

Digitech Systems Whitepaper

Presto! Automate Document Classification and Data Extraction with PaperVision® Forms Magic™

You're already using E-Forms and scanning paper documents into digital form. Take the next step. The PaperVision® Forms Magic™ technology keeps the automation going by classifying documents and indexing key data for fast use in your content management system and business software applications.

Forms Magic lets you:

- Put an end to slow and costly manual data entry
- Eliminate typing errors
- Speed access to information
- Save money



Want to free employees for work other than hand-keying data for routine business tasks like invoicing? Eager to eliminate typos and transcription errors? Want to automatically ready information for your business applications and content management system? The solution isn't magic. It's PaperVision® Forms Magic™.



Forms Magic is next-level intelligent capture software introduced

by Digitech Systems in 2016 and available as an optional add-on feature of PaperVision® Capture. (For a detailed report on PaperVision Capture, click here.) Forms Magic recognizes and extracts critical data from both electronic files and paper documents as they're being scanned for fast, effective use in your business applications and content management system. Documents also are classified by type (i.e., invoices, contracts, letters) so they're appropriately stored and protected and sent into the proper business processes.

Today, businesses and organizations are struggling to gain control of growing amounts of information. Forms Magic addresses this need. Keep reading to learn why the technology is a huge benefit for companies and organizations like yours.

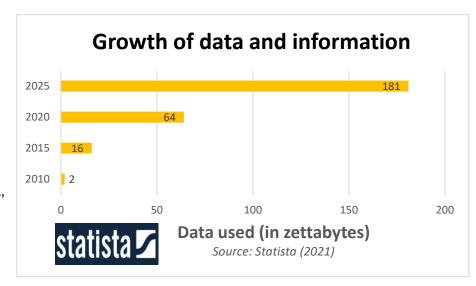
Take Control of Big Data

You've probably heard about big data but you may not understand what the term fully means and why it matters.

What is Big Data

"Big data" is a phrase coined to describe the growth of information being generated by every worker and individual. Just how big is "big?" According to a forecast from Statista research:

> The volume of data and information created, captured, copied and consumed worldwide continues to skyrocket and is expected to be nearly triple 2020 levels by 2025.¹



Big Data includes paper records. Companies must consider the important information stored on paper when they plan a big data strategy. Consider the following statistics about paper use:

- The average American uses 700 pounds of paper each year.²
- The average office worker uses 10,000 sheets of paper per year.³
- Between 70% and 80% of invoices are paper-based and as much as 70% of invoice processing costs are related to document handling and manual data entry.⁴



Why is Big Data a Problem?



As the amount of information increases, our capacity to collect, store and manage it is falling behind. "The ability to collect data has almost always been larger than our ability to process it. Processing power used to expand exponentially but in recent years that growth has slowed. The same cannot be said of the volume of the data available, which continue to grow year after year," author and artificial intelligence researcher Bernard Brode says.⁵

An even bigger challenge, according to Brode, is "there is a difference between big data and smart data." In

general, smart data is the subset of Big Data that is of actionable value to your business. To utilize smart data, you need an effective Enterprise Content Management (ECM) system that lets you securely digitize, store and readily access, manage and use that information. Without such a system in place, you are setting yourself up for failure.

Just thinking about the massive volume of your data may be intimidating. You may feel powerless to sort and organize the information you have today — let alone three times that amount in less than five short years. The stakes are high. Those who utilize content management enjoy a significant advantage in their marketplace. As reported in Harvard Business Review, a study found that companies in the top third of their industry in the use of data-driven decision making are 5% more productive and 6% more profitable than their competitors on average.⁶

Case study: GPC Contracting

As GPC Contracting expanded its commercial painting work into new markets, the company turned to ImageSilo®, PaperVision® Capture and PaperVision® Forms Magic™ to collect, index and extract information. Until then, of the 750 documents handled a week at the main office, about 75% were stored on a shared network drive that was poorly organized. Staff struggled to find documents. On-site workers were forced to spend hours traveling to the main office for key records. "We were managing close to 1.6TB on a hard drive that wasn't working (and) we were having so many problems filing paper to the point we were going to lose everything," company accountant Stefanie Evans says. The new setup allowed GPC to:

- Save 624 hours per year at an approximate value of \$7,500
- Save \$33,800 annually in salaries, printing, paper and storage costs
- Train its workers on the technology in a half a day



"Thanks to Forms Magic™ and ImageSilo® we went from 10 filing cabinets for just AP documents and now we only have 1 filing cabinet that holds all of our physical copies. We saved 500 square footage of floor space and now have more room to store pieces of equipment that we would have had to pay storage fees to keep."

– Stefanie Evans

Accountant, GPC Contracting



How Forms Magic Helps



Digitech Systems is the first company to bring artificial intelligence to document management users and the electronic document management industry. The approach saves you from typing. Also, it frees you from outdated automation technologies that require lengthy and complex configuration and setup processes that involve software developers manually importing and classifying documents into a forms processing application. Forms Magic develops its own patterns for classification, making it faster and easier. In addition, by relying on many more data points than other forms

processing options when making document classification decisions, Forms Magic ensures accuracy.

In both 2016 and 2019, independent technology researcher Keypoint Research/Buyers Lab awarded Forms Magic and PaperVision Capture its coveted Platinum rating. Read the full product review here. In addition, the analysts gave the product a uniquely created designation of Outstanding Achievement in Innovation when the product was initially launched in 2016. This award recognizes products that stand out for a breakthrough in technology, a unique feature or other noteworthy innovation that moves an entire class of products forward.

Here are a few of the comments the Buyers Lab researchers shared about Forms Magic:

- "...eliminates error-prone manual data entry and costly misfiling."
- "... makes information accessible to stakeholders and decision-makers."
- "Frees knowledge workers from tedious document classification tasks, allowing them to focus on higher-value work."
- "...worth the investment."



"Seeing the PaperVision Forms Magic Technology in action, we were instantly impressed. It's like facial recognition for documents. This means files at first unfamiliar to the classification engine can be recognized, parsed and slipstreamed into the appropriate document workflow, greatly reducing the number of exceptions that need to be dealt with manually. Simply put, it is unlike any recognition technology BLI has seen to date among leading document workflow solutions."

Jamie Bsales
 Director of Solutions Analysis, Buyers Lab

Forms Magic Meets Your Needs

Each organization faces its own set of goals and challenges in managing information. By identifying specific needs and the best Enterprise Content Management tools to help, you'll be able to focus on satisfying your customers and growing your revenue. Form Magic is one such tool. The technology works for businesses, nonprofits and public agencies of any size.



Wasting time and money on manual processing?



Did you know that purchase order lifecycles take 45% longer (35 hours vs. 24 hours) for companies that rely on manual processes compared to those that use an automated process?8 Were you aware that at least 33% of all job tasks can be automated and that most workers would welcome the



change? Though many organizations have started the automation journey, they're not yet getting the full advantage of automation in the information capture process. Forms Magic will automatically sort documents and eliminate manual data entry by extracting critical data from your documents to streamline organizational processes across the enterprise.

Case study: MSI Mold Builders

MSI Mold Builders, based in Cedar Rapids, IA, produces manufacturing molds for customers in a variety of industries including medical, automotive and recreation. Though it has used lean manufacturing techniques for years to produce high quality molds, its accounts payable processes were struggling to keep up. Mold Builders implemented PaperVision® Capture with PaperVision® Forms Magic™ to handle new invoices, classify them by type and send them into an electronic process for payment. The company:

- Reduced invoice processing time to 15 minutes from more than 60 minutes
- Achieved an industry leading 90 percent classification accuracy rate
- Lowered the processing cost per invoice to less than \$16 from about \$63, saving the company more than \$676,000 annually



"Forms Magic has revolutionized our (accounts payable) processes. We've been able to cut our invoice processing time by over 75% and have saved our \$676,000 annually. We love Forms Magic,"

- Jason Sojka

Network and Computer Systems Manager, MSI Mold Builders

Not benefiting from the full range of automated processes?



Is the endless small print in complex documents such as legal contracts giving you fits? How much staff time and storage space are documents like that costing you? Does your office come to a stop every time you need to search out a sentence or two or find a specific piece of data in a particular document? Forms Magic does the work for you by recognizing and classifying documents by type and extracting information from the most

complex documents so you and your staff can focus on other work. Forms Magic also readies the information for export into your information management system, where you will gain fast, secure access via simple keyword searches and multiple layers of data protection. In addition, you can export the extracted information into your other business applications, so you'll save money all over your organization!



Struggling to get a handle on complex documents?



Forms Magic can process virtually any document. The technology uses spatial layout, algorithms and multiple data points to make classification decisions that ensure the accuracy of even the most complicated documents.

Case Study: Arvato

Arvato specializes in the development and implementation of custom solutions for more than 150 million customers around the globe. When asked by a large IT/High-tech company to streamline and simplify licensing, they were stymied by critical business information trapped in paper contracts. The license agreements were too complex for ordinary OCR to capture, so the AI engine in PaperVision Forms Magic was critical for Arvato to recognize and extract the data that mattered to their client. They provided an automated solution that turned paper contracts into digital files, and extracted the information their client needed. Arvato was able to:

Trim 10 minutes from every license processed, recovering more than 10,000 productive hours annually.



- Eliminate manual data entry, **reallocating 70 employees** in four data centers across the globe.
- **Save \$3.15 million** by streamlining license processing.

"You can't automate something you can't read or look at. PaperVision® Capture and PaperVision® Forms Magic™ enabled us to access the critical information we need. Being able to extract the data with artificial intelligence has enabled us to automate our entire business process, saving more than \$3 million annually."

Tony Brown Director of Innovation and Tools, Arvato

Worried your information isn't secure?



Do you work with sensitive content? Through its integration with PaperVision Capture, Forms Magic allows you to convert vulnerable paper records into secure electronic files that can be protected by user login, encryption and multiple layers of system protections. Among the benefits: workers only see the information they need to finish the task at hand.

Software applications don't mesh?



With Forms Magic, you can extract and export information directly to your business applications as well as PaperVision® Enterprise, ImageSilo® or virtually any other Enterprise Content Management system. Forms Magic is highly customizable and adds powerful document recognition and classification features to your existing information

processing setups.

Forms Magic "reads" and extracts key data to populate keyword-searchable index values and send information to other hydrogen applications. As an example, if you're assening invoices and you're reserved.

information to other business applications. As an example, if you're scanning invoices you've received in the mail, the invoice number, date and dollar amount will be automatically extracted, copied into index fields and sent to your accounting application. You save more by eliminating the manual work of two systems.



HK Bain, CEO of Digitech Systems, notes easy integration is one of the key benefits of Forms Magic. "It dramatically simplifies the process of getting information into a usable format for business processes and decision-making. Just throw the files or documents into PaperVision Capture, and the (Forms Magic) technology will identify what they are, where they belong and what protections to apply, and what business processes to supply with the data. The (Forms Magic) technology will even extract and send information to other business programs to eliminate hand-keying data throughout the enterprise. PaperVision Forms Magic helps businesses solve some of their most complex and cumbersome information challenges."



"PaperVision Forms Magic helps businesses solve some of their most complex and cumbersome information challenges."

– HK Bain CEO, Digitech Systems

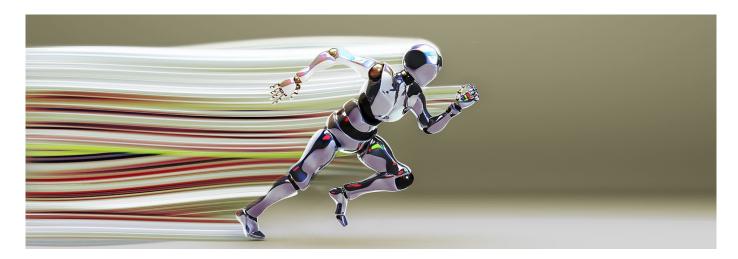
Too many errors?



Many businesses understand the efficiency of extracting information vs. hand-keying but they don't always think of another benefit: reducing human-generated errors. Employees don't intentionally make mistakes but, even when performing at a high level, humans are subject to error. Automated technologies don't make mistakes. You instantly improve data accuracy when extracting data with advanced technology.

Conclusion

As information continues to grow, our need to get control of it and to better manage it becomes more and more important. Go the next step. Whether working with existing digital information or digitized paper documents, Forms Magic keeps the automation going by identifying, classifying and extracting information for fast use in your content management system and business software applications. Information organization and security will instantly improve. You'll streamline access to the information you need to quickly complete business processes across your organization. It's not actually magic but we think it's pretty close!





Additional Resources

Visit our <u>online Forms Magic section</u> for more information. Our <u>online Learn section</u> also offers helpful resources on Forms Magic and other Enterprise Content Management products including:

Forms Magic

- Eliminate Manual Data Entry video
- How Can Forms Magic Help You video
- Forms Magic product sheet
- Forms Magic Platinum Product Review from Buyers Lab
- Forms Magic infographic

Intelligent Capture

Take your digital transformation to the next level.

- Intelligent Capture is Essential to Digital Transformation Whitepaper
- Contego Information Management case study
- PaperVision® Capture Infographic
- <u>Digitech Systems Recognized as the Outstanding Capture Solution</u>

Enhanced Automation

Get more out of your document management systems with automation tools that go beyond basic information collection and routing.

- <u>Is Enhanced Automation in Your Future? article</u>
- Solution Profiles Pre-Configured Templates for Automated Workflow Brief
- <u>E-Forms and e-signatures</u>
- Robotic Process Automation (RPA) Brief

Digitech Systems

At Digitech Systems, Enterprise Content Management is our bread and butter. Our websites are among the best places for you to learn from our experts about the technology and our products.

- Digitech Systems
- My DSI online portal for Digitech Systems resellers and customers

The Association of Intelligent Information Management

Get more information on Enterprise Content Management news and industry research from the Association of Intelligent Information Management.

• AIIM - The Association for Intelligent Information Management



Vocabulary and Terminology

Automated business process

Use of software to execute routine and repetitive functions or procedures.

Automated forms processing

Software that captures data from a paper document or electronic file and uses it to create index values in the Enterprise Content Management system. The data can also be sent via integration to other line-of-business applications to avoid manual data entry.

Capture

The collection and organization of digital and digitized paper-based information so that it can be moved into an information management system for secure access and management.

Complex documents

Documents with multiple parts, sections and/or substructures such as tables, footnotes and graphics.

Data extraction

Retrieve information out of data sources (usually unstructured or poorly structured documents) for additional data processing or data storage.

Document Classification

Categorize documents by type as they are being scanned and automatically sending them to the appropriate project in the Enterprise Content Management system.

Intelligent capture

Automatically recognize, classify and extract data from documents and then send that data through integration to other line of business applications.

Line of Business Applications

Automated business process applications that are critical to a company's business or customized to a specific business; aka, business applications such as accounts payable and other workflow management systems, document management systems and e-commerce systems.

Manual process

A business process achieved by a human without aid of assisting technology, i.e., hand-keying, typing, hand sorting.

PaperVision® Forms Magic™ Technology

Optional add-on feature of PaperVision® Capture that automatically classifies documents and extracts data for export to ECM systems and line-of-business applications.



Forms Magic Case Studies

For more real-world applications and testimonials on how organizations of all sizes are using Forms Magic to enhance efficiency, gain control and save money, visit https://www.digitechsystems.com/category/case-study/.



MSI Mold Builders cut its processing cost per invoice to less than \$16 from about \$63, saving the company more than \$676,000 annually. Read more.



Arvato saved \$3.12 million with streamlined license processing, reduced processing time and improved accuracy. Read more.



Prestige Care cut invoice processing times by 57%. Read more.



Casey Associates helped one client eliminate manual data entry and save more than 300 hours a year in overtime costs. Read more.



Polar Imaging reports one its clients uses Forms Magic to process 90,000 invoices annually. Read more.



NECS reports Forms Magic is working so well for its hospital clients that "people are calling us to get it." Read more.



GPC Contracting saves hundreds of worker hours and thousands of dollars with its ECM system that includes Forms Magic. <u>Read more.</u>



Works Cited

- Statista (2021). "Volume of data/information created, captured, copied, and consumed worldwide from 2010 to 2025." Retrieved from: https://www.statista.com/statistics/871513/worldwide-data-created/
- ² Facts about Paper and Paper Waste, iD2 Communications
- 3 Reduce.org
- Institute of Finance & Management and The Accounts Payable Network. (2015). "The Accounts Payable Certification Programs."
- Brode, Bernard. (2020). "The Problem with Big Data: It's Getting Bigger." Retrieved from: <u>The Problem with Big Data: It's Getting Bigger DATAVERSITY</u>
- McAfee, Andrew and Brynjolfsson, Erik (2012). "Big Data: The Management Revolution." Retrieved from: <u>Big Data: The Management Revolution (hbr.org)</u>
- ⁷ Keypoint Intelligence/Buyers Lab (2019). "Platinum Tested Solution 2019." Retrieved from: <u>BLI-PaperVision-Platinum-Product-Review.pdf</u> (digitechsystems.com)
- Deshpande, Ashish (2020). "How to Go Paperless in the Office." Retrieved from: <u>How to Go Paperless in the Office (frevvo.com)</u>
- Beloof, Katy (undated). "How Much Time Are You Wasting on Manual, Repetitive Tasks?"
 Retrieved from: How Much Time Are You Wasting on Manual, Repetitive Tasks? | Smartsheet



Digitech Systems, LLC

Digitech Systems, LLC enables businesses of any size to more effectively and securely manage, retrieve and store corporate information of any kind using either PaperVision Enterprise content management (ECM) software or the world's most trusted cloud-based ECM services, ImageSilo and PaperVision.com. By significantly reducing the cost, Digitech Systems has moved ECM from a luxury convenience to an essential element for every well-managed business.

Digitech Systems continues to raise the standard of excellence in the ECM sector, as evidenced by the numerous awards the company has received, including multiple Nucleus Research ROI Awards. In addition, Buyer's Lab has repeatedly chosen PaperVision Capture as the best data capture and workflow solution, ImageSilo and PaperVision.com as the outstanding cloud content management systems, and PaperVision Enterprise as the most outstanding ECM software in the marketplace. Digitech Systems' Process Automation Tools were recently named as a Top Ten solution. To learn more about the company's software and services that deliver any document, anywhere, anytime, visit www.digitechsystems.com. You can also connect with us on:

- LinkedIn (https://www.linkedin.com/company/digitech-systems)
- YouTube (<u>https://www.youtube.com/user/DigitechSystemsInc</u>) and
- Twitter (@ECMNow)

Contact Information

Digitech Systems, LLC 8400 East Crescent Parkway Suite 500 Greenwood Village, CO 80111

Toll Free: 866.374.3569

Email: Sales@DigitechSystems.com

www.DigitechSystems.com

Copyright © 2021 Digitech Systems, LLC. All rights reserved. PaperVision, ImageSilo and the PaperVision logo are registered trademarks of Digitech Systems, LLC.