*Manage What You Measure—
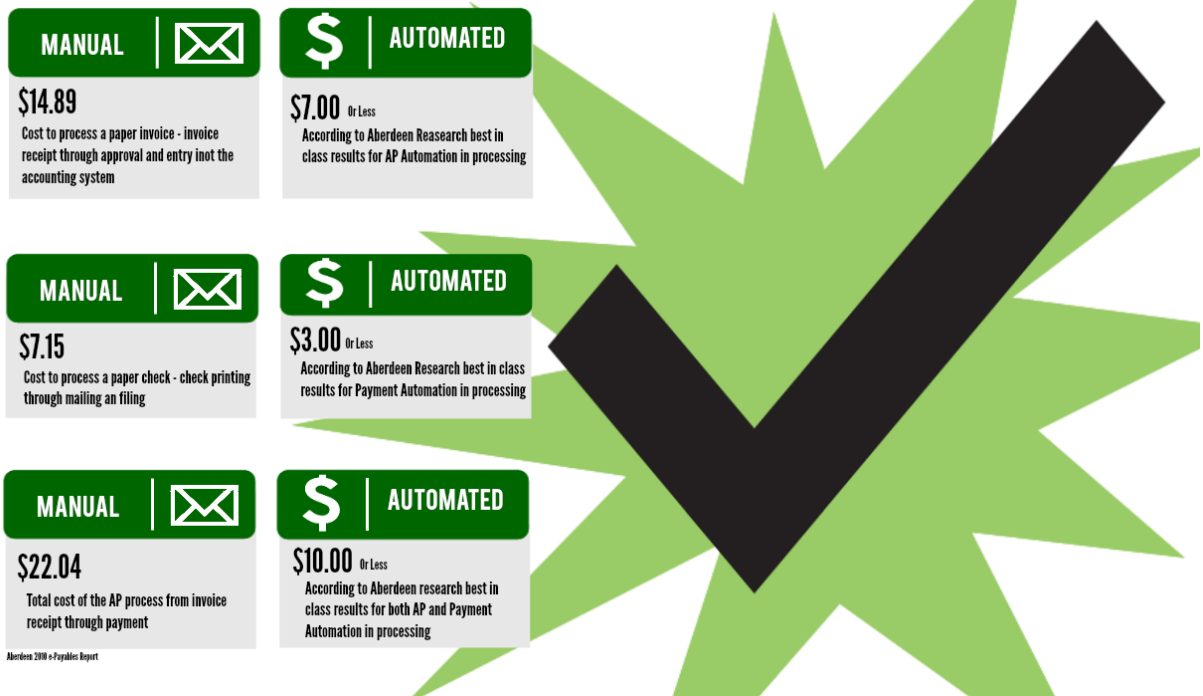Become More Efficient in 45 Days or Less*

5 Easy Steps to Determine Your Cost per Invoice and Payment

Author: *Jan Skinner, Vice President of
Business Development for AvidXchange*

Manage What You Measure—
Become More Efficient in 45 Days or Less

This white paper is intended to provide one simple idea—that CFOs and Controllers can implement a solution within 30 to 45 days to dramatically reduce their operational costs by cutting the cost to process their vendor invoices by more than half. Yes, I said 30 to 45 days. Depending upon the size of your company, you could trim your bottom line by tens of thousands to hundreds of thousands of dollars. Most companies seeking cost reduction focus on their critical business strategies and often overlook basic daily processes, like paying the bills. **If your company still receives paper invoices and/or pays your bills using paper checks, then invest in reading further.**

On average, studies show that companies are currently paying more than $22 to manually process and pay one invoice.

MANUAL ✉

$14.89
Cost to process a paper invoice - invoice receipt through approval and entry inot the accounting system

$ | AUTOMATED

$7.00 Or Less
According to Aberdeen Reasearch best in class results for AP Automation in processing

MANUAL ✉

$7.15
Cost to process a paper check - check printing through mailing an filing

$ | AUTOMATED

$3.00 Or Less
According to Aberdeen Research best in class results for Payment Automation in processing

MANUAL ✉

$22.04
Total cost of the AP process from invoice receipt through payment

Aberdeen 2010 e-Payables Report

$ | AUTOMATED

$10.00 Or Less
According to Aberdeen research best in class results for both AP and Payment Automation in processing

Manage What You Measure—
Become More Efficient in 45 Days or Less

The associated cost is typically high because of the time-intensive manual processes that are inherent to paper-based invoices and paper checks. Some companies think they've applied automation to their accounts payable process by scanning and e-mailing their paper invoices. However, all they've really done is digitize a paper process and add an element for tracking invoices using e-mail. They may have saved a few days by getting the bill to the approver electronically, but they haven't eliminated the task or the time associated with it.

In fact, they've really added costs, because they had to buy a scanner and pay for the document imaging system. By closely examining the overall process and establishing the time associated with each step in the organization's process, leaders of well-run organizations can make strategic decisions on how to eliminate costs from their departments**. The bottom line is that if your company is still receiving paper invoices or paying bills via paper check then you are not capitalizing on today's best practices**, not to mention the unlimited potential for savings that is derived from relieving your AP team of meaningless tasks such as opening the mail, data entry and filing stacks of paper. Applying "true automation" to your AP and payment processes means eliminating the paper invoices and checks from your organization completely, and reducing your processing costs by more than half along the way.

As your company looks for ways to reduce costs, don't overlook areas that are heavily laden with manual tasks as a result of paper being in the process. It is generally believed that, "change takes time". However, AP and Payment Automation can be implemented in 45 days or less, and have an immediate impact on your bottom line. In addition to the monetary value of implementing automation, you will also optimize the functionality of your workforce. When manual tasks are eliminated there is now time to analyze data and develop metrics, research new tax laws and policies, focus on opportunities for mergers and acquisitions, research benefits and compensation, and identify vendor discounts. Paper invoices and checks don't have to be a problem; they can actually be a solution for savings and efficiency.

You Can't Manage What You Don't Measure

You've probably heard the old adage, "you can't manage what you don't measure." This statement holds true when analyzing the costs to process invoices. Most organizations have never taken the time to truly understand what it costs them to process just one invoice or pay one bill, and are truly shocked when they find out their true costs. It seems that companies' biggest hindrance to establishing their cost per invoice is that they are too busy with their daily tasks, or that they simply don't know of an easy way to capture their current costs. I have worked with companies across the country. What I have discovered is that 90% of the time when I ask people about their company's internal costs for processing invoices or paying their bills, that they have no idea. **They have perpetuated inefficient processes simply because that's how they've always done them.** They never challenge the status quo to gain visibility into areas for improvement. Leading companies are constantly searching for strategies on how to reduce redundant costs or potential technologies that can replace outdated manual labor functions. However, you must first have a baseline of your costs to measure against. Typically these baselines are called either a Cost per Invoice (CPI) or Cost per Payment (CPP). Without a baseline it is impossible to determine whether leveraging technology would promote efficiency and fiscal effectiveness, or simply add more costs.

Major Components of Invoice Costs

There are two primary components to consider when analyzing the costs to process an invoice: Hard Dollar and Soft Dollar Savings. Hard Dollar Savings are typically related to three areas that can be easily identified and quantified: opening the mail, filing, and data entry. One can easily determine the hours spent in each of these areas, either through a time study or through interviews with your AP staff. Soft Dollar Savings, on the other hand, are typically more difficult to obtain, because they either happen sporadically, or are simply difficult to quantify. These costs include activities such as the time it takes to research a vendor question, approving a bill or pulling invoices for audits. Through working with clients we have discovered that although there is significant time associated with areas related to soft dollar costs, it is difficult to

correlate a monetary value with these activities. However, hard dollar savings are straightforward, and as a result will be the primary focus for the duration of this discussion.

Costs to Process a Check

Similarly, there are hard dollar savings in processing checks, which we refer to as Cost per Payment. These are slightly more obvious than costs associated with invoices, and therefore more easily identified. Examples of Hard Dollar Costs associated with check payments:

- Check Stock and Printing Costs
- Sorting and Signing Time & Cost
- Stuffing Envelopes
- Postage & Handling
- Filing

These hard dollar costs along with the time associated with performing the process of printing and mailing checks can be eliminated and replaced with automated payment options. The great news is that you already know this because you've most likely been offering ACH, credit cards, or other alternative forms of payment to your vendor for quite some time. The only difference is that your current offerings are not typically integrated with your accounting system, which is something that is vital in order to scale the process for all your payments.

How Much Analysis is Enough?

It's not unusual for CFOs to become paralyzed by the enormity of the task of evaluating the cost and benefit of a new process. This is completely understandable as a Cost per Invoice or Cost per Payment analysis could involve hours to perform detailed time studies of each specific activity associated with the manual process, and answer a series of questions to further identify time or costs related to these processes.

Our recommendation would be to make the amount of effort spent on evaluating the cost benefit correlate to the monthly volume of invoices managed. For any company processing fewer than 5,000 invoices a month a simple spreadsheet should do the trick. From our experience, the majority of invoice processing costs are related to labor. Therefore, it's important to capture the large increments of time spent processing invoices, and not worry about the occasional or sporadic effort expended by the team. Capturing costs for checks is fairly straightforward as well, because of the hard dollar costs involved. We will guide you through an easy process that will enable you to capture all of the elements of your invoice processing and payment processes, and ascertain where the largest monetary associations are. We are typically able to complete this process in less than an hour.

So, let's get started.

Manage What You Measure—
Become More Efficient in 45 Days or Less

Calculating Your Cost per Invoice

This is an example of what the spreadsheet would look like that would be used to calculate your Cost per Invoice.

It allows us to identify three major cost factors in relationship to primary AP tasks within your organization as highlighted below: **Employees, Time, and Money**

CPI Calculator	Answers	
Task: Opening Payables		
How many people open payables?	2	← **Employee Factor**
What is the annual salary of people that open payables?	$40,000	← **Time Factor**
What percentage of time does each person spend per week opening payables?	20%	← **Monetary Factor**
Task: Data Entry		
How many people input payables?	2	
What is the annual salary of people that input payables?	$35,000	
What percentage of time does each person spend per week inputting payables?	40%	
Task: Filing Payables		
How many people file payables?	2	
What is the annual salary of people that file payables?	$35,000	
What percentage of time does each person spend per week filing payables?	50%	

The calculation can essentially be broken down into 5 steps:

1. Map out your current process from invoice receipt through researching it after it is filed.

Here is a sample map:
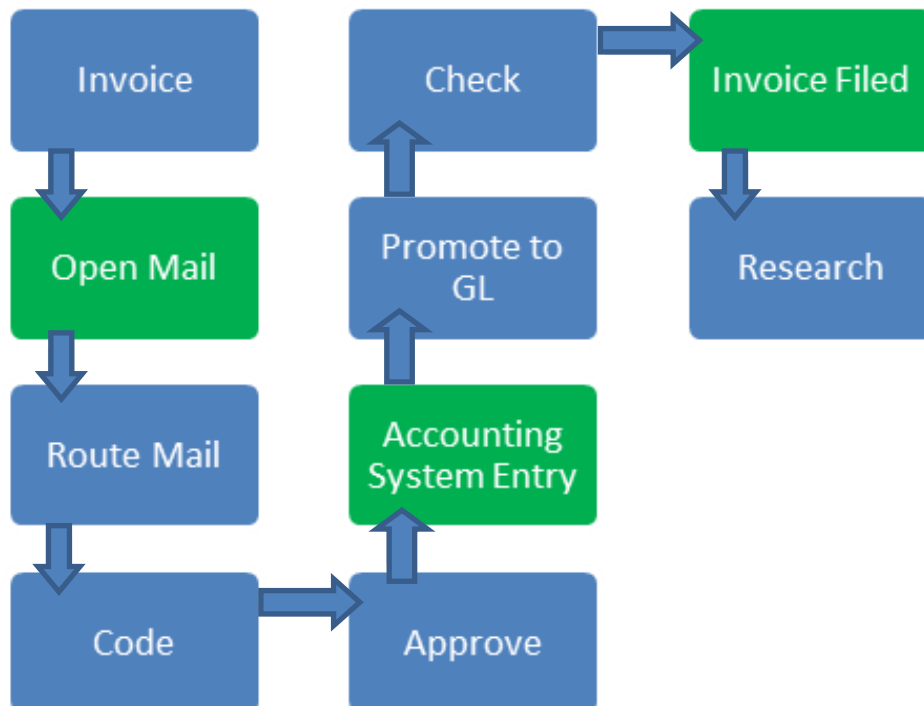
You will note that three of the above boxes above are in green. The green boxes denote tasks that are typically identified as "Hard Dollar" costs. These types of costs are easier to assign time associations, as discussed earlier. If you're looking for a fast and proven method to calculate your costs, then these costs should be your primary focus for notable saving potential to be established.

2. Identify the number of people associated with each of these tasks.

Examples from the green boxes as outlined in the process map above that reflect numbers from the spreadsheet:

Task	# of people
Open Mail (receive, open & route mail)	1
Enter AP into Accounting System	2
Invoice Filing	1

*Note: If the same person is performing multiple functions that are tied together, then one way to save a bit of time estimating the employee time association is to group these functions, as noted above, with the Invoice Receipt, Open Mail and Routing Mail into one task.

3. Identify the total time associated with each of those tasks.

Examples from the green boxes as outlined in the process map above that reflect numbers from the spreadsheet:

Task	# of People	% of Time
Open Mail (receive, open & route mail)	1	20%
Enter AP into Accounting System	2	40%
Invoice Filing	1	40%

4. Calculate the cost associated with each of those tasks.

Task	# of people	% of Time	Salary	Total Cost
Open Mail (receive, open & route mail)	1	20%	$42,000	$8,400
Enter AP into Accounting System	2	40%	$42,000	$33,600
Invoice Filing	1	40%	$35,000	$14,000
Total Costs to Process Invoices				$56,000

Equation:

# of People that Open Mail   X

 % of Time Each Person Spends Opening Mail X

Annual Salary of People that Open Mail   X

= **TOTAL COST FOR THAT TASK**

Example with Numbers: 1 x 20% x $42, 000 = **$8, 400** TOTAL COST FOR THAT TASK

5. Calculate your Cost per Invoice.

Equation: Total Cost Associated with All Tasks/ # Invoices

Total the costs associated with all tasks from Step 4 and divide that amount by the # of Invoices processed annually. If we utilize our current example, then we know that the company processes 500 invoices per month or 6,000 invoices annually. So, their calculation would look like this:

Total Costs to Process Invoices $56,000 /
Annual Invoices (500 x 12)   6,000
Cost per Invoice $9.33 per Invoice

Manage What You Measure—
Become More Efficient in 45 Days or Less

Calculating Your Cost per Payment

This is an example of what the spreadsheet would look like that would be used to calculate Cost per Payment.

It allows us to identify three major cost factors in relationship to primary payment tasks highlighted below: **Employees, Time, and Money**

CPP Calculator	Answers	
Task: Printing Checks		
How many people print checks?	1	← **Employee Factor**
What is the annual salary of people that print checks?	$40,000	← **Monetary Factor**
What percentage of time does each person spend per week printing checks?	20%	← **Time Factor**
Task: Mailing Checks		
How many people mail checks?	2	
What is the annual salary of the people that mail checks?	$35,000	
What percentage of time does each person spend per week mailing checks?	50%	
Task: Signing Checks		
How many people sign checks?	1	
What is the annual salary of the people that sign checks?	$90,000	
What percentage of time does each person spend per week signing checks?	5%	
Additional Costs		
Check Stock	$1,000	
Postage	$3,000	

The same 5 step process used to calculate your Cost per Invoice can be used to identify your Cost per Payment.

1. Map out your current process for making payments.

Here is a sample map:
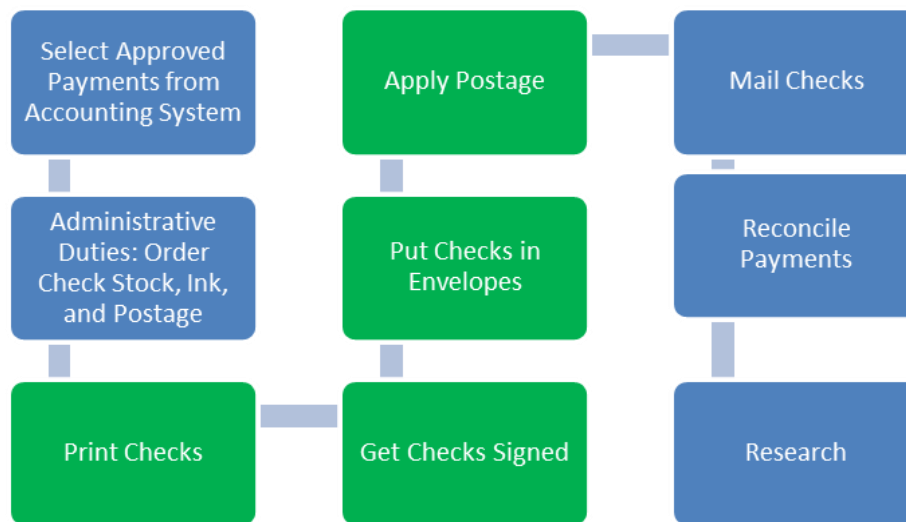
2. Associate the number of people that are associated with each of those tasks.

Examples from the green boxes above that reflect numbers from the spreadsheet:

Task	# of People
Print Checks	1
Sign Checks	1
Stuff Checks	1

3. Identify the total time associated with each of those tasks.

Examples from the green boxes above that reflect numbers from the spreadsheet:

Task	% of Time
Print Checks	20%
Sign Checks	5%
Stuff Checks	50%

4. Calculate the cost associated with each of those tasks.

Examples from the green boxes that reflect numbers from the spreadsheet:

Task	# of people	% of Time	Salary	Total Cost
Print Checks	1	20%	$40,000	$8,000
Sign Checks	1	5%	$90,000	$4,500
Stuff Checks	1	50%	$35,000	$17,500
Total Costs to Process Payments				$30,000

For example, if we are going to solve for how much the task of printing checks costs based upon the numbers we have previously used, then our equation would look like this:

Annual Salary of People Printing Checks =	**$40, 000 x**
Number of People Printing Checks =	**1 x**
% of Time People Spend Printing Checks =	**20%**
TOTAL COST FOR THE TASK OF PRINTING CHECKS	**$8, 000**

5. Calculate your Cost per Payment.

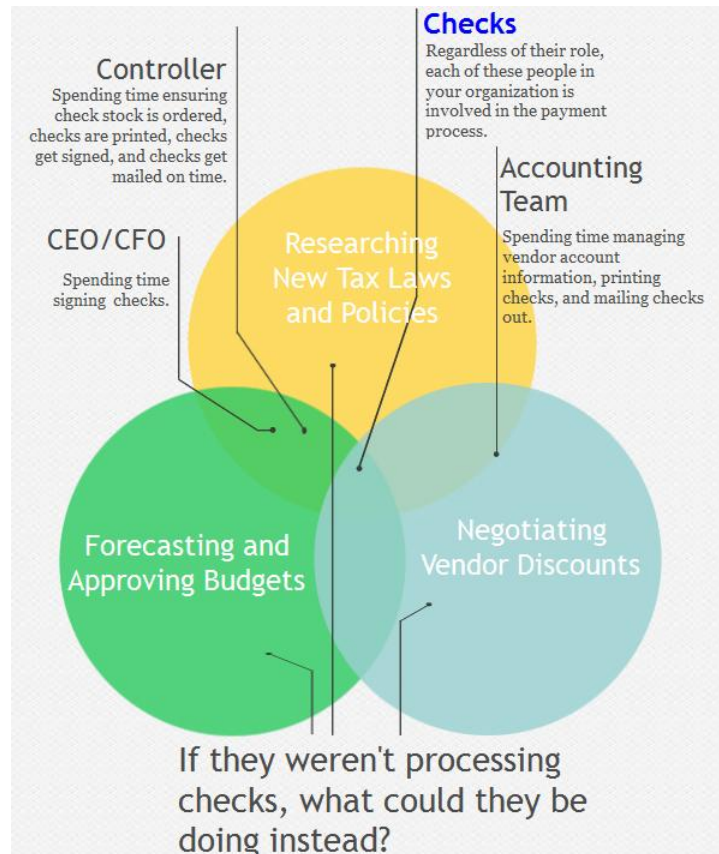**Equation:** Total Cost Associated with All Tasks/ # Payments

Total the Cost Associated with all Tasks from Step 4, and then add your "Additional Costs" from the spreadsheet (check stock and postage) and divide that amount by the # of payments processed annually. So, if the company processes 500 payments per month or 6,000 annually, then the calculation would look like this:

Total Costs to Process Payments	$34,000/
Annual Payments (500 x 12)	6,000
Cost per Payment	$5.66 per Payment

Manage What You Measure—
Become More Efficient in 45 Days or Less

Time is More Than Money

Knowing the monetary impact of AP and payment automation is one part of the equation and certainly makes a very compelling argument for automation. However, the value of the time that is freed up as a result of automation is priceless in terms of the impact that it can have on your organization. When manual, low-value, tasks are eliminated your staff is freed up to do meaningful tasks. These tasks vary based upon the job function of the employee, but wouldn't you rather, for example, your CEO spend his time researching mergers and acquisitions as opposed to him spending his time signing checks. In Christopher Elmore's book, *The 8 Pitfalls of Accounts Payable Automation,* he addresses this topic and coins the time freed up by automation as "new time". The reality is that in this time of increased regulatory scrutiny many organization's employees have become spread very thin in order to keep up with the increased paperwork pressed upon them by outside regulatory forces. AP and payment automation enable them to remove some of the tedious non-core work, and focus on their core job responsibilities. As illustrated in the above diagram, simply removing paper checks could have a powerful impact on the "new time" at various levels within your company.

Checks
Regardless of their role, each of these people in your organization is involved in the payment process.

Controller
Spending time ensuring check stock is ordered, checks are printed, checks get signed, and checks get mailed on time.

CEO/CFO
Spending time signing checks.

Accounting Team
Spending time managing vendor account information, printing checks, and mailing checks out.

Researching New Tax Laws and Policies

Forecasting and Approving Budgets

Negotiating Vendor Discounts

If they weren't processing checks, what could they be doing instead?

If you would like to calculate how much time your organization could save with automation then follow these steps to calculate your "new time":

For this example, we will use the numbers from the Cost per Payment spread sheet.

Task: Printing Checks
# of People: 1 X
# of Hours Those People Work: 8 X
# of Days They Work Annually: 260 X
% of Their Time They Spend Performing the Task: 20%
Total Hours Annually = 416

Task: Mailing Checks
# of People: 2 X
# of Hours Those People Work: 8 X
# of Days They Work Annually: 260 X
% of Their Time They Spend Performing the Task: 50%
Total Hours Annually = 2080

Task: Signing Checks
# of People: 1 X
# of Hours Those People Work: 8 X
# of Days They Work Annually: 260 X
% of Their Time They Spend Performing the Task: 5%
Total Hours Annually = 104

TOTAL HOURS ANNUALLY FOR ALL TASKS = 416 +2080 + 104 = **2,600 HOURS**

If you think about this in terms of job function, then you have saved your AP team 2,600 hours or 312 days! That's well over an entire working year, which means that your AP staff could realistically take on a whole other role. Then, if you think about the person, or people, in your organization that sign checks today an executive probably comes to mind. If we use the numbers from our example then it means that an executive would have 13 days of additional time to perform high value tasks each year… that's more than two weeks!

The Value of an Established Baseline

Establishing a baseline is paramount before beginning an automation project, because automation is only a good investment if it in fact saves your company money. By using this step-by-step process it is easy to ascertain if the decision makes sense for your company. If you would like to do the calculations on your own then you can purchase Christopher Elmore's book, *The 8 Pitfalls of Accounts Payable Automation,* which will guide you through the calculations and answer a lot of the other questions you may have about the impact of automation on your company. To receive a copy, visit his website: www.checkoutautomation.com . If you would like assistance in performing these calculations, and just don't have the time to perform all the calculations, there are Automation Specialists that can assist your team with calculations at no cost to your organization. Simply contact AvidXchange: info@avidxchange.com or 1.800.560.9305.

Now that you are aware of your potential for savings, the question is will you take the next steps for measuring your internal costs?