Disrupt your competition with...

Robotic Process Automation

American Technology Consulting

What is RPA?

Technology disruption has evolved past a buzzword and immersed itself into mainstream culture. Since its coinage in the mid-90s by Clayton Christensen in his book “The Innovator’s Dilemma,” its meaning has transitioned, much like the technology itself.

Popular examples of technology disruptors include e-commerce and ride-sharing. Both have altered the way shopping is done or transportation is used. Another burgeoning example of technology disruption is Robotic Process Automation, or RPA.

To understand RPA, it’s important to clarify a couple of other technical terms. RPA is a form of Artificial Intelligence, or AI, which allows computer systems to perform tasks typically reserved for human intelligence. Remember the hit movie trilogy *The Matrix*? While clearly a huge exaggeration and dramatized to feed fear, its concept of AI has merit. Whether referred to as computers, robots, AI or additional names, their emergence are beginning to serve a greater role in our society.

Another portion of RPA, and probably the most important, is automation. Automation refers to the subset of your work that is mundane and repetitive, often performed by human workers. It includes any task that bottlenecks productivity. Implementing automation, whether robotically, industrially, or through software, is dependent on the task itself and helps to levy the workload of employees.

RPA combines AI and automation functionality and enables a software bot to automate repetitive, high-volume tasks for your organization, much like a human(s) does, but with greater speed and accuracy. Tasks can range from very simple automation or complex operations often seen in AI.

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How Did We Get Here?

Success requires adaptation, and there is no greater way to change than technical adherence.

Just like all technology, some businesses have already embraced RPA and have fully incorporated it into their enterprises, others are towing the line and vetting it, and the remaining are actively avoiding the advancement of technology—just like stagnant companies have done for years. And guess what? Those organizations are dead or dying.

So how did we get here? How did our over-reliance on offshoring create another facet of corporate consumption that disrupts the way we work?

It's no surprise that outsourcing technical, data center/customer service, and administration tasks greatly decreases the spending of many companies. The costs of goods/services and labor availability is non-comparable domestically versus abroad. This has hurt the U.S. economy greatly in the past.

However, beyond offshore work investments, companies are constantly seeking out new ways to save money while simultaneously churning a healthy profit, hence the growing popularity of RPA in everyday work. As labor costs keep rising, including overseas, RPA is proving to be more than just monetarily viable.

RPA Benefits

Reap the benefits of RPA with an in-depth analysis of its cost-cutting measures, technical capabilities, and work dynamic adaptations.

Beyond increasing your ROI, RPA is an often-overlooked resource that bundles a plethora of assets into a competent player for tech disruption. Its implementation provides massive benefits from the top-down of your organization, assisting with long-term growth while also remaining a fundamental part in everyday business. Its key features include:

Cost Reduction: An aspect that makes RPA so attractive is its cost saving benefits. Most companies first look at this when considering the use of RPA. We'll explore the surprising statistics and explain how heavily regulated industries can use RPA to cut costs while staying compliant.

Agility and Adaptation to Processes: From increased efficiency to speed process times, to high velocity production with maintained and improved data accuracy, RPA augments your business acumen and leads to greater decisions. We'll navigate through the how and show you the why.

Greater Employee Satisfaction: One of the biggest misconceptions from RPA novices is the risk of employee retaliation or an inability to accept new processes. This is strikingly inconsistent with RPA research as we will explain.

Increased Customer Satisfaction: While many companies tout that employees are their best investment (we agree at ATC), we can't overlook customers and the service we provide them. We treat employees well because it mirrors our customer service. We're always looking for improved employee relations as it translates to our interactions with clients.

At ATC, we're dependable and have guidelines for follow up and other reach out measures. RPA ensures we keep on track with our correspondence and search out opportunities to build relationships that improve quality. We'll tell you how this works.

Upgraded security: There is always risk when using tools that regularly assess, analyze, and interpret data. Yet, when developed, tested, and implemented properly, RPA can reduce potential threats, such as cyber attacks. We'll give pointers to ensure your information remains protected.

Repetitive Tasks

Eliminates the mundane, repetitive tasks typically performed manually.

External System Integration

Integrates with external systems as needed without hassle.

Report Creation

Accesses and synthesizes data from multiple source to create user-friendly reports.

Information Collection

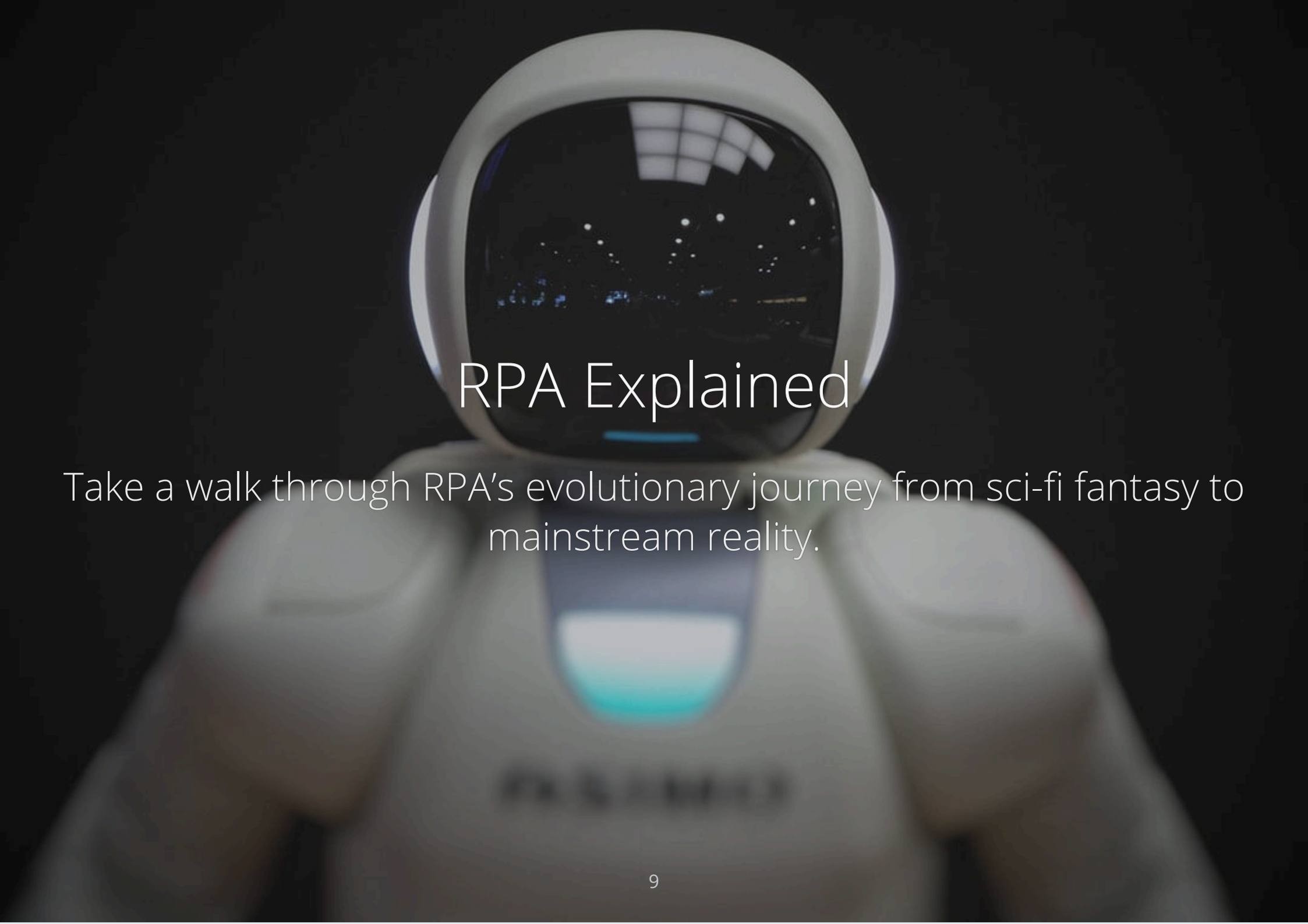
Quickly gathers information via multiple systems simultaneously.

Compliance Fulfillment

Data cleanses large amounts of information.

Data Validation & Conversion

Automates the culling of data and successfully converts it when launching a new system, migration or integration.



RPA Explained

Take a walk through RPA’s evolutionary journey from sci-fi fantasy to mainstream reality.

RPA has a rich history that's evolved over time.

There's some debate whether RPA is its own new development or just an extension of other tech ideas, most notably automation. Semantics aside, RPA's emergence has been decades in the making.

Its humble roots date back to the pre-internet era of the early '90s when screen scraping became "the first technology that created a bridge between current systems and incompatible legacy systems." Filling this gap allowed companies to use technology instead of manual labor in certain instances. Screen scraping proved limiting as its compatibility with existing systems and applications was spotty and its reliance on HTML proved too difficult to manage for the average employee, so more adaptable, versatile technologies were sought out.

Enter workflow automation and management tools. The introduction of workflow automation software to corporations was revolutionary in its capability of cutting out the middleman, aka the human worker, when performing data entry and order processing functions. Fulfillment rates improved as did speed, accuracy and efficiency.

After the establishment of workflow automation, artificial intelligence became a central factor in the rise of RPA. Robots, or the thought of them, have existed for nearly a century. From George Orwell's groundbreaking novel 1984 that depicts a technical society used for egregious political purposes to the 1960s cartoon The Jetsons, which employs a robotic maid named Rosie, the engineering of robotics has transformed from envisioned fantasy to inevitable reality.

RPA emanated from the blending of these technologies, slowly morphing into its current state. It started making headway in 2000 and is still considered a developing technology that has used the newest innovations of each of its predecessors to continue its maturation.

Some of the latest advancements since its early days still includes dependency on screen scraping (more so for its current capabilities) and workflow automation, but its usage has been refined for maximum outcomes.

RPA no longer requires coding to work. Instead it utilizes drag and drop features that encourage easy automation and workflow management. When used in conjunction with AI, RPA provides the opportunity to "reason, collect and extract knowledge, recognize patterns, learn and adapt to new situations or environments."

Nowadays, with continuous tech advancement, AI and RPA are collaborating more and merging together for stringent streamlined processes and utilization. As RPA keeps gaining steam, so will its demand and growth path. In fact, yearly projections keep growing, including McKinsey and Company predicting that by 2025 RPA's reach globally could equal up to $6.7 trillion. For now, we work with what we have, and stay open and adaptable to new shifts.

RPA COST REDUCTION

Arguably the most seductive of the aforementioned benefits, RPA savings statistics are staggering. Your organization can anticipate an estimated 25-40 percent savings using RPA versus 10% from outsourced resources. How is this done exactly?

Human labor costs money and many nuances exist between qualitative output measures of a person versus that of a machine. Eliminating the cost of an employee(s) while boosting output scores exponentially with the aid of a machine(s) can significantly drive up savings fast. It is more complex than an employee's paycheck and the benefits oftentimes associated with it.

If the work is structure-oriented, repetitive, and rule-based, then RPA is advantageous based on work production. Handling times can be reduced up to 40 percent and processing costs lowered by 80 percent. Humans can't work at the speed, accuracy, and efficiency of a machine programmed to perform the same type of work. There is no down time, work schedule, distractions, or other personal obligations. RPA can dedicate itself fully to the tasks it's staffed with. It's easy to save money when eliminating ineffective practices that cost more money than the replacements that increase output.

USING RPA ACROSS REGULATED INDUSTRIES

The Robotic Process Automation (RPA) Opportunity Varies by Industry and Function

Regulated industries with high-volume and transactional business processes offer the most potential

RPA adoption by buyer industry and function

Potential for RPA

Low → High

Illustrative processes with higher potential

Function	F&A	Procurement	Human Resource	Contact Center	Industry-Specific Processes	
Industry	Accounts receivable, accounts payable, general ledger	Invoice processing, requisition-to-purchase order	Payroll, hiring, candidate management	Customer Service		
Banking & Financial Services						Cards Activation Frauds Claim Discovery
Insurance						Claims processing New business preparation
Healthcare						Reports automation System reconciliation
Manufacturing						Bills of material (BOM) generation
Hi-tech & Telecom						Service order management Quality reporting
Energy & Utilities						Account setup Meter-reading validation

While RPA is beneficial across the entire business spectrum, it is particularly attractive to highly regulated industries. One of the main reasons for this is cost savings, which applies across all industries. However, there are added benefits to utilizing RPA when compliance is a mandatory part of your work existence.

If you've ever dealt with compliance, you are used to the rules and regulations set by your industry, and often enough, by the federal government. Persnickety, and sometimes obstinate, many of these required guidelines seem arbitrary, yet your organization must follow them on a grand scale. Affected areas typically include sales/marketing, privacy rights, financial rules, and general business practices that change irregularly without proper reasoning and are undefinable at times. Compliance is a necessary, but unwanted, headache. After all, if you don't comply you may face heavy fines. So, it is a "get with the program" deal.

RPA can make the process easier. As stringent compliance standards continue to compound, keeping up with the changes can be taxing on your organization, especially if you're just trying to stay afloat. Utilizing RPA can be a game changer in these circumstances.

Compliance is complicated. Learn how RPA breaks it down into easier solutions and manageability.

Understanding Compliance

Legalities and the complicated weave it leaves on society have made seemingly “free enterprises” more regulated than ever. But with growing restrictions, most businesses can’t keep up on all fronts: technically, operationally, on an executive level, administratively, and even by a lack of talent needed to support the necessary endeavors.

Luckily, there is RPA software that supports compliance and enables you to streamline your processes. Here’s how:

Greater Oversight Levels. RPA gives you control of executing your own operational processes internally. As the automation process occurs, RPA software robots perform actions that are logged and can be monitored or reviewed at any time. This gives you greater oversight, allowing you and your employees to confront compliance issues head on as they arise.

Better Reliability and Consistency. Once RPA has an established workflow and is set up accordingly, you should expect optimal execution as the solution will function identically every time without errors. Useful implemental areas include processing, purchasing order issuing, data transfer and migration components.

Improved Audit Preparation. Audits. The bane of any company’s existence. While a stressor during the process, and a dreaded threat when the possibility looms, audits are normal occurrences to any organization. However, that doesn’t alleviate the amount of work involved when you face an audit.

Since RPA bots have their actions saved to an activity log, you are fully prepared to extrapolate important data if requested during an external audit. The log provides necessary process information (types of processes performed, how performed, resistances to automation capabilities and why, and human involvement with issues), so handling a regulatory audit is hopefully seamless.

Essentially, effective compliance reporting and integrated data archives position your organization as mindfully advanced since anticipatory compliance is managed proactively, and internal reviews of compliance statuses are routinely conducted.

Adapting Compliance

An adaptive way RPA in changing the regulative industry is through cognitive compliance, a concept that involves utilizing the value chain and keeping up with regulatory changes. For example, say a mid-sized financial services company uses compliance-based automation to support compliance measures. What's the likely outcome?

Direct results include process optimization and reduced human errors. When applied on a larger scale, RPA enables the company to utilize compliance-related statistics to configure and align regulatory mandates with operational goals.

AGILITY AND PROCESS ADAPTATION

Have you ever seen the movie Limitless starring Bradley Cooper?

It depicts a struggling writer who consumes a magical pill that allows him to fully utilize his brain. At first his cognitive capabilities are extraordinary, enhancing his life exponentially with unlimited knowledge, power, and success. However, after a while he starts experiencing side effects, most noticeably lapses of memory. He goes to great lengths to counteract these side effects, and without giving away the entire plot or ending, the applied lesson is that humans have limits. Limits that machines don't have and the reason meshing humans and RPA together in a work situation is not only plausible, but profitable.

Phasing out employees from performing everyday tasks that are easily replaced with RPA has altered the success of businesses incorporating the practice for the better. Results speak for themselves:


UiPath RPA STATISTICS
60%
COST REDUCTION
Whichever industry you're in, RPA can drive significant savings.
80%
EFFICIENCY INCREASE
Up to 80% of standard, rule-based tasks can be automated, letting you increase workloads without increasing headcount.
32X
FASTER SPEED PROCESS TIMES
Using automation over manual can speed up work processes by up to 32x.
100%
IMPROVED DATA ACCURACY
An increase by up to 100 percent in data accuracy thanks to a zero error probability and 24/7 operational capacity.
30%
INCREASE BUSINESS CAPACITY
RPA can save the average worker 30 percent of their time that can be spent on other more sophisticated and time-sensitive work functions. In a sense, RPA is taking the place of one (or more) human workers, while employers are simultaneously producing greater output with the new time they have to dedicate their energy elsewhere.
57%
CUSTOMER SATISFACTION INCREASE
Companies report significant increases in consumer happiness when RPA is part of the customer experience.
100%
ENHANCEMENT IN EMPLOYEE SATISFACTION
Removing mundane tasks from employees improves employee satisfaction and employee retention.
55%
IMPROVED DECISION-MAKING
Companies report significant increases in consumer happiness when RPA is part of the customer experience.

You may ask how these statistics are even possible. Upon closer examination, the differences aren't so startling. Take, for example, the reduction of data entry and other manual errors. Unlike with humans, machines don't get distracted. After the initial setup, RPA can continuously perform its computed actions without interruptions, leaving it free from manual errors. No more worrying about mistyping numbers or the mix-up of codes. RPA eliminates the mistakes humans don't even know they make in their work.

This is not to say that RPA automation is foolproof. Bots may malfunction on occasion, which is why it's beneficial to still involve human workers in the oversight process.

Another component where RPA clearly has the upper hand is with speed of service. Back office processes can weigh down your productivity as employees manually enter forms into multiple systems, sometimes repetitively due to a low-quality tech integration system. Oftentimes employees are made to toggle endlessly between systems to copy and manipulate data. This leads to progress blockage, quickly overcome with RPA since it only works correctly after dedicated setup and testing. RPA enables communication between all needed systems and nonstop work activity inevitably leads to increased speed.

A sort of pattern begins to form. A reduction in errors and increase in speeds starts a domino effect, impacting data accuracy and quality, and produces an all-encompassing effect. Reliability is at the heart of predictive and data analytics, so a pattern of success is a huge determinant of future results and achievement and a big reason why RPA is useful under these circumstances.

For instance, as RPA and AI interact with legacy systems, they discover data that previously was hard to extract. This is equivalent to discovering the entrance to a goldmine and trying to collect it with a shovel versus using dynamite. Now that RPA has uncovered a wider and more beneficial scope for data collection, analytical teams have greater access to information and easier means to correct predictions and provide more customized and sophisticated analysis.

You might think this sounds great in theory, but need a bit more convincing that its representative of real-life scenarios. Luckily, there is a lot of experience-based evidence available to corroborate the RPA ideology and its transformative performance.

One such case study involves a staffing company unable to fill quota each month as viable prospects dwindled, and job openings soared in the oversaturated job market of IT. Our client used RPA to mine necessary data that encouraged recruitment and sales. The process identified qualified candidates and their skill sets and distributed that information accordingly to recruiters. Simultaneously, certain requirement barriers were broken down, leading to an upsurge of qualified applicants. For the full report, please visit our ATC Case Study: RPA Speeds Up Filling Time For Staffing Companies to see the direct impact the addition of RPA can have on an organization.


GREATER EMPLOYEE SATISFACTION

One of the biggest misconceptions surrounding RPA implementation is that it will replace human employees, putting millions of workers out of jobs. RPA is designed to take away menial and repetitive processes from employees, leaving them with more time to focus on more meaningful work.

In a way, pulling workers off tasks that bring no cognitive value to their position or allows them to flourish professionally in other areas, is a disservice. The addition of RPA to your organization is shown to actually increase employee satisfaction.

Nobody is trying to hide the fact that RPA implementation can drastically change the workforce landscape. However, confusion and misinformation leads to erroneous messages that companies are trying to force out workers in favor of robots. This isn't the case and has been misconstrued long enough.

As mentioned above, RPA sanctions off the repetitive, tedious tasks so employees can primarily focus on value-added activities, including those that incorporate problem solving, decision making, and personal interaction. This arrangement enhances your organization's production output while concurrently creating an atmosphere that benefits your employees and your bottom line with more time devoted to initiatives often overlooked due to time constraints.

Just as productivity levels for RPA-manned tasks increase, data shows the same occurs with employees given different responsibilities. Common feedback from companies who have transitioned employees to different roles after RPA implementation report greater production, higher satisfaction levels, and increased support for value-added tasks. Employees have emphasized a greater sense of accomplishment, more enjoyment in customer-facing roles, and a higher employee experience.

According to key findings, much of the employee satisfaction level after RPA fulfillment comes down to company culture. Those who embrace RPA and provide rewarding alternatives to disenfranchised employees experience the best results from an employee, customer, and RPA state of mind.

Despite all the positive statistics and examples, we can't discount concerns that frequently pop up addressing RPA. A lot of the fear and doubt is built around the misconceptions we've already covered. We must be realistic that no matter how hard we try to prove the RPA concept, there will always be resistance to the unknown.

Whether based on psychological hurdles, cultural discrepancies, or other valid issues, it is important to recognize the reluctancy businesses face. After all, unless these pain points are resolved, pain points will always remain.

Maybe approaching these challenges from another viewpoint can calm the waters. Emphatically imploring proper and highly tested RPA deployment, along with routinely highlighting the importance of change, can make a dent. Combined with an emphasis on appropriate training, intensive communication, and a collaborative effort, the cycle of uncertainty can be irrevocably broken.

Framing RPA as a supplement to your workforce could encourage employees to earlier adoption versus the mentality that it will overtake jobs. Marketing and selling its relevance is as equally important as structuring, deploying, and managing RPA.


DRIVE CUSTOMER SATISFACTION

"I can't get no satisfaction, I can't get no satisfaction."

- Rolling Stones.

Your customers can with RPA, and we'll tell you how.

Beyond the cost savings differential, the biggest "before and after" montage of RPA is increased customer satisfaction. Whether a client, potential customer, online user, or simply browsing and a few keywords pop up that shows RPA similar interests, you and your company are on a marketing radar.

Why the deluge of interest? It comes down to wanting to satisfy customers in new ways that haven't been actively promoted, yet have tried-and-tested conclusions. So maybe now you're just learning about RPA, in the usage consideration stage, or have already gone through an implementation.

Wherever you currently are in the process, the underlying fact is you are in the process. And as long as you remain in this process, or even if you drop out, we and similar backers of RPA, have touch points and nurturing campaigns that gauge your interest levels, response metrics, online activity, and other valuable data that can provide us with useful information to determine next steps.

Why you might ask? Because we want to develop your trust, have you recognize our expertise, and stay a devoted customer through highs and lows. We value customer satisfaction and try to improve our sales systems to ensure we stay on target and in touch with everyone remotely interested in RPA. So of course we do this by using technology.

How RPA Can Make Satisfying Customers Easier

Whether through robotic or human means, customers and leads need to be attended to regularly. There is a sense of urgency and neediness among customers, making them researching powerhouses, investment dynamos, and hard to re-engage once they discover greener pastures.

Their decisions might be meticulously planned or impulse buys. Whatever the case, once a consumer decides the time to purchase is now, they expect quick turnaround and immediate follow up. And with the technology available at their fingertips, a company is always open day or night in this global era, and with fulfillment expectancy at all-time highs, you might have to go beyond your human workload to keep up with demand and expectations. RPA is helpful in these situations as it can work with minimal supervision to keep your business running smoothly outside of normal hours of operation.

Another common concern among customers is the sharing of information. Data is routinely collected on consumers wherever they visit online. You might think this is harmful given privacy concerns at record levels, but the same information also serves to customize the user experience. Customers take some accountability in openly sharing tidbits of their personal information online regularly with the expectation of an enhanced customer experience. This is done with personalized deals, unique shopping experiences, content, and more when visiting sites and companies.

Automation can also prevent customers from becoming frustrated and impatient. For example, customers get tired of repeating their identifying information when calling into a customer service or help data center, receiving correspondence that misspells their names or has other incorrect personal information, and offers that don’t coincide with their buying preferences.

RPA helps to eliminate these redundancies and improve satisfaction by using its integration capabilities to capture, analyze, and double-check the data your customers have shared across all platforms, making user experience more seamless, personalized, and enjoyable. Having RPA perform these tasks also opens up the door for creative ideas and further innovation by your employees since they have more time to dedicate to these initiatives, and that ultimately benefits the customer.

"The customer's perception is your reality." -*Kate Zabriskie*


UPGRADED SECURITY

Data and information shared online is always vulnerable to security threats. You might be concerned that implementing RPA across your organization can increase these threats, but automation can actually provide greater protection.

One such way is through information security and compliance. If you are in a highly regulated industry or collect personal and sensitive data for business practices, then you are aware of the multitude of security and privacy risks, whether done intentionally or accidentally. Removing people from the process of handling sensitive information, can mitigate accidental disclosure and help deter purposeful privacy breaches, as the fewer hands accessing the information, the better.

Another privacy aspect RPA reinforces is business continuity and disaster recovery. If a malfunction occurs or a natural disaster strikes, companies that recover quickly and experience the least amount of disruption among their everyday operations, will flourish. This means you must have the ability to quickly restore business functionality and have an appropriate business continuity plan in place. RPA can ensure your backup plan is foolproof and provide extra safeguards by harboring copies of your processes and storing them off-site. This goes hand in hand with what we stated earlier: RPA is a great resource for audit preparation. Automation leaves behind a data collection trail that is gapless, and helps your organization prove compliance and due diligence, including video trails of every action taken.

It might seem counterintuitive to limit human intervention with RPA, but logically it makes sense. It’s so easy for individuals to be careless or to misuse data or abuse access privileges. RPA implementation takes this into consideration and crafts strategies to prevent such instances. In a way, RPA compensates as a cybersecurity professional(s) to protect your organization.

In addition to human errors, malicious employees seeking to harm, and natural disasters, the most common type of threats to your data is random cyber attacks. Many cyber security threats are sophisticated in their nature so employing more advanced methods to protect private data, such as RPA, provides additional security measures that counteract the cyber threats with extra layers of security and reduction in response time to potential risks.

The future of cyber security starts and ends with RPA.

Future of RPA

Now that you've gained insight into RPA and how to implement it into everyday life, you might wonder what is on the horizon for this technology. If predictions hold true, RPA's presence and influence will continue to grow.

The shift to RPA will change the workforce landscape as automation continues to take away manual jobs, fine-tune computer aided and formatting processes, and remains a key driver behind predictive analytics. RPA adoption will become more widespread and the technology itself will infuse with AI.

Other extensions of RPA (such as Smart Process Automation, or SPA, that automates unstructured data needs that can't be managed fully by robotics), will attain prominence as additional technology is pioneered. RPA will be used alongside other techniques and tools as integration becomes more commonplace as it's understandable that RPA doesn't function optimally or expand properly by itself. The human workforce will be weaved throughout this delicate technical transformation tapestry, taking on additional roles and responsibilities as old priorities are eradicated, creating a balance of creativity, innovation, and unrelenting evolution.

Get In Touch

RPA isn't a passing fad. It's not just for tech innovators or early adopters as it is a disruptor across all industries. It is a significant business tool that makes a lasting impact on your organization and encompasses a long list of benefits. You can either embrace the disruption or avoid it. Whichever route you choose, ATC is here to walk with you on your journey. Reach out today for a detailed consultation on RPA and the lasting imprint it will have on your future.

If you have any questions or want to know more, please get in touch with us.

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