2020 Payables Insight Report

A Buyer’s Guide to Accounts Payable Automation Software
Contents

Introduction ........................................................................................................... 3

The Payables Market ................................................................................................. 5

AP Software Use Cases ............................................................................................. 9

The Buyer’s Guide ..................................................................................................... 18

Coupa ....................................................................................................................... 25

About the Authors .................................................................................................... 28

About Levvel Research ............................................................................................. 29
Introduction

While the Accounts Payable (AP) department is fundamental to a business’s operational efficiency and financial success, AP processes are manual and time consuming for many North American organizations. To increase AP department efficiency, leading organizations implement automation tools, which help reduce departmental costs and drive revenue throughout the organization. Technology enables AP departments to sustain their protection of a strong bottom line.

Traditionally, large corporations with greater financial and technological resources have driven AP automation, but today, companies of all sizes are incorporating automation in their back offices. This has driven a wide variety of AP automation tool types and an increasingly competitive assortment of software providers.

In line with this trend, Levvel offers the following three market observations for 2020:

1. **Providers will see an increasing number of prospects already using automation software and will have to adjust their strategies.** The AP automation market is fairly saturated, and many businesses already have AP automation tools in place. This is true even down-market, as small and mid-size enterprises (SMEs) and middle-market organizations have increased their AP tool adoption over the last few years. Survey results indicate that over 40% of organizations already using software say that are least somewhat likely to switch AP automation platforms in the next year. For this reason, Levvel research believes that for providers to lure companies from their current tools, they will need innovative product development, flexible business models, and compelling messaging.

2. **Supplier portals are driving the modernization of invoicing methods.** In Europe and Latin America, government mandates drive electronic invoice (eInvoice) adoption. While the US is establishing some standards for digital invoices, the increased presence and use of supplier portals in AP automation solutions is making eInvoices more common. Survey data shows that more organizations are receiving electronic invoices. The majority of eInvoice growth is in invoices submitted by supplier portals, which now account for 22% of all invoices received. In contrast, the percentage of EDI and XML invoices has increased only slightly. The largest increases in supplier-portal-formatted invoices have been in SMEs and mid-market organizations, many of which have recently automated. Investment in strong supplier portal capabilities will be important for software vendors, as will easy supplier registration processes to ensure higher adoption.

3. **The toughest part of automating AP is the tool evaluation process.** Levvel Research shows that companies do not automate AP due to a lack of executive sponsorship, few technical resources, and budgetary constraints. But when asked about the most challenging aspect of purchasing software, organizations cited the vetting of vendors and performing marketplace research. In response to this, vendors could consider simplifying the analysis phase for companies. Additionally, finance professionals should seek the opinions of industry experts that offer unbiased, high-quality, comprehensive marketplace information.
This report presents options for back-office automation and observations about the current and future state of the software market. Additionally, it explains the modern AP automation tool. Organizations may use this report in comparing the performance and efficiency of their AP department with others.
The Payables Market

When organizations envision an automated invoicing process, they think of a touchless, paper-free environment in which documents are automatically routed for approval and payment. Table 1 shows how closely the average North American organization comes to this perfect-case scenario, as well as other AP department benchmarks.

The following are a few notable trends in this year’s survey data:

- **Data Capture**: There has been a slight increase in invoice data capture since last year. This year’s data also shows companies automating the data capture process more evenly distributed across revenue segments than in previous years. This supports Levvel Research’s 2019 observation that more downstream revenue segments were recognizing the importance of technology.

- **Invoice Receipt**: A comparison of 2019–2020 invoice receipt methods indicate that organizations are receiving a greater percentage of invoices in a structured digital format; specifically, via web upload/supplier portal. Traditionally, larger organizations have received a greater percentage of electronic invoices than smaller companies because it was more likely that both the suppliers and buyers had elnvoicing/AP technology. However, the percentage of invoices received in this format has doubled for SMEs and middle-market organizations. As stated in the executive summary, Levvel Research attributes this to more providers adding supplier self-service portal functionality to their tools and to organizations prioritizing this functionality.

- **Approval Workflow**: Most enterprises and some middle market organizations have automated the approval workflow step, but it has remained manual for most SMEs. Survey results show evidence of this changing, as the number of SMEs with manual approval workflow has decreased by nearly 10 percent from 2019 to 2020.

### Table 1

<table>
<thead>
<tr>
<th>Segment</th>
<th>AP FTE</th>
<th>ERP</th>
<th>Homegrown</th>
<th>3rd Party</th>
<th>Manual</th>
<th>Paper</th>
<th>Email</th>
<th>Fax</th>
<th>EDI/XML</th>
<th>Supplier Portal</th>
</tr>
</thead>
<tbody>
<tr>
<td>SME</td>
<td>3</td>
<td>47%</td>
<td>20%</td>
<td>17%</td>
<td>17%</td>
<td>38%</td>
<td>39%</td>
<td>5%</td>
<td>3%</td>
<td>16%</td>
</tr>
<tr>
<td>Middle Market</td>
<td>11</td>
<td>58%</td>
<td>14%</td>
<td>23%</td>
<td>4%</td>
<td>30%</td>
<td>37%</td>
<td>5%</td>
<td>7%</td>
<td>21%</td>
</tr>
<tr>
<td>Enterprise</td>
<td>28</td>
<td>59%</td>
<td>9%</td>
<td>31%</td>
<td>1%</td>
<td>22%</td>
<td>29%</td>
<td>5%</td>
<td>17%</td>
<td>27%</td>
</tr>
</tbody>
</table>

SOURCE: LEVVEL RESEARCH ACCOUNTS PAYABLE SURVEY, 2020

1 Levvel Research defines organizations with revenue greater than $1 billion as enterprises, organizations with revenue between $51 million and $1 billion as the middle market, and organizations with revenue between $1 million and $50 million as SMEs.
**Challenges**

Without the proper AP technology in place, organizations struggle to maintain an efficient invoicing process. Figure 1 shows the top four organizational challenges: manual data entry and inefficient processes; manual routing of invoices for approval; lost or missing invoices; and receipt of the majority of invoices in paper format.

When asked to describe their biggest AP-related challenges in their own words, respondents cited many difficulties. These related to having fully manual AP departments, but they also related to dealing with inadequate, outdated AP software. Many using an enterprise resource planning (ERP) or homegrown tool for managing invoice processes criticized their software for requiring manual input of invoice details. One respondent using an ERP-based tool complained of their tool establishing “no consistent process to receive and approve invoices.” They also described their AP department as “paper intensive,” despite the AP software. Others called their ERP-based tools “inadequate” and “clunky” with “too many steps.”

**FIGURE 1**

**Pain Points of Manual AP Processes**

<table>
<thead>
<tr>
<th>Challenge</th>
<th>% of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual data entry and inefficient processes</td>
<td>51%</td>
</tr>
<tr>
<td>Manual routing of invoices for approval</td>
<td>37%</td>
</tr>
<tr>
<td>Lost or missing invoices</td>
<td>33%</td>
</tr>
<tr>
<td>Invoice to payment matching</td>
<td>31%</td>
</tr>
<tr>
<td>Inability to approve invoices in time to capture discounts</td>
<td>27%</td>
</tr>
<tr>
<td>Duplicate invoices and/or payments</td>
<td>25%</td>
</tr>
<tr>
<td>Majority of invoices received in paper format</td>
<td>25%</td>
</tr>
<tr>
<td>High number of discrepancies and exceptions</td>
<td>23%</td>
</tr>
<tr>
<td>Lack of visibility into outstanding liabilities</td>
<td>17%</td>
</tr>
<tr>
<td>Fraud and security issues</td>
<td>16%</td>
</tr>
<tr>
<td>Compliance / regulatory reporting issues</td>
<td>16%</td>
</tr>
<tr>
<td>Decentralized AP processes</td>
<td>16%</td>
</tr>
<tr>
<td>Supplier inquiry management</td>
<td>14%</td>
</tr>
<tr>
<td>Other</td>
<td>4%</td>
</tr>
</tbody>
</table>

SOURCE: LEVEL RESEARCH ACCOUNTS PAYABLES SURVEY, 2020

**Data Entry and Inefficiency Continue to be Top AP Challenges**

*Concerning your organization’s current AP solution and/or process, which of the following best describes your overall top AP issues or challenges?*
Benefits

AP automation resolves a number of the manual AP department's shortcomings. Figure 2 shows that with AP automation, many organizations are able to accelerate approval cycles, eliminate paper, and improve employee productivity. It has many residual and strategic benefits as well, such as improving supplier relationships, simplifying audits, and reducing fraud and duplicate payments. According to Levvel Research's observations, organizations understand these advantages and view automation as an opportunity to technologically and operationally modernize and enhance their AP departments.

FIGURE 2

Improvements From AP Automation

- Quicker approval of invoices: 64%
- Increased employee productivity: 55%
- Reduction in paper invoice volume: 55%
- Lower overall AP processing costs: 53%
- Improved visibility into unpaid invoices: 45%
- Reduced invoice exceptions and/or duplicate invoices: 36%
- Reduction in late payment penalties and interest: 34%
- Reduced invoice and payment fraud: 30%
- Better compliance with regulatory requirements: 30%
- Improved supplier relationships: 28%
- Increased capture of early discounts: 24%
- Other: 2%

SOURCE: LEVVEL RESEARCH SOURCING SURVEY, 2019

Invoice Approval Times are Most Common Improvement from Automation

What would you say are the top benefits to your organization in using AP automation software?
**Barriers**

Despite the challenges of manual AP processes and the benefits of automating, many organizations do not prioritize implementing cloud-based software. Figure 3 shows that the most common barriers to this implementation relate to a scarcity of in-house resources. Some speak to a lack of education (e.g., not understanding solutions), while others show a lack of support (e.g., no budget, lack of resources for managing an automated solution, delayed implementation).

When organizations were asked to elaborate on the barriers to adoption in their own words, many cited potential security and regulatory issues, a particularly common worry in the public sector and for organizations that receive government funding. This is a valid concern, as not all software providers are equally equipped to address these particular issues, but there are providers that have developed specialized capabilities to mitigate these hurdles.

---

**FIGURE 3**

**Barriers to Adopting a Cloud-Based AP Solution**

- Lack of budget: 33%
- Current processes work: 31%
- Lack of technical resources to manage an automated solution: 28%
- Lack of understanding of current available solutions: 26%
- No executive sponsorship/buy-in: 25%
- Implementation/training takes too long: 25%
- There won’t be an ROI: 19%
- Our process is too complex: 14%
- Other: 6%

SOURCE: LEVVEL RESEARCH SOURCING SURVEY, 2019
Types of Software

One of the most effective endeavors that organizations pursue in order to modernize their finance department is adding automation to it. In addition to the previously mentioned benefits, these tools make AP professionals’ lives easier. Implementing automation itself can be an intimidating journey, as buying companies have questions on where to start, which vendor to choose, and what features to look for. A good first step is to understand the most important distinctions between the different types of software options available. Levvel Research separates these technologies into three distinct classifications:

- AP management tools included in an existing instance of ERP/accounting software
- Tools developed by internal technology resources, either standalone or as a plug-in to existing ERP/accounting software (a homegrown solution)
- Third-party, cloud-based plug-in automation tools

ERP-based AP software is the most widely used tool by finance departments. These tools function as a built-in feature or add-on to the core ERP software. The appeal is largely ERP-based tools’ low barrier to adoption, as they require less investment in implementation than other software types since the ERP is already installed. This typically also means less training is necessary for users. Because the ERP is often a fundamental component of the finance and accounting process, it may seem natural to use an AP module within the system, but this is a misjudgment of an ERP’s primary purpose.

ERPs are best suited as financial repositories and are incapable of truly automating the AP function, as they don’t have the robust capabilities of software designed solely for this purpose. There are also gaps in user satisfaction with these kinds of tools. Many respondents using an ERP-based tool said that they wanted a solution that was “more automated” and that their current software fell short, particularly in the workflow and imaging aspects. ERPs are also older in comparison to other types of software; ERP respondents are almost twice as likely as cloud respondents to have had their software for six or more years. Additionally, ERPs are difficult to update because they hold so much mission-critical information in so many different business areas. Therefore, ERP-based tools are more likely to have outdated technology and user experience.

Homegrown automation tools are custom-designed for each organization’s needs and technology systems, and well built tools capture the nuances and unique challenges of individual AP departments. This can be especially useful for industries with highly specific needs, such as the oil and gas industry with its field tickets and complex service needs, or universities, which use grant-based accounting.

The biggest shortcoming of homegrown tools is their inability to adapt to the constantly changing needs of businesses. Homegrown tools can be a fiscal and temporal drain on resources, as they need to be maintained, developed, and updated constantly, and they can become outdated and obsolete quickly. Companies with homegrown tools are more likely than any other group to have used them for six or more years and generally report the lowest satisfaction among all organizations.
using automation software. If an organization is experiencing growth and change with any regularity, a homegrown tool is unlikely to be the best option.

Cloud-based tools are dynamic, affordable, and flexible, and are usually the most modern software of the three options; most businesses having adopted them in the past two to three years. While not a module of an ERP, cloud tools can be closely tied to an ERP through integration; some have specializations or features for specific industries or market segments. Cloud tools also offer a host of benefits beyond the ones most frequently cited. For example, survey respondents reported that they were enabled by their software to expand their international presence, achieve ROI earlier than projected, and modernize their entire finance function.

Cloud-based tools are dynamic, affordable, and flexible, offering technology that enables business agility.
Core AP Software Features

The five core components of cloud-based payables software offer different benefits and use cases for users in company-wide roles. The following section defines these features and gives insight into who they’re designed to benefit. It will also discuss their perceived importance and organizations’ typical levels of satisfaction with them.

Invoice Receipt

Definition & Capabilities: There are several levels of automation and digitization that can be applied to the invoice receipt process. The most basic level involves electronically storing PDF invoices and using front-end imaging to scan paper invoices. These invoices are then keyed in by AP staff manually and stored in a computer database. This is the level of automation usually offered by a basic ERP or homegrown tool.

The next level of automation uses optical character recognition (OCR) to automatically recognize text within scanned images of paper invoices or PDF files, extract relevant data, and convert it into a digitized, machine-encoded format. Once the data is extracted, it is then verified against a set of configurable validation rules and appropriate back-end information (e.g., invoice numbers within the AP system). This automated validation technology ensures consistency and compliance before information is entered into and processed by the invoice management system. This is the level of automation seen in advanced ERP plugins and homegrown tools and basic cloud-based ones.

The more advanced automation providers will pair OCR with artificial intelligence (AI) that can intelligently enter the applicable invoice fields. The technology goes a step further by using information from similar vendors and invoice formats and building an invoice pattern for an organization and invoice type. This ensures that invoicing gets increasingly accurate and requires less human intervention as time goes on. Leading tools also offer language translation of scanned data, which is particularly useful for large, multinational entities.

But in automation, OCR is a road stop, not the final destination. In practice, using it often involves manual rekeying, further verification, and additional attention. The goal is for as many invoices as possible to be sent in a truly digital method. This makes AP nearly touchless, with the only human intervention being exception resolution. The three digital methods are detailed below:

1. Traditional direct integration with the supplier’s back-end AR system, typically achieved via Electronic Data Interchange (EDI) of XML files.
2. Online forms (usually as part of a supplier portal), which ensure that a uniform invoice is submitted every time.
3. A print-to-cloud solution that validates PDF elements instantly and notifies suppliers in real time if their invoice is missing necessary elements.

Who Benefits: Automated invoice receipt has the largest impact on AP staff who are responsible for manual tasks such as data entry. Automation reduces the amount of time-consuming, low-value tasks AP clerks and accountants are charged with. It also reduces the volume of paper, which lowers department cost. Management-level staff
can spend less time addressing discrepancies or solving disputes and turn their focus towards more strategic, value-add initiatives.

**Importance & Satisfaction:** 78 percent of organizations with invoice receipt said it was an important feature of their AP software. However, only about half of the organizations with the feature are satisfied with it, likely because many are using OCR to capture data from non-digital or unstructured invoices, which can be inaccurate and require human intervention. OCR used to be seen as a strong solution for companies that receive primarily paper invoices; however, as more companies adopt digital invoice formats, data capture has become a bandage rather than a true solution.

**Invoice Management & Workflow Automation**

**Definition & Capabilities:** IWA solutions manage how different types of invoices are routed for approval and processed. AP departments can customize workflows to their specific needs; for example, they can send one department’s invoices to a designated approver, set up approval chains with multiple approvers, or require additional information for specific types of invoices. IWA is seen only in advanced ERP-based and homegrown tools, but it is a standard offering in third-party, cloud-based ones.

User roles and access rights can be set to correspond to the organization’s existing hierarchy, and can be configured for exceptions. Many solutions give client administrators control over individual user access rights. Administrators can then delegate the types of approvals for each employee, their level of visibility, and their authorized dollar thresholds.

Some solutions will complete PO-based invoice matching, which involves automatically linking invoices to purchase orders or other receipt documents. Then they will route the invoice to the appropriate approval chain based on predefined business rules. Non-PO invoices are routed directly to the appropriate approvers, unless the solution offers the ability to dictate unique workflows based on invoice contents.

Competitive cloud solutions provide field-level matching, meaning that they match specific characters in invoice line items with their counterparts in the POs. The leading solutions will also allow those line items to be assigned to multiple cost centers and POs. If the invoice fails to match the PO, the exception management process starts. In the case of an exception, the document will be routed back to the supplier for correction or flagged to be examined internally. Advanced tools enable customizable workflows depending on the characteristics of the exception and invoice and allow for setting thresholds for discrepancies between PO and invoice. In the event that the approver is out of the office or occupied with other work, delegation rules and escalation procedures ensure that the document is not sitting idle. These rules can be prioritized based on invoice amount, early payment discounts, and payment due dates.

Users are notified of approvals and exceptions via email or mobile alerts. The more advanced tools will allow for resolution within the email itself, while more basic ones simply offer a link to log in to the solution. Leading solutions also have fully developed mobile applications or responsive web-based apps where the core desktop functions can be performed on a smartphone.
When combined with eInvoicing capabilities, IWA completely automates organizations’ invoice processing, in some cases even enabling immediate payment for invoices that meet all validation rules. This is especially useful for low-value or recurring invoices, and allows AP staff to focus on exceptions and other tasks. The IWA feature gives a real-time look into documents’ status and progress, stores their history, and provides an audit trail.

**Who Benefits:** Invoice management solutions affect all levels of an organization. Invoice workflows that were once manual, sometimes requiring authorization via hand, email, or even stamp-to-paper approvals, are now managed by automated software. Instead of AP team members spending time tracking down the correct approver(s) for each invoice, an IWA solution automatically routes invoices to appropriate managers electronically, as well as sends notifications and reminders to prevent delays. These alerts and custom controls reduce the time necessary for middle and upper management to oversee approvals. Invoice management solutions also record entire workflow histories, which helps with auditing and identifying errors. Those at the C-suite level will see the cost savings resulting from reduced invoice approval times and increased early payment discount capture.

**Importance & Satisfaction:** Invoice workflow is viewed as important by over 90 percent of organizations, making it one of the most critical features in AP automation software. It also has one of the highest satisfaction ratings from users. It is important to note that the larger an organization is, the more satisfied they are with the feature, which is likely a combination of these organizations tending to implement more advanced software and deal with higher document volumes than smaller companies, making this feature more critical to large companies’ success.

**Electronic Payments**

**Definition & Capabilities:** ePayments software enables organizations to optimize their existing payment processes by streamlining and enhancing the tedious steps of payment management. A basic solution initiates a payment either from an ERP or by notifying the AP department, while more advanced solutions manage payments through to the end either in-house or by a partner-provided service. At the bare minimum, software providers should be able to integrate with a payments tool and handle reconciliation with an ERP. ePayments solutions also facilitate ACH transfers and integration with back-end AP and AR systems.

ePayments tools support methods such as checks, ACH, wire, and purchasing cards, and they offer more detailed remittance information and other functionality, which traditional methods lack. Additionally, many solutions offer web-pay portals that provide vendors with real-time invoice and payment transaction status. These portals also support different payment types, as well as automatic formatting of remittance information based on supplier preferences.

Some ePayments solutions also feature working capital tools; often, these are simple discounting tools that can be leveraged during the invoice workflow process. Working capital optimization involves strategically optimizing cash flow by reevaluating and restructuring payment times and terms to make them more favorable for organizations. More advanced working capital
tools that can integrate into a payables platform are usually available through separate providers, supporting features such as dynamic discounting management (DDM) and supply chain financing (SCF) programs, and other strategic tools that may restructure payments and ensure rebate capture.

Leading ePayments solutions also provide other payment management services, such as mobile applications, audit trail functionality, and payments approvals. Advanced ePayments tools will also support commercial card programs. “Commercial card” is the umbrella term for payment cards used in B2B payments, and are not to be confused with consumer cards (i.e., personal credit cards). Common types of commercial cards include purchasing cards (p-cards), corporate cards, fleet/vehicle cards, ghost cards, single-use cards, virtual cards, and declining balance cards.

Some platforms also offer global payment services, which manage the more complex components of cross-border supplier payments, including regulatory compliance, international tax requirements, and checking suppliers against international Do Not Pay lists.

Who Benefits: ePayments solutions directly impact employees at the staff level by reducing the need for time-consuming tasks such as paper check processing. These solutions can handle payment reconciliation and data maintenance tasks, freeing up staff for other tasks. Mid-level and upper management staff see a great reduction in maverick spend, fraudulent payments, and security concerns that result from less controlled payment methods like checks. C-suite professionals can strategically manage payments and optimize cash flow, and see bottom line improvements from reduced costs and from higher rebate capture through commercial card use.

Importance & Satisfaction: 77 percent of respondents consider the ePayments functionality of their software important, a low figure relative to the other core features. About 57 percent are satisfied with it. Levvel Research credits the somewhat low importance figure to the thinking that some organizations do not use their tool for payments, but merely to send a ready-to-pay file to their ERP. Additionally, previous research shows that organizations are more likely to use a bank online bill pay tool and non-electronic methods than they are to use ePayments software.

**Reporting & Analytics**

**Definition & Capabilities:** Payables platforms include comprehensive reporting and analytics capabilities that provide unique and valuable insights into many areas of the business. Basic tools provide the opportunity to export data into another tool, while advanced ones feature interactive dashboards that can be customized and tailored to the individual organization and its processes. Reports include elements such as first-pass success, exceptions, and open invoice statuses.

Advanced analytics tools offer internal benchmarking capabilities, drag-and-drop report building, and drill-down capabilities. The ability to analyze specific report details allows an organization to view a single set of data from multiple perspectives, which creates reports that are tailored for use by different operational areas. Reports and dashboards can be used to make user interfaces more efficient; for example, the homepage for an approver can be customized to only include relevant invoices. Users can import data from different sources and leverage it to gain new perspectives into spend, such as integrating map tools to show the locations where spend is occurring.
Who Benefits: Reporting and analytics tools benefit users at all levels in an organization, but are particularly useful for administrators and decision-makers with more strategic tasks and goals. Reports summarize spend activity and help managers and the C-suite to identify spending trends, optimize spend policies, and improve efficiency. Reporting dashboards give visibility into potentially fraudulent activity, spend occurring out of company policy, employees who are delaying invoice approval workflows, and suppliers that frequently send duplicate or incorrect invoices. The insights generated by advanced reporting and analytics tools aid C-suite professionals in targeting trouble spots and provide a holistic overview of the organization’s cash flow.

Importance & Satisfaction: Reporting is one of the most highly valued features of an AP automation tool, with over 90 percent of organizations deeming it as important. Companies also tend to be satisfied with the reporting capability their current solution offers, demonstrated by a satisfaction rate of almost 70 percent, the highest of the core features. Many departments adopt AP software to increase visibility into their operations and to give them a more real-time look into their payments, and reporting is an important component to accomplishing that goal. Levvel Research also noticed several years ago that reporting and analytics features started to take more precedent among software providers, which corroborates AP professionals’ high satisfaction with it.

Supplier Management

Definition & Capabilities: Supplier management features centralize, control, and optimize supplier data. Supplier management functionality features a supplier self-service portal where suppliers can upload invoices, check on payment statuses, and update payment information. Platforms establish a confluence for communication between buyers and suppliers, mostly to resolve errors, exceptions, or other disputes. Supplier portals reduce low-value activity and labor duplication by consolidating queries into one platform. They also help manage various compliance requirements throughout the supplier relationship lifecycle. Some solutions permit buyers to create custom business rules at the point of supplier portal invoice upload; these rules create instant error notifications and allow PO flip from within the portal.

Who Benefits: While self-service tools are created for the supplier, supplier management functionality benefits the buyer as well, as it can increase supplier adoption of a company’s payables solution. Automated supplier management also reduces the manual work required to address disputes and queries, increasing time and cost savings, and enhances transparency among all parties. Better visibility and communication facilitated by supplier management functionality improves both supplier relationships and supply chain operations as a whole.

Importance & Satisfaction: About 80% of organizations deem supplier management functionality to be an important part of their AP software. Levvel Research believes that the importance of this feature has grown as organizations try to develop closer relationships
with suppliers, build more geographically diverse supplier bases, and try to increase their electronic invoice volume (which is enabled by supplier portals). About half of the organizations utilizing them are satisfied with this aspect of their tool, with mid-market companies more likely to express dissatisfaction towards their supplier management feature. This may be due to middle market organizations growing dissatisfied with more basic tools that might appease SMEs, but not being ready to adopt a more fully featured software like enterprises.

**Emerging Technologies in AP**

The features of AP automation software are strengthened by emerging technologies, including AI, machine learning (ML), robotic process automation (RPA), blockchain, and big data. Increasingly, these innovations’ application to AP is becoming less abstract. Their usage is so common that leading vendors have them ingrained in the core of their software, and basic providers at least have a plan for how they will use them in the future. Many organizations have started to see real benefits to utilizing these emerging technologies in their back office almost half of manual organizations consider this tech as important in thinking of a potential solution.

While there is certainly excitement around these technologies, there are still plenty of organizations that do not understand their application to AP.

- **Artificial Intelligence and Machine Learning (AI/ML):** AI is a machine/computer that is designed to mimic a human’s ability to think and utilize logic. ML is a subset of AI that improves on this process. ML is the ability of machines to learn patterns and habits to carry out and improve upon processes without explicit human instruction. AI and ML are integral parts of AP automation and they’re used in many different ways, including detecting errors and discrepancies, intelligently matching items across purchase documents, and learning invoice and supplier habits to improve invoice capture and decrease human intervention.

- **Big Data:** Big data refers to datasets that are too large and complex for humans to extract significant conclusions from. Big data analytics is the application of AI and ML algorithms to these datasets to analyze and detect trends. This not only gives organizations a better look into their past performance, but can be used to predict future outcomes.
• **Blockchain:** In the context of AP, blockchain’s best application is to ePayments. It’s defined as an expandable set of records that carry and store unique information regarding transactions and events. The “block” aspect refers to the singular action and the related information, while the “chain” is the public record system that links the actions together. Blockchain is appealing because no part of it can be altered or modified after the event takes place, making it a secure, reliable source of truth. It is still in the early adoption phase, but is used to increase the security of data and money transfers, facilitate connections among groups and individuals, and decrease latency in transfers between parties.

The features of AP automation software are strengthened by emerging technology, and its application to AP is becoming less abstract.
Current State Assessment Walkthrough

Once an organization has decided that automation is a viable option, the next step is mapping out the current state of the AP function. Teams should avoid blindly undertaking automation without this crucial step because many issues that plague departments are process- and structure-related issues that automation cannot fix alone. Levvel Research offers questions an organization should ask in a current state analysis:

How many invoices does the organization process per month and does this volume change seasonally?

Organizations should identify the overall number of invoices and number by each type (spend type, local vs. global, based on priority, utility vs. goods, etc.). This will help create a map that shows where invoices are routed, and will ensure that the software vendor can handle the invoice volume and type. This is also an important step in calculating ROI and judging which vendor’s pricing model an organization is best suited for.

How many suppliers does the organization have?

This requires the organization to separate their suppliers by type (relationship length, priority based on spend, geographic location, etc.). This is also a good opportunity to identify which suppliers are sending the majority of paper invoices, and to build out an onboarding strategy based on that and other supplier-related parameters.

How many people outside of AP typically touch an invoice?

Some companies allow purchases outside of centralized procurement departments or workflows, and therefore require a more widespread set of reviews and approvals on PO-based invoices. In this case, the organization can look for a solution that offers a versatile, accessible, and controlled collaboration platform for non-AP users.

Is the organization’s AP department centralized, decentralized, or somewhere in the middle, and does the invoicing process look different across multiple locations?

If an organization’s AP department is decentralized, they should prioritize looking for a tool that will accommodate this structure. If the company plans to maintain this structure, it is equally important to take a look at how the invoicing process operates across different locations. In order to maintain consistency, reduce exposure to fraud, and increase departmental visibility, the organization should adopt a standard invoicing process that is identical across locations. If standardization is not an option, working with a vendor to ensure that this is not a problem once the software is implemented is critical.

How many approvers are responsible for the invoice review process?

This will help the organization identify what type of workflow tool they will need, and how to configure roles-based access. It may also help the organization identify inefficient or redundant approval patterns that can be restructured.
Identifying all AP touches will be very important when it comes time to build out validation and approval workflows for invoices during implementation.

What does the supplier dispute process look like?

One of the main advantages of AP management software is the supplier dispute resolution service, as well as the supplier self-service tools that naturally reduce queries. This may help the organization strategically reallocate labor that was previously assigned to fixing manual-process-related issues. It is important to identify a solution provider that offers strong supplier services if disputes and queries are a significant issue in the organization.

What methods does the organization currently receive invoices in and in what volumes? What methods does the organization prefer to receive them in?

This entails segmenting the current number of invoices by paper, EDI/XML, fax, email, and web portal receipt type. This will help the organization identify where they should start with automation, as the volume of different types may affect which provider the organization chooses. For example, a company with high volumes of paper invoices may opt for a provider that offers mailroom services so that they can slowly phase their suppliers into more digital methods without disrupting the status quo too rapidly. Another company may receive the majority of their invoices in email format, and will have much less trouble onboarding their suppliers onto an eInvoicing network or persuading them to submit invoices via a web-based portal with a built-in data capture tool.

Does the organization deal with any specialized invoice types?

If an organization receives most of their invoices in a relatively standard format, this is not an issue. But if there is a high volume of specialized invoices, this should be communicated with potential automation partners. Some examples are invoices for freight, construction, pro-forma, and utilities. While a more basic tool can handle processing of standard invoices, it may require a solution with industry or format expertise to automate 100% of an organization’s invoices.

Does the organization conduct business internationally?

Similar to specialized invoices, international invoices vary in format and complexity, and not all software will be able to seamlessly handle multiple types. Some regions have eInvoice mandates and standards that organizations’ tools should be able to process. Language and currency are also issues. Advanced software offers support for managing more than one currency and language, even to the extent of offering OCR data capture technology that can read and extract data in more than one language.

What’s the organization’s industry and annual revenue?

Many IWA providers have experience in, market to, and design their products for a few specific revenue segments and industries. It is important to make sure the provider has a product set suitable for the organization’s own financial needs and business structure.
Is the organization growing?

If an organization is experiencing steady or even rapid growth, it should make sure that any potential software is ready to grow along with it. While the organization may not need certain features or a tool that is able to handle a high volume now, these may become more of a need as it grows. Levvel Research recommends that companies focus on finding a solution that not only meets their needs at a moment in time, but will also scale with them as they expand.

Does the organization have any automation already involved in the AP process?

Many solution providers offer their solutions in a modular fashion and can integrate easily with existing systems and tools. This means that if the organization already has a few AP automation tools in place, such as a data capture tool or an electronic payments tool, they can still move forward to complete the automated invoice lifecycle with more software tools.

Does the organization have any automation involved in the non-AP back office?

Solution providers can integrate with other P2P systems, creating a more seamless back-office environment. They may also offer some P2P system tools themselves, which can be appealing if the organization hopes to one day scale automation throughout the back office. Examples outside of P2P would be human resources (HR), travel and expense management, and legal documents. Some companies have a great deal of paper documents and internal data they need to consolidate and secure. For these companies, it can be more appealing to opt for a solution that offers more general document management software over one that is strictly focused on AP. These tools often still offer advanced workflow capabilities, but can be used across many departments and processes. This can be a suitable choice for companies with limited budgets but extensive document management problems, or for companies with many existing back-office solutions in place, but a desire to close in any remaining gaps with a versatile, general tool.

What ERP does the organization use?

Some companies use several instances of one ERP, while some use several ERP systems across different departments or locations. It is important to make sure that the software provider has the necessary integrations for the organization’s specific ERPs and their other existing systems. This is often one of the most important questions an organization can ask, as for some providers, certain ERPs are a non-starter. Additionally, companies should consider what level of integration they require their software to have with an ERP. Some software have such a tight integration that data updates instantly between the two sources, while others only update once per day.

Pitching ROI

A lack of budget, a lack of understanding, and fear of no ROI represent large barriers to organizations implementing cloud-based AP solutions. Companies dread adopting costly software that may disrupt the status quo and they lack the knowledge of what software offers as well as how it’s priced. Generally, organizations pay to license
the software in the form of an annual subscription fee that is contingent upon several factors, including what features organizations utilize. In addition to the subscription fee, companies typically also pay a one-time implementation fee. This implementation cost is given by providers up front and goes towards the cost of training staff on the software and IT resources to help with the technological migration. Some providers also charge organizations’ suppliers for using the software and for miscellaneous items such as additional user support, international capabilities, mobile accessibility, and integrations with additional ERPs. The two most popular models for pricing are outlined below:

- **User-based pricing:** This model simply asks how many employees use the software. Often, providers will break the price per user into two tiers: 1) general users that will be using more of the core features of the software regularly and 2) approval-only users. This is designed to curb concerns that would arise from employees who log into the software irregularly only to approve documents and employees who use the software on a daily basis as an essential tool of their job being charged the same price. To further address this, some providers will only charge the monthly licensing fee if employees use the software that month. This method of pricing can be particularly appealing to smaller organizations that have few dedicated AP employees.

- **Transaction-based pricing:** This model asks how much purchasing or document volume an organization has. Transaction-based pricing is typically more volatile than user-based pricing. Software vendors usually break transactional volume into tiers rather than charging per document, and the price per transaction goes down the higher the volume an organization has. This method of pricing can be particularly appealing to organizations with high transaction volumes that will have many employees accessing the software. It is also appealing to organizations that have seasonal volume spikes.

Many organizations use a hybrid of these models for pricing. The pricing question can be a confusing one for companies to navigate, but knowing how much it will cost is only one step on the automation journey. The next question revolves around how much the organization will save by automating. The following details the potential savings involved in software implementation.

- **Optimized Labor Costs:** A great deal of the savings generated by implementing AP automation software come from reallocation of organizational back-office resources. Instead of fighting fires and wasting time on low-value-add, manual data entry tasks, AP employees are freed up to handle more strategic tasks like identifying potential cost savings opportunities with vendors as well as with other parts of the finance team. Because automated organizations need fewer employees to process invoices, the cost per invoice will decrease. Additionally, because of this efficiency increase, the company will not have to hire additional resources as volume rises.

- **Increased Discount Capture:** As the AP process becomes more efficient, the invoice lifecycle shortens. A shortened lifecycle means that instead of paying late fees on invoices that
the finance team may be struggling to keep up with, the company can make payments on time and even early in order to capture discounts.

- **Process Improvement:** There are a number of residual cost savings that arise from automating AP. Many of them will depend on the unique situation of each finance department. If an organization currently outsources the invoice process, as the latest Levvel Research shows that 7% do, organizations can eliminate the cost incurred by contracting the manual activities out to a third party. Savings are also realized as the result of reducing fraud. Invoice fraud is an increasingly common problem in North America, and one of the easiest ways to avoid it is by implementing automation. Automation addresses both malicious and accidental fraud cases, with AI-enabled alerts on risky activity and automatic detection of duplicates. Similarly, errors from manual input are eliminated, and the auditing process becomes easier with automation, which helps companies save even more time and money.

Presenting a return on investment figure relies on calculations using all of these metrics. Many software providers are more than willing to help calculate this figure and have tools on their website to facilitate such a calculation, but it’s not a difficult figure to come up with. At the most basic level, it is the pre-automation cost of invoicing minus the post-automation cost of invoicing minus the total cost of the software (see Table 2 for equations). Levvel Research advocates using a five-year ROI figure, meaning that the savings from automation (pre- vs post-automation cost of invoicing) is multiplied by five, while only the recurring subscription part of the cost of software is multiplied by five. The calculation is broken down below. This calculation does not take into account the shift from manual payments to ePayments, which would only drive additional savings.

**Buying Best Practices**

**Look at Multiple Solutions**

One thing that stood out in this year’s study is that back-office professionals lack sufficient education on AP automation. Very few respondents were able to say they are very familiar with the general functions of automation software. Even fewer were able to name more than one or two providers in the space. When these observations are combined with the year-over-year consistency of a lack of education as a top barrier to automating, Levvel Research feels confident in stating that organizations—both automated and manual—are doing themselves a disservice by not conducting deeper exploration into the AP software marketplace. Companies should take a look at a wide variety of providers to ensure they are getting software that best fits the needs of their

**TABLE 2**

<table>
<thead>
<tr>
<th>Calculation</th>
<th>Equation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of Invoicing</td>
<td>(Number of AP clerks * average annual salary incl benefits * % of time spent processing purchase documents) +</td>
</tr>
<tr>
<td></td>
<td>(Number of AP managers * average annual salary incl benefits * % of time spent processing purchase documents)</td>
</tr>
<tr>
<td>Cost of Software</td>
<td>Subscription fees (recurring cost) + One-time implementation fees</td>
</tr>
</tbody>
</table>

Calculation Equation
organization. There are software companies that specialize in handling different issues for a large assortment of businesses, and by only looking at a few providers, organizations may be missing out on finding a partner that best suits their processes.

Seek Outside Help

Luckily, organizations do not need to go about this analysis on their own. There are many resources out there to help bring them up to speed on the marketplace. This ranges from research firms and consultancies to the software providers themselves. Both contribute a vast library of knowledge to the topic and much of it is available free of charge.

Seek a Partner, Not a Vendor

Organizations should seek out vendors that will form a partnership with them. The leading software providers use their customer base as a resource to help them further develop their product so it is constantly improving. They seek feedback to incorporate into updates and product developments, so establishing a mutually beneficial partnership is a top priority.

Companies should look at a wide variety of providers to ensure they are getting software that best fits the needs of their organization.
Involve All Stakeholders

AP automation is not a process that only touches the finance department. In reality, it can have a far-reaching effect on multiple parts of the company, from top to bottom. For this reason, employees pushing for implementation should bring everyone that has a stake in the AP function to the table to ease any potential issues stemming from automation. This should include procurement, leadership, and especially AP staff. Doing this lessens the chance of employees circumventing the new processes put in place by automation in favor of the old ones.

Consider the Implementation Scenarios

Not all automation or implementation looks the same. Occasionally, organizations are so anxious to reduce the problems that come with manual invoicing that they will rush for a big bang-style implementation without considering what parts of the company are affected. A more phased rollout should take into account different business units, make sure the key stakeholders are on the same page, and guarantee that nothing slips through the cracks while software is being implemented.

For those companies transitioning from an ERP or homegrown tool, the same care needs to be taken. During the current state analysis, these organizations should list out what tasks the old system is responsible for versus the new. While companies may be keen on ridding themselves of old software, any tasks not covered by the new system need to be communicated to the automation partner to guarantee nothing is omitted in the new process. Failure to do this can result in exposure to fraud, departmental inefficiency, and a failed implementation.

Don’t Stop with AP

If an organization is satisfied with the results of adding automation to their AP process, those benefits don’t have to stop with AP. Automating back-office processes is less of a goal and more of a philosophy that can contribute to increasing efficiency across the company. Similar candidates for automation include procurement, sourcing, contract management, and travel and expense. Because these functions are interconnected, challenges that slow down one process affect the others. Automating and digitizing as many of them as possible helps the company as a whole perform better and gives it a strategic advantage over its competitors.

Many of the leaders in AP automation also offer software that addresses other areas. The following profile includes a software provider that offers leading solutions in automating Accounts Payable and other parts of the back-office.
Coupa

Coupa was founded in 2006 and is headquartered in San Mateo, California. In October 2016, Coupa became a public company with its IPO under the ticker COUP. Coupa’s holistic Business Spend Management (BSM) platform encompasses the core transactions for spending money: Procurement, Expense Management, Invoicing, and Payments. It also includes Strategic Sourcing, Contract Management, Contingent Workforce, Supplier Management, and Spend Analysis—all enriched by cross-company Community Intelligence and a platform-extension mindset for connecting Coupa to third-party software vendors. Coupa serves companies of all sizes, from pre-revenue, growth-stage startups to fast-growing mid-market companies with hundreds of employees, all the way up to Fortune 500 companies—Coupa’s largest customers report over $100B in annual revenue. All customers run the same highly extensible codebase in a true multi-tenant cloud architecture.

<table>
<thead>
<tr>
<th>Founded</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headquarters</td>
<td>U.S.</td>
</tr>
<tr>
<td>Other Locations</td>
<td>20+ global locations across North America, EMEA, and APAC</td>
</tr>
<tr>
<td>Number of Employees</td>
<td>1,800+</td>
</tr>
<tr>
<td>Number of Customers</td>
<td>1,300+</td>
</tr>
<tr>
<td>Target Verticals</td>
<td>Financial Services, Industrial Manufacturing, CPG, Healthcare, Life Sciences, Retail, Business Services, Technology, Public Sector</td>
</tr>
<tr>
<td>Partners/Resellers</td>
<td>KPMG, Deloitte, Accenture, PwC</td>
</tr>
<tr>
<td>Awards/Recognition</td>
<td>Gartner Magic Quadrant for P2P Suites 2019, scoring Highest in both Vision and Execution; Forrester eProcurement Wave, 2019, scoring highest in both Current Offering and Strategy; 2019 IDC Marketscape for AP, scoring highest in Strategy and Execution</td>
</tr>
</tbody>
</table>

Solution Overview

Coupa utilizes AWS for physical hosting infrastructure via Amazon’s EC2 service, and leverages Amazon’s physical security measures. Coupa has also invested heavily in ensuring security and has received certifications from ISO 27001 ITAR, TUVRheinland, and more. Coupa’s open architecture allows customers to integrate with any third-party system and software application, from financial/ERP to HR to tax engines and beyond. Clients can use the Coupa API, flat files, web services, custom code, or any integration provider to make seamless connections between Coupa and their ERP platform. Coupa integrates with all ERP systems, including Oracle, SAP, JDE, PeopleSoft, Lawson, QuickBooks, Great Plains, Workday, and NetSuite. Coupa’s software is fully
mobile, allowing clients to access any part of the solution from any browser or through Coupa’s native mobile application. Coupa also has panel app capability to expose third-party software vendor data on relevant screens in context with the user’s current business process.

**Payables Management**

Coupa Invoicing provides organizations with a complete solution for managing their US domestic and global AP processes (the latter through an extensive Compliance-as-a-Service model). It supports invoice capture through a supplier self-service portal with supplier actionable notifications capabilities, and accepts multiple electronic formats, including cXML and EDI. It also offers an application called “InvoiceSmash” that converts emailed invoice attachments into the customer’s required field formats using a modern digital character recognition approach (versus optical character recognition). Customers can also elect to use Coupa’s partners for scanning and document conversion to get paper invoices into the system. Key Coupa Invoice capabilities include automatic PO-to-invoice conversion, and configurable approval tolerances. The solution can match invoices to purchase orders and receipts, and help manage exceptions. AP teams can set up and manage approval workflows via operational dashboards, as well as manage payments and apply early payment discount terms.

Coupa offers extensive payments capabilities in a comprehensive payment management solution, allowing a customer to transition all payments functions to Coupa and eliminate the challenges of manual payment processes across disparate systems. Coupa’s solution allows customers to execute payments across multiple banks and payment “rails” including bank transfer, digital checks, card, and digital wallets to provide a one-stop-shop for visibility and control over payments. Traditional p-cards can be replaced with virtual cards issued at the time of PO or of invoice, eliminating cumbersome manual p-card reconciliations. When payments are completed, Coupa automates the account reconciliation process by automatically tying completed payments to transactions. Coupa Pay also automates access controls, payment batch creation, and approvals while using Coupa’s user controls and separation of duties to reduce error and fraud risk. The solution helps avoid misdirection of supplier payments by leveraging supplier-managed remit-to details and bank account due diligence. Coupa Pay has early payment discount capabilities built into both the PO and invoice processes to drive adoption. Early-payment offers can be combined with virtual cards to maximize card rebates and leverage card billing cycles, letting cash managers maximize discounts and rebates while using their card’s billing cycle to conserve cash.

Coupa’s Supplier Portal allows suppliers to manage company information, retrieve and acknowledge POs, and create and submit electronic invoices for payment. No fees are required for the Portal. In addition to the Portal, clients can use Coupa’s Supplier Actionable Notifications to interact with suppliers (typically smaller to midsize businesses or low average-volume suppliers). This provides the ability for any supplier to interact with the buyer via secure emails without the need to register for a portal. Coupa updates suppliers automatically via email and SMS messages to keep the supplier informed.

Coupa helps customers comply with global invoicing regulations through a collaboration with the risk management specialist, PwC. The Coupa Compliance-as-a-Service includes both tax value
compliance and invoice processing compliance support. Coupa currently owns and maintains documented requirements for more than 80 countries around the globe, offers out-of-the-box and pre-configured (Compliance-as-a-Service) models for over 30 countries, and expands country coverage based on customer needs. Coupa also helps with global compliance, which helps global companies apply the correct tax regulations to invoices.

Coupa’s offers extensive reporting tools, including executive dashboards and reports, over 60 standard reports/views, and configurable transactional reports/views. Coupa also provides one-click Excel download functionality to export any data for additional insight.

Implementation and Pricing

Coupa uses both internal professional services resources and Coupa’s Certified Implementation partners to support clients’ implementations. These partners work with each client to define and establish their preferred method of support during implementation. Coupa currently has over 500 professional services resources and over 3,000 certified partner resources. Individual partner resources must go through a structured certification program to be able to implement Coupa.
About the Authors

Major Bottoms Jr | Research Consultant

Major Bottoms Jr is a Research Consultant for Levvel Research based in Charlotte, NC. He plays a key role in the analysis and presentation of data for Levvel's research reports, webinars, and consulting engagements. Major’s expertise lies in the Procure-to-Pay, Source-to-Settle, and travel and expense management processes and software, as well as technologies and strategies across DevOps, digital payments, design systems, and application development.

Anna Barnett | Research Senior Manager

Anna Barnett is a Research Senior Manager for Levvel Research. She manages Levvel's team of analysts and all research content delivery, and helps lead research development strategy for the firm's many technology focus areas. Anna joined Levvel through the acquisition of PayStream Advisors, and for the past several years has served as an expert in several facets of business process automation software. She also covers digital transformation trends and technology, including around DevOps strategy, design systems, application development, and cloud migration.
About Levvel Research
Levvel Research, formerly PayStream Advisors, is a research and advisory firm that operates within the IT consulting company, Levvel. Levvel 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. Levvel 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, Levvel Research is dedicated to maximizing returns and minimizing risks associated with technology investment. Levvel Research’s reports, white papers, webinars, and tools are available free of charge at www.levvel.io

DISCLAIMER
All Research Reports produced by Levvel Research are a collection of Levvel Research’s professional opinions and are based on Levvel Research’s reasonable efforts to compile and analyze, in Levvel Research’s sole professional opinion, the best sources reasonably available to Levvel Research at any given time. Any opinions reflect Levvel Research’s judgment at the time and are subject to change. Anyone using this report assumes sole responsibility for the selection and/or use of any and all content, research, publications, materials, work product or other item contained herein. As such Levvel Research does not make any warranties, express or implied, with respect to the content of this Report, including, without limitation, those of merchantability or fitness for a particular purpose. Levvel Research shall not be liable under any circumstances or under any theory of law for any direct, indirect, special, consequential or incidental damages, including without limitation, damages for lost profits, business failure or loss, arising out of use of the content of the Report, whether or not Levvel Research has been advised of the possibility of such damages and shall not be liable for any damages incurred arising as a result of reliance upon the content or any claim attributable to errors, omissions or other inaccuracies in the content or interpretations thereof.