RPA STARTUPS
CIOINSIDERINDIA.COM
CIO
Insider
EXPERT OPINION
GOVIND SINGH,
GROUP CIO,
DALMIA BHARAT
CIO SPEAKS
JAYANTA BANERJEE,
GROUP CIO,
TATA STEEL
RPASOFT
MANOJKUMAR NAGARAJ, CO-FOUNDER & CEO
AN EPITOME OF TECHNOLOGY COMPETENCE IN THE RPA SEGMENT
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CIO Insider

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Editorial

The Best Time to be in the RPA Industry

It's an interesting fact that the business realm has undergone more digital transformation than the entire yester-decade. The evolution of Robotic Process Automation solutions has been one of the major driving factors of digital transformation. It also amazes the pace at which RPA solutions have matured to extend their capability to support almost every business function – at scale, ranging from back-end departments like accounting, HR, procurement, and manufacturing to front-office functions like salesforce & marketing automation.

We are not just talking about the enterprises. Even the MSMEs and startups find it easier to bank on RPA due to the data-driven approach, precision, standardization, and lack of human errors it offers, not to mention the dire competition prevailing in the segment. The traits like scalability and affordability help them cut costs by eliminating dispensable human intervention, automating mundane tasks, and providing employees actionable information that will help them make better decisions faster than ever.

The future looks bright as a day. With cloud being the new normal, digital transformation being inevitable for businesses across the spectrum, and the 5G network expected to bring the network latency down, it's the best time to be in the RPA industry, especially since the market is global. According to Statista, the RPA market is expected to grow with a CAGR of 27.7 percent to be valued at $23.9 billion by 2030. This can be interpreted as enormous opportunities for autonomous and solution partners of any size. The key to success in both cases revolves around meticulously understanding the local businesses and finding the right formula to build RPA solutions that solve customer challenges and enhance their business outcomes.

Sujith Vasudevan,
Managing Editor
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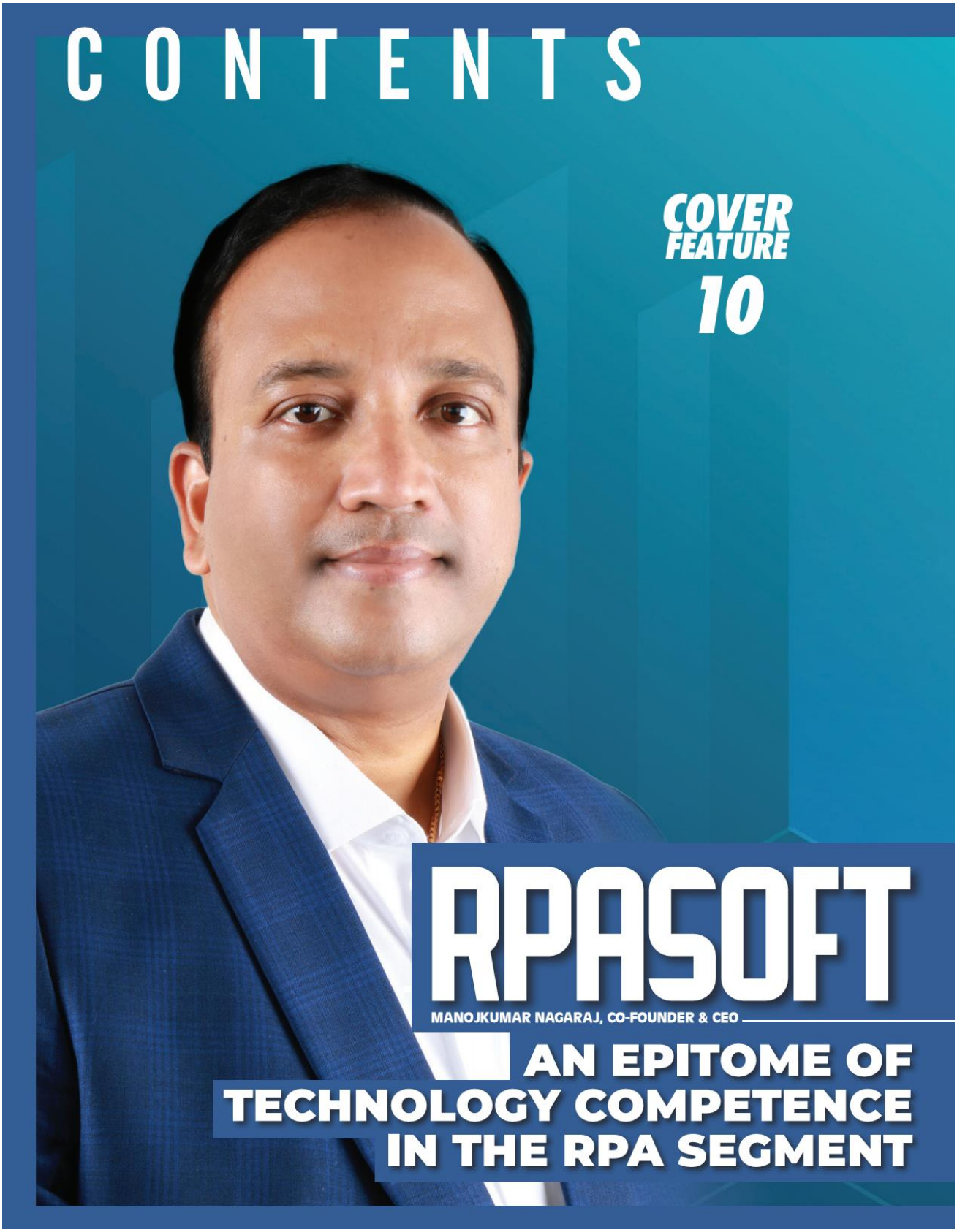
CONTENTS


COVER FEATURE
10
RPASOFT
MANOJKUMAR NAGARAJ, CO-FOUNDER & CEO
AN EPITOME OF TECHNOLOGY COMPETENCE IN THE RPA SEGMENT

CONTRIBUTORS

CXO SPEAKS

20

Why Data Backup & Recovery Need to be Part of your Zero Trust Security Program

Christos Karmis, President & CEO, Mobilitie

26

Attention Metric

Vivek P, VP - Revenue Strategy, Times Internet

30

Quantum Computing & AI Revolutionizing Cryptography & Security

Utpal Chakraborty, Chief Digital Officer, Allied Digital Services

CIO Insider 10 Most Recommended

RPA STARTUPS - 2022

18 Chiacon Consulting

24 InVibes

28 Kanerika

EXPERT OPINION

08

Optimization of Marketing & Product Lifecycle Technology – Development in Progress

Govind Singh, Group CIO, Dalmia Bharat

LAST COMMENT

34

Digital Transformation: Are We on the Right Track?

Tarun Bali, AVP - Technology, The Body Shop India

CIO SPEAKS

14

Becoming Future-ready by Mainstreaming the Right Technology Skills

Jayanta Banerjee, Group CIO, Tata Steel

32

Data Science & Analytics – The Indian Scenario

Yashwanth Kumar, Head - Analytics & Insight, Titan Company

EXPERT OPINION

OPTIMIZATION OF MARKETING & PRODUCT LIFECYCLE TECHNOLOGY – DEVELOPMENT IN PROGRESS

By Govind Singh, Group CIO, Dalmia Bharat

Govind has an extensive experience in managing both in-sourced and outsourced IT models, as well as coordinating and communicating efficiently with internal organizations and third-party vendors.

Tell us about your experience with marketing and product lifecycle in technology, but what and how it contributed to the progress of development.

I have worked in various industries right from manufacturing to automobile companies to FMCG companies. While working for Gillette, I had contracted with Asia tractors and moved to retail. I was working for a German retail company called Metrication Curry. From there I moved to a few international companies and finally joined Levi's.

Can you just tell me about your experience, how was the marketing and product lifecycle related to technology.

Product lifecycle-related applications are generally implemented in an environment, whether it's a technology company or it's a user company like our manufacturing company to ensure the overall age of the product in the context of a retail environment. Manufacturing depends on the appearance of an end-product and the environment of the longevity of the product lifecycle in the market and from the manufacturing timeline.

A product has to be marketed across different geographies and should be closed out because sometimes products manufactured by tech companies such as Apple iPhones depend on the product's market growth or how much money the business company is making, both in the terms of top and bottom line. The popularity of the application is an example from Microsoft and phone manufacturing companies/automobile companies will be cannibalizing their old models and launching the new models. There is a lot of science and art behind this when completed manually. It may not be the most appropriate way. Utilizing a lot of inputs from big data sources social media can help in customer feedback and help in interview conducts. Mystery audit is completed in the retail industry quite a lot. The product life cycle is determined through sunset product or the increasing/decreasing market value.

There are various algorithms and analytics that are utilized for manufacturing and specific product life cycle management applications or PLM applications are utilized. Depending on the requirement of an organization, businesses choose the companies and starts manufacturing. On the limitation to the size of the business and demand in the market, manufacturing completes either manually or automated. For larger companies, it is always advisable and required to have a good PLM application in the market.

Could you tell me the kind of strategies being implemented in companies to stay ahead of the competition in the market?

Being in the manufacturing industry mainly cement, now, instrument innovations are possible. For example, we can have a simple product like cement can also create a lot of difference in the mindset of the people causing environmental damage. So, we're working on something where we want to become carbon neutral. Carbon-negative in the next few years from now is possible by 2040.

We want to become carbon neutral or carbon negative or if not carbon negative entries. It helps to position business products better. In the case of cement, carbon footprint comes from furnaces, in form of coal, where it is sometimes further killed and can cost you more carbon footprint or less carbon footprint. Depending upon what kind of fuel is used, reclaiming of the exhaust gases is complete. Exhaust gases temperature gets into the technology, but in general, when exhaust fumes are coming out of your chimney in a plant, you use that heat to

Govind Singh, Group CIO

preheat some of the things. Maybe a lot of water is required to be heated in manufacturing plants for various reasons to generate electricity.

What are the breakthroughs in brand design brand new key integrated communication development, brand activation, P&L Management you have witnessed during your corporate experience?

I've been fortunate to have worked with the finest auto companies globally also in the country. What I have seen in my experience is that large companies or reputed companies mostly keep their mission and vision statement in line with their product life, product lineage, and the way they operate and treat their customers and employees. For example, our mission is to become carbon negative by 2040. We want to become carbon negative in the next number of years. Every activity includes a data center for hosting applications and as a parameter for reclaiming their energy, some of the data centers are using seawater to cool their environment. We also push our customers, suppliers, and vendors to use similar steps which make us overall carbon negative. And this is how you will be impacting or tweaking your overall PNL, financials, and so on.

Can you tell me how retail design expansion and trade marketing are invented and how you recognize excellent business solutions?

The most beautiful example of brand images is the Apple logo on an Apple showroom or an online Apple store. Brand recognition is a combination of various factors in life, which includes the quality of our products, to begin with. Beautifully created or curated quality products align with a company's mission and vision statement. Let's say, in the modern world environment is the major factor for any business to start production. If I'm using paperbacks there, it is aligning with my market image. Now waterless (a product by Levi's) means products need not be washed very frequently, because they have antibacterial properties. They are treated in such a way that instead of washing, all you can work them, let's say twice, as compared to other products.

Can you tell me about the future of effective communication marketing, the future of effective communication, and marketing?

In this pandemic, we have learned, all nations like us. Typical Indian organizations or manufacturing companies used to be mandatory to be physically present there, and those meetings and people used to travel from all parts of the country to our head office. What those important critical meetings and all that this pandemic has taught all of us, as individuals, Indian and international companies, that working remotely, must be sitting in some other city and answering in some other city. We can talk to each other, communicate, with my views/ideas, and effectively utilize them. For example, when I have a town hall for my function for my department, there'll be 100 people and 130 people sitting/delivering suggestions to take. So, what I'm seeing here is that the digital way of communication is gaining more and more prominence there. And the marketing, the digital marketing is also going to be gaining more and more prominence there.

While looking at the future of marketing, even the sales initiatives have many sales pitches. These are done online. When businesses are converting more and more digitally, marketing also has to be moving them in the same direction. Like a lot of CRM, programs are coming up with collaborative CRM programs.

As an IT technology professional, this pandemic has changed the minds of a typical technology professional also in such a way that we can get the deliveries done from a remote location. The second part is it has given a lot of boost to the economy of their two and tier three cities.

COVER FEATURE

MANOJKUMAR NAGARAJ,
CO-FOUNDER & CEO

> RPASOFT is hiring 150 RPA Automation Engineers in the next 18-24 months both in India and abroad to meet the demands based on the current pipeline and sales forecast. The hiring includes both from Market as well as College Freshers and Graduates from the Training Institutes. We will be investing $4-5 million to support the Talent Acquisition, Business & Competency Development, and Infrastructure Expansion

CIO Insider 10 Most Recommended

RPA STARTUPS - 2022

RPASOFT

An Epitome of Technology Competence in the RPA Segment

It's not only that Robotic Process Automation (RPA) tackles the repetitive, manageable tasks that plague customer service representatives, but it also ensures enhancing one of the most significant drivers of the market – customer experience. For instance, let's take the case of COBOT, a COVID Lab Automation solution developed by Bangalore-based RPASOFT, a specialized Technology company, focused on RPA. Mimicking the data entry operator, COBOT first validates the Test Report data against the mandatory fields before automatically uploading to ICMR and even sending email & SMS notifications to respective patients. This allows the labs to test an exponential number of samples daily, which is crucial in a populous country like India. RPASOFT, in fact, has swiftly become a specialist in focusing on customer issues, investing in the relationships, and staying relevant to their business by delivering that 'WOW' experience, it offers. Clutching its technical competence, the company caters to a wide range of industries. CIO Insider engages in an exclusive interview with Manojkumar.

In conversation with **Manojkumar Nagaraj, Co-Founder & CEO, RPASOFT**

The Robotic Process Automation industry is growing from strength to strength, increasing the scope and use-cases with every passing day. Where is RPASOFT positioned in the industry, and what are your target segments?

RPASOFT is a pure-play RPA Technology services provider offering E2E services – Process consulting, Process Automation implementation, Product/Technical support, and Professional services to enterprise customers. We have partnerships with leading Brands like UiPath and incubated competency on other brands like Automation Anywhere, WorkFusion, and AVO.

We cater to a wide range of industry verticals, including BFSI, Transportation, Property Tech, HR Tech, Health Tech, Manufacturing, large IT/ITES – MNC's & tier-I IPP's, Big Five - Consulting & Advisory services firms, and Fortune 500 – Global captives in India. Our services spread across an Rs.100 crore plus market in India and a $100 million strong market in NA & Europe. In a nutshell, we are a specialized technology company focused on robotic process automation consulting, resource augmentation, training, and implementation.

What is your operating procedure to understand the clients' pain areas and build requirement-centric solutions?

We follow our proprietary 3D Delivery framework – Discover, Decide, & Deploy. In the First step (Discover), we do discovery sessions through process consulting to understand the pain points. We interview the stakeholders and identify business processes for Automation feasibility with clearly defined ROI.

In the Second step (Decide), we assess the best technology platform that fits the client's automation purpose based on our competency.

In the Third step (Deploy), we have developed a clearly defined methodology to deploy automation solutions following the RPA Development life cycle with best practices curated internally based on our experience & expertise.

What are the other USPs that RPASOFT offers and make it stand out from the competition?

Our core competencies revolve around facets like delivery excellence, our domain-centric solutions, and technology leadership & experience. The delivery excellence can be traced back to our proprietary deployment framework – Cognitive Automation Framework (CAF). This is the IP of RPASOFT, which supports both Top-down & Bottom-up deployment approaches. CAF, which is an n-tier architecture involving Workflow, Business Intelligence layer, and RPA Automation layer, offers benefits including better consumerization, scale, agility, and holistic approach to the enterprise RPA Automation. Our proposition is Business Workflow Automation first based on the business intelligence enabled by the Process Automation using RPA.

In terms of domain-centric solutions, we focus on developing Automation solutions addressing specific use-cases within business segments to serve all the customers in that segment with minimum customization. For example, we have created COBOT – Covid Lab Automation solution in the health-tech space, and RI Bot, the intelligent recruitment bots for HR/Recruitment Automation.

Technology leadership we are built around is also matchless. The company started by Industry veterans with successful track record of incubating technology companies with decades of deep engineering knowledge across technologies, domains, and geographies. Our Co-Founding team, comprising myself (30 years of global experience with some of the biggest brands in the US) and Varun Melanta (15 years of global experience with BIG Five Advisory and Consulting firms), has a cumulative experience of more than 70 years. This makes Engineering, Architecture, and Delivery our core expertise compared to the competition.

What are the latest challenges that RPASOFT solves for its clients? Tell us about your portfolio of solutions.

When it comes to Property Tech, we help large co-working space management companies in the areas such as (i) Customer agreement validation Automation with back-office systems, (ii) Monthly invoice reconciliation Automation, (iii) Customer billing validation Automation, (iv) TDS reconciliation, (v) Revenue report validation for billing leakage, and

(vi) Broker fee Automation, to name a few. In FinTech, we help our clients with (i) Customer Assets/Liabilities reconciliation Automation and (ii) Customer KYC validation Automation. We also help HR/Staffing organizations to drive the Recruitment Automation (RI Bot), including timesheet reconciliation Automation, and Hospitals to speed up the Covid reporting with ICMR through COBOT. Additionally, our portfolio included Robotic Test Automation (RTA) – deploying Robots for Software Testing and test-case-quality audit automation (Qi Bots).

Tell us more about COBOT. What are the features incorporated?

COBOT offers higher throughput, better accuracy, and a predictable Automation process to handle large volumes of test reports. It mimics the Data entry operator, wherein the Test Report data is validated first against the mandatory fields before uploading to ICMR. All variations during the upload, like fresh cases and follow-up cases, are nicely handled as a part of the Automation process. Any errors are captured, sent to stakeholders for fixing, and fed back to COBOTS for upload. The solution provides the daily report of how many fresh and follow-up cases were uploaded and the number of errors during the upload. The solution eliminates the need for human data entry operators in the Lab. COBOT can also be extended with email and SMS to communicate with the respective patients, primary healthcare centers, and other stakeholders. Automated generation of Test reports with QR codes is also possible based on the requirements. We delivered the solution as a part of our CSR initiative along with our partner UiPATH, and we got huge recognition for the work as it saved lives during the second COVID wave.

What opportunities do you foresee, and what's the future roadmap set for RPASOFT?

The global RPA market size, valued at $822 million in 2019, is projected to grow at a CAGR of 40.6 percent from 2020 to 2027. The rising demand for the Automation of redundant tasks in business processes with AI and machine learning enhancements is expected to drive market growth. The SMEs segment is expected to exhibit the highest CAGR of 42.6 percent over the forecast period.

Our future roadmap involves aggressive expansion and better opportunity coverage. We are opening our office in key geographies like the US & Europe to increase our customer coverage. On the other hand, we are also looking forward to further expanding OEM Partnerships, creating more Technology Alliances, and having higher business coverage with more focus on Healthcare, Life sciences, Insurance, cold chain logistics, KPO, Digital native companies, and Logistics. We will invest more in Technical competency – specifically targeting Intelligent Automation solutions in conversational AI, Chatbots, and Document understanding, onboarding experienced & fresh talent, Learning & Development, and expanding our automation factory.

CIO SPEAKS

BECOMING FUTURE-READY BY MAINSTREAMING THE RIGHT TECHNOLOGY SKILLS

Jayanta Banerjee, Group CIO

By Jayanta Banerjee, Group CIO, Tata Steel

Jayanta has been with Tatas for almost twenty seven years and has lead businesses, sales, delivery, operations and IT/ digital globally.

One of the better outcomes of the pandemic has been the greater appreciation of the role of technology in our lives and how with the support of technology we managed to maintain some semblance of normalcy during the past 10 months. The compulsion to work from home pushed millions across the world to rely on basic technology skills to continue doing their job with little or no interruption. With multiple IT tools and software at your disposal, the key would be to learn how to apply the correct technology to solve critical business problems. Simple DIY tools and software will be more prevalent and would seek dominance over complex technical tools which require expert guidance for usage. With digital adoption on the rise and end customer reachability catching up, digital aggregators, providing an array of standard or customized services for the end consumer will play an important role going forward.

What we experienced during the pandemic also in many ways accelerated our dependence on technology. A large part of daily life shifted to a more virtual world such as online school and colleges, increase in online commerce largely fuelled

by groceries and food deliveries, and more. With customers moving to the virtual world more traditional businesses like kirana stores and heavy industries (capital goods) too have now a digital front for their businesses. Living under the lockdown also helped us realize the potential of digital healthcare where medical consultations can continue online. We have already witnessed the significance of digital tools in our daily lives and it will only have incremental impact going forward, but in order to create a differentiating factor for organizations, the key would be master the ability to choose and make the right investments in technology. Business leaders and CIOs in particular, have a significant role to play where they will have to create a clear road map to leverage the return on investments and to ably use their skilled talent.

> THE DIGITAL TRANSFORMATION IMPACTING ALL WALKS OF LIFE ALSO MEANS THAT WE WILL HAVE TO CREATE A NEW SKILLS ECOSYSTEM TO MEET THIS NEW DEMAND

The digital transformation impacting all walks of life also means that we will have to create a new skills ecosystem to meet this new demand. By some estimates these unlocking of the digital economy could create up to 65 million new jobs by 2025. It would be paramount to have a macro and core understanding of the latest in technology. Artificial Intelligence is gaining semblance and looks to be ready to evolve further into mainstream usage. Having your business servers and storages on cloud already looks like a thing of the past as cloud native architecture gains further steam. A deep understanding of evolving technologies such as blockchain, edge, networking option, sensors and more. will be critical as they gain more focus and business usage. Staying current and relevant is very important. Skills that were once niche are becoming mainstream and more importantly the shelf-life of these skills are much shorter and therefore need constant upgrading. The fact is technological learning and upgrading of skills will be a continuous process in 2021 as it was before and during the pandemic and among these few IT skills will remain crucial in the coming years.

With the new normal setting in and most of the workforce working from home, IT landscape is susceptible to the ever-rising cyber-attacks. This is a real concern not just because of the typical business vulnerabilities, a successful infiltration from a cyber-criminal could shut down a plant's operations or start making equipment produce faulty products without the knowledge of managers, among other things. Business leaders not only have to invest in secure products but people who have the skill to anticipate and identify such threats and act with agility to protect the organization from unforeseen cyber-attacks. We believe, both ethical hackers and traditional cyber security specialists with expertise in Security Information & Event Management, Security Orchestration, Automation and Response, Cloud Access Security Broker, and more will have a role to play.

Data is one of the most critical aspects in today's business environment and thus, ensuring its correct usage becomes paramount. More and more companies are aspiring to enable swift & remote decision making. Data capture, its storage and judicial usage in carrying out data analysis for gaining accurate business insights is paramount to succeeding in the new normal. It is important to have a robust IT Infrastructure to generate incremental amounts of data and use it such that a single version of truth prevails for everyone in the organization.

Identifying the right kind of skills is one thing, but building an ecosystem that produces a large pool of skilled workforce is a much bigger challenge. The significance of this is not lost on today's business leaders. For example, we are seeing a sizable growth in resources allocated to build the right skills within large and small organizations across all sectors. Training and retraining of the workforce are also getting the necessary support within the HR function. The importance of industry-academia collaboration to sustain the flow of skilled workforce is also getting mainstreamed which is vital to ensure we wedge the demand-supply gap in quick time. We already know that the technology workforce is moving from backseat to the front seat in almost every sector. Acknowledging and investing in this shift is going to make all the difference. CI

CIO Insider

10 Most Recommended

RPA STARTUPS - 2022

With constant changes happening in the consumer trends and global market, the economy has faced constant fluctuations in the past decade. The industries are emerging and evanescing in a way that it has become almost impossible to anticipate their future. Nevertheless, there is only the tech industry that has shown exemplary future potential bringing in abundant growth opportunities to the masses- strengthening their market positioning, and elevating their RoI. Earlier where, industrial revolution that occurred in the middle 1800 nurtured the economy bringing in automation with newer developments in the manufacturing & textile industry, today, it's the service industry that's benefitting from a similar industrial revolution brought down by technologies such as analytics, speech processing, image processing, biometrics, virtual reality, augmented reality, cloud technologies, mobile technologies, geo-tagging, low-code platforms, robotic process automation (RPA) and machine learning.

The mad rush for IT talent in the country brought on by pandemic-led digital transformation initiatives has transitioned almost all companies, and they are stepping towards establishing the RPA software systems to make and manage software robots digitally and thereby perform a wide range of defined actions through them. Thinking of replacing repetitive and monotonous clerical tasks performed by humans, with a virtual workforce RPA, many companies are coming forward to integrate or offer such services. The demand for RPA is booming and is estimated to grow with a CAGR of 27.7 percent by 2030 from $2.65 billion worth in 2021.

In this issue, CIO Insider has come up with a list of '10 Most Recommended RPA Startups - 2022' who have proved their proficiency in the sector with a deep knowledge in technology. The following list is prepared closely scrutinized by a panel of judges consisting of CEOs, CIOs, CXO, analysts, and our editorial board. We believe that these platforms will help in transforming business processes through their significant expertise and knowledge.

10 MOST RECOMMENDED RPA STARTUPS - 2022

COMPANY	MANAGEMENT	DESCRIPTION
Binarycorp **Mumbai** **binarycorp.in**	Smit K., Founder	Specializes in delivering tailor made software solutions, and a host of other Tech services to add value to your business
Chiacon Consulting **Gurgaon** **chiacon.com**	Rohit Garg & Raman Khurana, Co-Founders	With the right balance of business processes & technology knowledge, they digitizes the core of organizations and focuses rigidly on unlocking the most value using technology
Cloud Desk Technologies **Chennai** **clouddesk.ae**	Jeyakumar N., Director	They always excel at being at the top of the hierarchy when it comes to installing progressive and cost-effective, dependable technology like SalesForce, Cloud solutions and RPA
CLOUDGATE **Ahmedabad** **cloudgate.ie**	Vedang S., Lead Technical Architect	Offers innovative digital business solutions to organizations in the domain of Hyper Automation (RPA), Cloud computing and Blockchain technology
FusionHawk **New Delhi** **fusionhawk.io**	Harshit Sharma, Founder	Digital and automation-first company helping clients thrive in their digital transformation journey
Hir Infotech **Ahmedabad** **hirinfotech.com**	Brijesh Prajapati, Founder	Leading global outsourcing company with its core focus on offering web scraping, data extraction, lead generation, data scraping and many more
InVibes **Bangalore** **invibes.in**	Gangadhar Wali, Co-Founder & Vice President Vishwanath Sangoji, Co-Founder & Vice President- Business Development	A globally recognized, end-to-end process automation organization that offers innovative solutions and services in the process automation space
Kanerika **Hyderabad** **kanerika.com**	Bhupendra Chopra, Director	A company with 75+ years experience in software Product Development which is passionate about exceeding expectations of their clients
RPASOFT **Bangalore** **rpasoft.ai**	Manojkumar Nagaraj, Co-Founder & CEO	RPASOFT has swiftly become an RPA specialist, focusing on customer issues, investing in the relationships, and staying relevant to their business by delivering that 'WOW' experience
Turbotic **Bangalore** **turbotic.com**	Abhishek Kishore Gupta, CEO	Their objective is to build self-driving companies by integrating a wide range of automation and AI technologies into a single operating system

CHIACON CONSULTING

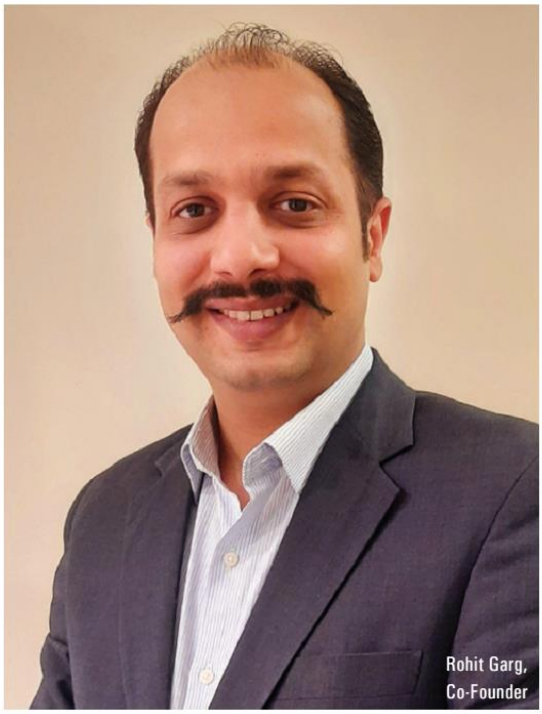
The Right Balance of Business Processes & Technology Knowledge

From repetitive tasks to high-volume processes, tasks with multiple steps, and tasks that require humans to interact between multiple digital interfaces, typically, around 60 percent of an organization's process activities can be addressed by RPA. The benefits are also priceless, ranging from commendable improvements in operational cost, accuracy, and productivity rate to more room for the different functional teams to focus on core, more productive tasks. But the key to these unprecedented benefits is a digital transformation partner who understands your business meticulously and possesses the knowledge to choose the right technology platform. Having this unique balance between business processes & technology knowledge has been the game-changer for Gurgaon-based Chiacon Consulting Pvt. Ltd. Offering a one-stop-shop destination with a consultative approach, Chiacon digitizes the core of organizations, unlocks the value residing in data, and focuses relentlessly on unlocking the most value using technology, providing its clients with comprehensive automation. CIO Insider engages in an exclusive interaction with the company's co-founder, Rohit Garg, to unfold more about this proposition.

In conversation with **Rohit Garg & Raman Khurana, Co-Founders, Chiacon Consulting**

India's IT sector market is projected to reach $100 billion by 2025, according to IBEF. Where is Chiacon Consulting stationed in the current market in India?

We aim to be the most trusted partner for our clients in the Intelligent Automation and Analytics space. We envision to be one of the strongest and biggest players in the Automation Services domain. Our key differentiating factor lies in the fact that our team is equally focused on Business Processes & Technology, thereby having a strong understanding of how technology impacts a business. Our main target is not to achieve big numbers, but to deliver the best quality to our client. With a cumulative experience of 30+ years in various IT functions and domains, we have a strong leadership base to support the company's future growth.


Rohit Garg, Co-Founder

What is the company's portfolio of services, and elaborate on its RPA service offerings?

We are currently focused on RPA (Intelligent Automation) and Analytics Services. We are specifically aggressive on RPA growth. We are focused on setting up the RPA COE Team, Process Accelerators, and QDBs.

Quick Deployable Bot (QDB) is one of the unique

Raman Khurana, Co-Founder

strengths that we offer to our clients, where we provide BOTs as plug-and-play solutions to various business needs like Digital Certificate generators, Invoicing, Data Scraping, WhatsApp automation, and others. QDBs are handy for clients who want quick and ready-to-use RPA solutions with minimum investment.

We also ensure that we have benchmarked capability, and hence we target to have all our associates certified in various RPA tools and technologies.

Could you talk about one of the most challenging instances when deploying your RPA services drew the successful outcome?

We have done a lot of successful RPA Implementations across various clients globally. These automation solutions include Web Automation, Desktop Automation, ERP integration with BOTs, and many others. But two of the most challenging deployments that we have done to date are Mobile Automation and Enterprise Risk Assessment.

Mobile Automation: This deployment was done using UiPath Test Manager and Browser Stack platform. We have automated the testing lifecycle of mobile and web apps in this implementation. This was one of the first few implementations of this solution.

Enterprise Risk Assessment: This was for one of our major healthcare clients in the US, where we helped them identify how a supplier or vendor impacts their gross revenue and profit. This was very helpful to our client, especially during the pandemic, as various suppliers across the globe were getting impacted. Using this automation, they were able to identify the upcoming risks and mitigate them proactively.

Concerning Chiacon Consulting's future roadmap, what are the opportunities it seeks to use, and where does it see itself in the next few years?

We want to see our customers unlock their human potential by implementing Intelligent Automation. We want to take it to another level, where every person working in the industry has one personal assistant BOT to do all the repetitive and mundane tasks so that millions of hours can be unlocked for critical and innovative areas for the betterment of humanity and business.

> Our team is equally focused on Business Processes & Technology, having a strong understanding of how technology impacts a business

Automation as a Service will be an interesting area to look at; this will unlock opportunities for small enterprises to leverage automation. In the next few years, we envision being one of the strongest and biggest players in the Intelligent Automation/RPA Service domain.

CXO SPEAKS

WHY DATA BACKUP & RECOVERY NEED TO BE PART OF YOUR ZERO TRUST SECURITY PROGRAM

By Christos Karmis, President & CEO, Mobilitie

Holding an MBA from the Warrington College of Business, Christos has been associated with Mobilitie for over 15 years now, prior to which he was the Telecommunications Consultant at Deloitte Consulting.

For years, the well-known security maxim was, 'Trust but verify'. However, the statement is no longer sufficient. In today's borderless, global, mobile, hybrid, cloud-based environment, traditional security approaches cannot defend the digital fortress on its own, and nobody is to be trusted, including employees, customers, and partners. But there is a way out. Zero Trust is an antidote for stale security strategies because it demands that organizations entirely remove trust from the equation by denying access to everyone.

Zero Trust is all about evaluating the security posture of users based on location, device, and behaviour to determine if the users are who they claim to be. Zero Trust is also about granting just enough privilege, just in time, so that users can perform their needed tasks and operations, and nothing more. With Zero Trust, only minimum permissions are granted at just the right time to get a job done. Then those permissions are revoked immediately upon completion of the job or transaction. A Zero Trust security approach authenticates and authorizes every connection – for example, when a user connects to an application or

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NGS Sequencing on Illumina, Thermo platforms
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software to a data set via an application programming interface (API).

As organizations globally rushed to support the remote workforce with the threat vectors spread across endpoints, combining that with surging cyber attacks prompted them to deploy a zero-trust security model. Early this year, COVID-19 related data of around 20,000 people were reported to have leaked from Indian government sites and were put on sale on the darknet. The data showed name, age, gender, mobile number, address, date and result of COVID-19 report of these people. This is a breach of people's personal identity information and happened on a government website.

Even companies like Apple and Meta could not evade data breaches, when recently hackers managed to obtain unauthorized access to their customer databases. Hence, it is given that bad actors will inevitably get inside any organization's network. Hence, everything possible must be tried-out to minimize the attack surfaces and protect the business-critical data from being damaged or destroyed.

As part of this Zero Trust strategy, organizations must also be exceptionally vigilant around their data backup and recovery strategies. The concept of constantly verifying, continuously authenticating, and always logging who is going where & doing what should apply to regular operations and application usage. It should also apply to the data backup and recovery processes. For instance, it's critical to know who is initiating that backup and where they are backing up the data.

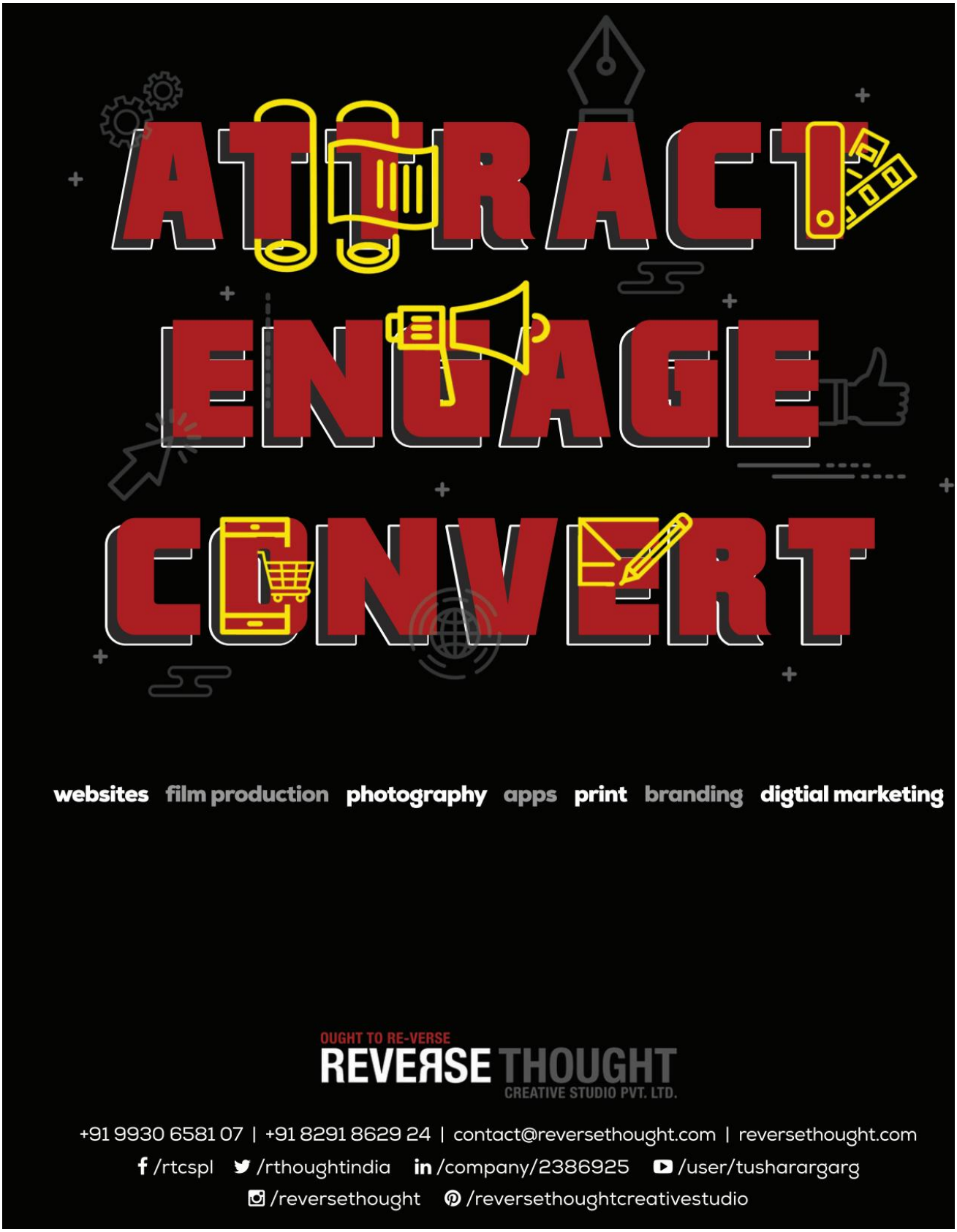
It's also essential to ensure that whatever applications you're using for your backup and recovery, those applications have embedded authentication mechanisms such as multifactor authentication, identity services, and role-based access. Take for instance, a worker who needs to have data recovered from her laptop. What are the credentials that allow this employee to restore the machine? What permissions were granted, and do those permissions need to be changed to reflect a new set of requirements? If the IT team is restoring a laptop set-up a year ago, who ensures no one else has access to that machine? A Zero Trust approach to data backup and recovery can go a long way towards resolving these questions while securing enterprise data further.

Adopting Zero Trust for backup and recovery can mean extending the security controls that already exist within your environment. For example, applying multifactor authentication to your backup and recovery processes can help establish identity insurance and add a greater level of protection to your organization.

> ZERO TRUST IS ALSO ABOUT GRANTING JUST ENOUGH PRIVILEGE, JUST IN TIME, SO THAT USERS CAN PERFORM THEIR NEEDED TASKS AND OPERATIONS, AND NOTHING MORE

Immutable storage should also be part of any Zero Trust initiative. Immutability is when data is converted to a write-once, read many times format. Immutable storage safeguards data from malicious intent by continuously taking snapshots of that data every 90 seconds. Because the object store is immutable, you can quickly restore data even if someone tampers with it.

As data breaches grow in volume and complexity, organizations must consider novel approaches to strengthen their protection against cyber threats. Zero Trust is not a specific technology or architecture. Instead, it is a new way of thinking that can help you achieve robust threat protection and gain next-level security. CI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INVIBES

Offering End-to-End Innovative Solutions & Services in the Process Automation Space

"We are glad that InVibes became our partner through the open tender process, for automating our Employee Medical Direct Billing Claim Process. This has helped us to deliver much better healthcare services to our executives, employees, and dependants by easing the hospital admission procedure and post-discharge direct billing process in the SAP by using RPA bots. This has not only simplified our internal workflows by minimizing staff efforts but also improved employee experience. This automation has been achieved using RPA bots, workflows, and mobile-enabled technologies. We thank InVibes for the right implementation of this solution", says V. C. Angadi, CIO BEML.

The RPA is an emerging technology and often involves creating awareness among customers on business use-cases specific to their digital operations. Before offering any business an RPA solution it's crucial to understand customers' existing processes, and identify candidate digital processes for automation along with process re-engineering. It is also important to evaluate open-source tools to enable cost-effective solutions for businesses. InVibes, one of the leading RPA startups in Bangalore is offering top-notch RPA powered solutions to its clients. Partnering with product vendors like Uipath and Automation anywhere has enabled the company to strengthen its offerings. Industry reports from Gartner and Forrester have enabled it to position its services and grow faster in the market.

Gangadhar Wali
Co-Founder & Vice-President

The Digital workforce is an industry catchword for RPA bots, which impacts companies, employees, partners, and other individuals associated with business processes. This means any process re-engineering must be analyzed from all perspectives for defining the objectives of the Digital Transformation initiative – irrespective of the size of the company. "In most of the processes, cutting labour costs is not the key objective – service availability 24*7, increasing throughput by framing decision making by Digital Workforce, will lead to competitive advantages", says Deepak Alur, C.T.O of InVibes.

Enterprises often do not take a quantum leap in adopting Digital Workforce, they pilot out a few implementations, watch the ROI and then proceed. With many interesting cloud services, RPA projects can deliver more outcomes than the existing NON-RPA processes, in lesser time and round the clock, says Gangadhar Wali, (Co-Founder & Vice -President) of InVibes.

In the SMB customer segment, the challenge is often on the cost of licenses and the support available to resolve issues even though they are convinced of the advantages of a Digital Workforce. Our USP has been addressing this concern by offering RPA as a service - says Vishwanath Sangoji, (Co-Founder & Vice-President-Business developments) of InVibes. He further adds that process re-engineering leads to a new perspective of processes that were not imagined earlier. In one of our projects, the benefits gained by our customer due to the new perspective was substantial compared to the original perceived objective.

Could you tell us about the vision and mission that InVibes built upon? How has it been maintaining its pace in the RPA market?

Vishwanath Sangoji, Co-Founder & Vice-President -Business developments, InVibes: InVibes works with the vision to become a globally recognized, end-to-end process automation organization that offers innovative solutions and services in the process automation space. In addition, our vision is to provide unmatched solutions and services to clients and create

customer value by helping them take a leap in process automation where information technology (IT) and operations (Ops) will be combined to reduce human effort and improve workflow efficiency.

What are the kinds of flagship RPA offerings delivered to clients and what are the expectations met through these services?

Gangadhar Wali, Co-Founder & Vice -President, InVibes: Often, our customers spend considerable effort in running their operations - from a collation of information to periodical compliance requirements. The expectation of these enterprises is to significantly reduce these operational efforts at non-so significant costs and deliver bigger value after automating their process.

Our RPA offerings include InVibes RPA Services Team that collaborates with customers to automate their Business Processes by co-discovering new automation avenues, reducing manual tasks, and maximizing value by saving costs. Our RPA-as-a-service is intended to reduce the CAPEX burden of deploying RPA within the business as well as the liability of hiring RPA talents by leveraging our RPA expertise and solutions throughout the customer journey. The POC-as-service to businesses reduces the initial RPA investment and risk to customers. Once our customers are convinced with ROI and the advantage of implementing RPA-as-a-service, we implement the same to meet automation objectives.

Deepak Alur
C.T.O

V C Angadi,
CIO, BEML

Vishwanath Sangoji
Co-Founder & Vice President-Business developments

Cast some light on the RPA solutions that the company is currently working on?

Deepak Alur, C.T.O, InVibes: Often, process automation comes at a cost that many customers in our market segment cannot afford but would be in the need to simplify their business operations. For such customers, InVibes is focused on building RPA-as-a-service to help customers avoid CAPEX and leverage RPA as an OPEX model while still delivering the same value. Moreover, we are currently focused on delivering solutions related to tax processing which often is the most tedious and time-consuming among other business-focused processes.

Enlighten us about the success of the company's intervention in solving a complex scenario highlighting the solution or service and strategies deployed to draw positive outcomes.

Deepak Alur, C.T.O of InVibes: Recently, we delivered a turnkey solution to one of the public-sector units. Our RPA based solution helped to build a platform to automate health claim processing and modernize their healthcare offering to their employees and their dependents, across India. The solution built on this platform helped simplify their entire workflow by improving the admission process and hence saving valuable lives and quick discharge by automating the claim settlement process.

Our solution helped to reduce the departmental claims reimbursement effort by 90 percent, nullify duplicate claims, reduced claim errors and avoid fraudulent claims, and most importantly - have a central information repository that enables them to take seasonal decisions based on data from all their branches across India.

What is the future roadmap envisioned for InVibes?

Gangadhar Wali, Co-Founder and Vice President, InVibes: This year we have made significant progress in delivering solutions to Govt PSU, financial sectors, and healthcare sectors. Our focus this year is on the financial services domain with our RPA as a service model in the areas of invoice reconciliation, TDS payment process, legacy document transformation, filing of Tax returns (GST), Financial Auditing process, and more.

CXO SPEAKS

ATTENTION METRIC

By Vivek P, VP - Revenue Strategy, Times Internet

Vivek P,
VP - Revenue Strategy

The digital advertising industry's one of the prominent promises was transparency, and this was revolutionized by the 'click' metric. Click for advertisers was an ROI metric representing risk mitigation strategy resulting in large amounts of digital advertising capital allocated to digital medium.

The increasing competition, pressure to deliver consistent results and overt focus on short term ROI has marred the digital advertising landscape with evils such as clickbait and other abuses. If advertisers would look closely, they would find their focus or over focus on buying 'clicks', however, the clicks no longer have the same credibility they once carried. Also, digital, a advertising medium favourite for lower funnel advertisers, has moved-up in the favorability matrix for top-of the funnel advertisers.

Brands characterized by nearly decrepit feedback loops and developed sales cycles, also desire ad measurement metric beyond clicks and impressions. The desire for new ad measurement originates not only because of the need for better ROI metric, but also because there is a growing understanding that digital medium metric can be used to do much more by informing advertiser subtleties about the brand performances such as how much resonance an ad created for a brand.

Advertising is about buying and selling 'attention', while the click is an expression of interest not expression of attention, and hence, at best a proxy for attention. With the advent of data science and big data capabilities, today, it is possible for the digital advertising industry to transition from a proxy metric to actual attention metric. An added advantage of these actual attention metrics is that they capture the consumer experience holistically.

Viewability, a basic alternative unit of attention measurement, drives its value from the fact that an ad has

Viewability, a basic alternative unit of attention measurement, drives its value from the fact that an ad has to be on the viewable portion of the screen

to be on the viewable portion of the screen. This unit gives many commercial arrangements such as cost-per-thousand viewable impressions. Viewable impression can be defined as the impression seen by an audience; e.g. an ad at the bottom of the page may register an impression, but unless scrolled to the bottom and seen by a human being, it does not become a viewable impression. We, at Times Internet, have always strived to come-up with innovative technology led solutions for our advertisers, and in this process of continuous improvement, we churn-out several internal research. Moreover, viewable impressions are expected to impact Brand Lifts too, but the impact is slightly less pronounced as on the CTRs.

Viewable impressions has struggled with its own set of challenges including higher cost of viewable impression, detrimental impact on user experience, susceptibility to fraud and manipulation through obscure ads.

Moreover, something is amiss because viewable impressions do not differentiate between ads that are viewed for only a few seconds from the ones that are viewed for a few minutes. In this endeavour to find the right metric for attention measurement, one missing ingredient is time-in-view or duration of ad view. Buying ads on a time-in-view metric solves for ads with time as a representative of attention values the ads with more time spent more.

Time-in-view helps advertisers to understand several aspects such as response and engagement to different creatives within the same and different campaigns. An insight which is invaluable when combined with target audience and other related factors. These combined can act as a very insightful feedback loop for marketers during strategy and campaign design. However, time-in-view doesn't address share of attention, meaning there could be a number of ads in view at the same time for the same duration, but assuming that all the ads get equal attention which might not be true.

In the future, technology can be used to address the gaps left by time-in-view. Technological means such as tracking movement or interaction via a mouse or even eye, however, privacy norms would have to be kept in mind while designing such technological solutions, as not many users may not be comfortable sharing where one's mouse is pointing, leave alone what part of the screen eye is watching. With the evolving digital advertising landscape, proxies are no longer a measure of ROI of advertising budgets and in the dynamic and cluttered environment of digital advertising, an Attention Metric is the potential future media currency.

KANERIKA

One-Stop-Shop to Make Enterprises More Efficient

The impact of the pandemic on the economy and efforts towards recovery have encouraged businesses across industries to leverage technologies to ensure resilience, productivity, and profitability. Robotic Process Automation (RPA) technology is gaining widespread popularity helping businesses to reach their full potential and stay competitive by reimagining operational. Kanerika, headquartered in Austin with an Indian office in Hyderabad, is a global consulting firm building efficient enterprises with the deployment of automated, integrated, and responsive solutions. Kanerika crafts innovative strategies harnessing the power of proprietary digital consulting frameworks and compostable solution architecture. Further, in an exclusive interview with CIO Insider Bhupendra Chopra, Founder & CEO of Kanerika, explained how the firm helps some of the top brands worldwide by increasing their speed to respond to evolving market conditions, reducing their cost of operations, and empowering them with the right tools & insights for effective decision-making.

The snippets of the conversation with Bhupendra Chopra, Founder & CEO, Kanerika.

Bhupendra Chopra, Founder & CEO

Please throw some light on the inception story of Kanerika and the benchmarks it has set in the industry so far.

Kanerika was established in 2015 with the purpose of creating a global consulting company to solve data integration, analytics and automation problems for clients. Since its inception, it has been the founders' objective to pursue their mission of crafting efficient enterprises, which they stoutly believe is critical to sail through transitions effortlessly, remain exceedingly responsive, and improve business performance. Further, in 2016, Kanerika earned its first angel customer, Veraction (now Trax), a leading transportation technology provider. Kanerika started with product development of their spend analytics platform, and is now delivering a robust data intelligence system for enhanced decision making. After this, Dr. Reddy's, a multinational pharmaceuticals company, partnered with Kanerika. The firm helped them to significantly improve their response time through a comprehensive data architecture and solution for managing large-scaledata lake.

Additionally, in the next few years, Kanerika strengthened its expertise from data analytics to solution architecture for large enterprises. And because of this, the firm was recognized as one of the Top 10 Most Recommended Data Analytics Solutions Providers-2019 by the CIO Insider Magazine in their data analytics special edition. With such exceptional achievements, Kanerika expanded its domain expertise from Healthcare, Travel, and Logistics to Manufacturing, Retail, BFSI, Hi-tech, and Telecom industries in 2020. Along with this, we became implementation partners for Automation Anywhere and UiPath, UiPath and gold partners for Microsoft PowerBi.

Kanerika is moving faster than ever towards its mission with a renewed strategy to craft enterprise efficiency. Kanerika also launched Kompass, its flagship compostable solution architecture, driving the faster deployment of solutions with improved accuracy of reporting and analytics.

Could you give a brief description of the factors you take into consideration while suggesting the solution under your mission of 'crafting efficient enterprises'?

The most important factors that we look to identify are the tactical, loose ends, and immediate ROI for current/active painful items, while going through the technical deep-dive session with new customers, or while doing the business analysis phase of any new opportunity. It's essential to show the benefits of association within a predefined time rather than starting on long-term beneficial value creation methods.

Kanerika always prefers suggest- 'Start with small & step-by-step approach, rather than let me boil the ocean for you approach'. That way customers/ prospects can see and evaluate the efficiencies that we bring in operations, technologies, processes, and more, across the main pillars of our offerings such as, analytics, integration, and automation.

Briefly tell us about the workforce of the company responsible for its success.

Since our inception seven years ago, our staff have been our partners and assets in our growth. We have a large number of returning personnel, not just current employees. The force consists of a strong and hands-on technical team that understands the importance of staying relevant to the journey of value creation for customers. Be it open source technology experts or integration solutions team or process automation team, the entire Kanerika team is driven by our core values of being part of the customer team.

As Don Wilson, Head of Technology at Fortegra says, the Kanerika team has been very special as they create and execute projects as if it's their own and that sets us apart while creating efficiency, solutions, and values for our customers.

> Kanerika is moving faster than ever towards its mission with a renewed strategy to craft enterprise efficiency

How do you intend to bring in more enablements in your platform for a more supportive Kanerika? Brief us about your plans for the organization's future.

We are certainly growing in data analytics, data integration, and process automation markets. This is because we have successfully implemented these solutions with our Australia, Hongkong, US, Egypt, UK, and US-based customers. Our focus area is growing with more than 60 percent year-on-year and we have been able to get some key customers in insurance, manufacturing, logistics, supply chain, and retail verticals. Most recently we closed deals with two investment fund companies and one of the largest global trading services, company for process automation services as the operation cost of all human-involved services is increasing. Interestingly, we are also seeing rising bookings in NFT, blockchain, crypto, and metaverse opportunities as well. This would be the direction we'd be heading towards going forward.

CXO SPEAKS

QUANTUM COMPUTING & AI REVOLUTIONIZING CRYPTOGRAPHY & SECURITY

By Utpal Chakraborty, Chief Digital Officer, Allied Digital Services

In his 22 years long career, Utpal has worked with multinational corporations such as IBM, Capegemini, Firmenich, L&T Infotech, and YES Bank, to name few.

Utpal Chakraborty, Chief Digital Officer

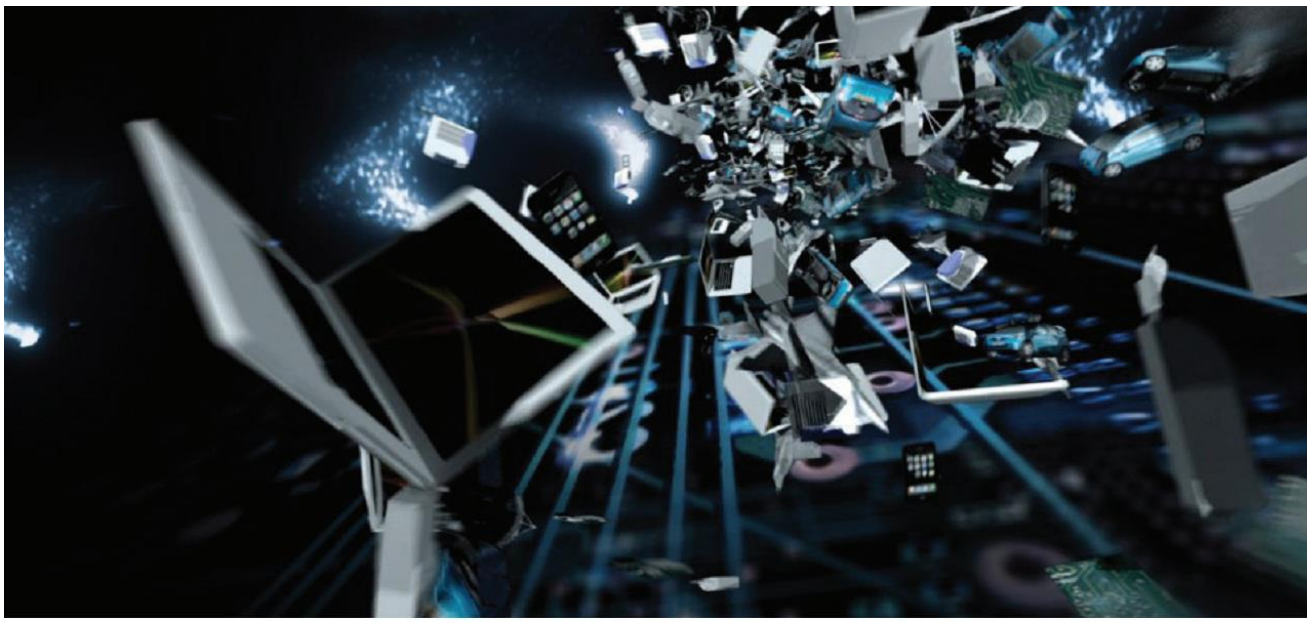
While the next big computer race is already underway, some of the biggest technology companies, including Google, Microsoft, IBM, and few others are already exploring their quantum computing technology in various avenues. Quantum computers would be used to create a new generation of very powerful, low-cost computing ecosystem that will cater to the demand of parallel computation.

We will not go into the fundamentals of cryptography and quantum properties like superposition and interference or 'Shor's Algorithm' in this article. We would rather briefly discuss the challenges that are emerging in the conventional cryptographic and security arena, as quantum computers are adding-up more qubits onto it and becoming more powerful.

Cryptographers have been working for years to prepare for the possible arrival of quantum computers by developing so called quantum-secure encryption methods. Fearful about the fact that quantum breakthroughs are imminent and threaten the sanctity of known encryption algorithms, cryptographers were seeking to develop quantum-resistant crypto that can withstand the intervention of a quantum computers.

It all started with the assumption that classical computers will never be powerful enough to crack AES and RAS. But all assumptions came under threat when quantum computers came into picture. Although AES-256 symmetric keys are believed to be quantum resistant, if the quantum algorithm can run on a large-scale quantum computer, it will be capable of cracking even such strong encryptions to the point where all your encrypted data at rest as well as transit are at risk. Of course, quantum computers will have to add more qubits onto itself before it can break such a fairly complex encryption. But that's just a matter of time, because the speed it is advancing at, the day is not far when it will be able to crack almost every encryption that is built using conventional methods.

Good news is, given the work already underway, researchers have started developing quantum secure cryptography before large quantum computers with large number of qubits become available to break RSA. Quantum computers are unlikely to



> The use of quantum cryptography now will not only provide immediate protection for your data, but also secures high-quality data and ensures that data with long shelf life is protected against future attacks

pose a practical threat to symmetric cryptography and asymmetric cryptography at least for some years. The reason being the quantum behavior of subatomic particles qubits still do not remain stable for long enough. The 'Shor Algorithm' used by a quantum computer with enough stable qubits to break through today's public-key cryptography still have some time, so there is no risk at least for now. However, the asymmetry of cryptography like RSA on which we rely today could be broken by the quantum computers.

Also called 'quantum-resistant' or 'post-quantum', the next generation of cryptography is designed to withstand quantum computers are being developed in collaboration with the University of California, Berkeley, and the National Institute of Standards and Technology (NIST) in the US. We will have to look at the post-quantum cryptography algorithm, which claims to be able to protect data even from the capabilities of quantum computers, called quantum attack. This type of mechanism is called quantum secure cryptography.

The use of quantum cryptography now will not only provide immediate protection for your data, but also secures high-quality data and ensures that data with long shelf life is protected against future attacks. It is important that a protocol with information-theoretical security means that security is not based on arithmetical assumptions and remains secure. In addition, the key management systems and protocols used are also inherently protected against attacks by quantum computers.

Faced with this looming threat, IT decision-makers should consider post-quantum cryptography, where a secure attack by a quantum computer would take place in the critical IT systems tomorrow. Today's public key cryptography has proven to be safe from mathematical attacks, but not from quantum computers. The good side is, harnessing quantum computing and AI, it's going to bring very exciting opportunities in almost every field and industry. With the massive parallelism that quantum computing brings to the table, combined with the cognitive element of AI, many possibilities to solve critical problems that we used to dismiss as unsolvable till now.

CIO SPEAKS

DATA SCIENCE & ANALYTICS – THE INDIAN SCENARIO

Yashwanth Kumar,
Head - Analytics & Insight

By Yashwanth Kumar, Head - Analytics & Insight, Titan Company

The global data science market size is expected to reach $140.9 billion by 2024. How do you see this market growing in India? What will be the major factors driving this growth?

India, like the rest of the world, is witnessing a rapid growth in the use of Data Science to drive superior business results. There are few underlying reasons for this trend –

- Increasing Digitisation of our world is creating new data streams, which are now being captured, stored and mined for extracting valuable business insights.
- As the benefits of Data Science become more obvious, more and more companies are adopting the use of Data and Analytics in their everyday work.
- The breadth of Data Science applications is also growing rapidly, as newer and newer methods such as IoT analytics become more widespread.
- Most companies have progressed from 'proof of concept' projects to serious engagements either by setting their own Data Science functions or by partnering with Data Science providers

To sum-up, this increasing appetite for Data Science in India, which is further growing and is likely to continue into the future.

Looking back at shoppers' past activity often isn't a good enough indication of what they will do next. Historical data analysis often delivers imperfect analysis and outcome. How should data analytics be processed, particularly keeping in mind the diversity and variables of the retail industry?

Historical data, if analysed correctly, can indeed make useful predictions about customer behaviours. However, in order to do so, we need to leverage the combination of having the right data, deep domain knowledge and the technical expertise to use Machine Learning algorithms. In order to ensure that the right data for all use cases is captured, processed and stored for easy access, a comprehensive Data management strategy needs to be adopted. Without creating this foundational element, no comprehensive Data analysis is possible.

Next, for complex use cases, it is important to adopt a 'man in the loop' approach, where a domain expert's knowledge is used to validate hypothesis, understand causality, select modelling variables, and more. This approach ensures that the modelling and analysis truly reflects real world scenarios and therefore results are accurate as well as consistent.

Finally, today's advanced Machine Learning algorithms do have the ability to learn 'weak signals', interpret complex patterns and leverage large data sets to make accurate predictions. However, we still need a capable team equipped with the right tools and platforms to utilize these technologies effectively.

Supply chains are already driven by numbers and analytics, but retailers have been slow to embrace the power of real time analytics and harnessing huge, unstructured data sets. How should the SMEs approach to leverage data science in their operation?

For evolved firms, who are already leveraging their supply chain and production data for insights, exploring real time and unstructured data analytics can certainly be very useful. However, it is important to put the horse before the cart. We need to adopt a business-first, not a technology-first approach. In other words, it would be useful for SMEs/ retailers to first map their current supply chain challenges or opportunities to potential analytics solutions to determine the need for real time or big data use cases.

If in this process, the need for real time analytics or big data arises, then it becomes worthwhile for retailers/SMEs to invest and adopt such technologies. In fact, leveraging these methodologies for evolved companies can have long term transformative effects, if done correctly.

With the scale and complexity of modern data, the only way to truly harness the value is to automate the process of data discovery, preparation and blending of disparate data. How can this be achieved?

In my view, it is difficult, if not impossible to completely automate the entire data discovery process. Even with sophisticated AI/ML algorithms, it is generally accepted that domain knowledge and the Data Scientist's experience plays a crucial role in delivering more real world usable and consistent solutions. However, in the more operational aspects of the Data Scientist's role such as preparing data sets, or testing and scoring models, automation is playing a key role. Today, automation in the processing, storage and serving of data or autonomous model lifecycle management for managing ML algorithms is helping Data Scientists work more effectively.

LAST COMMENT

DIGITAL TRANSFORMATION: ARE WE ON THE RIGHT TRACK?

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'Digital Transformation' is one of those buzzwords whose original meaning has gotten lost in translation, yet it's evident that effective technology use is more important than ever before.

Adopting technology for the sake of it isn't the goal of the digital transformation. Going digital is a long term strategy that should make a company 'more agile' where it matters, allowing it to focus on innovation and experience to build frictionless and seamless shopping journeys across channels.

Traditional marketing tactics like mass targeting and siloes business operations are no longer effective. Instead, clients should be treated as individuals, with relevant offers delivered at their preferred time, location, and channel based on their region, behavior, and purchasing history. While retail consumers grumble about distinct offers for online customers, most of the online buyers find it frustrating that the digital support alternatives are not as good as physical support.

Many corporate leaders, on the other hand, regard digital transformation as only a question of implementing new technologies while overlooking the human aspects of the process. As a result, sometimes the technology team took over ownership of the project from conception to completion, while the business team loses insights and becomes unable to adjust and adopt new systems. To make it successful, it is important for the business team to lead the project from the front, aligning internal processes and workforces with new trends through more rigorous training, commitments and ownerships. The main difference between success and failure is cross-functional and technical team planning and coordination.

To eliminate internal inefficiencies and working boundaries, everyone from the top down should take ownership and responsibility for creating a boundary-free, seamless, and frictionless experience for end customers.

The Human Angle

As retailers struggle to transform their entire business to become more customer-centric, personnel management becomes a key battleground in the fight to elevate customer service from 'the expected' to 'the difference'. While payroll is the most controlled expense, the complexities of managing in-store workers might appear overwhelming at times. Humans provide the necessary creativity, skill, and invention that computers lack. As a result, it is people, not technology, who develop products for better experience. Whatever knowledge you impart to the system, it will act and adapt accordingly.

Businesses succeed not because of creative products, but because of company culture, which can continually identify problems, take feedback, and collaborate across departments to accomplish 'business purpose and objective' that can be translated into customer experience and, eventually, income stream.

How to achieve this?

Rather than focusing on major milestones when migrating, firms should employ an agile strategy to generate smaller pieces of alterations and enhancements while engaging with functional departments. Instead of depending on technology teams to drive their strategy, everyone should grasp the digital ecosystem and make product success with fastest turnaround. Furthermore, automation demands more severe monitoring and upgrading owing to changing customer behavior and trends, and it cannot be left alone to make decisions.

The Bottom Line

Digital transformation does not entail a comprehensive technological revolution across all functions; rather, if smaller stepping stones have been achieved, you are on the right approach in achieving your end goals.

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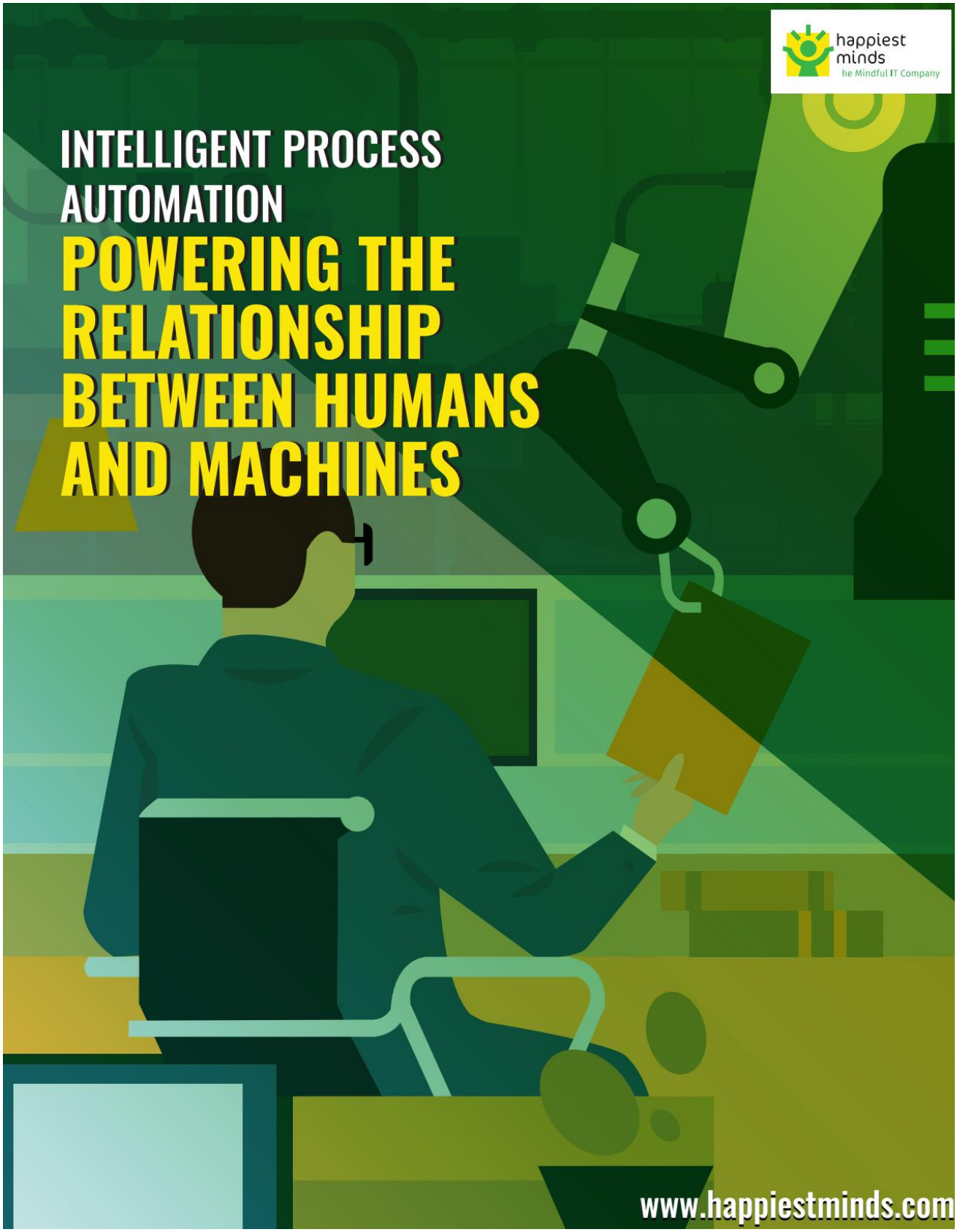
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