Content Intelligence for Finance and Accounting
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Dollars and sense:

RPA + Content Intelligence in Finance and Accounting

Finance and accounting leaders across industries—from healthcare to utilities to manufacturing—are facing unprecedented pressure to reduce costs, increase productivity, and improve reporting across their operations. While ERP systems enable organizations to automate a large number of finance and accounting processes, many routine tasks are still being performed by human labor, especially when it comes to filling the space between applications.
In many finance and accounting divisions, “swivel-chair work”—manually transferring data between applications, spreadsheets, and other data sources in addition to processing incoming documents and images from suppliers, vendors, and internal business departments—has become an unfortunate fact of life. Picture an employee frantically swiveling back and forth between monitors to capture data in one place and enter it in another, or processing an emailed document containing data that needs to be manually read and input into a system for processing, and you get the idea. Swivel-chair work drives up costs, hampers productivity, and carries a high risk of human error, yet organizations continue to practice it because there’s been no cost-efficient alternative ... until now.

Robotic process automation (RPA) has emerged as a technology that is key to an enterprise digital transformation strategy, enabling organizations to broaden and deepen the automation of their finance and accounting processes. But RPA alone is not enough. When organizations combine RPA with the data-transforming capabilities of Content Intelligence platforms...the full potential of automation can finally be realized.
What is RPA?

RPA is the use of robot-powered software technology to automate routine tasks usually performed by humans.

Software robots act as a “digital workforce” to execute repetitive, structured, rule-based processes—such as transferring data between applications—freeing human employees to focus on actions that require critical thinking and personal interaction, such as customer service.

**RPA is ideally suited for tasks that**

- Focus on rule-based decision making
- Require processing large volumes of data
- Involve little variation
- Are supported by digital data

For organizations looking to reduce costs, improve delivery times, and ensure quality, RPA can be an ideal solution.
Filling the unstructured content gap

RPA can offer tremendous benefits to businesses looking to increase productivity ...

...as long as their robots have structured, digital data to work with. That leaves organizations looking to implement RPA with a glaring question: What about unstructured content?

Many manual processes that are good candidates for RPA involve reading, classifying, and extracting large amounts of data for processing from content, including

- PDF documents
- Emails
- Forms
- Images, such as scans of official documents
Since software robots are unable to understand and extract critical data from unstructured content, organizations typically rely on human labor to transform the data into digital formats, erasing many of the cost and efficiency benefits that RPA promises. Or they forego trying to automate content-centric processes altogether, preventing the business from extending the benefits of automation into high-value use cases.

But there is a better way: Content Intelligence...

ABBYY Content Intelligence solutions benefit organizations at all levels of RPA—starting with the most basic automation robots, all the way to the custom design of robots to automate tasks involving more intuition and problem solving.

ABBYY’s Content Intelligence platform is complementary to all three digital classes of RPA. It applies OCR and machine learning as well as natural language processing (NLP) technologies to identify and classify content, and extract data and meaning, all while continuously learning from human output. When organizations combine RPA with Content Intelligence, they open up new possibilities to automate a broader array of processes and deliver greater business value.
## RPA

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
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<tr>
<td>Overcomes limitations of human-driven processes using digital data</td>
<td>Processes an expanded scope of data by incorporating unstructured content</td>
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<td>Mimics user activities</td>
<td>Mimics human thought processes by “understanding” and processing unstructured content</td>
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<tr>
<td>Processes structured data from systems, spreadsheets, and databases</td>
<td>Processes structured, semi-structured, and unstructured content for more informed decision making</td>
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<td>Enables rule-based automation of simple processes</td>
<td>Enables automation of more complex processes by leveraging supervised learning of documents</td>
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<td>Highly deterministic</td>
<td>Applies machine learning while also incorporating safeguards that require human interaction</td>
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<td>General employee-assisted digital worker</td>
<td>Highly skilled digital worker that can understand a broad range of information</td>
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Three levels of automation and their impact on business value

Digital worker: Building smarter robots

Rules
Robots used to extract and interpret existing applications for the purpose of automating rules-driven transactions.

Learning
Robots are able to understand unstructured content and apply it to process automation.

Reasoning
Robots automate tasks involving intuition, judgement, or problem solving. Mimics human intelligence and judgement.
Content Intelligence in Finance and Accounting

Finance and accounting operations rely on a large number of rule-based processes that involve little variation, making them excellent candidates for leveraging robotic process automation.

However, many of these processes still require analysis of semi-structured and unstructured documents, which makes the combination of RPA and Content Intelligence an ideal solution for lowering costs and improving productivity in a variety of use cases.
Despite advances in automation technology, invoice processing in many organizations is still bogged down by a large amount of manual work, resulting in productivity-hampering delays and payment errors.

For most businesses, vendor invoices arrive through multiple channels and in multiple formats, including paper bills, PDF email attachments, and links to payment portals. In many accounts payable departments, employees must retrieve invoices from various channels and manually enter each invoice’s details (amount due, category, invoice number, purchase order number, vendor name, etc.) into the ERP or accounting system manually. For purchase-order invoices, before approving for payment, clerks must manually match the PO number on the invoice with the purchase order. These time-consuming processes entail a high risk for human error. The delay involved in getting invoices paid could result in late fees or interest charges, and processing errors may not become evident until an inaccurate payment reaches the vendor, requiring the invoice to be processed all over again.
The Content Intelligence advantage

When invoices arrive in the form of semi-structured and unstructured content (paper bills, PDF documents, etc.), they require manual entry by human personnel, which wipes away many of the productivity and quality advantages promised by RPA. A Content Intelligence platform automatically reads and understands payment-related fields in an invoice so that the data becomes structured and usable by the software robot, eliminating the delays and risk of error involved in manual processing.

Why RPA?

Robotic process automation allows AP departments to automatically process structured data from various sources. For example, a robot might pull invoice data from a portal, validate the information, and input it into an ERP system. Invoices that fail validation can be routed to a human for exception handling.
The Content Intelligence advantage

ROBOT COLLECTS
- RPA input mgmt. process from: email, scanner, MFP, mobile

PROCESS UNSTRUCTURED CONTENT
- Classify invoice document
- Extract and review invoice data
- Continuously learning

APPROVAL PROCESS

ERP SYSTEM

STP

MANUAL

ROBOT DELIVERS TO SYSTEM AND USERS

AUTO

ACTIONS
- Approval, rejection, etc.
Just as we saw on the accounts payable side, many organizations have yet to realize the full potential of automation in sales order processing. Time-consuming and prone to human error, manual processing of sales orders can stifle productivity, drive up costs, and cut into profit margins.

Customer orders may arrive in a variety of formats, ranging from PDF documents, scanned images, and Excel files to email messages, and using human labor to enter them manually is time-consuming and carries a high risk for error when dealing with hundreds or even thousands of orders daily. Once the order is entered, processing typically involves a series of steps, including:

1. Verifying availability of products ordered
2. Looking up contract pricing
3. Performing customer credit checks
4. Forwarding special delivery instructions

Manual sales order processing leaves an organization vulnerable to numerous risks such as order duplication, incorrect pricing, delivery delays or missed deliveries, and returns of botched orders. Not only are errors and delays costly, but they can also cause significant damage to the business’ reputation and to customer relationships.
The Content Intelligence advantage

Content Intelligence allows the organization to extract sales order information from unstructured content (such as scanned images, faxes, PDF documents, and emails) and turn it into structured data that can feed directly into the RPA process. For multinational organizations, Content Intelligence platforms offer the added benefit of being able to understand and process content in multiple languages.

Why RPA?

Robotic process automation enables the organization to accept sales orders from a range of channels and to automatically carry out the various tasks involved in processing. Since RPA platforms can apply contract pricing rules, place and receive orders for credit checks, check inventory, and execute other tasks simultaneously, routine orders can be processed almost immediately, leaving personnel free to focus on those that require special attention (such as pricing overrides).
Another accounting function that’s rife with manual processes—and the resulting inefficiencies and risks—is the monthly, quarterly, and annual financial close. These rigorous routines involve dozens, if not hundreds of individual tasks, often documented across a scattering of spreadsheets and handwritten lists … or even simply stored in a key accountant’s head.

Even if the process itself is well documented, it requires pulling in data from a huge array of resources, from applications to Excel spreadsheets to paper documents. It’s a tedious, time-consuming undertaking that few accountants look forward to … and the risk for penalty-incurring delays and errors keeps many CFOs up at night.

Use case
Record to report—financial close
The Content Intelligence advantage

Much of the information involved in the financial close is hidden away in unstructured content such as PDFs, emails, and scanned document images. A Content Intelligence solution can review financial documents, identify and store data relevant to the closing process, and feed structured data directly into the RPA processes for consolidation, analysis, and report generation.

Why RPA?

Robotic process automation utilizes a combination of intelligent workflows, programmed business rules, triggering events, and process scheduling to take much of the manual drudgery out of the financial close process. Financial teams can leverage software robots to:

- Aggregate information from across the organization
- Reconcile balances
- Propose journal entries and route for approval
- Deploy triggers to manage inter-dependent tasks
Other use cases

The winning combination of RPA and Content Intelligence can apply to a broad range of additional use cases for finance and accounting operations, including:

1. Cash processing transactions
2. Payroll funds reports
3. Payroll funding
4. Direct debits/claims to funding
5. Wire requests
6. Margin call receipts
Looking to the future

As labor costs rise, budgets diminish, and regulatory obligations escalate, finance and accounting organizations can no longer afford to let themselves become bogged down in slow, costly, error-prone manual processes.

When organizations combine ABBYY’s Content Intelligence technology with robotic process automation, they maximize their IT investment by automating the tasks of understanding and processing information associated with a wide range of financial processes. They are able to make RPA robots smarter, achieve end-to-end automation, and support the organization’s overall digital transformation strategy.
Ready to get started?

ABYYY’s Content Intelligence technologies and solutions leverage the latest in OCR, machine learning, natural language processing, and text analytics technologies to transform unstructured content into structured data, ready to be used by any RPA platform.

**ABYYY Vantage**

A next-generation Content Intelligence platform for the enterprise that provides the skills required to understand and create meaning from unstructured content, providing human-like cognitive skills to intelligent automation platforms like robotic process automation (RPA). Vantage does not require technical expertise to configure and deploy its AI functionalities.

**ABYYY FlexiCapture**

Adds intelligence to robotic business processes by intelligently classifying and extracting data from structured, semi-structured, and unstructured content.

**ABYYY FlexiCapture for Invoices**

A business-ready solution for automating the capture of invoice data.