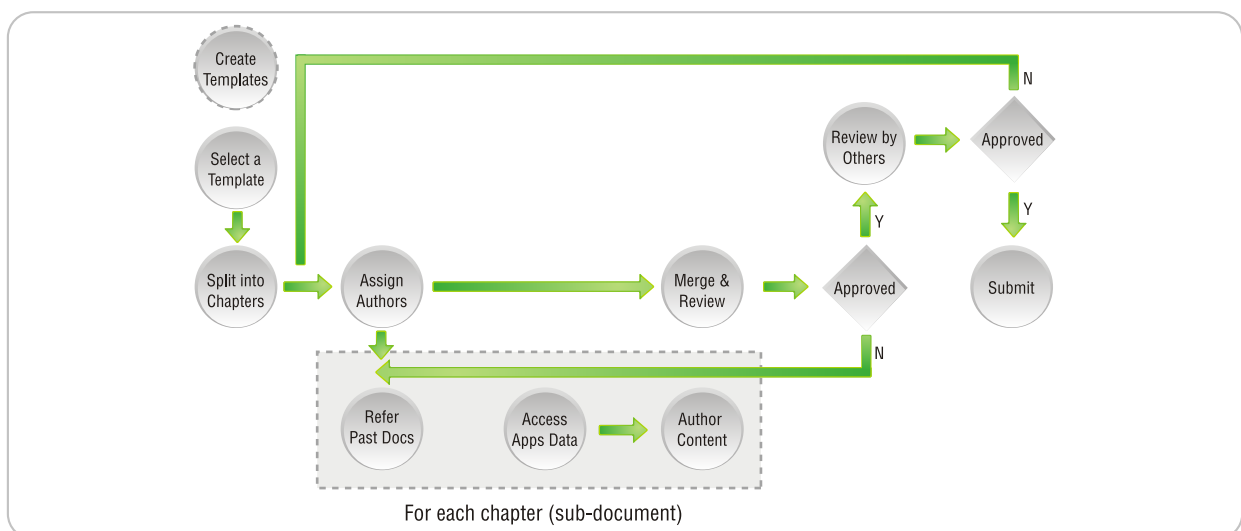


# Automated Document Creation & Assembly using Microsoft Office

Document authoring is often a non-trivial task in an organization, especially when the document is a binding agreement with external agencies - examples include sales proposals, complex bids, legal contracts, insurance policies, case documents. If not managed properly, this activity can end up being much more time-consuming and error-prone and can have a significant bearing on the outcome.

## The Need



The diagram above describes typical activities / workflow involved in generating a document. A manually-driven process creates a number of inefficiencies, such as:

- You are not the only one to contribute to the document:**

You are the owner of the document but there are others whom you rely on to get the content. A lot of effort is consumed just communicating with them, conducting reviews, consolidating individual contributions and managing versions.
- The content is already there electronically but I still have to type it.**

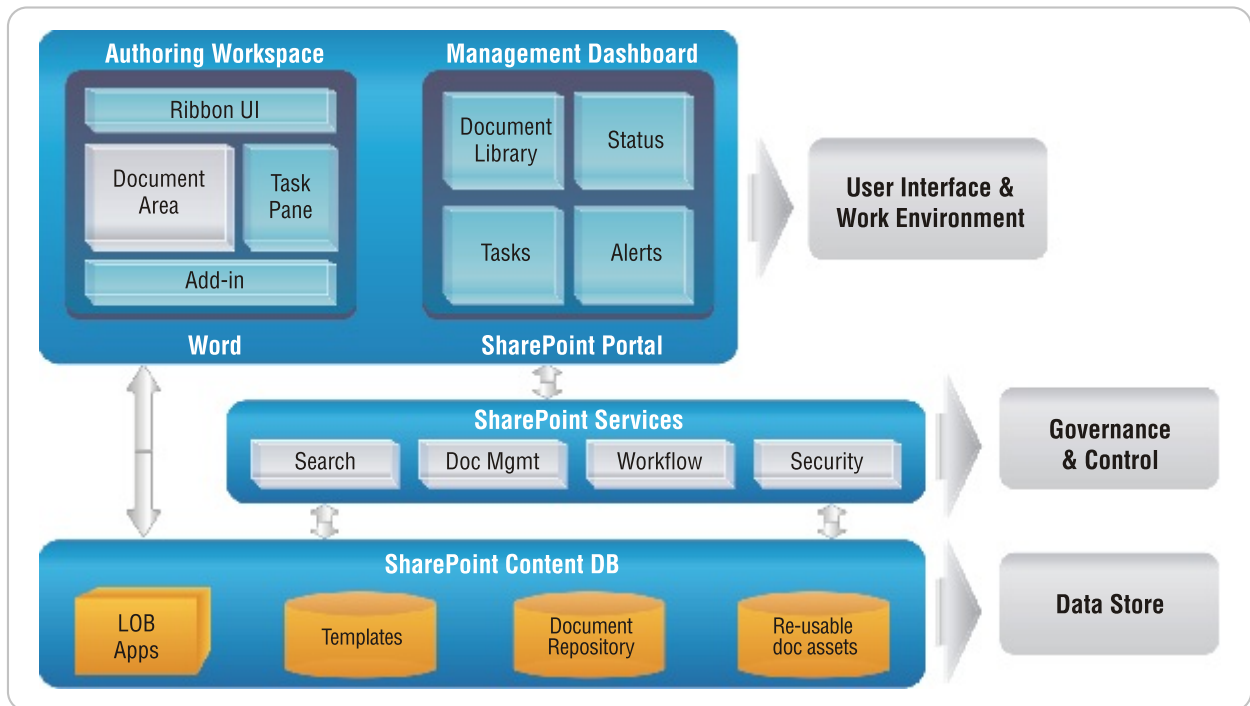
Many a time, like in case of preparing a quotation in response to an RFP, you need to access a Line-of-Business application's data (e.g. price book), view it in its client application and then type that over in your quotation document. This is both cumbersome and error-prone.
- I had done this before, just can't get my hands on it right now.**

Seldom have you to generate content from scratch and most times you can do the job with 'copy-paste' provided you are able to easily find the right documents.
- Am I doing it right? I need someone to review and approve it.**

Often times, critical business documents need to be approved by multiple business entities (like legal, finance etc) and liaising with them could be inefficient. Managing multiple versions manually and merging changes into a single, final document can be both painful and time-consuming, often resulting in errors.

## Solution Architecture

The Microsoft Office platform, version 2007 in particular, comes with a rich set of tools and technologies that can streamline the entire document creation and assembly process, substantially reducing the time and errors.



The diagram depicts the Solution Architecture based on Microsoft Office 2007 platform to streamline document creation and assembly process.

Microsoft Office SharePoint 2007 as the server infrastructure forms the core of this solution. It comes with a number of out-of-the-box features that can be leveraged effectively to meet most of the requirements that this scenario demands. It plays the role of the central driving agent. The Office 2007 client applications suite integrates well with SharePoint based server infrastructure.

Following are some of the SharePoint 2007 features that can be leveraged out-of-the-box:

**Document Management:** It can be used as a centralized repository of all the documents managing versioning and archiving.

**Search:** Enterprise Search can be used to search for the documents through meta-data tagging and within the documents.

**Workflow:** Custom workflows can be defined to implement business processes associated with the document generation.

**Security:** Security features can be leveraged to govern the access to the documents.

SharePoint acts as a central repository of all the documents facilitating search, governing access control, and at the same time orchestrating team activities around creation of the document.

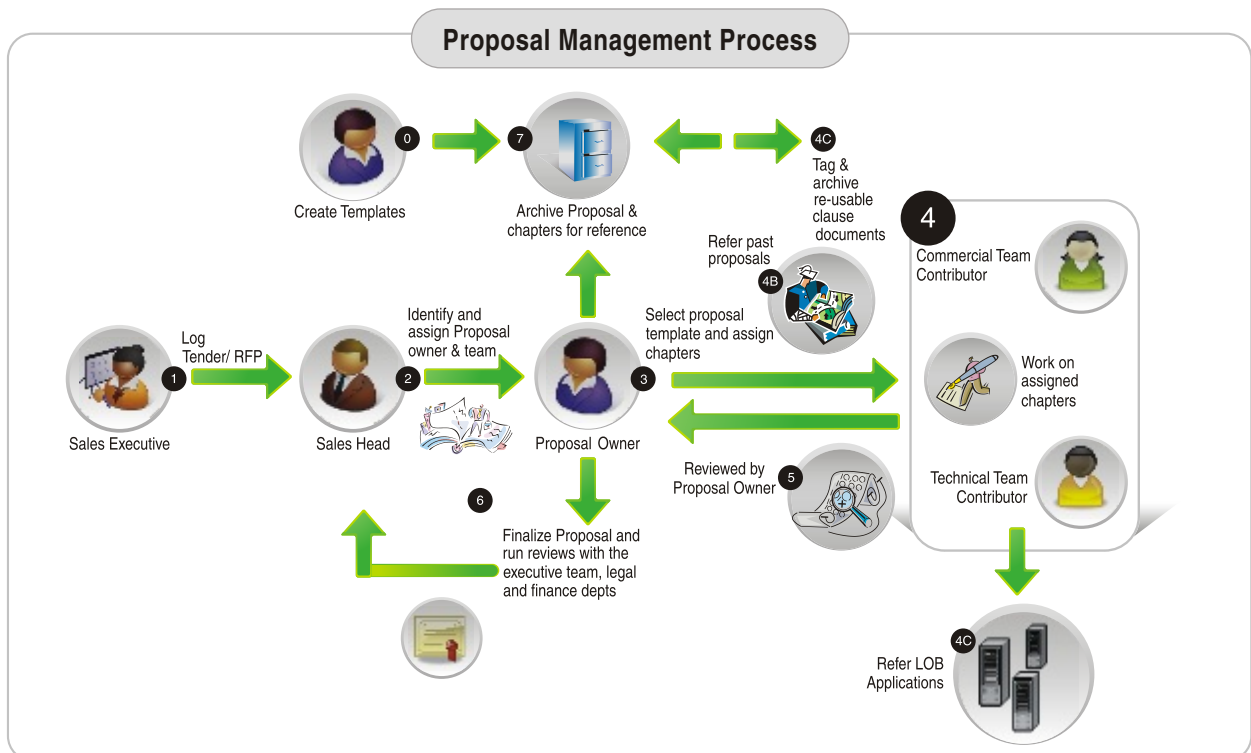
At the client side, Microsoft Word 2007 as the authoring tool offers rich customization through user

interface programmability [in the form of Ribbon User Interface and Task Panes] and OpenXML based document model. Word Add-in and Task Panes help creation of frequently used document templates facilitating definition of metadata like parameters in the form of Content Controls as well as archival of re-usable clauses from the documents.

### Solution in action

Let's take the example of a typical sales proposal creation process and see how Office platform based solution can address all the human inefficiencies.

The diagram below provides a sample scenario and describes how people with different roles typically contribute to creating a sales proposal:



**Step 0:** Standard proposal templates are created in Word 2007 with parameters defined as Content Controls [that can be replaced with actual values at the time of creation] using Word Add-in and stored in the Document Library.

**Step 1:** Sales Executive logs onto the SharePoint portal and enters RFP details. This gets added to a CustomList in SharePoint and triggers workflow assigning a task to the Sales Head.

**Step 2:** Sales Head receives notification and logs onto the portal to review the RFP detail. He then identifies the Proposal Owner to work on this RFP and notifies the concerned person about the task through the workflow.

**Step 3:** Proposal Owner reviews the RFP and selects an appropriate Proposal Template from the Document Library using SharePoint Search. The Owner splits the template into appropriate number of chapters in his Word environment using a pre-built component that uses OpenXML model for splitting. Individual authors are identified for the chapters and notified through the workflow.

**Step 4:** Each author works on his assigned chapters. During authoring, using Word Task Panes,

- He may access some Line-of-Business applications to replace the pre-defined parameters with actual values.

- He can access past successful proposals / or clause library to re-use some of the clauses. This access is facilitated from through SharePoint search.
- He may also update the clause library with the newly authored clauses that he thinks could be useful in the future.

**Step 5:** The proposal owner reviews the contributions by each author, approves it, and then creates a final version by stitching these chapters into one proposal document. Intermediate and final versions are maintained by SharePoint Document Management capabilities.

**Step 6:** The proposal document is then subjected to reviews and approvals by other departments like legal, finance etc through workflow.

**Step 7:** Final version of the proposal is archived in the Document Library for future references.

The SharePoint portal holds together the entire document repository and guides the users through the pre-defined process. Word 2007 is used to search for content from the Document Library and access Line-Of-Business application, in addition to making changes to the documents manually, thus reducing errors and promoting re-use.

## Benefits

Evidently, the solution addresses all the problem areas associated with the document generation processes and has a number of benefits to offer:

- Reduction in time through streamlined process facilitated by SharePoint workflow
- Re-use of past efforts with effective search of relevant documents
- Reduction in error with the ability to parameterize the documents and access to data residing in the Line-of-Business applications right from the authoring environment
- Archival and version maintenance through SharePoint for future reference and compliance needs
- Improved efficiency by quickly accessing the repository and looking for similar content

What is more - all of the necessary SharePoint features are available with Windows SharePoint Services (WSS) that comes free with Windows Server, without needing to invest in Microsoft Office SharePoint Server (MOSS) licenses.

The solution has significant Return-on-Investment to offer, especially in the scenarios where business critical documents are generated with multiple parties' involvement and content is pulled in from various systems.

**With Microsoft Office 2007 platform, your Document Creation experience could be more of clicking and less of typing!!**

## About Blue Star Infotech

Blue Star Infotech, part of the US\$600 million Blue Star Group and Microsoft Dynamics President's Club 2008, is a leading provider of custom business solutions to ISVs and Enterprises globally. Leveraging cutting edge Microsoft technologies (SharePoint / Office Business Applications, .NET 3.5, Silverlight 2.0 and SQL Server 2008) and ready-to-use frameworks, BSI enables the rapid construction and deployment of real-world business solutions.

BSI's Document Authoring solution framework enables enterprises to accelerate the automation of the document authoring process and increases the collaboration efficiency of the people involved in the process. It can be easily customized to automate document-intensive processes in areas such as Proposal Management, Policy Management, Contract Management, Case Management, Records Management, etc.

This solution has already been deployed at leading Professional Services and Engineering enterprises for streamlining their bid desk operations, successfully reducing the response time and increasing the win ratio.



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