EXPRESS COMPUTER

6 | Special Focus: RPA

How Hero MotoCorp is using emerging technologies to accelerate its growth

From AI to AR to IoT - the country's largest two-wheeler maker, Hero MotoCorp, is taking a series of huge digital bets to redefine its future

VIJAY SETHI
CIO AND CHRO, HERO MOTOCORP

EDIT

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The rise of RPA

MORE INSIDE

RPA is today at a stage where the cloud was a decade back. The adoption of RPA is now fast gathering momentum with companies in the BFSI sector leading the charge. Research firm, Gartner predicts that by the end of 2022, 85 per cent of large and very large organisations will have deployed some form of RPA.

In India, organisations have been quick to realise the huge opportunity in RPA by automating repetitive transactional processes. Take the case of HDFC Bank, which uses RPA to do eyeballing credit applications. Similarly, Yes Bank has used RPA for automation of payment processes where more than 5

> **"** With automation as the goal, RPA is now being used to solve some unique issues. For example, Vodafone Idea uses RPA to set algorithms that identifies exceptional situations

lakh transactions are automated on a monthly basis. At ICICI Lombard General Insurance, RPA has been used to automate quote issuance, policy issuance and claims processing. This has resulted in an increase in operational productivity and an improvement in turnaround time for policy issuance.

With automation as the goal, RPA is now being used to solve some unique issues. For example, Vodafone Idea uses RPA to set algorithms that identifies exceptional situations. For instance, in case of a power failure, the firm has created an

algorithm which identifies the nearest technician using geo-locations and dispatches the work automatically. This ensures that the site gets restored in the minimum time possible. At Mphasis, RPA is being used to automate and complete the accounting process across Mphasis legal entities spanning across countries where the firm has a significant footprint. Automating intercompany transfer, invoicing and collections by deploying a bot to complete all accounting tasks, has helped its finance and accounting team in saving time and effort, and at the same time, record 100 per cent compliance. At Emcure Pharmaceuticals, RPA is being used for the posting of bulk GST invoices. SBI Cards uses RPA for its transaction dispute follow up process. Besides standardisation of the process and elimination of human dependencies and errors, RPA has been able to save close to 700 hours of efforts per day across processes. Online Pharma firm, Netmeds uses RPA for onboarding of suppliers and interacting with their systems.

As user confidence in RPA systems has grown, firms have scaled up the deployment of RPA to multiple processes. ICICI Bank, which started from deploying RPA for 200 business processes in 2016, is now running 1350 business processes on RPA, which is currently being used in processes such as customer on-boarding, transaction processing, post transaction servicing, reconciliation, and loan processing. Similarly, HDFC Life which started out with 8 bots in 2016 is now using running 154 bots across 24 functions. From simple tasks, bots have now progressed to handle complex queries. In the case of HDFC Life, 40 per cent of the bots handle complex tasks.

In the future, one can expect more use cases of RPA combined with AI and analytics. As business confidence grows, we can see business processes being re-imagined and re-engineered to create a significant shift and improvement in customer experience and business outcomes.

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VIJAY SETHI
CIO AND CHRO, HERO MOTOCORP

COVER STORY

HOW HERO MOTOCORP IS USING EMERGING TECHNOLOGIES TO ACCELERATE ITS GROWTH

From AI to AR to IoT - the country's largest two-wheeler maker, Hero MotoCorp, is taking a series of huge digital bets to redefine its future

Srikanth RP
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The country's largest two-wheeler manufacturer, Hero MotoCorp, has always been known to be a pioneer in terms of experimenting with emerging technologies. Almost nine years back, when adoption of cloud computing was in its infancy, the firm created a cloud-based dealer management system, which led to a huge business impact, as it gave the firm excellent insights into relevant dealer related data. Over the years, the company has experimented with new technologies, while continuing to strengthen the core foundation.

"We take a lot of IT initiatives with an objective of driving business goals and objectives. At the same time, we make the organisation ready for future disruptions and demands. Initiatives taken are of two types; the first type of initiatives are systemic initiatives, which are taken to make the organisation more suited to take on technology disruptions by enhancing competency and getting ahead of the industry learning curve, and the second kind are those which involve leveraging specific technologies for business impact," states Vijay Sethi, CIO and CHRO, Hero MotoCorp.

Hero MotoCorp has one of the largest networks of channel partners in the country. Till recently, the firm had the primary network connected to its CRM system and all processes were being managed using this system. The company started extending the CRM system to its secondary network and more than 1000 touchpoints have already gone live. This has immensely helped the firm in reducing the turnaround time for information availability and thus, decision making, basis the data that is being captured in those touchpoints. The initiative has also helped the channel partners manage their processes with ease and also helped Hero MotoCorp give a consistent experience to customers at all touchpoints.

Digital firsts

In another first, the company launched its e-Commerce platform - hgpmart.com for selling Hero Genuine Parts, accessories and two wheelers. This is a first of its kind initiative by a two wheeler OEM where customers can directly buy products online. Parts and accessories bought using this platform are delivered to the customers' doorstep.

To improve customer satisfaction, the firm launched a 'Job Card Creation' app using which Job Card at the service station can be opened through the mobile. "This has reduced job card creation time to 30-40 seconds from approximately 2 to 3 minutes. Currently 75 per cent of job cards are created using this app, saving 1800+ man months of effort and support our green initiative by saving about 21 million paper, which translates to saving about 6000 trees per year," he mentions.

Understanding the critical importance of being visible and being discovered on search engines, Hero MotoCorp has also created digital business listings for all its dealers. This has strengthened local Search Engine Optimisation and has greatly helped the customers in finding Hero dealerships with ease, which in turn has helped the firm improve footfall for sales and service.

Hero MotoCorp has also put in place a digital Instant Redressal Feedback. Explains Sethi, "We created this system to improve the quality of service and customer delight by putting various controls in the system and capturing instant customer feedback for any grievance redressal. Once customer supplies the 'Happy Code' to the supervisor, then an invoice can be generated against the service. If a customer is unhappy, instant redressal of feedback by the service manager can be done."

To improve the capabilities of its employees, Hero MotoCorp has created an Integrated Learning Management System. This has been deployed with an aim to improve learning management process of all employees of 6000 touch points. This covers entire learning management process starting from hiring, training need identification till separation. In addition, e-learning and assessments are done to enable the employees of channel partners to update their skills and do assessments online through mobile devices. "As attrition is very high at channel partners, planning and retraining is very important, dashboards and reports based on this application helps in planning training sessions based on RAT (Required –Available-Trained) analysis," states Sethi.

Hero MotoCorp was also one of the first firms in India to experiment with Digital Twins. In 2017, the firm setup a factory in Halol, using the 'Digital Twin' technology concept. The entire factory was simulated, as to how would it look after it is ready for operations. This is the first time that a factory was built in India using the digital twin technology.

On the critical importance of Digital Twins, Sethi says, "Digital Twin tool will aid management with capabilities like visualisation, decision making, tracking/monitoring/ control. It is providing value to businesses during product manufacturing life cycle and establishing digital replica of entire operations. With solutions to simulate 3D working of all operations of plants, this technology was first pilot tested in our manufacturing facility in Gurgaon and later virtual plant simulations and digital twin was created for our factory in Halol. Now, as we are working on our next green field facility in Chittoor (AP), where we are working on creating a replica of complete Chittoor plant in 3D format, possess the layout simulation, identify bottlenecks at critical areas, calculate resources like say the total number of Automated Guided Vehicles (AGV) in plant and take measures to enhance efficiency and plant design."

Proactive service using emerging technologies

Understanding the critical importance of responding quickly to service requests, Hero MotoCorp has implemented a Remote Support Solution using smart glasses and AR technology in plants, that allows communication between technicians and support departments (internal /external vendor) as an expert assistance. "This has translated to improved efficiency of diagnostics, substantial reduction in downtime of repair and maintenance of equipment and facilities," he states.

An analytics platform has been deployed to strengthen the analytics capabilities of the organisation. The team has initiated projects for forecasting of two wheelers and spare parts to improve demand fulfillment. The analytics platform also helps users do self service analytics.

Strengthening the foundation

Hero MotoCorp has formed a technology evaluation and solution architecture team which does technology evaluation involving business at an early stage to check Go/No Go or Go Later also ensuring Triple A trifecta (Automation, Analytics and AI) is an integral part while evaluation.

Sharing his perspective on the emerging technologies being adopted, Sethi says, "Major solutions that have been evaluated/introduced include Industrial IOT, AI for image processing and detection of spare parts, RPA automation, Low code development platform, 3D printing for toolroom, usage of AR for remote support, enterprise content management using ML and AI, connected vehicles, remote tracking and location, Turn by turn navigation using bluetooth (segment first introduced by Hero) and predictive maintenance using IoT for cranes."

Hero MotoCorp is also encouraging its employees in the IT team to do special projects in areas which are not related to their regular area of work. "The benefits that we achieve out of this activity are twofold. Firstly, it helps build and enhance the competency of our team since they get to learn new technologies and work in varied areas and secondly, it helps the organisation future proof itself against technologies that might not have become mature or mainstream but the fact that we have already experimented with it makes us move far ahead in the learning curve for that technology and if need arises, we can leverage the competency that has been built for those technologies," he explains.

Embedding AI

Artificial Intelligence has now started to become an inherent part of everything that is being done at the firm. Most of its technology led initiatives such as Industrial IoT, predictive maintenance, RPA, part recognition etc today leverage AI in one form or the other.

With the availability of a large amount of data generated in the past / currently being generated by the organisation and enhancement of the analytics capabilities, it has now become imperative that the initiatives that the firm takes, leverages the data and analytics combination. The firm is also leveraging AI to build chatbots, both for its employees and customers. These chatbots are meant to aid the employees and customers find the relevant information easily and also help the company understand customer requirements a little better. Hero MotoCorp is evaluating AI and ML for strengthening information security and enhancing customer delight.

As the above initiatives show, Hero MotoCorp has been constantly pushing the boundaries of technology by experimenting consistently with emerging technologies.

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> **Vijay Sethi,**
> CIO & CHRO, Hero MotoCorp

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6 | SPECIAL FOCUS
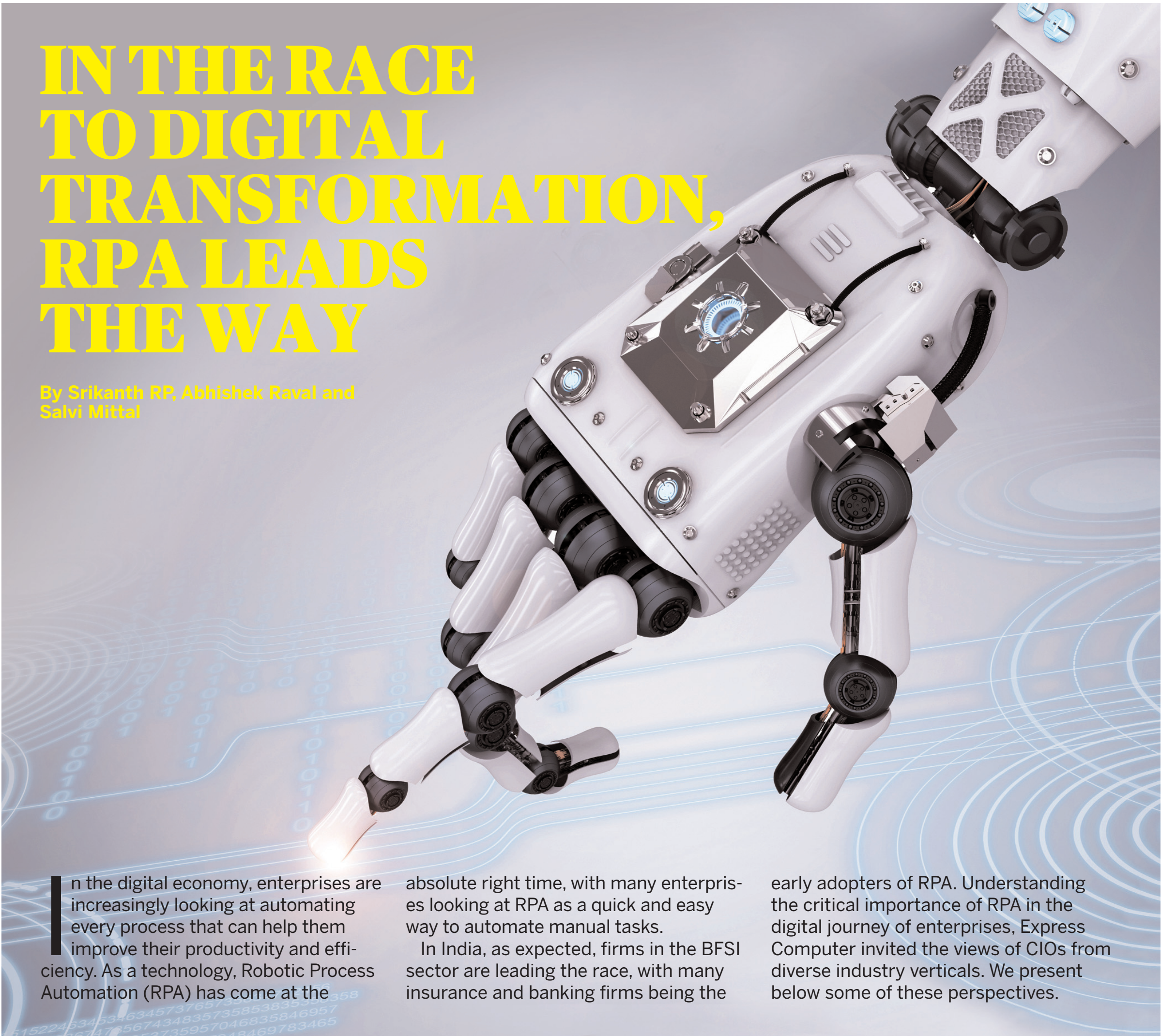
IN THE RACE TO DIGITAL TRANSFORMATION, RPA LEADS THE WAY

By Srikanth RP, Abhishek Raval and Salvi Mittal

In the digital economy, enterprises are increasingly looking at automating every process that can help them improve their productivity and efficiency. As a technology, Robotic Process Automation (RPA) has come at the absolute right time, with many enterprises looking at RPA as a quick and easy way to automate manual tasks.

In India, as expected, firms in the BFSI sector are leading the race, with many insurance and banking firms being the early adopters of RPA. Understanding the critical importance of RPA in the digital journey of enterprises, Express Computer invited the views of CIOs from diverse industry verticals. We present below some of these perspectives.

MUNISH MITTAL
GROUP HEAD-IT & CIO, HDFC BANK

We are deploying portal technology for our public website, which also powers our mobile application. There is a process for deploying the 900 odd pages, from an editorial layer to a publishing layer. It goes through a three step process. Now, if it is to be done manually, it will take 100s of our marketing executives to deploy this from editorial to the publishing layer, in the portal technology. and on the portal platform. We have used RPA where dozens of robots run in parallel and pick up 10s and 20s and 30s of these pages and complete this process in the matter of hours and days. So 900 pages we could publish within a period of three days, across this three-step process. This has helped us speed our time to market and speed up our go live. What this also does is that it gives us an opportunity

to do this multiple times without human fatigue or errors. This is just a DevOps example.

From an operations perspective, we have a de-duplication API that all the credit applications are subjected to multiple times for multiple levels of fraud screening, it is subjected to computing application scores, checking if it is a good credit / bad credit, etc. Earlier, the eye balling wherever there is not a perfect match, it was done by a human credit underwriter. We were able to introduce RPA where this eyeballing is done by robots. Today, 70-80 per cent of these eyeballing activities are now processed by the robots. So the turnover time for credit undertaking has drastically come down.

(As told to Srikanth RP)

VISHANT VORA
CHIEF TECHNOLOGY OFFICER, VODAFONE IDEA

At our Network Operations Center in Pune, we have implemented RPA in a big way – we have been on this journey for years. However, there are human beings doing a significant amount of work to ensure that machine algorithms serve the needs of our business. We are doing similar things in network planning, network designing. We are using machine learning to ensure that decisions are much more predictable.

Across Vodafone Idea, we have more than 200,0000 locations where we have cell sites operating. Each site creates hundreds of alarms, in case of incidences such as power failure. Earlier, we faced the challenge of proper analysis of these alarms, due to a huge number of alarms and inadequate manpower. However, using RPA, we have set clear algorithms to

co-relate alarms with their respective incidents. This enables us to get intelligent analysis of these incidents. RPA is very crucial when you're dealing with high volumes of data.

We have also used RPA in several other functions. For instance, in case of a power failure, we have created an algorithm which identifies the nearest technician using geo-locations and dispatches the work automatically. This ensures that the site gets restored in the minimum time possible. At Vodafone Idea, we are doing a massive transformation of our networks. As the networks of Vodafone and Idea have come together, we are ensuring that we implement the latest generation of technologies.

(As told to Mohit Rathod)

ANUP PUROHIT
CHIEF INFORMATION OFFICER, YES BANK

Some of the key processes that have been automated include the payment process where more than five lakh transactions are automated on monthly basis.

Branch users upload two files (pdf and excel) on a BPM tool from which users download the files and process payment of the customers. RPA will automatically read requests uploaded on BPM by branches, perform OCR on the pdf file and compare it with the excel file. OCR review is followed by CBS review where records in the file are compared to CBS giving a list of matched and mismatched records. After CBS review, an API request file is generated by RPA which is then processed after completing the maker/checker.

We have also used RPA and BPM for electricity expense claim automation for more than 1000 branches

Benefits

Today, there are near zero errors while processing transactions in 54 processes which have been automated. We have achieved a 12x boost in efficiency in most of the Excel-based processes. This has led to improved data governance, and improved quality and security. This has also helped in achieving automation of regulatory requirements.

Overall, RPA has helped us improve our customer service significantly. We have also automated repetitive and mundane tasks related to GUI automation (Excel data, screen scraping, etc.) Already more than 50+ processes have gone live with 148 bots active in production till date

Evolution of RPA

As with every wave of technology, expectations for RPA were higher than the practical capabilities of first-generation RPA tools warranted. Early automation programs were rushed into production without the benefit of analyst research, peer advice or published case studies. Some of these early programs have met expectations, but some have not.

RPA 2.0 at Yes Bank

We are confident of more to come in the days ahead, including capabilities such as tightly integrated OCR, artificial intelligence and machine learning with RPA as a combined group of tools which can achieve the organisations' goals of optimising business activities and address IT challenges in the digital age or fourth industrial revolution.

(As told to Srikanth RP)

VIJAY SETHI
CIO AND CHRO, HERO MOTOCORP

RPA has already been tested to be a game changer in the industry and pilots done by us also validate the same for departments like Finance, HR, IT, etc.

On one hand RPA significantly reduces the human effort by automating the pre defined process and is less error prone. Simultaneously, it ensures our manpower is used for strategic work instead of operational tasks. However, for an RPA initiative to be successful, it is important that organisations also look at process re-engineering in existing tasks and workflows to increase the level of automation backed by business case where the volume of manual repetitive process is considerably high.

As a part of our RPA journey, we are in the process of implementation of RPA for certain business processes using RPA technology. Based on business rules, RPA makes it really easy to do data extraction, confirm to validations, notifying for failed steps and soon. As far as our organisational context goes, we are sure of the fact that RPA can reap huge benefits and therefore, we will be taking RPA implementation to the next level and also expand the use of this technology to other business process areas.

(As told to Srikanth RP)

HARNATH BABU
CIO, KPMG INDIA

Over the last few years, RPA has proven to unlock productivity benefits and improving business efficiency by automating repetitive, manual tasksas well as freeing up staff for higher-value driven projects. Leveraging RPA, we at KPMG in India have automated several manual processes followed by corporate functions as well as business lines.

The solutions have been received very well by the business group, thus resulting in faster adoption within the firm.

Key benefits

By taking over from humans at suitable points via RPA, we have been able to not only automate repetitive, standardised and transactional processes, but also help reduce thousands of man hours, yield huge cost savings and generate additional revenue. RPA has also helped us improve internal processes while having control over process insights and analytics.

Before putting RPA to good use within the firm, it was important to figure out the processes that would benefit from intelligent automation and increase the business' effectiveness. So we began the journey by identifying the use cases and creating Proof of Concepts which attracted business teams as they saw the helping digital hands.

Today, we can see business teams taking advantages of RPA to automate their business processes while they can focus on more value-added tasks. Within the last one year, we have automated dozens of processes and saved thousands of man hours and counting.

Evolution of RPA

A few years ago when RPA came into the picture, it was just an automation technology which could automate some rule-based processes. Now its definition has changed; it is not just RPA but Intelligent RPA. RPA's artificial intelligence and cognitive technology make it stronger to get insight of unstructured data and handle dynamic contents with computer vision.

We began the journey of RPA with a small process in expense reimbursement. And today, we have more than a dozen robots in the production, helping business lines perform tasks with excellent accuracy and within the turnaround time.

Looking at a bigger picture, RPA has the potential to stir passions at companies that believe in the power of digital transformation and if deployed strategically, it can completely transform workplaces as well as the way today's workforce works.

(As told to Srikanth RP)

SAMRAT DAS
CHIEF INFORMATION OFFICER, PNB METLIFE

At PNB MetLife we have embarked into the journey of driving operational efficiency through the lever of RPA. One of the processes that we have automated is the Auto Debit Mandate process.

We introduced RPA for rule based high volume transactions, which are repetitive in nature. The process involves the following steps: Reading email and opening attachments -> running validation to clean data -> gathering data from various sources -> running algorithms for matching the names -> status update on the systems -> sending out reports, mails and other communications and sending unprocessed cases to a manual queue.

Due to RPA, we have achieved better efficiency with 80 per cent reduction in TAT from 15 man-hours to three man-hours; reduction in errors, since this is a rule based system and there is no human intervention. Earlier, there were 18 manual steps and hence were prone to errors. The bot is available 24x7, unlike a human driven process with fixed work hours.

At PNB MetLife, RPA plays a vital role in shaping up our digital journey. It allows us to continuously relook at our existing processes and optimise the efficiencies. Besides, the robots which we have deployed are inter-operable, which means that during month ends or high-volume days, we can make them multi-task and involve them in other processes as well, an aspect not possible for manual systems.

We deployed RPA technology in our organisation six months back for driving operational efficiency. Going forward, as a part of our digital journey, we would come up with process enhancements and our robots will be capable of handling more complex operations then.

(As told to Srikanth RP)

LALIT POPLI
HEAD OF IT, ICICI PRUDENTIAL AMC

We have implemented or are in the process of implementing RPAs, or rather as I call them i-Bots (Intelligent BOTS), in areas such as Voucher Processing, Email Automation, Speech Response, MIS and Payments.

As a result of RPA, there has been a huge productivity improvement. RPA has also provided us automated controls in all areas which in turn have reduced dependency on manual controls. The ROI of the projects undertaken so far has been excellent, thus providing more impetus to bringing more processes for RPA implementation.

RPA is playing a very critical element in the digital journey. They are handling lot of processes by reducing the wait times, thereby providing a great customer experience at a much lower cost. They are helping us to look into the processes and the final outcome in a very different way then what is being looked at in a traditional way.

We are going to see an explosion of i-Bots. What we are seeing now is just the tip of the iceberg as many partners are just learning the power of orchestration with various contrasting technologies to reach the final outcome. Once they achieve mastery of the same in a cost effective manner, we will see a very different solution paradigm being provided by RPA.

(As told to Srikanth RP)

We have applied Robotic Process Automation across certain repetitive tasks within Mphasis, which has increased efficiency and is helping us optimise our talent for high-end tasks.

Few years ago, we introduced the 'Ask Dexter' app - a dynamic bot that improves the response rate to user queries by adopting a conversational approach. Dexter resolves leave balance queries, learning related queries (voice enabled), general FAQs related to company policy and bona fide letter generation. On the talent front, Dexter specialises in giving an overview of job openings available, future job openings that may arise and the preferred skills for each. It simplifies the sourcing of all operational tools such as Employee Release (ER), Contract Management (CCMT) and the Mphasis Sales Marketing Tool (MSMART). Dexter is also integrated with our ITSM platform and services employee's requests related to software installation, IT resource provisioning, etc. (zero touch).

Automation of finance function

Paper-based invoices, bills, re-imbursement related to Account Receivables (AR) and Accounts Payables (AP) have been eliminated and instead we have automated the entire process. We have deployed a bot to complete the accounting process across Mphasis legal entities spanning across countries where Mphasis has a significant footprint. The bot helps streamline the process through data extraction, validation and processing. New Third Party (TP) invoices, corrected TP invoices, TDS-invoices are received in the BOT Email Account, directly from the client, following which invoices of multiple formats are segregated based on their input template during processing. The bot reads structured emails with specific subject lines and input files by keyword identification and extracts the excel attachments. The bot then checks for data validation based on pre-defined standards and any invalid data is marked as exception for the AR team to

RENJEEV KOLANCHERY
SENIOR VICE PRESIDENT AND HEAD - AUTOMATION, MPHASIS

further investigate. The bot processes TP and non-TP invoices based on the mapping conditions, filtering out the records and then informs relevant teams about the process completion through emails.

Standardisation and automation of the salary template and pay slip process across CFO organisation was our next move. We have further plans of automating internal processes like integrating the access maintenance system with the leave records system.

Key benefits

Automating intercompany transfer, invoicing and collections by deploying a bot to complete all accounting tasks, helped the finance and accounting team in saving time and effort, and at the same time, record 100 per cent compliance. In the pre-automation phase, the transaction handling time per record, for three applications was at 30 minutes which after automation has reduced to 20 seconds. Data accuracy was mapped at 80 per cent with manual access, whereas deploying bots enhanced accuracy levels to 100 per cent. The transaction

handling time has dramatically reduced from 30 minutes per record to 20 seconds per record. Deploying the 'Ask Dexter' application has enabled enhanced user experience and improved productivity at the employees' end by reducing the need for service desk tickets by 25 – 30 per cent.

Evolution of RPA

The evolution of the automation journey has been powered by cognitive technology, which has significantly expanded the scale and nature of software-addressable problems. With cognitive powered automation, Mphasis is helping clients and employees innovate, grow and compete successfully.

We bring the best of solutions from our Research Development and Innovation Labs – 'Next Labs' for our clients and ourselves. From our AI offering – 'DeepInsights' we leverage Optimise AI (process mining), Cognitive OCR/data extraction, Cognitive Microservices and Customer 360 to bring in automation and benefits to our CFO organisation, business operations like faster employee on-boarding, forecast/predictions for our internal financial operations. We also leverage image recognition, voice transcription, predictive analytics and predictive maintenance to improvise our business, HR and admin operations. Combining Cognitive solutions with RPA has helped us immensely in automating our enterprise and has brought in valuable benefits.

Every organisation should pivot technology around the impact it has on end customer/s and work backwards towards augmenting the experience and stickiness. Just as companies such as Facebook and Netflix have delivered hyper-personalised user experiences that build loyal customer relationships, we strongly believe hyper-personalisation through next-gen technologies, including RPA, will both transform how organisations engage with employees and signal profound implications for organisations of the future.

(As told to Srikanth RP)

GIRISH NAYAK
CHIEF, SERVICE, OPERATIONS AND TECHNOLOGY, ICICI LOMBARD GENERAL INSURANCE

Using RPA, we have automated some of the following key processes: Quote issuance, policy issuance and claim processing. This has resulted in an increase in operational productivity. We have also seen an improvement in TAT of Policy issuance. As a result, same day policy issuance target has been achieved. RPA has improved sales, underwriter and operations productivity and instead of doing monotonous job year after year, they are now able to focus on creative, strategic and customer facing activities.

Today, there are 150 BOTs, which have been implemented across the verticals. To promote frictionless business and service, AI solutions have been implemented along with automation. This results in further reduction on TAT and reduction on the manual errors. The processing of the claims involves lot of data entry based on the various documents that have been collected. The RPA solution has been implemented to take the data directly from the documents and processing the claims.

RPA has been used to automate the complex operations processes in our organisation. We have used RPA for providing the AI base solutions which will help to improve and provide the under writing decisions without manual intervention.

(As told to Srikanth RP)

Using RPA, a key process that has been automated at Emcure Pharmaceuticals is the posting of bulks GST invoices. After the successful delivery of a pilot, the process will be rolled out across the entire organisation. The process that is being automated, from beginning to end, is this: invoice receipt, login to SAP, invoice posting on SAP and acknowledgement of the posting. The process automation works for both the variations: vendor invoice with and without reference to a purchase order (PO).

Key benefits

The key benefits are two-fold: (a) reduction of manual effort by 90 per cent in the automated state, which enables us to reallocate potentially 90 per cent of the resources to other higher value-add activities, and (b) elimination of errors from manual posting.

I believe RPA is a highly desirable technology in our digital journey. Financial decision-making at pharmaceuticals is highly manual. The reason for this is the regulatory and compliance-related requirements of this industry. Since FDA audits are critical to the viability and growth of business, I believe the use of RPA positions us strongly in terms of easily demonstrating our compliance with regulatory needs. In addition, by incorporating (RPA, or the initial elements of AI) into the processing of financial transactions, we are enabling intelligent decision-making while eliminating errors.

Evolution of RPA

Yes, I believe RPA will grow to handle more complex operations in the future, e.g. finance, accounting and supply chain management. I see concrete use cases that can be covered by RPA, such as procure-to-pay, quote-to-cash, record-to-report, order processing, payments, email automation, inventory management, vendor selection, supply planning and demand planning. As I explained before, RPA brings the beginning elements of AI into the picture without the uncertainty around the 'intelligent' aspect of the technology. Whether a technology is truly intelligent or not can be debated; whether it automates a process is clear to see.

(As told to Srikanth RP)

AMITABH MISHRA
GLOBAL CTO, EMCURE PHARMA GROUP

KUNAL DIKSHIT
CTO, RELIANCE HOME FINANCE

We at Reliance Home Finance (RHF) are relatively new to the world of RPA but have the intention to make up for the lost time and charge full steam ahead. We have identified a total of 50 plus processes which we would like to automate in the long run. At this moment we have

initiated the process of adoption of RPA.

We are piloting for automation in the following areas:

● Automation of updation of "Pending Customer Documents" in the loan lifecycle. The RPA BOT will do a maker - checker and upload the details and status of the documents received in the core loan management system, basis excel input prepared by operations. Improvement of the process in terms of notifications / reminders is also in the plan.

● Automation of the "Purchase Order Generation" process and auto execution of mail to the respective vendor. RPA BOT integrates with our core SAP accounting system.

● Another area in which we see value add is the automation of the "Customer Issue / Feedback" process. Mail sent by customer is auto allocated to the team and recorded in the system and an incident number is generated. Auto reply is sent back to the customer along with the incident details.

RHF aims to achieve the following benefits. We will target process efficiency and reduction of TAT by 80 per cent in the PO generation process. We will also target reduction of costs by 20 per cent in customer feedback support process.

(As told to Srikanth RP)

SPECIAL FOCUS

GANESSAN SOUNDIRAM
CHIEF TECHNOLOGY OFFICER, ICICI PRUDENTIAL LIFE INSURANCE

To provide convenience to customers, we constantly evaluate and leverage new age technologies. The implementation of Robotic Process Automation (RPA) has enabled us to devise innovative customer engagement solutions. All our processes are well-orchestrated and executed using Business Process Management and RPA solutions.

RPA has been implemented across business systems and processes including customer on-boarding, customer servicing, underwriting, policy issuance and claims settlement. It has resulted in error-free and timely processing of transactions due to elimination of manual intervention. It has enabled customers to initiate and conclude service requests by themselves i.e. self-help. For example, customers can switch funds, make premium top-ups, change portfolio strategies, etc., via our digital platform. In FY2019, 76 per cent of service requests were self-help requests. We have integrated our systems with external eco-systems including that of our partners using RPA, resulting in seamless exchange of data on a real time basis. This has helped in conveying underwriting decisions, reducing processing time and faster issuance of policies and handling policy servicing requests. RPA has been a catalyst for growth for the Company as well as our partners. It forms an integral part of our digitisation roadmap and is also a key element in our Business Continuity Plan strategy.

Benefits

Discerning customers today look for instant gratification and we are able to meet their expectations with the use of technology. RPA has enabled us to further reduce turn-around-times (TAT) and provide a smooth experience to customers. Today, a policy (non-medical) can be issued in less than two hours which earlier took 7 – 10 days. Service requests can be executed in less than 24 hours which previously took days.

Claims settlement is extremely important for a life insurance company. Beneficiaries can raise a claim via our device agnostic digital platform in a hassle free manner. Our CRM (Customer Relationship Management) registers a claim through the auto call log. On completion of verification the payout is initiated through NEFT/RTGS to the beneficiary's bank account, this ensures that the beneficiary receives the claim proceeds immediately. Our average time taken to settle a genuine claim stood at 2.99 days in FY2018, this has further come down to 2.34 days in FY2019. RPA has been the catalyst that has enabled ICICI Prudential Life to deliver superior service experience and instant gratification to customers across their entire policy life cycle.

Evolution of RPA

We already have RPA implementation rolled out seamlessly for complex processes such as lead to issuance that touches different stakeholders and systems. We have been leveraging technology advancements such as Natural Language Processing, Machine Learning and Artificial Intelligence and are inching towards cognitive automation.

(As told to Abhishek Raval)
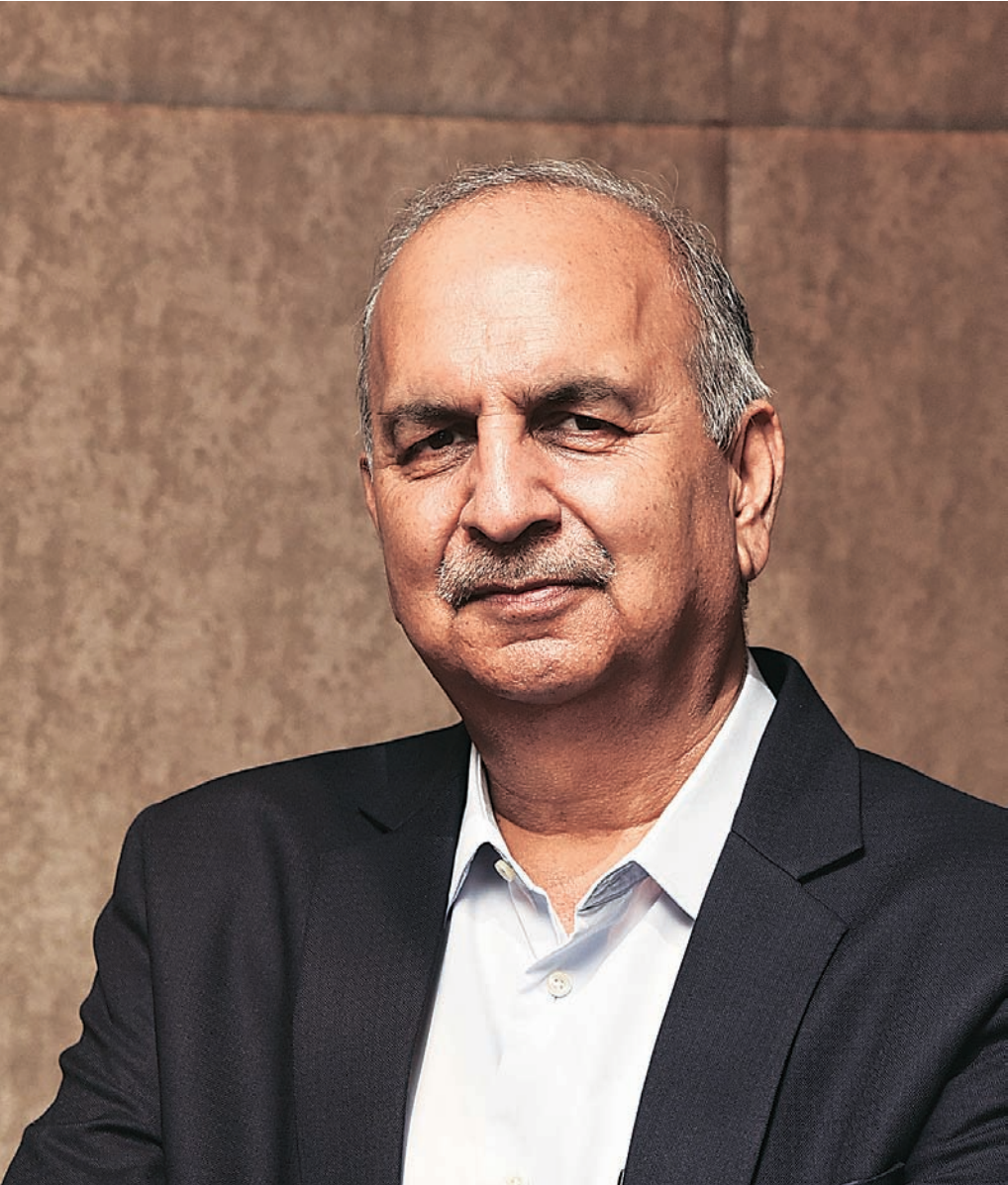
RAJESH UPPAL
EXECUTIVE DIRECTOR – IT, CIO AND CHRO, MARUTI SUZUKI

Robotic Automation Process (RPA) is a mature technology to work on. It is beyond the PoC stage and has started to add value to the business. We started IoT sometime ago, which is also maturing and is giving results in the shop floors' efficiency and provides proactive management and visibility. In big data and ML, we are currently at the PoC stage.

A large amount of data has started to pour in through various sources, and data can be consumed really well in our various organisational functions.

Under AI, we have basic bots and are becoming commoditised. But we are getting a deeper sense from our big data.

We have a lot of PoCs under AI and we see promising results. We are also leveraging virtual reality in various areas.

Standalone technology was taken up jointly with Suzuki and Maruti team together. Further, we had use cases from Japan and India, and POCs were initiated.

The first POC was in finance, where a lot of documentation is now digitally managed, and the results were phenomenal.

We have identified around 40 areas where RPA can be implemented, and gradually getting them on the platform.

Since the infrastructure is laid down, now it's just the matter of driving value in these areas.

RPA is a tool to drive the efficiency.

I view RPA as an immersive technology used by everyone in the organisation. RPA will soon become an office tool for everybody.

(As told to Salvi Mittal)

SHIV KUMAR BHASIN
CTO, NSE

Given that RPA is an emerging technology in the service industries, there are no standards or formally agreed upon industry controls specific to RPA. Indeed, this has been given little focus to date as the drivers have been around cost reduction and the adoption has been modest to date. There seem to be two starkly different ways that people think about automation and cyber security. While some believe that bots are basically invulnerable, since they never deviate from rules and are immune to the kind of curiosity that makes you click on a phishing email, others have nightmares about increasingly smarter robots going rogue on their networks, making them resist RPA altogether.

Suddenly, your bot doesn't do what it's supposed to do. It's a fearful scenario that can be panic inducing. What do you do? Well, you obviously unplug it, but don't leave it at that. There's a reason the bot lost its mind, and it's not because it has one of its own. You have to go back and reconstruct what happened (i.e. malicious or change in code/business logic or not appropriate change management or other misuse by an employee), which is why it's so important to make sure that you have an audit log that records all activity.

RPA is often promoted as a solution that can be deployed independently by a business unit. But like any other software solution, the IT and the information security departments must be critical stakeholders in planning, deploying, and managing the solution throughout its life cycle.

GURURAJ RAO
CIO, MAHINDRA AND MAHINDRA FINANCIAL SERVICES LTD (MMFSL)

Before implementing RPA, it's important to recognise, when RPA should be implemented. RPA is brought into action only in the absence of a standard API to transfer data between two systems, or when, one of the systems doesn't permit an integration.

Secondly, the process has to be adequately manual to be RPA enabled. It has to bring in minimum business benefits in terms of the man hours saved, accuracy of information, etc.

The company has automated three processes. A post loan disbursement document collection process; The company has also automated bank statement reconciliation process. A couple of insurance processes are also in the process of getting automated.

"In our case, RPA is implemented to automate process with regards to taking data from the document, submitted as a proof by the customer after the loan is disbursed. The data has to be imported from an external website. There was no API enablement to this process. Every loan related document is downloaded after entering the Reference and key number. This is repeated for every document, which is done thousands of times on a monthly basis

The RPA keys in the necessary numbers to make the numbers in the file available for download and stores in the required destination. This process has given us benefits because it works round the clock, provides the necessary controls with accuracy.

Hitherto, this process was done manually. Dedicated human resource would key in the number and download the document from the website. The said process was supposed to be completed within days but the backlog was running into weeks. The activities now, are completed within the stipulated timeline and with accuracy, with a potential to operate at a much larger scale than before. The staff has been redeployed for other business activities. MMFSL is currently working with one vendor and the plan is to add one more. "The tools are bought and run by us on a subscription basis, over a cloud model and there is no perpetual license arrangement, whatsoever. Technically, the way it works is our system calls the cloud based tool which interacts with the external systems from which data has to be received and transferred," explains Rao.

Learnings on implementing RPA

Choose the right processes: The problem and the business benefit comes first and then accordingly, the tool has to be decided upon. We cannot decide to use RPA just because it's an emerging technology, and then go about searching for the use case. Only if in case there are pain points such as if the systems you have, cannot be modified or integrated, then RPA is the right choice.

(As told to Abhishek Raval)

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The service industry is evolving very fast, and technology has become the biggest boon for it. Given this, Robotic Process Automation (RPA), which is the use of software programmes with artificial intelligence (AI) and machine learning capabilities, has fast found favour with companies looking to upscale their systems and improve processes, to provide a better experience for users and customers. It is highly advantageous to handle manual, high-volume, repeatable tasks which require fixed logic, such as queries, calculations, reconciliations, refunds, automated responses, and acknowledgements, through RPA. By facilitating increased efficiency, rationalisation of manpower, and a significantly reduced turnaround time for such tasks, it is able to respond faster, better, and more accurately. Thus, we at Thomas Cook India decided to explore RPA and its benefits for our shared services.

The aim of the shared services was to enable the consolidation and standardisation of HR and finance processes, and deliver an enhanced experience for our stakeholders. Our first objective was to identify the processes that could be integrated into the shared services setup. These included multiple units, which were accompanied by their own unique processes, highlighting the need for an operational back-end that has standard processes, responds fast to changing customer requirements, is more efficient, thus reducing overall cost of operations, and delivers accurate output impacting the business outcomes through measured metrics. This is where RPA was brought in where manual

intervention in processes can be automated to make them more efficient and effective.

We first conducted an end-to-end analysis of the process, in order to identify the best approach to implement RPA. However, our goal was not just to implement RPA, but also transformation. This required us to look at all the processes from end-to-end, and carefully consider the aspects that needed to be fixed. As a result, we were able to ensure that only those processes were automated which were efficient, and had a maximum impact on customer experience, and not those which were broken. This is because the automation of a bad process cannot improve it, but instead, only result in repeated faulty outputs, with no beneficial impact on the efficiency; hence, we excluded them.

RPA can be utilised by most of the currently existing processes, including HR and finance, which will help create maximum impact for our internal and external stakeholders. We have implemented RPA on critical reconciliations to help us assess potential risks on open items on a real-time basis. Currently, we have three RPA-enabled processes and three bots in use, which have shown an improvement in efficiency by 40-50 per cent. By the end of this year, however, we aim to implement as many as 10 to 12 bots.

Our pilot project has also been quite a successful experience. Our selection method for the pilot project was designed to prioritise inputs on our customer-facing process and transactional process.

GEETA DEGAONKAR
SENIOR VP SHARED SERVICES, THOMAS COOK (INDIA)

Our Proof Of Concept (POC) was quite successful, following which, we then presented it to our senior management, conducting an end-to-end video documentation of how it helped maximise efficiency. This

gave us tremendous confidence to move forward with the project.

The alignment of the entire team within the organisation was another critical requirement, as RPA is a new technology. So, following the

presentation with the senior management, we interacted with our HR teams, IT teams, and internal operation managers, among others, showcasing the POC and the efficiencies that could be gained by utilising it. This helped us bring in the necessary alignment within the organisation, along with gaining the support and backing of the senior management.

We also needed to ensure that our IT department was aligned with the infra requirements, and other elements necessary for RPA implementation. This is because a large part of the existing infrastructure in organisations might be sufficient for certain transactions or processes, but for RPA, the requirements are more specific. Information gathering is a very critical step, since the subject matter expert (SME) or team leader's failure to provide the appropriate information to an RPA developer can significantly hinder the success of the coding and logic involved in it. This is why, it is extremely necessary for team leaders and managers to be involved intricately in the processes, with regular internal reviews being conducted to gauge the impact.

To ensure a smooth end-to-end implementation, we also interacted with relevant business teams, and suggested a number of necessary changes in the upstream; including adherence to a particular format for the inputs they send. If these inputs had not followed the specific format, our bot would not have been able to work properly. By informing them of what we were trying to implement, the processes it would impact, the way it would impact them, and the outcome that

we were expecting, we were able to ensure that the procedure was concluded smoothly.

One of our significant learnings was the importance of having an output or goal-based project, keeping in mind the primary objective, be it efficiency, quality, customer experience, or compliance, along with how the people available to us could be utilised. This entire planning and detailing phase has to be a part of project management. The UAT testing time is also particularly crucial, because in the absence of the right UAT testing scenario, when the bot enters a hyper-care mode, one might have to keep developing or coding it for various exceptions. We looked at what the exception percentage was, right from the beginning, to ensure we knew what the expected output is. Thus, it became a deciding factor for including the process in the scope of RPA.

When we had received an output from the bot during the hyper care, we had our teams work manually to look at it, in order to ensure that it was absolutely correct. This gave us confidence regarding the accuracy of the bot, so as to ensure the maximum output, right from the time that the bot goes live.

Detailed planning, and a watertight project management plan, along with a team that could coordinate within the organisation and other stakeholders, while also looking at all the various milestones, raising red flags as necessary, and ensuring adherence to the appropriate time constraints, have together helped us achieve our first milestone on our RPA journey.

(As told to Abhishek Raval)

ADVAIT SUHAS PANDIT
DIRECTOR & CTO, NETMEDS

The company has been using Robotic Process Automation (RPA) in various operations systems. For instance, in order to keep the product catalogue up-to-

date, Netmeds runs bots that lookup supplier data and match products and prices against it's product catalogue. This helps in identifying new products, changes

in pack sizes and prices. What could take weeks to get this information, Netmeds is now able to get it as soon as the suppliers have stock of the product or make changes.

Another RPA use case if that of onboarding of suppliers and interacting with their systems.

There are currently over one lakh pharma products available in the market. We use machine learning and fuzzy logic to map our catalogue to supplier catalogues. Over a period of time, on an average, we have been able to match 80 per cent of a supplier's catalogue via our algorithms, which helps slash integration time tremendously. Our algorithms have also been able to detect new pack sizes, patterns in the way suppliers name products in their catalogue, which helps in on-going synchronisation between supplier systems and ours. Furthermore, in the area of digitisation and validation of prescriptions, every prescription received is digitised by a data entry team. Netmeds has built intelligence into the system to be able to understand certain prescription layouts and rate/score the validity of a prescription. This helps auto fill certain information and keeps improving. While this has significantly reduced the time for pharmacists to validate a prescription, it has also improved accuracy.

(As told to Mohit Rathod)

KEDAR UPADHYE
JT. PRESIDENT & GLOBAL CFO, CIPLA

Since invoicing happens in high volumes, we have deployed a bot for the financial operations, to process the travel invoices. The company is very enthused about the potential of robotic automation, currently at various stages of utilisation in the accounts payable area and tax declaration with zero documentation. This has enabled Cipla to streamline operations generating financial benefits, compliance and HR benefits. The

employee consequently experiences a truly simplified digital automation process with a click of button.

Automated workflows have been introduced for inventory reserve calculation for GAAP accounting filings. RPA has given a delightful experience to the organisation, its partners and customers. Since everything becomes scalable, the resources required to perform the multiple transactions reduce substantially and can be repurposed to high-end work which

adds more value. This is much better than being stuck in the manual processes. RPA itself is very objective in nature. Powered with analytics and database, and being cloud-based, there is enhanced security whereby the accuracy of problem-solving increases enormously. It offers a fact-based, prioritised decision making, and the effectiveness of managerial decision-making is enhanced.

(As told to Salvi Mittal)

SBI Card has always been at the forefront of adopting latest technological innovations to improve internal business processes and enhance overall customer experience. In fact, technology is one of the key pillars that has driven our fast paced growth over the last few years. Deployment of RPA has been one of the major technological integrations at SBI Card. We started our journey with RPA with Customer Services function viz 'Transaction Dispute Follow-up process'. After witnessing significant benefits such as reduction in human errors, increased process efficiency and enhanced customer experience through early action and process re-engineering , we extended the platform to other processes as well.

We have already integrated RPA platform with eight business processes spanning across customer service and operations departments. Our largest automation process is churning out approximately 600 transactions per day while working 24X7 and we have deployed eight bots for the same. The automation includes basic analysis of the customer dispute while checking for various business conditions and following up with the customers over mails for the required documents.

How RPA has resolved a transaction dispute process

Transaction Dispute Follow-up process is a sub-process under Chargeback process for disputed transactions. Under this sub-process, when a customer raises a dispute for any transaction, a proper classification of the dispute is conducted as per the defined process and the follow up mails are sent to the customer requesting for the relevant documents based on the nature of dispute. Before the adoption of RPA, if a customer had raised a dispute for more than one transactions simultaneously, then separate emails were sent to him/her manually by SBI Card for each of the disputed transactions. This created multiple layers of communication, which became cumbersome for the customers.

Post implementation of RPA at SBI Card, all the manual activities under the Transaction Dispute Follow-up process have been taken over by the bots. Introduction of process re-engineering has enabled consolidation of all related disputes in one email which is then sent to the customer. It was not possible with the manual process earlier. This has significantly simplified the communication process for the customer, making it

HARDAYAL PRASAD
MD & CEO, SBI CARD

hassle free and has further enhanced consumer experience.

Benefits

At SBI Card, we have witnessed significant impact on the productivity of processes where RPA has been deployed. We have been able to save approximately 700 hours of efforts per day across processes. It has also helped us in standardisation of the processes through elimination of human dependencies and errors. Moreover, it has increased output leading to faster response time to customers, thereby, reducing pending case pipeline. This has definitely enhanced the experience for SBI Card customers. At the internal front, RPA has enabled employees to focus on value-add activities rather than mundane ones and increased overall employee satisfaction.

As of now, we have deployed RPA for Customer Services and Operations functions and are looking at extending it to other functions such as Finance, HR and IT as well in the coming months.

Our roadmap includes extending the automation into cognitive areas where basic decision making will also be done by the bots and currently, we are working towards it.

SPECIAL FOCUS

MEHMOOD MANSOORI
PRESIDENT SHARED SERVICES & ONLINE BUSINESS, HDFC ERGO GENERAL INSURANCE

Automation is the ultimate game, which streamlines the business. We started to identify multiple opportunities where the business processes were not so automated. Currently, we are focusing on five to six processes where robots are deployed, such as policy insurance, claims, post-policy servicing and other parts of the internal processes.

At the policy insurance, we receive a lot of data files from partners, which contains the data which is important for us to issue the policies. But these files need to be reformatted and make them acceptable to the existing systems. We first accumulated the sufficient data, to get the right limit of integration to execute a transaction without any human interference.

Today, robots pull-off the entire job of taking those Excel files from the 40-50 multiple sources. It brings them to the required standard format. It also checks the payment information, inaccuracies in the data, visits the banking portals, does the transaction, downloads the information and statement, does the validation, etc. And further, it places the job in the queue which can be taken forward for policy processing. In case of any issues, the robots raise a ticket with the help desk.

We are able to address the complete chain and are receiving files with almost 99 per cent accuracy, which is far superior to any humans and the RPA solution has cut down our turnaround time. And of course, the manpower requirement has significantly reduced and has resulted in cost saving.

Similarly, on the claim side, RPA solution is processing approximately 1500 claims a day. Right from collecting the data from third parties, validating the data against the various parameters and getting them approved. Hence, we have covered the entire value chain around the claims and insurance processing claim and certain processes which were outsourced earlier are happening in-house. The customers can directly visit our portal, and they can execute the transaction end to end.

The turnaround time has symbolically reduced, geared-up the customer servicing efficiencies, the quality has improved and the cost has reduced. And this has generated a notable amount of positive Net Promoter Score (NPS) from the customers and has enabled us to settle the claim frictionlessly in just a matter of hours, whereas earlier it took around 24 hours.

Our organisation is processing the claims until 10 pm, every two hourly. Nothing is waiting for the next day in the queues, we run the scheduler every two hours, initiate the NEFT, and the money is transferred in the customer's bank account.

Training the robots

Can the robots learn from their own? Currently, they are operating on the standard rules, all their decisions are data-based. For example, if there is a customer email. Can the robot interpret those emails and draw the meaning? One is the identification, categorisation of the customer's demands. But, we are looking to send a resolution, not just the response? Unfortunately, as an insurance company, whatever I say in writing or verbal is a legal word and one has to abide by it. Hence, can a robot read that email, contextualise it and give an appropriate solution to the customer?

After we went live with the solution, close to 3 per cent of our emails are responded by the Watson technology and gradually, we are seeking to jack-up numbers close to 50 per cent. We have learned the technology and we have developed our own homegrown robots, based on the open source technology.

(As told to Salvi Mittal)
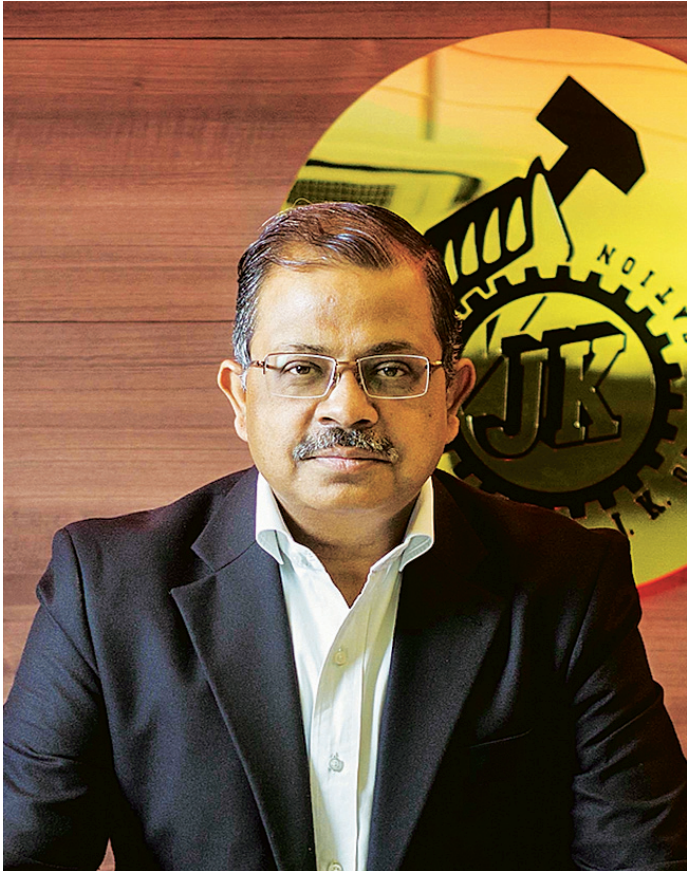
JITENDRA SINGH
CIO, JK CEMENT

The company is implementing Robotics Process Automation (RPA) for numerous use cases where manual inputs can be minimised. It has already moved its accounts payable and certain HR workloads to RPA. Until recently, we were required to send the hard copies of invoices from plant to the head office. These copies would be re-validated and registered manually.

However, using RPA, the copies are now scanned and the automatic transaction is generated and is forwarded to the finance department for timely payments. This transition has given credibility in the eyes of a supplier, which in turn puts JKCL in commanding better facilities from its suppliers.

ICICI Bank, in 2016, announced the deployment of 'Software Robotics' in over 200 business processes across various functions of the bank. The bank was one of the first in the country and among few, globally, to deploy 'Software Robotics' that emulates human actions to automate and perform repetitive, high volume and time consuming business tasks cutting across multiple applications. The software robots at ICICI Bank are configured to capture and interpret information from systems, recognise patterns and run business processes across multiple applications to execute activities including data entry and validation, automated formatting, multi-format message creation, text mining, workflow acceleration, reconciliations and currency exchange rate processing among others.

RPA Journey at ICICI Bank

After three years, the bank is running 1350 business processes on RPA, which is currently being used in customer on-boarding, transaction processing, post transaction servicing, reconciliation, loan processing, where it involves moving data between systems. "RPA is used in a big way at ICICI Bank. In the area of operations, the bank, on a daily basis does 6.5mn transactions. Mammoth organisations having a baggage of legacy systems, have high use cases for RPA. The reason being, legacy setups are not tuned to work with API in many cases and thus RPA can be leveraged; they don't have good data upload functionalities and even if it's doable, conducting validations is an issue," says Anubhuti Sanghai, Head – Operations and Customer Service, ICICI Bank.

The actual building of the RPA tool began with the inhouse team working on it since 2012. The official announcement was made in 2016. 'Corporate limits setup' was the first process, that RPA was enabled for. The sanction for the corporate limit for fund and non fund based products is complex. Once the sanction is received, the disbursement is done. Subsequently, the data is stored in the core banking solution (CBS).

Hitherto, post the sanction, the processes were manual i.e the data was posted manually in the CBS after doing the necessary validations. With an investment of just two subject matter experts, a robot was built in a week to automate the process.

Currently, close to 1350 business processes are running on RPA. In technology operations, there are thousands of processes that are RPA enabled. It involves, data being transferred from and to unconnected IT systems. In 2016, ICICI Bank announced automating over 200 processes. "However, they continued to be RPA enabled until they were fully dissolved into an automated system. So, the 200 processes were reduced to, for example 100 processes. They have now gone upto 1350. The function of the number of processes being run through RPA is dependant on the amount of digitisation of the overall systems in the bank, for example, the case of corporate limits mentioned earlier, is now being API enabled. The sanctions system is now connected with the CBS via an API and thus no longer is there a need for it to be run through RPA," says Balaji VV, Head – Business Technology Group, ICICI Bank.

The more deep rooted an organisation moves towards digitisation, the more nuanced, the need for RPA. Currently the systems are partially digital and partially physical requiring the information take off and hand off. This is where the need of an RPA arises.

BALAJI V.V
HEAD – BUSINESS TECHNOLOGY GROUP, ICICI BANK

However, the more business processes are digitised, removing the physical systems, it will take away the need for RPA kind of systems. "ICICI Bank is moving towards a service based architecture, which is primarily API based. Wherever API comes in, there is no need for RPA," says Balaji.

Major RPA use cases

Bank reconciliation: Faults in bank reconciliation can lead to fraud. "ICICI Bank has acted in this regard. The bank is using RPA to reduce manual reconciliation and at times completely eliminate it. We have been using RPA over and above an automatic reconciliation team in the operations department. We use RPA to further bring down the false matches, which are coming in," informs Sanghai

Form 15G / 15H : Software robotics has been deployed to perform end to end process involving resolution of queries related to Form 15G / 15H. This form is a self-declaration form submitted by an individual for non-deduction of tax on interest income. There are lakhs of such forms that are processed annually in Q1 of the financial year. The activity would take around three days, but with software robotics, the turn-around-time has reduced from three days to same day closure with 100 per cent accuracy.

ATM query resolution: This is the process of handling ICICI Bank customer queries who have encountered unsuccessful cash withdrawal while using an ICICI Bank ATM. Earlier, the turn-around-time for resolving such queries was seven days. Now, with software robotics, the resolution time has come down to four working hours

Similarly, there are significant time efficiencies that have taken place for many business processes like, mobile number updation for internet banking alerts, ECS presentation for loan repayments, Aadhaar details validation importer-exporter code validations, debit card re-issuance to name a few among many others.

"We have a process which involves fetching vehicle registration details field by field from the central motor registration repository (Vahan) and updating manually in our core system. Each record in a manual process used to take 10 minutes. With the deployment of Software Robotics, the same activity is being performed in less than a minute," states Balaji.

RPA team

The automation team at ICICI Bank has 60 developers (30-35 fulltime with the bank and the rest are at vendor locations), who work on RPA and other kinds of automation like bots, AI, ML and physical bots. The same set of developers work on RPA for across functions like treasury, trade, retail, corporate, international operations, etc. Apart from developers, there are product, process experts, business analysts and a testing team.

The testing cycle involves, IT, users (customers and employees), security testing done through a

ANUBHUTI SANGHAI,
HEAD – OPERATIONS AND CUSTOMER SERVICE, ICICI BANK.

change management software. The RPA is put into production only after it passes through these cycles.

The bank is working with 6-7 vendors for RPA. "We work on two models. Firstly, the development is given out to the vendor and secondly, the operations and the technology team work together," says Sanghai. There are four levels of automation operational at ICICI Bank: RPA, bots, AI and ML and physical bots. "RPA is handled by three-four teams working under the operations team and one team under IT," mentions Balaji. Technology and the operations team has graduated to a level where the IT team provides the front end access and the operations team has the people with the required skill sets to run the automation on their own without any help from IT.

Future roadmap and learnings

ICICI Bank is moving into more complex automation, which is RPA + OCR + AI, ML. "It involves, going through multiple processes, picking data through OCR, running AI, ML on it and also validating the same data and updating an altogether different system," says Sanghai.

Companies should ultimately go for a services based architecture. Moving towards an end to end automated platform, which eliminates RPA over a period of time.

(By Abhishek Raval)

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RPA is perfect for eliminating non value adding tasks

IN THE INTENSELY COMPETITIVE insurance sector, HDFC Life is banking heavily on its technology strengths. **Parvez Mulla**, COO, HDFC Life, shares with EC, on how his firm is using emerging technologies such as AI and RPA to its advantage

By Srikanth RP

Can you take us through some of the recent technology initiatives that you have taken that has led to huge business impact?

The world is changing at an accelerated pace enabled by spate of technological disruptions. These disruptions have matured in their life cycle and now have scalable use cases for enterprises.

At HDFC Life, three years ago we saw the pace of these disruptions in evolving insurance market in China and started investing in technology initiatives. Our large scale tech enabled digital transformation gave us mobility platform across our sales journey. It digitised all our onboarding processes and made the journey smooth. We progressed from there to plug and play partner integration through APIs.

We then built our data platform, started our cloud journey and then invested in data lake. We created multiple cognitive engines within HDFC Life. Separate technology teams were focusing on different areas. Our emerging tech team, ADCAT, developed a spate of tech products which could use to simplify journeys. Nudge engine, Recommendation engine, Dedupe, Customer 360 were developed to enable personalising customer journeys. The Data Labs team worked on predictive

modelling across the value chain helping us to reduce our claim settlement time from weeks to days. Our fraud analytics model and customer propensity models are extensively used by us and our partners. Our online learning platform mLearn, Geo based sales solution like InstaGo and people app mConnect have helped us drive better people engagement and satisfaction. We have launched a three-click PASA (pre- approved sum assured) journey which shortens the customer buying process and makes it seamless on partner systems. HDFC Life has believed in using technology, not as an end in itself, but to serve to smoothen the customer journey and simplify the process for the customer.

How do you look at the usage of AI in your organisation? What is the impact that AI is making or has made?

Long term businesses are built by constantly focusing on understanding evolving customer needs. We have not searched for a use case for AI and force fitted it. We wanted a customer or business problem to be solved and we applied the relevant technology which served to address the problem. We have a data labs team created within HDFC Life having AI/ML specialists. We started with customer facing bots.

Elle is a chat bot for customers, which handles 70 per cent of customer chats. The email bot handles 20 per cent of emails and Twitter bot was recently launched. We are in process of integrating all the bots on a common platform and adding Facebook and WhatsApp to the suite. We have an email sentiment analysis being used to understand customer complaints and queries. We are using voice bots for the revival calls to customers. We have worked on various machine learning algorithms to well as enable/augment underwriting, determine

customer propensity, product recommendation and optimum ticket size, as well as predict future premium payments (persistency).

Voice emotion analysis and voice authentication are going live soon. We are in the process of developing a risk mitigation solution to strengthen the payout process at our branch offices - these include face match and signature match. Our process bots have enabled us to rationalise and relook at our processes. We have recently gone live with a beta launch of our new hyperpersonalised incentive program which

incentivises input triggers and desired behaviour amongst sales team member in our proprietary sales channels. This uses segmentation and dynamic programming to ensure that each sales team member is incentivised to maximise his individual achievement.

Relevance of RPA for your organisation? In what areas/business processes is it now being used?

Insurance is a process centric, customer oriented business and a strong process drive creates predictable customer experience. The

> Elle is a chat bot for customers, which handles 70% of customer chats. The email bot handles 20% of emails and the Twitter bot was recently launched

focus is not only to create documented processes across the functions, but also identify forms of waste in the processes by understanding the type and nature of activities as Value Addition (VA) and Non Value Adding (NVA), and its impact on quality, cost, time, etc.

Also, we track the performance gaps/ opportunities through rigorous business reviews. RPA becomes the perfect approach towards eliminating the NVAs in the processes and bridge the gaps in performance through a non-invasive, speedy delivery and cost efficient way. We have bots deployed in 26 functions of the organisation, spread across insurance value chain of new business, policy servicing, persistency, payout, claim enabling various touch points for customer facing and support functions. We are now processing our transactions, ranging from expert scrutiny of a new business case, providing a surrender quote, policy loan decisions, process payouts, etc., through bots.

Evolution of RPA in your firm - do you see RPA handling more complex operations now or in the future?

Given the complexity of the insurance products, spread of processes across geographies, dynamic workforce, different partners, multi-distributor model and

eco systems/ platforms; we at HFDC Life have strategically identified, experimented and deployed leading edge technologies including RPA to create a scale and competitive advantage. Hence after evaluating 40+ vendors, built first set of eight bots in Oct'16 for our most complex process (customer initiated payout) and second set of three bots with the most complex function (actuarial). Post these two deployments and successfully 'managing the change', in next six months, we deployed 22 bots in FY17. Post this, we have been growing strength to strength in our bots penetration and used case complexity. Currently, there are 154 bots running across 26 functions, out of which 40 per cent of the bots are complex in nature!

Further, we manage the real time adherence of these bots through a Super Bot and each of our bot has specific tangible benefits viz. TAT reduction, accuracy improvement, risk reduction, productivity improvement, etc. Now we are looking at RPA in conjunction to AI/ML, analytics, all put together, as 'Cognitive BOTs' to re-imagine the processes and create a significant shift in the customer experience and business value creation. The future is all about how effectively we use technology to simplify complex scenarios of the value delivery processes.

The RPA implementation began, in around May 2018. Overall, at the Muthoot Group, RPA is impacting risk management, which includes frauds; KYC; credit appraisal; AML; customer service and surveillance.

The company offers gold loans and thereby gold worth hundreds of crores is kept in the 4500+ branches across the country. It's manually overwhelming to monitor the multiple cameras deployed at the branches. RPA helps in monitoring the cameras and provides alerts as per the events defined. Manual monitoring in this case is not feasible and ineffective.

KYC

The customer's personal information has to be validated before service activation. Details like mobile number, ID proof, etc., have to be matched with the respective database, for example, driving license has to be validated with the driving license database of the respective state. RPA helps us enable that. Earlier, it was done manually. The exercise saves time and gives accurate results because with respect to the driving license verification, every state stores data in their respective format resulting in complexity and

having a modular approach. With RPA, the same exercise has become relatively easy.

"The particular reason why driving license verification is important because we have found that many gangs operating in North India steal gold and pledge it with gold loan companies like us by using fraudulent driver's license. They don't prefer Aadhaar or PAN card," says K N C Nair, Group CIO, Muthoot Group.

AML

The Muthoot Group is also in the business of money transfer and the regulator insists on having checks for money laundering. The company gets the list of suspicious people from the authorised sources, which is updated on a daily basis. RPA helps in verifying the authenticity of the credentials of the customers.

Loan origination system

The RPA is used to collect the data from the backend of the customer, who already has a financial relationship with the company. He has been cross sold another product and the reverification has to be done. It's not only the backend data that is verified but data is also pulled from the credit

information companies; social media, etc. The data is compiled and a decision is arrived upon. The loan appraisal time has thus been reduced from five days to a few hours.

Surveillance

Earlier teams from regional offices monitored the events and investigated further. Feedback was taken from the branch manager and team members were informed accordingly. The motion detect sensors are placed, which automatically detect and generate alerts. Image recognition software is used and screenshots are taken to classify an incident as critical or whether it is a false alarm. Initially, this job was done by a team of 10 people, however now, it's done by two people without diluting the effectiveness. The company has hired the services of two vendors, both of them are already providing IT services to the company and they have given RPA as an additional tool to the company. For example, the vendor for the loan origination system has tie-ups with RPA vendors. The same company has partnered with the Muthoot Group.

(As told to Abhishek Raval)

K N C NAIR
GROUP CIO, MUTHOOT GROUP

Liberty General Insurance Limited, one of India's fastest growing general insurance companies, relies extensively on technology to enhance service delivery. The company recently implemented bots in sending No Claim Bonus(NCB) intimations internally within the system and then updating the back office for claims management. The automation has helped in saving up to 120 mins of man hours per day. Bots have enabled daily updates instead of weekly inputs on NCB details and increased the ability to process emails successfully by 95 per cent. More importantly, this automation has helped in meeting Service Level Agreement (SLA) of five days for all identified cases.

ROOPAM ASTHANA
CEO & WHOLE TIME DIRECTOR, LIBERTY GENERAL INSURANCE

Sr No	NCB process that are LIVE	GoLive Date of each process	FTE savings of each process	Comparison of each process between bot and user	No. of records processed by automated bot till date
1	NCB Process 1- sending NCB confirmation to private insurers	15-Feb-19	Man hours saved up to 120 mins per day	If user took 30 mins to process 1 average file of 200 records, bot processed same in 20 mins	Reverted 208 emails, having 60,500 records
2	NCB Process 4- NCB confirmation to Claims Team	8-Apr-19	Man hours saved upto 240 mins per day	User : 2 mins per mail Bot : 1 min per mail	Reverted 865 emails
3	Business Package	25-May-18	Man hours saved up to 720 mins per day	User : 45-60 mins per DCN Bot : 30-45 mins per DCN	500 proposals

NCB: No Claim Bonus
DCN: Document Control Number
FTE: Full Time Employee

Benefits of RPA Implementation :
● Automatic response with NCB details to insurers daily instead of weekly
● Ability to process emails successfully - 95 per cent

● Meeting SLA of five days for all identified cases
● Business package is a multi-section and multi-location product, it is very tedious and time consuming to create such proposals,

implementation of bot has helped in speedy creation of proposals, thereby enabling quick policy creation as well adhering to the timelines.