Close	Creating workbooks to close awards in Research Finance.
UTPB	New	PeopleSoft Testing	Functional testing of Peoplesoft Ui after Peoplesoft Updates.
UTT	New	Ci Process	The Ci Process is employed to execute approved changes from eForms to PeopleSoft related to job changes, encompassing activities like hiring, termination, job attributes, and assignment transfers.
UTHSCSA	Replicate	Medical Records Denials	Submits claims denials reconsideration to payors website when additional information additional information (such as clinical notes, visit summaries, case history etc.) are requested by the payor to review a denied claim.
UT System	New	Benefits Focus	Multiple institution collaboration to automate reconciliation of benefit focus reports.



## **Automations in Ideation**

# A complete list of automations in ideation can be found on the IASG website:

https://www.utsystem.edu/offices/collaborative-business-services/intelligentautomation-services-group



## Who is IASG? What services does IASG provide?



35

## Who is IASG

Intelligent Automation Services Group (IASG) is an internal support group that serves all UT System Institutions for business process automation utilizing RPA and Intelligent Automation tools.



## Intelligent Automation Services Group Offers

- Webinar & Education Programs
- Business Process analysis for automation
- Automation Design and Development
- Hosting and Monitoring Services
- Consulting Services



**Office of Collaborative Business Services Intelligent Automation Services Group Organizational Chart** 



38

Powering Success with Intelligent Automation

## Intelligent Automation Services Group (IASG)

Jeffery Bonnardel	Executive Director, IASG	jabonnardel@mdanderson.org
Jennifer Gloria	Program Manager	jgloria@mdanderson.org
Quintin Peikert	Sr. RPA Analyst	wqpeikert@mdanderson.org
Kapil Gupta	Robotics Process Automation Architect	Kgupta@mdanderson.org
Isaac Shaffer	Sr. Robotics Process Automation Developer	isshaffer@mdanderson.org
Michelle Nguyen	Robotics Process Automation Developer	MLNguyen1@mdanderson.org
Marlena Kays	Administrative Assistant	mskays@mdanderson.org





Updated 10/3/2024

## Has RPA delivered value to UTS?



40

## Value Creation through FY24 \*Q4

Institution	Process	Started	FY19	FY20	FY21	FY22	FY23	FY24	Totals
UTMDACC	Grant Cash Reconciliation	FY19	\$27,422	\$54,844	\$54,844	\$13,711	N/A	N/A	\$150,821
UTHSCH	Review & Validate	FY19	\$133,236	\$266,472	\$266,472	\$266,472	\$279,702	\$ 280,932	\$1,493,286
UTT	Review & Validate	FY19	\$20,466	\$40,932	\$40,932	\$46,840	\$51,995	\$68,851	\$270,016
UTHSCSA	TMHP Medicaid Eligibility	FY20		\$532,982	\$2,637,042	\$5,929,976	\$4,571,921	\$4,455,033	\$18,126,954
UTSWMC	TMHP Medicaid Eligibility	FY21			\$2,143,455	\$3,208,658	\$3,515,718	\$2,335,178	\$11,203,010
UT System	LBB System Adm	FY21				\$17 <i>,</i> 658	\$36,700	\$53 <i>,</i> 892	\$108,250
UTMDACC	Underpayment Overpayment	FY22				\$282,046	\$395,894	\$657,934	\$1,335,873
UTA	Grant Close	FY22				\$14,464	\$70,716	\$54,576	\$139,756
UTMDACC	ТМНР	FY22					\$826,046	\$880,126	\$1,706,172
UTSWMC	Financial Aid	FY22					\$10,500	N/A	\$10,500
UTSWMC	MR Denials	FY22					\$213,000	\$49,900	\$262,900
UTPB	Grant Close	FY23					\$17,356	\$32,121	\$49 <i>,</i> 477
UTSA	Grant Close	FY23					\$6,826	\$54,881	\$61,707
UTEP	Grant Close	FY23					\$39,896	\$123,594	\$163,490
UTT	ТМНР	FY23					\$489	\$11,871	\$12,361
UTA	Sahara UTS 142 Notifications	FY24						\$148,750	\$148,750
UTSA	Missing Receipts	FY24						\$4,078	\$4,078
Totals			\$181,124	\$895,230	\$5,142,745	\$9,779,826	\$10,036,759	\$9,211,716	\$35,247,400



**Services Group** 

\*Collecting Q4 data

41

Updated 10/3/2024

## How to Get an RPA Program Started



42

## Key activities to get started include...

- Defining Organizational Objectives (Vision & Strategy)
- Establishing RPA Governance
- **Determining Technical Environment & Support Model** (e.g., IASG, In-house, 3<sup>rd</sup> Party)
  - Selecting Delivery Team (e.g., IASG, In-house, 3rd Party)
- Ensuring stakeholders on-board
  - Information Security
  - IT
  - Compliance
  - Internal Audit
  - Employees

## The IASG Team is available to assist you with any of these activities. IASG@mdanderson.org



## How Do I Build a Process Automation?



## How to Build a Process Automation

- Select Process
- Document-Map Process
- Establish Team
- Key Decisions
- Design
- Build
- Test
- Deploy



## **Select a Process**

- Identify potential processes for automation that meet use case characteristics
- Consider processes which can not be improved through existing application.
- Perform a process assessment to determine automation potential of processes selected (e.g., potentials savings, complexity of build, risks, and limits).
- Ensure it meets RPA requirements
  - Digitized
  - Deterministic
  - Documented



## **Document Process**

- Create detail step by step procedures of the process (SME & Business/Process Analyst)
- Create the Functional Design Document -Flow chart current and new process (Business/Process Analyst)
- Create the Solution Design Document (Technical Architects)



## **RPA** Team

- Capture Current Process Subject Matter Expert (SME) and RPA Analyst
- Establish Scope Process Owner, SME, and RPA Analyst
- Document To Be State RPA Analyst
- Configure Automation Blue Prism Developer
- Test Automation Unit Testing Blue Prism Developer and SME
- UAT Testing SME, Developer, and RPA Analyst
- Finalize Process Documentation RPA Analyst
- Deploy and Stabilize Technical Architect and Monitor Team



# **Key Decisions**

- What, if all, of the process will be automated?
- How often will the digital worker run, i.e. frequency, hours, days of the week?
- Do you need a SQL server to capture large data sets?
- How many licenses will you need?
- Will the environment reside at your institution or UT SIS?
- Who will support and maintain the automation?



# Design

- Functional Design Document a document that details the business process that is to be automated. Once agreed as the basis for the automation of the target process, will be used as a platform from which the automated solution will be designed.
- Solution Design Document a comprehensive document containing, not only high-level details of how the developer will deliver the solution in the RPA platform, but also includes details of other deliverables that are required for the solution (i.e. web services, database tables, web forms etc.) and on other details such as security, scheduling, alerting, management information, and exception handling.



## Build

Once the solution design document has been developed, then the solution must be reviewed and agreed upon by the process owner, IT, implementation team, and delivery team to ensure successful delivery.

An RPA Developer is then tasked to build out the solution using business objects in the Blue Prism application studio.

The developer will need requirements during this phase such as the input and output files, and test data to prove the object logic.



## **Blue Prism Tutorial Video**

Blue Prism Video Tutorial | 010 | Introduction to process studio and creating a simple process -YouTube





The aim of testing is to deliver solutions that meet business requirements and contain the minimum possible number of faults.

- Unit testing is testing the performance of the automation, environment, and stability.
- User Acceptance testing is validating the output, and meeting expectations.



# Deploy

## Move to Production

- HyperCare
  - Move to Production HyperCare where automation is in production but is closely being monitored by the delivery team.
     Once stability is achieved, knowledge transfer occurs between developers and the monitoring team.
- Business as Usual (BAU)
  - Routine operations



## Things to Remember – Lessons Learned

- Get Information Security approval before you start the process
- Make sure all interested Parties are involved, (ISO, Audit, Compliance, Process Owners SME, etc.)
- Involve a Technical Architect at design to advise, and create solution design
- Get credentials for the DW to the appropriate applications
- Determine when the automation can run and how long
- Try and determine number of DW needed
- Unit Testing done by developer and with Process SME, and should run end to end to simulate production
- UAT should run end to end to simulate production
- Don't develop in a vacuum, engage the process SME



## **RPA Video**

- <u>https://www.youtube.com/watch?v=5JJCZIclC1Q&list=PL</u>
   <u>4SEtvjUqihFh-iFvb\_s0VAhPCX1tzg2A&index=3</u>
- Please visit the UT System OCBS Webinar website for the How to Build a Digital Worker Webinar



## How do I get started?



57

# **Identify Process**

- Select a process that meets the use case characteristics
- Ensure it meets RPA requirements
  - Digitized
  - Deterministic
  - Documents
- Conduct a process assessment to determine potentials savings, complexity of build, risks, and limits.
- Consider processes which can not be improved through existing application.

The IASG Team is available to guide you on these requirements. IASG@mdanderson.org



## Have a good internal team

Include key stakeholders to ensure proper RPA development workflow, financial planning, resource management, control and risk management, and to prevent potential delays.

- Information Security
- IT
- Compliance
- Internal Audit
- Employees

