

# 2016 Invoice Workflow Automation Report

The Case for Holistic Invoice Management Automation

## Q4 2016 | Featuring insights on...

- » Current Market Trends in Invoice Management Among North American Organizations
- » The Benefits of Invoice Workflow Automation (IWA) Software
- » Features and Functionalities of IWA Software
- » A Leading IWA Software Provider

Underwritten in part by

**OnBase**<sup>®</sup>  
by Hyland

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# Introduction

Over the last few years, organizations have shown an increasing interest in back-office technology—an interest that can be attributed in part to increasing globalization in business operations and growing pressure from executives to reduce costs while improving productivity. Automation adoption looks different for every back-office department, but each shares the same goals of reduced costs and more strategic control over spend. In the AP department, automation often begins with managing supplier invoices in a completely paperless environment.

Eliminating paper is one of organizations' top goals in AP process improvement, and the use of data capture tools to scan paper invoices has become a common method to accomplish this goal. However, adoption of more holistic AP automation tools, like invoice approval workflow (IWA) software, has not substantially increased in recent years. PayStream believes that many companies rely too much on their own efforts to improve processes, such as using email to send invoices for approval. Unfortunately, when organizations do not continue automation efforts beyond reducing paper, they miss the benefits that come from fully automated invoice management.

This report shows the difference between trying to improve processes with existing tools and fully automating invoice management with a dynamic invoice approval workflow solution. IWA not only helps to route invoices in a controlled environment, it also speeds up processing times, removes non-value-added tasks from AP staff's workload, and helps to complete supplier payments in as little as one day. Also included in this report is a look at current AP management trends among North American businesses and a high level guide to the services and features offered by leading IWA solutions.

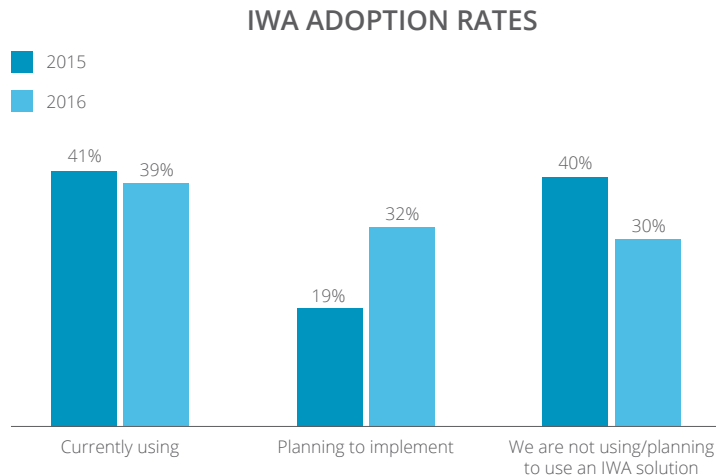
# Invoice Management Trends

In order to identify invoice management trends among North American organizations, PayStream surveyed over 200 back-office employees across several industries and market segments. Research shows that while interest in IWA solutions has increased, IWA adoption itself remains steady, see Figure 1.

**Figure 1**

## IWA Adoption Remains Steady

*"Are you currently using or planning to implement an automated workflow solution in the next 12 months?"*

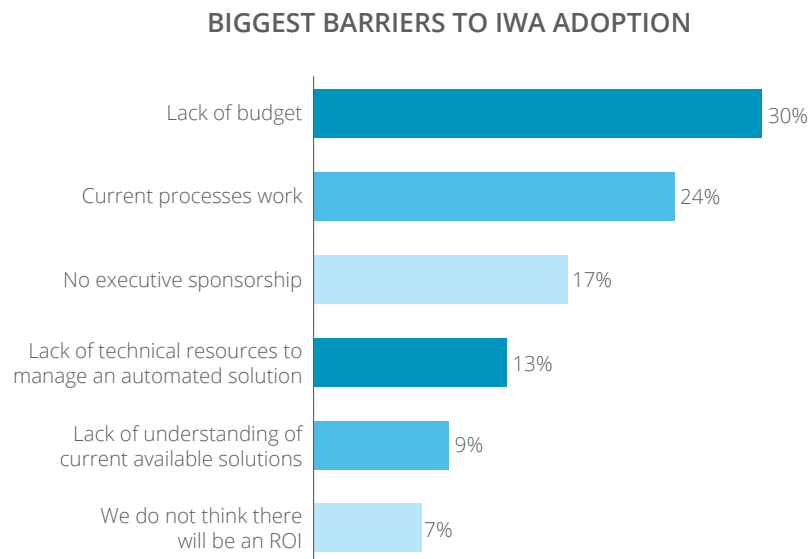


PayStream attributes slow adoption momentum to several factors, including economic pressures and resistance to technology investment. Budget concerns have had an increasing impact on North American businesses, resulting in the greater desire to control costs in the back office. When organizations were asked about their main barriers to IWA adoption, most reported lack of budget and the belief that the current processes are working, see Figure 2.

**Figure 2**

## Most Organizations Cite Budget Concerns as Their Primary Barrier to Adoption

*"What is the greatest barrier to adoption?"*



Adoption barriers can vary based on the size of the company—not only are smaller companies more unlikely to adopt IWA tools, they are also more likely to report a lack of budget as their main concern. For all market segments, however, this research indicates that many organizations are trying to make do with what they have, attempting to improve processes and reduce costs without a considerable investment in software.

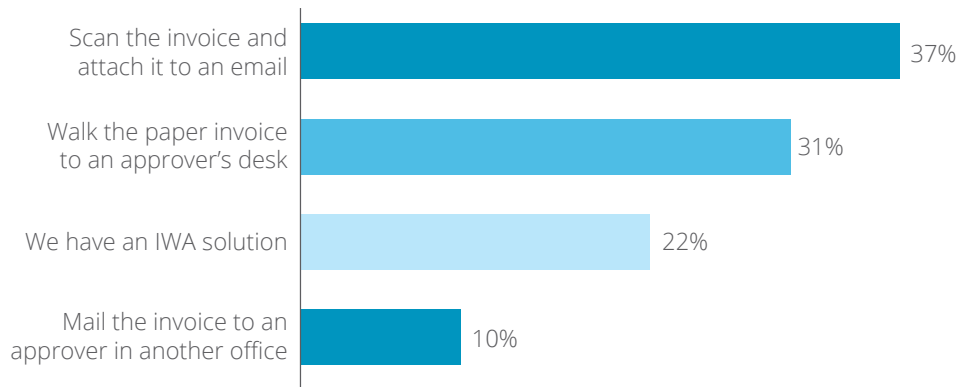
This hesitation to adopt IWA software does not mean that organizations are not embracing technology at all—in fact, the current adoption barriers are in line with trends towards partial AP automation among businesses. Email plays a significant role in partial automation; when organizations were asked about their primary methods for routing invoices for approval, and about how managers remind approvers of outstanding invoices, email led in both categories, see Figures 3 and 4.

**Figure 3**

**Most Companies Use Email-Based Invoice Routing**

*“How do you typically route invoices for approval in your organization?”*

**INVOICE ROUTING AND APPROVAL METHODS**

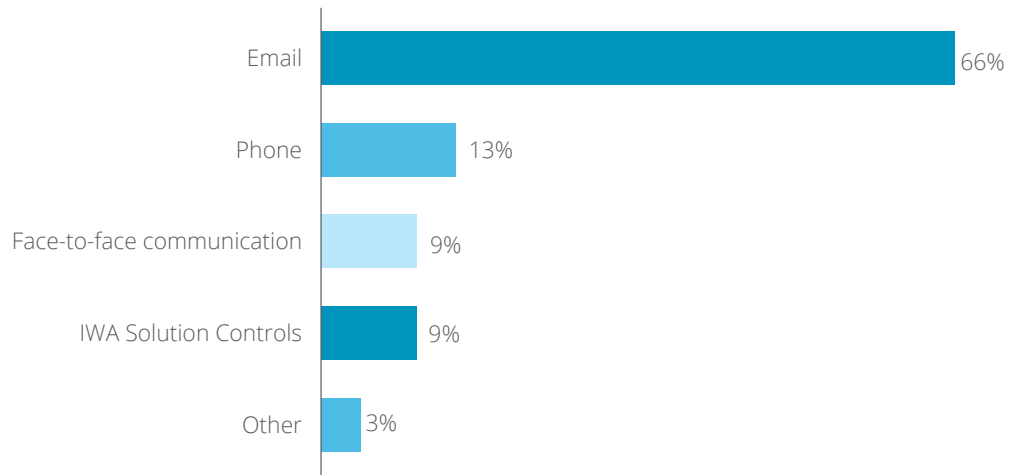


**Figure 4**

**Most Companies Use Email to Speed Up Approvals**

*“What is your company's typical strategy/policy for speeding up overdue approvals?”*

**INVOICE ROUTING AND APPROVAL METHODS**



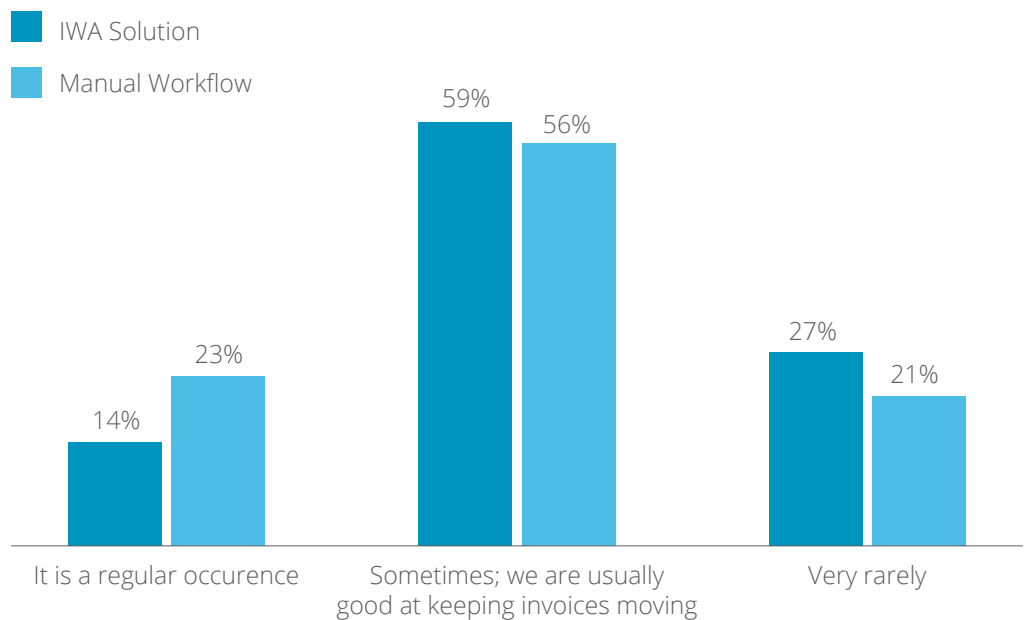
Compared to paper-based processes, email is a fairly progressive way to manage business documents, and it does tend to result in more efficiency than using only paper or manual routing. However, email can't fix all the problems of manual processes; it leaves many gaps in AP automation, such as integration with the ERP or the ability to handle complex approval workflows. Using existing tools like email to improve manual processes is only a temporary remedy—it is not a sustainable solution, and it does not solve all process pains. For example, Figure 5 shows that companies without an IWA solution experience more approval workflow delays than those using an IWA tool.

**Figure 5**

**IWA Automation  
Reduces Approval  
Delays**

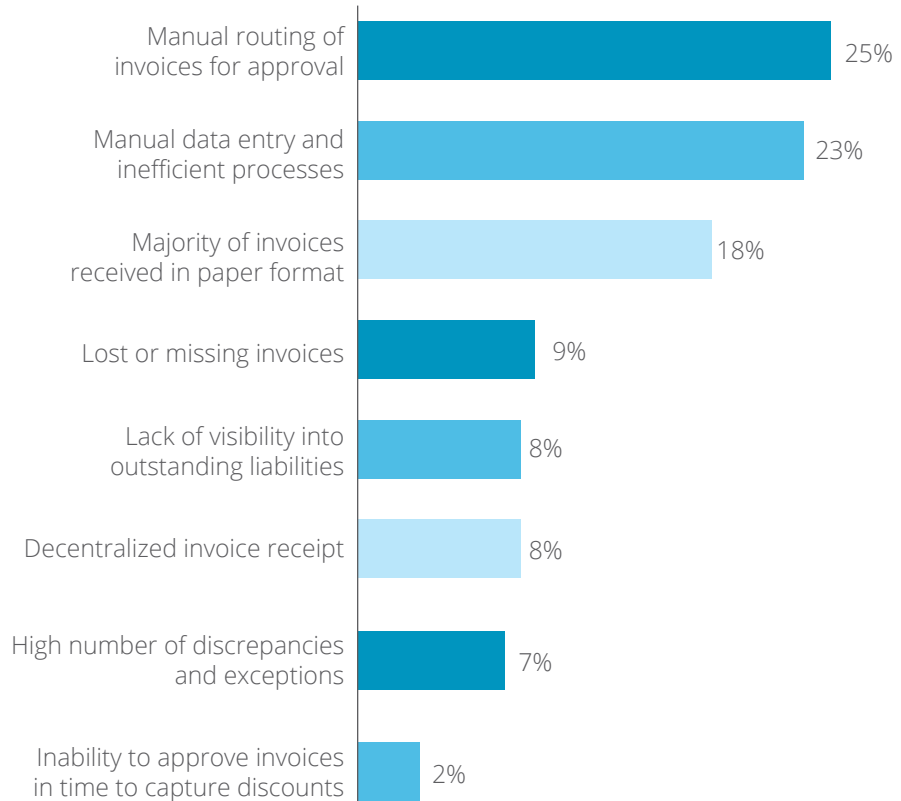
*"How often does an invoice get stuck on one approver for longer than a week after it has been routed?"*

**INVOICE APPROVAL DELAY RATES**



Another indication that manual methods are not sufficient is reflected in Figure 6; when organizations were asked about their top three workflow challenges, most reported problems with manual processes. This shows that although many companies attempt to get by with current tools, those tools are not adequate for improving efficiency and lowering costs.

**TOP CHALLENGES IN INVOICE WORKFLOW PROCESS**



**Figure 6**

**The Lack of IWA Causes Manual Process Challenges**

*“What are the top three biggest pain points you experience in your workflow process?”*

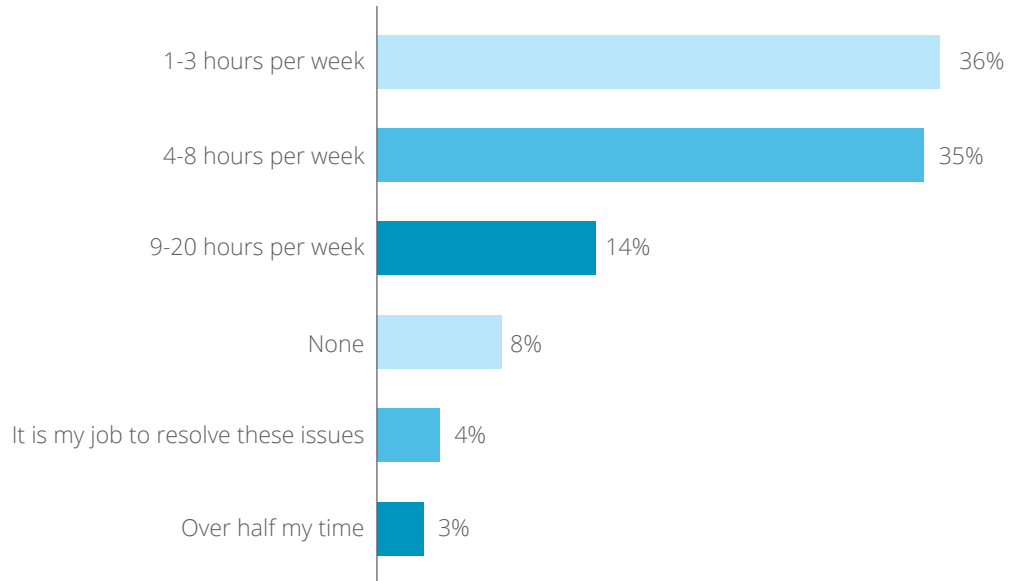
Issues related to manual processes create a variety of process inefficiencies. They can cause approval delays and late payments, which lead to supplier inquiries and invoice disputes. When organizations were asked how much time they spent each week handling AP process issues, most report between one and eight hours, see Figure 7.

**Figure 7**

**Two-Thirds of Companies Spend Between 1 and 8 Hours a Week Resolving AP Issues**

*“How many hours each week do you estimate you spend on resolving AP process issues? (invoice errors, duplicate invoices/ payments, supplier calls, etc.)”*

**TIME SPENT RESOLVING AP PROCESS ISSUES**



When adding up the costs of resolving AP process issues, it becomes clear that organizations are spending a large amount of money each year solely on damage control. Table 1 contains calculations of organizations’ labor costs for dispute management, assuming an average annual salary of \$45,000 per AP staff member, three weeks of PTO, two weeks of combined holiday and sick leave, and 20 percent overhead calculation.

**Table 1**

**Annual AP Issue Resolution Costs**

Hours Spent	Annual Costs Per Employee
1-3	\$1,350 – \$4,050
4-8	\$5,400 – \$10,800
9-20	\$12,150 – \$27,000



The only successful way to reduce costs and improve AP management is through the adoption of a holistic IWA solution. When organizations adopt this software, they not only experience cost reduction—they also gain improvements in approval times, employee productivity, and visibility into liabilities, see Figure 8.

### TOP IMPROVEMENTS GAINED THROUGH IWA AUTOMATION

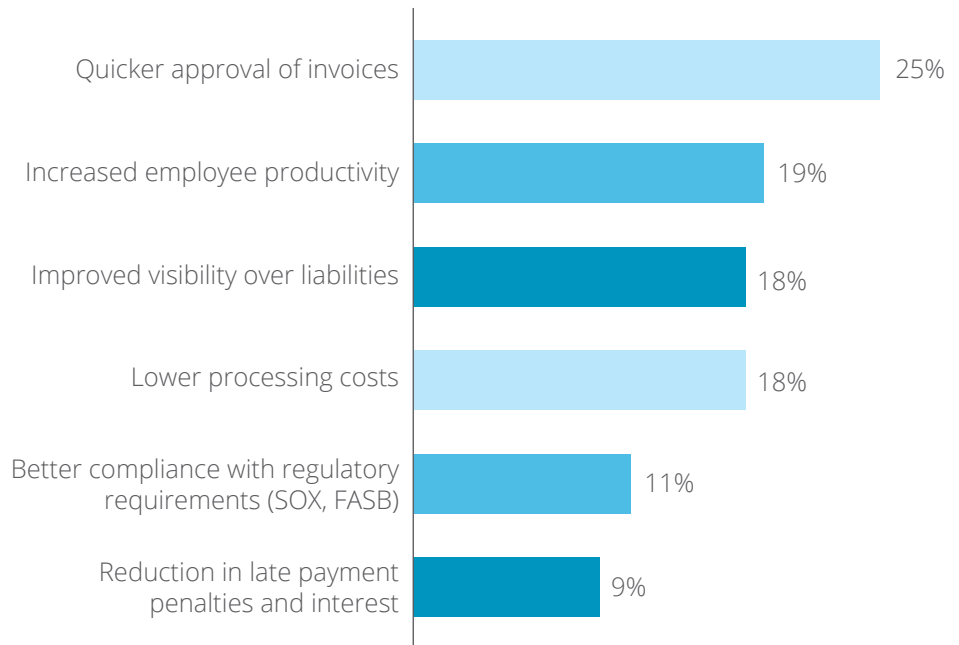


Figure 8

#### Organizations Experience Quicker Approval Times and Increased Productivity with IWA Automation

*“What are the greatest improvements you have seen since implementing a IWA solution? (Select top 3)”*

In order to properly educate organizations about the benefits of IWA automation, the following section explores the features and services of leading IWA automation software.

# IWA Features and Functionality

An IWA solution is designed to adapt to existing business structures, diverse supplier bases, and complicated approval hierarchies. In order to meet these requirements, the software must address the entire invoice lifecycle and be highly advanced, customizable, and versatile. This section highlights the basic and leading features of advanced IWA solutions.

## Invoice Receipt

Before an approval workflow solution can operate successfully, invoices must be entered into the organization's system in an efficient, timely, and accurate manner. There are two primary ways to input invoices electronically into a workflow system—through the use of a scanning and OCR data capture process or via an invoicing network.

- » *OCR Data Capture* – Optical Character Recognition (OCR) is the electronic conversion of scanned images or text to a machine-encoded document. OCR extracts the relevant data from scanned paper or PDF invoices and sends it through validation and routing. OCR technology can be used in several invoice receipt methods, including mailroom services, email extraction, and online portals.

After invoice data is extracted, the OCR-converted documents are verified against a set of validation rules; the solution compares specific fields against the information held in the appropriate back-end system (e.g., purchase order numbers against the purchasing system). Validation technology is a second round of checks and balances for invoice consistency and compliance—after the initial capture of data, it re-affirms the integrity of business documents before they are assimilated into the main workflow system.

The use of advanced OCR technology ensures a high level of precision, consistency, and compliance. Advanced OCR technology provides capture capabilities that have excellent pass-through rates when scanning paper documents, and some technologies can extract data from the subject and body of emails rather than the attachments only. In all, the more advanced the OCR software, the more streamlined the routing process becomes down the line.

- » *eInvoicing* – The electronic submission of invoices eliminates all manual data entry by the buyer. There are three methods of electronic invoicing:
1. Traditional direct integration with the supplier's back-end AR system, typically done via Electronic Data Interchange (EDI) of XML files.
  2. Online fillable forms (usually as part of a supplier portal), which ensure that a uniform invoice is submitted every time.
  3. A print-to-cloud solution that validates PDF elements instantly and notifies suppliers in real time if their invoice is missing necessary elements.

Advanced eInvoicing solutions are free for suppliers, and many feature advanced global capabilities for complex invoice requirements in Europe, Asia, and Latin America. The greatest advantage of eInvoicing is the ability to send invoices straight to the approver and then straight to payment (i.e., straight-through processing).

### **Matching and Routing**

Workflow solutions enable AP departments to define how different types of invoices are processed. Invoice matching and routing involves linking invoices to purchase orders and other receiving documents, then sending them through the appropriate approval chain based on terms identified within the invoice (such as PO number). PO-based invoices can be matched against PO and receipt documents automatically, while non-PO invoices are routed to the appropriate approvers.

All invoices are routed based on predefined business rules, and user roles and access rights can be set to match the organization's existing approval hierarchy. Many solutions give client administrators control over individual user access rights. Those administrators can then delegate the types of approvals for each employee, their level of visibility, and their authorized dollar thresholds.

Advanced technologies provide field-level matching, meaning that they match specific characters in invoice line items with their counterparts in POs. Some solutions create notifications or workflows driven by fields with invalid or missing data, and some feature the ability to dictate workflows for non-PO invoices based on invoice contents.

Users may also assign non-PO invoices to categories within the general ledger, and advanced solutions allow specific line items to be assigned to multiple cost centers or multiple POs.

The accuracy of rules-based matching engines, in combination with eInvoicing, allows many companies to automatically pay invoices that meet all validation rules shortly after receipt, letting AP staff focus only on exceptions. This pass-through feature can be used for low-value or recurring invoices (such as utility bills).

Invoices that fail validation and matching undergo a pre-established workflow and routing procedure, also called exception management. Invoice exceptions could be a discrepancy between an invoice and a PO or missing information such as PO number, approver's name, or location code. The exception management process lets users re-route invoices and fix errors by viewing the original invoice to identify handwritten, printer, or OCR errors. Advanced exception management software allows for the creation of custom workflows depending on the type of exception present. These solutions also enable users to set thresholds for non-PO invoices to identify potential errors or fraud, such as an invoice for snowplow services in July. In addition, many systems put the responsibility of exception and discrepancy resolution back on suppliers, returning the document to them for correction before allowing it to enter the main workflow system.

## **Approval**

Once invoices have been validated, matched, and routed into the appropriate queue, a variety of approval workflow capabilities ensure that those invoices are approved in a timely manner. Most invoice workflow solutions are highly configurable; they are built to adapt to an organization's existing approval hierarchies and enable more complex routing (e.g., between different departments and cost centers). During and after initial setup of a solution, organizations can easily adjust workflows according to their own business rules, legal requirements, and the invoice type, amount, or other content. Advanced solutions facilitate this customization through visual workflow editors with detailed process flows and drag-and-drop functionality.

When invoices require review, approvers can typically be notified via email or mobile alerts. Most solutions come bundled with alerts and reminders for approvers, out-of-office delegation rules, and escalation procedures for overdue invoices. Prioritization capabilities allow organizations to move invoices with discounts to the top of the

processing queue, ensuring that they are approved in a timely manner. In addition, some solutions feature workload-balancing features that redistribute the invoices in an approver's queue to different employees if that approver's workload exceeds a certain number of invoices.

AP interfaces make approvals easier and more transparent. Dashboards allow users to navigate in-progress invoices, providing complete histories of the documents. Supervisors can track the status of individual invoices or approvers, reorganize and prioritize unapproved invoices, and access audit trails at any time.

Some solutions offer approval capability directly from within emailed notifications; in other situations, users can click on a hyperlink in the email and log in to a system to view, code, and approve invoices online. Many solutions also offer mobile approval capability through native and/or responsive web-based apps. Offering multiple methods for approval keeps invoices moving through the system when approvers are on the go.

### **Payment and Reconciliation**

After an invoice has been approved, it is automatically sent forward to payment. Basic solutions create a payment file that is sent to the ERP (which then initiates payment or sends a message to AP). These solutions also facilitate the input of ACH information and integration with back-end AR systems.

To completely automate the invoice lifecycle, leading solution providers offer an in-house or partner-provided electronic payments solution. For advanced solutions, this entails integration with virtual card solutions and active supplier onboarding services. Some solution providers even cut checks on behalf of the buyer if they fail to onboard suppliers to virtual cards or ACH.

Some IWA providers offer a web-pay portal for vendors to log in and view invoice and payment transaction status in real time. These portals can also support different payment types and automatic formatting of remittance information based on supplier preferences.

### **Reporting and Analytics**

Most IWA solutions combine process transparency with robust reporting and analytics tools, greatly improving an organization's ability to audit, analyze, and improve procedures. Basic reports can

be exported to a spreadsheet tool, and can include first-pass success rates, exception rates, and open invoices for any defined period of time. Advanced solutions feature internal benchmarking, allowing users to review how their organization compares to other end-users of the solution. Leading solutions also offer a drag-and-drop functionality and exceptional drilldown capabilities from within a reporting dashboard.

Many IWA systems additionally offer sophisticated invoice and payment audit technologies. Audit solutions can integrate seamlessly with numerous accounting applications, and can flag potential duplicates. Clients have the option of configuring the business logic that will be applied to identify erroneous payments, and the solutions generate reports on a periodic basis highlighting potential payment errors for resolution.

# Top IWA Goals

Although IWA software is an effective way to improve efficiency, many organizations have more to consider than simply reducing costs and speeding up approvals, see Figure 9. Fortunately, leading IWA tools provide features and services that enable organizations to accomplish these goals.

## MOST IMPORTANT WORKPLACE GOALS/ACHIEVEMENTS

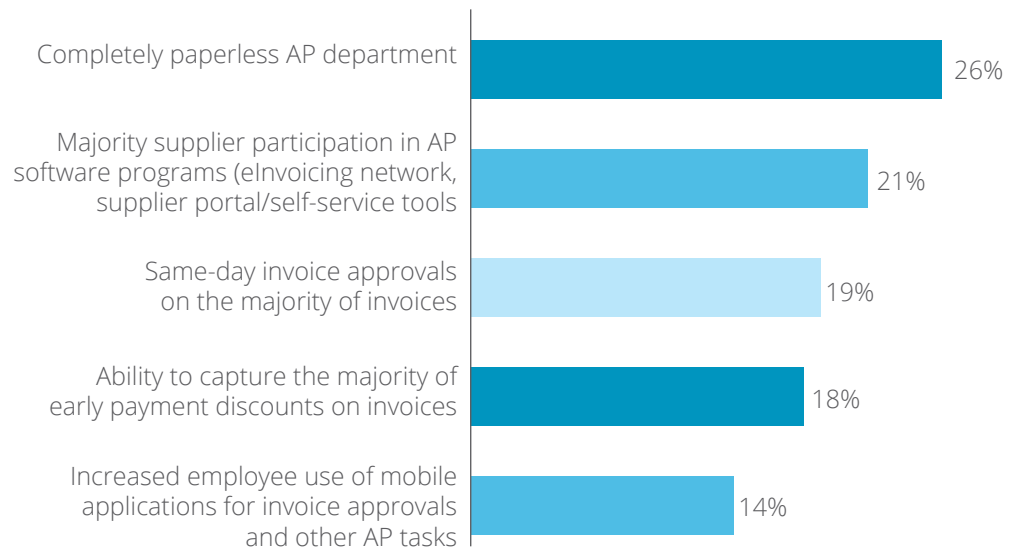


Figure 9

### Organizations' Top Goals Include Gaining Supplier Participation and Achieving Same-Day Approvals

*"Which of the following workplace goals/achievements are most important to you? (Select top 3)"*

Organizations that adopt IWA can trust leading solutions to accomplish the following goals:

**Paperless AP.** Leading IWA providers offer a variety of tools and services to help organizations eliminate paper in their AP departments as quickly and seamlessly as possible. They also work with clients according to the organizations' own structural and business requirements. For example, smaller organizations with many different offices and decentralized invoice receipt would benefit from an in-house scanning tool that could be installed in each invoice receipt center or AP office. However, this same scenario would not be as effective for a large multi-billion dollar company, for which an outsourced mailroom service would be a more viable option. In some cases, an organization might need a combination of both tools. Fortunately, leading IWA providers have the ability to accommodate an organization's invoice receipt needs according to its size and industry.

**Supplier Participation and Enablement.** One of the most important ways to increase supplier participation is to work with a provider that offers proactive onboarding strategies, and to choose a solution with a robust supplier benefits. Many IWA software providers proactively engage their clients' supplier communities in order to gain as much participation as possible. Some providers run large-scale onboarding campaigns, reaching out to suppliers via phone, email, and/or mail with invitations to join their network. These provider onboarding teams may also help the buying organization create invitation templates for its own outreach campaigns, as well as helping configure registration landing pages on the organization's website.

Suppliers are also more likely to participate in automation when the solution is supplier focused—many of these tools offer valuable supplier self-service capabilities that speed up and streamline invoice processing. Basic supplier portals allow suppliers to upload invoices, check on the status of invoices, and communicate with buyers about exceptions and errors. Advanced solutions permit buyers to create custom business rules at the point of supplier portal invoice upload. These rules create instant error notifications and allow PO flip from within the portal. Solution leaders also enable suppliers to input payment preferences, upload payment information, and verify payment information in real time. These portals also facilitate better supplier-buyer communication and dispute resolution.

**Same-Day Approvals.** IWA solutions greatly improve approval times through intelligent invoice routing and workflows, and through approval reminders and escalations. Today's leading solutions also enable organizations to further speed up approvals by segmenting out some of the lower-value or recurring invoices for automatic approval. This is very useful for invoices like utility bills or recurring orders from trusted suppliers. AP managers can also easily customize business rules and approval routes to separate high-priority invoices, such as those from a special supplier, ensuring that these are pushed to the top of approval queues.



**Working Capital Management.** Leading workflow solutions give organizations access to additional working capital management tools such as dynamic discounting, supply chain financing, and electronic payments such as virtual card. These tools all increase companies' savings and bottom line, either through sliding scale discounts, third-party financing, or payment rebates. Moreover, working capital management tools benefit the supplier through fast invoice payments, thus improving business relationships.

**Mobility.** Leading AP automation solutions provide their clients with dynamic mobile applications, allowing users to access business software tools from anywhere, at any time. Mobile access includes invoice verification and approvals, as well as communication with the suppliers on invoices and payments. These applications are typically available in through a responsive web app or a native application for mobile operating systems.

In order to help organizations select an IWA solution that will help them accomplish their AP goals, the following section explores the features and services of a leading IWA automation software provider.

# OnBase by Hyland

For over 25 years, Hyland, creator of OnBase, has helped organizations streamline everyday business challenges. Hyland’s document management solution, OnBase, is a single enterprise information platform for managing content, processes, and cases. OnBase provides enterprise content management (ECM), case management, business process management, data capture, and enterprise file sync and share—all on one platform. The solution is highly configurable and can be easily applied to invoice management processes to create transparent and secure invoice approvals.

Founded	1991
Headquarters	Westlake, Ohio
Other Locations	Irvine, California; Sao Paulo, Brazil; London, United Kingdom; Tokyo, Japan
Number of Employees	2,050
Number of Customers	15,025
Target Verticals	Manufacturing, Transportation and Warehousing, Professional Services, Real Estate, Rental and Leasing, Accommodation and Food Service, Healthcare, Higher Education, Insurance, Financial Services, Government
Partners / Resellers	DataBank, Konica Minolta Business Solutions, KeyMark Inc., Requordit
Awards / Recognitions	Leader, Gartner Magic Quadrant for ECM, seven consecutive years; Leader, Forrester Wave: Transactional Content Management Services, Q2 2015; Strong Performer in the Forrester Wave: Dynamic Case Management, Q1 2016; Ranked #48 on the Fortune 100 Best Companies to Work For in 2016.

## Solution Overview

OnBase can be deployed as an on-premise or hosted solution. The solution provides no-code integration capabilities with multiple ERP systems including SAP, Oracle, and others. OnBase also has a complete

set of API-level libraries available in COM/.NET, Java, and SOAP/Web Services, which allow programmers to leverage OnBase functionality from custom-built applications.

OnBase allows users to restrict who can see documents and data, and what actions they are able to perform with the information. Additional security features include audit trails, DocuSign and CEC Integrations for electronic signatures, data in transit (SSL/TLS), and means for encrypting data in storage.

OnBase provides mobile capabilities through client apps for iOS, Android, and Windows Mobile. With the OnBase app, users can access documents and electronic forms, and make business decisions.

### **Invoice Receipt**

OnBase features native capabilities for scanning and importing all business document types, including invoices. OnBase can accept invoices in multiple formats including images, PDF, XLS, XML, and EDI, and can be submitted by fax, email, FTP, and from the web via website or the OnBase Vendor Portal. OnBase extracts data from submitted documents via OCR; OnBase also provides intelligent capture for semi-structured documents, and the technology can capture line-item details and handwritten characters.

Document scanning and indexing is completely integrated within OnBase. Hyland offers various capture methods, including ad-hoc scanning from desktops, remote locations, and front-office functions, scanning with a third party application, MFP integration for high-volume scanning, and email-based capture. Hyland also offers mailroom services through its Imaging Services team for customers that wish to outsource the data capture process.

### **Approval Workflow**

OnBase automates several key AP business processes, including routing to appropriate business units, 2- and 3-way matching, approval hierarchies, dispute management, and posting to accounting applications. OnBase Workflow operates on a business rules engine that can adapt to any business structure. It is easily configurable, allowing designated users to rapidly create and deploy complex workflow hierarchies on demand. OnBase can also re-route invoices back to suppliers when necessary.

Users access invoices and related content from their familiar ERP application, email inbox, or mobile device. Managers can view real-time dashboards that increase visibility into the status of invoice processing, allowing them to identify bottlenecks and adjust workload distribution. OnBase Workflow supports workload balancing by user or role, as well as out-of-office forwarding.

Once invoices and payments are approved, OnBase can submit payment details to the customer's ERP to initiate payment to the vendor. OnBase also archives all client content with advanced document archival methods, preserving the documents according to clients' preferences and providing advanced search and retrieval functionality.

### **Reporting and Analytics**

OnBase Report Services includes over 140 pre-configured reports for evaluating OnBase and the processes it manages. OnBase presents reporting data in a variety of formats, and reports can be exported in XML, HTML or Excel formats, or saved as PDF, JPEG or TIFF. Organizations can also create custom reports to meet their specific business reporting needs—without the need to engage IT resources. Dashboards present data in a variety of graphical formats including charts, graphs, scorecards, and maps, and interactive features allow users to easily monitor performance and analyze trends in real time.

### **Implementation and Pricing**

Implementation times for OnBase solutions vary by solution and customer needs. During implementation, OnBase offers a variety of on-site and online training classes and events for both end users and customer trainers. Customers can access detailed documentation and user guides, as well as user community websites that provide a place to learn more about OnBase and collaborate with other users. OnBase offers customers dedicated support from Account Management teams, as well as 24/7 access to Technical Support.

The licensing and pricing of OnBase is designed with diverse customer needs in mind, allowing for à la carte purchases of modular components that depend on which OnBase solution the client is currently using.

## About PayStream Advisors

PayStream Advisors is a technology research and consulting firm that improves the way companies plan, evaluate, and select emerging technologies to achieve their business objectives. PayStream Advisors assists clients in sorting through the growing complexities of IT applications related to business process automation with the goal of making objective, analytical, and actionable recommendations. Wherever business process automation technology is an issue, PayStream Advisors is there to help. For more information, call (704) 523-7357 or visit us on the web at [www.paystreamadvisors.com](http://www.paystreamadvisors.com)