Improving the efficiency, accuracy and cost effectiveness of core business activities

Enable better management of product, customer, employee, asset and supply chain information through enterprise content management
Executive summary

In today’s interconnected world, information equals opportunity. We’re living on a smarter planet, surrounded by ever-larger quantities of data. And every piece of information generated by the people, devices and systems associated with your organization can be exploited to gain a competitive edge.

However, to make sense of it all, you need an enterprise content management (ECM) approach that coordinates knowledge, correspondence, content and resources throughout the long-lived collaborative processes that drive key business decisions.

Tapping into the information contained in systems throughout the enterprise and turning it into digital gold requires managing enormous volumes of documents, email, images, reports and forms. By managing the content within your company’s systems effectively, you can better connect people and information—allowing you to extract business intelligence and, in turn, unlock a vast range of opportunities.

Most companies have had some form of content management or document management infrastructure in place for years—but legacy strategies are no longer adequate for today’s business environment. Technologies, processing power, functionality and integration points have advanced and expanded; organizations can now obtain significantly greater value from the documents and content associated with core business activities and improve the overall efficiency of business activities in a more cost-effective manner.

An ECM strategy that fully integrates advanced case management and compliance capabilities can address increasingly diverse and complex business challenges. IBM® ECM solutions are designed to empower companies to unlock the value of their unstructured data and transform key business processes to reduce risk, cut costs and increase revenue. IBM ECM delivers flexibility in a services-oriented environment by empowering business users, shortening time to value and helping businesses respond more quickly to changing requirements.
This paper describes the business challenges associated with managing core business activities and explains how IBM ECM enables greater efficiency, accuracy and cost reduction. It also discusses the benefits of integrating IBM ECM with existing investments in ERP, CRM and other line-of-business (LOB) systems. Through integration, organizations can further improve their core business activities and deliver the business agility needed to quickly resolve complex business problems and enhance employee and customer decision making.

IBM ECM enables organizations to improve efficiency and accuracy while lowering the costs associated with “core” content-centric business activities common to almost every organization.

Improving the efficiency, accuracy and cost effectiveness of core business activities
Applying ECM capabilities to core business activities has the potential to transform the way in which an organization conducts key areas of the business, such as customer service or supply chains. By transforming current business activities into more streamlined processes, companies can reduce costs, increase productivity and efficiency, obtain market insight, reduce risk and become more responsive to continually changing business climates.

Many organizations apply ECM to improve a single activity, yet fail to realize the additional benefit and return on investment that can be achieved by applying ECM strategies and technologies to additional business areas. Companies can gain significant value by extending ECM to other activities, rather than purchasing point solutions for each business area. Because many activities share information across the organization, content and business processes related to one activity can be—and should be—integrated with other business activities.

IBM ECM facilitates the integration of content with other departments, processes and applications. By combining content, process, information lifecycle governance and analytics and integrating with existing IT environments and applications, IBM ECM enables companies to create highly adaptive processes so they can anticipate and respond to events as they occur.

The core business activities discussed in the following sections have similar attributes with respect to the manner in which documents are used. IBM ECM enables an organization to improve the efficiency of each of these processes while lowering IT costs:

- Employee lifecycle management
- Product or service lifecycle management
- Asset lifecycle management
- Customer lifecycle management (market analysis, customer on-boarding, customer service, “single view” of a customer, electronic statements)
- Project management
- Corporate legal and compliance
- Supply chain (contracts, ERP transactions, accounts payable)
- IT infrastructure and administration
Employee lifecycle management

Business challenges
Human resources (HR) organizations face considerable challenges in dealing with the growing complexity of managing increasing volumes of information related to both active and retired employees. Managing and storing paper employee files distributed across offices results in sizeable operational costs, process inefficiency and unnecessary security and compliance risks. Plus, companies typically retain files much longer than legally required.

Many HR activities, such as employee on-boarding, performance evaluations, status changes and retirements, are needlessly hampered by manual, paper-based processes. Corporate policies and procedures created and disseminated by HR may be incomplete, inconsistent or difficult for employees to access if there is no formal publication process or central repository for current, comprehensive information. This can be a particular challenge if policies and procedures vary by geography.

Symptoms:
- Excessive HR budget spent on physical storage of employee files
- Inconsistent and problematic on-boarding processes
- Employee information is not readily accessible by HR staff and is not adequately secured
- HR staff spends an inordinate amount of time on administrative tasks
- Backlog of employee requests or inability to meet service-level agreements (SLAs)
- No single source of corporate policies and procedures

How IBM ECM can help
IBM case management capabilities can help organizations efficiently process and retain all content and documents associated with employees—from hire through retire. HR departments can apply automated business processes to manage high-volume HR transactions such as hiring, changes in job status and retirement, thereby reducing administrative overhead.

IBM ECM can be integrated with existing HR systems to create a single, comprehensive view of employee information. It provides a repository to securely capture and retain employee documents. Business process management (BPM) and electronic forms capabilities help further improve efficiency by enabling employee self-service. With a consistent process in place, HR can create, update and publish policies, procedures, benefits information and more, which also improves overall corporate efficiency.

The move to electronic documents—supported by ECM technologies and an advanced case management strategy—dramatically reduces the need for HR to store employee information in file cabinets and offsite storage facilities. The records management capabilities of IBM ECM help organizations ensure that employee information is retained only as long as legally required, further cutting storage costs and risk.
Business case: Implement paperless processes
A branded foods company extended its IBM ECM platform to significantly improve its HR organization’s efficiency. The paperless environment enables the company to securely manage employee documents. Employees, managers and HR staff use electronic forms to capture information, update employee data in the ERP system and initiate workflows. The paperless processes reduce the company’s administrative costs, improve data accuracy, reduce file storage and postal costs and offer the ability to track and audit human resource transactions. As a result of employing IBM ECM for HR, the company reduced administrative overhead far enough to avoid the need to hire two additional full-time equivalent employees.

Product or service lifecycle management

Business challenges
Companies that develop products or offer services often lack consistent, repeatable processes related to the lifecycle of these offers. For example, business opportunity analysis and market needs analysis typically rely upon quantitative information. They usually ignore customer and market insight that is buried in unstructured content—email, call-center logs, blogs, web and social networking sites—because there is no means to efficiently collect or analyze the content.

Product planning and design also requires the creation, review and approval of myriad documents by multiple departments and—in some cases—multiple suppliers and/or partners. Without a central point of collaboration, document versioning and a formal process that guides the creation of product specifications and supporting content, product development may be needlessly protracted. And companies that produce thousands of products or variants of products find it difficult or even impossible to maintain accurate information for their offerings. Government regulations require manufacturers to provide increasingly detailed product information. Companies with wholesale or retail responsibilities must also capture and centrally manage product information in multiple formats provided by suppliers.

Ultimately, the disconnect between structured and unstructured content affects everyone from product manufacturer to consumer. When organizations fail to combine both structured and unstructured data into a single view of the product, buyers and consumers cannot readily determine the capabilities, attributes and relevance of a product or service to their needs. Retailers cannot repurpose product information across multiple channels, such as the web, stores and printed materials, and companies must contend with the large amount of documentation and rich media used to describe, promote, market and support all of their products and services.

Symptoms:
• Lack of access to market and customer sentiment contained in unstructured information hinders product targeting
• Increased time to market caused by inefficient product planning and development processes
• Excessive costs for creating and disseminating product information
• Vendors unable to handle unstructured product information from large numbers of suppliers
• Suppliers unable to provide the product information that customers demand
• Inability to manage rich media associated with products
Improving the efficiency, accuracy and cost effectiveness of core business activities

How IBM ECM can help

IBM ECM helps companies manage unstructured content, as well as the processes associated with the development, production, delivery and consumption of products or services. IBM ECM also offers content analytics capabilities that use sophisticated natural-language algorithms to generate business insight from virtually any type of content in any format. For example, product managers can leverage IBM ECM capabilities to pinpoint a problem with product design by analyzing content of incoming customer support calls.

IBM BPM capabilities enable an organization to accelerate the product development process. And IBM ECM solutions provide a central repository to manage the creation, acquisition, updating and publication of product information such as data sheets, specifications, collateral, technical diagrams, warranties, price lists and media assets.

Advanced case management solutions from IBM can also help companies cost-effectively retain information about products that are no longer manufactured, but nonetheless supported. Vendors can capture, process and centrally manage new product information provided by a myriad of suppliers. Additional efficiencies may be achieved by integrating IBM ECM with product lifecycle management applications or other product information management systems such as IBM InfoSphere™ Master Data Management Server for Product Information Management.

Using IBM ECM technologies, manufacturers, producers, suppliers and service organizations can provide and maintain accurate product information, establish a standard process for updating product information and utilize product information across multiple channels and media. They can capture and aggregate product information to provide customers with comprehensive, detailed product or service information, to facilitate buying decisions or to improve their competitive positioning.

Business case: Faster time-to-market for new services

A European communication services provider deployed IBM ECM to optimize the process of evaluating ideas and developing new products and services. The combination of content management and BPM enabled more effective collaboration and information sharing among the company’s departments and offices. In contrast to the previous methods employed, IBM ECM enabled the provider to track the development of new ideas more consistently, quickly capture a wide range of supporting materials during the development process and more efficiently plan the delivery of new products and services. The provider estimates annual savings of €200,000 in process efficiency, and more important, 50 percent faster time-to-market for new services.

Asset lifecycle management

Business challenges

Typically, companies lack a single source for current and accurate capital asset information. Information related to the planning, selection, acquisition, operation and retirement of assets is spread across multiple departments, each having their own “method” for managing the information. As a result, incorrect or incomplete information can proliferate, leading to improper asset use, inadequate maintenance or premature retirement. Capital assets such as buildings, IT infrastructure, machinery, utility infrastructure, vehicles and real estate have volumes of documents—in many formats—related to their planning, acquisition, operations, maintenance and disposal. Employees responsible for these assets need access to all relevant maintenance and operations information in order to maximize their availability and lifespan, yet most companies lack the content infrastructure to enable this. In addition, regulations for management and disposal of hazardous materials require organizations to document and prove compliance.
Symptoms:

- All relevant documents related to assets are not readily available to employees who operate, maintain or account for those assets
- Asset repairs are delayed due to inaccessible repair records, technical documents or procedure manuals
- Pending retirement of employees who possess significant operational knowledge jeopardizes the company's ability to repair or maintain assets
- Needless retention of outdated asset information creates unnecessary storage requirements
- Fines levied for failure to properly document disposal of hazardous materials or assets

How IBM ECM can help

IBM ECM helps companies manage documents and content associated with capital assets, from asset planning through asset retirement. The asset lifecycle can be treated as a “case,” so multiple people can contribute to its management over time. IBM ECM provides a single, secure repository to manage content, regardless of source or format, related to the planning, evaluation, procurement, operation, maintenance and retirement of capital assets.

A single, secure source of asset information makes it significantly easier for employees to access accurate, current asset information to accomplish their jobs. Companies can automatically identify, capture and manage asset information as a corporate record, improving efficiencies while enabling important business insight and regulatory compliance. By integrating with other enterprise applications, such as ERP and IBM Maximo®, IBM ECM allows other lines of business and remote employees to access asset documentation when needed. In this way, efficient content management can facilitate better asset utilization and extend the life of key capital assets.

Business case: Economic benefit of complete asset documentation

A U.S. utility company uses IBM ECM to maximize asset availability. The company maintains critical technical documents, procedures, repair notes and service bulletins in the IBM ECM repository. By linking relevant documents to the work packages, the mobile workforce—both employees and contractors—has the accurate, current information required to perform their work. This helps the company get assets back online faster after both scheduled and unscheduled maintenance. Through these and other efficiencies, the company has realized an estimated US$3 million annually in power-generation availability improvements.
Customer lifecycle management

Incomplete market analysis
Customer lifecycle management begins with carefully targeted marketing that matches products or services with those most likely to accept the offer. Companies conduct careful market analysis based upon information in the data warehouse and business intelligence systems, but frequently ignore the wealth of marketing insight contained in customer email, blogs and social networking sites. More detailed analysis, utilizing a wider range of market information, has the potential to reduce customer acquisition costs and improve overall customer service.

Symptoms:
- Important customer trends, issues or attitudes remain buried in communications such as written correspondence, email and customer service records
- Valuable customer or market sentiment contained in websites, blogs or other social media is ignored
- Increased marketing and advertising costs as a result of an inability to accurately target products and services

Problematic customer on-boarding
Once attracted, customers form an impression (positive or negative) based upon the on-boarding process. For many customers, the initial enthusiasm for a product or service is quashed by the complexity, tediousness and length of the on-boarding process. Fulfillment or delivery of the product or service may also be problematic and protracted if the process is not efficient.

Symptoms:
- Needlessly complex, tedious and lengthy customer on-boarding process
- Inaccurate information capture results in problematic ordering and fulfillment processes
- Inability to efficiently process and resolve “exceptions” to customer orders

Inconsistent customer service
Organizations must balance customer service costs with quality of service. High-volume customer service requests or “cases” need to be handled consistently and efficiently. Increasingly, customer communications—whether by phone, letter or email—need to be retained. However, customer service representatives often do not have instant access to all relevant customer information to quickly resolve calls. Self-service capabilities that could simplify customer service processes, cut customer service costs and improve customer satisfaction are often inadequate or poorly designed.

Disjointed customer information
In industries where case management is a standard practice, such as healthcare, insurance, government and social services, employees need secure access to all information, regardless of source or format, to efficiently manage casework. However, relevant customer information, which is often unstructured data in the form of email, bills, contracts and other forms, is stored across the organization in various systems and can be difficult to locate.
Ideally, any employee providing customer service should have a “single view of the customer” to efficiently and effectively respond to customer requests—but in reality, employees must often re-enter customer data to process requests or inquiries. Delays in resolving customer issues are the result of a lack of complete or accurate information about customers and the company’s products and services.

**Symptoms:**

- Inability to integrate unstructured customer information with information contained in databases or CRM systems to create a single view of the customer
- Customer service representatives cannot quickly determine the status of a customer inquiry
- Inconsistent processing of client “cases” from initiation through resolution
- Many high-volume customer service activities are manual or paper-intensive
- Reliance upon call centers rather than customer self-service website because of a lack of product or service information

**Reliance on printed statements**

Monthly printing and mailing of billing or account statements are ideal targets for cost reduction and greater efficiency. Increasing the amount of detail on statements requires higher volumes of paper, production and handling time, and higher distribution budgets. Customers often request statement copies or duplicates, and delivery costs increase as energy prices rise. Depending upon local environmental initiatives, a significant portion of the statements may never be recycled and may end up in the landfill. Call centers can easily quantify the percentage (and cost) of calls related to billing or statement inquiries to help identify areas for improvement.

**Symptoms:**

- High overhead from printing bills or statements
- A high percentage of customer service calls with billing or statement inquiries
- Inability to achieve environmental goals through reduction of paper usage, printing and postage

**How IBM ECM can help**

IBM ECM facilitates better customer service, self-service and case handling through efficient management of content and processes associated with customer information and transactions. Electronic forms and BPM support more accurate capture of customer and order information, thereby reducing the number of problematic orders. IBM BPM capabilities can also help accelerate order processing and fulfillment.

IBM ECM can be integrated with CRM to enable a single view of the customer. This helps customer service representatives to quickly resolve customer requests initiated by phone, web, email, written correspondence and in person by giving them access to all relevant information about the customer, from past order details to order frequency and complaints. Complex, long-term customer service requests or “cases” can be more efficiently managed when all relevant information, as well as supporting notes and communications, is captured, updated and made available to knowledge workers supporting the case. The combination of IBM ECM capture, recognition, classification, business rules and BPM capabilities help organizations effectively process the large volume of customer correspondence and inquiries that arrive via a variety of channels: mail room, website, call center, social networking sites and so on.
Managers can use process metrics to evaluate customer service trends and efficiency, and can analyze customer correspondence and call logs to uncover trends, needs or issues. Organizations that dynamically generate volumes of communications in response to customer requests or inquiries can capture and retain them as part of a single view of the customer or records management strategy.

Government and social agencies services that employ a case management strategy can utilize IBM ECM to facilitate collection and management of all unstructured information throughout the lifecycle of the case. When cases close, IBM ECM can help the organization automatically archive and retain case information as long as legally required.

IBM ECM can also help reduce the costs of printing and distributing statements, fostering a positive environmental impact and shortening the overall billing process. Companies can offer their customers more accurate, up-to-date billing information, and can deliver it over the web or to mobile devices. Accessing bills or statements via a secure web portal can reduce the cost of customer support by enabling a greater degree of customer self-service, offering customers 24x7 access to current and past statements.

The process can also be leveraged as an up-sell opportunity: using customer profile data contained in CRM or a database, the company can include carefully targeted promotional offers or messages in a customer's statement. IBM ECM can electronically archive statements, thereby helping to reduce storage costs. Organizations may choose to apply IBM ECM records management capabilities to meet requirements for retaining statements and other materials.

**Business case: Quick customer “on-boarding” makes a positive first impression**

A global financial services company with 200 million customer accounts and presence in more than 100 countries applied IBM ECM to support the application and complaint-handling processes of its credit card business. The IBM ECM solution helped reduce the application process from more than two weeks to just two days. The company estimates that the centrally managed ECM strategy delivers cost savings of several million U.S. dollars annually, improves customer-request response time and allows work to be scheduled according to staff availability, resulting in lower customer service costs.

**Business case: Faster resolution of back-office customer inquiries**

A European communications and media company employed IBM ECM to capture, classify and route more than 3,000 pieces of customer correspondence and inquiries received daily in the mail room. Once classified, an inquiry is assigned to a customer service representative with requisite skills. Upon resolution, the correspondence is retained in the IBM ECM repository to provide call center staff with a customer’s complete correspondence history. Compared to the previous method of handling correspondence, the company reduced the backlog of inquiries by 87.5 percent, and customer satisfaction increased by 15 percent. The company realized return on investment in less than six months.

**Business case: Electronic statements cut costs, improve customer service and benefit the environment**

A California utility company is advancing its green initiatives and eliminating half a ton of printed paper daily by delivering bills electronically. Utilizing IBM Content Manager OnDemand, customers are able to review current and prior bills online. Electronic billing enabled the utility company to retire their microfiche operations and redirect the skills of a seven-member team that previously resolved customer billing inquiries to more valuable customer service activities. Customer contact center employees now have instant access to all customer bills, which supports faster billing inquiry resolution. IBM ECM also addresses the department’s future compliance requirements regarding records retention of customer bills. Based upon the success of electronic bill delivery, the utility company is planning to deliver additional customer communications electronically.
**Project management**

**Business challenges**

Today's organizations have a wide range of projects in progress at any point in time. Projects can be short-term and simple or long-term and complicated, such as the design and construction of a new high-speed railway. Effectively managing project-related content and documents is difficult: documents and other information may be distributed across employee desktops or on file shares. In many instances, critical project information is external to the organization, created and maintained by suppliers, partners or subcontractors. With no single source to store and manage current versions of project documents, productivity suffers and inefficiencies increase, such as duplication of effort because project participants cannot determine the current status of project information.

Engineering, construction and manufacturing companies have significant investments in project management systems and/or computer-aided design (CAD) systems. Although these systems superbly support the creation and management of technical documents, they lack the ability to manage the diversity (financial, contracts, email, intellectual property agreements, agreements and so on) or volume of documents associated with major projects. For smaller projects, Microsoft® SharePoint® is often the preferred management environment. But regardless of the system that created it, critical project content must be captured and retained for future operational or maintenance reference or for regulatory compliance.

**Symptoms:**

- A large number of formal and informal cross-departmental projects, with no secure, single source for managing project documents
- Proper security or access rights cannot be applied to certain types of project documents
- No means for effectively identifying and retaining critical project documentation
- Difficulties managing the diversity and volume of project documents and content

**How IBM ECM can help**

IBM ECM provides a collaborative environment that enables employees as well as clients, suppliers, partners and contractors to contribute to project success. Participants can present ideas, develop plans, share information, make decisions and manage documents (including email) associated with a project. IBM ECM allows organizations to organize the document types associated with each project so that the participants have easy yet secure access (based upon their project or organizational role) to the information.
IBM ECM enables project teams to establish repeatable business processes to accelerate project completion. For organizations that have extensive project management activities, IBM ECM enables them to create templates, repurpose previously created work and maintain a library of project-related content that supports multiple project activities. When current project information is available via a single, secure point of access, companies gain project management efficiencies: employees can make faster, more accurate project assessments and decisions, while managers can secure project information based upon participant roles. They can also classify and retain critical project artifacts for future reference.

Organizations that utilize CAD applications can integrate those tools with IBM ECM so that designs, technical documents and any associated business documents can be centrally managed and securely accessed.

**Business case: Central management of engineering and associated project documents**

An energy operations company provides engineering, materials management, construction management services for onshore and offshore production facilities, offshore platforms, onshore and offshore pipelines, floating production systems and subsea systems for oil and gas, pipeline and midstream industries. The company has completed more than 4,000 projects in 30 countries for more than 260 clients. AutoCAD and MicroStation applications are integrated with an engineering document management application from an IBM partner, enabling the firm to view, check in, check out and save documents; index drawings; attach references; and import title blocks. This approach to engineering project management exploits capabilities of CAD software and engineering document management functionality from the IBM partner while maintaining all of the relevant project documents in an IBM ECM repository. At project completion, in addition to automatically retaining project documents as corporate records, all data and documents can be exported and given to the client for ongoing support and operations of the platform or facility.

**Corporate legal and compliance**

**Business challenges**

Corporate legal interacts with almost every department in an organization, and requires access to a wide variety of information and documents. However, it’s rare that corporate legal staff can easily obtain or access the requisite information, as critical information is often scattered—and duplicated—across numerous, isolated locations.

As a result, the process of finding, identifying and gathering the information required for routine legal matters or during the discovery process is protracted, tedious, incomplete and occasionally unnecessary, as many documents are unknowingly retained longer than legally required. Electronic discovery (eDiscovery) services are available from outside vendors, but they can be prohibitively expensive. Further problems arise when corporate legal is required to place “holds” on documents that exist in locations scattered across the organization.

These challenges often indicate an absence of an information lifecycle management (including records management) and governance strategy. Without such a strategy, a company has little control over the classification of documents, their usage throughout the organization, the ability to find them, their security and duplication and their retention time. These problems reduce corporate legal’s efficiency and effectiveness.

**Symptoms:**

- Corporate legal spends unacceptable amounts of time searching for documents
- Corporate legal requires processes outside existing document management software to handle cross-departmental collaboration, records management, eDiscovery or electronic holds
- Rising costs for eDiscovery services provided by external organizations
- Retention of expired documents and content has increased time and cost of discovery processes
- Excessive fines for failure to produce required documentation or respond to audit in a timely manner
IBM ECM helps corporate legal staff find, access and manage documents and content associated with legal matters, cost-effectively conduct eDiscovery across enterprise content (both physical and digital) and be far more effective in managing critical corporate content associated with legal affairs. Key to effective content management within the context of corporate legal activities is the ability to implement an enterprise information lifecycle management and governance strategy.

IBM ECM content assessment capabilities enable an organization to dynamically analyze enterprise information to identify content vital to the business and content that can be decommissioned. Context-sensitive and rules-based IBM classification and categorization capabilities can automate categorization and facilitate more consistent handling of enterprise content.

IBM records management capabilities provide a centralized policy for file plans, retention schedules, legal preservation holds and auditing, all of which address rapidly evolving mandates and regulatory, legal and fiduciary requirements. IBM eDiscovery empowers corporate legal teams with a defensible process for rapidly finding, assessing, delivering and producing a streamlined grouping of relevant materials to ruling bodies or third-party service providers.

**Business case: Legal department adopts ECM strategy**

A major grocery chain that uses IBM ECM for human resources, purchasing, accounts payable, casualty claims, real estate and environmental affairs expanded its use of IBM ECM to the legal department, which was increasingly becoming involved in the business affairs of these and several other departments. Rather than having to request duplicate copies of documents associated with legal matters (a protracted, costly manual process), the grocery chain’s lawyers now have direct, secure access to those documents via the IBM ECM repository and can collaborate with key people in the departments to review and resolve the legal issues. The legal department estimates an annual savings of approximately US$1 million as a result of efficiencies provided by IBM ECM.

**Supply chain management**

The supply chain is a critical component of almost every company. Supply chain complexity varies by company size, industry and geopolitical environment, but for most companies it is a document-intensive process, beginning with selection of and negotiations with suppliers and ending with accounts payable. It is a key target for cost reduction and improvement in operational efficiency. IBM ECM can be particularly beneficial in three areas of the supply chain: contract lifecycle management, ERP transactions and accounts payable.
Contract lifecycle management

Business challenges
Most large organizations have hundreds or thousands of contracts that define and drive business relationships and agreements and serve as corporate records. Following a lengthy draft-approval process, these contracts may be in effect for a long time. Employees throughout the company regularly reference contracts (often within the context of customer service or ERP transactions) in support of business transactions and decisions. But accessing contracts is difficult and time-consuming: contracts are stored in file cabinets or offsite; they can be misfiled, in another employee's possession or lost. Without centralized contract management, employees cannot accurately track and verify compliance with contracts, nor can they automatically track contract renewal dates.

Symptoms:
- Inability to effectively manage contract administration, compliance and renewals because of the contract volume and level of complexity
- Increasing costs related to the physical storage (onsite and offsite) of contracts
- Employees with contract responsibility cannot quickly and securely access contracts and supplementary information
- Unnecessary costs due to penalties for late contract renewals

How IBM ECM can help
IBM ECM enables organizations to capture paper contracts and transform them into digital documents so that employees can quickly and securely access them from a single, secure repository. For contracts that originate in electronic formats, IBM ECM provides a collaborative environment and business processes so companies can easily manage the entire contract lifecycle, including drafting, negotiation, approval, storage, administration and renewal. They can also capture and manage supplementary documents associated with the contract, regardless of source or format, by utilizing the IBM ECM repository. IBM ECM can integrate with ERP, CRM and other LOB systems for additional efficiencies in managing contract processes.

IBM ECM can help organizations implement a standard process for each step in the contract lifecycle to improve productivity, reduce costs and increase contract accuracy. Automatic declaration and retention of contracts as corporate records helps streamline and improve auditing. Also, automatic notification of contract review and renewal dates can lead to more favorable contract negotiations and eliminate late-renewal penalties.

Business case: Complex, long-term contracts
An aerospace company uses IBM ECM to manage thousands of contracts associated with multiyear projects. Long-term retention of contracts in a digital format allows quick and secure access by employees and contractors associated with a project. The complex contracts may have hundreds of supplementary documents that are added or updated at any time during the contract lifecycle. In addition to enforcing confidentiality of documents via role-based security access, IBM ECM helps the company eliminate paper-based contract management—significantly reducing administrative costs and risk while improving efficiency of accessing the hundreds of thousands of documents associated with the contracts.

ERP transactions

Business challenges
ERP is the backbone for many organizations’ supply chain processes. Supply chain operations are highly transactional: updating supplier information, managing inventory, executing purchase orders, processing invoices, making payments. Many activities are document-intensive, being initiated by a document received from an external party or a document produced during the course of transaction. When documents associated with transactions are not readily available to the person(s) executing the transaction, it delays ERP processes. Time taken to locate the document impedes efficiency, especially for high-volume transactions.
Although ERP systems have some document management capabilities, they do not have the breadth, depth and enterprise scalability to keep up with the needs of a large enterprise. Also, ERP document management systems do not readily facilitate the sharing of a wide range of supply chain content—budget plans, product quotes, fax, contracts, vendor email, warranties—beyond the ERP system. And although ERP systems have workflow capabilities, many supply chain processes begin outside of the ERP system or extend outside of the ERP system when integrated with other systems, or when exceptions to the process need to be rectified. The lack of a seamless workflow among systems hinders supply chain efficiency.

**Symptoms:**

- Delayed transaction completion and compromised accuracy due to inability to easily find the information needed to execute ERP transactions or processes
- Inability to directly access transaction documents, files or email from within the ERP system
- Manual paper handling, manual data entry and ad hoc manual processes required for ERP-managed business processes
- Discontinuity in supply chain processes, causing users to rekey data, duplicate information or use nonintegrated systems such as email and file shares to manage documents associated with ERP transactions

**How IBM ECM can help**

IBM ECM is frequently used to complement ERP applications. Via integration with ERP, content created outside of an ERP application can be captured and maintained in the IBM ECM repository for easy and secure access during the course of a transaction. IBM ECM enables all relevant content associated with suppliers and supply chain transactions to be centrally and securely managed, yet be accessible to the ERP users as well as other lines of business that utilize the information in their daily activities.

Many documents generated during the course of supply chain processes are bona fide corporate records. The IBM ECM records management capability enables a company to automatically capture and retain supply chain documents and retain them electronically as long as legally required—which also reduces paper storage costs.

IBM BPM capabilities integrate with ERP systems to provide best-of-breed workflow, enabling optimal supply chain processing. Creation or capture of a document, such as an email, fax or invoice, within IBM ECM can automatically initiate a workflow, further reducing the number of manual steps involved in the supply chain. Organizations that wish to optimize supply chain processes can apply IBM business activity monitoring capabilities to continually analyze process productivity with the goal of eliminating bottlenecks and deploying resources optimally.
Business case: Integrating IBM ECM and SAP to boost process efficiency

A European telecom provider implemented IBM ECM and SAP as enterprise-standard platforms to support more than 150 business processes for finance, accounting, supply chain, resource management, asset management, logistics and human resources. Integration between IBM ECM and SAP provides best-of-breed process management, allowing a process initiated by IBM ECM to “hand off” data and documents to SAP for further processing. The process also works in reverse, as in the case of exception processing for supplier invoices, which are resolved using the BPM capabilities of IBM ECM. All documents associated with supply chain transactions are managed in IBM ECM, yet remain securely accessible via the SAP modules that are executing the processes. Additionally, the telecom company uses IBM ECM business activity monitoring to continually assess SLAs, identify problematic processes and optimally allocate resources.

Accounts payable

Business challenges

Accounts payable is the focal point for managing payment terms, capturing discounts earned, avoiding duplicate payments and maintaining a vendor master file. Companies continue to receive invoices via paper, verify them, assign a GL number, review them against the existing prescribed payments system, approve them, process exceptions and then execute payment. For certain invoices, the payment process may involve numerous approvers. Throughout the process, organizations must adhere to internal audit controls and demonstrate compliance with regulatory requirements.

For many organizations, accounts payable is a highly inefficient, paper-intensive process. Without a tightly controlled process, companies risk duplicate or erroneous payments, missed invoice discounts, late-payment penalties, misuse of funds, fraud and noncompliance. From an accounting standpoint, disparate systems and disjointed processes jeopardize a company’s ability to maintain compliance.

Symptoms:

- Current accounts payable process is paper-intensive and required document retention is costly
- Inability to take advantage of discount opportunities because of late payments
- Accounts payable process is disjointed and error-prone, with some steps requiring manual processing and/or rekeying of data
- Correcting data errors and “exception” processing consumes an inordinate amount of time

How IBM ECM can help

IBM ECM leverages BPM to reduce or eliminate manual administrative tasks related to accounts payable and to streamline invoice processing. Accounts payable processes driven by IBM ECM can automatically capture and classify invoices, enabling greater invoice and payment accuracy. BPM also allows the department to process invoices much faster and more consistently.

An enforceable accounts payable process supports compliance and allows organizations to make timely payments to vendors and take advantage of related discounts. Real-time invoice tracking can help eliminate unrecorded liabilities due to missing invoices. Plus, IBM ECM can help accounts payable teams accommodate increased invoice volumes without a corresponding increase in staff.

Business case: Enabling best practices for accounts payable

A global leader in the footwear industry uses IBM ECM to process more than 6,000 non-merchandise invoices each month. The system establishes and maintains authority levels to control the processing, review and approval of invoices by more than 100 employees. Using IBM ECM and BPM technologies, and integrating content management and electronic forms with the ERP financial system, the retailer reduced invoice processing costs by 20 percent and achieved faster approvals. This resulted in timely payments to vendors, allowing the company to take advantage of available discounts. Real-time invoice tracking also enabled the retailer to eliminate end-of-quarter unrecorded liabilities due to missing invoices.
Information technology

Business challenges
IT organizations contend with the costs and administration of managing an increasing volume of documents and unstructured content contained in a multitude of locations—desktops, file shares, email and isolated document repositories. For the most part, IT has little control over this content. Volume grows as content is copied and duplicated in an effort to make it more accessible across departments, but storing multiple copies of the same data puts a strain on storage resources. Critical corporate content remains “in the wild,” subjecting the organization not only to increasing storage costs, but also to added risk when it retains content longer than legally required.

The proliferation of content sources is compounded in companies undergoing mergers or acquisitions. Assessing the value and relevance of the documents of an acquired company, eliminating superfluous documents and consolidating the content into a single source can be a time-consuming task without the proper tools to execute such a project.

In an ideal situation, information lifecycle governance strategies would be applied to critical corporate content, regardless of source or format, enabling an organization to classify content at time of capture or creation and apply an appropriate retention schedule, thus insuring that content is retained no longer than legally required.

Applications such as ERP, CRM, asset management and legacy systems fail to maximize productivity when users are unable to easily access documents associated with transactions, assist in decision making or provide details about customers, assets, suppliers and so on. Whenever a user has to seek supporting information/documents by accessing another system or manually searching for that information, productivity is impaired.

Symptoms:

- Multiple, isolated document/content locations and repositories that add to IT administrative and licensing overhead
- Desire to reduce the number of isolated content sources found throughout the enterprise
- Increase in storage costs resulting from uncontrolled proliferation of documents and enterprise content
- Inability to capture and retain critical corporate content only as long as legally required
- Employee productivity drop resulting from inability to quickly and securely access all relevant unstructured information related to customer, product, employee, asset, supplier and partner
- Excessive costs for onsite/offsite storage of corporate records
How IBM ECM can help

IBM ECM offers IT organizations the capabilities to address each of the problems cited above. IBM ECM analytics and classification capabilities allow an organization to inventory a collection of documents and assess the value and relevance of each item with the goal of deleting unneeded content, archiving content to more cost-effective storage media or migrating/consolidating content into a centrally managed repository. Eliminating unnecessary documents and decommissioning obsolete repositories can significantly reduce storage, licensing and IT administrative costs.

Alternatively, IBM ECM federation capabilities allow an organization to maintain its investment in an existing, legacy content repository while creating an enterprise content metadata catalog that provides a central point of access to the content sources that are federated under the IBM ECM system. For sources such as SharePoint, file shares and email systems, IBM ECM offers various options to bring that content under control. “Connectors” enable IBM ECM to control the content located in the various repositories while allowing users of these repositories to access the content as usual.

Integration with IBM ECM can significantly enhance the value and productivity of applications that require frequent access to a wide range of documents as part of the business activity, such as human resources, supply chain, asset management, finance and product lifecycle management. ERP and CRM systems are not architected to manage large content volumes, nor do they have the lifecycle capabilities that enable documents to be securely managed from time of creation through final disposition. Using IBM ECM to manage and archive the documents and content associated with ERM or CRM systems enables an organization to improve system performance, particularly with respect to document retrievals; eliminate offsite storage costs for paper documents; and automatically manage electronic document retention to keep items only as long as legally required.

Business case: An enterprise approach to records management

A U.S. university with more than 44,000 students makes extensive use of the records management capabilities of its IBM ECM platform, which supports document-centric business processes in accounts payable, contract administration, the student business center, purchasing, the CFO office, the budget office, human resources and food services. IBM ECM records management features provide the ability to automatically tag university records upon receipt, eliminating concerns about policy compliance. Managing the documents and business records electronically enables the university to free up large amounts of physical storage space and apply the professional skills of staff to more productive activities.

Business case: Enhancing the value of SharePoint

A British insurance provider uses Microsoft SharePoint as the front-end interface for its underwriting operations. To enhance the overall productivity of employees involved in the underwriting process, SharePoint was integrated with IBM ECM. Once the underwriting documents are completed and stored in SharePoint, IBM ECM initiates a workflow for further processing. All underwriting documents created during this process are archived and managed by IBM ECM, but remain accessible via SharePoint. Implementing IBM ECM allowed the insurance provider to support the business needs of SharePoint users and establish a reliable and stable platform for its document management system, including workflow processes that could be scaled across other business units. The provider also gained the ability to meet corporate compliance standards.

Business case: CRM integration

A European communications service provider captures more than 40,000 customer documents per day from more than 220 remote stations and 500 fax lines and email boxes. Documents are classified and linked to the customer account by querying the common customer database, and then retained in IBM ECM. Depending upon classification, certain documents may
automatically trigger a workflow for further processing. By combining unstructured customer information with information contained in the CRM system, IBM ECM enables customer service representatives to easily access all relevant customer information from one location, thereby accelerating call resolution and lowering customer service costs. The service provider also captures all outbound correspondence that may be generated as part of a workflow and links it to the subscriber CRM record.

**IBM ECM: Enhance core content-centric business activities throughout an organization**

IBM ECM addresses a wide range of content-centric business activities that are critical functions in most organizations. Most of these business activities share a common set of requirements, including the need to:

- Securely and centrally manage a group of related documents or content of varying types to achieve a specific business goal.
- Incorporate BPM to facilitate the creation, sharing, processing and retention of content.
- Selectively share or collaborate with employees involved in the business activity.
- Integrate documents and processes with other information systems and processes to derive greater value from the information.
- Apply information lifecycle governance to capture, classify and retain documents in accordance with applicable industry or legislative requirements.
- Analyze and exploit the inherent insight contained in unstructured content to improve customer understanding, develop better products, improve customer service and proactively anticipate and respond to dynamic market conditions.

Implementing an ECM strategy to support core business activities and requirements has numerous benefits. An integrated IBM ECM solution helps an organization lower IT costs (in comparison to multiple, isolated point solutions), eliminate onsite and offsite paper storage costs, and reduce information access and processing costs. Providing all relevant information to employees or customers allows them to make faster, better quality decisions.

Organizations can also use ECM to eliminate redundant tasks such as rekeying information, enable faster process throughput and facilitate more efficient use of existing information and assets. They can increase information and process quality, consistency and accuracy, with continued opportunities for process improvement. In addition, companies can reduce risk and enhance compliance efforts, by implementing a content lifecycle governance strategy to retain information only as long as legally required.

In many of the examples identified in this white paper, content created by one department is referenced or consumed by individuals in other departments or external groups. One of the greatest advantages provided by IBM ECM involves connecting the key integration points across departments and lines of business, among any business areas leveraging IBM ECM and even between external entities.

**Leverage ECM to its full potential**

In a world that is increasingly instrumented, interconnected and intelligent, companies need smarter systems to help make sense of their vast stores of data. Every organization depends on large volumes of both structured and unstructured information to effectively conduct business activities and guide critical decisions. All of this data serves an important function in its associations with employees, customers and suppliers, as well as key business processes such as asset management, planning, project management, ERP, supply chain management and compliance.
IBM ECM can help an organization to significantly improve key business processes, productivity and overall efficiency. Through the application of tools designed to support ECM and advanced case management, organizations can become more efficient and effective in managing contracts, employee information, supplier agreements, customer relationships, capital assets, accounting processes, technical document publications, projects, change management processes, compliance initiatives and much more. By combining the power of enterprise content, highly efficient business processes, content lifecycle management and analytics, companies can streamline and optimize their business activities, and exploit all forms of content for deeper market insight, faster, more accurate decisions and greater enterprise productivity.

For more information
To learn more about IBM ECM solutions, please contact your IBM marketing representative or IBM Business Partner, or visit: ibm.com/software/data/content-management

Join the conversation at ibm.com/community/ecm

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