Beyond RPA: Transforming Legacy Automation with Intelligent Solutions

© Hyperscience 2023

Contents

- 03 Is RPA Losing Its Edge?
- 04 Businesses are Outgrowing RPA
- 07 Where RPA Falls Short
- 09 Going Beyond RPA with Intelligent Automation
- 11 Benefits of Intelligent Automation
- 13 Customer Story: Intelligent Automation in Action
- 14 Augmenting RPA with Intelligent Automation

Is RPA Losing Its Edge?

Nearly every industry is feeling the pressure from economic uncertainty and a tight labor market. It's during these times that organizations look to increase efficiencies and cut costs, targeting inefficient manual processes that hamper agility and prevent the delivery of a differentiating product or service.

But economic headwinds don't need to be a source of uncertainty. In fact, Gartner argues that a recession presents an opportunity for businesses to build a long-term competitive advantage by investing in the right digital initiatives.¹

In an effort to maintain a competitive edge, many businesses have turned to RPA. Unfortunately, these companies have also discovered that the solution they opted for is far more rigid than they first believed—as soon as a process changes, the automation breaks, requiring constant testing and rebuilding of bots.

What most business leaders don't realize is that only 20% of their available data can be processed by RPA. Without including processes that handle unstructured data (something RPA struggles with) in the automation pipeline, automation efforts screech to a halt.



Only 20% of a company's available data can be processed by RPA

This ebook will help you better understand the limitations of traditional RPA solutions, as well as offer insight about how intelligent automation adds significant value to an existing RPA setup. With a more accurate and flexible automation solution in place, businesses can optimize operations while better supporting the needs of customers.

Businesses are Outgrowing RPA

Historically, RPA has been the enterprise's automation tool of choice for one simple reason—RPA solutions perform rules-based tasks quickly and accurately. However, as digital transformation initiatives mature, businesses are shifting their focus from automating singular, simple tasks to the automation of entire complex, end-to-end processes.

If digital transformation is akin to running a marathon, RPA will only take you the first few miles. While it works for simple, well-defined tasks, it lacks the intelligence and flexibility required to automate increasingly complex processes—and it won't get you to the finish line.

According to a September 2022 report from HFS Research²:





Only 40% of purchased RPA licenses have actually been used.

Only 60% of automation initiatives meet client expectations.

With an RPA solution in place, it can actually be more challenging to sunset legacy software or even perform basic updates. As processes change, software robots (called digital workers by many RPA vendors) break—and create costly mess in doing so. Regarding this, the HFS Research study estimates the shelf life of an RPA Bot to be between 9-18 months. After that timeframe, system and process changes either necessitate a rework or make it redundant.

The Macro Problem: Mountains of Unstructured Data

Unstructured data includes information acquired via emails and text-heavy documents and PDFs, along with rich media formats like images, video, and voice/audio. According to estimates from Gartner, unstructured data accounts for as much as 80% of an enterprise's total data.³

RPA relies on rigid business rules and a template-based approach that can't handle the unpredictability and high variability of most unstructured formats. An unstructured document, like a contract or a medical record, with long paragraphs of text, doesn't have predefined or predictable fields to extract information from.

What this means for companies deploying RPA-centric automation is that 80% of their data remains trapped in documents and other content types that their automation solution can't read.

							1055	1012	01.16		1.00		1					1		345	1941	1111		Contraction of				1 COMPANY			1.11	and the Party of	31-1
						These of the second						100		1200		and a second	100	and the second	81					SHUE!								-	
									1		10020		-	100				-	-	-	L.S.	-	1111	1000	1011	-							
						and l		1190		-		SEC.	-		i.i.		-	1000						-	-						and Print	1.12	
						Time.	100	-		1.154	1			1200		1000		1.11		tes:	-	-			-	NU-PF			-		and the second second		
						-	0.685			125	-		Contraction of				1944	104		1						1111							
						10222	1116	1							317	Rear I		and a state of the		0.052	No.	1.	S-nt	110	-							-	-
													THE!	1000	anne.					Ramp.	1001	100-	-	-	and a	-					C REAL PROPERTY AND	e	
				-	-	-		1025		10			2300	1000		HARD		-	anet	1000	-	-				1111	-	a martin					a a la fi
	1.0	1	17		1.4	(inst	all in					TENK.	121	STATE OF	1		TREN	1000							1	100	100		Thursday is				
-	1.	10.00						1 Bit					See.	100			No.			21752	Real Property lies	they	1222	10000	-		Later of the later	and the second second	THE R. P. LEWIS CO.				1
						-		1825		- 41			inter of			and.	*BEH	No.R.		1031	-	-		-	-	These at	1		and the second	Contraction of the		1	
					4	-	an fr		100				-	Saus.	-		1602	-	1000	-			-			-	144	1000	-				
	11-14					1		1	18.5		1000	1000		Fall	100	-	-			-			-	-	-			TISH	In the second	-	112-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1		
						BPC.		100		-							Sad?	122	See.	1 and	-	100					T. Contract						
			l territ	-	100	-		-			- 11							107.00					and the second	ALC: N	•4bx	TEAL	1000						
				Sec. open	100 A			1								1111		-									-		1			1	
						100		114		1111	-			513	land a				1.4									and all	all	1000			021
									1	140		1.10		HARE	- est	1224	1000	-	-		1.00				10.00				1221111				
	П			1. 5			-	1186			inti				1	1295	-	and the second			and a	THE .	1211	THE O	100		IST IS						
								-		and a					luna.			1122				1100	-	1000			A STATE OF		INCOME.				-510
Hard						1000		1	(Lines)		10021		- and			1.2		1111		100						-					Contraction of the		
							1		1.00	-				2				1000						111	1.1	100		L PIN		anus 11		Bunnes :	1
	ы	11							1111												48 C					100		Pilling.	A COLORADO	-		a terre a	
							-					.	and the second		- Alert	2010			are t							100		A CONTRACTOR	IN ROAD IN	POL DE			10 A
								100				111		81.	E Mari	1.1							11.11			115 pt		The second		the state	in section	-	- 10
																					1521		8		-	-		1141					
						Real P								7944			and a									1						11111	
							1.00		1				100		ine l								Stort				- CONTRACT		IRON IN THE				
							and							-							4	11			1.0		a state of the second			10		THE R	
in the second									-					-	No.2	-	Pon.		-	12.0	Illes.	-		-			1.11.11	110 11	A CONTRACTOR OF				
						-		a series			100	1111		-	alart	18SE	-	1.00	-	-								-	COLUMN DE			LUNSED O	
	1.1		11				1011						-			ALC: NO		Statist.	the state		-		-	Um	1000	1000	1 1000	COMPANY.			ومحمود	1012101	
													100	The same	Contract No.	100						-	1000	(WER	100	2002							

RPA's failure to automate processes reliant on unstructured data impedes an organization's economic resilience and operational agility in several ways:

Increased Costs

Organizations that rely heavily on manual processes to handle unstructured data may see a significant increase in costs due to the need for manual labor. This can be particularly challenging for organizations that operate in highly competitive or fast-moving markets, where keeping costs low is critical for maintaining a competitive edge.

Inefficient Processes

RPA is not designed to handle unstructured data and as a result, manual processes are required to process this type of data which can lead to inefficiency. This can slow down operations and reduce the overall agility of an organization, making it more difficult to respond quickly to changing conditions or customer needs.

Restricted Insights

Unstructured data can contain valuable insights that organizations can use to improve their operations and make better-informed decisions. However, if RPA cannot process this data, organizations may miss out on these insights, which can limit their ability to innovate and adapt.

Limited Scalability

As an organization grows and the volume of unstructured data increases, manual processes can become overwhelming, limiting the scalability of the organization.

RPA's inability to automate processes involving unstructured data can have a significant impact on an organization's ability to operate efficiently, respond to changing market conditions, and extract valuable insights from data.

For companies seeking resilience and agility, this unstructured data must be unlocked.

Where RPA Falls Short

When RPA was first introduced, it offered a quick and simple way to automate some of the repetitive back office business processes without the need of APIs. As a result, RPA came to be viewed as the easiest point of entry for many digital transformation initiatives. However, as organizations began implementing RPA solutions and those implementations matured, companies began seeing first-hand the constraints of RPA. Some of those limitations include:

Struggling with Complex Processes

Business processes are often quite complex with multiple steps, conditions, and decisions to be made before arriving at a final outcome. RPA bots may struggle with such complexity, and as a result, they may not be able to automate the entire process.

For example, business processes frequently change, such as when a software application or even an entire system receives an upgrade. For complex processes with many moving parts, even the slightest change can cause an RPA bot to break.

Reliance on Templates

For RPA to work with document-centric processes (which are the vast majority), it requires a new template to be created for each document variance.

Before RPA bots can accurately automate invoice processing, a template must be created for each invoice format received, which can easily be in the hundreds or thousands for large organizations. Highly variable documents are harder to standardize, resulting in high maintenance costs and process exceptions that must be handled manually.

Requiring Additional Technology

Where RPA fails, additional automation tools such as intelligent document processing (IDP) or optical character recognition (OCR) are needed to translate the unstructured information into structured data that—once a template has been created—can be processed by RPA.

While many RPA vendors already offer these capabilities through 3rdparty providers, it's not proprietary technology, which adds complexity and more costs to existing automation initiatives.

Poor Scalability

RPA struggles to scale as it relies on predefined rules and templates to automate tasks. As the number of processes and tasks increase, it becomes more challenging to manage and maintain the bots, and there is a risk of the rules and templates becoming out of date or inconsistent. When a process becomes more complex and exceptions arise, it can become harder for the RPA to handle it and the process needs to be reevaluated.

Failure to Recognize and Learn From Mistakes

Since not all possible exceptions can be programmed into its logic, a software bot will simply stop or, even worse, carry on unaware of the mistake it made. If unchecked, this leads to real-world ramifications, such as an individual not receiving their disability benefit or a delayed insurance claim.

Going Beyond RPA with Intelligent Automation

Intelligent automation represents a shift in automation where machines imitate human actions and possess cognitive abilities, typically through the use of machine learning. Intelligent automation solutions can comprehend structured and unstructured data, as well as learn from ingested data, making it possible for businesses to automate processes more fully.

Intelligent document processing (IDP) is a powerful example of intelligent automation in action, helping organizations increase efficiency and accuracy when dealing with huge volumes of data.

"Organizations looking for ways to apply AI pragmatically today should prioritize investigating intelligent document processing."⁴

Neil Ward-Dutton

Vice President of AI, Automation, and Analytics, IDC Europe

IDP technologies add value by increasing agility, as well as automation scope and rate, and helps process documents with greater speed and accuracy than traditional automation technology.

Intelligent Automation Vs. RPA

Intelligent automation helps organizations build automated processes that are flexible and work in tandem with business objectives. Where RPA is more rigid and would break down or throw an exception when the process changes, intelligent automation has the ability to continuously learn and adapt to changes in the business. Intelligent automation accomplishes increasingly complex tasks with better accuracy, greater connectivity, and endless flexibility.

The table below outlines the optimal uses for both RPA and intelligent automation.

Use RPA for:	Use Intelligent Automation For:
 Copying and pasting structured, machine- readable data 	 Classifying diverse document types, streamlining the indexing and sorting
 Clicking and dragging files through various file paths 	 Extracting machine readable data from complex documents (handwritten, machine- printed, low resolution, or distorted)
 If / then statements 	
— Opening emails & attachments without	 Involving human supervision only when needed, validating data against other sources.

- understanding the context or content
- Making calculations

- enriching data
- Extracting insights such as the intent, sentiment, keywords, etc. for better decision-making
- Routing complete, accurate data to your preferred platform for faster processing

Benefits of Intelligent Automation

Artificial intelligence (AI) and its related technologies are creating a sea of change, altering the way businesses simplify and expedite complex workflows. Processes like mortgage loan originations, benefits claims, and social services programs are prime candidates for smarter automation practices.

Companies desiring greater flexibility and resilience have begun the shift from RPA alone to intelligent automation solutions, where machine learning (ML) and AI work alongside humans for faster and more accurate data processing, end-to-end automation, and increased operational scalability.

Here are some of the advantages of intelligent automation solutions.

Equipped for Unstructured Data

By leveraging AI and ML, this form of automation is able to turn humanmade content into machine-readable data. ML enables the automated processing of low resolution images, scanned documents, PDFs—all the unstructured data mentioned previously—even with messy handwritten text, crossed out information, or other data degradations.



Increased Accuracy and Efficiency

Intelligent automation handles increasingly complex processes with greater accuracy and reliability. Instead of a single bot repeatedly performing the same task with no variation, imagine a solution that automates dynamic, data-centric workflows while being smart enough to know when to ask for human interaction to achieve better outcomes and make better decisions.



Improved Customer Experience

Intelligent automation has the potential to greatly improve the customer experience by providing more personalized and efficient service, increasing availability, and proactively addressing customer needs. It can also help organizations make more informed decisions by providing them with more accurate and consistent customer data.

Better Employee Engagement

Intelligent automation has the potential to improve employee engagement by reducing repetitive tasks, encouraging skills development, and by improving process efficiency. As a result, employees can spend more time on more meaningful work, which can lead to higher satisfaction, motivation and better job performance.



More End-to-End Automation

Intelligent automation can provide more end-to-end automation of processes for businesses by automating repetitive tasks, identifying and prioritizing tasks, predictive maintenance, process optimization, and integration with other systems. This can help organizations improve efficiency, reduce costs, and make better-informed decisions without relying on multiple disparate tools.

Customer Story: Intelligent Automation in Action

At CI Financial, when an agent managed a case, they manually read, processed, and transcribed any documents related to that case. Manual processing strained the company's operations and challenged its ability to scale.

Integrating Intelligent Automation with RPA

While CI's existing RPA solution streamlined some rules-based tasks for the company, it ultimately lacked the ability to read unstructured document data, which proved to be a roadblock in unlocking greater automation initiatives. By bolstering their RPA solution with Hyperscience, CI Financial could unlock the data previously trapped in unstructured documents.

Automation, Fully Realized

CI Financial uses a combination of RPA and intelligent automation to automate document-driven processes. Hyperscience helps reduce the time it takes agents to type case documents by 60%, giving them more time to focus on other activities that contribute to providing the best customer experience.

"We experienced a 142% increase in the number of documents routed to the automation, and we've seen a 253% increase in documents processed through the automation queue."

— Martin Cheung

Vice President of Digital Transformation & Automation CI Financial

Augmenting RPA with Intelligent Automation

For those relying solely on RPA to carry the load of today's complex business processes—the limitations of rules-based technology can't keep up with modern business. Companies that complement their existing automation stack with ML technology that continuously learns from data and improves over time, increase the speed and quality of their operations and business outcomes while cutting costs, mitigating risks, and boosting revenue.

Discover how intelligent document processing can improve your organization's efficiency.



Watch a demo