



AUTOMATION PLAYBOOK

Banking and Financial Services (BFS)

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1. PREFACE

Automation is the focus of intense interest in the global banking industry. Many banks are rushing to deploy the latest automation technologies in the hope of delivering the next wave of productivity, cost savings, and improvement in customer experiences. While the results have been mixed thus far, the early growing pains will ultimately give way to a transformation of banking, with outsized gains for the institutions that master the new capabilities.

There are clear success stories but many banks face sobering challenges. Some have installed hundreds of bots—software programs that automate repeated tasks—with very little to show in terms of efficiency and effectiveness. Some have launched numerous tactical pilots without a long-range plan, resulting in confusion and challenges in scaling. Other banks have trained developers but have been unable to move solutions into production. Still more have begun the automation process only to find they lack the capabilities required to move the work forward, much less transform the bank in any comprehensive fashion.

Despite some early setbacks in the application of robotics and artificial intelligence (AI) to bank processes, the future is bright. The technology is rapidly maturing, and domain expertise is developing among both banks and vendors—many of which are moving away from the one-solution-fits-all “hammer and nail” approach toward more specialized solutions. Banks are also learning critical lessons about workflow in this new world—for example, how to more effectively manage handoffs between man and machine, and where typical process redesign/re-engineering can be put off or even skipped in favor of automation—particularly where systems are likely to be replaced.

It is estimated that in the next few years, machines will do up to 10 to 25 percent of work across bank functions, increasing capacity and freeing employees to focus on higher-value tasks and projects. To capture this opportunity, banks must take a strategic, rather than tactical, approach. In some cases, they will need to design new processes that are optimized for automated/AI work, rather than for people, and couple specialized domain expertise from vendors with in-house capabilities to automate and bolt in a new way of working.

This document dives deep into the BANKING industry processes, challenges, and the potential areas for automation. This document should serve as a ready reckoner for the practitioners to understand where, and how to start their automation journey.

Happy reading!

2. CONTEXT OF THIS DOCUMENT

This document captures the core processes across Banking and Financial Services value chain and assesses the challenges faced and opportunities to improve through automation. The content of this document is based on research of the latest trends demonstrated by industry leaders, across geographies and has been normalized to present an inclusive view.

This document presents an industry view of where automation can be leveraged to significantly improve the performance and efficacy of the process. It is of relevance to the following roles: -

- Industry leaders (decision makers, influencers) looking to evaluate automation as a means of boosting operational efficiency and human potential
- Sales and Business Development teams looking out to understand and set up preliminary conversations to address client's pain points
- People willing to consume this information for knowledge gain – automation / industry enthusiasts

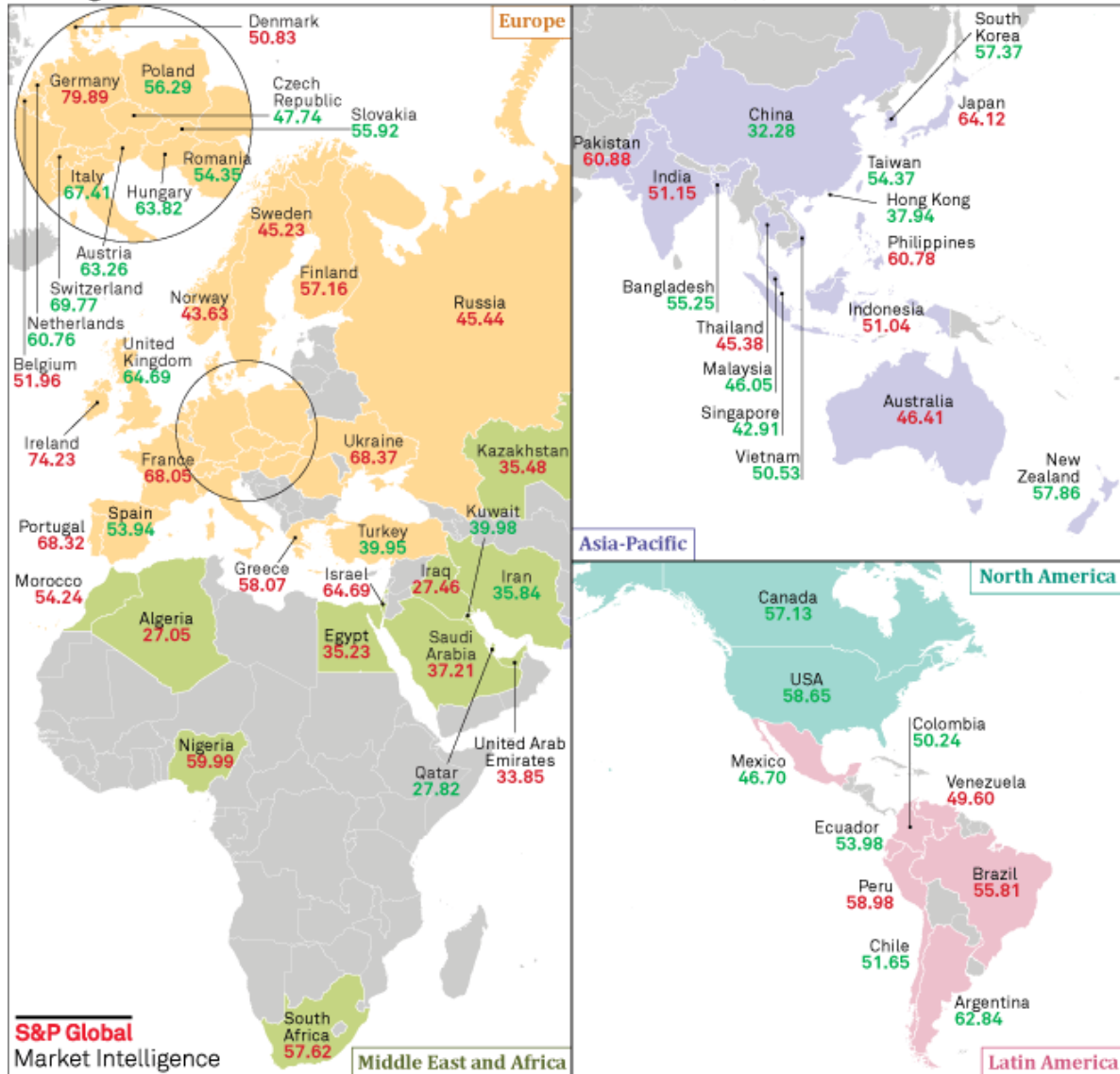
3. TRENDS IN BANKING INDUSTRY AND RELEVANCE OF AUTOMATION

Most financial institutions have been spending significantly on acquiring digital technology encompassing design & architectural improvements, loyalty & insights driven personalization as well as on channel & integration refresh. Some leading institutions have also been going through a major shift in their business models in order to disrupt themselves before challenger institutions take away a significant part of their customer base. However key business challenges still exist for banks globally. For example

- Average application abandonment rates across bank's retail product offerings still stand at approximately 40- 50%.
- As per a recent IMF Global Financial Stability Report dated Oct 18, while bank's non-performing loans percentage globally has come down to 3.4%, the emerging markets asset quality remain a big issue as their bank's non-performing loans percentage was close to 4.9%.
- As per World Bank's 2017 Global Findex database, while more than two-thirds of the adult population has access to banking and mobile money accounts, 1.7 billion adults remain unbanked. Infact a recent report by Oxford Economics and San Francisco-based fintech Juvo projects states that providing financial identities to the world's unbanked population could add \$250 billion to global GDP.
- Banks around the world showed mixed progress in their 2018 cost-to-income ratios (refer to Chart A) with the majority of countries in the Americas showing improvement, while most of those in the Middle East and Africa deteriorated, data collected by S&P Global Market Intelligence shows.

Chart Watch

Average cost-to-income ratios in select countries, FY'18 (%)



Data compiled July 17, 2019.

All ratios are asset-weighted average of banks under SNL coverage in Market Intelligence with headquarters in the respective countries.

Analysis excludes countries with 2018 GDP less than US\$100 billion.

Data is for the annual fiscal reporting periods adopted by individual companies, which in some cases span 12 months in two calendar years.

Value for the U.S. was derived from GAAP filings of U.S. banks.

Figures in green represent a decrease in the figure from a year ago, while those in red represent an increase.

Map credit: Ciaralou Agpalo Palicpic

Source: S&P Global Market Intelligence

Figure A: Cost to Income Ratio Intelligence

Further banks have always been in the forefront of adoption of new technologies and in order to address some of the above challenges, and continue to lead the way by leveraging AI and robotic process automation. Therefore, it's not surprising that, according to data by analyst firm Everest Group, banks and financial firms account for 40 per cent of the RPA independent software vendor market.

According to a McKinsey Global study on the skill shift and future of workforce, “The next wave of smart automation will have a sizable impact on the industry: 38 percent of employment is currently in back-office jobs that are more susceptible to automation and which will see a decrease in total hours worked by 2030 of as much as 20 percent.”

A recent study shows that the need for physical and manual skills as well as basic cognitive skills will decline significantly, while the need for social and emotional skills as well as technological skills will intensify.

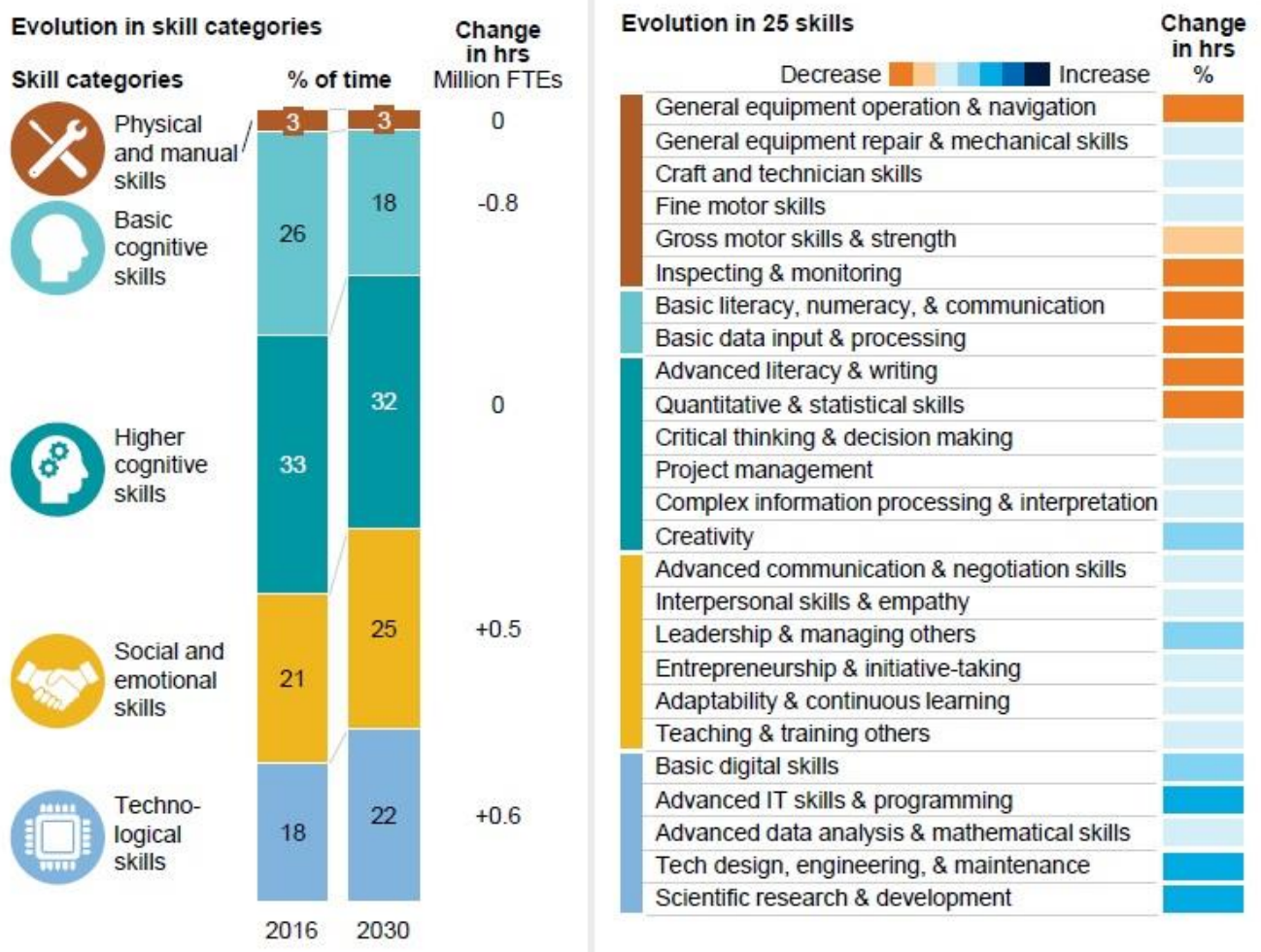


Figure B: Evolution in skill category

Chart B – A study by McKinsey Global Institute shows the sector skill shift for resources working in the Banking and Financial Services Industry

Jobs for roles such as tellers, financial analysts, and brokerage clerks will decline substantially with the increase in process automation, while the demand for technology professionals and customer interfacing roles requiring higher social and emotional skills will grow.

Further another study from Fiserv points out that well over a third – and in many cases perhaps as much as 80 percent of currently outsourced business process work – can and will be automated using tools such as RPA. Hence clearly defining the importance of this technology.

4. AUTOMATION ACROSS THE BANKING VALUE CHAIN

Changing consumer preferences, newly evolving business models, and competitor's investment in digital technologies are making it vital for banks and financial institutions to stay abreast with the market developments and existing challenges.

Although banks continue to be trusted by customers and remain a core part of customer's day to day activities, they are making an effort to increase their participation both directly as well by indirectly in most of their end customer journeys. While bank's operational value chain supporting their actions has remained more or less consistent over the years, their internal working is becoming more agile & efficient as reflected in the key metrics being tracked (refer to Chart C).

The inefficiencies in the system are being addressed by way of adoption of advance technologies led by data led intelligence, API based integration, AI & automation and offerings, all of which is being rendered by way of superior end customer experience.

We believe that the future of leading banks would be in their becoming truly invisible, while still actively participating in enabling all of the customer's daily activities. This will be facilitated by a seamless, connected and efficient value chain where processes and activities would be closely monitored and constantly improved.

	Marketing	Sales	Origination	Booking	Servicing	Shared Services
Roles	Marketing Executive Campaign Manager Channel Marketing...	Direct Sales Manager, Branch Sales Executive, Fin. Advisor, Sales Ops Manager...	Sales/ Account Manager Credit Risk Executive Liability Operations, Loan Operations Exec, Underwriting officer, Manager/Closer/ Post closer...	Credit Risk Manager, Loan Setup Specialist, Closing Officer, Deposit Specialist, Treasury Executive...	Cust. Ops Exec., Doc Admin., Teller Officer, Ops Control, Risk Ops, Collections Off., Legal Exec, A/c's Payable/ Receivable Clerk, Fund Accountant...	Strategy, Planning, Procurement, HR/ Training Mgr., Finance, Performance Mgmt., Risk & Compliance, IT/ Operations ...
Systems	Campaign/ Leads Management, Assets Management, Analytics...	CRM, Leads Management, IVR, Mobile Apps, Calc., BPM...	CRM, Internet Banking, Decisioning, 3 rd Party Tools, BPM, LOS, Product/ Pricing, Invoice Fin, ..	Core Banking, Loan Management, CMS, Collateral, Payment Systems, Trade Finance...	Core Banking, Teller, Loan Mgmt., Collections, Accounting, CMS, Payments, CRM, Asset Fin., Asset Mgmt., Content Mgmt..	HR/ Learning , Data/ Reporting/ Analytics, Risk/ AML Systems, GL, Collaboration, Doc. Mgmt., Enterprise Project Management/ DevOps...
Inputs	Campaign BI Reports, LOB Product Wise Plan, Budget Approvals...	A/c opening form, Customer docs, Proposal docs, Third party leads, Internal leads ...	Account Opening, Customer Documents, 3 rd Party Reports, Credit Reports....	Account Opening Document, Customer Documents, 3 rd Party Reports, Payment Receipts...	Customer Request Form, Payment files, Agency MIS, Customer Documents...	AML/ List , Resourcing, Regulatory Inputs, Liquidity Mgmt. Reporting, CEO Dashboards, Exposure view, Staff reports
Output	Campaign Performance Reports, Marketing Plan, Customer Insights...	Lead MIS, Completed Account Opening Form, Customer Documents...	Decision/ Account Opening Documents, Covenant Sheet, Borrower Documents...	Signed Legal Documents, Customer Account Package...	Customer Acknowledgement, Customer Documents, Legal Documents, Internal Approvals....	Compliance & Operational Mgmt. Reports/ Reconciliation info, Compliance reports,
Activity	Marketing plan & strategy, ROI Effectiveness, Executing Pre-approved Offers, Booking Accounts...	Assessing customer requirements, Ensuring profitable and risk managed business...	Validations/ Checks/ Assessments, Generating documentation, Exposure Management....	Cross sell/ Upsell, Document validation, Account disclosures, Account activation...	Manage service requests, track metrics/ reports, compliance adherence, collections strategy...	Business planning, Regulatory traceability, Stress tests, Risk modeling/ validations, Compliance mgmt., IT & operations planning & governance
Metrics	Net New Clients, New/ Lost Ratio, Lifetime value of a client, Branch Market share, Attrition rates...	Total applications, Turnaround time, Error rates, Abandonment rates...	Exposure per customer/ group, decline rates, Exceptions #, Approval turn around time...	Error rates, turnaround time, productivity, customer satisfaction metrics...	Attrition rates, Cross sell/ Upsell rates, Inactive accounts, default %, charge offs, transactions growth....	Training \$/ Employee, Manager/ Staff ratio Compliance costs, Deposit value, ALM ratios, # risk incidents, network planning...

Figure C: Banking value chain on a page

The industry is now moving from bank's wanting to solely own their customer's primary banking relationship to one where banks are efficiently striving to increase their customer's lifetime value, share of wallet as well as customer profitability metrics. End customers are no longer loyal to their primary bank. As financial services are being smartly packaged by offline & online businesses and specialty e-tailers, who are able to front end and take away their customer's attention span by offerings that solve a problem, traditional banks have no option but to follow suit.

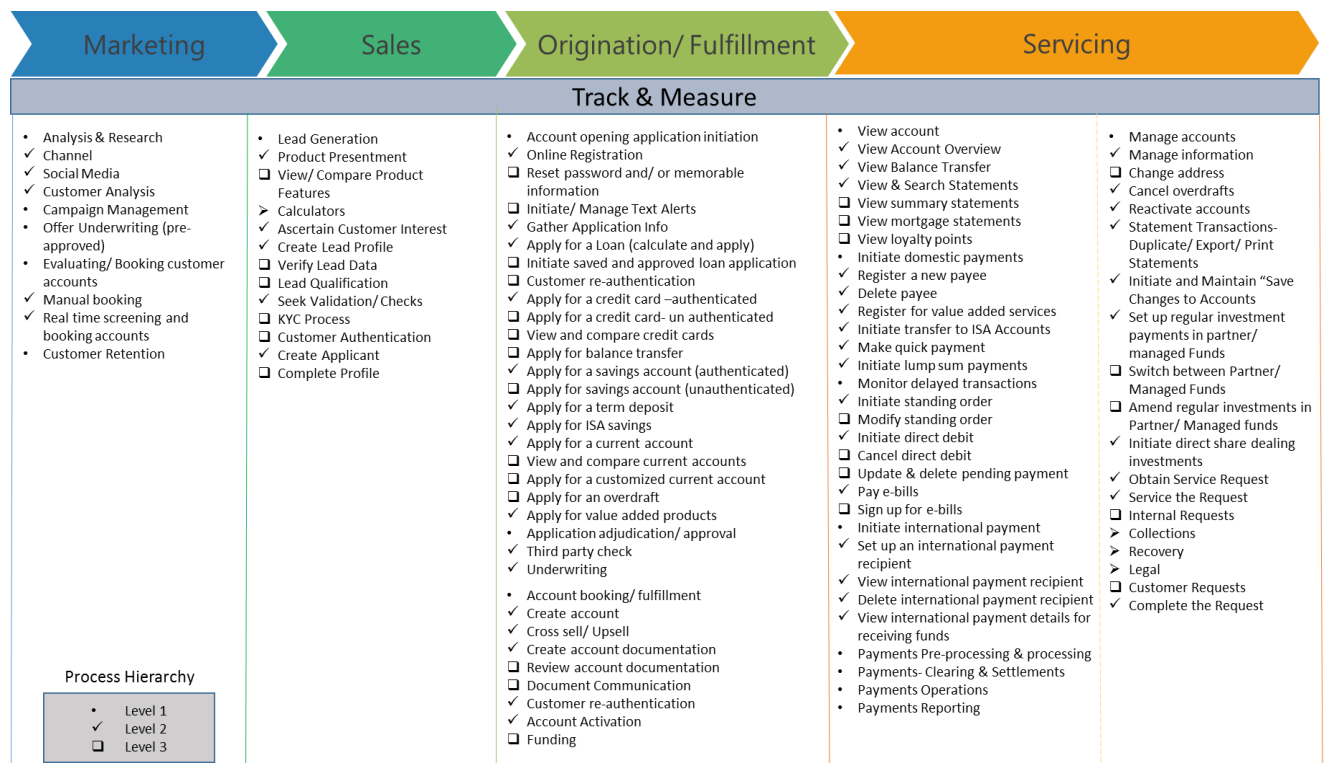


Figure D: Representative Digital Retail Bank Processes

Some challenges that come in the way of most traditional banks fulfilling their vision include rising compliance costs, presence of legacy systems, lack of operational agility, intermittent manual processes, unavailability of a single customer view and a rapidly changing technological landscape. With all these factors playing a critical role, RPA comes as a powerful force multiplier solution, one that can help financial institutions benefit from below:

- Enhance connected customer experience
- Improve efficiency without tinkering with the existing Legacy systems
- Provide required agility to scale as per compliance needs
- Maintain better control on processes through required auditability
- Automate manual intensive efforts and reduce errors

Keeping the above drivers in mind, a banking domain architecture has been outlined to represent where RPA can help (refer to Chart E which calls out functions in green as the areas where RPA has had an clear impact), and provide the necessary in-roads for banks. The benefits of automation can be tracked through the KPIs associated with each process.

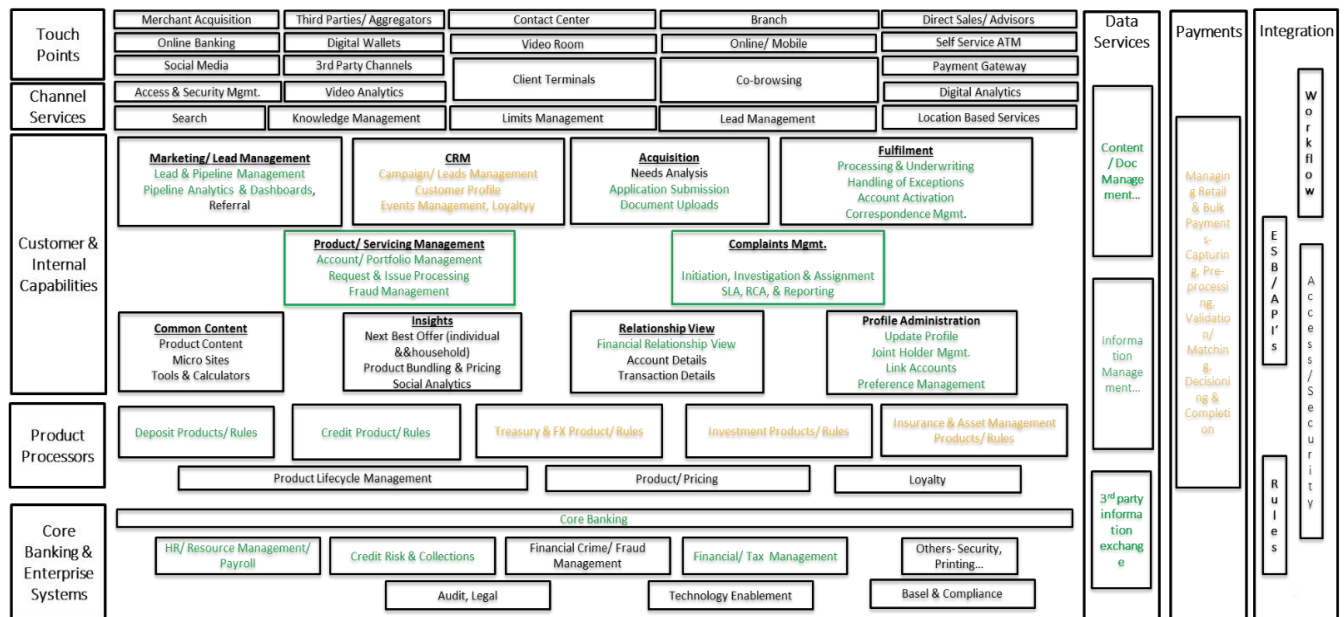


Figure E: RPA impact on a domain architecture

In conclusion, we can see that RPA can have a high impact on a large number of banking processes, with broader benefits including enhanced accuracy, faster throughput, higher straight through processing, improved tracking, reduction in handling time/transaction, increased visibility and timely monitoring of critical activities.

5. CHALLENGES AND OPPORTUNITIES

In order to remain ahead in an increasingly competitive market – especially with the more widespread adoption of virtual banking – banking firms have had to find a way to deliver the best possible user experience to their customers. Internally, the challenge to maximize efficiency and keep costs as low as possible while also maintaining maximum security levels has also increased. Some of the key challenges faced by the banking industry and the opportunities that they present are as following: -

Verticals	Challenges	Opportunity
Marketing	<ul style="list-style-type: none"> Gathering marketing insights from competitor websites and other sources of information to uncover changes and developments, requires one to scout through various websites 	<p>RPA can be used to automate marketing activities and compliment an organization's marketing team. Bot can be used to</p> <ul style="list-style-type: none"> Trawl competitors' websites, read a press-release and other sources of information to uncover changes and other developments.

Verticals	Challenges	Opportunity
	<ul style="list-style-type: none"> Setting up targeted campaign and Ads via different mediums like, Social media, Website, Email, SMS Analyzing competitive online presence, against our competitors, across multiple website, is time consuming Generating leads from various channels like websites, lead collection form, vendors, trade shows. Capturing leads from various sources Capturing the leads that have been generated into a CRM application is manual and time consuming 	<ul style="list-style-type: none"> Streamline and optimize digital Ad placement. They can used to setup alerts and responses for mentions, automate posting content to social media and other networks, send auto-messages to leads, monitor social media for leads Automate email marketing (Schedule Emails, Email address validation, List cleanup, Send-schedule optimization, Intelligent response processing, Auto-forward response to SPOC, Campaign metrics reporting) Automate SMS marketing by connect directly with the contacts using targeted SMS messages, automating bulk SMS campaigns from a list in the organizations database, scheduling SMS Perform continuous competitive research Collate leads from various sources by <ul style="list-style-type: none"> Scaping leads from websites Collating leads from trade shows Processing leads from visiting card photos Getting additional lead information from public data sources automatically Automating Lead qualification process Validating leads before passing them to the sales team Automatically capture leads into the CRM system
Sales	<ul style="list-style-type: none"> Identifying opportunities for cross-selling and upselling Carrying out market research to improve sales 	<p>RPA can used to:</p> <ul style="list-style-type: none"> Automate monitoring of customer activities, to identified opportunities of

Verticals	Challenges	Opportunity
	<ul style="list-style-type: none"> Predicting future sales accurately Managing operational activities – updating interactions in CRM, updating scorecards of sales representatives. These are time consuming activities 	<p>cross-selling and upselling (through segmented campaign targeting)</p> <ul style="list-style-type: none"> Automate monitoring client base's policy status and identify gaps and opportunities for discounts and bundles. This will help to maximize sales opportunities. To integrate their email, call and other communication data to CRM and keep the interactions with customers, up-to-date Integrate Leads and CRM systems to ensure that changes in CRM are uploaded to scorecards so sales reps can see their progress real time Help sales professionals in predicting future sales accurately (using AI along with RPA) by automating tasks related to data gathering, manipulation, presentation and analysis.
Customer on-boarding and KYC	<p>Many organizations still use manual, time-intensive tasks to:</p> <ul style="list-style-type: none"> Check identity information against numerous watch lists and public record databases Collect and integrate the necessary data from external sources and internal systems <p>This results in</p> <ul style="list-style-type: none"> Slow on-boarding and revenue realization – resulting bad customer experience Possibility of fines for on-compliance - manual processes increases the likelihood of errors or missing information 	<p>Robotic Process Automation can:</p> <ul style="list-style-type: none"> Automatically selects all known information needed to authenticate and verify the individual's identity Mimic how an employee interfaces directly with an internal or external website, portal, or application – automatically connect to external agency websites, APIs and multiple internal systems to check an individual's background Deliver the results much faster and with zero errors Help respond faster to regulatory updates by automatically monitoring and extracting data from regulatory websites

Verticals	Challenges	Opportunity
	<ul style="list-style-type: none"> Increased operational cost – More resources are required to manage manual processes 	
Customer Service	<ul style="list-style-type: none"> Banks deal with multiple queries from multiple customer every day ranging from account information to application status to balance information. It is difficult for banks to reduce the turn-around time of these queries. It takes a couple of mins to make one's way through an IVR, to get even the simplest of information Only a limited number of executives are available at any point in time and if the number of calls exceed the available number of executives then customers get queued. 	<ul style="list-style-type: none"> RPA can automate such rule-based processes to respond to queries in real time and reduce turnaround time to seconds, freeing up human resource for more critical tasks With the help of artificial intelligence, RPA can also resolve queries which needs decision making. With the help of NLP, Chabot can understand the natural language to chat with customer and respond like human.
Risk and Compliance	<p>Regulatory Reporting</p> <ul style="list-style-type: none"> Regulators require a wide array of regulatory submissions from banks at varying frequencies and across the functional areas – financials, asset quality etc. The data required for regulatory reporting are stored in disparate systems and involves significant manual processes to collect, prepare and transform source data as per the regulatory requirements <p>Credit Monitoring</p>	<p>RPA can enable automatic</p> <ul style="list-style-type: none"> Collection data from disparate source systems Preparation of data for transformation Transform of data as per regulatory requirements <p>It will also ensure accuracy of the information submitted to the regulators, thus avoiding regulatory penalties and reputational impact</p>

Verticals	Challenges	Opportunity
	<ul style="list-style-type: none"> Banks collect an array of documents from their corporate customer to monitor and compute key financial and risk indicators, post sanction of credit Client data is submitted in disparate formats <p>Trade Surveillance</p> <ul style="list-style-type: none"> Banks require to adhere to a large volume of regulatory requirements and perform post trade compliance checks for the trades executed The checks are performed by testing compliance through a manual process using compliance checklist <p>Model Performance</p> <ul style="list-style-type: none"> Banks need a large number of models for risk quantification and capital computation across risk categories and products Annual validation of models. Due to large number of models, not all models get validated every year 	<p>RPA can capture data from these forms using OCR and automatically feed them into Loan Management System (LMS) for computing the ratios</p> <p>Multiple bots (one per each product) can be used to carry out the tests automatically and simultaneously, thus reducing the time and effort in completing the tests</p> <p>RPA can enable</p> <ul style="list-style-type: none"> Collection and preparation of data Execution of statistical tests Comparison of model outputs and actual outcomes

6. INTRODUCING PROCESS DRIVEN AUTOMATION

The traditional method of approaching automation opportunities, is to conduct a detailed time and motion study of the individual processes across the value stream and determine what improvements can be made through automation. This approach to study business processes at a detailed level and identifying the automation opportunities is called the Process Driven Approach. The process driven approach qualifies the opportunities based on efficiency, effectiveness and experience factors from perspectives of: -

- Volumes which consume a person's critical bandwidth
- Execution time – the time spent by the person doing redundant work or non-value steps
- Degree of rework and propensity of errors
- Tasks making a person's work mundane e.g. checks and verifications

Once the detailed study of the opportunities has been completed, a qualification report is generated based on the degree of automation possible, impact of the automation on dependent flows, cost-benefit factor. Based on the qualification report and client's preference, creation of a priority matrix helps to plan out the RPA roadmap, deployment and support frameworks.

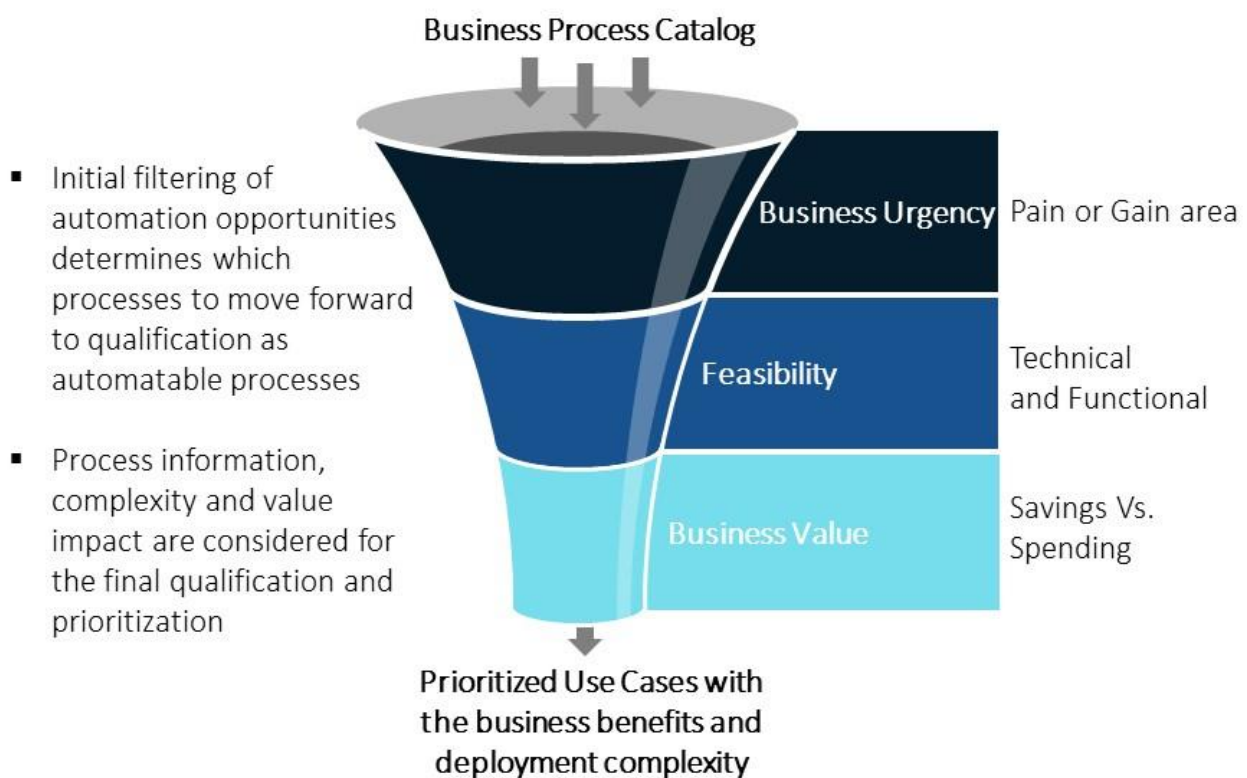


Fig F: – Process Prioritization Funnel

Following the prioritization process, derive the 'value benchmarking' and 'measurement' as follows: -

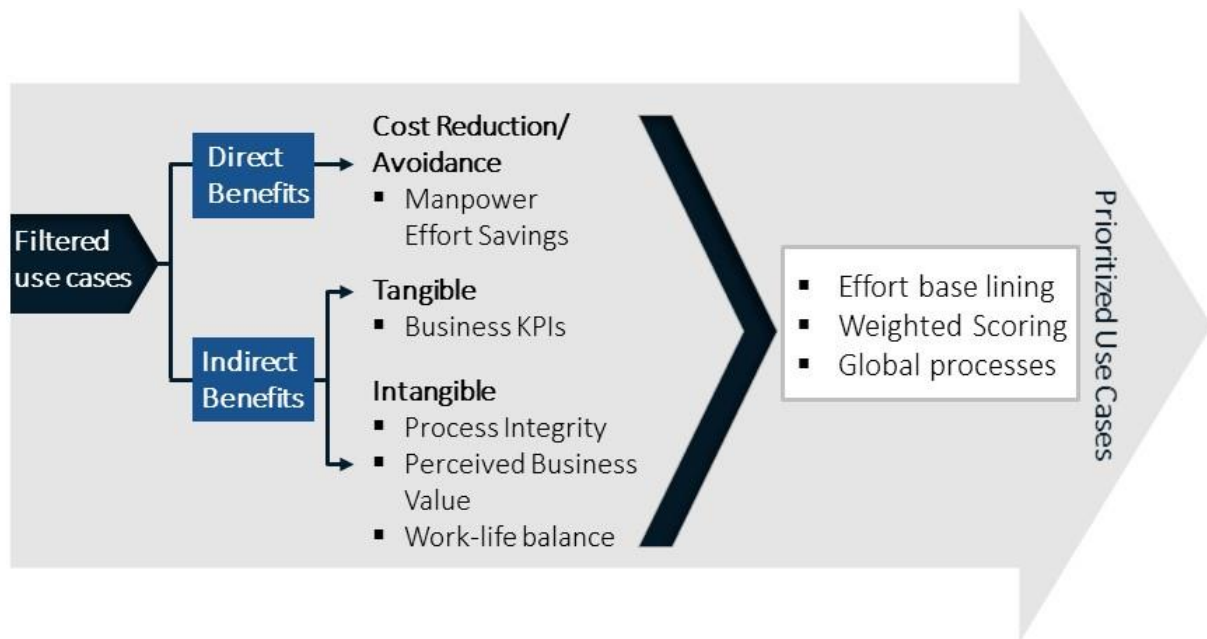


Fig G: – Value Measurement Framework

Initiate the value measurement once the automated processes are implemented and BOTs start to execute the day-to-day activities. Capture the performance parameters to identify the resulting value from automation in terms of Effort savings, Cost savings, SLA adherence, accuracy and additional baselined business KPIs.

6.1. PROCESS CATALOG

After conducting a detailed analysis of the BANKING value chain, business functions and multiple BANKING industry players, following is the process catalog with the list of processes which can be automated. (Refer Appendix for the Process Catalog)

6.2. FUNCTION WISE AUTOMATION PROPENSITY

Based on the processes study and process cycle mapped in Section 5, we find that the eligibility of automation across different core and supporting functions of the BANKING industry is as follows –

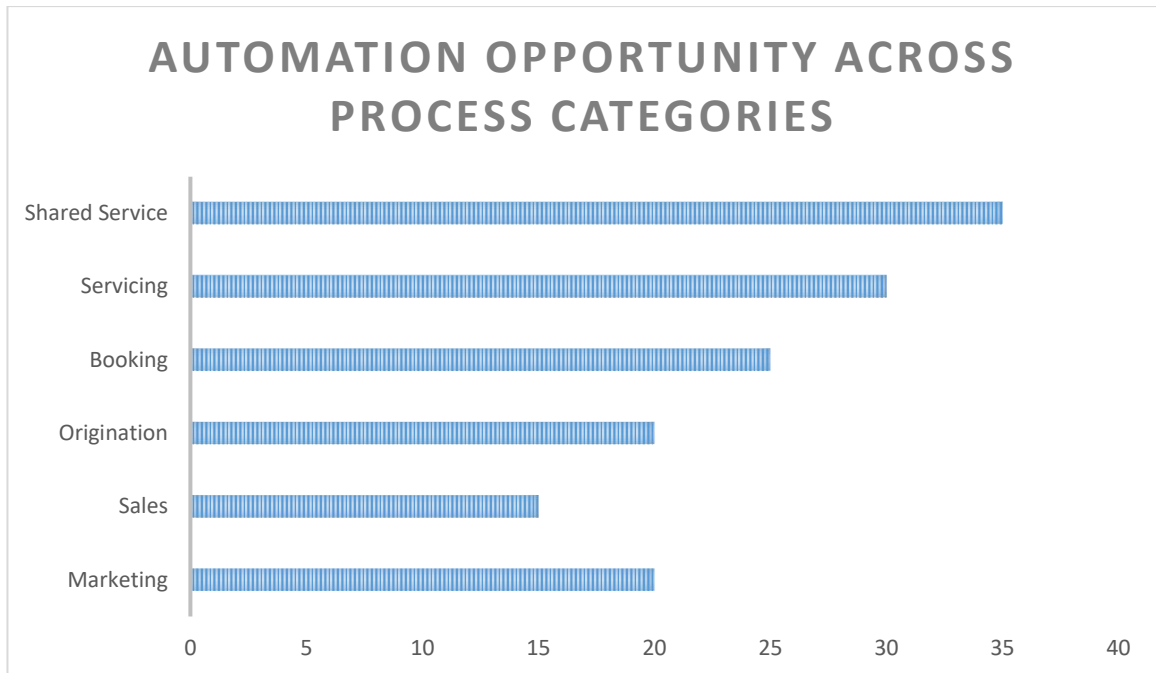


Figure H: - The above chart shows the function wise propensity of automation by way of depicting the percentage of processes than are amenable to automation

The advantages of the above representation are: -

- Quick view of functions with a greater number of automation candidates
- Opportunity to look persona-based standardization

Automation Propensity Overview

In this view, we are representing some of the processes pertaining to the above functions in terms of their complexity and the degree of automation possible.

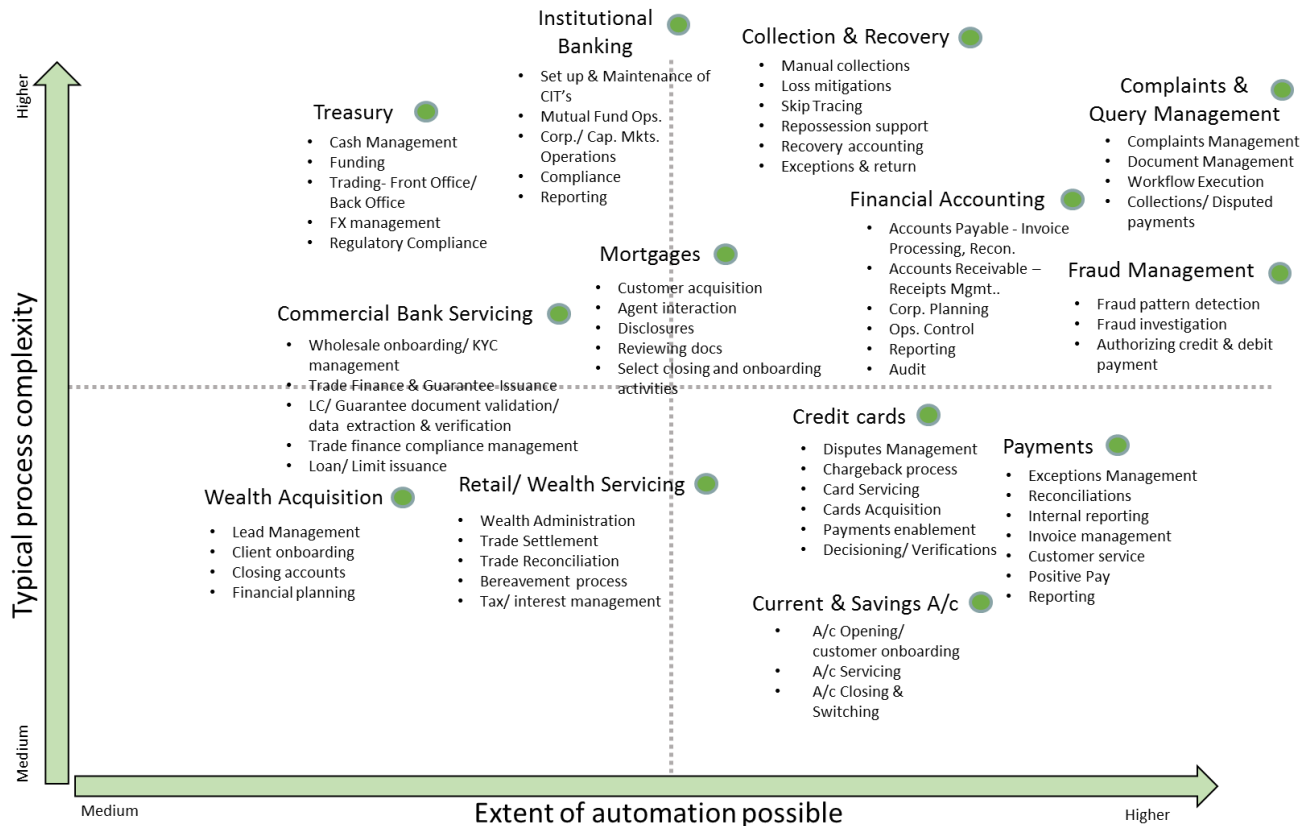


Figure I: - Represents complexity to automation extent possible for banking processes

The advantages of the above representation are: -

- A pin-point view on which process to start with
- A foundation to create a process prioritization matrix

Now let's see what the possible approaches could be to embark on the RPA journey or take the RPA journey to the next level of enabling transformation within an organization.

7. INTRODUCING THE DIGITAL WORKFORCE – PERSONA DRIVEN AUTOMATION

While the Process Driven Approach is a standard and widely adopted method to start the automation journey, we have come up with a new approach of amplifying human potential with a hybrid workforce where human skills are complemented with digital skills. This concept is based on: -

- A. Looking at creating helper bots across job roles – Digital Buddy
- B. Looking at creating bots which can take a major part of the job role thus streamlining workforce – Traditional Persona or Digital Workforce

In both cases the, method of approaching an automation opportunity is largely people centric. This is a purely design thinking led approach which captures efficiency, effectiveness and experience from perspectives of: -

- Repeatability vs Redundancy – the frequency of execution of a particular task over a period of time vs the number of times the task is executed without much value
- Time taken to execute – the time between the arrival of the task request and initiation of processing of the task
- Number of steps that are manual and are automatable
- Decision making vs Discretion

To construct a Persona, following is the structured approach to identify the manual tasks which can be transformed into digital skillsets: -

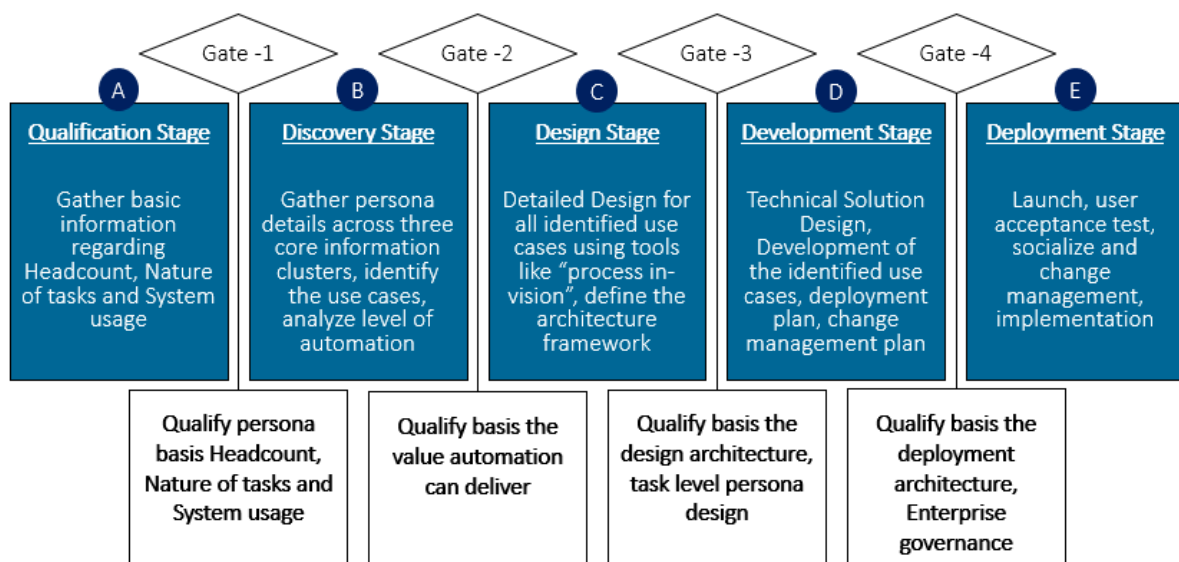


Fig J: – Persona Modelling approach

Extending the Digital worker concept to BANKING, outlined are 7 major personas through which this industry will benefit the most based on the assessment of the degree of automation possible, tasks across roles and the value expected from automation.

7.1. CUSTOMER SERVICE EXECUTIVE

Key KPIs of a Customer Service Executive

Average Response Time | First Call Resolution | Number of issues | Number of re-opened issues | Customer Retention | Net Promoter score | Abandon Rate of Calls and Chats |

The Customer Service Executive plays a critical role in ensuring the bank's customers receive outstanding support and all their needs are met. His/her key responsibilities lie in answering calls and reading emails from customer, answering their inquiries, resolving their issues within the stipulated SLA, escalation of the issues to the appropriate person/department, if required, updating customer on the status of their complaints/issues and seeing them to closure.

As Customer Service Executing directly interacts with the customer, they play an important role in driving customer experience, in building and promoting the brand, in analyzing customer needs and in creating new leads/opportunities for the bank.

Keeping the criticality of his/her bandwidth in mind, following is the persona construct that can be contemplated to make life easy for the Customer Service Executive: -

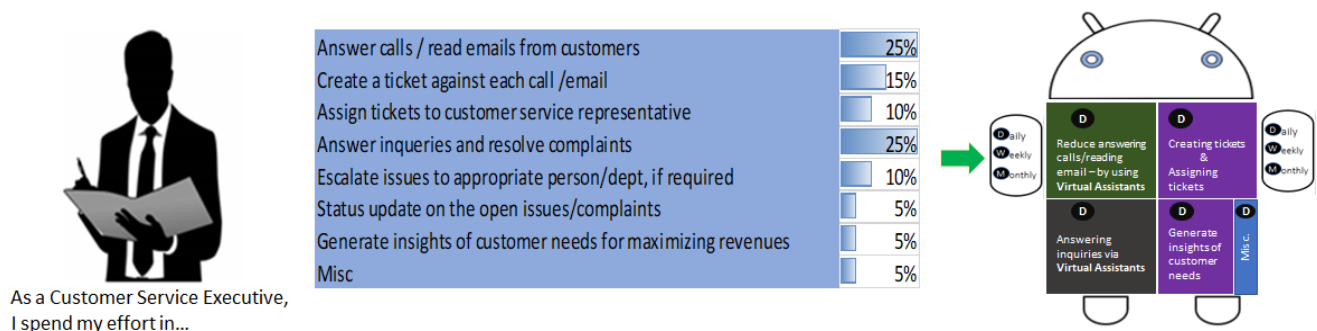


Figure K: – Modelling the Customer Service Executive Persona

7.2. MARKETING EXECUTIVE

Key KPIs of a Marketing Executive

Cost Per Lead | Marketing ROI | Lead-to-customer Ratio | Landing page conversion rate | Social media traffic, leads & conversion rate | Mobile traffic, leads & conversion rate | Customer Lifetime

The Marketing Executive plays a critical role in overseeing and developing marketing campaigns, devising and presenting ideas and strategies, lead generation and competition analysis. His/her key responsibilities lie in planning and coordinating marketing activities, identifying potential customers, developing marketing campaigns, organizing focus groups and carrying out market research.

Marketing Executive has to collaborate with Sales Executive and Channel Managers to drive marketing programs, resolve issues that may occur throughout the lifecycle of a campaign or project. They are key to running a successful campaign and generating leads which has the potential to turn into opportunities for a bank. They play a key role expanding the customer base and in bringing revenue for the bank.

Keeping the criticality of his/her bandwidth in mind, following is the persona construct that can be contemplated to make life easy for the Marketing Executive: -

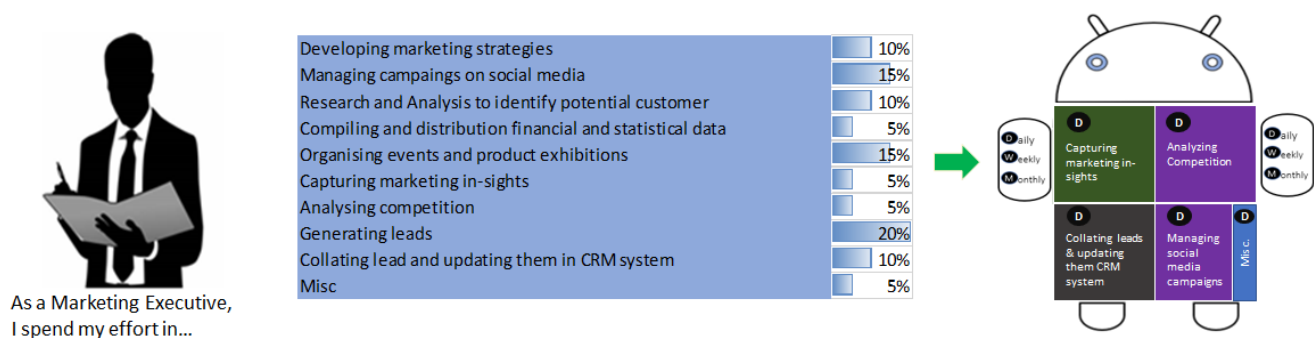


Figure L: – Modelling the Marketing Executive Persona

7.3. SALES EXECUTIVE

Key KPIs of a Sales Executive

New Opportunities | Client Acquisition Rate | Sales Volume by Location | Existing Client Engagement | Employee Satisfaction | Upsell/Cross-sell rate | Sales Cycle Length | Positive v/s Negative Reply Rate | Customer Lifetime Value |

The Sales Executive plays a critical role in devising sales strategies, acquiring new customers, managing customer relationships and sales promotion. His/her key responsibilities lie in planning sales activities to meet sales target, converting leads into opportunities, promoting the brand, carrying out market research on the product sales, identifying opportunities for upsell and cross-sell, interacting with customers (understanding their needs and selling the right product), managing the performance of sales reps and managing sales budget.

Sales Executive plays a significant role in bringing in new customers and in retaining current customers by managing customer expectations. They play a key role expanding the customer base and their actions have a direct bearing on the revenue for the bank.

Keeping the criticality of his/her bandwidth in mind, following is the Sales Assistant Persona construct that can be contemplated to make life easy for the Sales Executive: -

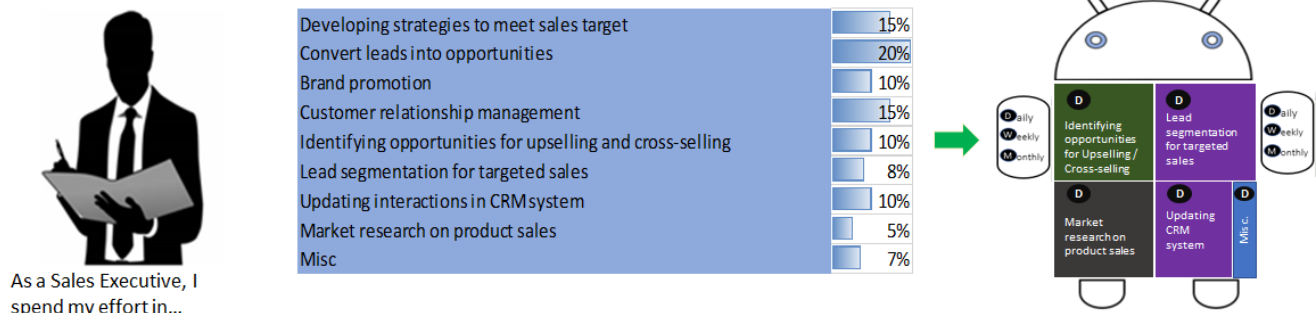


Figure M: – Modelling the Sales Executive Persona

7.4. COLLECTIONS EXECUTIVE

Key KPIs of a Collections Executive

Days Payment | Collector Effective Index | Percentage of Outbound Call Resulting in Promise to Pay | Bad Debts to Sales | Cost of Collections | Right Party contacts Rate |

A Collections Executive plays a critical role in collections of past due receivables, reducing delinquency to the lowest possible level and minimizing financial loss. His/her key responsibilities lie in reviewing, analyzing and collecting past due contacts, prioritize collector's list, contact customers (over emails and phones), establish and monitor work-out arrangement.

Collections Executive has to negotiate with customers, legal folks, and other parties of interest in order to secure appropriate work-out arrangements and bring past due contracts into compliance. He/She has to also Investigate and resolve contracts that have asset issues, insurance claims or those requiring casualty & liability insurance follow-up.

Keeping the criticality of his/her bandwidth in mind, following is the Sales Assistant Persona construct that can be contemplated to make life easy for the Collections Executive: -



Figure N: – Modelling the Collections Executive Persona

7.5. CREDIT RISK EXECUTIVE

Key KPIs of a Credit Risk Executive

Negotiations Skills | Accurate Credit Risk Assessment | Risk Margin Management | Collateral Asset Quality Control | Credit Monitoring Accuracy | Lending Limit Management |

The Credit Risk Executive plays a critical role in the operations of Financial Institutions in the Booking Division. His/her key responsibilities lie in assessing the credit ratings of customers, provide approvals for lending, maintain lending limits and risk margins, assess collaterals against lending, perform credit monitoring etc. Therefore, there is a huge responsibility riding with him/her to ensure smooth flow of credit operations.

Keeping the criticality of his/her bandwidth in mind, the following is the Persona construct that can be contemplated to make life easy for the Credit Risk Executive: -

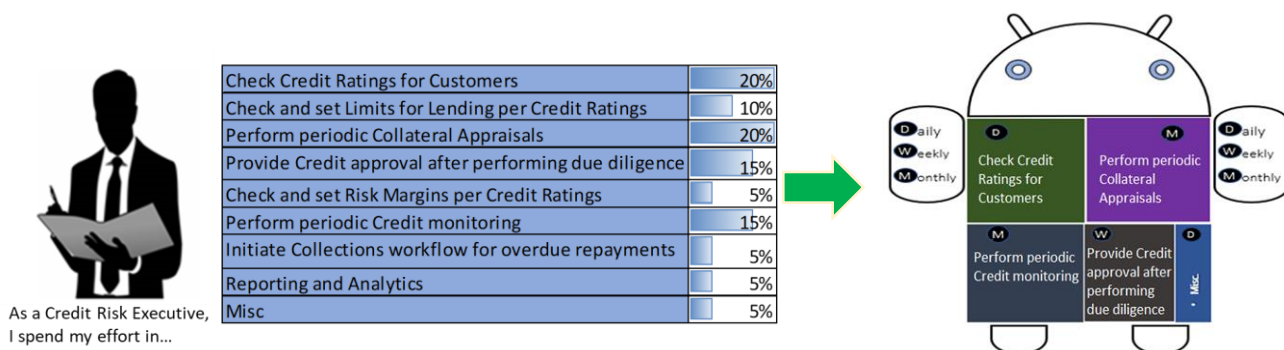


Figure O: – Modelling the Credit Risk Executive Persona

7.6. CORPORATE UNDERWRITER

Key KPIs of a Corporate Underwriter

Optimum usage of Corporate Lending Funds | Improved Corporate Loan Quality | Corporate Loan Book Growth | Minimum Corporate NPAs | Optimum Risk to Return Ratio for Corporate Loans

The Corporate Underwriter plays a critical direct role in growing the corporate loan book of the bank and thereby directly improve the revenue and profitability. His/Her key responsibilities lie in ensuring efficient and optimum usage of the bank's funds. He/She needs to make sure that the bank's non-performing loans are at a minimum, while also making sure to improve the corporate loan book of the bank to a maximum. He/She needs to ensure the best possible mix of risks and return from the corporate lending function of the bank.

Keeping the criticality of his/her bandwidth in mind, the following is the Persona construct that can be contemplated to make life easy for the Corporate underwriting: -

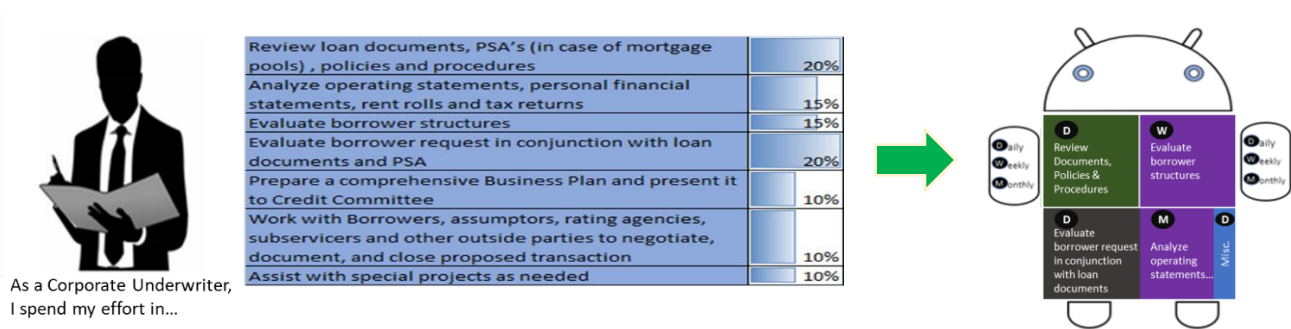


Figure P: – Modelling the Corporate Underwriter Persona

7.7. FINANCIAL ADVISOR SUPPORT EXECUTIVE

Key KPIs of a Financial Analyst

Returns on model portfolios in line with Risk profile | Quality of Dashboard and Report
Generated for Advisors & Clients | Performance of client portfolios against defined benchmarks

The Financial Advisor Support Executive plays a critical direct role in the operations of the Wealth Management and Investment Banks by means of carrying out various tasks to support the Financial Advisor as well as maintaining the client portfolios thereby directly contributes to improve the revenue and profitability of the company / bank. His/Her key responsibilities lie in collecting and analyzing financial data from various internal and external sources to build model portfolios for various client segments, monitor client portfolios and perform rebalancing, thereby making sure that portfolios are on track to fulfil the goals set by clients and advisors. They also collate data and generate reports that provide insights for financial advisors who then take actionable insights to their clients.

Keeping the criticality of his/her bandwidth in mind, the following is the Persona construct that can be contemplated to make life easy for the Financial Advisor Support Executive: -

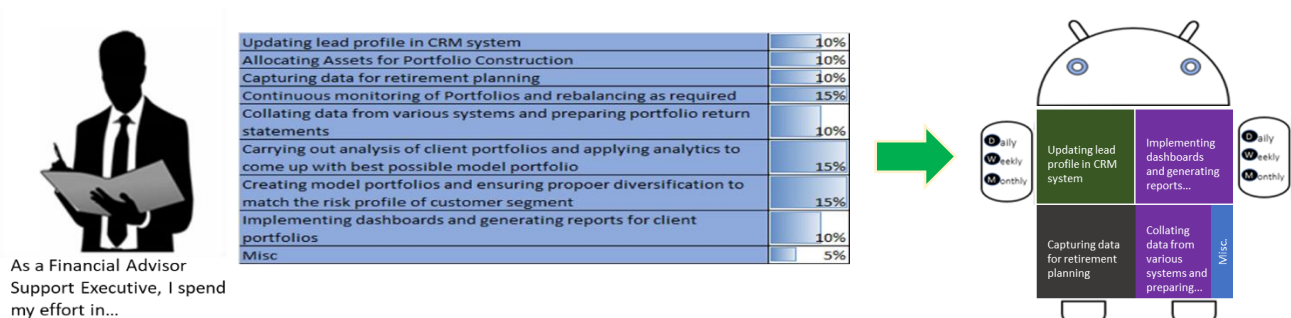


Figure Q: – Modelling the Financial Advisor Support Executive Persona

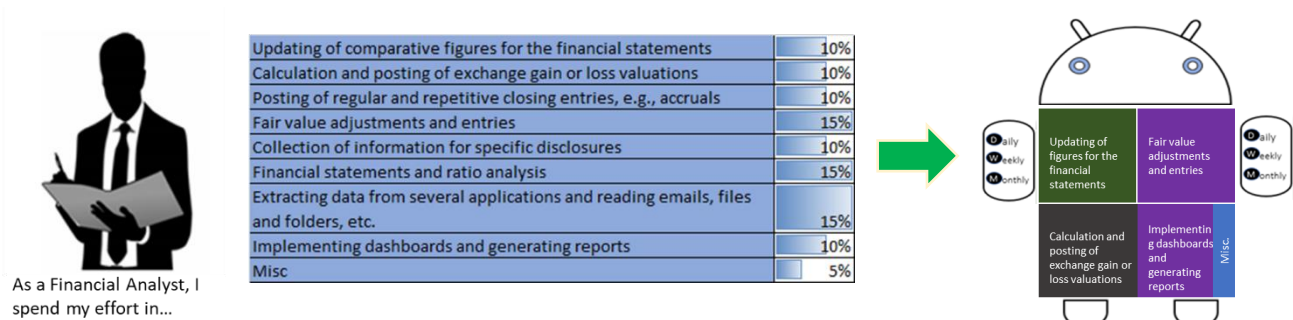
7.8. FINANCIAL ANALYST

Key KPIs of a Financial Analyst

Accurate Analysis of Financial Data | Quality Dashboard and Report Generation for Advisors & Senior Management | Quality insights derived from Financial data

The Financial Analyst plays a critical direct role in the operations of the bank by means of analyzing market data as well as the books of the bank to come up with analysis reports for consumption by the company's senior management and thereby directly contributes to improve the revenue and profitability of the company. His/Her key responsibilities lie in collecting and analyzing financial data from various internal and external sources and generating reports that provide insights to senior management as well as financial advisors.

Keeping the criticality of his/her bandwidth in mind, the following is the Persona construct that can be contemplated to make life easy for the Financial Analyst: -



7.9. ACCOUNT PAYABLE/ACCOUNTS RECEIVABLE CLERK

Key KPIs of Accounts Payable/Accounts Receivable Clerk

Cost per Invoice | Invoice lead time | Number of invoices processed per day | Avg time to approve from receipt to payment | Days sales outstanding | Average days delinquent | Collection effective Index | Accounts receivable turn-over ration |

Accounts Payable/Account Receivable clerk plays a critical role in processing accounts and incoming payments in compliance with financial policies and procedures, performing day to day financial transactions, including verifying, classifying, computing, posting and recording accounts receivables' data and to ensure their company receives payments for goods and services.

His/her key responsibilities lie in reconciling the accounts receivable ledger to ensure that all payments are accounted for and properly posted, verifying discrepancies by and resolve clients' billing issues, facilitating payment of invoices due by sending bill reminders and contacting clients, generating financial statements and reports detailing accounts receivable status and preparing bills, invoices and bank deposits.

Keeping the criticality of his/her bandwidth in mind, following is the persona construct that can be contemplated to make life easy for Account Payable/Accounts Receivable clerk: -

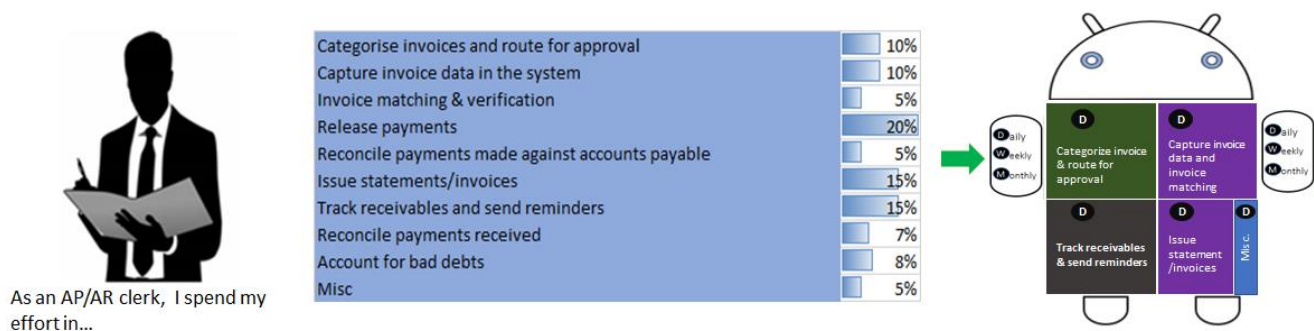


Figure S: – Modelling the Collections Executive Persona

8. GETTING STARTED

8.1. APPROACH TO AUTOMATION

From an approach standpoint, a process and technology landscape study to identify automation potential is a must. However, to accelerate this process we have created a starter kit which gives a ready reference list of processes across the different high automation propensity functions based on time and motion perspective. While the Starter Kit will help quick start the automation process for new adopters, the traditional approach of Discovery to Sustain still remains relevant to create automation waves for sustainable outcomes.

Outlined is our consulting led approach for an end to end automation cycle: -

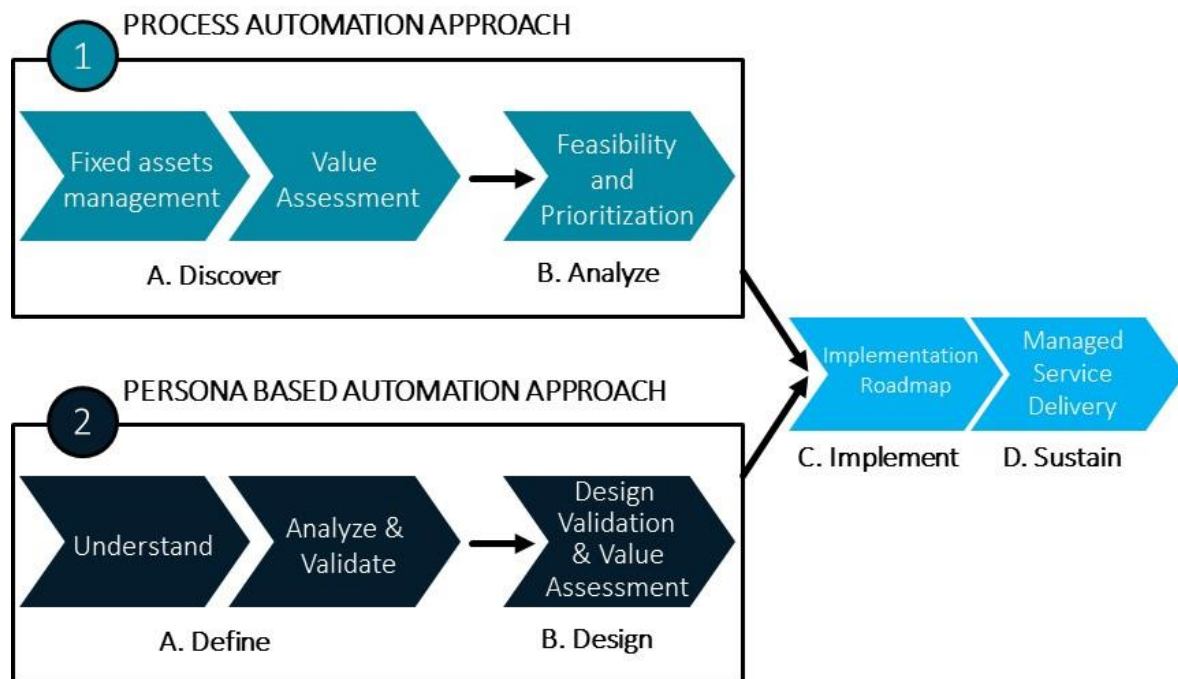


Fig T: – Process Discovery and Mining Approach

8.2. METHODOLOGY

Process Discovery and Prioritization Methodology

Our Process Discovery and Analysis phases are powered by IP driven methodologies and frameworks that has been built based on industry best practices and execution experience. The discovery, process prioritization and value assessment are conducted using our E³ Framework (Efficiency, Effectiveness and Experience) wherein each process is studied in detail and key parameters are captured to determine the following:

- Dependencies – Technology, People, Upstream-downstream process
- Actions Performed at each step – determine whether it is a necessary action, action leading to non-value add, action prone to error or deviation from expected method, repetitive, manual interventions needed
- Degree of Repeatability
- Degree of Redundancy
- Time Factors – time to response, time to wait, time to execute, frequency etc.
- Degree of work not happening on IT e.g. reading and understanding data before being fed into IT system

Perform a detailed data/response collection based on the key attributes of Efficiency, Effectiveness and Experience, our framework determines the degree of automation and complexity based on predefined rules and thresholds.

Based on this output, we correlate the candidate processes with automation priority for business. Predict the notional ROI considering the total effort involved in executing the as-

is process, the TCO for automating the process against the expected returns on automating the process.

Persona Discovery Methodology

Our QD4 framework is used to qualification and design the Digital Persona. The data collected and the correlations derived from the design-thinking led approach helps to determine which role and tasks for the roles have a higher propensity for automation to deliver a higher return.

After helping our clients by creating an opportunity wave, detailed roadmaps are created for implementation and carry out business as usual. It is achieved through the following: -

- Pure Play Automation Ownership – Where we help the client with consultancy on how to go about with automation, do the implementation and handover so that the client and own and manage the program by themselves
- Managed Services – In this model we own the delivery and sustenance of the automation program end to end. We may play the role of license reseller in certain situations. Additionally, we have a Bot as a Service – In this model, we own process as whole therefore the infrastructure, licenses also come under our responsibility.
- POV as a Service – Should a client wish to test waters before deep diving into automation investments, we also provide a POV (Proof of Value) as a service, wherein we help simulate a critical part of the opportunity and establish the fitment of solution (the bot framework, automation tool) and present the value to our clients. This is a Pilot of mini-project model wherein the scope of the deliverable is limited to prove the concept and the value.
- RPA Support as a Service – Under this model, we may take up the support and governance of an RPA program that we have developed or any other entity has developed, with the main aim of running it at high efficiency, performing bot rationalization to optimize resource consumption and maximize output.

Based on the different stages of automation maturity that our clients have; we can assist them with an aligned strategy for growth.

Stage	Challenges	How can we help
Seekers – Planning for RPA investment	<ul style="list-style-type: none"> • Relevance and feasibility of automation • Risk and cost of transformation • Product evaluation 	<ul style="list-style-type: none"> • Product comparison and selection • Starter kit • Process mining
Samplers – Conducting Proof of Technology / Concept	<ul style="list-style-type: none"> • Selecting the right product • Identifying the right use cases for automation • Business case for Automation 	<ul style="list-style-type: none"> • Business case creation • Alternate platform selection • Process mining and prioritization • Implementation services

Stage	Challenges	How can we help
		<ul style="list-style-type: none"> • Functional and Technical experts • Value modeling
Embracers – In early stages of implementing RPA	<ul style="list-style-type: none"> • Enterprise process discovery • Process standardization and streamlining • Bot development and deployment • Bot support and maintenance 	<ul style="list-style-type: none"> • Value baselining and measurement • Industry specific automation process catalog • Establish governance and RPA CoE • Different engagement models (Automation as a service / Managed service) • Change management • Use bots for end user support and issue triaging
Champions – Have done RPA implementations at scale and innovation	<ul style="list-style-type: none"> • Scale Bot implementation and deployment • Intelligent Automation • Bot KPI improvement 	<ul style="list-style-type: none"> • Integrated Automation solutions – End user computing as a service, PLM Support automation, Test Automation • Change Management • Intelligent Automation Establish RPA CoE • Validate coding best practices using QC bot • Use of bots for end user support and issue triaging

8.3. STARTER KIT

In order to kick start the automation journey for our client < minimize the time from discovery to design>, we have the Starter Kit catalogue in which the client is free to choose from the process catalogue and based on the complexity assigned to the process, there will be a fixed rate charged for the services (* RPA Licensing is exclusive of this).

Based on our experience in handling various client requests, following is a representative development to deploy timeline: -

Automation Complexity	Avg. Turnaround Time (in days)
Simple	15 – 20
Medium	25 – 35
Complex	35 – 45

Following is the Starter kit process catalog: -

Sl#	Business Area	Simple Use Cases (Pick any 2)	Medium Use Cases (Pick any 1)	Complex Use Cases (Pick any 1)
1	Payments	<ul style="list-style-type: none"> Foreign money transactions Exceptions Management - Incoming transactions returns Biller Registration Exceptions processing- False Positives Operational Reporting- processing volume, rejection rates etc... 	<ul style="list-style-type: none"> Positive Pay Registration Regulatory Reporting- Event based and period reports Bill Payment reconciliations Cheque back end exception processing Reconciliations- preparation of files, verifications and error management 	
2	Fraud Management	<ul style="list-style-type: none"> Authorizing credit & debit payment 	<ul style="list-style-type: none"> Fraud investigation 	<ul style="list-style-type: none"> Fraud pattern detection
3	Shared Services (incl. Financial Accounting)	<ul style="list-style-type: none"> Accounts Payable - Invoice Data Processing Accounts Receivable- Exception Processing of Receipts Legal & Compliance- contracts management Procurement data extraction and updation Hiring validation and planning Training enablement 	<ul style="list-style-type: none"> Payroll exceptions processing Tax automation and reporting Litigation information collation Reporting- risk and compliance Audit- response collation, evaluation/ risk population and reporting 	<ul style="list-style-type: none"> Corporate Planning Operational Control- reconciling exceptions, edit errors, posting correct entries across LOB's Benefits calculation and integration with payroll
4	Collections & Recovery	<ul style="list-style-type: none"> Manual collections workflow integration Repossession operations back office automation 	<ul style="list-style-type: none"> Skip tracing third party data integration and alerts management Recovery accounting Collection payments disputes management Exceptions & Returns 	<ul style="list-style-type: none"> Loss mitigation / loan restructuring
5	Current & Savings A/c	<ul style="list-style-type: none"> A/c Opening- content extraction from documents, triggering select downstream services incl. onboarding A/c Closing requests management 	<ul style="list-style-type: none"> Account Administration or Servicing-Information updates/ bereavement process/ Document management/ Case creation and closure Account switching 	<ul style="list-style-type: none"> Marketing Campaign effectiveness automation

Sl#	Business Area	Simple Use Cases (Pick any 2)	Medium Use Cases (Pick any 1)	Complex Use Cases (Pick any 1)
6	Mortgages/ Asset Financing/ Auto Loans	<ul style="list-style-type: none"> Agent interaction Disclosures management Reviewing docs Credit Report Generation 	<ul style="list-style-type: none"> Customer acquisition- content extraction and validation Underwriting automation Invoice processing for third parties Insurance policy data updates 	<ul style="list-style-type: none"> Closing & onboarding activities Value added services incl. insurance policy renewals Auto Finance- Select Servicing activities including complaints resolution
7	Credit Cards	<ul style="list-style-type: none"> Card Servicing - Activate Card Card Servicing - Balance Transfer Request Management Card Servicing - Credit Limit Change Card Servicing - Card Restriction Payments enablement 	<ul style="list-style-type: none"> Disputes Management Decisioning/ Verifications Cards Acquisition- Application input/ Validation & Updation, Onboarding 	<ul style="list-style-type: none"> Chargeback process Marketing campaign effectiveness management
8	Retail/ Wealth Management & Servicing	<ul style="list-style-type: none"> Lead Management Account closures activities Information Delivery Deposit book for investments executed 	<ul style="list-style-type: none"> Client Onboarding Regulatory Reporting Expense Management Post Trade Processing 	<ul style="list-style-type: none"> Securities Settlement Trade Reconciliation Financial planning Financial Accounting Tax Reporting Bank Account Reconciliations
9	Commercial/ Corporate Bank Acquisition & Servicing		<ul style="list-style-type: none"> Customer loan proposal automation Loan Servicing- Select "Surveillance & Inspection" activities 	<ul style="list-style-type: none"> Onboarding/ KYC management Trade Finance & Guarantee Issuance LC/ Guarantee document validation/ data extraction & verification Trade finance compliance management Loan/ Limit issuance Loan/ Limit contract amendment activities
10	Complaints & Query Management	<ul style="list-style-type: none"> Doc related content extraction and case creation Query management - Statements Query management - Transaction Related Assistance Request Creation 	<ul style="list-style-type: none"> Complaints Management Workflow execution Email Routing 	<ul style="list-style-type: none"> Disputed payments management
11	Treasury Management	<ul style="list-style-type: none"> Accounts Receivable - Issuing statements & invoices, sending reminders & triggering reconciliation Cashflow forecast output workflow 	<ul style="list-style-type: none"> Accounts Payable process - capture invoices received in the system Settlements - Reviewing settlement details 	<ul style="list-style-type: none"> Accounts Payable Cashflow forecast Risk Evaluation - Aggregate information from various system into TMS Trade Finance Regulatory Reporting

Sl#	Business Area	Simple Use Cases (Pick any 2)	Medium Use Cases (Pick any 1)	Complex Use Cases (Pick any 1)
		<ul style="list-style-type: none"> Intercompany reconciliation Line of Credit - Customer acquisition 	<ul style="list-style-type: none"> Confirmations - Reviewing confirmation details Lines of Credit – Document Review Risk Identification - Capture risks sent over emails or other medium in to ERM system Static data maintenance Risk Evaluation 	
12	Institutional Banking	<ul style="list-style-type: none"> Mutual Fund Reconciliations Client Reporting Income Posting Sweep into money market funds 	<ul style="list-style-type: none"> Regulatory Reporting Income Collections Funds Accounting Record Keeping 	<ul style="list-style-type: none"> Assigning NAVs Treasury Operations FX Operations

9. CONCLUSION

The top reason why automation is still viewed with unease lies in the demands made by automation technology on process maturity. Organizations are not certain if they are ready for automation. In many instances, they have already failed to extract real benefits from their automation pilots. This is because of the type of end objectives set for their automation programs, the most popular being, “I want to reduce X people in the organization.” Just replace X with any number from 5 to 500.

Other objectives that lead to failure are, “I don’t have enough manpower and I want automation to fill the gap.” This is even though organizations have, for years, developed macros to automate worksheets—each time to ensure that tasks are done faster and more accurately by their workforce, and never with the goal of eliminating or replacing manpower.

To succeed, we offer one thumb rule: Continue to keep the benefits of automation narrowly focused on making the workforce agile, amplify human potential, make more time available to employees so that they can perform better and elevate their cognitive potential.

People are being loaded with more work than ever before. They are expected to quickly learn new skills and if they do, it is at the cost of being able to use their cognitive skills. Automation is a way to regain cognitive ground.

Boosting employee potential is a remarkably powerful objective. But we have seen it fail in 80% of the engagements that we have been involved with. Reason: Organizations fail to see the larger picture; they feel that once you apply automation, employees will be free when in reality what needs to be measured (and reported) is the improvement in throughput, reduction in turnaround time and accuracy of process execution.

Let’s examine a commonly experienced problem—that of worker fatigue from repetitive tasks such as creating purchase orders from voice calls, emails and chat applications. After doing this task

repeatedly, fatigue injects errors into the process. The cost of inaccurate purchase orders slipping into the system and the cost of rework are huge. Robotic Process Automation and Virtual Assistants can easily reduce this cost by improving worker efficiency and reducing fatigue.

If automation can deliver such major impact, what can organizations do to eliminate barriers to the technology? The truth is that organizations don't know where to begin. Traditional organizations want to see value in automation that is tangible. Often that is difficult to demonstrate in the first few cautious projects. But the deeper truth is that by not proposing an adoption plan they are making it harder to assimilate automation into their business and culture, while the rest of the world moves ahead.

We hope this document has been able to bring clarity in the thought process, the start and the end points, and most importantly, appreciation of the fact that the hybrid workforce is here to help, sooner than later. Earlier one adopts, faster is the road to nirvana.

10. APPENDIX

Sl. No.	Functional Area	Use Case	Use Case Description	Role
1	Retail Banking	New Customer Acquisition Activities	Automate AML/ KYC/ Enhanced Due Diligence by improved data collection & validation for completeness as well as decisioning	Sales Operation Executive
2	Retail Banking	New Customer Acquisition Activities	Improved onboarding- document collation, content extraction and onboarding to the core banking application	Sales Operation Executive
3	Retail Banking	Dispute Management	Dispute investigation & resolution- Extraction of content from mails, validation with the CRM, internal task initiation and resolution with customer communication	Sales Operation Executive
4	Retail Banking	Associating prospects to Marketing Campaign	Analysis of customer's online behavior across internal and third- party applications, ascertain share of wallet data, predict next stage of customer journey and associate prospects with proposed campaigns	Campaign Manager/ Marketing Executive
5	Retail Banking	Execute & Manage Campaigns effectively	Marketing campaign effectiveness automation- Automating calculation of customer response rates and Return on marketing investment (ROMI) ratios for individual campaigns and channels	Campaign Manager/ Marketing Executive
6	Retail Banking	Liability- Account Opening	Automate data extraction from customer documentation and populate online application, validation of account opening details and exception processing. Trigger downstream actions and customer communication. Opening of the account is typically followed by associated processes such as issue of debit cards, cheque book issue, setup transactions such as sweep, overdraft limits etc.	Sales Operations Executive
7	Retail Banking	Liabilities- Account Administration	Automation can update account restriction or closure codes besides automating routine tasks such as proactively monitoring and blocking	Customer Operations Executive/

Sl. No.	Functional Area	Use Case	Use Case Description	Role
			transactions with select clients on the blocked list besides internal and external reporting. Further account closure request can be a downstream activity amenable for automation. Automation is also possible for routine service requests like statement issuance, account balance, payment initiation etc.	Operations Control Manager
8	Retail Banking	Unsecured Loan Originations (incl. student loans)	Automation of manual activities around customer data input, validation, credit check initiation, loan decisioning, and loan booking into the system of record.	Loan Operations Executive, Underwriting Officer
9	Retail Banking	Unsecured Loan Servicing (incl. student loans)	Automation of manual activities such as customer personal information amendments requests, loan amendments, request for documentation, restructuring & closures	Customer Operations Executive
10	Retail Banking	Mortgage Origination	Automation of select activities such printing & sending disclosures, vendor order management including updates to the system, supporting of reviewing documents as part of underwriting, select loan closing & post- closing activities.	Mortgage Operations Officer/ Closer/ Post closer
11	Retail Banking	Mortgage Servicing	Some customer and associated collateral management issue resolution activities can be automated via RPA tool for example - document preparation, collateral management, transaction processing, content extraction from documents, as well as query resolution via ticket management	Customer Operations Officer
12	Retail Banking	Auto Loan Originations	Processes covering direct & indirect- dealer/ point of sales management we well as decisioning and contract management	Sales Operations Executive, Underwriting Officer, Closing Officer
13	Retail Banking	Auto Loan/ Lease Servicing	Customer request handling for existing auto loan customers - i.e. pertaining to document issuance, asset servicing, end of loan/ lease processes, value added product queries etc.	Customer Operations Executive
14	Retail Banking	General Collections	Activities including promise to pay, interaction with third party agencies as well as those culminating into payments	Collections Officer
15	Retail Banking	Collections- Loss Mitigation	Restructuring of outstanding including re-underwriting processes, approval workflow and direct customer interaction for low ticket loan outstanding	Loss Mitigation Officer
16	Retail Banking	Collections- Skip Tracing	Activities pertaining to qualifying the customer as skip trace and internal/ partner process to contact the missing customer for payment. Includes leveraging third party databases, contacting customers and coordinating with agencies	Collections Officer

Sl. No.	Functional Area	Use Case	Use Case Description	Role
17	Retail Banking	Asset Recovery- Total Loss	Update systems and engage with insurance company, valuers and lawyers to follow the defined process.	Collections Officer
18	Retail Banking	Collections- Repossession/ Foreclosure	Manual processes pertaining to recovery of assets by interacting with third party vendors, issuance of documents, internal approvals and appropriate recovery accounting post resale	Collections Officer
19	Retail Banking	Collections- General recovery leading into accounting	Including activities for charge-offs, credit bureau updation as well as GL accounting and associated reporting	Collections Officer
20	Retail Banking	Operations & Loss Prevention- Payment issue resolution	Payment disputes redressal- Processing and resolution for all client complaints related to unauthorized customer transactions	Collections Officer
21	Retail Banking	Operations & Loss Prevention- Exceptions & Returns	Process supporting researching and resolving accounting differences in customer accounts including research & analysis	Financial Accountant
22	Payments	International Payments	Payment hold, false positive resolution and associate accounting	Payment Operations Executive
23	Payments	Cheque Processing	Select back end/ manual activities mostly around exception processing	Payment Operations Executive
24	Payments	Investigation Management	Check for OFAC, fraud & suspect lists prior to releasing/ rejecting payments	Payment Operations Executive
25	Payments	Operational Reporting	SLA monitoring, payment volume and payment rejection reports. Data extraction from the payment platforms	Payment Operations Executive
26	Payments	Regulatory Reporting	Both periodic and event- based reports. Include high value transactions, fraud detection and OFAC reporting- Data extraction, formatting and transmission	Payment Operations Executive
27	Cards	Marketing Campaign Effectiveness	Automation of campaign effectiveness evaluation tasks as well as completing the feedback loop	Marketing Executive
28	Cards	Application Processing- Application input/ Validation & Updation	Content extraction from customer docs, extraction of the application data from CRM/ Lead systems into the cards origination system	Sales Operations Executive
29	Cards	Originations- Underwriting	Possibility to automate the entire card application processing/ decisioning process	Sales Operations Executive, Underwriting Officer

Sl. No.	Functional Area	Use Case	Use Case Description	Role
30	Cards	Servicing- Card Activation	Select activities- post receiving an activation request from the customer, validate the same via eligibility check and update the request into the card management system	Operations Executive
31	Cards	Balance Transfer	Select activities- Post initiation of a balance transfer request, capturing of transfer details (i.e. outstanding balance etc.), conduct eligibility checks, communication/ concurrence of the acceptance from the customer, leading to the updation of the balance transfer request to the cards management system	Operations Executive
32	Cards	Servicing- Account Closure (Customer as well as Collections initiated)	Select activities- Determination of customer repayment pattern/ record, pulling credit history, initiate retention effort (if required), initiate customer settlement of pending amount and finally initiate card blocking/ cancellation	Operations Executive
33	Cards	Servicing- Credit Limit Change	Select manual tasks- Initiate service ticket, ascertain customer eligibility, forward to the credit department followed by customer communication	Operations Executive
34	Cards	Servicing- Cards Renewal	Select manual tasks- Initiate customer request, conduct eligibility check and credit pull, forward to the renewals team or cards system (in case of reject) and intimate the customer	Operations Executive
35	Cards	Servicing- Frauds Management	Select manual activities outside of the fraud management applications- upfront determination of fraudulent customers, transaction assessment, false positives evaluation and facilitating customer interaction in order to complete assessment	Operations Executive, Fraud Management Expert
36	Cards	Servicing- Chargebacks	Select manual activities – initiate valid chargeback request from the customer for investigation, determine mode of transaction, ascertain docs, restore credit limit, send to acquiring bank via the card network, decide on the request based on the feedback and post which inform the customer	Operations Executive
37	Cards	Servicing- Financial Adjustments	Select manual activities- customer request initiation, categorization of the request, routing to the credit/ risk department for approval and back to the customer and system updation	Operations Executive
38	Cards	Servicing- Upsell	Potential to automate select manual activities in the upsell process especially via the digital channels. Large part of the upsell activity has been driven by analytics and tools such as the Next Best Offer/ Action.	Operations Executive
39	Cards	Servicing- Query Management	Automation of statement, transaction and product related queries	Operations Executive

Sl. No.	Functional Area	Use Case	Use Case Description	Role
40	Commercial/ Corporate	Account/ Facilities Opening	Part of the onboarding process and especially manual steps and including document management and content extraction can be automated	Relationship Manager, Sales Operations
41	Commercial / Corporate	Trade Finance- Issue Import LC's/ Back to back LC's/ Receive Import LC Apps/ Amend Import LC's	Automation covering paper digitization, documentary & compliance checks, signature verification, FX booking, B/L and invoice validation, vessel checks etc.	Sales Operations, Customer Operations
42	Commercial / Corporate	Trade Finance- Export LC's/ Register Docs against LC	Select manual activities to be taken up at the time of presentation of L/C (i.e. Sight or Usance) document	Customer Operations Executive
43	Commercial / Corporate	Trade Finance- Export LC's/ Accept & Liquidate Docs	Select manual activities for recording the acceptance of the issuing bank and liquidating the LC Bill on receipt of funds (both Usance & Sight)	Customer Operations Executive
44	Commercial / Corporate	Trade Finance- Import Bill Collections	Select manual activities around logging documents under import collection (i.e. both sight/usance)	Customer Operations Executive
45	Commercial / Corporate	Trade Finance- Settle Export Collections	Select manual activities around monitoring & settling payments for export collection bill	Customer Operations Executive
46	Commercial / Corporate	Loan Proposal Creation	Manual activities especially customer document collection, content extraction, discrepancy resolution	Relationship Manager, Sales Operations
47	Commercial / Corporate	Loans Underwriting Preparation	Manual activities around document collection, discrepancy resolution, spreading and reporting of client financials	Relationship Manager, Sales Operations, Corporate Underwriter
48	Commercial / Corporate	Servicing- Surveillance & Inspections	Collection, extraction and evaluation of content from client's financial statements, ratio calculations. Comparison with approved benchmarks and highlighting of exceptions	Financial Analysts
49	Commercial / Corporate	Servicing- Contract Amendments	Select manual activities in the review process – financial document content extraction, financial ratio calculations, creation/ projecting proposal in the risk queue, and execute amendments into the system of records - including changes to interest rates, terms, schedules, principal increase/decrease, etc.	Sales Operations, Corporate Underwriter
50	Commercial / Corporate	Syndicated Loan Origination- Create Facilities & Define Tranches	Select manual activities- document content extraction and updation of content into the approval system	Sales Operations

Sl. No.	Functional Area	Use Case	Use Case Description	Role
51	Commercial / Corporate	Syndicated Loan Servicing-	Select manual activities in the amendment, preclosing, restructuring etc.	Service Operations Executive
52	Commercial / Corporate	Operations Loss Prevention- Fraud Management	Part of investigations as well as reporting can be automated	Fraud Management Officer
53	Financial Accounting	Accounts Payable- Invoice Processing & Authorizations	Extracting content from invoices and emails, validation with contractual and application information, enabling internal approvals & automation of accounting entries as well as customer intimations	Financial Accounting Analyst
54	Financial Accounting	Accounts Payable- Reconciliations	Potential to automate manual tasks including entry of records into the GL as well as reconcile the data with PO's, Invoices and System data	Financial Accounting Analyst
55	Financial Accounting	Receipts Management	Monitoring the receipt of funds as exceptions processing; linking and matching to the appropriate master records as well as automated posting in the GL	Financial Accounting Analyst
56	Financial Accounting	Corporate Planning	Data collation across internal & external databases, third party reports data extraction, application of rules and report automation & dissemination	Financial Accounting Analyst
57	Financial Accounting	Taxation	Select manual activities supporting tax setup, strategy, forecasting, planning, filing & reporting- For example data collation, third party reports data extraction and report automation	Financial Accounting Analyst
58	Financial Accounting	Operational Control	Automate exception management activities such as reconciling exceptions, edit errors, posting correct entries by application of business rules as well as reporting automation. LOB's/ Products covered can include ATM accounting transactions, loan accounting across unsecured loans, mortgages, commercial/ corporate loans, cash management etc.	Financial Accounting Analyst
59	Financial Accounting	Enterprise Reporting	Potential to automate a significant part of the repetitive and rule- based reporting activities	Financial Accounting Analyst
60	Financial Accounting	Audit	Automation of audit response collation, evaluation/ risk population and reporting	Financial Accounting Analyst

Sl. No.	Functional Area	Use Case	Use Case Description	Role
61	Wealth Management	Client Onboarding - Account Open	CRM user validates customer's request and enters the client information in the system. New customers are recorded as prospect prior to proceeding with the AML and KYC check.	Front-office Operations Executive
62	Wealth Management	Client Onboarding - Internal Consistency review	CRM user validation of customer's request and checks for existence of record in the system.	Front-office Operations Executive
63	Wealth Management	Client Onboarding - Data Aggregation	Aggregating data from various systems including CRM, ADS and Rules engine to come up with different model portfolios for presentation to clients.	Front-office Operations Executive
64	Wealth Management	Client Onboarding - Run verification checks	New customer details to be recorded as prospect while proceeding with triggering the AML and KYC check.	Front-office Operations Executive
65	Wealth Management	Client Onboarding - KYC	CRM user validates customer information and cross checks information with external data sources in order to make an effort to verify the identity, suitability, and risks involved with maintaining a business relationship.	Front-office Operations Executive
66	Wealth Management	Client Onboarding - Data push to downstream applications	After collecting required signature of clients and completing the KYC/AML checks, data is pushed to downstream applications from CRM to portfolio design and financial planning tools.	Front-office Operations Executive
67	Wealth Management	Profiling	Identify Current Status & Gather Data- Age/Current Income/ Current Net-worth/ Dependents; Identify Objectives- Capital Appreciation Expectation/ Sensitivity to Capital Preservation/ Liquidity flows/ Goal Time-lines; Identify Limitations- Liabilities/ Current Liquid Assets/ Legal & Taxation Provisions/ Time Horizons etc.; Create Investment Policy & obtain customer concurrence.	Financial Advisor Support Executive
68	Wealth Management	Portfolio Construction	Allocated amount for various asset classes; Survey investment opportunities; Match the securities with the risk return profile; Ensure diversification- compare securities with sector standards; Initiate trade processing.	Financial Advisor Support Executive
69	Wealth Management	Retirement Planning	Determine present status & obtain data- Age/ Current Income/ Current Net-worth etc.; Identify objectives & Retirement requirements; Estate planning.	Financial Advisor Support Executive
70	Wealth Management	Monitoring & Rebalancing	Continually monitor every portfolio and rebalance only those that are triggered by predefined settings, such as when the model drifts outside the preset parameters. Prepare trade recommendations and send to portfolio advisor for review and approval.	Financial Advisor Support Executive
71	Wealth Management	Trade Reconciliation	Compare the advisor's records with those of the custodian, identifying any discrepancies and resolving them.	Back-Office Operations Executive
72	Wealth Management	Trade Surveillance	Collate data from multiple systems to check compliance checklist against trade data to perform compliance tests for the trades executed.	Back-Office Operations Executive
73	Wealth Management	Trade Enrichment	Data needs to be reviewed and flows through multiple systems before being final.	Back-Office Operations Executive

Sl. No.	Functional Area	Use Case	Use Case Description	Role
74	Wealth Management	Trade Validations	Data from multiple systems are compared to validate before being finalized. Trade validation typically is done by leveraging multiple data sources (e.g., commission tables, market data vendors).	Back-Office Operations Executive
75	Wealth Management	Information Delivery	Generation and delivery of information for internal or client consumption. It can generate standard reports and perform data quality checks. The reports then can be directed for review or queued for distribution via automated delivery to clients, such as by email or secure file transfer.	Back-Office Operations Executive
76	Wealth Management	Expense Management	Run validation checks, process payments given predefined criteria and update budget forecasts.	Back-Office Operations Executive
77	Wealth Management	Tax Reporting	Run queries, perform calculations, perform data validation checks and even populate forms to support many components of the tax assessment and filing process.	Tax Consultant
78	Wealth Management	Regulatory Reporting	Trigger scheduled as well as ad-hoc report requests by collating data from multiple systems and pushing them down to the reporting system for report generation and distribution.	Regulatory & Compliance Manager
79	Wealth Management	Compliance Testing	Prepare data from multiple systems to run compliance checklist to perform independent testing of compliance to key regulations to be able to certify business units.	Regulatory & Compliance Manager
80	Wealth Management	Financial Accounting	Accounting computations for individual as well as corporate accounts. Preparations of accounting statements for internal reviews as well as transmission to clients.	Financial Accountant
81	Institutional Banking	Assigning asset values- NAV's	Computing regular NAV's. The same would include interfacing with sources using feeds from recognized pricing sources, commercial sources such as Bloomberg, single-dealer quotes, price comparisons with similar assets etc.; Verifying NAV change from the previous NAV being within accepted tolerance from the benchmark; Verifying the ending market value by ensuring that all securities are priced and the unrealized gain or loss for the fund is reasonable etc.	Operations Executive
82	Institutional Banking	Participant Record Keeping & reporting	Include account to account transfers; annual statements creation & distribution; fund records being maintained as per regulatory norms; Includes info on trades, dividend and interest postings, cost basis adjustments, Fees, Deliveries, receipts and transfers.	Operations Executive
83	Institutional Banking	External Reporting	Regulatory Reporting	Regulatory & Compliance Manager
84	Institutional Banking	Income collections	Collecting and reconciling domestic and ADR dividends for marketable stocks; ADR tax reclaim; dividend reinvestment; stock splits and stock dividends; certificate of deposit interest etc.	Operations Executive

Sl. No.	Functional Area	Use Case	Use Case Description	Role
85	Institutional Banking	Mutual funds trading & reconciliations	Primary activities pertain to mutual funds trading and settling/ funds reconciliations between fund companies and distributors. This includes posting of mutual fund trade orders received from our external and internal clients. A specialist will participate in some of the more complex trading processes which may include broker/dealer, branch and broker representatives.	Associate Analyst/ Specialist
86	Institutional Banking	Income posting and positions reconciliation	Income posting on the system, Reconciliation process includes balancing and reconciling all sub-accounted mutual funds and networked fund families.	Accounting Analyst
87	Institutional Banking	Sweep into money market funds	Processes that support sweep into the money market mutual funds	Associate Analyst/ Specialist
88	Institutional Banking	Funds accounting	Revenue collection, allocation & rebates in association with the custodian	Associate Analyst/ Specialist
89	Institutional Banking	Client Reporting	Product specific compliance with audit and govt reporting requirements, management reports, reconcile out of balance reports etc.	Analyst- Reporting Operations
90	Institutional Banking	Performance Measurement	Measure investment performance/ audit and manage rate of returns	Associate Analyst/ Specialist
91	Institutional Banking	Derivate operations	Processes covering exchange traded and over the counter trading/ accounting/ customer service- including payment issues/ regulatory, customer and internal reporting	Analyst- Derivatives Operations
92	Institutional Banking	FX Operations	Includes trade settlements (corporates & interbank), confirmations, verifications, verifications and customer issue resolutions	Analyst- FX Operations
93	Institutional Banking	FX Investigations	Nostro balancing, G/L reconciliations, trade and payment order issues. Fixing the issues can be managed manually through error logs.	Analyst- FX Operations
94	Institutional Banking	Treasury Ops- Funding	Processes that supports and manage the daily cash position for all banking affiliates, balancing of the RBI/ Fed/ FSA accounts, accounting for inter-company loans, processing & maintaining accounting records for long term debt (income/accretion/yield recognition), supporting liquidity and non-core funding reports.	Analyst- Treasury Ops
95	Institutional Banking	Treasury Ops- Safekeeping	Provides custody services for fixed income securities including the primary functions being trade settlement, disbursement of P&I payments, maintenance of collateral info, distribution of holding statement, tax reporting etc....	Analyst- Treasury Ops
96	Institutional Banking	Treasury Ops- Collateral Services	Managing collateral, monitoring of deposit levels and securities activity to forecast anticipated collateral needs	Analyst- Treasury Ops
97	Institutional Banking	Treasury Ops- Investment management	Managing securities and include processes encompassing trade settlement, principal and interest collection and security maintenance, which include monthly pricing. In addition, monitoring yield and income levels to ensure accounting compliance. Finally tasks also include regulatory, financial and management reporting	Analyst- Treasury Ops
98	Institutional Banking	Accounting	Loans, Mortgages, ATM's, Payment & Cash Management etc.	Regulatory & Compliance Manager
99	Insurance	Updating court provisions	Updating court provisions in claim system	Legal Team Executive

Sl. No.	Functional Area	Use Case	Use Case Description	Role
100	Insurance	Request creation	Calling for assistance after an accident has taken place	Customer Service Executive
101	Insurance	Refund processing	Refunding the cost of vehicle repairs based on filed invoices	Operations Executive
102	Insurance	Service Invoice	Data entry for incurred direct service costs.	Customer Service Executive
103	Insurance	Data Updates	Data entry for change of policy owner, end of insurance coverage, etc.	Customer Service Executive
104	Insurance	Invoice Payment	Preliminary payment for car damage	Customer Service Executive
105	Insurance	Email Routing	Read the emails, determine what was needed, and then route each email to the most appropriate department for follow-up and resolution.	Distribution Governance Executive
106	Insurance	Bank Account Reconciliations	Download bank statements as well as corresponding ledger accounts and match the balance of the bank account using Microsoft Excel.	Back-Office Operations Executive
107	Insurance	Invoice Data Processing	Manage the payables inbox where the invoice arrival, sorting and categorization is done. The invoice file is downloaded, renamed to include the supplier's name and invoice number along with a time stamp, saved to a network folder and then sent to downstream systems for verification and processing. Upload the digital data from downstream system into the AP system and attach the copy of the invoice for future reference.	Account Executive
108	Insurance	Address Update	Customers making address changes to their account. It is often overly complex because of multiple internal systems in which a change of address needs to occur yet there are no integrations – and negative downstream effects will result from any delays or errors.	Account Executive
109	Insurance	End of Month Accounting	Execute the back-end jobs on applications that are critical to successful and error-free closing of the accounting books at the end of the month.	Back-Office Operations Executive
110	Treasury Management - Accounts Payable	Procure to Pay	Approve invoices, match invoices and vendor records, make payments, record and reconcile the payments made	Accounts Payable/Receivable Clerk
111	Treasury Management - Accounts Receivable	Order to cash	Setting up procedures for extending credit, generating invoices, maintaining records of payments due, payments received and reconciling	Accounts Payable/Receivable Clerk
112	Treasury Management - CashFlow Forecast	Cashflow Forecast	Obtaining as estimate or forecast of the bank's future financial position, based on anticipated payments and receivables	Finance Manager
113	Treasury Management - Intercompany transactions	Intercompany reconciliations	Reconcile intercompany deals, to ensure both parties agree on the value of the invoice	Cash Management Manager

Sl. No.	Functional Area	Use Case	Use Case Description	Role
114	Treasury Management - Lines of Credit	Customer Acquisition	Acquire customers in need of trade finance	Sales Manager
115	Treasury Management - Lines of Credit	Document review	Collect and review documents provided the customer for their eligibility and completeness	Data Processing clerk
116	Treasury Management - Letter of credit	Application Processing	Review the application from the customer to open a LC and validate the documents (shipping & transport documents, insurance documents, Consular invoice and finance documents) to assess the eligibility	Branch clerk
117	Treasury Management - Letter of credit	Credit worthiness check	Review the fixed assets of the customer, his/her investments with the bank, carry out a credit check to assess the credit worthiness of the customer	Branch Manager
118	Treasury Management - Letter of credit	Issue LC	Based on the credit worthiness of the customer the bank fixes a margin amount (which is blocked, to pay the supplier on maturity date) and issues LC to the Supplier's bank	Branch Manager
119	Treasury Management - Letter of credit	Payment to the supplier	Issuing bank collects the money from the buyers and transfers it to the supplier. If the buyer fails to pay, then the issuing bank will make the payment	Branch clerk
120	Treasury Management - Front Office	Trade Execution	Execute trades/transactions for cash investment, funding, foreign exchange and hedging risk. The types of trades that a bank may get into are - Money Market - Call Money, Commercial Papers, Repo & Reverse Repo - Foreign Exchange - Spot, Forward, Swap, Options - Securities - Coupon bearing / zero coupon bonds, Callable & Puttable bonds, T-Bills Certificate of Deposits - Derivatives - FRA, Swaps/Swaptions, Cap & Floor, Interest Rate Swaps, Interest Rate Options	Trader/Dealer
121	Treasury Management - Middle Office	Risk Management	Monitor compliance with market risk limits, credit limits, calculate collateral requirements, counterparty related changes, notify CRO and Treasury of limit violations and risks	Middle Office Clerk/Manager
122	Treasury Management - Back Office	Settlement	Exchange of payments to the seller and transfer of assets/securities to the buyer	Bank Office Settlements Clerk
123	Treasury Management - Back Office	Confirmations	Process by which, either through electronic messaging or through the use of paper confirmations, the parties legally accept the terms of the trade.	Back Office Confirmations Clerk
124	Treasury Management - Back Office	Reconciliations	Reconcile trade details between a) FO & BO systems, b) cash accounting between Treasury system & GL system c) intercompany reconciliation and d) Nostro accounts.	Bank Office Reconciliations Clerk
125	Treasury Management - Back Office	Static data maintenance	Maintain static data necessary for capturing deals, for processing payments, for sending confirmations to customer and for generating accounting entries	Static data maintenance clerk

Sl. No.	Functional Area	Use Case	Use Case Description	Role
126	Treasury Management - Risk Identification	Risk Identification	Identify and classifying sources of risk and prioritize them based on the criteria of probability and severity	Risk Manager
127	Treasury Management - Risk Evaluation	Risk Evaluation	Compare the estimated risk against the given risk criteria so as to determine the significance of the risk.	Risk Manager
128	Treasury Management - Regulatory reporting	Regulatory reporting	Submission of raw or summary data needed by regulators to evaluate a bank's operations and its overall health, thereby determining the status of compliance with applicable regulatory provisions	Finance Manager
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