

Indxit Systems, Inc



WHITE PAPER

# Automated Indexing with InDxLogic

How InDxLogic indexing decreases costs and improves document turnaround times in your medical practice

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## INTRODUCTION

Today healthcare organizations are under tremendous pressure from patients, insurance companies and regulators to manage their medical practices electronically. With the plethora of documents organizations must process each day as they interact with patients and conduct clinical practice, simply integrating all the paper can be a overwhelming task. That's why medical organizations are putting innovative software in place that brings together people, processes and documents to improve efficiency reduce staffing requirements and increase practice profitability.

This white paper will discuss how automating labor intensive tasks with workflow software can improve your Bottom-line. It will also describe how to achieve impressive results by using document workflow solutions to optimize your automated match rate

## WHO SHOULD READ THIS PAPER?

Read this paper if ...

- You manage paper documents by a separate storage and filing system
- You manage paper documents by scanning and attaching in a manual indexing system
- Your practice profitability is impacted by human resource costs that are directed towards nonproductive activities
- Your document turnaround time is impacted by your inability to manually index efficiently
- You would like to add automated document indexing to your practice

## THE DOWNSIDE OF DOCUMENT INTEGRATION

No matter what your practice type, documents such as labs, radiology reports, insurance related items, consultation reports, consent forms, are essential. They can also be overwhelming for your electronically enabled practice. Often the problem is not the document content. It's the indexing and document management that impacts your practice negatively.

Consider for a minute the typical day in your practice. Hundreds of paper documents are managed or received. In all medical organizations, this is a labor intensive process. Documents are received by fax, by courier, or in some cases electronically, then placed into a holding pattern until your staff has manually scanned and indexed the document, perhaps and re-routed around the office as clinical findings or other practice related events are upon reviewed and acted upon.

The downsides of manual based document management processes are many. Each step of the process adds little or no clinical or financial benefit to the organization. Document management is a huge financial drain. Providers, clerical staff and management get annoyed. The consequences of so much lost productivity can be sobering, including high overhead costs and undue document processing delays. Have you ever had your "scanning and attaching" staff go on vacation?

## ELIMINATING MANUAL INDEXING FROM YOUR MEDICAL PRACTICE

If you are having a hard time keeping up with the paper in your office, you are in good company. It has been found that document indexing is one of the most unpleasant tasks your staff will experience as it seems to bring little benefit to the patient and it is repetitive and tedious. Why has automated document indexing not taken hold the medical community as it has in other industries? Companies that sell automated indexing solutions provide software that many organizations have found too costly and complex to implement and use. InDxLogic is an innovative indexing paradigm developed to reduce these costs considerably.

## DISPELLING THE MYTHS ABOUT AUTOMATING DOCUMENT INDEXING

In reality, automated document indexing solutions have come a long way. Automated document indexing is no longer only for large healthcare organizations with boundless budgets and large IT departments. As the following table illustrates, organizations of all sizes can rapidly and cost-effectively automate important tasks and decrease manual indexing in their practice environments.

MYTH	REALITY
<b>Costly</b> Automated indexing workflows are too costly for most small- and medium-sized organizations.	<b>Affordable</b> The cost of automating document indexing is very affordable with the availability of centralized indexing processes, in essence allowing organizations across the country to share indexing resources.
<b>Complex</b> Solutions are difficult to install, deploy and manage.	<b>Simplified</b> InDxLogic has made great strides in simplifying automated indexing workflows. Technologies such as Microsoft .NET make solutions fast and easy to deploy, adapt and manage.
<b>Unused</b> Software systems are too hard for people to learn and use.	<b>Useful</b> Intuitive integrations with existing software tools make it easy for average workers to incorporate workflow into their routines.
<b>Automated indexing is impossible</b> There is no way to completely eliminate manual indexing within most offices.	<b>Automated Indexing is possible</b> Manual indexing may always be with us to some degree, but the most successful practices are able to eliminate the majority of manual indexing from the document management processes.

## BENEFITS OF AUTOMATING INDEXING

Automated indexing is possible and it does not have to be costly, complex or hard to achieve. Repetitive indexing tasks can be replaced by easy to use algorithms that improve your productivity over time and these algorithms are available to automate any document-indexing task. This software offers a variety of benefits including:

### Cost Savings

Staff costs are significant cost drivers in document-intensive organizations with manual indexing processes. In healthcare industry for example, the cost to manually index a single document can be more than 21 cents per document. With a per patient visit average of 6-8 documents per visit, this can be a serious expense. Automated indexing software helps reduce costs by greatly reducing the labor costs associated with manual indexing.

### Improved Response Times

Organizations that rely on manual indexing document management solutions can add days or even weeks to their document turnaround time. With automated indexing software, tasks can be automatically completed and delivered, to ensure they are completed in a timely manner. Workflow software also can provide document delivery and OCR recognition capabilities to allow organizations to better manage their disparate documents and the information contained within. Such systems ensure that document management tasks are completed in a timely manner and that documents are readily available to the provider. In addition, documents can be automatically delivered to recipients, and then, archived electronically for later retrieval. By automating document indexing, automated indexing software empowers staff to quickly receive, analyze and correctly act upon time-sensitive

information and tasks. As a result, human resource managers to reallocate staff to more productive activities such as responding to patient needs.

### **Security and Compliance**

Automated indexing software such as InDxLogic provides a secure and standardized environment for clinical and financial documents. This minimizes the privacy and regulatory risks associated with manual document indexing by enabling organizations to better control, manage and monitor who, where and when information and tasks were acted upon.

### **Efficiency**

Reducing an organization's reliance on manual indexing can dramatically improve efficiency and productivity. Automated indexing software makes it faster and easier to manage your documents. It frees your staff from redundant and time-consuming document administrative tasks, allowing them to focus on higher value activities.

### **Error Reduction**

By minimizing manual indexing and providing a structured electronic document indexing environment, organizations can dramatically increase accuracy and monitoring of indexing tasks, thereby improving overall service quality.

### **Profitability**

Cost, speed, efficiency and accuracy of information all feed into a healthcare organization's ability to develop successful clinical relationships with patients. By automating document indexing tasks organizations can greatly reduce overhead and improve bottom line results.

## **INTRODUCTION TO INDXLOGIC AUTOMATED INDEXING SOFTWARE**

InDxLogic provides an affordable automated indexing solution enabling organizations to create a trusted environment where people, processes and documents can come together to improve efficiency and increase profitability. It provides both technical and nontechnical workers with workflow solutions that are easy, flexible, integrated and accessible. It automates repeatable document management activities involving document management and delivery, from simple workgroup tasks to complete enterprise-wide processes. This enables organizations to standardize and streamline indexing-based activities.

### **Document entry into InDxLogic automated workflows**

The success of document indexing automation is directly related to the quality of the document entering the automated indexing workflow. Additionally success is defined by the indexing parameter desired. In general terms, document type indexing success is related to the users experience over time. As a document type experience is generated for a given location, the ability of the software to successfully determine the document type increases. Over time, users can expect to achieve a document type match rate of over 90% and a date of service match rate of over 95%. InDxMatch search algorithms require that the match for person is 100% correct.

## Optimizing automated workflows

Improvements in automated match rates of scanned or faxed documents are achieved by improving fax quality, by the judicious use of labels in existing clinical workflows and by integrating source documents such as consents within Centricity letters and handouts wherever possible.

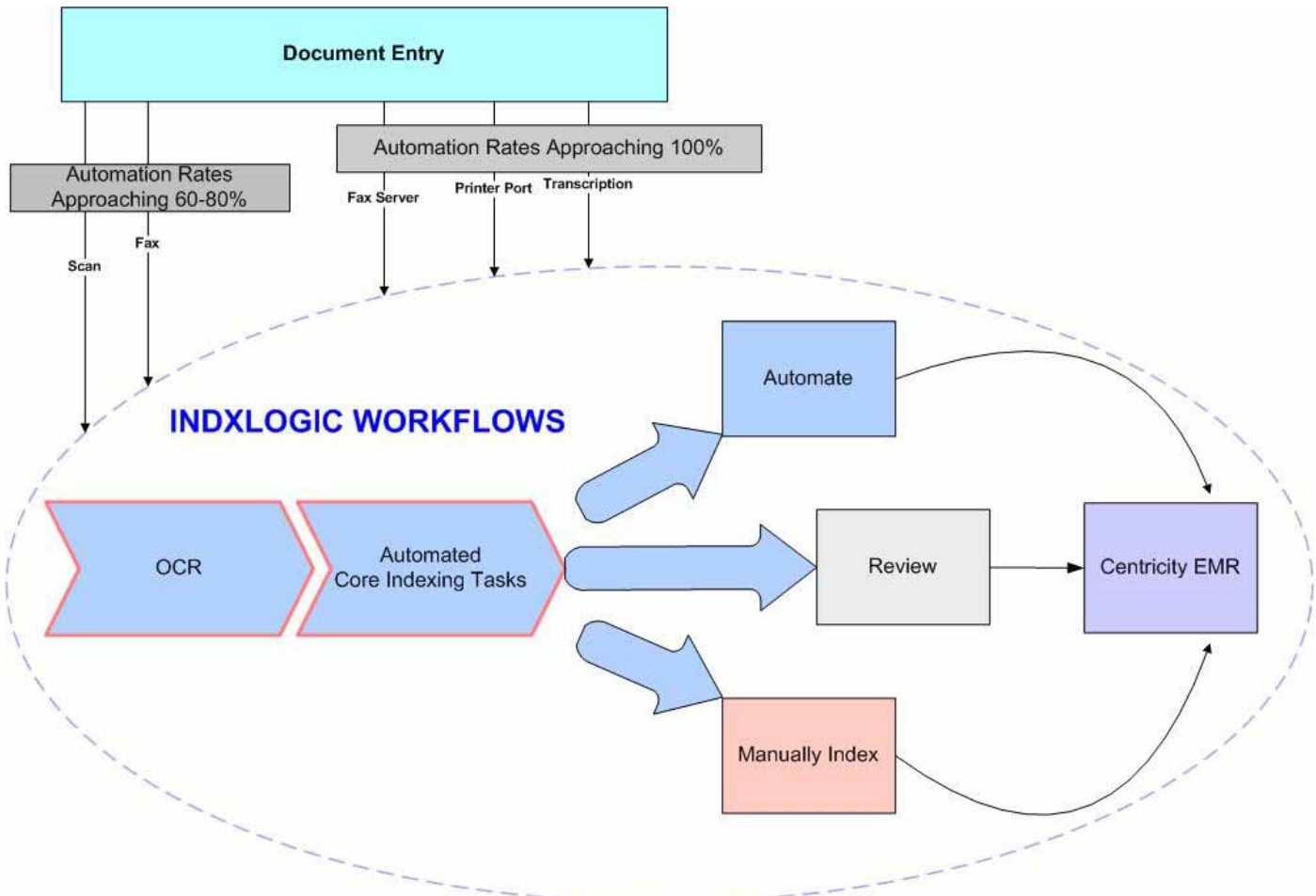


Figure 1: InDxLogic manages all document indexing steps in a healthcare organization.

## DOCUMENT WORKFLOW SOLUTIONS IN ACTION

Today effective organizations are automating document-intensive processes and eliminating paper-based routines with InDxLogic document workflow solutions. Organizations that implement an InDxLogic solution can dramatically reduce costs and improve productivity.

## Centricity Integrations

InDxLogic integrates with Centricity and Microsoft technologies to make it easy to define, develop and deploy document indexing processes, rules and conditions within a Centricity environment. Centricity users can define custom document types that link with InDxLogic document type identification algorithms. Centricity users can also generate source documents that require for patient signature within the Centricity letters feature. These integrations result in match rates for these documents of 100%. By taking advantage of these flexible tools and integrations, organizations can maximize their investment in Centricity infrastructure.

## Scanning Workflows

Even in a scanning workflow, automation rates of 100% can be achieved depending on document quality. For instance, consents (such as a HIPAA consent, operative consent, ABN's etc) that are generated using the Centricity letters and handout features have an automation rate of 100%. Clean reports or clean fax copies have a match rate approaching 100%. The InDxLogic user can set review criterion based on document type and is able to review and edit already indexed documents within their secure account prior to the return of the document to the client image server. Presently automation is limited to documents that contain ASCII characters of any font; InDxLogic does not recognize handwriting. Poor quality documents or handwritten documents are managed by the use of labels (such as the labels you use for pathology or lab specimens) or by the InDxLogic manual indexer.

## Reporting Software

When Porterville Women's Medical Associates desired to implement an automated indexing solution for their ultrasound practice, they simply configured an Adobe PDF printer port to output completed reports to the InDxLogic signed document inbox. Now their ultrasound reports appear in Centricity within moments of being completed.

## Fax Server to Fax Server

Fax server to fax server relationships have match rates approaching 100%. Documents delivered by fax server can be completely automated if each fax document represents a single document per patient. Biscom offers a fax splitting solution that is a manual process to allow practices to split their faxes into single patient documents. Other practices have found it to be as cost effective to simply print out the reports on good quality laser printer and split the documents in the Acrobat Capture workflow. Even these printed documents from a fax server have match rates approaching 100%.

## Results

Practice	Centricity letters integration	labels	PDF printer port configured	Fax server	Auto (%)	Manual (%)	<i>n (documents)</i>
1	yes	yes	yes	no	81.32	18.68	24,685
2	yes	yes	no	no	71.5	28.5	1,109
3	no	no	no	no	64.29	35.71	5,738

**Table 1. The results of three different InDxLogic Document Management Solution installations.**

Table 1 illustrates the reduction of manual indexing in three different practices and the effect of workflow modification upon automation rates. These results are the averages of all documents submitted in each practice including handwritten documents and poor quality documents. Success of automated indexing was defined as obtaining all indexing parameters without staff intervention. These parameters are patient identification, document type, responsible provider, and date of service.

## CONCLUSION

Manual indexing can cost organizations greatly due to human resource required to staff these activities.. Organizations that remove or decrease manual indexing from document-intensive processes are best equipped to address the needs of their patients and are able to quickly realize a return on investment. Today, cost-effective and rapidly deployable workflow software solutions are available which enable medical practices to automatically index, manage and deliver documents. These solutions can greatly improve business performance and help organizations optimize their people, workflow processes and business information.

## FOR MORE INFORMATION

InDxLogic Document Management solutions help organizations automate the indexing and document flow throughout the document lifecycle (process, index and deliver). InDxLogic helps organizations to grow revenues and increase profits while meeting their document management goals.

For more information, visit [www.indxlogic.com](http://www.indxlogic.com) or call 1.866.683.8317

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