Intelligent Process Automation

The key to automating, orchestrating, and optimizing the modern workplace
It's time to break the backlog
The rise of digitally-native customers, emergence of big data infrastructure, and maturation of AI-related technologies has made it easier than ever for innovative companies to disrupt an industry and—seemingly overnight—spawn new leaders.

For startups, this change is good news. Never in the life of entrepreneurs has it been easier to innovate and outpace incumbents. Driven by plummeting cost, the democratization of technology increased access to funds. And a rising entrepreneurial culture led to hundreds of startups attacking traditional markets—Uber, Twitch, Tesla, Hired, GitHub, WhatsApp, Airbnb, Snapchat, Waze, and the list goes on.

Startups are achieving scale faster than analog companies ever have. Where the average Fortune 500 company took 20 years to reach a market capitalization of $1 billion, Google managed it in only 8 years. Uber, Snapchat, and Xiaomi did it in 3 years or less.

Leaving established companies faced with a do or die decision—**disrupt or be disrupted**.
Digital transformation:
The eternal journey

For nearly a decade, executives from legacy companies have embraced digital transformation to differentiate from incumbents and stave off emerging competition. But analog incumbents looking to become digital enterprises face two main challenges:

1. The business model that served them well for decades has been disrupted by digital innovation, and it no longer works as desired.

2. Their attempts to create viable, digitally-transformed business processes—that are automated and optimized—are left sitting in a queue of projects and priorities, with no hope of getting quickly resourced.

As a result, customers and employees are stuck dealing with manual, broken processes—and businesses remain at risk of being disrupted.

Both in the boardroom and the popular press, the conversation surrounding digital transformation has taken a bleak turn.

Once an achievable destination, digital transformation has now become an ongoing—never-ending—journey.
The large (and growing) IT delivery gap

Popular press often cites change management and organizational structure as the biggest obstacles to realizing digital transformation. However, intelligent automation research from McKinsey & Company suggests the biggest challenge is far more fundamental.

Even though we’ve been talking about digital transformation for nearly a decade, 68% of business processes remain highly manual. When you dig into why so few processes are automated, it’s clear that the true obstacle to digital transformation is a constraint on IT.

Despite their best intentions and true commitment to the endeavor, there simply aren’t enough hours in the day to optimize the thousands of processes across their enterprise.

As a result, the projects most critical to the CEO get prioritized. While the people operating day-to-day business—like sales, finance, HR, marketing, etc.—are left tracking projects in an IT backlog.

But with the emergence of new technologies and the rapid push to digitize business, the process automation gap is growing wider by the day. So, the probability of any given HR, finance, sales, or legal workflow getting automated is slim.
While enterprise IT departments are struggling to keep up with demands from the line of business (LOB), startups—eating away at competitors' core value propositions and customer bases—aren't waiting around for IT. This pressure has forced the line of business to take control of their own technology decisions. According to IDC, 2017 was the year line of business outspent IT on software—spending $150.7 billion vs. $64.7 billion. Except for internal operation teams, most information workers, across every enterprise department, have the authority to make technology purchasing decisions.

**DOES YOUR DEPARTMENT HAVE AUTHORITY TO MAKE PURCHASES OF TECHNOLOGY PRODUCTS AND SERVICES?**

<table>
<thead>
<tr>
<th>Department</th>
<th>Yes (%)</th>
<th>No (%)</th>
</tr>
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<tbody>
<tr>
<td>R&amp;D</td>
<td>62%</td>
<td>3%</td>
</tr>
<tr>
<td>Sales</td>
<td>62%</td>
<td>7%</td>
</tr>
<tr>
<td>Marketing</td>
<td>60%</td>
<td>8%</td>
</tr>
<tr>
<td>Finance</td>
<td>58%</td>
<td>5%</td>
</tr>
<tr>
<td>Operations</td>
<td>48%</td>
<td>5%</td>
</tr>
<tr>
<td>Total</td>
<td>58%</td>
<td>5%</td>
</tr>
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Custom vs. packaged applications

With newfound technology budgets, the LOB is faced with a choice—buy packaged applications and get to market quickly, or leverage developers to build highly-flexible custom apps that meet their specific needs.

Given the limitations of time and resources, most technology decisions lead the line of business to choose packaged applications. The quick time to deploy drove early success, but caused the number of SaaS applications deployed in various enterprise departments to spiral out of control.

AVERAGE NUMBER OF CLOUD SERVICES USED BY CATEGORY, GLOBAL APRIL 2017:

- Marketing: 91
- Collaboration: 70
- CRM: 43
- Cloud storage: 27
Stuck between a rock and a hard place

As time has passed, the limitations of packaged applications has been exposed. Packaged apps are simply too costly and too siloed—with every application operating independently—to keep buying them for the automation of every process.

The fact that there is no easy way to get one application to talk to another is a major problem—resulting in very fragmented technology infrastructures.

Automating any business process requires packaged applications to work together, forcing the line of business to once again file tickets with IT to build custom apps. It’s a cyclical approach to digital transformation that has many organizations stuck—unable to realize its full promise.

Gartner predicts that by 2020, 75% of application purchases supporting digital business will be “build” not “buy.”
Breaking the backlog

Simply adding more IT resources isn't the answer. The pool of developers around the world—around 25 million people—is limited, expensive, and overall difficult to hire and retain.

It's time to break the backlog once and for all. Empower people like business analysts and power users to automate and optimize their own business processes.

And, if there's any hope of gaining LOB adoption and freeing up IT demands, this requires a platform that's easy enough for line of business, trusted by IT, and truly no code—not just low code.

There are many benefits to no code platforms. But the biggest gain comes from an organization's ability to rapidly get tens, hundreds, or even thousands of power users automating their finance, sales, legal, HR, and marketing processes. Enabling them to move at “the speed of business.” Not the speed of the IT department.
Welcome to the era of intelligent process automation.
Intelligence: The new currency of business

No code process automation platforms have enabled enterprises to take a huge step forward in automating the long tail of business processes. But the rise of artificial intelligence in its various forms—machine learning (ML), natural language processing (NLP), deep learning, etc.—are enabling companies to not only move at the speed of business, but to do it more intelligently.

Over a decade ago, Nintex pioneered the move to no code process automation. Now, we’re pushing forward to realize the promise of supplementing that powerful solution with machine intelligence. This effort is moving us into the 4th wave of process automation, known as Intelligent Process Automation (IPA).
Intelligent Process Automation: Core portfolio capabilities

There are 6 core capabilities for any Intelligent Process Automation portfolio:

- **ADVANCED WORKFLOW**: Automate any business process—from simple to sophisticated—with drag and drop, no code workflow.

- **DOCUMENT GENERATION**: Automatically create consistent, compliant, up-to-date documents with the push of a button.

- **MOBILE APPS & FORMS**: Leverage mobile devices and forms to capture critical data—online or offline.

- **ROBOTIC PROCESS AUTOMATION**: Automate highly repetitive processes that a person would typically perform.

- **PROCESS INTELLIGENCE**: Govern, analyze, and drive the efficiency of process automation with real-time analytics and insights.

- **MACHINE INTELLIGENCE**: Get assistance in completing tasks with best-of-breed machine learning and natural language processes.
### Any Intelligent Process Automation platform should meet the following requirements:

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<tr>
<th><strong>INTUITIVE</strong></th>
<th><strong>INTEGRATED</strong></th>
<th><strong>INTELLIGENT</strong></th>
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<tr>
<td>Regardless of your role in an organization, your workflow and content automation tools must be easy to design, participate, understand, and resolve. Think no code solutions that are easy enough for line of business and trusted by IT.</td>
<td>For process automation to be easy and adaptable—helping your work just flow—IPA capabilities must be deeply integrated into the enterprise tools your LOB relies on. It should work where you work—meaning users are able work from within their systems of record, like CRM, CCM, FSM, or ERP.</td>
<td>By automating and optimizing millions of workflows that run billions of times across every industry, an IPA platform should be a system of intelligence—your digital process automation coach. Learn from intelligent actions that provide AI-as-a-service to optimize your critical business processes—no data scientist needed.</td>
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Intelligent Process Automation in the real world
Intelligent contract lifecycle management

Intelligent Process Automation can automate and orchestrate virtually any business process. Here’s an example of IPA in action—leveraging machine intelligence to optimize an enterprise customer’s contract lifecycle management process:

**INTELLIGENT ROUTING**
Using machine learning, the intelligent routing action automatically routes a contract to the legal person most likely to respond and review in the shortest time—based on the contact type, dollar value, time, and day of the week.

**INTELLIGENT REDLINING**
Relying on natural language processing and machine learning, intelligent redlining highlights any changes to an agreement that it deems material (e.g., at least one standard deviation change in pricing or contract length).

**INTELLIGENT ARCHIVING**
Based on the metadata and text of a file, natural language processing is used to determine the type of document being archived and can intelligently route it to the appropriate location in Box.

Archived in registry
Executed contracts
System of record
Contract Negotiator
Customer
Legal
Finance
Sales
Salesforce or CRM
Sales Rep automatically creates a data-driven contract
Redline/Decline Redline/Decline Contract Revisions
Depending on deal size, contract sent for negotiation
Compare versions
create final contract
Signed contract submitted to CRM
Sent for e-signature
Legal team approves
Intelligent contract lifecycle management
Intelligent Process Automation can automate and orchestrate virtually any business process. Here’s an example of IPA in action—leveraging machine intelligence to optimize an enterprise customer’s contract lifecycle management process.
When you decide to move forward—beyond the way it is—everything changes. You enter a new age. The era of Intelligent Process Automation.

A time when humans and machines work in harmony to automate every interaction. Where they adapt. Learn. And optimize every business process in the modern workplace.

Because this is it—how business automation and unrivaled customer experiences become an achievable destination. Not some never-ending journey.

This is your era of Intelligent Process Automation.
Where will you lead it?

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