

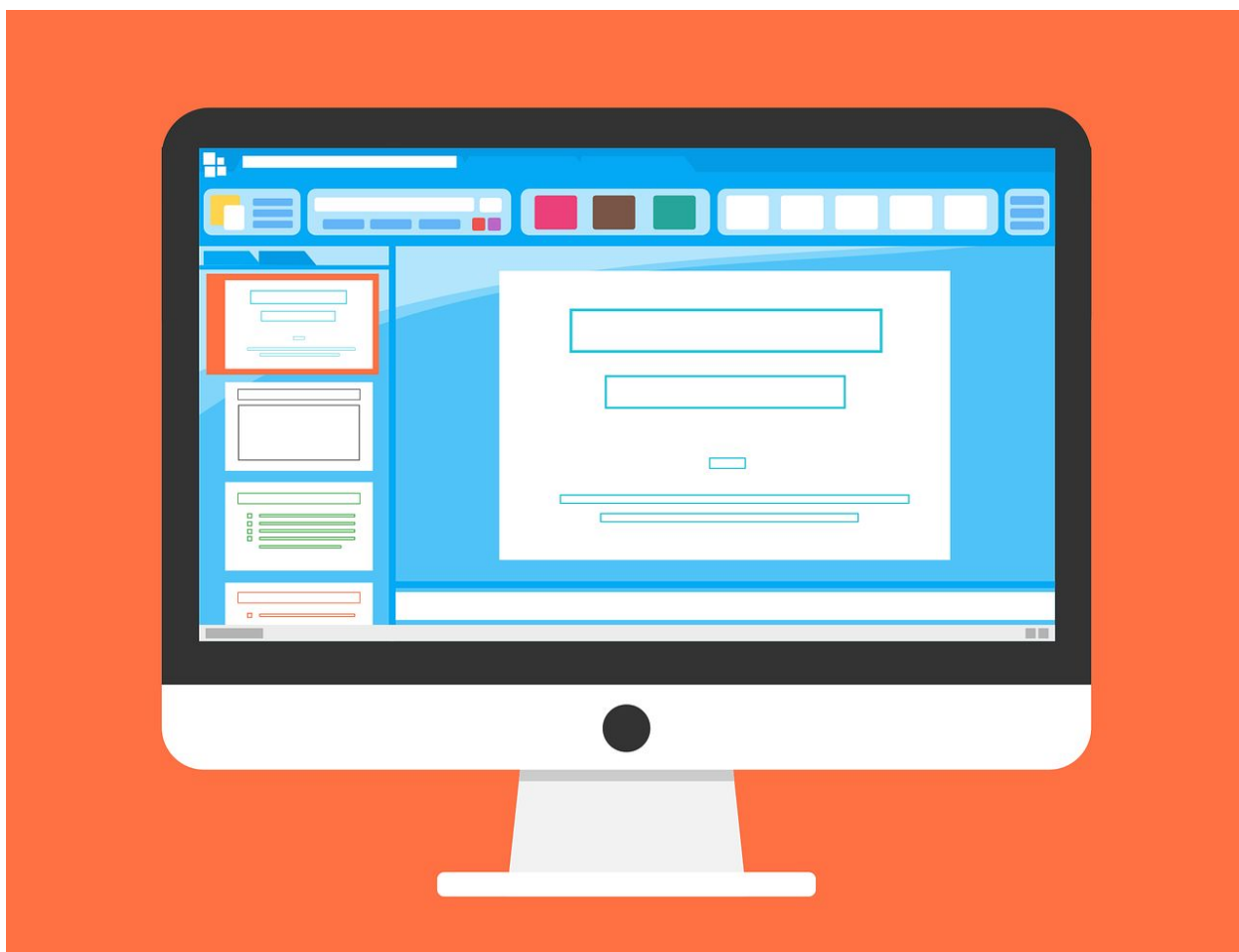
CONTENT INTELLIGENCE USE CASES

Real world applications for content intelligence

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Content Intelligence

Enterprises today have more data than ever before. Between documents, images, text, emails, and other unstructured data, organizations are swimming in ocean-sized amounts data and struggling to move into the digital age and address the ever-changing demands of their industry. Up to 90% of the content in the enterprise is in the form of unstructured data. While structured data has a schema that allows it to be easily organized in databases and data stores, unstructured data is not organized in a way that computers can easily process, lacking schema and other means by which the information can be easily queried and organized. With unstructured content playing a critical role in so many critical business processes, it's important for organizations to have the right tools to intelligently understand and extract valuable data that ultimately drives the process and decisions.

Enterprise organizations are taking advantage of the tremendous advancements in computing, storage, and software technology to bring the necessary understanding to this disparate, heterogeneous content to make intelligent business decisions. Specifically, the development of artificial intelligence (AI) and machine learning (ML) technologies have given rise to the ability to extract more information, and *intelligence* from the wide range of *content* in the enterprise, whether structured or unstructured. Enterprises are increasingly looking not only for technology solutions, but also easier ways these advanced capabilities can be trained, deployed, and leveraged into various intelligent automation systems and processes. This has led to cognitive content skills (or services) that are being leveraged in tools like robotic process automation (RPA).

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Content Intelligence enables the digital workforce with the necessary skills to understand and create meaning from content to make intelligent business decisions.
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Content intelligence is the idea of applying AI and cognitive technologies to turn unstructured content into structured data. The structured data can then be understood which in turn drives intelligent decision-making. Content intelligence enables organizations to:

- **Handle the full range of unstructured content in the organization**
- **Free up human labor to handle processing of data and documents**
- **Give a competitive advantage in document-intensive industries and business processes**
- **Engage customers in a more proactive manner and deliver better service**

Content Intelligence in the Real World

Companies of a wide range of sizes and industries are increasingly gaining value from content intelligence. The use cases for content intelligence are broad and span many industries with content intelligence increasingly being leveraged across a range of automation platforms including robotic process automation (RPA) or business process management (BPM). Companies

that apply content intelligence to RPA solutions are making their “digital worker” smarter and even more efficient. No longer are processes delayed by requiring human workers in the loop of tasks and processes. By having smarter systems take the place of a human worker to read documents, extract and input information into systems, make determinations such as if a contract is compliant, process documentation as part of an onboarding process, or initiate an electronic signature as part of a transaction, companies are seeing significant gains.

For companies looking to get started on their content intelligence journey, we’ll highlight various use cases below to show examples of how content intelligence is applied in real world applications.

Use Case #1 - Finance & Accounting

Organizations’ finance and accounting operations are often dependent on paper-based processes that can create inefficiencies, bottlenecks, and other delays. Content intelligence solutions are being applied to various business-critical operations such as invoice processing within a finance department. Traditional invoicing methods require human activity to manually perform tedious manual data entry and validation reviews to extract required information from incoming invoices in paper or electronic format. This all-too-common approach to invoice and financial documents is time-consuming and error-prone.



However, with an intelligent invoicing system, data capture, machine printed and handwriting recognition can extract relevant information from financial documents, and enter that data automatically into enterprise financial systems.

Other use cases of content intelligence in finance focus on the ability to intelligently identify and extract automatically key information from contracts, agreements, purchase orders and sales orders. With content intelligence, systems can automatically categorize documents and learn to recognize documents by data and type. By having systems that can learn based on thousands of variations such as invoices, POs or agreements, content intelligence solutions can automatically extract appropriate data and connect the data to a process, eliminating much of the manual work so that business users can focus on the review and exceptions. These efficiencies help finance and accounting departments stay on top of the documents they receive to help reduce costs, optimize cash flow, and positively affect the satisfaction of all participants in the process.

Use Case #2 - Banking

Content intelligence is also being applied in regulated industries such as banking to help with a wide range of compliance and documentation tasks. These systems help the financial institutions comply with an increasing array of regulations and stay competitive against their peers while reducing costs and increasing profit margins. When banks do not properly vet a business or individual they expose themselves to being out of compliance and can face significant fines. As a heavily regulated industry they need to make sure there are always checks in place to confirm proper procedures are being followed. Systems that provide content intelligence help banks

identify potentially fraudulent transactions, comply with Anti-Money Laundering (AML) regulations and processes, meet know your customer (KYC) regulations, facilitate loan processing and expedite a wide range of banking processes.

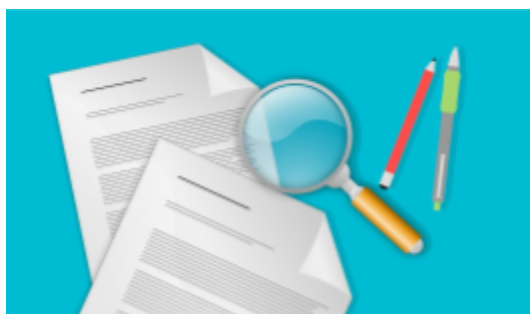


For example, when a customer wants to apply for a loan they must fill out a variety of loan documents as well as provide accompanying documents to get approval. Traditional manual approaches can be tedious, error-prone, and slow. There are usually many steps involved in the process including scanning of certain documents, classification of these documents, extraction and verification of necessary data, and validation of customer information. In many instances, most of these processes can be significantly improved with content intelligence. By applying content intelligence the system can automatically confirm the necessary documents were provided, extract the critical information from the appropriate documents, and move the application through internal systems. This helps reduce manual human errors, and can dramatically speed up processing time which means banks are able to process more loans and improve customer experience, helping to win and retain more customers.

Content intelligence benefits for financial institutions include:

- **Reduced costs associated with compliance or regulatory processes**
- **Increased auditability of systems, data, and processes**
- **Improved customer satisfaction**

Use Case #3 - Legal



For enterprise companies, legal departments are often overwhelmed by all sorts of legal documents. Contracts, agreements, regulatory filings, court documents, and all sorts of documents are critical to the business. For many years legal teams have relied on using teams of paralegals or lawyers to comb through these papers and documents by hand. However, with content intelligence technology they are able to facilitate quicker and more intelligent decision making through elimination of manual work.

Enterprises have seen efficiencies using content intelligence in the processing of legal contracts. Content intelligence is able to understand documents just like you do, to unearth insights critical to decision-making. It incorporates advanced classification, entity extraction and uses Natural Language Processing (NLP) to understand contract semantics, identify specific clauses, sections and obligations, and contrast, compare and analyze contract language through configurable clause libraries.

The systems can recognize standard clauses through learning and automatically flag documents that have incomplete or missing information. Now, instead of lawyers having to manually look through every single page they can focus their time on the areas that need more attention.

Use Case #4 - Transportation and Logistics



The world is more interconnected than ever before, with transportation and logistics playing an increasingly vital role for many businesses. Shipping and logistics companies struggle under heavy documentation, compliance, and administrative burdens. Shipping firms produce large volumes of data including various shipping records, bills of lading, customs forms, and other documentation that pertains to the movement of goods on roads, planes, ships, and across borders.



By applying content intelligence, shipping and logistics firms are more efficiently and effectively handling document-intensive workloads without adding staff to their already overburdened budgets. The use of content intelligence enables fast and efficient decision-making, saving time -- very critical in transportation and logistics. These firms are able to automate document processing, eliminating the need to manually go through each document and allowing for fast analysis to reveal critical information. With more intelligent document processing, these systems can automatically classify and validate data from Bills of Lading, Certificates of Origin, waybills and other important documents, providing transparency and awareness of when goods are delivered, lowering operational costs, and initiating billing processes.

Use Case #5 - Property and Casualty (insurance)



Given the frequency of documents in conducting insurance business, every insurance organization must be able to process and consume the right content from the right documents. Content intelligence combined with process automation enable insurers to deliver faster and more efficient services to their customers while generating more profit through the process. Organizations can capture and process any documents at any point of the insurance lifecycle: customer onboarding, underwriting, policy analysis,

reinsurance, claims, subrogation, legal disputes and more. This helps in reducing the amount of time spent manually processing and filing documents.

For instance, insurance companies are moving towards AI-assisted claim document recognition systems that help to handle handwritten claims notice documents using data capture services. In addition, these systems are capable of natural language processing in multiple languages. This helps the insurer to process claims speedily and more accurately while maintaining a good customer relationship and being able to service a wide range of customers who who may speak different languages.

Additionally, insurance companies are constantly trying to stay on top of fraudulent claims. Advanced content intelligence solutions are capable of tapping into various forms of structured

and unstructured data such as client documents, claim notes, or photographs to help determine if the claim is valid or fraudulent. For example, an insurance adjuster can instantly assess damage and begin the claims process through automatic document handling and process automation. Insurance workers and customers no longer have extreme lag time before property damage and the time it takes to file a claim. This enables faster claim processing, less human error, and greater oversight over the entire process which could help to eliminate fraudulent claims.



Use Case #6 - Government

Even today, many government processes are surprisingly paper based and employees need to retrieve and enter data into various systems that are not connected to each other. In recent years, many public sector agencies and organizations have increasingly invested in content intelligence and business process automation technology to gain productivity and efficiency. Many of these intelligent solutions enabled automated integration or interaction across a range of systems that previously required significant human labor. With the help of content intelligence governments are starting to see real efficiency saving processing time, reducing human errors, and freeing up employees to work on higher value tasks.



Increasingly, a wide range of government agencies ranging at the local, state, and federal level are turning to intelligent automation to help a wide range of document and human-intensive tasks. It's no secret that government processes can be very document and human process intensive. As they move towards digital transformation, government agencies of all types are adopting intelligent tools to achieve mission outcomes. Intelligent automation tools reduce thousands of person-hours of work resulting from highly regulated government processes including submitting forms, generating documentation, and otherwise following all the steps necessary to comply with various rules, laws, and regulations. Instead of an employee spending time submitting information and working to shuffle information between systems, intelligent automation solutions achieve those same tasks, providing the required compliance with greater accuracy, less cost, and improved reporting and visibility. Similarly, as the government workers receive these citizen submissions, intelligent automation solutions can save thousands of hours of manual processing time while lowering error rates to near-zero.

Government agency that leverage content intelligence solutions are able to:

- **Increase compliance**
- **Deliver better services to constituents**
- **Improve data quality and reduce human errors**
- **Provide greater insights into various processes and workflows**
- **Save thousands of hours on manual, tedious tasks**

Taking the Next Steps on Content Intelligence



Enterprises are striving to achieve the goals of Digital Transformation - combining digitized process, data, collaboration, mobility and intelligence to help companies take advantage of the rapidly evolving digital economy. Without content intelligence digital transformation is just not possible. When combined with process automation, content intelligence provides the AI and cognitive machine-learning capabilities that automates content-centric processes.

Picking the right vendor to help your organization navigate the journey of digital transformation and content intelligence is important. Efficiency. Speed. Quality. Cost savings. Productivity. These are all things companies need to consider. This whitepaper has explored just a few industries that can benefit from content intelligence. But this is by no means a comprehensive list. Engage further to learn how your organization can benefit from adopting content intelligence as part of your digital transformation journey.

ABBYY Quick Overview

ABBYY is a digital intelligence company. ABBYY's portfolio brings together a class of technologies –our digital intelligence platform - that help organizations understand and create context from business processes and content, with the end result of optimizing process execution and enhancing customer experience. We help raise an organization's Digital IQ. ABBYY Process Intelligence solutions provide end-to-end visibility into processes and how they are performing. ABBYY Content Intelligence solutions train digital workers to learn how to turn unstructured content into structured, actionable information. Enterprises use ABBYY digital intelligence solutions to accelerate their digital transformation by complementing intelligent automation platforms like RPA, BPM, and others.

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