



# **Unlocking Profit From Transactional Document Processes**



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**Dear reader:**

Thanks for taking time out of your busy calendar to invest in yourself today via this eBook. We hope that it sheds light on areas of business improvement that have historically been underserved and often unaddressed. To leave these topics in that condition would be a disservice to you and as such, we have taken it upon ourselves to concisely summarize some of the fundamental and pressing issues facing business leaders today.

Certainly growing top line revenue, managing change in a complex and connected global marketplace is challenging, but there are also great gains to make in many non-core operational, back office, and secondary processes that will yield sizable and sustainable returns.

We hope you find this eBook insightful and challenging. If it's challenging your assumptions or business process knowledge to date with new concepts, then we've provoked vigorous thought and hopefully encouraged you to look at your processes in a new light...and one that helps you extract every ounce of value out of them.

We're excited to hear any feedback you might have too! If there are items that you want additional insight on you can check out our blog page at [www.cloudxdpo.com/blog](http://www.cloudxdpo.com/blog) or email us at [info@cloudxdpo.com](mailto:info@cloudxdpo.com) and we'll be happy to help you any way we can!

Best regards,



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## **Introduction:**

Today's business marketplace is full of numerous challenges that organizational leaders are being forced to deal with as the landscape evolves and changes. There are pressures from geopolitical destabilization, to technological shifts, to rising labor and healthcare costs, to outsourcing, to supply chain issues, to energy issues, to all kinds of stuff. It's easy to get lost in the shuffle with all the pressures that are facing business leaders today. Further, it's understandable that for many business leaders it's difficult enough to sort out which pressures need to demand their focus and energies.

With a somewhat stale national recovery underway from the low's of the 2008 market bottoming out, it makes sense that most C-level executives are focused on improving their sales and operational performances. These in fact are the means by which companies power their revenues and by which most investors assess their performance metrics. It is also therefore understandable that most companies prioritize investment into initiatives that support the growth of top line revenue, and that facilitate operational efficiency as it relates to production and supply of their goods or services. However, the flip side of that coin is that it also explains why process improvement around the back office tends to not get the attention or funding required to make sizable gains that could similarly contribute to the financial and operational health of the organization as a whole.

This is unfortunate, because for many companies their burdened transactional processes represent hills of gold, so to speak, if only someone with the foresight and industry required to unearth it would come along and make this a priority...and that is why we wrote this eBook!

There is a convergence of technology and operational practices today that is transforming how corporate leaders do business and delivering unprecedented levels of value. In this eBook, we'll look at what document process outsourcing is and how a singular platform can be used to expedite, automate, improve, and financially transform several key horizontal processes including Accounts Payable invoice processing, Accounts Receivable remittance processing, and sales order processing. However, we won't stop there, as we'll delve into other processes including electronic Accounts Payable, or payment automation methodology, for other means by which

finance leaders can streamline workflow and make massive contributions to the bottom-line.

It's time that more business leaders realize the wholesale potential of what process automation can be mean, not just from a workflow and ease of use standpoint to an organization, but truly from a financial contribution standpoint. If this type of insight were available to more corporate leaders, we'd see a macro-level shift in virtually all mid to large size businesses in the market, as the gains are nearly universally positive and fiscally potent.

Once you fully grasp the potency and impact of what these processes look like after their automation metamorphosis, you'll have a hard time being content with doing business the usual way, and as far as we're concerned, that's a good thing. It's a good thing because more efficient processes mean healthier companies, and healthier companies in turn mean that there are increased profits, which can in turn benefit employees through higher wages and strategic reinvestment. Re-investment equates to more jobs and opportunities for growth as companies are spurred forward by innovation.

In short, we think that you'll see in the following pages that there is much to be gleaned from our assessment of the state of these processes in most organizations and much more to be extracted through their re-engineering and transformation through automation. It's our hope that this eBook serves to take the governor off your processes as they exist today and functions as your own little red button to kick them into over-drive operationally and financially.



## Chapter 1 - Defining Document Process Outsourcing

*“The beginning is the most important part of the work.” - Plato*

In this case we want to establish a foundational understanding for what document process outsourcing is, and why it is both needed and useful in today's complex business marketplace. We can do this via two means, a. defining what it is, and expounding upon its implications to those savvy enough to leverage its potential, and b. clarifying what it is not.



Document process outsourcing is a new and nuanced approach to melding state of the art document management technologies and best practices in a cloud-based infrastructure that leverages end users business logic to advance process without the document process outsourcing service provider having to take full process ownership as is the case in many typical business process outsourcing engagements. It represents a hybrid approach whereby a company can access technologies that may have been previously out of reach from a cost or resource management standpoint and coupling that with affordable labor resources that can automate and administer basic functional process levels without having to turn the keys of the process over to the service provider, so to speak.

Let's look at a brief technology stack required to automate document processes:

**Electronic document management technology** - Often referred to as EDM or in some cases ECM (Electronic content management) technology, this has traditionally been deployed in an on-premises arrangement, it is fundamental to being able to image, archive, organize, query, and retrieve indexed documents. It also functions as a collaboration tool in many organizations as a repository that can be harnessed to support many business processes and needs.

**Electronic workflow and automation technology** - This is typically a bolt on for many companies EDM/ECM providers, though some integrate it into their offering. It is an essential tool for being able to mimic paper based approval processes digitally, as is the case for approving invoices for payment or GL-coding functions. Additionally, this can be necessary for check authorizations or case management depending on the type of document process you're dealing with. Without this type of technology you're stuck with manually moving documents internally or from site to site via courier (which shockingly still happens all too frequently!).

**Business rules engine** - A piece of business intelligence that allows process or system administrators to define workflow to adhere to pre-defined business rules. As an example, certain documents by vendor may need authorization by a particular department manager, and ultimately an overseeing executive to obtain approval for payment or for GL-coding purposes. Business rules in this case can and should be applied in this case to

expedite and automate processing to route pertinent documents to the right process stakeholder dynamically. Without business rules, this kind of traffic cop action will need to be governed by an individual, which just adds drag and expense to non-automated processes.

**Optical character recognition** - OCR technology is by no means a new technology, but recent advances in it, specifically Advanced Capture (layout and learning approaches), make it a robust solution for converting printed data with high levels of accuracy. OCR can often achieve accuracy rates north of 98% in terms of character confidence (the metric that the software believes the result aligns to an individual character correctly). However, OCR is still a technology that requires oversight and intervention. The reason for this that the 2% of characters that have low confidence will need a manual operator to analyze and determine what the appropriate character should be. Still, this type of technology has been proven to improve both accuracy and process cycles by nearly 80% in terms of speed and cost to process. Unfortunately, it is something akin to Lurch in the Addams Family meaning that it's an oddball. From a technology standpoint it's something that many tech folks have only cursory understanding of and little relevant experience. This, coupled with its typical high cost point to deploy, has prevented many companies from justifying in its investment.

**Data validation & cleansing** - This may bleed over into one of our next points, centered around integration, but it is pivotal in understanding how these technologies intersect and can be utilized to improve process and break performance barriers. As stated above, data cleansing must occur post OCR in order to achieve high levels of accuracy, and often the best way to do this is via a dual-validation effort. Dual-validation implies that two independent, data validation operators look at the data in question to determine what should be captured. If the results at this stage don't align after OCR and secondary validation, they can be escalated to a third party or rejected as illegible and therefore un-processable. Without this step, processes are at risk of using bad data, which is implausible for the obvious reason that there could be significant financial risks due to poor data quality.

Data validation should also be optimized to use back end data to bounce OCR captured data off in an effort to streamline and match against and therefore ensure higher accuracy and better throughput rates. In the case of invoice or sales order processing, key data, such as vendor name, should be matched



against vendor master file data. Other items could include identifying location based cost centers by address information or where services were performed.

**Integration** - Integration is a key component of improving any document process. Without integration people are left to combine information between disparate systems, hence the reason for large volumes of transactional documents. These documents convey critical information that requires some level of interaction, interpretation, and entry to act as causal forces in a process. The goal of integration is to connect these systems through a variety of methods, including direct, API, EDI (electronic data interchange), and even robotic automation. The robotic automation technology that now exists basically serves as an information conduit that essentially mimics macro tools and follows manual data entry procedures in a structured, and repetitive format. Some may view this as poor man's integration, but the net result is the same...accurate data delivery. Whatever the means by which you choose to integrate your process, the big picture is that when you get data delivered electronically to your system and don't have to interact with it to advance your process, you're freed up to pursue higher order needs. The challenge herein for many companies has to do again with fiscal and expertise resource constraints, and inability to force trade partner adoption. Integrating systems is costly and challenging work and it proves difficult for many mid-market organizations. This in turn is creating demand for platform-based integration instead of company-to-company integration. If a common methodology and integrator existed with a common data warehouse across corporate entities, integration issues would fall by the wayside. Unfortunately, as yet, that type of platform does not exist except for certain P2P systems, which forces massive process change and acts as a drag on process improvement in some cases. You can read more on that [here](#)!

**Reporting & dashboards** - It's been said that what can be measured can be managed. While this adage is certainly not new, it is no less relevant today, than when it was penned. By virtue of having key data components indexed and available within the confines of an EDM/ECM system, there exists the possibility of harnessing that data to be made of good effect to process administration. Much has been made of tapping into terms like big data to gain insight into a process, but this is especially true when automating burdened document processes. For decades, information has been trapped inside of paper based (or PDF) documents without having a meaningful way of extracting it out and presenting it to a process owner who can assess and

prioritize meaningful action based on it. This is not the case anymore as one of the key tenets of document process outsourcing is to provide said data in user-definable custom reports and dashboards. These can be adapted to mine out subjective key performance indicators so that businesses can make more intelligent and timely decisions and in turn improve their performance, whatever the process may be.

**Mobile accessibility** - It's not enough in today's marketplace to provide online only solutions. Certainly this is an advance over locally installed (deployed, server-based) software, but today's savvy system users are mobile professional who need accessibility to key information and the ability to administer process from anywhere, including mobile devices. As such, any platform for automating document processes would be remiss to not include mobile apps by which a process can be managed. Increasing numbers of organizations are shifting to tablets over traditional computers and this will require additional app development for document process outsourcers.

In the ensuing sections we'll look at process types that benefit from this type of approach and that represent some of the most significant areas of opportunity for savvy financial, technical, and operational leaders today. For many, it will be the dawn of a new day in their internal business workings. In this era, there will be unprecedented levels of value, efficiency, profitability, and hassle elimination that will be created through this approach.



## Chapter 2 - Accounts Payable Automation

Accounts Payable is arguably one of the most paper burdened departments in any corporate environment. The unsung heroes of the corporate back office that man these departments are inundated with invoice, purchase order, and receiving documents. Their unenviable day to day tasks center around comparing and contrasting these documents to identify items for payment and to ensure that they were both ordered and received in correct measure. Should something not match or fall within a certain acceptable variance threshold, pop goes the weasel, and out kicks the invoice as an exception for either internal or external trouble shooting. Because of high volumes of paper-based invoices, the typical approach for most companies has been to staff up and simply throw labor at what is inherently not a labor problem. Rather, it is an information problem and one that needs to be brought up to speed with modern technology through the steps we've talked about.

Accounts Payable automation tends to break down into two categories; Front-end Invoice Processing & Payment Automation. Therefore, it makes sense to clarify up front some common parlance in this space.

**Front-end invoice processing** - This specific area tends to deal with invoice presentment (the point of invoice delivery into an AP organization) up to the payment stage. Essentially, this is an area that is made for a document process outsourcing approach with a hand in glove fit. Early data capture off invoices obviates the need for hordes of data entry staff, and expedites exception handling. Workflow in this space can be used to escalate invoices quickly to GL-coders and to department heads for payment authorization and digital approval. Dashboards and reporting can be used to quickly identify process chokepoints and bottlenecks, and by so doing, they can be re-routed and delegated if need be.

Alternative to front end invoice processing is an E-invoicing, approach though this consideration comes with much more process adjustment on the procurement side of the house in addition to process changes from an AP perspective.

The bottom-line here is that on average most companies deal with nearly 81% of their invoices in paper format or digital paper format (pdf). There is little distinction between the two, because most companies that are without a processing solution will inevitably output digital documents to paper and then process them manually. The point here is that the exact entry and manual handling of process is what drags on processing cycles and adds layers of cost to the equation. Further, according to data from The Aberdeen Group and Paystream Advisors, only about 30-40% of mid-market and enterprise customers have pursued automation solutions. This means that the lion's share of the market have yet to tackle this challenge fully and are yet to realize the benefits that go with the territory.

**Payment automation** - Another area that is ripe for profit extraction is that of payments. Many organizations have pursued some level of improvement in this space and have reduced dependencies on physical check printing. That being said, the check still dominates the corporate landscape in terms of usage and reliance. Other avenues that have grown have been wire, ACH, and corporate card proliferation. The card option comes with the benefit of some type of reward incentive and so savvy finance leaders have at least recognized that they can tap some of the volume of their payment spend and obtain some benefit for their efforts. Additionally, some companies have pursued purchase card (P-card) solutions for their procurement needs, although this necessitates major process overhauls in both AP and purchasing. As an added

perk (sarcasm implied), driving vendor adoption is a burden that is left squarely upon the shoulders of AP and purchase folks, who are generally less than enthused to add sales to their skill sets and thereby distract themselves further from their core competencies.

However, it's important at this stage to note, that a fairly recent development in the payment automation landscape is what's known as virtual credit card payments. This has also been dubbed electronic Accounts Payable, though this is something of a misnomer in that this title could just as easily apply to front end invoice processing as it does to the payment mechanism. This singular area represents one of the most potent means by which an organization can fundamentally mine out new sources of profit. We'll examine this in depth in a few chapters, based upon a model mid-market organization and by using some assumptions based on market data and our consulting experiences. Suffice it to say that this initiative alone can act as a funding source for the other areas of strategic investment we'll look at, as well as covering the cost of most Accounts Payable organization's headcount.

From our perspective, this initiative represents something similar to an arbitrage deal in investment finance. For many companies, these kinds of platforms can be introduced for little to no capital investment; yet, they offer immediate, sustainable, and sizable financial upside. Therefore, we think that it should be a high priority for finance leaders to look at payments not just as a flow of cash out of the organization, but as an in high finance. With only 18% of the market having adopted EAP into their organizations (\* per MasterCard recent eBook Why CFO's are Writing off Checks), it means that 82% of companies have yet to reap the latent dollar value potential housed up within their corporate payables.

## Chapter 3 - Accounts Receivable Automation

Accounts Receivable represents another area with a set of back office processes that tend to be inundated with paper, manual labor, and the need to integrate information from disparate systems. As such, large volumes of sales orders, remittance slips, checks, and other documents beset AR departments. In this section we'll look at these processes in more detail and layout exactly where the inefficiencies lie and how astute corporate leaders can skillfully improve them and drive home recouped costs to boost their fiscal performance.

### Check Processing

For many organizations processing checks is bittersweet. Bitter from the perspective that it entails manually entering checks into their accounting systems and sweet because AR checks represent dollars on the balance sheet in the plus column. However, the drag on processing these checks rises as the volume of AR increases from a transactional level. One common denominator when it comes to manual document processing is that data entry doesn't scale, and because of that when volumes of transactional documents increase, it is inevitable that companies seek to throw bodies at the problem. This does little to root out the problem and essentially acts as a process bandage with the added benefits of cost, risk, and time consumption.

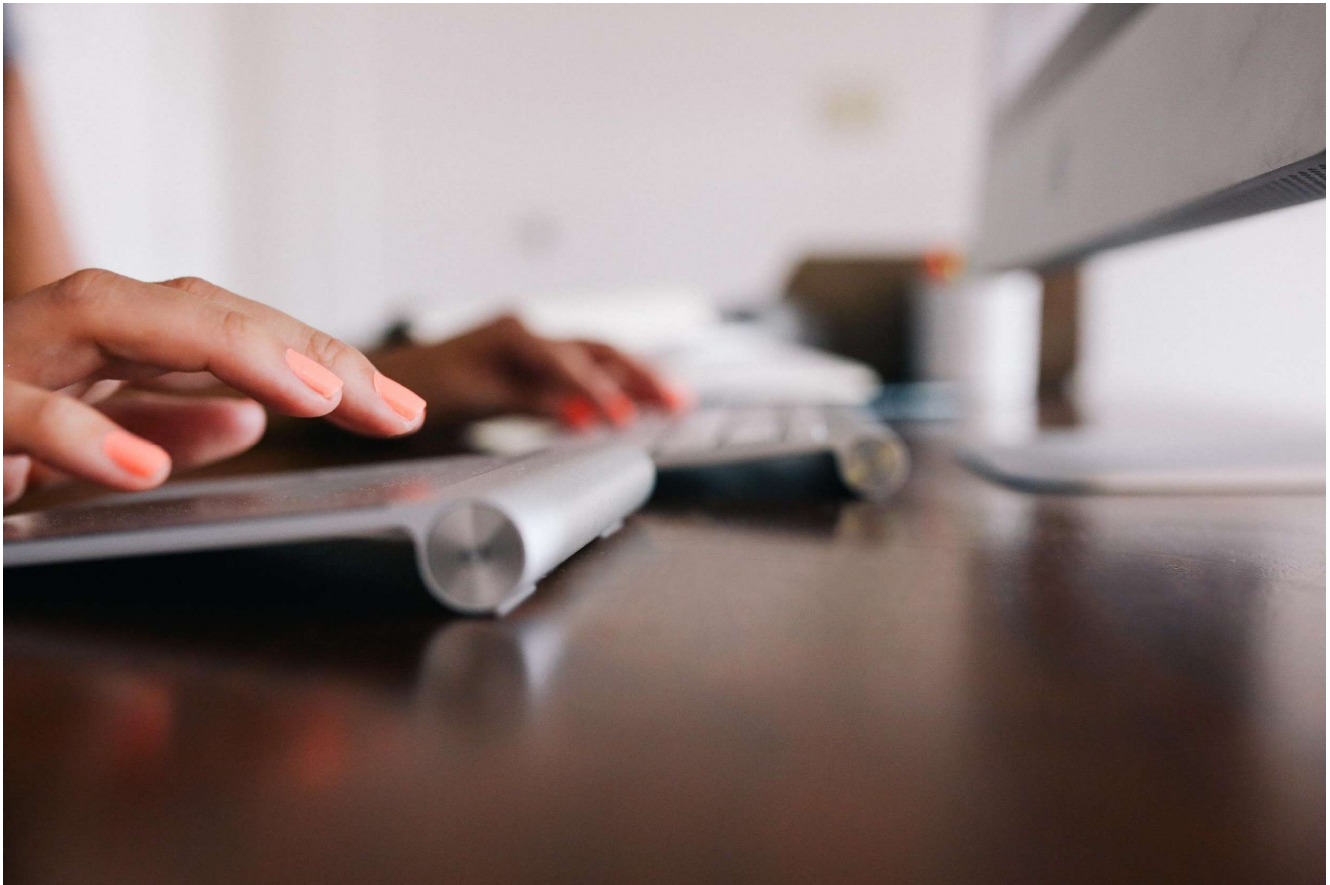
Because of this, AR departments have sought out better means for processing their AR. One common approach is to have their banking institution provide turnkey check processing on their behalf. This begins with the bank providing a lockbox check receipt and scanning service. Essentially corporate customers will route their AP payments and remittance slips to a dedicated lockbox that is monitored by the bank. The bank will then convert these to electronic and use advanced check processing solutions (like Check 21) to extract the information off of a check to automate the creation of AR payment records. In addition they may or may not offer processing of the remittances, which tends to fall outside their domain expertise. In this case, the remits, often end up back in the lap of the AR staff for processing. Now, this type of check processing offers significant time advantages to the process by providing a dynamic solution to ingesting check data, and can typically be arranged on a pay as you go service basis and offers the benefit of taking the mundane out of the process for AR specialists.



## Remittance Processing

Although banks are proficient at capturing data from checks and funding dollars into your bank account, processing remittance slips that are affixed to many invoices can present unique challenges. Some banks perform this service and produce a BAI (Bank Administration Institute) file that can be ingested into your accounting system to close out the appropriate AR paid on the check and referenced by the remit. Presently, the mode in which banks are processing remits leaves several gaps in the process that are unaddressed and cumbersome to AR departments. First, outside of basic check image capture, banks lack prowess concerning OCR (Optical character recognition) administration. Because of this, many banks will outsource this to an off shore data entry provider. The end result often tends to yield a high degree of data quality issues with little advancement over existing procedures. Lack of quality in processing renders any cost advantages secured through this approach moot, as bad data necessitates AR intervention and creates process redundancy. Second, they also lack expertise in terms of system integration to many ERP's and any document management and storage requirements will need to be addressed by your organization.

Many banks also allow their customers to do their own check scanning and to upload the results to the bank enabling the same benefits as their lockbox services without the need to have a lockbox service in place. Alternatively, via a DPO approach, you can obtain remittance processing as a service at a fraction of what it is costing you today with your existing manual process or what you are getting from your bank. This can be done by taking electronic images of a remit and capturing all of the data required through OCR and then produce a BAI file that can be matched against what's in the open AR file. The benefit of this validation step is ensuring that once data is pushed to your ERP system that exceptions are mitigated. In addition all of the appropriate documents are automatically indexed in a document management repository as part of the process.



## **Chapter 4 - Sales Order Automation**

Sales order processing is a challenge which organizations, that are non-point of sale based, have to face on a day-to-day basis. Sales orders may arrive in either a Sales Operations or Accounts Receivable environment depending on any individual companies unique infrastructure. The commonality between these two is that the information presented within the sales order itself has to be accounted for within the vendor's Accounting system to initiate fulfillment and billing in most cases. As is the case with processing invoices, much of this data is onerous from a data entry perspective and slows down the process. Some vendors have had the foresight to pursue Electronic Data Interchange integrations with their customers. However, this requires technical prowess on both ends of the transaction and is typically limited to high volume, low SKU relationships due to the fact that they are more repeatable and less complex. Integrating systems through this means is optimal, if not a reality for most companies.

Alternatively, we believe that a document process outsourcing approach that leverages the same technology and process stack as that of front-end invoice processing in Accounts Payable, offers the most compelling solution for the Sales Order automation space. Though it may sound repetitive based upon the previous ground we covered in the earlier section, the truth of the matter still holds up. Automated capture can be leveraged to rapidly ingest and process sales orders instead of relying upon copious amounts of data entry. Additionally, numerous companies still receive their orders in a variety of methods. Many receive them as e-mail attachments, others as electronic orders through procurement systems, others via mail (though admittedly this is major decline through the proliferation of electronic delivery methods), still others have dedicated sales staff that interact with customers via the phone to acts as order agents, and finally a surprising contingent still receive orders via fax.

The truly exciting prospect about a DPO approach to automating the sales process involves standardizing the conversion of any and all of these various types, with the exception being the phone-bound sales agent volume, to an ERP ingestible file. This can come about via a singular EDI approach, direct integration, flat file, .csv, or even robotic macro automation technology based upon a standard map. The bottom-line is that the mundane and mind-numbing work of data entry can be removed through this approach. The net result will be a faster order ingestion cycle, as well as a diminution of errors and risks to poor data. For companies lacking the technical bandwidth to pull off an outright EDI coup or who lack the intestinal fortitude to pursue a P2P automation solution (one which requires heavy vendor solicitation and adoption, and one which entails additional process changes on the procurement end, (sometimes the juice isn't worth the squeeze in layman's terms)), Sales Order automation may very well represent the most fiscally leaned out and operationally beefed up opportunity to transform a static, outdated manual process and contribute to organizational financial health in unprecedented ways.

## **Chapter 5 – Dissecting the costs**

This is where the rubber meets the road for most finance leaders. Certainly, many would not argue about picking up workflow and process gains, as those are very much welcome, but the de facto litmus test by which these initiatives will judged is oriented around their generation of savings and rebate streams. In most cases, the fiscal gains will be able to offset the overhead cost

for entire sets of departmental staff in addition to being able to make measurable progress toward the organizational bottom-line. As we look at each section, we'll define the assumptions and precedent for each process model based upon our experience in working with the numerous organizations we've assisted while drawing upon solid benchmark data from reputable industry trade and research organizations.

The financial impact of improving these processes can be significant to most organizations. These benefits include the following;

- cost reductions from process improvement
- efficiency gains and organizational impact for stakeholders in the process
- strategic gains for the business
- financial rebates and early payment discount improvement

In addition there are several other categories of savings that are sometimes not tracked but can add up quickly. This includes the cost of storage, mail and print costs, postage, freight charges, and IT costs to name a few.

Most organizations will use process improvement metrics to justify an improvement project's worthiness. Reduction of resources and freeing up resources so that an organization can do more with less is definitely a trend, however quite often this can lead to a political decision process. In many cases the decision is on the fence per se, and ends up being paralysis by what we would call bad or incomplete analysis. We also see that this in most cases is enough to advance a project but we are going to give you much more ammo as we go through the process.

Through this chapter we will outline these areas and paint a picture for some of these benefits.

### **Data Entry**

Labor is one of the largest costs in terms of document processing, due to the data entry effort required to feed information into disparate systems. If it took 5 minutes to book an AP transaction with a resource that costs \$20 an hour the cost would be \$1.67 for that transaction alone. If it took 10 minutes to process an order at a cost of \$25 an hour the cost would be \$4.17 in that case.

Many companies will also look at the transaction volumes divided by the resource pool to come up with these numbers.

An AP organization processing 5000 invoices a month with a team of 4 people at a cost of \$20 / Hr assuming 172 hours in a month would be \$2.75 an invoice, while an organization processing 3000 orders a month with a team of 4 people would be \$5.73 an order. This method is obviously better than the time estimation as it reflects actual volumes processed in relation to the costs.

Below are what we see as typical ranges for data entry costs for transactions that we are involved with:

AP invoice Data Entry Costs      \$1.50 - \$3.00

Order Data Entry Costs      \$3 - \$6

Remittance Data Entry Costs      \$3 - \$6

Obviously there are exceptions to this based upon industry, the complexity of the transactions and the location of the staff, but you can see the logic.

### **Storage & Retrieval Costs**

Storage and retrieval costs are prone to escalation in a paper world. The average document is touched more than ten times during its lifecycle. Each interaction compounds the processing cost associated with the document. Creating the initial file is one thing but a whole bunch of other issues enter the equation when you look at the workflow and custody of a document. Transactional documents vary in their complexity to process with differing degrees of workflow, intervention, and approval required. AP transactions are the most complex in terms of workflow, but sales orders can get tricky as well. Remittance notices are typically straight forward, while cutting payments to suppliers in most organizations can be easily tamed unless you have policies like multiple signatures on a check.

Many analyst organizations consider the cost of storing a document to be more than \$1 /document. We typically use a \$.50j/document metric and consider that to be conservative for organizations that are operating in a manual, paper-based process.

Electronic storage is an option that some organizations use but what we typically see is that they manually process their transactions and archive the

documents electronically at the end of the process. This is a big no-no, as all of the benefits of electronic processing come with converting the document to data at the process outset and leveraging that data to drive the process. This was previously discussed but necessary to restate.

The cost to scan a document including the costs of equipment and document management software and resources to manage the system can easily get up to that \$.50 /document quickly, and we're typically at around \$.25 in our analysis to be conservative.

### **Mail Processing Costs**

Mail opening equipment can certainly help for nominal cost, which you will recoup in short order. The other thing to consider in this analysis is how the documents are routed to their final processing destination. Is there an electronic workflow? Are documents physically routed? or mailed? Are they distributed multiple times? AP transactions tend to cost more due to the complex nature of workflow requirements for Non-PO invoices in most cases.

The mail processing costs that we typically see are as follows:

AP \$.25 - \$5

Orders - \$.25-\$1

AR Remittance and Checks \$.25-\$1

### **Output Costs**

Most of the transactions that we've discussed to this point include inbound processes (AR, AP, and Sales Order Processing). Some of these processes may include the costs of printing supporting documentation such as a check request document in AP but for the most part we typically don't include any costs when we do analysis on these transactions on the output side.

Check printing and mailing, on the other hand, is almost entirely made up of the cost to print and mail a check.

According to The Accounts Payable Network, the average cost for an organization to cut a check is a whopping \$5.14.

Because of this, it should definitely be a target for improvement in environments that don't have electronic payment alternatives yet.



## **Workflow Costs**

Many of these processes have workflows for approvals or quality control involving other stakeholders in the process. Manually pushing paper around an organization can cause issues on many fronts and the costs are one of them. The cost to route an AP invoice for Approvals, and GL coding can be extensive especially when this can be automated electronically. The costs to physically send checks for signing, or sending an order off for validation to make sure part numbers or specifications are correct can also add to the costs.

Finally, the costs can vary quite a bit in the workflow area mostly in terms of the time stakeholders are involved as well as any postage or mailing charges that may be involved in the process. You also have to take into consideration the time of the stakeholders in the process. Physically signing a check or an approval form takes much longer when dealing with physical paper. Rules-based electronic workflow can typically reduce these costs by more than 50%.

For sake of analysis we typically use the following metrics for transactions. In addition to this we would also add any appropriate postage charges.



AP approval workflow and routing	\$1.50
Check signing	\$1

In the next chapter, we'll explore what this looks like in a typical demographic of a mid-sized company to arrive at a reasonable expectation for the impacts of these processes.

## **Chapter 6 – Modeling automation impacts**

The purpose of this chapter is to provide a clear overview for the financial impacts of automation across the areas we've discussed to include AP invoice processing, electronic payments, AR remittance processing, and Sales order processing. Additionally, through automation of these areas there are additional financial impacts that we'll delve into that are tangential to improving these processes.

The below profile is a sample company based upon our findings having one in-depth analysis and quantitative assessments across these various process areas. When engaging our customers through our consultation process, we embrace rigorous and thorough benchmarking methods. Additionally, we then hold these up against industry data and metrics from analyst organizations to provide conservative projections that you can count on.

### **Case Study Profile:**

Industry	Manufacturing/Distribution
Annual Revenues	\$100,000,000

### **Accounts Payable Processing**

Annual Payables Spend	\$40,000,000
AP Staff Headcount	2
Invoice Transactions/Month	3,000
Checks Cut/Month	1,500
Cost Per Invoice	\$6.29* - Median Per Aberdeen Group, 2012

Improvement Target	50%* - Conservative with OCR & workflow automation
CPI Future State	\$3.14

Annual AP Savings	\$113,220
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Other areas of opportunity for an automated and visible AP invoice process include audit and accrual cycle time reduction. Visibility has two impacts in this case. The first being that time spent retrieving documents is cut to virtually nil. As is the case for most AP audits, considerable time is spent in paper-based environments producing hard copies of invoice and payment transactions. In an electronic AP process this time is drastically reduced, enabling AP staff to optimize their work efforts and reduce auditor on site billable hours. Secondly, a similar cycle time reduction is achievable for month end accruals. For accounting organizations that forecast their next month's spend at the end of each month, it is feasible to run dynamic reporting that provides instant feedback instead of the guess-timation function that occurs in many other organizations.

Audit Cycle Savings	\$3,000*Annualized
Accrual Process Savings	\$3,000*Annualized

Other Accounts Payable factors include gains made possible by Early Payment Discount capture and through payment automation. Payment automation in this case is specifically designed as electronic Accounts Payable (aka virtual credit card payment), which drastically reduces reliance upon traditional check cutting and payment in AP environments.

Early Payment Discount Target	\$40,000* 5% of Annual Spend @ 2% discount
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EAP - 1% Rebate	\$132,000* - Assuming 33% of Annual Spend
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Check Savings	\$21,840* - Assuming 33% of Spend via EAP Annualized*
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For the Check Savings, we approximate a \$1.50 per check cost, reduced from the \$5.14 per check cost average (provided by The Accounts Payable Network), and assume that this organization can reduce it's check dependency by 33% in accordance with it's EAP initiative.

## Netting it out

Annual AP Savings	\$113,220
Audit Cycle Savings	\$3,000
Accrual Process Savings	\$3,000
Early Payment Discount Target	\$40,000
EAP - 1% Rebate	\$132,000
Check Savings	\$21,840

Net AP Impacts	\$313,060
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As we alluded to earlier on this is a dramatic number that is attainable for most companies, and as such, it should occupy the attention of Finance and Operational leaders. Considering that the size of the model organization is modest, the numbers grow proportionately for larger entities.

As we shift our focus to other processes similar gains are available to be had and are also attention-worthy.

## AR Remittance Processing

Remittance Slips Per Month	1500
Cost Per Remit Pre-Automation	\$6.00
Cost Per Remit Post-Automation	\$4.00
Annual Remit Savings	\$36,000

AR remittance processing represents a tangible and measurable means by which AR organizations can improve their efficiency. While the gains in this process tend not to be as profound as they are on the AP side of the house, they are nonetheless compelling. Coupled with enhanced data quality, and faster cycle times, more Finance leaders than not would prefer to pick up these savings than leave them be so to speak.

## Sales Order Processing

### C2. Efficiency Gains and Organizational Impact

Some of the components of this have been discussed in the above commentary however we thought we'd get into the detail in this section. Efficiency gains in relation to BPM (Business Process Improvement) can be looked at from a number of perspectives. The goal of looking at BPM can be limited to the internal benefits to the organization from a resource perspective to looking at cycle times to impacts on other parts of the business and ultimately to the stakeholders in the process - ie your customers and suppliers. For the purpose of this narrative we are going to give you the light version and will touch upon all areas.

#### Data Capture

One of the biggest components of efficiency gains is optimizing the data capture from a data quality perspective as well as automating the data entry. Getting rid of manual data entry is the key and most importantly is getting this done as early in the process as possible. Combining OCR technology with data validation and QC processes enables us to get great results and efficiently convert virtually any document regardless of format to meaningful data at very efficient cost levels.

We typically see improvements over manual data entry of more than 70%. With that in mind most data entry positions such as Order Entry or Accounts Payable clerks spend about 75% of their time doing manual work. Pounding at the keyboard and file retrieval are menial tasks burdened with risks. With that said expect to free up these resources by more than 50%.

#### Time to Process

When we talk with prospective clients about how long it takes them to process a document you will get a multitude of answers depending upon who you are talking to, what time of day it is, the weather, and a multitude of other factors. The reason being is that it is hard to measure in a manual world.

In the AP world until an invoice hits AP the clock doesn't start. To begin with the clock start at the supplier end. They may print an invoice on the first day of the month at which time the invoice date and terms are set and it could take more than a week for it to enter your organization. Then it could go from the mailroom to an approver where it may sit another couple of days best case and it could go to another individual to figure out what GL code to book it to and ultimately to an AP clerk for data entry. As you can see there is a lot of opportunity for delays in the process. This is why when we ask the question

above and someone says they process AP invoices in a manual mode and that they get them through in a few days we are skeptical.

In the order entry world there is more pressure as in most businesses the revenue side takes priority over the expense side. However the workflow is typically less complex and in most cases orders are coming in electronically. There is still room for improvement in terms of the process.

Finally processing checks and remits are the most critical as we're dealing with hard cash being pumped into the business. A delay of 1 day can create issues in the business that could be significant.

In all of these scenarios the primary driver is the data capture at the beginning of the process. Electronic submission through vendor portals or via e-mail can improve the timeline significantly. In the above AP example we can receive an AP invoice in seconds via e-mail or the portal versus a week. This minimizes the pressures and process risks big time.

Below are some typical SLA's that we see after automation is in place.

AP invoices processed	24 hours
Orders Processed	8 hours
Remittance / Check Processing	2-4 hours

#### Data Quality

Data quality can create all sorts of problems in the process. Getting an amount wrong on a sales order or an AP invoice although rare can cause serious issues. It isn't just the risk of overpaying or undercharging it is the tension that it creates. One example I like to use on the AP side is keying an invoice number wrong into the ERP system. Even if workflow is implemented how many approvers look to see if the invoice number is correct? If they are then they probably aren't doing a great job at their day job. If the invoice number is entered wrong and paid it could potentially still be an open receivable for your supplier. How long will it take for this to surface and how much time will go into fixing it? You get the idea. Bad data can wreak havoc on an organization. Manual data entry comes with an error rate - typically in the 5%-7% range. OCR with good validation and QC yields about a 99.7% result. When we combine visibility into the process along with triggers on things that can cause problems we can just about eliminate all data risk.

#### Lost Documents

When you're pushing paper things get lost or misfiled. More than 5% of all physical documents in a business get lost or misfiled. The cost to replace or reproduce these documents cost more than \$100 per incident. This metric is a few years old so I'm sure that number is higher but you get the gist.

#### 3) Strategic Gains To The Business



In addition to being a lean mean fighting machine and having streamlined efficient processes there are a slew of strategic benefits that come along. When we first started providing these solutions many moons ago most organizations justified them by reducing costs and headcount. Middle management typically is tasked with doing that. Today we are seeing that the strategic benefits are more important and executives are getting more involved in bringing these types of solutions into their companies.

The big driver and you may have heard this word is **visibility** into the process. Visibility by definition is a noun " the state or [fact](#) of being [visible](#)". I know I can relate to this especially after the winter we've had. Good visibility while driving for example is a requirement. Good visibility into your business transactions can be life or death. Not knowing your cash position, what is in the order que or what your liabilities are real time can be a big disadvantage.

Another big word is Scalability. Maintaining staffing levels for manual process can be a challenge especially if your business is growing or is seasonal. If it isn't growing we will help you with that :). If you are staffed to process 50 orders a day what happens when 100 come in? On the same hand what happens when 25 come in.

Unique process knowledge can be a risk especially if the person that has it leaves the organization. What would happen if your entire AP organization or order department hit the lottery. They maintain that unique process knowledge. Streamlining and standardizing exception processes and getting that unique clunkiness out of the process minimizes your risks.

Time to process which we discussed earlier is a big 1. Converting documents to data at the beginning of the process enables a complete electronic process which is leaner and quicker. Real time processing offers big advantages.

Negotiating Power - Better terms, discounts with suppliers

Better customer service - on time order fulfillment

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4) EPD & Rebates

Reasonable EPD goal should be at a minimum 5% of spend at a 2% discount

VCC rebates - 30%, 1%