WHITE PAPER

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Work Like Tomorrow.

INTELLIGENT AUTOMATION

USE NEXT GENERATION RPA TO DESIGN, BUILD AND MANAGE
YOUR DIGITAL WORKFORCE OF THE FUTURE, TODAY.

KOFAX

"DON'T JUST BUILD BOTS."

"True business value is achieved through a sustainable, scalable, open platform that connects RPA and AI solutions.

INTELLIGENT AUTOMATION is the next-generation of RPA that brings together RPA-extended capabilities such as workflow orchestration, unstructured data capture, intelligent OCR, machine learning, mobile and omni-channel, advanced analytics and e-signature onto one open platform to seamlessly work with RPA to drive maximum business value."

— Chris Huff, Chief Strategy Officer, Kofax

ABOUT THE AUTHOR

As Chief Strategy Officer at Kofax, Chris Huff develops and drives the company's global strategic initiatives, intelligent automation (IA) thought leadership and cross-functional horizontal integration. Prior to Kofax, Chris spent five years at Deloitte Consulting, where he led the U.S. Public Sector Robotics and Cognitive Automation practice during the emergence of RPA. Chris has delivered RPA to over 30 billion-dollar enterprises and implemented five different RPA vendor solutions. He is often called on by publications and conferences as a thought leader in the next wave of RPA.

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KEY TAKEAWAYS

1 True business value is rarely achieved by RPA alone.

2 Intelligent Automation is next-generation RPA that solves end-to-end automation challenges.

3 The managed digital workforce empowers organizations to reimagine the customer experience, add workforce capacity without headcount and free up time so employees can focus on higher-value work.

INTRODUCTION

When the automated teller machine (ATM) went mainstream, there was widespread fear that ATMs would automate away and displace bank tellers. But what actually happened once the dust settled on those shiny new machines?

Despite predictions to the contrary, macro trends and workforce economics worked to everyone's benefit. Banks improved productivity and increased profitability by transforming the workforce from dispensing cash (a low-value transactional activity) to originating additional loans for customers (a higher-value, judgement-based activity). Employees were rewarded with new skills, making them more marketable and mobile while enjoying higher wages. And finally, customer experience was enhanced through 24/7 access, faster transaction times and better accuracy.

The workplace is experiencing a similar type of automation renaissance with robotic process automation (RPA), a technology that uses software robots to automate repetitive tasks and manual processes—enhancing the work of your employees by interacting with websites, business and desktop applications, databases and people to execute repetitive and often mundane work.

Roughly half the activities that organizations pay workers to perform have the potential to be automated with technology—but more jobs will change than will be automated away.

—"A Future That Works: Automation, Employment, and Productivity," McKinsey Global Institute

Just a few years ago RPA was described as a job killer, but through actual implementations and quantitative analysis we are seeing the "ATM dynamic" play out. RPA is allowing organizations to shift people to higher-value work, which is driving increased productivity, revenue and margin expansion. Individual employees are enjoying an up-skill evolution that will keep them employed and engaged as part of the future workforce.

Now that the global economy is embracing RPA as the new digital workforce and shifting people from "data gatherers" to "data users," we can focus on moving forward. What's next for exceptional organizations that want to accelerate their digital transformation and automation strategy and realize even more RPA business value?

Incredible customer experiences are built on automation infrastructure.

THE CURRENT STATE OF RPA

The largest macro trend in the global economy is improving the customer experience (CX), which IDC calls "the key differentiator for companies going forward."[1] Some call it the "Amazon effect": A company that started out as a reseller of books has over time built an ecosystem that addresses the customer's fundamental desire of getting what they want, when they want and at the price they want.

Automation is the infrastructure on which an incredible customer experience is based—connecting data, documents, people, systems and insights in a process that's so streamlined, customers focus on the CX outcome of the automation rather than the automation itself.

HOW RPA IS PERFORMING AS A PROCESS PROBLEM-SOLVER

The "Amazon effect" is forcing organizations to rethink three key attributes of the RPA technologies they've implemented to address issues like customer experience and operational productivity:

1. Product: The RPA product in its current state is successful in smaller pilots, but is facing difficulty in scaling because key RPA-extended capabilities are missing.

2. Delivery Model: Delivery models are struggling due to reliance on external dependencies, such as browsers and operating systems that must remain stable for most RPA solutions to remain operational.

3. Price/Licensing: Pricing is affordable, but the current licensing model is inefficient since standard licensing is structured so that one bot license equals one physical or virtual machine. This means that most RPA consumers are paying for capacity they may never use and are investing in unnecessary physical desktops or virtual machines/desktops.

These three factors are manageable when first exploring RPA as a pilot, but quickly prove to be restrictive as organizations look to scale. The question is simple: How can your organization move from an RPA pilot or proof of concept to full-scale Amazon-like streamlined processes?

Forrester estimates that, by 2021, there will be over 4 million robots doing office and administrative- and sales-related tasks.

—The Forrester Wave™: Robotic Process Automation, Q2 2018

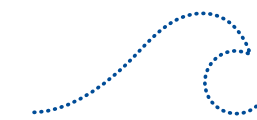[1] IDC FutureScape: Worldwide Customer Experience 2018 Predictions

INTELLIGENT AUTOMATION delivers an unmatched capability to acquire, process, analyze and deliver insightful data across the enterprise that cannot be delivered by RPA alone.
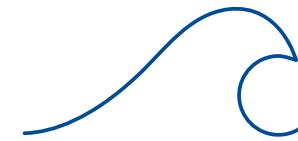
INTELLIGENT AUTOMATION: THE NEXT GENERATION OF RPA

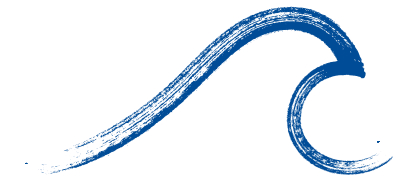RPA's adoption in organizations can be described in three waves.

WAVE I	WAVE II	WAVE III
TOE IN THE WATER	RPA PILOT	INTELLIGENT AUTOMATION
Investigating RPA with small proof of concept or pilot	Conducting a successful RPA proof of concept or pilot (5-10 bots)	Scaling and sustaining RPA across enterprise (managing a digital workforce)

Achieving the true value of RPA requires moving from pure RPA to an Intelligent Automation platform.

WAVE I consists of organizations and individuals investigating RPA and/or running small proofs of concept or pilots in a single department.

WAVE II consists of those implementing successful proofs of concept or pilots. Most organizations feel that once they get to 5-10 RPA bots, the manual work to maintain operational bots derails the whole point of automation as a digital transformation initiative.

WAVE III which few are currently in, are those organizations sustaining scaled operations. While Waves I and II are primarily focused on building individual RPA bots, moving to Wave III requires a shift from simply "building bots" to "managing a digital workforce."

Wave III allows organizations to drive maximum business value, where product, delivery model and pricing/licensing align to deliver quantitative and qualitative return on investment.

We call Wave III intelligent automation (IA). The core of intelligent automation is RPA, but the key to scaling across the enterprise is extending the capabilities of RPA with features such as workflow orchestration, unstructured data capture, intelligent OCR, mobile and omni-channel, machine learning, advanced analytics and e-signature onto a single open platform.

This platform approach significantly advances RPA from a point solution to a full-featured suite of complementary tools that integrate seamlessly with AI solutions such as advanced algorithms, open source machine learning like Python, natural language processing and business intelligence tools. An intelligent automation platform delivers the capability to acquire, process, analyze and deliver insightful data across the enterprise that cannot be delivered by RPA alone.

FOUR KEY COMPONENTS OF A BEST-IN-CLASS IA PLATFORM

To achieve strategic business goals like reimagining the customer experience, adding workforce capacity without headcount and driving innovation, organizations must rethink how they have historically done business. When it comes to an IA platform, organizations should, at a minimum, demand four things from providers:

IA CORE FOUR

UNIFIED PLATFORM

A unified platform of core and extended RPA features capable of automating end to-end processes across the enterprise.

INTELLIGENT WORKFLOW

Built-in intelligent workflow orchestration to manage the digital workforce at scale.

EASY INTEGRATION

An open platform capable of integrating with any third-party artificial intelligence and cognitive solution.

EFFICIENT LICENSING

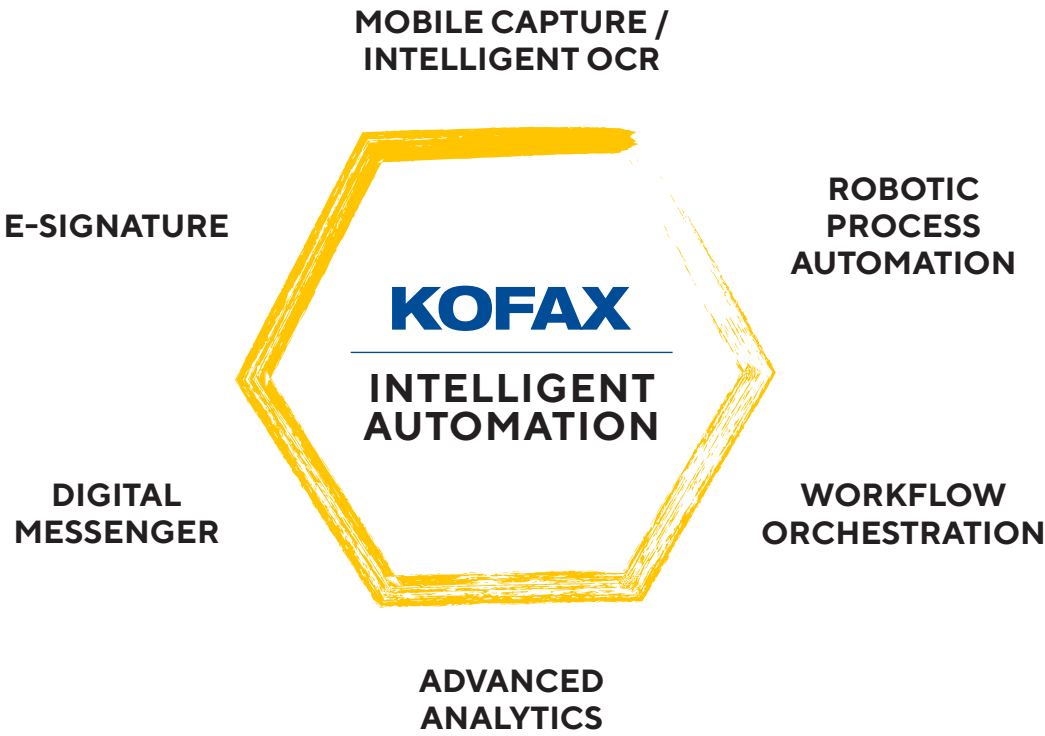Efficient concurrent licensing model to keep costs low relative to usage.

The ability to augment RPA becomes the game-changer.
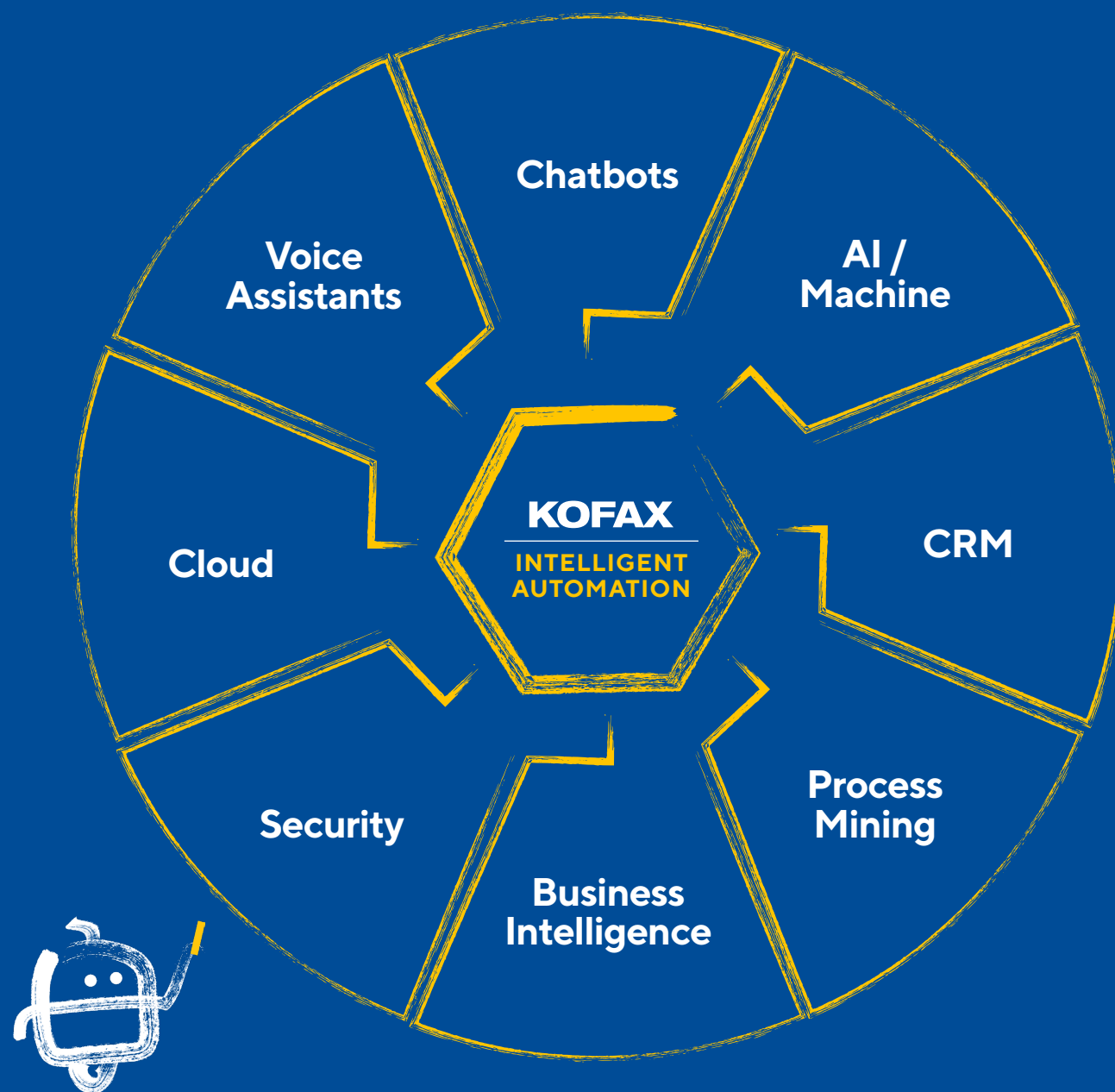
KOFAX INTELLIGENT AUTOMATION

Kofax Intelligent Automation (Kofax IA) is a unified platform of core RPA and RPA-extended features that allow organizations to live comfortably in Wave III where they are managing RPA (i.e. the digital workforce) at scale.

Kofax IA allows organizations to stay within a single platform while automating end-to-end processes and enabling artificial intelligence. These capabilities include:

MOBILE CAPTURE / INTELLIGENT OCR

E-SIGNATURE

ROBOTIC PROCESS AUTOMATION

KOFAX
INTELLIGENT AUTOMATION

DIGITAL MESSENGER

WORKFLOW ORCHESTRATION

ADVANCED ANALYTICS

Most organizations will not require all features on day one, but as organizations expand from single-function pilots to cross-functional enterprise use, the ability to augment RPA becomes the game-changer.

Kofax IA supports these six core RPA-extended capabilities with an open platform that integrates with third-party artificial intelligence, open-source machine learning and cognitive solutions. This enables business units to expand end-to-end process automation with additional solutions to acquire, process, analyze and deliver insightful data across the enterprise.
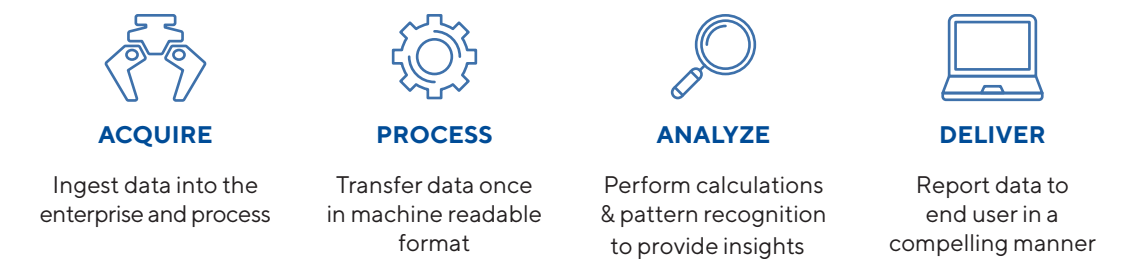
Kofax IA integrates with third-party solutions to deliver unmatched intelligent automation capability across the enterprise.

THE KOFAX INTELLIGENT AUTOMATION FRAMEWORK

Kofax IA is functionally agnostic—built to solve automation problems across all lines of business including financial management, acquisition, supply chain, human resources, shared services and operations.

RPA is at the core of Kofax IA, with extended features to enhance RPA's automation capabilities. That begs the question: Which extended features do you need? Our ACQUIRE–PROCESS– ANALYZE–DELIVER framework is a simple way to diagnose the business problem and determine which Kofax IA platform feature is required.

ACQUIRE	PROCESS	ANALYZE	DELIVER
Ingest data into the enterprise and process	Transfer data once in machine readable format	Perform calculations & pattern recognition to provide insights	Report data to end user in a compelling manner

Business needs dictate your ecosystem of Intelligent Automation tools. Workflow orchestration (intelligent digital project management) is continuous.

To show how the Kofax Intelligent Automation framework operates, let's step through each element:

ACQUIRE: Most organizations acquire and ingest various forms of data, including paper, images, electronic and web-based documents, chat and voice. A true enterprise RPA solution should be able to ingest all forms and turn the data into a machine-readable format. Kofax IA has multi-channel information capture, intelligent OCR, mobile and RPA features to handle the ingestion.

PROCESS: Once data has been extracted and transformed into machine-readable format, Kofax IA has robust RPA capabilities that integrate information between any system, repository, application, browser or mainframe. As the core of IA, RPA's low-cost, non-disruptive system integration and rapid implementation enable it to easily automate repetitive, replicable, routine tasks that have traditionally been too difficult to integrate or too low-volume for process automation platforms or ERPs to handle.

ANALYZE: Current RPA (Waves I and II) typically focus on analyzing how well individual RPA bots perform. Kofax IA moves beyond measuring individual bots by also focusing on advanced analytics to measure licensing utilization and overall digital workforce orchestration. Kofax IA is also open to third-party AI or cognitive solutions to include client-generated algorithms or open

source code such as Python and R. These advanced models perform complex calculations and execute behavioral analysis and pattern recognition to provide insights back to the workforce. Kofax IA also provides process intelligence for real-time visibility into performance of entire business processes.

DELIVER: Once the data has been analyzed by either Kofax IA advanced analytics or a third-party AI solution, RPA plugs the data into a third-party visualization dashboard. Kofax IA also provides the ability to apply, encrypt and validate e-signatures and deliver customer communications through encrypted and secure email. Information from any source can also be automatically fed into business processes, workflows, enterprise applications and repositories.

Two example use cases put the Kofax IA framework into context:

FINANCE AND ACCOUNTING:

Keying in invoices or sales orders manually is slow and prone to error. Kofax IA ingests the information (no matter the format), automatically classifies and extracts the data, integrates the information with your ERP, analyzes the performance of not just the IA platform itself but of the holistic invoicing or sales order process, and delivers those time-sensitive insights to executives for optimizing financial and operational performance.
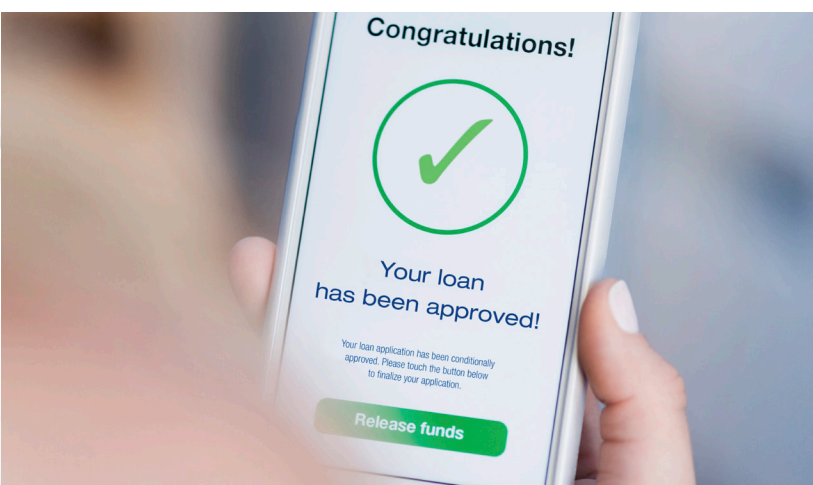
CUSTOMER ONBOARDING:

Onboarding usually involves in-person trips to your organization or laborious scanning of documents; and providing real-time progress updates is challenging. With Kofax IA, customers submit documents by photographing them with a smartphone. The information is automatically extracted, verified and processed with RPA and workflow orchestration, and customers are kept in the loop with timely status communications, on their channel of choice. Advanced analytics tools uncover opportunities to grow accounts and optimize processes, and all data is seamlessly synchronized with your organization's systems and departments.

CONCLUSION

As we've seen in Waves I and II, RPA is a great baseline capability that automates time-consuming and error-prone drudge work to improve the customer and employee experience and deliver operational savings. But in order to achieve the business case and value that top executives demand, organizations must move beyond RPA to an intelligent automation platform that builds and manages the digital workforce and redefines the future of work.

Kofax Intelligent Automation is a powerful yet affordable unified solution that empowers organizations to move past the headaches of current RPA pilots.

Designed specifically to enable organizations to build and manage a digital workforce of hundreds or thousands of bots, Kofax IA is your robust and future-proof platform.

For more information, visit KOFAX.COM.

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