

## Guide to Payables Automation

Going Paperless, Gaining Maximum Returns from Payments,  
and Ensuring the Success of AP Automation

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- » Payables Trends Among North American Organizations
- » Payables Management Goals Among Organizations With \$100-500M in Annual Revenue (or the Lower Middle Market)
- » Features and Functionality of Payables Automation Software for the Lower Middle Market
- » A Few Leading Payables Automation Software Providers

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## Introduction

Many of today's innovative organizations are seeking to streamline labor-intensive back-office processes through strategic change management, process restructuring, and digital transformation. Inefficient processes look different across different back-office departments, but when it comes to Accounts Payable (AP), one of the greatest drains on costs and efficiency is high volumes of paper and manual methods of processing that paper. Under these constraints, AP departments are often spending a significant amount of resources on low-value activities like entering, verifying, correcting, and updating information from paper invoices. They also often have difficulty maintaining the security of financial information and maintaining compliance with taxation and legal standards. The best way to combat these challenges is by overhauling the current state with AP automation software.

There are a few different ways to approach automation, and these will vary based on an organization's primary problems and goals, which will in turn depend on size and current state characteristics. For example, businesses in the lower middle market (LMM)—those making between \$100 million and \$500 million in annual revenue—tend to have strained resources due to ongoing growth that prevent them from applying the same full-scale improvement initiatives that larger organizations are able to consider. Fewer employees, coupled with smaller investment budgets, mean LMM businesses face limits to productivity without the flexibility to improve conditions. A common problem among LMM organizations is the prevalence of paper and the lack of resources to properly manage high paper volumes. Issues related to high paper volume and manual invoice management are more difficult to fix for these companies than for larger organizations, which tend to have more stable business environments, contingency plans, and more resources for technology or labor investment. This means that circumstances like rapid business growth, which is common among organizations in the LMM, can put stress on small finance teams.

Level Research believes that the appropriate approach to AP automation for LMM companies is to eliminate their most urgent and prevailing problem—paper. By improving invoice receipt management, these organizations can forge a path towards more AP automation adoption, such as electronic payments (ePayables) technology. When AP staff can better manage a costly problem like paper invoices and manual processes, they will be better able to improve their organization's bottom line and strategically support business success.



This report discusses the value and strategic implementation of AP automation tools, exploring how organizations—particularly those in the lower middle market—can benefit from going paperless in their back-office departments. It also offers a guide to selecting an appropriate AP automation strategy based on specific business characteristics.



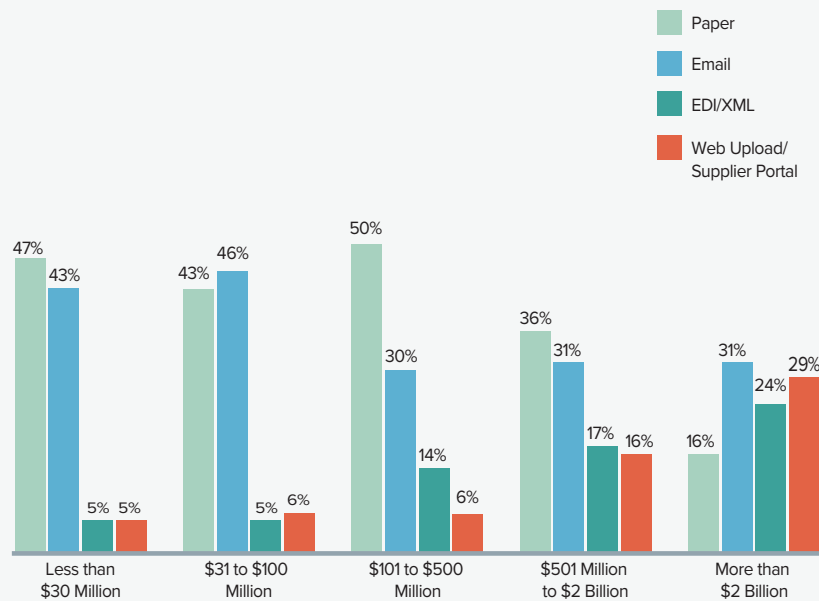
## The Current State of Invoice Receipt

To examine the current state of automation in AP, Level Research surveyed over 250 North American organizations of different sizes and from different industries. Research showed that there are several distinct differences in AP pain points and AP goals across company size. Overall, companies within the LMM1 segment tend to be less advanced when it comes to AP automation and technology adoption, and have less efficiency in AP management in general.

In the survey, AP professionals were asked to allocate the proportion of invoices they received in various formats, see Figure 1. Level Research found that the majority of invoices received by most organizations are in paper format, except among enterprise level organizations. As organizational revenue increases, there is a trend towards greater receipt of EDI/XML and web upload/supplier portal invoice types. Larger organizations also typically receive a greater variety of invoice formats than smaller organizations. One reason for this is that larger companies have typically had more time and money to invest in more progressive technologies like electronic invoicing (eInvoicing). They also tend

FIGURE 1

### Method of Invoice Receipt



#### LMM Organizations Receive the Highest Volume of Paper Invoices

*“Please allocate 100 percentage points on how your organization receives invoices.”*

&

*“What is your organization’s annual revenue in the most recent 12-month reporting period?”*

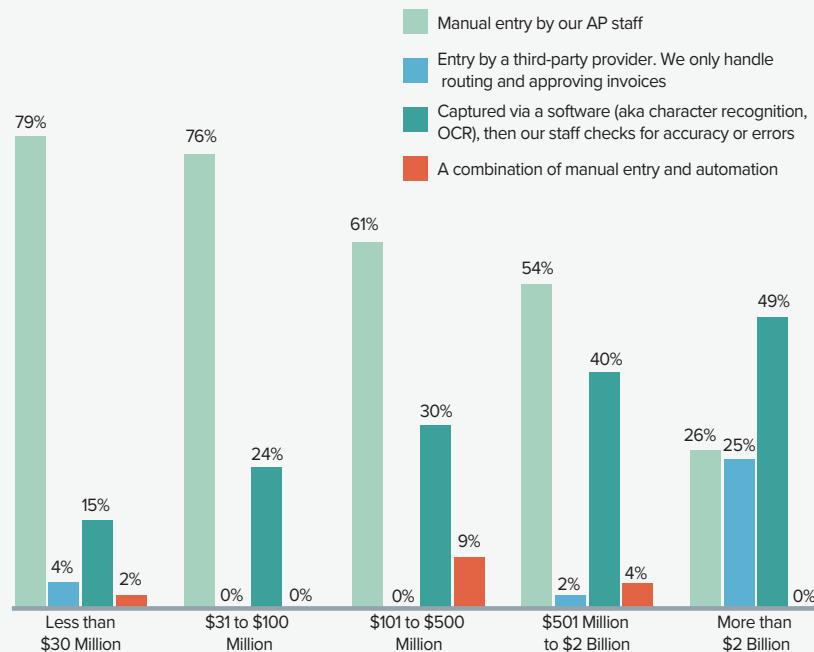


to have more buying power over their suppliers, and can be more successful in encouraging these suppliers to use invoice submission methods like web-uploaded invoices and EDI/XML. As seen in Figure 1, LMM organizations, on the other hand, have the highest volumes of paper invoices. This is likely because they typically face a few characteristics that make it difficult for them to remove paper from AP—a scaling/growing business environment, limited financial resources, and relative youth in terms of operating years.

Level Research finds that the majority of organizations manually enter invoice data into their ERP or accounting solution, see Figure 2. Organizations that classify as LMM and below are particularly likely to manually enter data into their ERP, while enterprise organizations are more likely to use a software solution to capture invoice details. Overall, the larger the organization and the more invoices it receives, the more likely it is to turn invoice data entry over to a software or a third-party service (e.g., mailroom processing provider).

FIGURE 2

### Invoice Data Entry to ERP



#### The Smaller the Organization, the More Likely to Manually Input Data

*"How is invoice information entered into your ERP, accounting software, or accounts payable software?"*

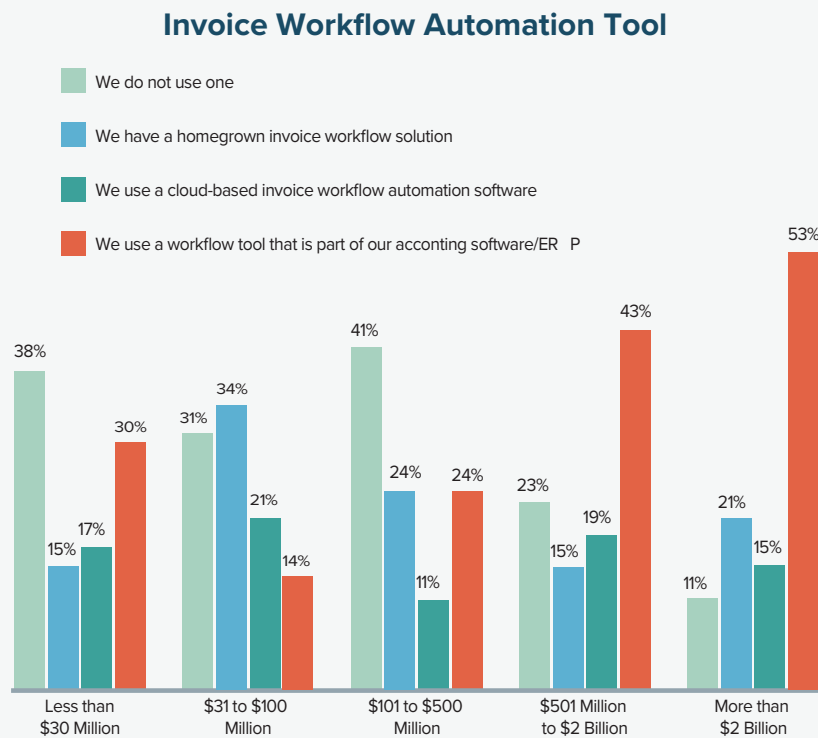
&

*"What is your organization's annual revenue in the most recent 12-month reporting period?"*



Once invoices have been received, many organizations process invoices manually through review and approval. Almost half of LMM organizations have no invoice workflow tool and thus rely on manual routing and hand-offs for the invoice to be processed, see Figure 3. Larger organizations, on the other hand, tend to use a workflow tool within their ERP/accounting solution. Overall, the adoption of a cloud-based invoice workflow tool is relatively low, as only about a quarter of organizations have this type of solution in place, regardless of their size.

**FIGURE 3**



**LMM Organizations Are Least Likely to Use Cloud-Based Invoice Workflow Automation Software**

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

&

*"What is your organization's annual revenue in the most recent 12-month reporting period?"*



## Challenges Encountered in Manual AP Processes

Even in the most fine-tuned and disciplined of departments, manual processes leave AP vulnerable to the inefficiencies and risks of high invoice volume. The time and resources required to manually manage invoice exceptions, remediate errors, or search for required information takes staff away from regular processing tasks and derails productivity. Manual processes are also known to lead to significantly higher processing costs in terms of both time and labor, and greater risk of non-compliance with auditing requirements.

From a financial standpoint, the cost of invoice processing can vary dramatically depending on a company's level of AP automation. Automation maturity can be gauged using several different factors, including the speed at which organizations choose to automate (i.e., an internal factor) and suppliers' willingness to participate in activities like electronic invoicing (i.e., an external factor). Table 1 shows the different thresholds organizations typically reach based on their automation maturity, illustrating that significant improvements in processing times follow technology implementation.

TABLE 1

Metrics	Novice	Mainstream	Innovator
Average processing time from invoice receipt to approval	45 days	23 days	5 days
Average processing cost per invoice (combination of paper and electronic)	\$15.00	\$6.70	\$2.36
Percentage of invoices received electronically	3%	9%	32%
Percentage of invoice terms discounts captured	18%	40%	75%

### AP Automation Maturity

In addition to high financial costs, manual processes leave sensitive company information susceptible to errors and vulnerable to security breaches. Organizations will also face greater challenges when it comes to auditing or editing existing data with manual processes. Given a lack of visibility into data in general, manual processes limit access to insights that would enable strategic



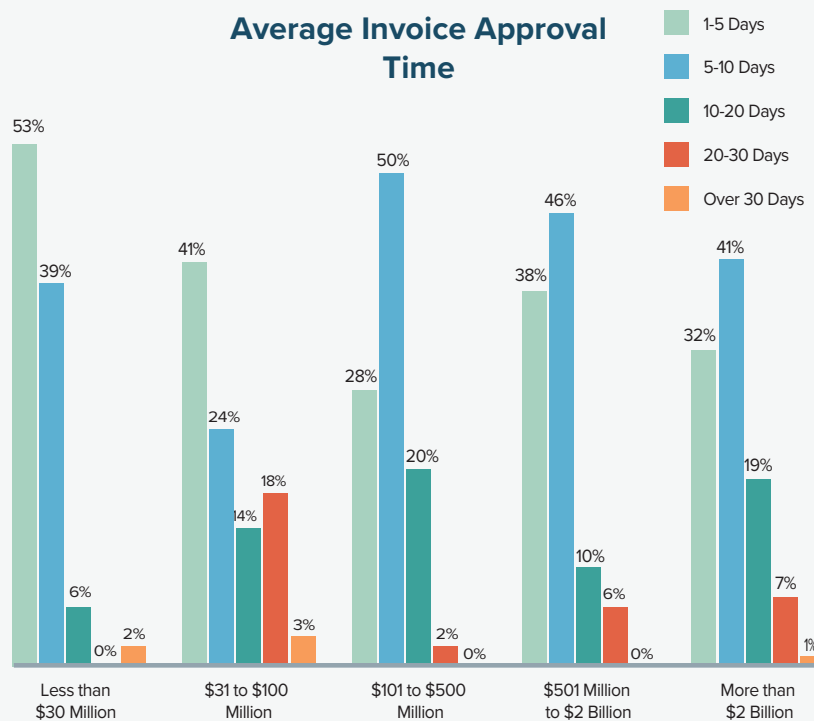


business decisions. Other issues like seasonal invoice volume fluctuations and special invoices that require more attention (e.g., those from international vendors) all become much more difficult to manage when there is no automation in place.

Another common problem stemming from manual processes and high paper volume is lengthy approval times. Figure 4 shows that LMM companies have some of the lengthiest invoice approval times across market segments. Organizations with less than \$100 million in revenue process a significant amount of their invoices within 5 days, which Level Research believes is less a factor of invoice receipt type and more related to the lower volume of invoices they receive, as approval times lengthen slightly by company size.

It should be noted that the time frames found in Figure 4 represent the average time spent after the invoice was officially received and opened, and do not take into account mailing time or time spent tracking down an invoice that may have

FIGURE 4



**LMM Organizations Are Most Likely To Have Invoice Approval Times Between 10 and 20 Days**  
 “How long does it typically take your organization to approve an invoice from the time it is received?”  
 &  
 “What is your organization’s annual revenue in the most recent 12-month reporting period?”

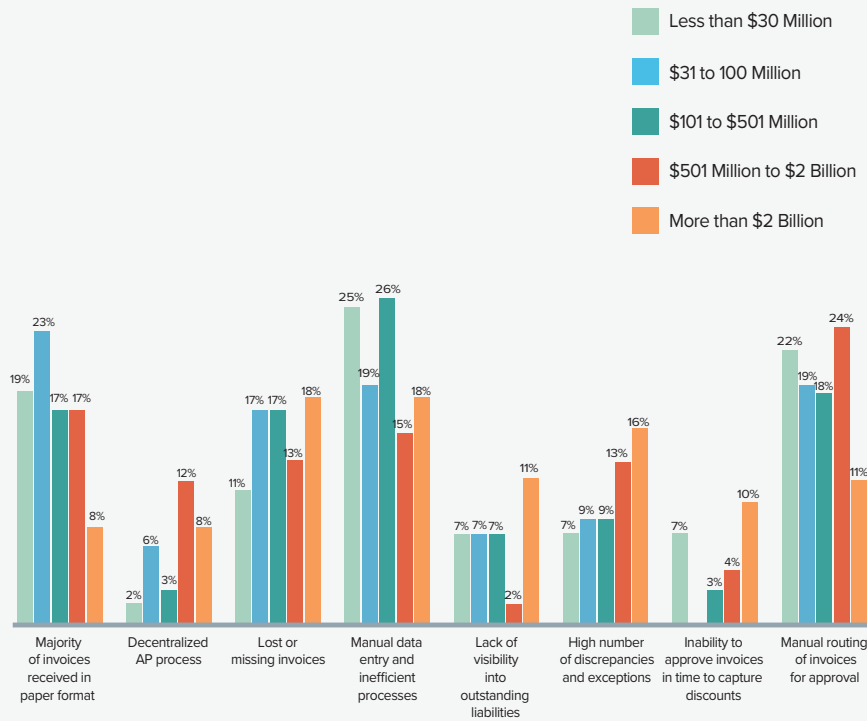


been misplaced or lost upon receipt. Unforeseen circumstances like those can lengthen approval times even further, increasing processing costs and putting companies at risk of making late payments and missing early payment discounts on invoices.

While slow invoice approval times can be a problem for both the organization and its suppliers, Levvel's research reveals that organizations of all sizes experience a range of pain points in terms of their invoice workflow processes, see Figure 5. Organizations of all sizes report facing challenges related to paper-based processes, including the receipt of paper invoices and manual data entry and invoice routing. Over one-quarter of LMM organizations identify manual data entry and inefficient processes as a top invoice workflow challenge. Compared to smaller organizations, enterprises are more concerned with their ability to approve invoices in time to capture discounts and the high number of discrepancies and exceptions during invoice processing.

FIGURE 5

### Invoice Workflow Pain Points



#### LMM Organizations Cite Manual Data Entry Among their Top AP Pains

“What are the top three biggest pain points you experience in your workflow process? (Select top 3)”

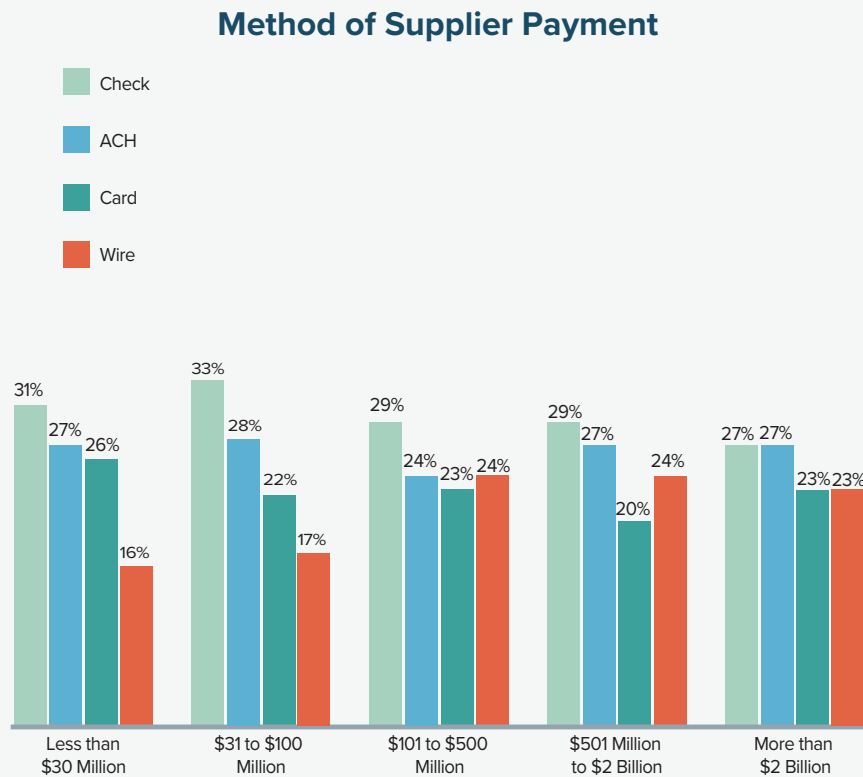
&

“What is your organization’s annual revenue in the most recent 12-month reporting period?”



Unlike with invoice receipt and processing, payment methods are almost evenly split between manual and automated types, see Figure 6. There is little variance across company size when it comes to payment methods, although paper-based payment methods (i.e., checks) are used slightly less often as organization size increases. Larger organizations are also more likely to make wire payments, which is likely because these companies often have large and/or international supplier bases.

**FIGURE 6**



**Payment Method Adoption Is Relatively Standard Across Company Size**

*“What percentage of your supplier-related payments (number of payments, not dollar value) is processed using the following methods?”*

&

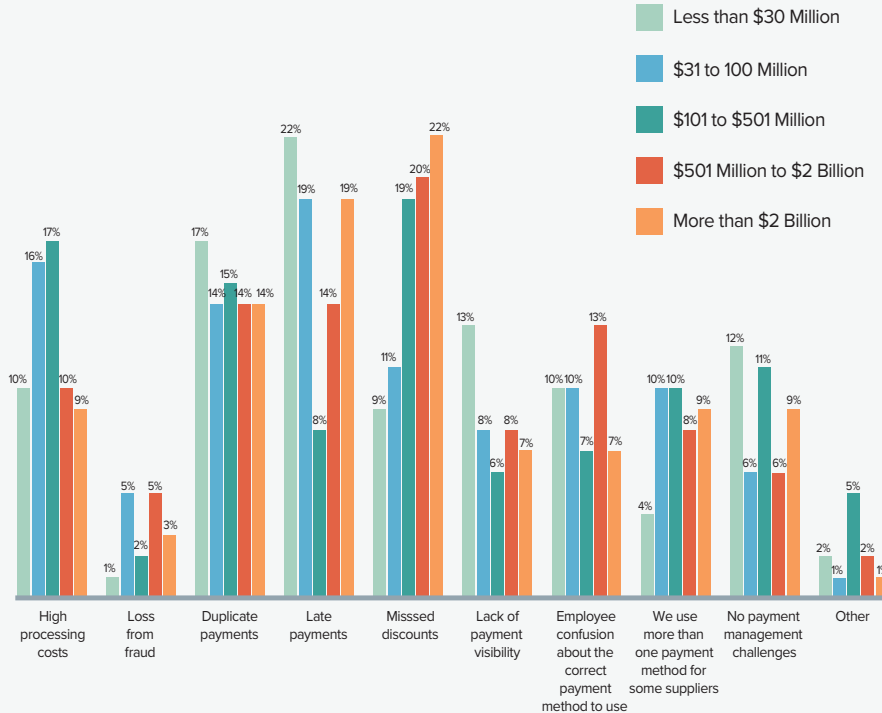
*“What is your organization’s annual revenue in the most recent 12-month reporting period?”*

While there is not a lot of variation across payment methods, there are some differences in payment-related pain points across company sizes, see Figure 7. When asked about their top pain points, LMM organizations reported missed discounts, duplicate payments, and processing costs as key issues. Duplicate payments in particular are often a symptom of highly manual, disorganized



FIGURE 7

### Top Payment-Related Challenges



### LMM Organizations Report Missed Discounts, Duplicate Payments, and Processing Costs As Among Their Top Payment Challenges

*“What are your top three problems payment-related pain points?”*

&

*“What is your organization’s annual revenue in the most recent 12-month reporting period?”*

processes, which lines up with the typical current state of LMM, and often scaling, organizations.

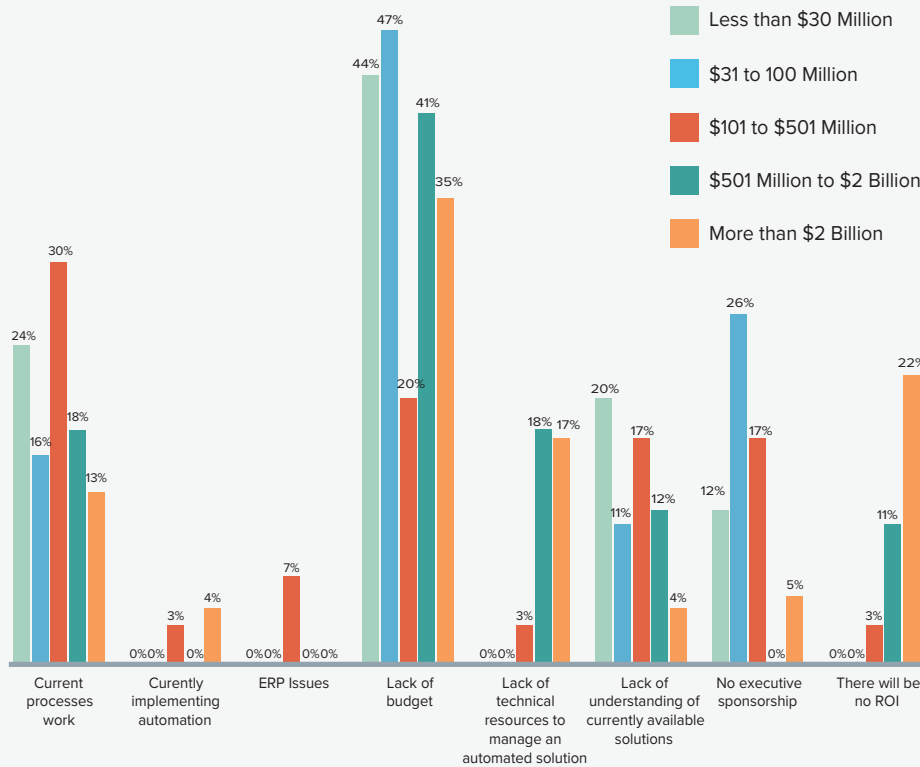
Despite notable inefficiencies, paper-based processes still permeate the back offices of all organizations. When it comes to adopting AP technology that would help eliminate paper, organizations of all sizes perceive budgeting as their top barrier to adoption, see Figure 8. However, LMM companies’ top barrier is the belief that current processes are working. Level Research attributes this partly to the fact that many companies in this revenue segment are in the process of scaling operations. As a result, they may be experiencing sudden changes and a period of internal disruption, which can create blind spots and necessarily prioritize some change management initiatives above others. In other words, when it comes to growing the business and maintaining competitive advantage



with limited resources, scaling organizations may consider customer-facing projects more strategic than getting rid of paper in their AP department. This is somewhat reflected by another top barrier for the LMM, which is “no executive

FIGURE 8

### Perceived Barriers to Automation



#### Lack of Budget is the Top Barrier to Adoption Across Revenue Segments

“What do you perceive to be the greatest barrier to adopting a cloud-based AP automation solution in your organization?”

&

“What is your organization’s annual revenue in the most recent 12-month reporting period?”

sponsorship.”

The data also shows that larger organizations are more concerned about the technical resources available to manage an automated solution. This is partly due to the fact that larger organizations are much more likely to have existing technology systems in place that must be replaced or integrated with, and they will have concerns about onboarding requirements and process restructuring. Smaller organizations are more likely to be starting from scratch—or close to it—



in terms of back-office technology adoption.

In all, the first step to overcoming the top barriers of adoption for LMM companies is to understand the diverse and flexible options for approaching AP automation. Organizations can strategically remove paper from their back office in a way that is suitable to their budgets, business environments, and future business goals. The following sections outline some of the tools LMM organizations can use to get rid of paper and automate their AP process.

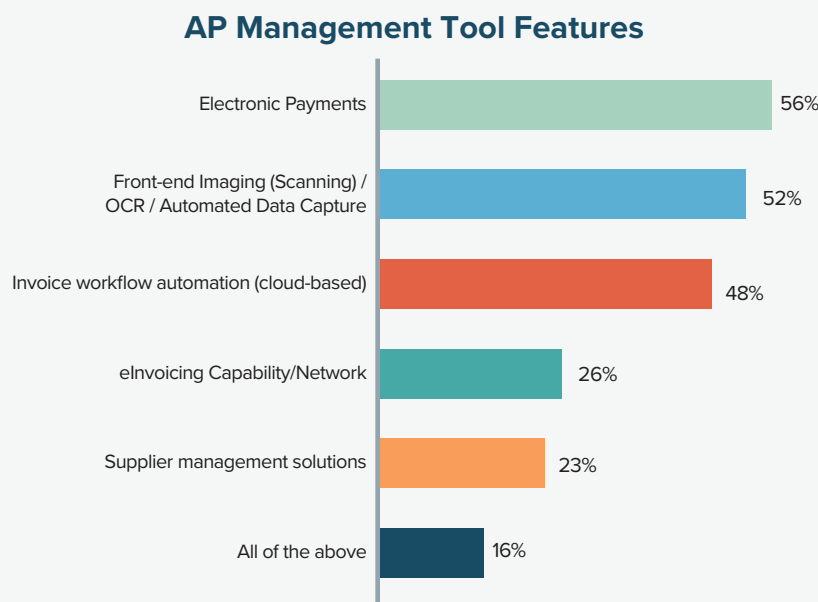


## Understanding AP Automation Options

Identifying the most suitable approach to AP automation for a given organization depends on several factors, including the organization’s size, industry, and current state. Level Research breaks down payables automation into five primary functions: paper-based invoice receipt (front-end imaging/data capture), electronic invoice receipt (EDI/eInvoicing network), invoice workflow automation, electronic payments, and supplier management. Within these functions are several other useful tools for successfully managing AP, including reporting and analytics tools and basic PO management functionality. If an organization has technology in place for each of the primary functions above, it is considered to have a fully automated payables process.

Figure 9 shows the overall adoption rate for each type of payables automation tool. Across all organization sizes, ePayments is the most commonly implemented AP automation feature, followed by a front-end imaging/data capture tool. Level Research attributes this to the relative ease of implementing these tools in an AP process.

FIGURE 9



### Electronic Payments Are the Most Widely Adopted AP Automation Tool

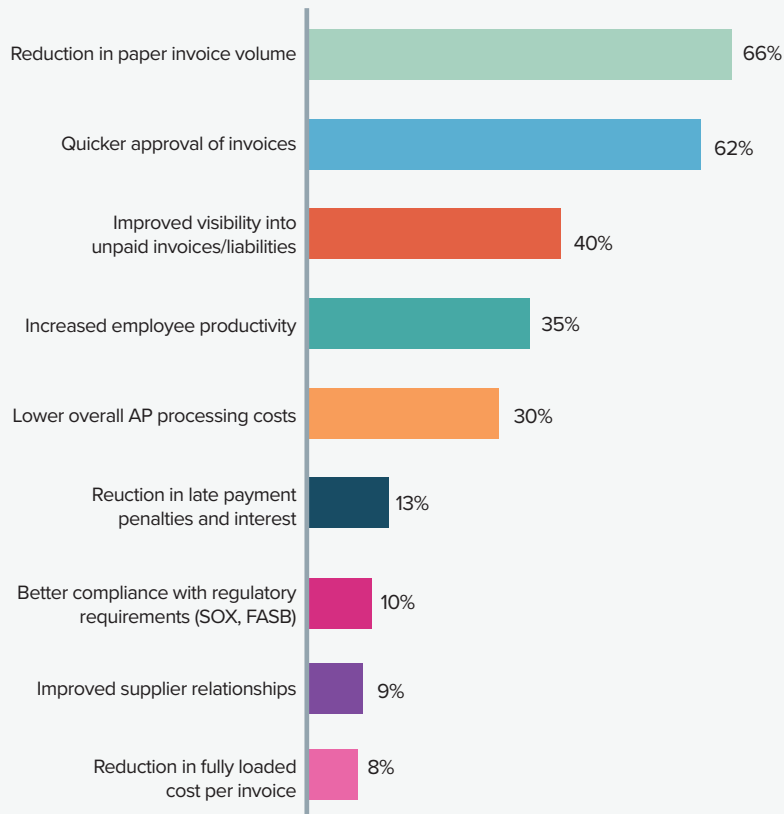
*“Which of the following features does your AP management tools have? (Select all that apply)”*



Front-end data capture tools’ adoption rates rise as organizational size decreases—the smaller the organization, the more likely it is to have an AP solution with a data capture feature. For LMM organizations managing significant volumes of paper, the first step towards improving AP processes should align with the first step of the invoice journey—when the invoice is received. As these companies deal with higher volumes of paper invoices than larger organizations, paper-based invoice receipt technology and services are often the most strategic way to begin AP automation. Automating AP in this way also circumvents the need for an organization to require their suppliers all convert to electronic invoices, which can be much harder for smaller organizations with less buying power over their supplier bases.

**FIGURE 10**

**Benefits Achieved Through AP Automation Implementation**



**Electronic Payments Are the Most Widely Adopted AP Automation Tool**

*“Which of the following features does your AP management tools have? (Select all that apply)”*





When organizations that had adopted AP automation were asked about their greatest improvements, the majority of organizations reported reduction in paper invoice volume as their top benefit from automation, followed by improvements in approval times, see Figure 10. There were no notable differences when improvements were examined according to organization size.

There are certain features and services that are more appropriate for the needs of LMM companies. The features and services of LMM payables automation are outlined below.

### Invoice Receipt

There are two primary methods of managing invoice receipt. The first is to take a flexible approach to the original invoice format, using front-end imaging technologies and services to convert paper-based invoices into the electronic format appropriate for existing accounting systems. The second way is to try to convert invoice formats into the preferred electronic format at the invoice's origin, such as connecting the buyer and supplier via an electronic invoicing network to enable EDI invoices.

Getting rid of paper in the front end provides organizations with a significant level of control over downstream AP processes. It also reduces delayed and lost invoices and cuts back on the chance of duplicate invoices. These benefits are particularly valuable for scaling organizations, as new supplier relationships and expanding operations will be more sustainable and successful with accurate and timely invoice and payments processes.

For LMM organizations, automating invoice data capture is sometimes preferable over establishing an eInvoicing network. This is because many medium-sized businesses do not have the time or up-front resources to support the requirements of an eInvoicing network, including implementation, development and maintenance of technical architecture, and supplier onboarding campaigns. Additionally, eInvoices make up a very small percentage of supplier invoices for most organizations, and smaller organizations are not always able to persuade their suppliers to convert from their own preferred method.

Data capture solutions use Optical Character Recognition (OCR) technology to extract information from scanned paper invoices or invoices that are received via email. Though minimal manual corrections are often required, data capture solutions offer varying levels of accuracy, depending on the service level agreement (SLA) in place. Once invoice data has been extracted, it is processed



in a verification and validation system for review and subsequently sent through an approval workflow system for processing and payment. Data capture solutions remove manual data entry from AP professionals' workload, allowing them to focus instead on verifying the accuracy of the data, dealing with invoice exceptions, and managing supplier relationships.

Some AP solutions also offer suppliers other methods for submitting invoices that do not strictly fall under the category of eInvoicing. Suppliers can access a self-service web portal to submit invoices in non-EDI formats such as PDF files. Data capture tools are built into these portals, allowing suppliers to verify invoices themselves after data is extracted. This is appealing to suppliers because it reduces the invoice lifecycle and speeds up payment times, and it is helpful for the buyer because it increases suppliers' involvement with the technology. The greater the supplier engagement with an AP solution, the greater the chance of ROI from adoption. Self-service portals with data extraction tools also open the door to transition suppliers over to more efficient invoice management methods in the future, like EDI invoicing.

Data capture technology can be leveraged to get rid of paper in several ways:

- » Establishing an Internal Mailroom Service – Mailroom services are most valuable for companies where a mailroom already exists, or where companies are quickly scaling and considering implementing one. OCR data capture via front-end imaging technology requires minimal training and onboarding for mailroom staff, since now all they must do is separate the invoices they receive through the mail and upload scanned documents to the invoice receipt management system for automatic data capture and routing.

It is worth noting that leading data capture solutions can provide value beyond invoice management, such as when handling legal and HR documents and contracts. The use of data capture solutions in this way is especially suitable for organizations that rely strongly on an Enterprise Content Management (ECM) system or a shared services center.

- » Outsourcing Invoice Receipt to a Third-Party Document Management Service – Outsourcing invoice receipt is a viable option for organizations that either do not already have a mailroom service or are looking to eliminate existing internal mailrooms. Opting to outsource may be the result of many different factors and does not necessarily need to be due to budgetary reasons.



In fact, in many cases, using a third-party document processing service can cost roughly the same as maintaining in-house invoice processing. Outsourcing invoice receipt, however, relieves an organization of the burden of staffing and helping achieve output and productivity benchmarks.

When invoice receipt is managed by an outside service, mail is sent to a centralized location and processed with leading advanced data capture technology, which often provides similar accuracy guarantees to a plug-in data capture tool. In some cases, service providers also include human intervention through double-blind keying to ensure greater accuracy. When asked the main benefits achieved from using a third-party provider, most Level Research survey respondents cited more expedient processing times, a reduction in paper invoice volume, and an overall reduction of AP processing costs.

- » In-House Implementation of a Front-End Imaging System – Some organizations lack the necessary budget and infrastructure to support a full mailroom invoice receipt operation. Fortunately, there are several advanced front-end imaging systems on the market that are specifically tailored for smaller AP departments. These solutions automate invoice data capture and validation workflows, freeing up AP clerks while also decreasing processing times.

## Approval Workflow

Efficient invoice management includes automatic GL coding, duplicate invoice detection, and other features that prepare the invoice for the approval workflow. While AP systems for larger organizations often entail extensive workflow routing setup, solutions for mid-sized companies feature a simple, user-friendly configuration in order to accommodate fewer employees, less time, and limited IT resources. The setup can have multiple steps and routes with conditions, as well as easily-activated alerts, escalations, and delegations.

AP systems also provide high levels of visibility into workflows, creating a traceable audit trail for an invoice throughout its lifecycle. Efficient automatic workflows reduce cycle time and help eliminate late payment penalties and supplier calls, while capturing potential discounts from suppliers. Mobile functionality allows AP employees to approve invoices out of the office and at any time, bringing more speed and flexibility to the process. In addition,



approved and paid invoices can be archived for several years to enable quick retrieval and ensure audit compliance. This archive also eliminates the need for offsite document storage.

### **Built-In PO and Expense Reporting Functionality**

In today's market, it is common for larger organizations to turn to different solution providers for different automation needs. For example, a large enterprise may use one software company for electronic procurement and another for AP management. However, for businesses with less extensive and more centralized operations, with fewer resources for technology investment, leveraging many different solutions is not always a practical strategy.

Solutions geared toward medium-sized businesses often offer simplified versions of other process functionalities within their product, bringing holistic automation on a smaller and more affordable scale. For example, some providers offer PO management functionalities, allowing users to create POs from their computer or mobile device. This allows for two- and three-way matching, which validates the invoice before it enters the approval workflow, preventing future problems and enabling additional control and visibility.

Many solutions also offer basic expense reporting functionality. For organizations with a smaller workforce, or one that travels only rarely, built-in expense reporting is very appealing. Solutions with this feature can capture and manage expense reports with attached receipts, as well as manage the workflow and archival of contracts and other documents.

### **Electronic Payments Integration**

Electronic payment functionality is very important for efficient AP, as it is the final step for a secure and swift workflow. Many invoice management solutions and some data capture tools offer in-house payments automation capabilities, or directly integrate with leading ePayments solution providers. These methods include traditional purchasing card support and ACH payments, and in some cases, check-writing services for customers who still require a check payment option. More advanced options include advanced ePayments platforms and commercial card tools.

“Commercial cards” is the umbrella term for payment cards used in B2B payments (as opposed to consumer cards). Commercial cards types include:



- » Traditional Purchasing Cards – Organizations provide purchasing cards (p-cards) to individual employees for the purchase of business goods and services. P-cards are ideal for purchases in which the traditional invoice approval prior to payment does not add value (e.g., low-dollar purchases). Some p-card programs are known as “One Card” programs when they also allow for T&E expenses, eliminating the need for an employee to carry two cards.
- » Corporate Cards – Employees use these cards for business travel and expense (T&E) purchasing.
- » Fleet/Vehicle Cards – Organizations implement this type of card to pay for fuel and vehicle maintenance. The cards allow for reporting and tracking by vehicle, providing controls specific to this expense category.
- » Ghost Cards/Accounts – Traditional ghost cards function like p-cards, with reusable account numbers and spend limits that refresh each month. One common scenario is providing a ghost account number to a supplier, who retains the number and processes charges to it as employees make purchases.
- » Single-Use Cards – This is a common type of Virtual Account (VA)—also called virtual account cards or virtual account numbers. After an organization approves a supplier’s invoice(s), AP initiates the payment process. The supplier receives a one-time-use virtual account number to process the charge. The spend limit is equal to the approved invoice(s) and does not refresh.
- » Other Virtual Card Programs – Like single-use cards, other Virtual Accounts programs center around an organization’s approval of supplier invoices. One VA option is a straight-through payment where a supplier receives a direct payment through the card network or issuer, rather than having to process a charge transaction. Overall, organizations tend to target Virtual Accounts for higher dollar purchases and/or complex purchases warranting invoice review prior to payment. VA cards are one of the fastest-growing payment tools offered today, and are offered by leading ePayments providers.
- » Declining Balance Cards – These cards have a set limit and expiration date that does not refresh. Organizations may use such cards for special projects



with a set budget, such as meetings or events, for relocation expenses, for infrequent travelers who do not warrant a corporate travel card, and more.

Advanced ePayments providers will complete payments through ACH rails, while offering rich remittance detail and other functionality that traditional ACH does not. This software streamlines many tedious aspects of payment management. Some companies also offer wire payments support, as well as global payment management services that enable organizations to streamline the complex tasks of international supplier payments. Sometimes these services include verifying suppliers' legal status and payment compliance by searching Do Not Pay lists. These services can be especially valuable for growing middle-market companies that are considering expanding operations. Leveraging these solutions early on will increase companies' ability to support international payment process and compliance requirements as they build their international supply chain.

Much of the value of an ePayments tools lies in their integration with existing AP functions, either through the company's ERP or its AP automation software. This enables organizations to truly automate the entire invoice-to-payment lifecycle. With an electronic payments platform, payments can be automatically approved based on invoice amount or type, or they can be sent through a configurable payments approval workflow. Once an invoice is approved, the invoice details are posted to the organization's financial system, and approvers can pay individual invoices or create payment batches. Many solutions also handle much of the remittance and reconciliation process, and some solutions post remittance data within clients' bank accounts for better transparency.

With ePayments solutions, the most obvious savings come from reducing processing costs from manual and paper payments. Savings can also be realized by removing steps from the invoice lifecycle process. For example, Accounts Payable can make one monthly payment to the card issuer instead of hundreds of payments—most of which are small-dollar—to many different suppliers. In addition, organizations can configure their system to send some invoices directly to payment, such as those connected to utility bills.

Another advantage of commercial cards is how organizations can use them to optimize cash flow. Some solutions also include discounting functionality that allows organizations to manage payments according to available early payment discounts. AP can also leverage the commercial cards to increase Days Payable Outstanding (DPO)—rather than adhering to suppliers' typical 30-day invoice payment terms, paying via card can extend the float beyond 30 days.



Commercial cards often offer rebates that can bring organizations substantial savings, even offsetting the cost of the technology investment itself. Many commercial card providers offer certain monetary rebates and incentives based on their clients' spend. Rebates can be large—up to hundreds of thousands of dollars. These savings can be very beneficial for middle-market companies that look at potential ROI as one of the most important factors in their decision to adopt technology.

### **Strategic Reporting and Analytics**

Reporting and analytics functionalities provide mid-sized companies with vital visibility into spend activity and employee compliance. Dashboard and reporting capabilities improve monitoring and information discovery through KPIs and activity graphs analyzing spend, suppliers, process productivity, delays, and other factors. These features allow organizations to fine-tune their current processes to become more controlled and cost-efficient. Many solutions include a document archive and a full-text search capability. From a resource efficiency perspective, LMM organizations may lack the staff to regularly analyze data and perform strategic financial and process improvement analytics. Built-in reporting tools enable these organizations to track key metrics and carry out strategic analysis. In addition, these tools provide C-suite decision makers with real-time visibility into a wide variety of metrics that would ordinarily be difficult to monitor during growth periods or using highly manual processes.

Regardless of the solution an organization chooses to implement, a transition towards AP automation should be welcomed for the significant improvements in processing efficiency and accuracy it yields, as well as for cost improvement relating to employee productivity. To properly select and implement the right payables automation tool, organizations to fully understand both the current state of the back-office and the different automation options available. The following section outlines some of different ways LMM companies can approach paperless AP.



## Automating in the Lower Middle Market

Automating AP processes is not a one-size-fits-all solution across different organizations, nor does it necessarily involve the implementation of a fully-featured AP software. Instead, automation can be initiated by selecting a particular part of the AP process to begin with, while keeping open the possibility to scale up as needs and/or budgets change. Prior to automation, organizations of all sizes should map out their current state and process metrics, including processing times, labor costs, and error rates. With the proper preparation and scoping prior to implementation, organizations of all sizes will be ready to successfully begin automating AP.

Level Research's research has found that efficient and successful LMM AP automation implementations involve the following steps and characteristics:

*Outline the most suitable invoice management process.* Prior to initiating automation, organizations should examine the state of their existing invoice processing structure. Decision makers should assess information such as the number of ERP systems in place, monthly invoice volume, the number and type of locations where invoices are sent, and the amount of touches (or people involved) in existing invoice workflows.

Once this information has been gathered, organizations should examine their findings in the context of their automation options. For example, a large organization that processes a high volume of invoices at various decentralized locations may not benefit from implementing internal mailrooms in each location. In this case, the organization may want to weigh the relative advantages and disadvantages of establishing a centralized mail room versus outsourcing all invoice management to a third-party document management provider.

Beyond an organization's size, other factors such as invoice volume and an organization's business structure may affect which automation approaches make sense from an economic and resource perspective. Consider a large organization with operations spread out across many different locations, though each location receives relatively few invoices. In this instance, it makes little sense for the organization to centralize invoice receipt processes, since the small number of invoices would require a significant amount of coordination and routing. Instead, a more feasible solution for the organization would be to implement data capture technology in each location.





*Ensure uniformity in adoption across the entire organization.* The value of automating invoice processing is contingent upon how well an organization incorporates the new technology and corresponding workflows. To increase the success of solution adoption, controls should be established that prevent employees from bypassing certain protocols. For example, if an invoice requires fast-tracking or if AP teams find themselves overburdened during seasonal spikes in invoice volume, processes should be put in place so that these invoices can be managed in a traceable, efficient manner.

*Integrate with the current state.* Mid-market AP solutions are built to integrate easily with an organization's current state. Companies can automate their invoice process step by step, starting with an easy-to-use AP automation software that includes portable cloud scanners. With simple, efficient AP tools laying the groundwork, advanced automation like eInvoicing networks and full supplier participation will easily follow in time.

Organizations should also find a solution that is unobtrusive and quick to implement. Cloud-based solutions enable easy and quick implementation, no advanced IT involvement, and minimal user training, and can be operational within a few hours. They do require some information from the user, such as GL lists, vendor lists, POs, and workflow setups, but after this data is transferred, the system is loaded in a matter of hours and does not disrupt the current business flow.

*Find a solution that is priced according to businesses' needs.* AP solutions can be priced according to organizations' specific financial needs. Many are zero-risk, requiring no investment or IT costs, and organizations can often try a solution for free before making a final decision. In addition, many pricing structures are based on usage, allowing organizations to directly control costs. Many providers allow their customers to cancel at any time with no penalty.

The proliferation of cloud-based software in recent years has provided LMM organizations with a broader range of automation options to consider. Before, solutions tended to be tailored towards larger organizations, were more expensive, and required longer implementation times. Today's LMM organizations have a number of options when it comes to finding a relatively low-priced solution with a range of optional value-added services that can be implemented as needed. Organizations can gradually automate AP processes with the ability to scale up to other tools, such as a Procure-to-Pay (P2P) suite, if desired.



*Consider long-run supplier onboarding.* While committing to an invoice processing approach is an important strategic decision for an organization, part of the decision and transition involves the organization's supplier base and their potential to meet new demands. An organization's ability to get suppliers to comply with requests for EDI or email-based invoices will depend on the supplier relationship. For example, smaller organizations that submit relatively small purchase orders may find it challenging to find leverage with their suppliers. Often, suppliers may not feel required to comply with new protocols, particularly if they're not dependent upon the buying organization to maintain their business, or if their own strategic outlook does not align with the new ask.

When an organization has many suppliers that send paper invoices, it will be helpful to set up alternatives to email/EDI invoicing, at least at first. In such cases, an organization can give suppliers a new mail-to address, which would send the invoices to an internal or external centralized mailroom. Over time, the organization and supplier can work together to convert an increasing amount of paper invoices to email/EDI invoices.

Alternatively, when an organization has a relatively progressive supplier base where most invoices are sent over email, the organization can route these invoices through a new email account that is integrated with a data capture system. Any remaining non-email invoices can be entered into the organization's ERP after being sent to a small mailroom location, or to a few AP departments that use inexpensive data capture tools. Data capture or third-party providers often work with suppliers to drive compliance, and can also establish additional means such as an automatic rejection policy for invoices that are not completed properly to increase new solution uptake. Level Research's benchmarking research has found that suppliers generally realize the benefits of providing organizations with email or EDI invoices. Advantages such as quicker processing times, more accurate data capture, and improved compliance offer a valuable incentive for suppliers to adjust their methods accordingly.

*Look beyond getting rid of paper.* Companies that start by getting rid of paper should not stop there, but should move forward to create a holistic, fully automated, and controlled AP lifecycle. While Level Research has found that for many LMM organizations, getting rid of paper is a strategic first step in AP automation, this does not mean it is the only option. For example, some organizations may have equally or more urgent problems in their back-office than high paper volume, such as payment processing difficulties. For these



organizations, it may be more beneficial to start with electronic payments tools, instead of, or in conjunction with, an invoice data capture tool or service.

Starting with one part of the AP process over another does not mean an organization is limiting itself. It can work with a provider that offers holistic AP automation, which will allow the organization to adopt additional modules in the future. Or, they can also work with a specialist in one area of AP automation (e.g. a virtual card provider) that offers advanced integration capabilities with other technologies, and/or existing partnerships with other leading AP automation providers. Using adoption strategies like these is very strategic for scaling companies that will have changing needs as they grow—as well as growing resources for technology investment.



## Conclusion

Lower middle market organizations can pursue a number of approaches on their journey to AP automation that allow them to better manage their existing processes as well as scale those operations as the company grows. An AP automation solution made for the middle market will bring extra visibility and control into business operations, allowing AP departments to focus on more strategic tasks like identifying more cost savings opportunities and helping their organization achieve greater competitive advantage.



## Artsyl

Artsyl has been helping companies automate business processes for over 15 years. Artsyl’s Transformation Platform, based on its core product docAlpha, processes millions of documents each year. Having gained extensive knowledge about customer processes, requirements, documents, and back-office challenges, Artsyl has put together a solution focused specifically on invoice processing called InvoiceAction. This solution helps get customers up and running with AP automation quickly and efficiently.

Founded	2002
Headquarters	Toronto
Other Locations	Kiev, Tampa
Number of Employees	51
Number of Customers	500+
Target Verticals	Corporate Finance, Manufacturing, Financial Services, Healthcare
Partners/Resellers	SAP, docSTAR/Epicor, ReQlogic/UXC/CSC, Acumatica

### Solution Overview

Arstyl’s Transformation Platform and its InvoiceAction solution are based on Microsoft.NET and a Service Oriented Architecture, and follow all standard security models from Microsoft. All of Artsyl’s solutions leverage API-based integrations to connect with major ERP systems, including SAP, Oracle/NetSuite, Microsoft Dynamics, Acumatica, Sage 100/500, Sage Intacct, Epicor, and SYSPRO, as well as several more ERPs using EDI 810 and web services. Invoice Action is offered as an on-premise, hosted, or public cloud solution.

### Payables Management

InvoiceAction drives down operational costs and drives up operational efficiencies with flexible AP automation. The solution’s invoice management capabilities include data extraction, business rules validation, and routing for user verifications, approvals, and GL coding. InvoiceAction also delivers accuracy and ease of use in invoice processing with capabilities like cascading document classification and machine learning leveraged through a feature called “Auto-Find”. The solution exports invoices and other documents to the appropriate ERP, ECM, SharePoint, or other business system databases.

Invoices can be put into the InvoiceAction through multi-channel inputs, including



email, scanned paper, fax, FTP site, WebDAV folders, and EDI. Artsyl supports PDF and other image formats such as TIFF, JPEG, BMP, and PNG, or electronic invoice formats such as EDI, XML, TXT, CSV, Word, and Excel. Artsyl also offers a supplier portal that gives suppliers direct invoice submission/generation capabilities for multiple formats, as well as the ability to view and monitor invoices in progress.

InvoiceAction extracts relevant header and line-item data from invoices and related procurement documents, validating that data by cross-referencing existing ERP system records. InvoiceAction then relies on the extracted data to provide 3- and 4-way matching with transactions within the ERP system, or automatic exception routing according to pre-defined business rules. InvoiceAction supports field-level matching based on business rules, and invoices can be routed back to suppliers with rejection explanations.

Automatic email notifications alert staff to exceptions that need attention, and automatic escalations ensure that nothing remains in any individual's queue for too long. InvoiceAction supports out-of-office forwarding, escalations and reminders, and workload balancing. The solution also offers automatic approvals on recurring invoices, such as utility bills. InvoiceAction is web-based, and its responsive-design application can be accessed from any mobile device. Emails contain hyperlinks to launch the application and allow users to manage their invoices from any tablet or mobile device. In terms of payments, electronic payments are offered through third-party integrations.

Artsyl also provides insights into user and system performance through the use of a transaction statistics server to collect and report on all facets of any transaction processed through the system. The solutions offer reports that can be configured to present KPIs for a client. Artsyl's consulting staff works with all clients to map out their current processes and re-engineer them leveraging the features of docAlpha and InvoiceAction.

## Implementation and Pricing

InvoiceAction implementation times vary depending on the complexity of a project. Artsyl provides full operator and administrator training as part of the standard implementation. After implementation, Artsyl offers full technical support 24/5. The solution is priced per transaction.



## AvidXchange

AvidXchange automates invoice and payment processes for mid-market companies through a combination of service and technology to remove manual tasks and paper. AvidXchange was founded in 2000, initially focusing exclusively on automating invoice processes. As the company grew, it expanded scope to encompass more paper-elimination functions such as managing approval of requisitions and orders, and processing utility bills. In 2012, AvidXchange developed the AvidPay Network to pay suppliers. Since then, AvidXchange has expanded its automated accounting integrations to over 140 accounting systems. Today, AvidXchange offers electronic invoicing and payments via its primary product, AvidXchange Invoice, and the AvidPay Network of 400,000 suppliers.

Founded	2000
Headquarters	Charlotte, NC
Other Locations	Salt Lake City, UT; Houston, TX; Somerset, NJ; and Pembroke, MA
Number of Employees	1000+
Number of Customers	5500+
Target Verticals	Real Estate, HOA, Nonprofit, Construction
Awards/Recognitions	2017 Top Software Company in North Carolina by NCTech; ranked on Deloitte's Fast 500; CFO's Tech Outlook Top 10 Accounts Payable Solution Providers 2017

### Solution Overview

AvidXchange integrates with a client's ERP using AvidXchange's Application Interfaces (API) and file-based process developed specifically for each accounting system. AvidXchange's web application is mobile-responsive, enabling customers to approve invoices using Smart Workflows via any mobile device. Since AvidXchange is a web-based based solution, it focuses on the highest level of security audits to keep clients' data secure.

### Payables Management

AvidXchange offers paperless invoice management from day one via its three scanning and data capture centers located in the US. AvidXchange converts all received invoices into an electronic documents, and performs data entry to allow customers to accelerate the client coding and approval process.



AvidXchange's invoice workflow solution is customizable, allowing users to configure multiple steps based on role, user, requisitioner, and manager, as well as providing the option to set conditional steps by invoice total or tax amount. Customers can also choose special workflows based on need, such as PO-match and ad-hoc workflows. AvidXchange provides exception notification rules customized for user roles. For each workflow step, customers can set "days before escalate," and organizations can configure emails to notify users of pending approval notifications. In addition, AvidXchange's solution includes a Proxy Approver feature which allows different users to help maintain timely approvals.

AvidXchange's primary electronic payments solutions are virtual cards and AvidPay Direct. The AvidXchange ACH+ solution comes with all the benefits of the AvidXchange Pay Network including rich remittance detail, access to an online supplier portal and the option for early payment via the Invoice Accelerator solution.

To manage fraud risk, AvidXchange offers 4-way positive pay and ACH debit blocks on all settlement accounts. AvidPay PayControl is a payment approval solution that supports review of high dollar payments, approval thresholds, and dual approvals and for all submitted payments.

AvidXchange also offers a purchase-order management tool, which enables AP users to flip POs into invoices, as well as match POs and invoices for accurate payment fulfillment. As part of the 2017 Ariett acquisition, AvidXchange recently extended the AvidXchange Purchase-to-Pay (P2P) solution to customers using Microsoft Dynamics GP and Intacct. Within the P2P solution, AvidXchange also offers a travel and expense management (TEM) product for managing expense report submission and approval.

## Implementation and Pricing

The standard implementation period is 45 days, with options to accelerate the timeline for customers using specific accounting systems. AvidXchange's implementation toolkit means that most companies do not need IT resources to implement the solutions. AvidXchange provides standard training remotely via screen sharing and video conference software, and supports both a train-the-trainer model and an end-user training model. Customers also have access to training videos that cover specific application functions and overviews.





AvidXchange has two service groups dedicated to customer success after go-live—Customer Care and Customer Success. The Customer Care team consists of technical and functional experts dedicated to resolving customers’ most pressing issues related to the system and services. Customer Success is dedicated to monitoring and supporting customers in their active use of the solution. The Success team will schedule regular business reviews with customers, serve as escalation points on support cases, and monitor usage levels to ensure that clients are taking full advantage of what AvidXchange has to offer.



## Digiscribe

Founded in New York in 2001, Digiscribe International provides accounts payable automation services and solutions to North American organizations. The founders of Digiscribe have over 30 years of experience creating paperless offices for companies across all industries and sizes. The company's offerings include front-end imaging/scanning, mailroom services, invoice workflow automation (cloud-based), document management services, optical character recognition, automated data capture, indexing and data entry. Digiscribe works primarily with mid-sized companies with a revenue of \$30 million to \$500 million, monthly invoice volumes of 3,000+, multiple locations, and approximately 100-5000 employees. The company scans over 40 million documents annually.

Founded	2001
Headquarters	Elmsford, NY
Other Locations	Norwood, MA
Number of Employees	70
Number of Customers	450
Target Verticals	Hospitality, Healthcare, Distribution, Manufacturing
Partners/Resellers	Bluecreek Vision 360 Accounts Payable Automation Software, Upland Filebound Document & Workflow Automation Software, Psigen Software, Digatech Systems Software
Awards/Recognitions	SOC 2 Type 2 Facility; Accredited Payables Solutions Consultants; HIPAA trained staff; NYSID Preferred Source Solutions Partner

### Solution Overview

Digiscribe's New York-based document scanning facility, which houses its mailroom center, has received its SOC 2 Type 2 Report annually since 2013, and all staff are trained in HIPAA compliance. The facility has disaster recovery plans in place, off-site data back-ups and replication, and 24/7 video monitoring.

Digiscribe's AP automation solutions can be easily integrated into most ERP and accounting systems, and are mobile enabled. Data is automatically encrypted during transmission to clients and between the user's browser and their instance of the AP automation software. Additional security measures include authentication and password controls, privacy and availability measures, and network, organizational, and administrative security measures.

Digiscribe specializes in the lower middle market, tailoring its services and solutions to meet the needs of organizations of this size. Digiscribe also offers



its products at a mid-market-appropriate cost point, and most clients are able to realize a clear ROI in 12-18 months.

## Payables Management

Digiscribe's outsourced mailroom services cover receipt of clients' incoming invoices and related documents. Digiscribe allows invoices to be submitted in almost any format; suppliers can send paper invoices to a Digiscribe-monitored post office box or submit electronic invoices via email to a dedicated email account. Once invoices are received, Digiscribe's team of data specialists extract and validate all of the invoice transaction data. Digiscribe captures invoice data by double keying and comparing to PO and vendor master data from the client.

Client-dedicated post office boxes are housed in USPS locations located near Digiscribe's scanning facilities. Digiscribe picks up the mail daily and brings it to scanning facilities for immediate conversion, capture, and upload to the AP automation system. All invoices are keyed and fully verified using double-blind keying, and Digiscribe reports data confidence levels of 99.5 percent on invoices.

Digiscribe's AP solution supports direct invoice submission in many ways, including vendor email portal, PDF, TIFF, EDI submission, PO flip, and electronic images. Emailed documents are received directly on Digiscribe's internal servers in client-dedicated email accounts. The accounts are continuously monitored, and the emails are processed for image optimization, data capture, and upload. Digiscribe's solution also offers a vendor notification system, emailing them to alert them of the status of their invoices.

Once documents are digitized and indexed, Digiscribe delivers process-ready invoices into the client's preferred AP automation workflow software for either straight-through processing or automated review, approval, and payment. The software uses matching engines to perform 2-, 3-, or 4-way matching between POs, receipts, component inspections, contracts, or any other associated sets of metadata.

The workflow tool can automatically categorize invoices and present them to AP staff via a dashboard. The software also incorporates a set of complex exception engines and algorithms that will prevent problem invoices from slipping through the process without review. Exception invoices are tracked, recorded, and made visible in the dashboards.



For invoice approvals, the system offers reminders, escalations, and workload distribution based on sets of algorithms and business rules. If an invoice exceeds an approver's authority level, that invoice will automatically escalate up the approval chain. Non-PO invoices can be coded on screen or the chart of accounts can be applied automatically using Digiscribe's smart coding technology. All activity including approvals, access, and histories are recorded and logged for security and compliance. Digiscribe partners with a payment provider to give clients access to payment automation upon invoice approval.

The AP automation software includes full reporting, dashboards, and analytics as part of the standard package, as well as custom reports as needed. Digiscribe also offers record retention and archival services which can be housed in the cloud or on clients' internal servers. This includes search and retrieval functionality that can be integrated with clients' ERP and other accounting systems.

### **Implementation and Pricing**

An average implementation is 45 days. During this time, Digiscribe offers a dedicated client-services team and highly trained and certified technical staff that work with the client on design, implementation, and training of the AP workflow automation solution. Digiscribe provides complete training during configuration, for go-live, and after go-live. This includes administrative training, AP staff training, and end-user training. After implementation, Digiscribe's customer support is available and ready to assist when needed.



## 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. In 2017, Hyland acquired the Perceptive business unit from Lexmark International, Inc., expanding its portfolio of content services offerings. With this acquisition, the company added data extraction software, Brainware by Hyland, to its product portfolio.

Founded	1991
Headquarters	Westlake, Ohio
Other Locations	Lenexa, Kansas; Sao Paulo, Brazil; London, United Kingdom; Sydney, Australia
Number of Employees	3,300
Number of Customers	19,000
Target Verticals	Manufacturing, Retail and Wholesale, Transportation, Professional Services, Construction, Media, Healthcare, Higher Education, Insurance, Financial Services, Government
Partners/Resellers	300+, including DataBank, Konica Minolta Business Solutions, KeyMark Inc., Requordit
Awards/Recognitions	Leader, Gartner Magic Quadrant for Content Services, 2017; Leader, Gartner Magic Quadrant for ECM, 2010-2016; Strong Performer in the Forrester Wave: Cloud-Based Dynamic Case Management, Q1, 2018; Market Leader in Ovum’s Decision Matrix for ECM Solutions for the Cloud, 2017-2018

### Solution Overview

OnBase by Hyland can be deployed as an on-premise or hosted solution. The solution provides no-code integration capabilities with multiple business applications and live data integrations through the

OnBase Enterprise Integration Server with ERP systems such as SAP, Workday, Infor/Lawson, Dynamics, Oracle, and others.

To ensure organizations’ security, OnBase allows users to restrict who can see documents and data, and what actions can 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 configurability and scalability, which allows Hyland to configure their products to serve the specific needs—and growth plans—of any business. For example, there are no limits or restrictions regarding the number of documents stored, which gives LMM companies uninterrupted usage of OnBase’s document management services as they scale. As OnBase customers grow and change, they can also easily add additional modules to address new business needs.

## Payables Management

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 via the web or the OnBase Vendor Portal. OnBase extracts data from submitted documents via OCR; OnBase also connects with Brainware by Hyland to provide intelligent capture for semi-structured documents, and this technology can capture line-item details and handwritten characters.

Document scanning and indexing is completely integrated within OnBase. The system supports Kofax, ISIS, and TWAIN scanner interfaces and provides licenses for multiple page volume levels, as well as centralized scanning and scanning from remote offices. 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.

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 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, escalations, and reminders.

Workflow Approval Management, a direct add-on to Workflow, allows business users to configure required approvals and business rules to evaluate documents and dynamically assign approvers for any Workflow process—without any custom development. Approval hierarchies from existing business systems, such as ERPs, can also be leveraged to automatically manage approval assignments. Invoices without a PO will be routed to an AP review queue for GL coding or approver assignment. Additionally, PO invoices with PO or vendor exceptions will be routed to either AP staff or to the buyer associated with the PO.

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

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.



## ImageTag

ImageTag is a document management and business process automation solution provider for the mid-market. The company first offered its ECM solution in 1997, later adding ERP system integration and AP workflow automation to its core capture platform, KwikTag. Today, KwikTag provides ImageTag customers with a holistic system for managing document processes across their entire organization. KwikPayables, the KwikTag accounts payable automation solution, can host virtually all of an organization's business documents in the same system, reducing the need for many separate software solutions. The KwikTag solution includes several advanced tools for capturing, storing, and searching for documents, and routing using dynamic workflows for necessary reviews, edits and approvals.

Founded	2008
Headquarters	Tempe, AZ
Other Locations	Tucson, AZ; Fort Lauderdale, FL
Number of Employees	50
Number of Customers	1,000 companies; 120,000+ business users globally
Target Verticals	Healthcare/Insurance, Financial Services, Manufacturing, Restaurant and Food Services, Construction, Professional Services, Sports and Entertainment, Education and Government, Nonprofit
Partners/Resellers	Velosio (FKA Socius & SBS Group), Tribridge, RSM
Awards/Recognitions	Microsoft Silver Partner, 9 Patents; Previous: Microsoft Partner of the Year Finalist

### Solution Overview

KwikTag integrates directly with Microsoft Dynamics GP, NAV, SL, and AX through ImageTag's ERP connectors, allowing customers to tag, view, search for, and retrieve any document that has been captured by KwikTag. The solution is offered on mobile devices in any browser through the KwikTag KTX responsive design application. The system also integrates with Microsoft Office and Office 365, enabling users to leverage the system to send documents and forms directly into KwikTag from these common applications.

ImageTag provides great value for mid-market and growing organizations with the solution's deep integration specifically within the Microsoft Dynamics ERP suite. The solution suite is also easily scalable across different business units,





making it suitable for mid-market organization with more modest budgets.

## Payables Management

In order to input customers' documents into the system, KwikTag facilitates batch scans using full content OCR capability, as well as add-on products and services that perform intelligent capture with auto-learn capabilities. ImageTag reports that in some cases, accuracy rates have reached up to 99 percent. ImageTag accepts most standard document formats including Microsoft Word, Excel or Adobe PDF, as well as image files. When paper invoices are received in the client's location, they are "tagged" with a KwikTag barcode label and can be batch scanned into KwikTag for the initial indexing or verification step.

Once documents are in the system, KwikTag workflow solutions allow customers to route them across many different departments and roles. Out of the box, clients' workflows are configured by the KwikTag professional services team. ImageTag also offers a software development kit (SDK) for custom integrations and more complex use cases. If invoices do not require approval, they can be indexed or validated by the accounting team to ensure that the data was either captured or entered correctly, as well as GL code validation. Then the invoices can flow straight to the supported ERP systems or their final workflow step within KwikTag. The solution supports email approvals from mobile devices to accelerate the process, as well as automatic escalation routing. KwikTag also enables users to update workflows in real time with its Workflow Assignment Matrix Management tool.

The solution provides users with the ability to submit, tag, search, and retrieve documents. Users can search for documents with KwikTag Global Search, an advanced search function that includes everything from simple text queries to full content searches, in addition to metadata search criteria. The system has a flexible repository that allows documents to be archived outside of the KwikTag server on distributed customer storage systems. A sophisticated document lifecycle service is built into the KwikTag system, providing a complete audit trail and enforcing retention and archiving rules based on document type.

KwikTag provides security at multiple levels, including user authentication, site and drawer level permissions, which includes file-specific access. Security can be handled with Active Directory-driven user lists and single sign-on Windows authentication at the user level. KwikTag's security measures enable compliance with SOX, HIPAA, and other financial and corporate regulations.



The solution is designed to accommodate a variety of back-office document lifecycles, including those for accounting, expense management, and supplier or employee onboarding; and it can be tailored to meet the needs of any business process. These applications are found in ImageTag's catalog of KwikApps®, which are packaged and semi-packaged workflow applications designed to automate a specific process for any department (e.g., payables automation, expense management, sales orders, corporate forms automation, employee HR files). The system also offers a roles-based client strategy, providing different client experiences for various roles and activities.

Because document metadata is stored in ImageTag's relational database, customers' documents are linked to each other via common values. KwikTag allows users to retrieve a document and all related documents in the system, grouping them together in "Cases" for a broad view of a common area of interest. For example, in an Employee Case, all documents related to an employee are grouped together, making the navigation experience simpler for the employee, Payroll, and HR.

The KwikTag system also supports the full digital asset lifecycle, including creating, managing, distributing, retrieving, and archiving digital assets. The company's professional consultants work with customers to recommend best practices and tailor solutions to meet their digital asset management needs.

## Implementation and Pricing

The average implementation of the KwikTag solution typically runs between two and three months, depending on the customer's schedule and availability. ImageTag offers hands-on administrator training and video tutorials during implementation, as well as hands-on Power User training.

After implementation, customers receive unlimited technical support via a dedicated US-based support team. They also have access to a dedicated technical account manager and proactive server maintenance for an additional fee. ImageTag's pricing structure varies for on-premise and Software as a Service (SaaS) implementations. More information on the ImageTag solutions is available on the provider's website.



## Nivo1

Nivo1 is a financial process software provider that offers solutions to eliminate the challenges of online document processing. Nivo1 launched its premier SaaS product, AP Express™, in 2016; since then, the company has grown rapidly. Nivo1 offers AP Express to small, medium and large enterprise organizations. Nivo1 recently announced an exclusive partnership with TransSys Solutions in Dubai to introduce AP Express to the Middle East market.

Founded	2016
Headquarters	Pittsburgh, PA
Other Locations	London, UK
Number of Employees	22
Number of Customers	23
Target Verticals	Financial Services, Insurance, Retail, Manufacturing, Transportation
Partners/Resellers	TransSys Solutions (Dubai); Rite Software Solutions (Houston, TX); Remote CNC Services (Gallatin, TN); Tier1 (Pittsburgh, PA)

### Solution Overview

AP Express uses real-time native interfaces to integrate with customers' specific ERPs, including most major systems such as Oracle E-Business Suite, JD Edwards, PeopleSoft, Dynamics AX, and D365. Nivo1 differentiates itself by developing specific versions of AP Express to reflect the “look and feel” of the ERP system it is integrated with.

To ensure security, Nivo1 is SSAE18 SOC1 Type 11 compliant, and performs penetration testing twice annually. All data is encrypted during communication and at rest. AP Express Mobile provides an interactive application for viewing and responding to approval notifications, updating GL code combinations, and capturing invoice images.

AP Express is a cost-efficient choice for organizations of any size, as it does not require any software or hardware purchases and there are no on-going service costs. AP Express can be implemented in 30 business days or less, allowing organizations to recognize ROI fairly quickly.



## Payables Management

For invoice receipt, invoices and other transaction-related documents can be imported via email, scan, secure FTP, and by direct upload to AP Express. AP Express accepts documents in PDF, CSV, and XML formats. The solution processes documents through intelligent capture technology, and Nivo1 provides data capture confidence levels of greater than 90 percent. Nivo1's staff will manually fix any errors in data capture extraction, ensuring invoices are correct when they are submitted for review. Nivo1 also gives customers access to mailroom services through a partner, PowerFlow Solutions.

The standard invoice approval workflow in AP Express works from the employee/supervisor relationship. Organizations can configure additional options as needed, such as requiring pre- and post-approval reviews on invoices to confirm accurate and complete capture of required information. The solution supports invoice field-level matching based on business rules, and offers matching-related workflows that identify match exceptions and place the invoice in the applicable queue for review by the appropriate user.

AP Express features reminder and escalation settings for delayed approvals, which can be configured at the global or business-unit level. Out-of-office and vacation rules are also configurable by both users and administrators. Once invoices are approved, the solution integrates with ERP and financial systems to post approved transactions to the general ledger. Nivo1 also partners with OnPay Solutions to provide customers with payment related services.

In mid-2018, the company will be releasing a supplier portal, which will support automatic re-routing of exception invoices back to suppliers, as well as PO-flip functionality. The supplier portal will offer end-to-end supplier integration and collaboration, from onboarding to invoice submission and tracking. Customers will be able to send suppliers a registration notification to onboard them to the portal. Once suppliers register, they can provide customers with required documentation, as well as review the status of invoices.

Nivo1 provides archival services for customers' documents. The company maintains a minimum retention policy of 7 years, and archival beyond that timeframe is negotiated with each customer as needed. AP Express users with access to the archival service can search for invoices using any captured data. The search results include the invoice details and a link to the captured invoice image.



AP Express offers out-of-the-box reporting and analytics features. The solution's analytics capabilities include pre-built metrics related to invoice supplier and purchasing data. Nivo1 will create custom metrics for customers at no additional charge.

### **Implementation and Pricing**

In most cases, Nivo1 can implement AP Express in 30 business days or less. The company offers administrator and user training as part of the implementation. It also provides a dedicated customer support portal that allows customers to report and monitor service requests. AP Express does not require any software or hardware purchases, and there are no on-going service costs.



## Nvoicepay

Nvoicepay has a decade of experience delivering cloud-based electronic payments for enterprise organizations. The solution streamlines how companies pay their domestic and international invoices, and works with every accounting system and all banking partners. Nvoicepay integrates with front-end AP solutions to complete the Procure-to-Pay lifecycle, enabling organizations to pay 100 percent of their invoices electronically.

Founded	2009
Headquarters	Portland, OR
Other Locations	Regional offices
Number of Employees	200
Number of Customers	2,750
Target Verticals	Construction, Healthcare, Technology, Automotive, Hospitality, Multifamily Housing, Education, Retail, Manufacturing, and Financial Services
Partners/Resellers	Coupa, Concur, Viewpoint, Zycus
Awards/Recognitions	2017 Oregon Top Places to Work; 2016/17 Could Awards Winner; 2016 Best of SaaS Showplace

### Solution Overview

Nvoicepay serves enterprise organizations across a variety of industries. As a cloud-based solution, Nvoicepay integrates seamlessly with any pre-existing platforms or workflows and any banking partner. Nvoicepay’s international payment offerings deliver payments to over 170 countries in over 140 currencies, with an auto-generated remittance for every payment.

For system security, Nvoicepay is SOC certified and all payments are insured and warranted. For international payments, suppliers are checked against “Do Not Pay” lists and Nvoicepay helps clients adhere to all local, regional, and national regulations. Data is stored for seven years in the cloud and separate logins are provided to auditors.

### Payables Management

Nvoicepay partners with front-end AP solution providers to offer invoice receipt, validation, workflows, and approval management. When an organization already has an eInvoicing and/or front-end AP automation solution in place, Nvoicepay can display invoice images in those solutions. The software can also display cleared check images.



Nvoicepay offers support for ACH/EFT payments as well as card, check, and wire payments. Nvoicepay partners with MasterCard to deliver secure, single-use, controllable virtual card numbers (VCNs) using MasterCard's inControl platform. Nvoicepay follows up with suppliers to ensure the VCNs are processed in a timely manner. For card payment approvals, hierarchies are built into the platform, allowing the customer to set complex approval matrixes and workflows that mimic their current processes.

Nvoicepay provides comprehensive supplier services through its Payment Command Center. Within the Command Center, suppliers can access a portal that allows them to check on payments status, download remittances, and communicate with buyers. In addition, suppliers can indicate which payment methods they accept; suppliers can update their payment and remittance contact preferences at any time.

Nvoicepay manages all supplier payment data and updates it in real time. The company onboards all suppliers through multi-touch campaigns. As new suppliers are added, Nvoicepay reaches out and enables them for electronic payments.

The solution provides Positive Payee services for all print check payments and monitors its system for duplicate invoice payments. Nvoicepay also features automatic account reconciliation and provides suppliers with rich remittance details with every payment.

Nvoicepay's solution offers reporting within the platform and provides benchmarking and best practice metrics for customers across their industries. Nvoicepay also provides reporting and analytics tools to assist with working capital management.

## Implementation and Pricing

Implementation needs vary by customer and the complexity of the use case. Typically, implementations take 45-60 days, with the majority of that time spent by Nvoicepay enabling suppliers to accept electronic payments. Customers spend on average 8 hours on implementation activities, including training.

Nvoicepay is responsible for mapping the payment files, programming approval hierarchies, and enabling all suppliers, regardless of size or location. Nvoicepay provides training either digitally or in person for customers, and customer support representatives are available to assist customers when they have



questions. Additionally, customers can access on-demand support via phone and email, and have dedicated account managers. Suppliers also have access to on-demand support via phone and email to assist in processing payments.

Nvoicepay has standard SaaS pricing as well as transactional fees. There are no fees for suppliers to accept payments.





## Teampay

Teampay is a lightweight procurement system and purchasing card provider that allows organizations to use virtual cards to streamline purchasing and manage employee spend, serving as the single point of control for all employee purchasing within an organization. Teampay’s virtual card and payments management products enable companies to request, approve, and track employee purchasing in real time. Special features include a customizable policy engine, duplicate vendor detection, and price discovery that alerts organizations to what other customers are paying to the same vendor. Teampay’s product is specifically built for the lower middle market segment, and Teampay works primarily with organizations that have 200-1000 employees. The company works to support finance teams that want to add control, transparency, and speed to their purchase cycle.

Founded	2016
Headquarters	New York, NY
Number of Customers	50
Target Verticals	Technology, Service Providers, Biotech, Agencies
Partners/Resellers	Silicon Valley Bank, and more
Awards/Recognitions	Ranked top 5000 companies on Crunchbase; VentureCrushFG Accelerator, Commerce; Innovated Accelerator by Silicon Valley Bank and First Data

### Solution Overview

Teampay integrates with most major ERPs and accounting software. Teampay supports bi-directional, rich data syncing with QuickBooks Online, NetSuite, Intacct, Xero, and Oracle EBS. One-click data exports are also available. The company supports integration with hundreds of banks, including Chase, Bank of America, Silicon Valley Bank, Wells Fargo, and Citibank. To ensure security, Teampay uses 256-bit TLS encryption to keep customer data safe in transit, and never stores card numbers within the system. Teampay is PCI-DSS compliant, the official security standard of Visa and MasterCard.

Teampay’s application is accessible on-the-go via any mobile phone, as well as via web or a browser extension. Teampay also integrates with corporate messenger tools like Slack.



## Payables Management

For invoice handling, Teampay integrates with external partners to provide clients with invoice management software, including paper-based invoice processing. These partners offer eInvoicing support, as well as invoice matching against POs.

Teampay's primary products include virtual cards, ePayables, corporate cards, T&E/travel cards, and POs. Teampay also offers ACH/EFT payments through its eInvoicing and AP automation partners.

All card tools leverage diverse spend control features, including single-use, velocity limits (daily/weekly/monthly/yearly), multi-vendor or single-vendor, and project-based cards to align with budgets. Teampay also offers real-time card control configurations on-the-fly, reducing the time required to manually handle declined transactions. Other cardholder tools include multiple accounting dimensions and corporate card (company liability) expensing across the majority of commercial issuers.

Using the Teampay solution, a user requests a purchase from Teampay on mobile, in their corporate messaging app, or on the web. Teampay then collects any additional information about that purchase depending on an organization's preferences, and runs the purchase through the proprietary policy engine and approval workflow. If the purchase is approved, Teampay issues a virtual card for that purchase tied to the specific approval and delivers it to the requestor. Teampay strictly enforces positive-pay type functionality on cards by matching the approved request with the actual card transaction data, and prevents purchases above the approved amount. Whenever the virtual card is charged, the transaction is logged against the original request, relevant parties are notified, and it is automatically settled into the accounting system.

Teampay offers direct, real-time connection of transactions into a company's general ledger system. Instead of posting simple journal entries, Teampay creates primary objects in the accompanying system (e.g., a bill and bill payment) with rich vendor data matched to the existing vendor file.

Teampay provides archival and search and retrieval functionality for captured images and data. Teampay also offers out-of-the-box reporting and analytics on vendors, employees, department, subscription payments, request audit trail and change log, and spend analytics and alerting.



## Implementation and Pricing

Teampay's typical implementation takes 2-3 days, including configuration of the ERP system for transaction. During implementation, each customer is given custom onboarding as needed. Teampay's customer support team is available 5 days a week from 9AM-9PM EST. For pricing, the company offers a Pro plan for companies with fewer than 200 employees and no ERP solution, and an Enterprise plan, which includes the ERP offering, more complex policy rules, and higher transaction volume.



## Yooz

Yooz is a fast-growing SaaS company that provides an easy, powerful, and smart Procure-to-Pay automation solution specifically designed for mid-market companies across a wide range of industries. Yooz was founded in Europe in 2008, and began its journey to the U.S. in 2014. Today, the Yooz platform solves for companies' top AP process challenges.

Founded	2014
Headquarters	North America: Dallas, Texas
Other Locations	Aimargues, France; Surrey, UK
Number of Employees	75
Number of Customers	2,000+
Partners/Resellers	Sage Intacct, CDK Global, Acom, Nvoicepay
Awards/Recognitions	FinTech Breakthrough Award; CFO Tech Outlook 2018 Top Accounting Solutions; THINKstrategies Best of Saas (BoSS) Award; Industry Era 2018 Top 10 Cloud Solutions Provider

### Solution Overview

The Yooz platform seamlessly integrates with over 175 ERP and other financial systems. The Yooz solution is offered as a mobile app on iOS and Android mobile devices for complete and secure accessibility anytime and anywhere. For security measures, Yooz production platforms are scanned and monitored for malware detection, application and perimeter vulnerability risks, and SSL certificate validation, powered by Qualys® Secure.

### Payables Management

The Yooz platform is built on intelligent document capture and OCR technology innovations from its ITESOFT (Paris: ITE) affiliate. Users can upload invoice files via all traditional methods, including scan, email, import, elnvoice, and via mobile device. Once the relevant data has been captured, it is transformed into structured electronic information in order to enter an approval workflow. The Yooz system leverages AI and machine learning to extract the data from documents, which means templates do not have to be created. Within seconds, documents are automatically recognized and separated into batches of documents for review.

Yooz features a purchase module in which a purchase request can be created from an item catalog, approved, and transformed into a PO. Yooz can also integrate to external purchasing systems to receive PO data.



The solution offers field-level matching based on business rules, as well as PO-flip on validated invoices (2-way or 3-way match). Users can scroll through the key invoice data fields while the system highlights the extracted data. Users are able to manually point, click, or lasso any missing data elements to update anything on the invoice field.

Yooz offers an automated, customizable workflow for processing incoming invoices, and can integrate with any ERP platform. Workflow features includes approval notifications and delegation, secure 24/7 mobile approval capability, escalations and reminder settings.

Users can approve invoices directly from any browser window or from the mobile app. Once the invoice is approved, users can pay with virtual cards, checks, or ACH within the same platform in a secure environment. The solution then automatically turns invoices into accounting data compatible with ERPs/ financial systems. After payment, records are securely stored and archived in the cloud for easy accessibility, and they can be retrieved using search capabilities.

Yooz is payment provider-agnostic, with several strategic payment partners directly integrated into the software platform. Clients can also select their own third-party payment provider to integrate with the Yooz solution.

Yooz offers a rich reporting dashboard for executive and customer reporting. In an upcoming software release, Yooz will provide a reporting tool that allows organizations to optimize their process via a dashboard displaying individual, team, and departmental KPIs, and visibility into the overall AP process. The system also provides month-by-month graphs that can track AP volumes and other key performance and operational metrics.

## Implementation and Pricing

Yooz offers onsite and remote implementation and onboarding assistance. Implementation timelines can range from a few hours to three months, depending on the level of client-defined customization. Yooz strives to require little to no involvement from clients' internal IT departments during implementation.

Yooz provides dedicated one-on-one training onsite or via phone, depending on the customer's preference. Customers can get support several ways, including phone and email, or by attending one of the Yooz Insider client exclusive webinars. During these webinars, Yooz's chief innovation officer/COO, Laurent



Charpentier, answers live questions, demonstrates solutions to questions or problems, and offers tips and tricks for maximizing the Yooz platform.

The Yooz pricing structure is subscription-based, with a zero-risk, no annual commitment monthly charge, based on the number of invoices processed per month and level of customization.



## About Level Research

Level Research, formerly PayStream Advisors, is a research and advisory firm that operates within the IT consulting company, Level. Level Research is focused on many areas of innovative technology, including business process automation, DevOps, emerging payment technologies, full-stack software development, mobile application development, cloud infrastructure, and content publishing automation. Level Research's team of experts provide targeted research content to address the changing technology and business process needs of competitive organizations across a range of verticals. In short, Level Research is dedicated to maximizing returns and minimizing risks associated with technology investment. Level Research's reports, white papers, webinars, and tools are available free of charge at [www.level.io](http://www.level.io)

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