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AP Automation Benchmarks at a glance

About Medius
Executive summary

I’m delighted to present the latest edition of Medius Accounts Payable Automation Benchmark Report. The benchmarks presented in this report are based on aggregated data from thousands of organizations using the Medius AP Automation solution globally.

All efficiency KPIs show a good and healthy performance compared to other industry benchmarks available as well as a steady improving trend in relation to our historic data. While I’m pleased to see these positive trends, I’m not surprised at all. The increased development and usage of AI tools have supported accelerated automation capabilities for invoice processing. Things that previously required lengthy, manual work are now managed automatically by a solution that gets smarter with every invoice processed.

At Medius, we’ve been talking about touchless invoice processing for years. First, referring to the process of automatically matching invoice data to purchase orders. Today, we can extend the touchless functionality to other parts of the AP process including data capture, coding and routing invoices to approvers. And the innovation won’t stop there.

Is there a flip side of AI powered AP automation solutions? AP and Finance teams may feel hesitant to introduce additional automation in fear of losing control. But automation and risk are not contradictory. In fact, smart automation tools will give you more control and help you prevent fraud. Your AP solution can identify potentially fraudulent activities by flagging duplicate payments, inconsistent bank details or unusual invoice amounts, catching fraud in the act and shutting it down.

What we need is trust. Users need to feel they can trust the solution to do the job as good as (or better than) humans. That’s why we advise organizations to move towards autonomous AP step-by-step. Allow your AP team to review the work completed by a solution the first few times. Once trust is established you can turn on fully touchless functionality.

How can your organization move towards an autonomous AP process? Start by reviewing the efficiency KPIs in this report. Compare your process performance to the average and best-in-class metrics to identify opportunities for improvement and further automation. For each KPI you’ll find optimization tips and success stories from best-in-class performers.

I wish you all the best on your continued automation journey,
Key take-aways

**Great improvement opportunities for AP teams**

While nearly all KPI benchmarks show a steady improvement trend there is still a wide gap between the average and best-in-class performers. This is good news for AP teams! This means that there are vast opportunities to optimize processes and introduce more automation. In this report you’ll hear directly from some of the best performing companies and learn how they’ve achieved their outstanding KPI levels.

**AI expands automation throughout the AP process**

The AP automation benchmarks show that invoices are being processed faster than ever, automated routing gets smarter every single day and the number of invoices that are captured without any human interaction is accelerating. One of the reasons for this is that the reach of artificial intelligence (AI) and machine learning technology in the AP process is growing rapidly. Smart automation tools can extract invoice data correctly, suggest coding, tax groups and approver. More automation means the AP team can focus on the tasks that really need professional attention.

**E-invoice mandates accelerate touchless capture**

The touchless invoice capture KPI has shown an impressive improvement. As many European countries have now introduced mandates for e-invoices, organizations are forced to move towards a more structured way to receive supplier invoices. Still, enabling e-invoices alone does not mean you have a touchless process. Often you need a layer of smart automation on top to reach the best-in-class levels.
Methodology

The benchmarks presented in this report are based on anonymized and aggregated invoice processing data from the global Medius customer community. The research includes millions of invoices that have been processed through the Medius AP Automation solution by AP teams using the same standardized process.

The Medius customer base includes organizations in all regions of the world, operating in a variety of industries and handling invoice volumes ranging from 10,000 to more than 1 million supplier invoices annually.

The average performance benchmark takes into account all companies in the database whereas the best-in-class benchmark represents an average of the top 10% best performing organizations.
The Accounts Payable Automation KPIs

In this report you’ll find benchmarks for the most commonly used AP process KPIs covering both PO invoices and non-PO invoices. The difference between these invoice types lies in the purchase that generated the invoice. When a purchase requisition is in place, the purchase will be triggered by a pre-approved purchase order (PO) that is sent to the supplier. In the case of purchases made outside the regulated purchase process, a non-PO invoice, also called expense invoice, will be sent from the supplier.

The KPI metrics used to measure process efficiency will differ slightly depending on the invoice type. For both types, the KPIs will help monitor how fast invoices are processed and where manual tasks are slowing you down.

For each KPI we've included a clear definition of the metric, the average and best-in-class benchmarks, as well as tips for AP organizations who wish to improve the KPI performance.
Total invoice processing cycle time (Non-PO invoices)

The KPI explained

Definition
The number of days it takes from when a non-PO invoice is entered in the AP system for data capture until it is completely approved and ready for payment.

Trend
The average processing time for non-PO invoices has been stable at around 7 days while the best-in-class performers continue to improve. This indicates that AP teams who put an effort into continuously optimizing the invoice process can achieve fantastic results. With AI-powered automation tools this best-in-class benchmark is likely to improve.
Total invoice processing cycle time (Non-PO invoices)

The story behind the numbers

Top tips: How to improve

- Automate the data capture process and work with suppliers to send e-invoices.
- Implement automated routing and coding, work with your AP automation solution provider to ensure the configuration is optimized for your organization’s structure.
- Offer approvers easy ways to review and approve invoices wherever they are – via mobile devices and email.

Business benefits

- **Save time:** Free up time in AP for more business-critical tasks.
- **Do more with less:** Support business growth by handling larger volumes of invoices and suppliers without adding AP resources.
- **Improve cash flow:** Free up working capital and/or leverage early pay discounts.
- **Lower supplier risk:** Minimize supply chain risk and keep supplier relationships healthy by paying invoices on time.

Success story

With a large volume of invoices, many needing to be matched to purchase orders, Dynapac’s manual process was time-consuming and often caused a delay in payments. Medius AP Automation introduced a fully digital workflow, so PO invoices are automatically matched, and expense invoices are distributed to the right approver. With improved visibility and accessible data, Dynapac benefits from faster processing and significant savings.

Early payment discounts are heavily used in Germany. Thanks to Medius, we have been able to get invoices into the system quickly and approved well in time to capture cash discounts from our suppliers. This is a huge improvement for us.

Axel Niederquell, IT Manager
Touchless capture rate (Non-PO invoices)

The KPI explained

Definition
The percentage of invoices where invoice data is extracted and captured fully automatically by a system without any user interaction whatsoever.*

Medius Benchmarks

<table>
<thead>
<tr>
<th>Average</th>
<th>Best-in-Class</th>
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<tr>
<td>71.9%</td>
<td>99.8%</td>
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</table>

Trend
The touchless capture rate continues to improve with best-in-class performers getting close to 100%. The increasing adoption of e-invoices in combination with advanced invoice capture tools leveraging AI and machine learning technologies have accelerated this development.

*Touchless capture is manually enabled per supplier in the invoice capture solution. Hence touchless capture will be lower when onboarding new suppliers. Once a number of invoices has run through the system, it will learn the data structure and build a confidence level high enough to turn on touchless capture. E-invoices (EDI and similar) will increase the touchless capture rate significantly.
Success story

By transitioning from a manual system to one that’s fully automated, Puma now has complete visibility to track the invoice process from capture to archive. Staff can see exactly how long the process takes, identify where bottlenecks occur, and remedy the situation. Not only have they eliminated wasteful paper, but faster payments mean better vendor relationships.

Vanessa Gomez, AP Manager

Touchless capture rate (Non-PO invoices)

The story behind the numbers

Top tips: How to improve

- Work with suppliers to drive high level of e-invoices, all digital formats will help drive accuracy in the capture process.
- Analyze your process data/analytics and review capture rate per data field to identify bottlenecks. Then work with your suppliers to improve invoice data compliance.
- Implement an intelligent capture solution leveraging machine learning technology that continuously learns how to interpret data and thus automatically improves touchless capture over time.

Business benefits

- **Save time:** Free up time in AP for more business-critical tasks.
- **Do more with less:** Support business growth by handling larger volumes of invoices and suppliers without adding AP resources.
- **Risk mitigation:** Eliminate the risk of manual data entry errors and apply system control functions to identify potential fraudulent invoices.

We started as fully manual processing data entry, paper pushing and now we don't have any paper so we’re seamlessly capturing things, automating and stepping into the future with Medius.

Vanessa Gomez, AP Manager
Automatic routing rate (Non-PO invoices)

The KPI explained

Definition
The percentage of non-PO invoices that are automatically routed to the correct approver within the organization without any user intervention.

HIGHER IS BETTER

Medius Benchmarks

70.1%  99.7%

AVERAGE  BEST-IN-CLASS

Trend
The average benchmark for automatic routing continues to improve while the best-in-class metric has stabilized at a high level. Yet, the gap between the average and best-in-class performers is relatively large, indicating that there is an opportunity for many companies to improve configurations of their AP solution and aim for those top automation levels.
Automatic routing rate (Non-PO invoices)

The story behind the numbers

Top tips: How to improve

- Configure your AP automation solution with business logic and rules to enable automatic routing of invoices according to your organization’s approval hierarchy.
- Work with your suppliers to ensure they understand your required invoice fields and formats.
- Analyze invoice process data to research where automatic routing fails and identify needs for further configurations or supplier invoice compliance issues.
- Implement an intelligent solution that can learn the right approver based on previous user inputs.

Business benefits

- **Save time:** Free up time in AP for more business-critical tasks.
- **Do more with less:** Support business growth by handling larger volumes of invoices and suppliers without adding AP resources.
- **Risk mitigation:** Ensure supplier invoices are reviewed and approved by the appropriate staff according to the organization’s approval hierarchy.

Success story

Medius connected the company’s four administration hubs, providing faster access to information about supplier payments. Automated 2-way and 3-way matching relieved staff of a previously complex and time consuming process. With a 42% touchless capture rate, the company saved nearly 300 hours in the first four months alone.

Medius allowed us to reallocate three staff members to more productive tasks. It’s a better use of their energy and creativity, so everyone benefits.

Joel Flemming, VP of Information Technology
Average approval time

The KPI explained

**Definition**
The average time (in days) that a non-PO invoice is in the ‘Approve’ step where a user, typically the person who bought the product or service, and/or the budget owner, reviews the invoice content and coding to ensure all details are correct.

**Medius Benchmarks**

<table>
<thead>
<tr>
<th>Average</th>
<th>Best-in-Class</th>
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<tbody>
<tr>
<td>3.1 DAYS</td>
<td>1.0 DAY</td>
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</table>

**Trend**
The best-in-class approval time has accelerated impressively while the average performance stays relatively stable. The pandemic lockdown period drove adoption of digital invoice approvals. Now we see the results of companies not just digitizing but optimizing automation of invoice approvals.
Success story

As Viking Line continued to grow, its on-premise AP software needed to be upgraded with a cloud-based solution that offered modern features and scalable functionality. Medius AP Automation replaced Viking Line’s manual workflows with a fully automated system, allowing staff to work remotely and process invoices faster and more efficiently. As a result, late payments and penalties have been virtually eliminated.

Top tips: How to improve

- Offer approvers easy, convenient ways to review and approve the invoices via mobile devices and through a single click in an email.
- Ensure invoices are pre-coded when they hit the approver’s inbox, leveraging AI-powered technology that automatically applies coding based on historical data.
- Analyze invoice process data to understand which specific invoices or approvers cause lengthy approval times and work with them to find ways to speed up the process.

Business benefits

- **Save time:** Free up time for approvers throughout the organization that can be used for more business-critical tasks.
- **Improve cash flow:** Free up working capital and/or leverage early pay discounts and avoid late payment fees.
- **Risk mitigation:** Minimize supply chain risk and keep supplier relationships healthy by paying invoices on time.

Staff is completely satisfied with Medius. For approvers, especially workflows, are much more efficient and less prone to errors.

Jan Lindholm, Head of Development, Finance

Average approval time

The story behind the numbers

Risk mitigation:
Minimize supply chain risk and keep supplier relationships healthy by paying invoices on time.
Total invoice processing cycle time (PO invoices)

The KPI explained

**Definition**
The number of days it takes from when a PO invoice is entered in the AP system for data capture until it is completely approved and ready for payment.

**Medius Benchmarks**

<table>
<thead>
<tr>
<th></th>
<th>AVERAGE</th>
<th>BEST-IN-CLASS</th>
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</thead>
<tbody>
<tr>
<td><strong>DAYS</strong></td>
<td>6.3</td>
<td>1.0</td>
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<tr>
<td>LOWER IS BETTER</td>
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**Trend**
The processing time for PO invoices has stabilized at strong levels. As for non-PO invoices the gap between the average and best-in-class benchmarks is still wide, showing great opportunity to improve and speed up the process for those organizations in the average range.
Success story

Lost documents, duplicated work, and late payments – these issues had significant consequences for Liberty. By replacing its manual system with AP Automation, Liberty gained the benefits of a standardized interface, improved visibility of approvals, and robust analytics. With greater efficiency Liberty can also take advantage of trade discounts.

The results - we initially achieved a 79% touchless rate which was great and a cycle time of less than five days - previously we were looking at two weeks to get anything approved. There was a massive reduction of manual intervention. Gone were the days of walking paper around the office.

Ashley Matadeen, Product Owner

Top tips: How to improve

- Automate the data capture process and work with suppliers to send e-invoices.
- Leverage reporting in your AP solution to identify why deviations occur during invoice matching and take appropriate action.
- Offer buyers easy ways to review and approve deviating invoice items – via mobile devices and email.

Business benefits

- **Save time:** Free up time in AP for more business-critical tasks.
- **Do more with less:** Support business growth by handling larger volumes of invoices and suppliers without adding AP resources.
- **Improve cash flow:** Free up working capital and/or leverage early pay discounts.
- **Lower supplier risk:** Minimize supply chain risk and keep supplier relationships healthy by paying invoices on time.

Total invoice processing cycle time (PO invoices)
**Touchless capture rate (PO invoices)**

**The KPI explained**

**Definition**

The percentage of invoices where invoice data is extracted and captured fully automatically by a system without any user interaction whatsoever.*

**Medius Benchmarks**

![69.7%](image)

**Trend**

The touchless capture rate continues to improve with best-in-class performers getting close to 100%. The increasing adoption of e-invoices in combination with advanced invoice capture tools leveraging AI and machine learning technologies have accelerated this development.

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*Touchless capture is manually enabled per supplier in the invoice capture solution. Hence touchless capture will be lower when onboarding new suppliers. Once a number of invoices has run through the system, it will learn the data structure and build a confidence level high enough to turn on touchless capture. E-invoices (EDI and similar) will increase the touchless capture rate significantly.
Success story

Global spare parts specialist TVH has appointed dedicated AP resources to actively identify suppliers where touchless capture can be turned on, allowing the AP system to automatically extract the invoice data without human intervention. The Medius solution makes this process easy by indicating when all invoice fields have been captured correctly and providing a confidence percentage level for automated capture.

Top tips: How to improve

- Work with suppliers to drive high level of e-invoices, all digital formats will help drive accuracy in the capture process.
- Analyze your process data/analytics and review capture rate per data field to identify bottlenecks. Then work with your suppliers to improve invoice data compliance.
- Implement an intelligent capture solution leveraging machine learning technology that continuously learns how to interpret data and thus automatically improves touchless capture over time.

Business benefits

- **Save time:** Free up time in AP for more business-critical tasks.
- **Do more with less:** Support business growth by handling larger volumes of invoices and suppliers without adding AP resources.

Risk mitigation:
Eliminate the risk of manual data entry errors and apply system control functions to identify potential fraudulent invoices.

**Touchless capture rate (PO invoices)**

The story behind the numbers

Usually we only need to run three invoices from a new supplier for the system to learn the data format and indicate a high enough confidence level that we can turn on automatic touchless capture.

Renate Mortier, Finance & Support Manager
**Touchless processing rate (PO invoices)**

**The KPI explained**

**Definition**
The percentage of PO invoices that are automatically processed, matched to supporting data and approved for payment by the AP system without any user intervention whatsoever.

**Medius Benchmarks**

<table>
<thead>
<tr>
<th>Average</th>
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<tr>
<td>63.8%</td>
<td>94.9%</td>
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**Trend**
The touchless processing rate has stabilized at a good level with the best-in-class performers driving the most significant improvement. Average performers still have a way to go to reach the highest levels of touchless processing with extensive opportunities to improve. It’s important to note that large volumes of new organizations that implement AP automation for the first time might have a negative effect on the average metric in the short term. The reason is that it usually takes some time for these AP teams to configure the solution to optimize automatic matching and work with suppliers to ensure invoice data compliance.
Success story

Prior to automation, invoices were received on paper or email, distributed for approval, and stored in binders. With the majority of Møbelringen’s invoices requiring two-way matching, this manual process was extremely time consuming. Medius AP Automation now captures invoices in a centralized, digital system where data is synchronized and matching is automated.

Top tips: How to improve

- Identify which invoices fail to automatically connect to purchase orders, then work with those suppliers to fix invoice data errors.
- Continuously monitor price deviations and put processes in place to update price lists in internal systems (ERP and procurement solution) as well as with suppliers.
- Configure your AP automation solution with tolerance levels to automatically approve certain levels or types of deviations, such as freight and administrative fees.

Business benefits

- Save time: Free up time in AP for more business-critical tasks.
- Do more with less: Support business growth by handling larger volumes of invoices and suppliers without adding AP resources.
- Increase control: Eliminate the risk of manual errors and apply system control functions to identify incorrect invoice data.
- Improve cash flow: Free up working capital and/or leverage early pay discounts.

Before Medius we had reached 52% touchless processing. By working with our dedicated advisor and ongoing process optimizations, we now hit well over 80% touchless!

Gisle Weberg, Accounting Manager

The story behind the numbers

Touchless processing rate (PO invoices)
# AP Automation Benchmarks at a glance

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<tr>
<th>KPI</th>
<th>AVERAGE</th>
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<tbody>
<tr>
<td><strong>Non-PO invoices</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total invoice processing cycle time</td>
<td>6.8 days</td>
<td>2.2 days</td>
</tr>
<tr>
<td>Touchless capture rate</td>
<td>71.9%</td>
<td>99.8%</td>
</tr>
<tr>
<td>Automatic routing rate</td>
<td>70.1%</td>
<td>99.7%</td>
</tr>
<tr>
<td>Average approval time</td>
<td>3.1 days</td>
<td>1.0 day</td>
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<tr>
<td><strong>PO invoices</strong></td>
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<td></td>
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<td>Total invoice processing cycle time</td>
<td>6.3 days</td>
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About Medius

Medius links invoice capture, processing and payment to replace the worry and wondering of managing AP with calm and confidence. Medius goes far beyond basic automation by using artificial intelligence to do most of the work – so invoices get confirmed, coded and paid; AP teams get to go home and rest easy; and businesses can trust their budgets and forecasts. Medius has more than 4,000 customers across 102 countries and processes $180 billion in annual spend through its system. Visit medius.com to learn more.