BROCHURE

Storage, Sharing and Retrieval of Business Critical Documents

Documents such as invoices, quotations, SLA, contracts and orders etc., are the lifeblood of your business. It is important that the information in these documents is available as and when it is needed in order to clarify your business obligations, how you should act and to drive good business decisions.

There are few that would dispute the business benefits which an ERP system delivers; business decisions and transitions not only move much faster, but they are often automated. However, decisions made can be flawed if the documentation holding key information is not available at the right time and in the right place.

Businesses are also becoming much more regulated and companies are now under enormous pressure to comply with a growing number, range and complexity of regulatory requirements.

In recent years corporate scandals, due to poor internal controls, have led to new regulations such as Sarbanes-Oxley and greater scrutiny. This now means that organisations must be able to provide accurate and timely information to:

- Authorities
- Stakeholders
- Partners
- Shareholders

Penalties for non-compliance can be severe and not only impact business relationships, but can also lead to punitive fines, and in extreme cases imprisonment. To quote Deputy Attorney General, Paul McNulty – “If you think compliance is expensive, try non-compliance”.

This document will set out some of the key issues to be aware of and suggest some simple strategies that Microsoft Dynamics users can use to protect their organisations.

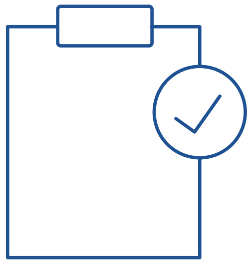
Why Document Compliance?

Businesses increasingly complain about document regulations, but many consumers, consumer advocates, and nongovernmental organisations argue it is necessary to protect the public interest. Governments around the world impose on private firms and individual's regulations to achieve government's purposes. These include better and cheaper services and goods, health and safety, and the financial protection of organisations and investors.

Regulations, penalties and enforcement policies vary according to the legislation of the countries your business operates within. These can be very severe including: the seizure of goods which may prevent your business operating, punitive fines that may damage you financially and cause business partners/shareholders to lose confidence in your organization, and in rare instances imprisonment. Failure to adhere to applicable business regulations may also prove to be a significant obstacle to doing business with both customer's rightly questioning non-compliance, and suppliers wanting to avoid reputational risk.

So how does this affect documents? The simple truth is that many compliance requirements focus on recording exactly what occurred when, and by whom, with details captured as close as possible to the source of the transaction activity, making them very documentation centric.

Authorities often take a sympathetic view to organisations that have systematic compliance processes in place, for example, in the UK the HMRC tax authority publically state: "We will not charge you a penalty for an inaccuracy if you took reasonable care to get things right but your return or document was still wrong." It pays to implement document compliance processes.



Who does Document Compliance apply to?

It is very rare to find a business which escapes regulatory demands.

Most industries have their own specific regulatory bodies. A regulatory body is not a membership organisation and its primary activity is to protect the public. Unlike professional bodies, it is established on the basis of legal mandate. These regulatory bodies create rules and regulations designed to ensure a safe and fair outcome for those consuming products and services. For example:

- Financial services
- Pharmaceutical
- Distribution
- Legal services
- Building
- Many different types of manufacturing
- Healthcare

There are also some ubiquitous regulations which cross all industries, regardless of if an organisation is publically or privately owned.

- Financial Control
- Health and Safety
- Employment
- Anti-trust

What documents must I store?

Something Bottomline Technologies observes very frequently in organisations is that system administrators think very carefully about how documents are created but less consideration is given to how they store, secure and gain access to information, as well as their wider storage policies:

- What do you need to store legally?
- What documents benefit your business processes?
- What will their filing system look like?
- Do they need to store old documents?
- How long will they store documents for – and then what?
- What documents need to be controlled?

Whichever unregulated documents you choose to store is entirely up to you based on your business needs and how the information they hold can help your business run more smoothly or implement improvements.

Regulated documents are an entirely different matter. The variance is wide – it is entirely governed by the regulatory regimes your business is subject to. The appropriate authorities within your geographic jurisdiction will often make it clear exactly what documents you need to archive and for how long.

For example, in the United Kingdom some of the documentation you will be required to hold would be as follows:

- Inland Revenue and taxation documents need to be kept for 6 years
- VAT papers need to be kept for 6 years
- Company Records – must be retained for 6 years
- PAYE records need to be kept for 3 years
- Former company member records must be kept for 20 years
- Past company directorships for 5 years
- Government Grant documents for 4 years
- Limitation Act– claim actions can be brought up to 6 years;
- Contracts under deal or deed should be kept for 12 years

It is important to pay attention to the duration you are required to hold this information for. Holding information beyond legislative requirements can be a good idea if you use this information to support your business processes, but it can also be a liability with data protection laws. There is a balance you should consider your policies on aged information vary carefully.

Integrity of Information

Key to document compliance is that your data must have integrity – there must be assurances that documents are available, secure, tamper proof and available at all times.

Availability of information presents a challenge in itself, in this context we mean that ALL regulated documents must be stored and retrievable on demand. Regulated documents are usually aligned to tightly prescribed regulated processes, which in many cases lend themselves to automation, which in turn can make document storage and retrieval fast and efficient whilst making impressive cost savings.

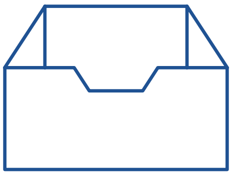
Paper is often regarded as a significant disruptor of all modern processes, especially those which are regulated. It is simple to conceive techniques to tamper with paper documentation as the movement of paper is difficult to securely control and breeches are often undetectable. As well as the business process efficiency benefits of removing paper from processes as soon as possible, there are also regulatory reasons to do this.

Electronic documents are by contract far easier to control. It is common for organisations to control access to digitised documents and information, and computerised audit trails can demonstrate what occurred with the data, when it changed, and who or what made the change etc.

Where to store your documents?

How and where you save your documents is an important decision. Enterprise Content Management systems are good for storing large amounts of heterogeneous data where variation in content makes it very difficult.

There are several obvious choices about where you will store your documents, these will normally be driven by the amount of control you need to put in place over the documents and who needs to access them.



Three most obvious choices for storing your documents:

ERP

- Customer/ supplier context
- Access limited to ERP users

File System

- Shared access
- Lack of context

Document Repository

- Shared access
- Flexible data lookup

Storing documents within your ERP

The greatest advantage of this approach is that documents will normally always be held within an appropriate context i.e. a customer order or invoice will be stored alongside an individual customer record, so those people with access to the customer record can quickly and easily retrieve the document.

The downside is that only people with appropriate ERP access will have visibility of the information. Most ERPs will save documents on an external file system, but they will be very difficult to locate and use, so if an implementation team, or a building contractor also needs to check the original order when they suspect something is not as it should be, they will not be able to do this easily.

Holding information on a file system

This has the advantage of accessibility not being dependent on ERP licenses. Although some appropriate security and access controls can be simply implemented, it is often impractical to restrict access on a granular record level. This means, with most modern fileservers, access can be achieved by almost any enabled user from a wide variety or devices and through a wide variety of applications or utilities.

The disadvantage is that you lose context, it is quite common to find fileservers with unstructured storage systems or naming conventions, or even worse "common" file areas where it is often difficult to find the information you are looking for unless you put it there.

Document Repositories

A Document Repository, fundamentally, is a database of documents. Each record will have metadata attached to it which helps with the storage and retrieval of documents, either directly, or with search tools associated with an applications interface.

Manual Document Repositories can slow the filing of documents down, but these processes can often be automated by automating the generation of metadata.

Hybrid solutions

One common approach to enabling the accessibility of documents and the contextual benefits of an ERP is a hybrid approach. Instead of attaching the document to the customer or process record, you can save a file to a Document Repository and simply attach a link to the customer which references the document on the file server.

This means ERP users will still have context sensitive storage and retrieval of files, whilst other users, such as quality control, can also access the files either directly or through other software solutions using an application interface.

How will you store your documents?

There may not be a need to store your documents in any single file format. It is important that all of your authorised users have the ability to both create and read the files when necessary, and there are many file formats which will allow this.

However, if you choose to standardise on a particular document format – we would recommend strongly considering PDF files which offer the following benefits:

PDF files have become the default replacement for paper documents. This is partly because of the above, their ubiquity, and because they are an excellent document exchange with significant downstream benefits as your systems mature. One example of this is a Bottomline customer, who was told by the USA government that they must prepare all of their materials for visually impaired users; they did this by converting their documents into PDF format and using a PDF audio reader.

Filing your documents

As any old fashioned filing clerk will tell you, the key to finding a document is knowing where you stored it – they developed sometimes complicated systems, and we can learn from them.

First you need to understand the types of document you are dealing with, then understand what attributes they have that can help us file these and retrieve them when needed. This information is known as the documents metadata. It is information which tells us about the document itself, and there are two primary sources of information which can help us with this:

1. The process the document is associated with
2. The content of the document

Business Benefit	Options	Purpose
Long term archiving and content retrieval	PDF Standards: PDF/A-1a, PDF/A-1b, Metadata	Select the right standard based on your needs, i.e. archiving and/or reprinting
Electronically	Sign documents with HSM or eSignatures to prove authenticity	Makes original documents immutable
Storage and web optimisation	Managed image resolution and linearisation	Ensure that the size of the PDF is optimised for the target media
Content accessibility, e.g. visual impairment	Tag PDF	Add tags to structure your PDF
Platform independence	Embed fonts, PDF version support 1.3 to 1.7	Ensure the document is displayed as intended, on any device
Content security and control	Security: copy, edit, print, annotate, modify, extract content, reassemble	Can your PDF be modified? Can text be copied out of the PDF?
Language support	200+ ISO language supported	

Process driven metadata

We can tell a great deal about a document by looking at the process it is associated with. Most processes have specific documents associated with them and whilst there may be some overlapping this can easily be dealt with.

For example, if we look at a company's processes, we will end up with a list significantly more extensive than this:

- Account Payable
- Account Receivable
- Delivery
- Quality control
- Customer Support
- Repair
- Returns

Capturing the process a document is associated with, and using this as part of the documents metadata, already significantly narrows down how a document should be filed or retrieved. There will also be other snippets of process driven data which can help us add additional levels of granularity to storage and retrieval. For example:

- Document arrival / creation date
- Who processed the document
- Transaction type etc...

Content driven metadata

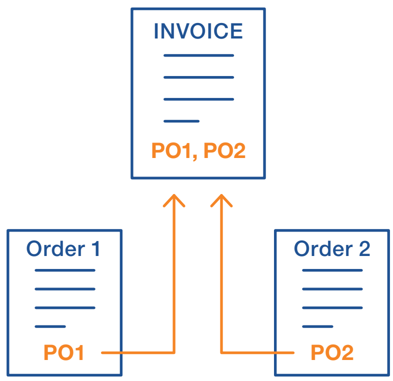
The second source of metadata is the content of the document, some document processing systems are highly dependent on understanding the information held on the document. For example, Accounts Payable Automaton systems normally include a data extraction phase. This is where OCR software is used to extract information from the document such as Purchase Order (PO) numbers.

It is also relatively simple to capture some basic information from the document such as what type of document it is, the document date and who the customer or supplier is.

In our experience, our customers normally don't start capturing this level of granularity, but as the number of documents which they capture increases, they look for more detailed metadata to help with usability. For example, an Accounts Payable department may wish to start splitting its documents by type.

Relationships between documents

By catching metadata in this way, it is possible to infer relationships between different types of documents such as; all documents referring to a particular customer, invoice, transaction, contract or process. Each metadata field can also include multiple pieces of information to allow you to build a many to one relationship. A common example of this would be when suppliers combine several PO's into one invoice, but this could also be reversed where a supplier part ships PO's generating multiple invoices against a PO.



Audit trails

An audit trail is a chronological log of access to a system and a record of additions, changes and deletions to that system.

As already discussed, there are many legal requirements for audit trails concerning many parts of a business. It's also very useful to electronically sign and lock these documents, either with a Hardware Security Module, or for some types of document, using legally binding eSignature technology. Both of these will make your documents immutable.

There are technologies available which can easily automate this process. The greater the automation process, the more confidence you can have in the documents authenticity as manual processes open up opportunities for abuse and often in financial process fraud.

Capturing metadata

The goal is to capture as much metadata as possible automatically. This is a common and straightforward process for most ERPs – so much so that Bottomline have pre-built tools to assist with this process for:

- AX Document Handling
- JDE Media Object Attachments
- SAP Archive Link

It is useful to be able to OCR the contents of the files to capture information to support your metadata requirements. However, an alternative to this is to create mandatory fields when a document is stored to your document repository, whenever a document is deposited there. It is very important to mandate the use of these fields as missing information will quickly lead to lack of visibility.

Challenges capturing your documents

Automating document archiving can reduce regulatory document exceptions by up to 85%, as well as making your documents more accessible through increased filing accuracy, and significantly reducing the operational overhead involved.

The first challenge is that some documents and processes are easier to automate than others. One useful approach in understanding this is to segment your documents in two ways: 1. Is the document standard or undefined? 2. Is the document associated with an inbound or outbound process?

	Standard	Undefined
Inbound	Process related metadata	Reliant on manual categorisation
Outbound	Process and content related metadata	Some process related metadata

Most documents entering an organisation will be undefined, as usually you will have little influence over their contents or layout. If they are related to a particular process, you can still use process related metadata to archive them, and in some cases, like Accounts Payable, invoices specialist systems are available to help you manage the processing and archiving of these documents; otherwise you will be reliant on manual categorisation.

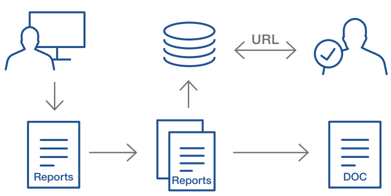
You will have a great deal more control over documents that your organisation creates. If they are related to standard processes, you will almost certainly be able to capture both content and process related metadata if you use appropriate tools. It will also be possible to archive most non-standard documents process related metadata.

Fortunately, most documents related to regulated processes are very predictable and outbound documents can be very tightly controlled. It is also possible to manage inbound documents with the use of standard forms. Forms have long been a reliable way to ensure that data submitted to an inbound process is both complete and structured. Modern electronic form technologies can also be interactive, removing the need to scan or re-key data, providing a means to very accurately file inbound documents.

Capturing information for process centric outbound documents

One of the simplest ways to ensure that you appropriately file documents that are associated with regulated processes, is to automatically file all standard documents associated with that process when they are created.

Whenever you create an output document, simply make a locked copy and store it into a document repository with as much metadata as is available, to help retrieve the document as simply as possible when it is required. This metadata will almost certainly include process related data for all outbound documents, and some content related data for standard document types.



Capturing information for process centric inbound documents

Whilst there are specialist systems available to help you automate the filing of specific types of documents into your business, like invoices, these are not available for all processes. It is very likely that in most cases you will be more dependent on process related data, simply capturing and filing against simple information such as what department or process a document is associated with, who saved it, when etc. It may also be worthwhile prompting users for certain type of documents to manually select information about associated customer/supplier accounts etc.

Some documents are also searchable, so depending on the type of document stored it may also be possible to use google like search tools to narrow down a subset of candidate documents before more targeted document section using the mate data.

Document technologies and the ways in which we are using them are also changing quickly – it is becoming increasingly common to store data files within electronic documents, if present these can also be used to generate metadata to help you more accurately index and retrieve important documents.

Filing Documents without metadata

The unpredictable nature of some documents means that being able to automate the storage and retrieval of all documents will be rare. Traditionally, this is managed by asking the operator to assist with filling in the metadata for you when they store the documents. There are several problems with this approach such as, the operational time spent, the accuracy of the filing, and the risk documents not getting filed at all during busy periods. However, if the process can be built around this, then it will dramatically increase your chances of accurately storing and retrieving documents.

Newer technologies are also available to help retrieve documents on an ad hoc basis. Depending on the file format you have chosen to store your documents in, they may be searchable with Google-like search tools. By using this approach, the data locked in the documents which have not been well indexed may not be permanently inaccessible. However, this approach has limited reliability and can be very time consuming.

Find Out More

Well planned document compliance and unlocking maximum business value from your documents should be a priority for any organisation; automating your document management can achieve this.

Bottomline are a world leader in document management solutions and integrate systems for more than 10,000 customers globally.

Find out more about automating your document management by contacting us on:

Call 0870.081.8250
or email: emea-info@bottomline.com

Bottomline Technologies

Connect with us

Europe, Middle East, Africa Headquarters
115 Chatham Street
Reading, Berkshire RG17JX
United Kingdom

Tel (Local): 0870 081 8250
Tel (Int): +44 118 925 8250
Fax: +44 118 982 2253
emea-info@bottomline.com

Corporate Headquarters
325 Corporate Drive
Portsmouth, NH 03801
United States of America

Phone: +1 603.436.0700
Toll-free: +1 800.243.2528
Fax: +1 603.436.0300
info@bottomline.com

Asia Pacific Headquarters
Level 3, 69-71 Edward Street
Pyrmont, Sydney NSW 2009
Australia

Tel: +61 2 8047 3700
Fax: +61 3 9824 6866
ap_info@bottomline.com

bottomline.com