RPA empowered Self-functioning Utility Processes ecosystem

Speakers :

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➢ Tata Power is a process driven organization where not only we achieve the best operational and performance parameters, but also focus on improving our Digitalization Index.

➢ Meter Reading, Billing and their quality checks are most critical commercial activities for any Distribution Utility

➢ Robotic process automation (RPA) plays a pivotal role in the automation of these processes
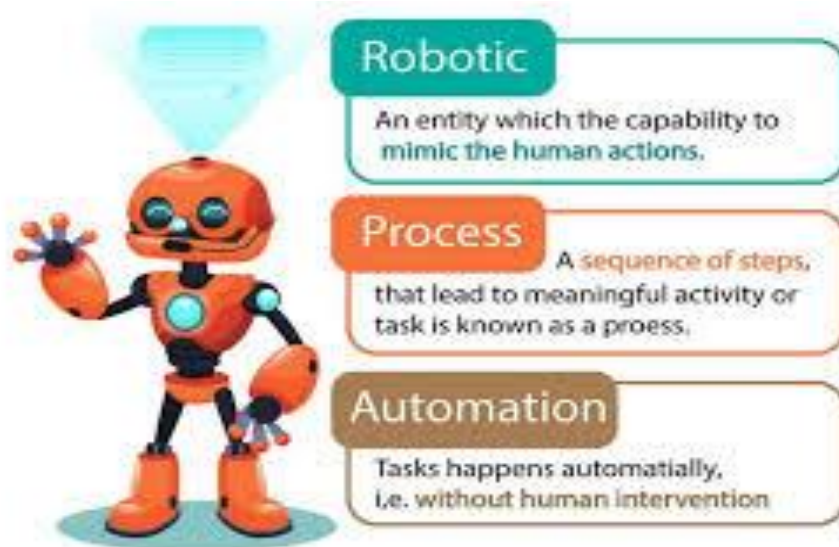
- Robotic Process Automation (RPA) is software with Artificial Intelligence (AI) and Machine Learning that handles simple / complex , high-volume, repetitive tasks, leading to cycle time reduction and greater efficiency

- Robotic process automation makes it easy to build, deploy, and manage software robots that simulate humans actions interacting with digital systems and software

- Robotic process automation streamlines workflows, which makes organizations more profitable, flexible and responsive. It also increases employee satisfaction, engagement, and productivity by removing mundane tasks from their workdays
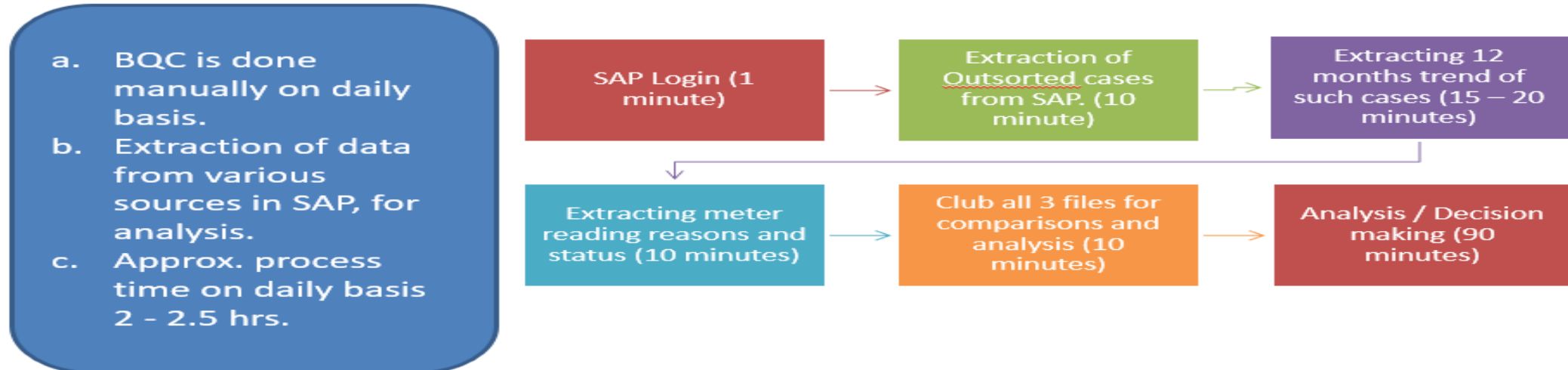
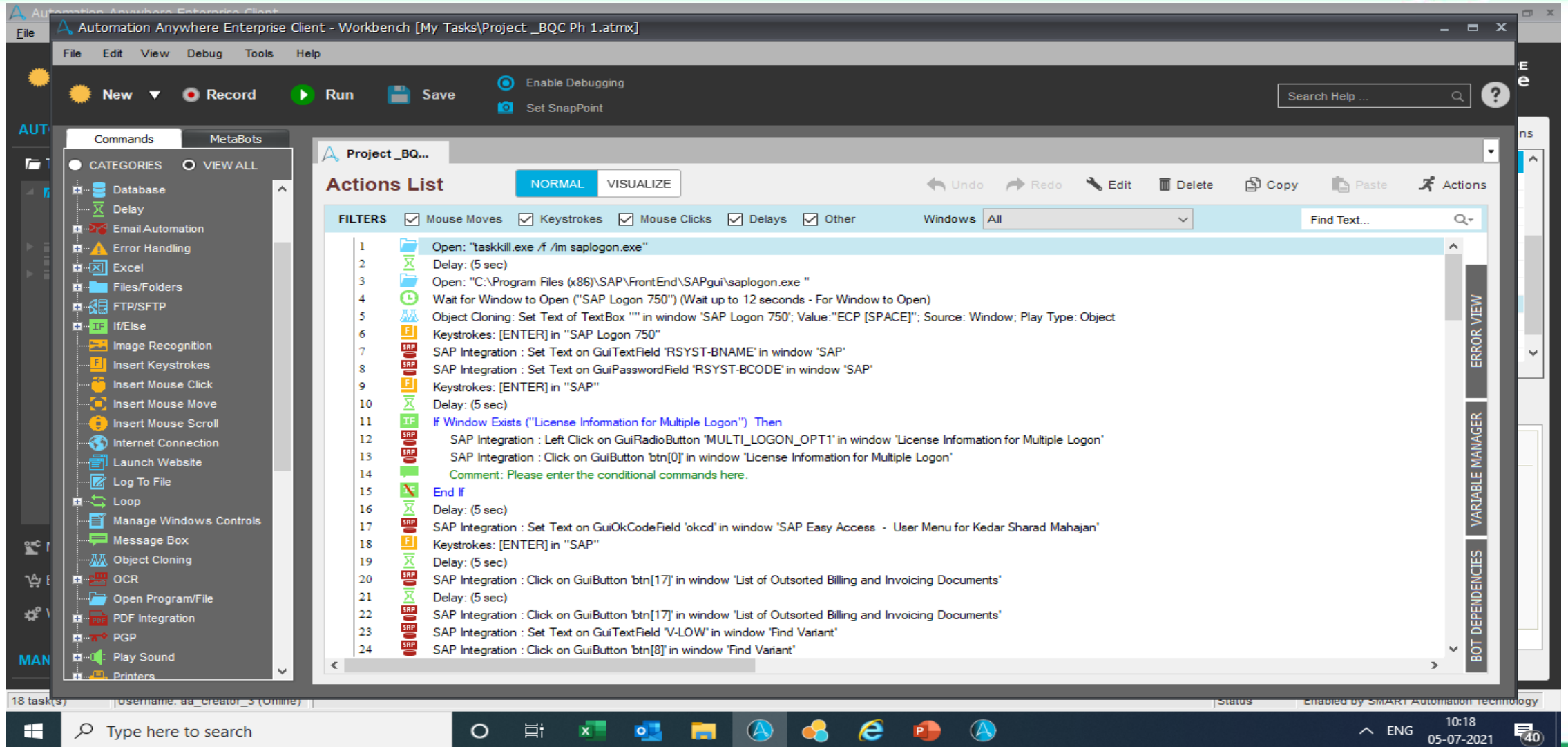| Business Process	Bill Quality Check Analysis	Meter Data Analysis	Notification Report	Master data Mismatch Report
Discription	Proactive Bill quality Check Mechanism with set rules & validation ensure consumer will get correct electricity bills. *RPA BOT extracts Outsort cases along with supporting reports & perform analysis,Autogenrate mail triggers with output remarks.*	Meter data analysis is reading quality check analysis, all AMR enabled consumer's meter data analysis done on daily basis, all abnormal Events, voltage & current data analyse to find out any abnormalities in meter *RPA BOTS extract data from server & perform analysis,Autogenrate mail triggers with output remarks.*	Notification report exctracts & send to concern department through autogenrated mail on daily basis. *RPA BOTS Extracts Notification reports & sent pending as well completed calls department wise through auto genratde mails*	Identify mismatch in consumer Master data enable accurate billing. any deviation in master (Business , techinical)data proactivly identified & action to be done before actual billing *RPA BOTS execute Master data mismatch report & sent to concern department for action*
Benefits after RPA deployment	1) Reduction 2.5 daily man hour. RPA perform all activities in less than 10 min 2) 100% Accuracy as analysis done by system with set logics. 3)Increase billing efficiency ,reduction time for BQC process (unbilled TAT reduce) 4) Enhance employee moral as daily repetatioive/mundane task now handled by RPA BOT 5) Elimnation of dialy repatative task	1)Reduction 1.5 Manhours daily. 1) Accuracy level increse to 99.9% as no manual intervention. 2) Abnormalities in Meter identify through data analysis which ensure accuate billing,any deviation identified before electricity bill genration.	1)Reduction in 10 Minutes daily. 2) Reduce manual dependencies for daily routine task BOT schedule non working hours.	1)Reduction in 0.5 Man hours daily 2) Reduce manual dependencies for daily routine task BOT schedule non working hours.

Bill Quality Check

- Bill Quality Check is critical process where-in each Bill document is checked with certain set of validations based on past 12 months history data and various other parameters like connected load , type of meter reading , tariff category , etc.
- Bills documents that do not pass these validations , are out-sorted and can be processed further for invoicing only if these are released by the supervisors. Based on the analysis of history data , some bills need to be reversed by the back-office team
- Back-office team used to spend around 2.5 hours on a daily basis to complete the analysis and check all the validations manually
- Post implementation of RPA , team can now take their decisions within 10 minutes and process the document further
- We have achieved 100% accuracy through the BOT

Process Steps

a. BQC is done manually on daily basis.
b. Extraction of data from various sources in SAP, for analysis.
c. Approx. process time on daily basis 2 - 2.5 hrs.

SAP Login (1 minute) → Extraction of Outsorted cases from SAP. (10 minute) → Extracting 12 months trend of such cases (15 – 20 minutes)

Extracting meter reading reasons and status (10 minutes) → Club all 3 files for comparisons and analysis (10 minutes) → Analysis / Decision making (90 minutes)

BOT Developer Screen

Video will be played

Business Benefits

- **Workforce productivity –** Repetitive tasks are completed by the Bot , back-office team can invest their time in more productive task which enables maximum employee engagement

- **Reduction in errors -** Manual intervention is eliminated, which has led to error free analysis. Person dependency has been eliminated

- **Increased agility -** RPA often enables an organization to more easily accommodate business process changes, Bots are re-configurable

- **Standardization of processes -** RPA performs its tasks exactly as it's programmed to do, ensuring that a process is followed consistently every time across locations

- **Improved customer satisfaction -** Reduction in cycle time and error free billing has led to improved customer satisfaction

- **Centralized Analysis -** Email notifications are sent to all team members involved in this process. Bot output is attached in the Email for further decision making

- **Improved Digitalization Index -** RPA implementation has led to improvement in digitalization index of Commercial Billing Management process

Thank You

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