

Automating BUSINESS APPROVAL PROCESSES

EXECUTIVE SUMMARY

Approvals are a critical part of every organization's operating procedures, yet they are often a missing component when an organization introduces automation initiatives. Many of the programs within both the government and commercial sectors to promote automated processes and transactions address only a fraction of the complete Business Approval Process. In evaluating solutions for the automation of business processes, it is critical to understand and document how data and documents flow today to see where opportunities for automation and efficiency improvements can be introduced.

In order to map out approval processes and plan for automation, it is critical to develop a strong understanding of the Business Approval Process and its value. This involves defining and dissecting the Business Approval Process to break it out into critical components and then analyzing these components to build a complete picture.

WHAT IS THE BUSINESS APPROVAL PROCESS?

To define a Business Approval Process, it is first essential to delve into the definition and use of approvals within a business context. Approvals play an integral part in the core operations of every business, from government departments through large corporations. As a rule, most approvals represent the delegation of authority to carry out an activity.

Properly executed, these approvals also record the accountability of those involved. As well, they demonstrate consent or agreement to information essential to business. Approvals can also support ongoing change within an organization, or allow everyday operations to proceed.

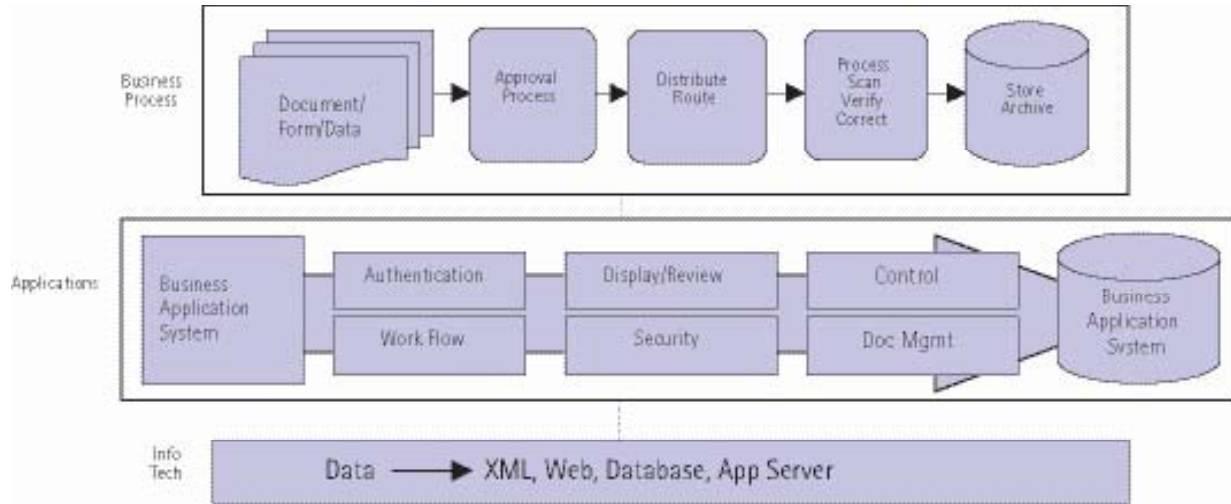
The ultimate purpose of obtaining an approval is to validate the data that is part of a transaction or process. The capture of intent on the document is a means to validate that the approver is demonstrating their intent to comply with or authenticate the data.

When applied to current business practices, nearly every process across an enterprise involves an approval. Whether it's a manager's approval on an employee appraisal, a buyer's agreement to a critical purchase or

an authorization on a project plan, each process involves at least one approval.

The total Business Approval Process involves the series of steps for review and modification of information required to allow an activity to proceed. This information is usually contained within one or several documents, and is processed through a number of steps. At each step, a certain level of approval is necessary, resulting in the addition, modification, or deletion of approval-related data. Often the approval process is implicit since the verbal authority of a superior is sufficient. However, approval processes that have substance and associated risk are often explicit, as they require careful review of information and strict adherence to accountability that must be recorded through a process such as routing a form for signatures.

The Business Approval Process is often thought of as adding a signature to a piece of paper. When signatures are used to signify an approval on paper, it is not the visible mark that is crucial to the process, rather it is what the signature represents, the binding of intent to the document's



contents. The signature represents the authority's agreement and designates his/her "approval" of the process. This agreement shows that a party with the right to approve the operation has authorized the process. Applying a signature as part of the document approval process enables organizations to mitigate risk by having an auditable record of the approval.

Business Approval Processes go beyond simply applying a signature to a document. Many approval processes appear to be simple and intuitive, as they only require one approval in association with a small piece of information. For example, a purchase requisition to order a replacement ink cartridge for a printer may only require a departmental manager's approval. However, this manager must verify that the requisition is correctly completed with accurate data, or the requisition will be rejected. The manager may also need to fill-in supplemental information, such as

title and date, as part of the approval process. When the requisition arrives at the purchasing department, it is verified to ensure that the data signed off by the manager is filled-in completely, that the authority level of the manager is sufficient to make the

“WHEN SIGNATURES ARE USED TO SIGNIFY AN APPROVAL ON PAPER, IT IS NOT THE VISIBLE MARK THAT IS CRUCIAL TO THE PROCESS, RATHER IT IS WHAT THE SIGNATURE REPRESENTS...”

request, and that the signature belongs to the user requesting the purchase. It is only at this point that the process is approved and the intended activity of purchasing the ink cartridge can proceed. This approval process provides accountability for the activity and ensures the proper level of sign-off by authorized individuals. If at a later date the auditor discovers that the employee requesting the replacement cartridge has ordered an excessive number of cartridges in the past year, then both the employee and the

departmental manager can be held accountable for the signed requisition.

The example above illustrates a very simple approval process, with just a few signatures, a limited approval chain, and a small amount of data

that is modified in each phase of the approval. As you can imagine, each additional approval that is introduced into the process adds more complexity, introduces delays in processing, and adds costs.

To see the benefits of introducing electronic approval processes, it is first important to examine the anatomy of the Business Approval Process and further define what is driving the complexity.

ANATOMY OF A BUSINESS APPROVAL PROCESS

A Business Approval Process modification may be accompanied by an approval or a non-approval. From end-to-end, the process is driven by data. The approval process is kicked-off by the interaction between the data and the business application, driven through the multiple phase of the Business Approval Process and then ultimately transferred to the business management system for archival or further processing.

consists of stages and processes that enable the review, modification and approval of information that is contained in one or more documents. At each step, the review or

COMPONENTS OF AN APPROVAL INCLUDE:

DOCUMENT | A paper-based or electronic document that contains information or data presented in some manner or format. Typical document types presented in a business approval process include letters, reports, Web-forms, paper-forms, plans, change requests, and contracts.

DOCUMENT DATA OR INFORMATION | The document data or information differs from the context, as it is information added by an author to represent the information that is reviewed and or modified as part of the approval process. The document data is what generally drives the business process.

DOCUMENT META DATA | The document meta data refers to the data about the document itself, not the document content. For example, many forms and documents have an effective date and/or an expiry date. This date may change, depending on when the document is in use. Other meta data may include the name of the document file, the storage location, the author, and the version.

SIGNATURE | Applying a signature to a document represents that the signer is giving their approval, agreeing to, or signifying that they are the authors of the information. It may also indicate that he/she has reviewed and clearly understood the information depending on how it is presented and the implicit or explicit rules that are part of the approval process. It may also indicate that they are accepting some concept or information associated with the document(s).

SIGNATURE META DATA | The signature meta data is the information that accompanies the signature and is used to describe the act of signing. Typically, information such as the signer's name, title, department, and the date of approval are required. This information is usually required to ensure that the approval is valid. For example, the signature meta data would show that the signer has the authority for the approval, would indicate the date of the approval, and display the company that the signer is representing. The meta data is as important as the signature, as it represents the validity of the approval.

CONTEXT | The context is generally found in forms or other structured documents (such as contracts) where data is being added. The context refers to titles, headings, labels, tables, fields, sections, and other information that structures the placement and indicates the meaning of information within a document. Context is also used to indicate the approval process rules, responsibility, or accountability assigned to specific approvals.

FIELDS | The fields are part of the context of a form or structured document, and are used to input specific information. The fields can be represented by a number of data entry mechanisms, including open text boxes, drop-downs, and check boxes.

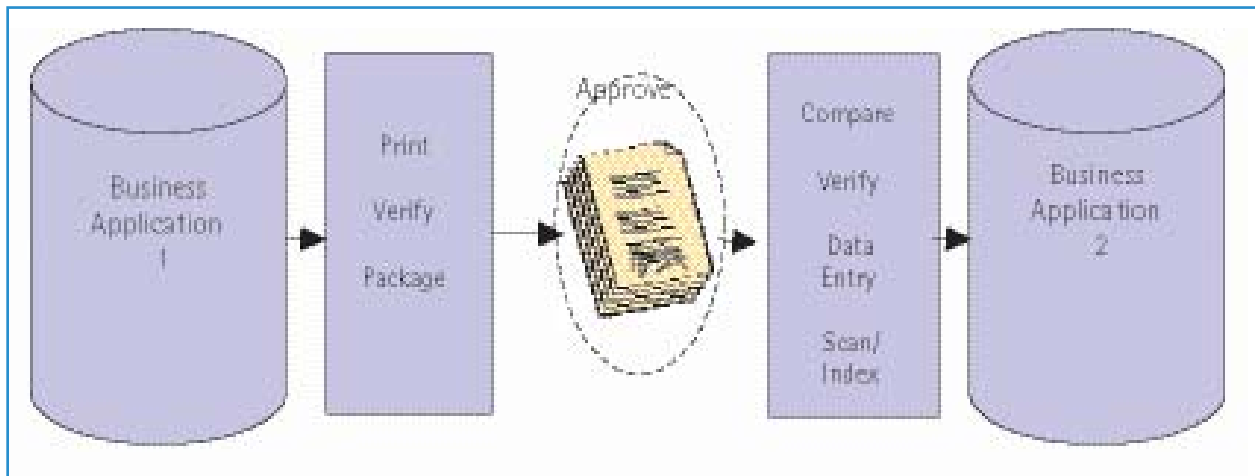
SECTIONS | Sections are an important component of the context for a form or structured document. Sections allow for grouping of information, and they indicate specific actions that are to be taken within the section. A section may also be used to define the area of responsibility assigned to one or more approvals. This means that a specific step in the approval process may apply to a single section of a document or form, with the approver taking responsibility for just this section. In a more complex scenario, many users may fill in a document at different stages. Handling this complicated approval process through document sections enables independent approvals from each person in the approval process, with clearly defined associated responsibilities.

COMMENTS | Information added during the approval process can be handled as comments. In the paper world, adding comments to an approval can be problematic, as they are often added in free form without being attributed to a particular individual. In electronic forms, there is usually a specific area designated for approval-related comments that is associated with the signature being applied to the form.

SIGNATURE BLOCK | A signature block is a special type of section that contains a combination of signature fields, signature meta data fields, and other data-entry fields such as check boxes and comment areas. The signature block is designed to provide a clear location and procedure for an individual approval.

AFFIRMATION DATA | The affirmation data is a phrase or paragraph with a direct affirmation that is being accepted, agreed to, or approved by the signer. Generally, this affirmation message is within view of the signature, so it is clear that the signer has read and understood this message as part of the approval process.

SIGNATURE COVER SHEET | A signature cover sheet is a component that is generally used when approving a group of documents. The document group is generally bound together by the signature cover sheet to illustrate the relationship between the approvals and the document package. The sheet can have one signature or several, and it generally signifies acceptance of a process or agreement defined within the group of documents being approved.



CHALLENGES OF A TODAY'S APPROVAL PROCESSES

Traditional approvals are common practice throughout many organizations. However, reduced budgets, and a faltering economy have driven many enterprises to re-evaluate how they do business. Organizations are looking at ways to cut costs and improve efficiency. Streamlining and downsizing have resulted in the need for organizations to accomplish more with fewer resources. This is driving organizations toward solutions that introduce automation, leverage technology investments, reduce repetitive manual processes and allow disparate business systems to communicate.

Paper-based approvals are actually quite inefficient. According to Bankers Online, electronic transactions and approvals are about 75 percent less expensive than their paper-based counterparts. When you break down a paper-based approval, it is easy to see the pain-points where additional costs or delays are introduced as many components of the process are riddled with re-keying, and manual

processing. This is due to the fact that the data is locked into the document. Since the data is the driving force behind the business processes, locking it into a document causes many issues. After an approval, data is used to trigger follow-on processing, such as agreement with other data in the system, or input or transfer of the data and approval into a second system.

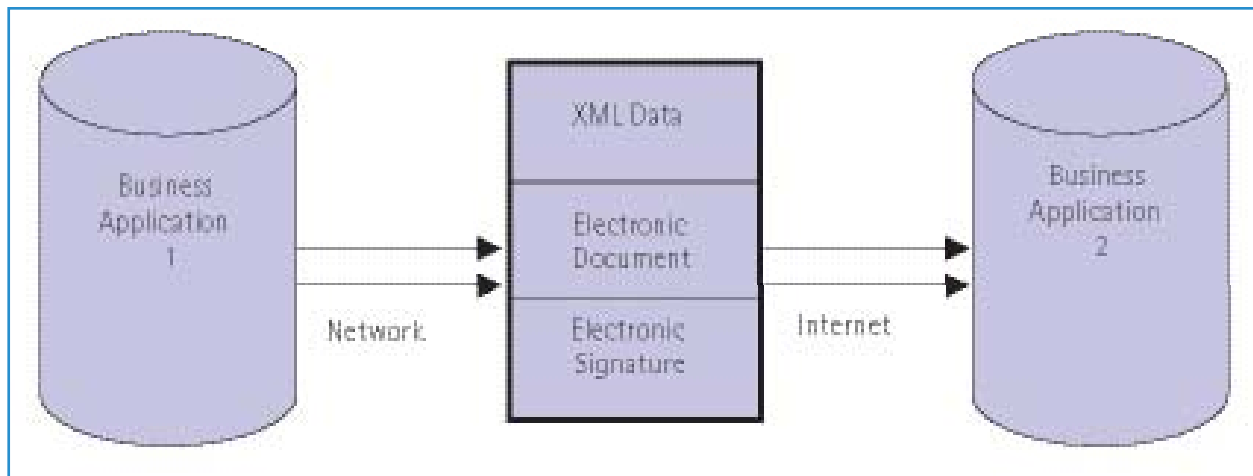
In many cases documents are created electronically and then either delivered on paper by mail or courier, or transmitted by email, fax, or across the Web. The approval process takes place manually with the receipt, distribution, review, and approve steps handled on paper. The print documents are then manually checked, and often scanned back into the system for electronic storage. However, since the actual approval took place on paper, it is often necessary from a compliance perspective to archive the "original" paper copy as well as an imaged file.

One of the biggest challenges in automating the Business Approval Process is in freeing the data from

the documents. When automation is introduced, organizations often simply migrate their processes into an electronic format, without changing the structure of documents and data associations. This results in replication of data and duplicate processing as the data is locked into the document. Since data often needs to be transferred from one system to another as part of the approval process, it is much more efficient if data is unlocked from the document, and is free to travel between systems across the Internet, triggering further processing.

BUSINESS APPROVALS TODAY

As illustrated below, paper is used to fill the gap between disparate business applications. In this example, information needs to be exchanged between two systems that are not connected. A traditional way to accomplish this is through the use of a common medium, like paper. The data is transferred into a document, which is printed, verified, and packaged. It is then delivered on paper for approval. The print copy is then returned to the organization,



checked, scanned, and brought into the second business application. In this illustration, the business applications can represent applications within a single organization, or amongst organizations and individuals.

AUTOMATED BUSINESS APPROVALS

When approvals are automated, three key components replace paper as the communications conduit. These components are: XML Data, an Electronic Document, and an Electronic Signature. These components enable data to flow from one system to another in a standard, compatible format, while conveying approval information and capturing intent in a legally enforceable manner.

AUTOMATION DRIVERS

Economic influences have created a more competitive marketplace for businesses today. Employees, customers, and partners have placed new demands on organizations for better service, more access to information, and the availability of self-service processes.

In response, many organizations have invested heavily in Web channels and call centers to create a "click-and-mortar" environment. While these new contact centers provide a certain level of self-service, many cannot facilitate complete transactions because of the need to acquire a physical approval on documents. Providing customers with the ability to quickly and conveniently complete transactions online enables organizations to close business faster, and reduces the 50 percent to 95 percent fall-out rate that the American Bankers Association attributes to the waiting period for receiving documents by mail. Moreover, reducing customer defects by 5 percent has the effect of boosting profits between 25 percent and 95 percent according to Harvard Business Review.

Compliance has become an issue that is front-and-center with nearly every organization. Corporate accountability, adherence to industry standards and regulations, and compliance with legislation are issues that executives are faced with on a daily basis. With hefty fines and the potential for legal

action, compliance is a pressing matter that is a significant challenge for organizations, which acts as both a driver for automation and a barrier. There are a number of challenges in introducing and implementing technology to solve compliance issues.

Many organizations are also faced with the challenge of reducing or eliminating cost centers from their organization. Traditionally this may include cutting or reducing shipping fees, data entry, quality assurance, and processing. These tasks fall into departments that rely heavily on repetitive, manual processes where automation can have a significant impact. Enabling electronic approvals for several processes within an organization can serve to cut the company's courier bill in half, resulting in six-figure savings annually for mid-size to large organizations.

Five years ago, this simply involved the elimination of paper. Today this means connecting enterprise applications to create end-to-end automation amongst disparate

systems.

Control and accuracy are also factors that are driving automation initiatives. When a document is processed and routed on paper, there is a certain amount of control lost each time the document changes hands. There is also little ability to check the status of the document or to speed the process along, as there is a reliance on manual processes and uncontrollable routing technology like mail and couriers. Accuracy plays heavily into this mix as well, as there is often a need to manually re-key or handwrite information related to the document routing and approval processes. When data is re-keyed, human error comes into play resulting in an approximate error-rate of 20-40 percent.

BRIDGING ISLANDS OF AUTOMATION

Many organizations have made significant investments in technology as an effort to automate components of their business processes. Organizations have built fully connected, internet-based processes that leverage Web services and portal applications. Since businesses are run on information, the ability to enable the flow of this information internally, between departments and externally amongst partners and customers is critical to successfully automating business approvals.

The key to bridging this automation is successful data exchange. This has

driven a large movement in many markets to standardize data exchange protocols through the use of Extensible Markup Language (XML). The result is large-scale acceptance of XML as the common language for exchanging data and triggering follow-on processes. This common protocol facilitates the electronic delivery, review, and approval of documents, as there is a standard way of formatting, reading, and processing the data amongst disparate systems.

The next step along the path to automation is the introduction of workflow and process mapping. This allows an organization to dictate a set approval path, and chain of command for document and data processing. The process of routing documents for approvals is handled electronically with the ability to add status messaging and triggers at each stage for both positive and negative reactions to the document. This results in better control of the process throughout each phase, provided that the process is handled electronically or the status is updated at each step.

Imaging is another technology group that is often introduced as part of an automation effort. Using imaging technology allows organizations to re-capture documents and data into an electronic format after they have been transferred out to paper for processing or approval. Imaging systems are excellent for bridging the

gap for hybrid processes that involve a mix of electronic and paper-based documents. They can also provide the illusion of efficiency as they allow for documents to be re-introduced into electronic processes without the pain of re-keying data. However, they do come at a substantial cost. Imaging systems can help to restore the flow of data for approvals, but they often require fail-safe or redundant systems, which can add substantial costs to the process.

While there are certain efficiencies introduced with each of these new technology, until the gap of data exchange between and amongst systems is built into the process, no one solution creates the desired end-to-end electronic process, keeping documents and data in native electronic formats. The key activity with each technology that forces documents back to paper is the approval. By incorporating processes and technology to manage and automate approvals, it is possible to bridge the gaps amongst these technologies, eliminating the need for some altogether. Electronic approvals are the glue securing the Business Approval Process, providing the foundation for interaction amongst different technologies and processes.

IMPACT OF AUTOMATION

The impact of automation on an organization can be felt in two key ways; reduced expenditures

and revenue enhancement. Reduced expenditures come as a result of both hard-cost and soft cost reductions. Introducing electronic or Web-based systems drives a direct reduction in delivery and communication charges for courier, fax, and mail fees. This in-turn drives down the costs associated with the systems and tools required to generate, duplicate, and store paper. In addition, the need for imaging and scanning systems is greatly reduced, as the approval chain stays electronic throughout, rather than dropping to paper for signatures and then being reintroduced as an electronic document later in the cycle.

Automation of the Business Approval Process can also have a significant positive impact on revenues through increased employee productivity and enhanced customer satisfaction. Time that employees previously spent preparing documents, coordinating shipping, tracking and checking the approval status can now be spent on more productive tasks like closing new business. In addition, continuous electronic processes significantly reduce the need for repetitive, manual tasks such as data re-keying, quality assurance monitoring of paper-based documents, duplicating, and imaging. While some

third-party documents may still need to be handled on paper and imaged, the majority of processes will be automated.

In addition to pure cost savings and increased revenues, organizations will also benefit from stronger risk management. A well planned and executed implementation of Business Approval Process automation will help to mitigate an organization's risk and eliminate the penalties associated with not meeting regulations, standards, or directives. This applies across many markets and industries including government, healthcare and financial

FINDING THE RIGHT PARTNER

The key to any successful Business Approval Process automation project lies in strong planning, implementation, and execution. Since approvals are the foundation of most business processes, the risks associated with automation can be high if a thorough analysis of the business, legal, and technical requirements is not conducted. Selecting a partner with the right blend of experience can help to mitigate this risk, and can ensure that your organization is poised for a successful project.

With over a decade of experience in automating Business Approval Processes, Silanis has guided more than 1,000 organizations through successful automation initiatives. Silanis' goal is to maximize the benefit of technology to your business while managing any risk related to implementation and ongoing support.

With first-rate experience in design, development, integration, and implementation, Silanis supports and manages each phase of your project. We can build and

deliver solutions within existing document management, workflow and portal applications, or work with you to meet your organization's unique needs.

Our knowledge, experience, and in-depth understanding of how technology can be applied to solve specific business issues ensures that we can deliver on the promise of total solutions and total success. Silanis offers:

- Enterprise ready solutions
- Services for the design and execution of implementation plans to ensure client success
- Solutions tailored to business needs
- Application software that seamlessly integrates with existing infrastructure

For more information about how Silanis can help you automate your Business Approval Processes, please call 1-888-SILANIS, ext. 2 or email sales@silanis.com



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