

# Dynamic Publishing

**Optimizing the publishing processes enables organizations to generate new revenue while cutting costs**

## Introduction

Ninety percent of published information is stale; customers are overloaded with information, but usually cannot find what they need; the field force is dispatched to service calls with incorrect instructions; help desks desperately shuffle through a myriad of papers to find obsolete answers; organizations frequently publish incomplete or outdated information. It's no wonder that customer satisfaction is low, service costs are high, and legal exposure is high.

Creating and using redundant, inconsistent, and unstructured information for formal publishing requirements is a recipe for failure. Just as you wouldn't tolerate uncontrolled data in your organization's financial management systems, you can no longer afford to handle your intellectual content in an uncontrolled, unconstrained, error-prone, and highly labor-intensive manner.

By using traditional publishing software, authors typically waste 30% to 50% of their time formatting documents instead of focusing solely on content creation and improvement. Often, authors must recreate content that already exists because that content can't be located. Inconsistencies in the sequence and structure of information across similar documents make the information difficult for readers to understand. Lastly, lack of an automated publishing process forces authors to manually update multiple documents whenever a product or service changes, which is a time-consuming and error-prone process.

By optimizing your publishing process, your organization can gain a significant competitive advantage and achieve lasting differentiation from your competition.

The following paper will discuss how you can improve the quality of your publications and why a dynamic publishing system is optimal to solving your information quality problems.

- What if you could speed time-to-market by automating publication development and ensuring that new publications are released simultaneously in multiple languages and multiple media formats?
- What if you could increase employee productivity by 30% by improving employee access to current, relevant, higher quality information?
- What if you could deliver the most current, personalized training materials automatically to all your training locations while eliminating 75% of your publication costs?
- What if you could maximize your ability to win new business by cutting proposal response time by 50%?
- What if you could automatically deliver personalized documentation to all your customers while quadrupling the frequency of documentation updates?
- What if you could eliminate the need to create 1/3 of all new documents by facilitating reuse of existing information? What if you could eliminate up to 80% of your localization costs?

<sup>1</sup> "The Hidden Costs of Information Work," IDC White Paper, March 2005.



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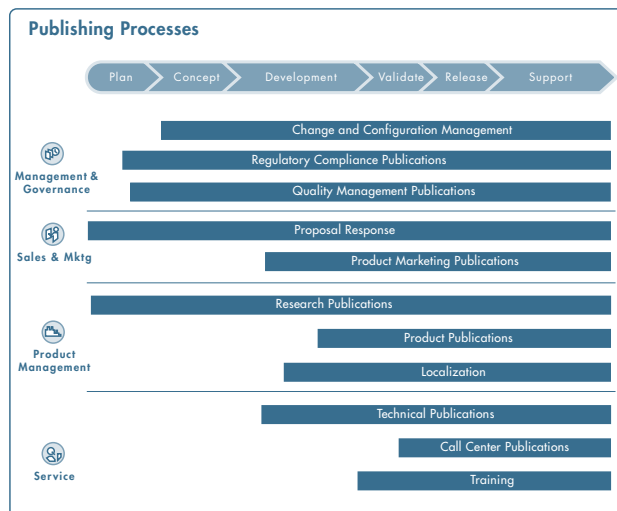
## Challenges with Traditional Publishing Processes

### Poor Information Quality Impacts Organizational Performance and Corporate Profitability

An organization's inability to reuse information and to automate the publishing process are two of the largest areas of inefficiency in today's corporate environments. Taken together, these inefficiencies have a dramatic, yet typically unrecognized impact on internal costs, revenue recognition, productivity, time-to-market, and customer satisfaction.

### Typical Publishing Processes in Organizations

In today's competitive environment, customers demand more relevant information, tailored to their needs, delivered in a timely manner, in format and media of their choice. An inefficient publishing process can have a significant effect on the financial success of a product or service. Organizations typically have multiple publishing processes that involve multiple corporate functions and roles. When totaled, these processes have a significant impact on the overall performance of the organization. Organizations that employ traditional publishing software suffer from slow linear processes, lengthy revision cycles, and costly redundancies in their information release cycles. Manual publishing processes force compromises in the quality of documentation and place undue pressure on the publishing team, resulting in overtime and inaccurate information. The net impact of this approach is inevitably a loss of customer satisfaction, higher service costs, and possible liability exposure.



**“Workforce inefficiencies related to publishing will cost organizations across the globe approximately \$750 billion.”**

—A.T. Kearney

### Traditional Publishing Systems Limit the Benefits of Enterprise Content Management (ECM) Software

Organizations with limited content management experience believe that deploying a content management system alone will solve their publishing problems. Content management systems offer organizations the ability to impose controls over the process related to content creation and publishing. Users benefit by having a formal, predictable and secure way of assigning tasks for creating new information or updating existing information. However, traditional publishing systems, such as word processing and desktop publishing software, waste organizations' time and resources while limiting the benefits that Enterprise Content Management (ECM) can deliver. This waste arises from the way that traditional word processing and desktop publishing software lets authors create and publish information.

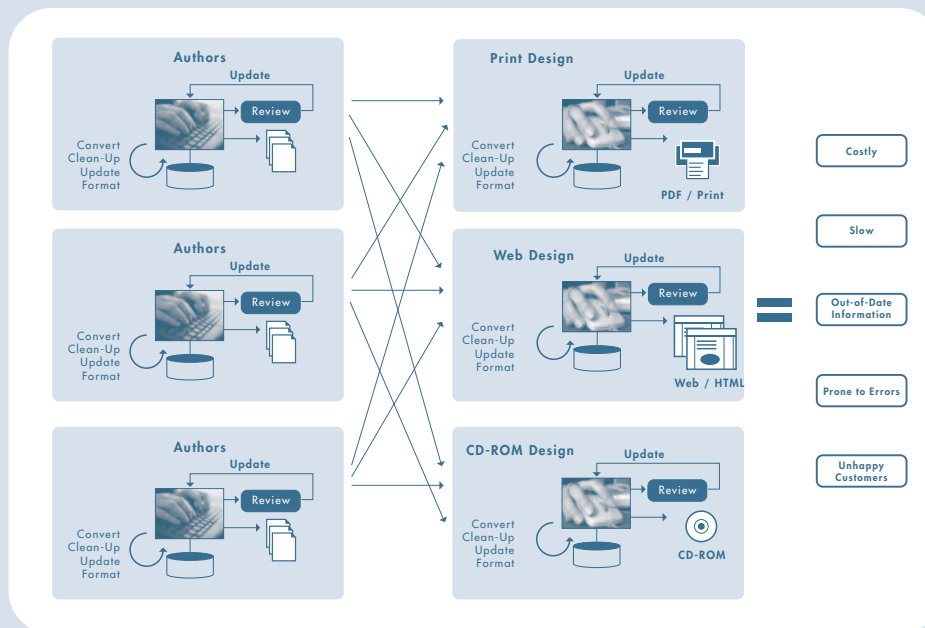
The primary limitations of traditional word processing and desktop publishing software include:

- **Manual updates**—Copying/pasting content is a common method for making changes when using desktop publishing. Although this method may add to authoring efficiency when creating a stand-alone document, it greatly complicates the maintenance of documents. Changes to content require authors to manually search and update redundant content in multiple sections within multiple documents. Changes are the writer's nightmare and accounts for a major portion of authors' "wasted effort". Additionally, the process is error-prone and often causes inconsistencies or inaccuracies in published content.
- **Manual formatting**—Authors typically spend between 30% and 50% of their time formatting documents in traditional publishing applications—applying character, paragraph and page styles<sup>1</sup>. Even when provided with authoring templates, most authors make formatting and style changes to each document as they write. If the document is a small, simple, one-off communication such as a memo or email, the wasted effort of manual design and formatting is usually not significant. However, for long documents composed from legacy information and subjected to repeated revision cycles, this manual effort compounds and leads to an excessive waste of manpower, resulting in inefficiency and production delays.
- **Recreating existing content**—Authors will recreate content that already exists if they cannot find it. When they find the content, authors typically copy and paste it into the new document. Both approaches are wasteful because making subsequent improvements to the information requires finding, updating, and reviewing all documents containing the repeated passage, caption, or phrase. Where localized versions of the content are required, translation fees can add exponential cost to a publishing operation. Furthermore, rewriting content instead of reusing it not only increases the cost and time to develop the content, but also raises the risk that redundant information is inconsistent with other documents, making it even more difficult to update.

- Lack of structure. Inconsistencies in the sequence and structure of information across similar documents make the content more difficult for readers to understand and more difficult for your authors to find and update. Unstructured information is impossible to re-use or automatically format. A computer program cannot process inconsistent input—the classic “garbage in, garbage out” problem. Lack of structure adds redundant cycles of review and edit to the publishing process, as multiple updates must be circulated.

So, if desktop publishing and word processing are so problematic, why are they so popular? For organizations using these methods, traditional publishing software actually provides many benefits compared to the publishing tools it replaced. For example, desktop publishing provides a quick and easy way to make changes and preview the result before printing. However, while desktop publishing may be appropriate for some types of documents, many organizations are unaware that there is an alternative that lets you publish better information more efficiently.

### Traditional Publishing Process



### Example: Traditional Publishing Process

The traditional publishing process requires authors to create, format, and manage their content individually. They usually begin with a standard template for a specific type of publication, which they modify as they create the document. Authors add text, create or import graphics and tables, include boilerplate text (such as labels, disclaimers, etc.), and import content from other documents or databases from within or outside the organization. Authors format the document as they write and then send it out for review and approval. Any change requires additional manual update and formatting. The process typically requires several iterations before the document is complete. On average, authors spend 30-60% of their time in low-value tasks such as decorating documents and updating multiple instances of the same information that proliferated through copying and pasting. Approved content is sent to the design team for re-formatting and configuration for publishing to additional media such as the Web. Often, content will be sent to a third party for multiple translations. Translated content typically varies in length and requires additional formatting before the publications are finalized. While not very efficient, this process might be tolerable were it not for the inevitability of content changes. Any update requires publications to undergo the same serial labor-intensive processes and requires all downstream functions to redo massive amounts of work. Furthermore, many organizations need to simultaneously manage multiple publications with overlapping release cycles.

These issues are further complicated by the typically chaotic environment already in place. Disconnected silos of information, lack of data version control, inadequate security/information access, and inefficient means of internal/external communication, all serve to exacerbate the above problems. As a result, most publications are stale, outdated, or inaccurate. This results in lost/delayed revenue, dissatisfied customers, and substantial legal exposure.

### When Should an Organization Consider Adopting an Automated Approach to Publishing?

You should consider evaluating the benefits of replacing traditional desktop publishing or word processing software if your content has one or more of the following characteristics:

- **Multi-channel Delivery**—When you have to deliver content in print, on the Web, in online help, to wireless devices, or to additional formats and media types, traditional publishing software requires you to assign someone to manually format your content for each different media type. Not only does this manual effort waste time and money, it also leads to inconsistencies in the resulting content that could lead to customer dissatisfaction or legal liability.
- **Multiple Embedded Diagrams**—The inability to embed interactive graphics, which automatically update when content changes, forces authors to write excessive verbal descriptions and incorporate inaccurate, out-of-date illustrations.
- **Large Volume**—The more content you create, the more costly it becomes to use traditional publishing software, where authors can spend as much as half their time formatting—a waste of time and money.
- **Repeatable Processes**—The more frequently you create and publish documents of a particular type such as datasheets, manuals, proposal responses, or regulatory submissions, the more consistent the documents should be in style and structure. Desktop publishing software works against this goal by giving the user complete freedom to change each document's style and structure. The resulting inconsistencies not only reduce readability and utility for consumers of the information, but also make downstream automation such as automatic publishing to multiple types of media impossible.
- **Personalized Content**—Consumers of information increasingly expect content to be tailored to meet their needs. They want only content that is relevant to their use case. Using desktop publishing software to produce tailored publications is rarely efficient on any scale.

- **Configurable Documents**—If you create highly configurable documents with varying audience-specific content, desktop publishing software forces you to either publish long documents with a lot of irrelevant information, or to spend excessive time creating individual publications for customized for each target audience.
- **Dynamic Content**—If portions of the content change frequently, such as prices, dates, seasonal provisions or configuration requirements, traditional publishing software is, by far, the least efficient means to process the change.
- **Interactive Content**—The Web and, to varying degrees, other electronic delivery media are great at providing an interactive experience to the consumer. Features such as advanced navigation aids, hyperlinks and dynamically showing or hiding content engage the consumer and provide a faster, more satisfying experience. The manual steps required for adding these features, when converting word-processed or desktop published documents to a Web-friendly format, can be daunting. Often, the labor costs for such conversions force companies to compromise their Web applications with static text and minimal linking.

#### Billions in Savings

Telecom	Reduced content authoring time by 33% by improving output from 2.7 pages per hour to 4.3 per hour.
Financial	Improved reuse from near 0% to 60%.
Medical Equipment	Reduced translation costs by 65%, from \$41/page to \$14/page.
Government	Reduced processing time for standard manuals from 4-5 hours to 8 hours.

## Best-Practice Approach to Creating and Managing Publications

An effective publishing solution must allow for concurrent development of multiple publications across a distributed environment. The solution must address all phases of content development: content creation, collaboration and review with subject matter experts; control and management; content configuration; and automatic communication by distributing content to multiple targets and publishing to multiple media. These capabilities must be built on an architecture that maximizes the system's usability and reliability and minimizes deployment costs.

### Creating Publications

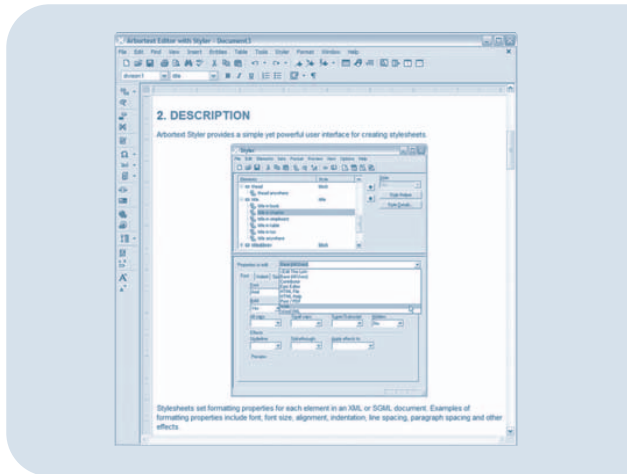
The key to successful automation of the publication process is componentization. By splitting your documents into reusable components that are big enough to be worth managing separately, yet small enough to reuse in multiple instances, you can create a single source of information, so that making just one change can update multiple documents at once. A single source also leads to the reduction or elimination of redundancy, which enables you not only to reduce translation costs to only those information components that have changed, but also to ensure the integrity and accuracy of your information.

Componentization is also critical for personalization. Creating information in smaller components allows you to set up a system to assemble and reuse those components dynamically to suit the needs of various audiences. To make componentization work, the components must be interchangeable, and they must fit correctly into the publications that contain them. For example, you may choose to create two different sizes of components, such as 'warnings' and 'topics', where warnings fit into topics and topics fit into books.

Another key to successful automation is an absolutely consistent structure and data format. While the formatting of an individual business document suggests a structure that's obvious to anyone looking at it, authors freely alter structure and formatting to suit their circumstances and tastes. The result is that documents of the same type will have similar but not identical formatting, and similar but not identical structures. These inconsistencies, however small, make automation impossible.

Another key to automation is separating the information from its style or presentation. In office automation, that means storing data in databases and extracting it for various purposes. Accountants can produce tabular reports, charts and graphs in virtually endless combinations, even though the data in its raw form would be unintelligible to them. Applying this principle to documents means that you can use the same information in different types of documents with different formatting without manually modifying the information itself.

<b>Essentials of Automated Publishing System:</b>	XML enables several critical requirements for automating the publishing process.
<b>Componentization</b> – enables reuse, single-sourcing and personalization	Through XML, one can specify the size of the re-usable information components in a consistent way, enabling easy interchange of one component for another. PTC's support for DITA, an application of XML that's particularly well-suited to publishing, brings state-of-the-art support to developing and publishing componentized, reusable information.
<b>Structure and Consistency</b> – essential for automation	XML makes structure explicit and ensures absolute consistency of your documents. In that respect, XML is unique. No other standard data format (except SGML, the predecessor to XML) can represent all types of information – text, data and graphics.
<b>Single Source</b> – eliminate the ongoing time and expense to maintain redundant information while ensuring its integrity	By enforcing consistent structure of all document components, XML facilitates identification and consolidation of redundant content, while enabling reuse and re-purposing of information components.
<b>Separation of Content from Formatting</b> – required to deliver the same information in multiple documents and file formats with multiple styles	XML also enables the separation of content from its presentation. XML represents information in a "media neutral" form that is not constrained by the limitations and capabilities of any particular medium, so you can create information in its "pure" form, and separately process it to produce information products.
<b>Automation</b> – assemble information for multiple audiences and publish to multiple types of media without human intervention	One of the advantages of this separate process is that through automation, the information can be presented with absolutely consistent formatting regardless of the author, and it can take full advantage of the capabilities of each medium. Publishing systems that leverage the DITA data model enable organizations to adapt (specialize) their XML data models to better meet different needs, while preserving interoperability with all downstream applications that use a DITA-based data model.



### CREATE Content with Arbortext Editor:

For more than 20 years, PTC has been instrumental in solving the challenges surrounding the development of complex content. Authors use Arbortext Editor to create business, technical, and reference documents. Arbortext enables you to: create and edit XML and SGML content; work with content both as components and as compound documents; reuse content across your organization; and improve the accuracy, consistency and flexibility of your information. Arbortext looks and works like familiar word processing software—yet provides all the power and flexibility authors need. Arbortext lets authors attach audience information to content for producing customized publications, and embed data from databases, business systems, and other data sources. Using Arbortext Editor for document authoring enables a company to automate the publications process and benefit from dynamic publishing.

### Collaboration Requirements

The key to efficient publication development is to allow authors to work on different components simultaneously. By replacing linear redundant processes with concurrent processes, you can substantially reduce the overall publishing cycle and accelerate time-to-market.

Publications often have multiple contributors who are geographically dispersed. Project collaboration tools are required to enable work-in-process collaboration with subject matter experts from both within and outside your organization. Efficient collaboration requires the flexibility to allow individual contributors to work independently to generate digital content and to periodically share that content with each other. At the same time, team members need a common view of the project plan and current status. Content management tools must detect important changes and automatically notify project members. Furthermore, these tools should protect content from unauthorized changes, keep a history log of all document modifications, enforce interim checkpoints and manage multiple review and approval cycles.

**“Collaborative solutions can reduce the product development cycle by as much as 40%.”**

– Giga Information Group

**“Collaborative development reduces data proliferation by 30%.”**

– McKinsey

### Content Control and Management

What would happen to your publishing process if your core intellectual content were stored in many different locations and repositories, so that when individual components changed, you had to track down all of them before publishing a document? Can you imagine what would happen if a drug label didn't accurately reflect its prescribed use or if the financial report didn't properly reflect corporate results? It would result in chaos, liability, and an unacceptable risk. Content control and management are necessary to optimize the enterprise publishing process. There are several key capabilities you should look for in your content management system:

- **Support for structured XML content**—Support for XML within a content management system can vary from simply recognizing XML as a different file type to providing considerable XML-specific capability such as: checking XML documents to make sure they are valid; automatically bursting documents into reusable components; assembling components into whole documents; and automatically handling all related files that together make up an XML compound document.
- **Lifecycle management**—Publications naturally go through various lifecycle states such as “Work-In-Progress,” “In Review,” “Released and Available,” and “Obsolete.” Managing content through lifecycle states enables companies to route information based on lifecycle states and to give access to the right people so they can perform lifecycle-specific tasks on that content

<sup>1</sup> DTD or Schema and a stylesheet are needed in order to use a typical XML document.



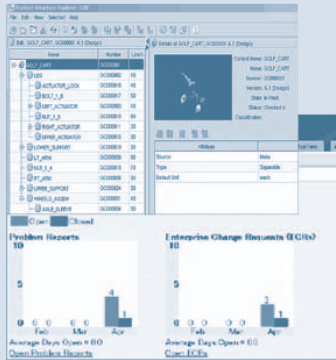
- **Business Process Automation**—The capability to graphically model a workflow-driven process, automatically trigger the start of the process based on specific circumstances, and monitor the progress of the running process and intervene, if necessary, delivers great value to the publications process, particularly for complex processes. Sophisticated publishing applications require workflows to guide the steps of reviewing, approving, translating and publishing, and have the scalability and flexibility to be defined for specific document components or for collection of components. Workflow-driven process automation enables automatic management of heterogeneous documents consisting of multiple types of content.
- **Dynamic management of multiple types of content**—Publications incorporate multiple types of content such as text, interactive graphics and illustrations, links, multimedia objects, and MCAD and ECAD objects. In order to automate the publishing process, all content components must be managed dynamically within the content management system. When you make a change to one of your content components, you want all the content referencing this component to automatically update without manual intervention.
- **Common security requirements**—In order to ensure content integrity and compliance with regulatory requirements, document components must share common security requirements. Permissions and workflows must vary based on the version and lifecycle of the document, and content changes need to be tracked and traceable back to their source.
- **Translation management**—Delivering information in multiple languages adds another dimension of complexity. Publishing software must support the composition of all the required languages, and the content management system should provide an interface to translation memory databases with automatic management of all localized versions of the document.

### Configuration Management

A critical requirement for automating the publishing process for complex dynamic documents is configuration management. Configuration management is the foundation for both information reuse and dynamic assembly; and results in higher productivity and quality. Configuration management capabilities ensure that appropriate content is published in conjunction with a specific view or version. Key configuration management capabilities include:

- **Componentized documents**—knowing which documents own which components. This knowledge enables several valuable functions, such as preventing authors from deleting a component that one or more documents currently use, and performing “where-used” searches that list each document that uses a certain component.
- **Multi-level version control**—Content must be controlled, not only at the document level, but also at the component level. These capabilities are important for documenting product changes after the product release date, confirmation of the change, and for managing multiple localized versions of the same content. For example, organizations need to be able to publish the same process instructions with differing sub-sections for cases where procedures and regulations vary by country. Or, they need to publish personalized investment reports, where content components differ, based on the individual investor’s selections and the date of a change.
- **Renditions**—In XML publishing applications, content exists both in its source format of XML and in various published formats or “renditions” such as PDF and HTML. Advanced content management systems enable configuration control of renditions, which is required for automatically publishing to multiple types of media.

### COLLABORATE, CONTROL Content and Processes, and CONFIGURE Rich Publications with Arbortext Content Manager:



Arbortext Content Manager, based on PTC's proven content and process management technology, provides a single source of information, while maintaining control at every component level, preserving component relationships, and providing deep configuration management capabilities. Arbortext supports collaboration of geographically dispersed teams, while managing critical processes such as configuration management and release to publications. Arbortext's ability to manage complex information assets enables organizations to stream-

line their document and publishing processes, while ensuring that the correct information is continually updated and delivered to consumers. Arbortext Content Manager automatically "bursts" XML documents into document components.

Once in Arbortext Content Manager, these document components are subject to Arbortext Content Manager's powerful configuration and workflow management capabilities. These capabilities enable you to choose whether to manage each component individually or manage entire products and documents with a single workflow, modeled after your organization's business process. Arbortext can effectively manage different configurations of compound documents, including the latest configuration, latest at a specific lifecycle state, or a specific "baseline" configuration. Arbortext can dynamically manage multiple types of content, enabling Arbortext to automatically assemble and publish information. The solution allows you to automatically publish information to multiple types of media, while enforcing common security requirements.

Furthermore, Arbortext Content Manager visualization capabilities allow users to view, interrogate, and markup documents (e.g. PDF files) and graphics (e.g. Visio) without the need for the native authoring applications. This capability facilitates collaboration during the process of developing publications.

### Communicate—Publishing Content

There are several key technical requirements necessary for automating the process of assembling and communicating content:

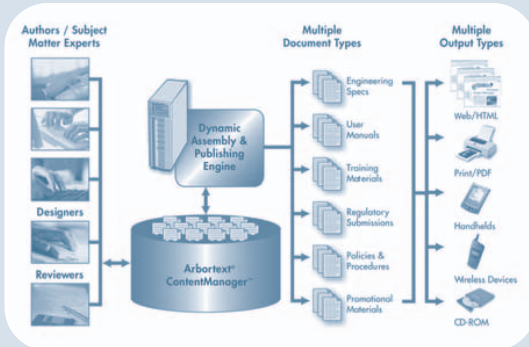
- **Automatic publishing to multiple types of media for multiple audiences.** One of the primary benefits of XML publishing is the capability to publish automatically to multiple types of media for multiple audiences. Stylesheets are used to enable automation because they contain the instructions for formatting documents for each type of media. Automated publishing software applies a stylesheet to content to produce a Web, print, PDF or other types of media output.
- **Complex formatting capabilities.** To produce documents automatically, you need a system that can manage complex formatting requirements. For example, you may want to generate content automatically, either by deriving it from your document to produce a list of figures, or by extracting content from a database to create a parts catalog with part numbers and descriptions.
- **Personalized documents.** For many organizations, producing documents that are tailored to the needs of individual audiences is a critical part of the publishing process. For example, if you offer services with a variety of options, you need to tailor each customer's documents to match the specific combination of options that the customer selected.

- Common approach to tailoring information is to create "master documents" that can be tailored to produce many variations. To use this approach, authors must embed information about the audience profile for each document component. You can tailor information all the way down to a word in a sentence or a cell in a table. Then, when you publish the document, you select the audience, and the publishing software pulls the right information to publish.

**Automated publishing is the key to realizing the vision of delivering the right information to the right person at the right time.**

\*A stylesheet is a document that contains instructions to specify the formatting and display of XML-encoded documents, or to transform XML into another format.

### COMMUNICATE Via Rich Publications Using Arbortext: Publishing Engine



The power of a dynamic publishing system is in its ability to automate the publishing process. Automation of the publishing process not only reduces the burden on authors, liberating them from the responsibility for designing and formatting content, but also enables you to publish more frequently to more types of audiences and to more types of media.

The Arbortext Publishing Engine is a server-based product that pulls XML and SGML content from Arbortext Content Manager<sup>5</sup>, assembles that content for different audiences, and automatically publishes the assembled content in both print and electronic forms, all with high-quality layout and formatting. Arbortext Publishing Engine operates in a completely unattended mode, and is a key component of PTC's Dynamic Publishing System that allows you to:

- deliver more accurate, more timely and more consistent content
- dynamically deliver publications that are tailored to the needs of each consumer
- immediately produce updated publications across all of your target media
- automatically publish on-demand to multiple types of media, including Web, print, PDF, Microsoft Word, HTML Help, and wireless devices

Arbortext Publishing Engine provides a wealth of features that support the automation of page-oriented output and eliminate the need for authors to manually format documents.

### Choosing the Right System Architecture—Critical Component for Automating Publication Processes

Automation can significantly reduce costs and time-to-market by streamlining and improving the technical publications process. Automation can succeed only when all components of your publishing system are compatible and reinforce each other. A poor system architecture will result in difficult deployment, massive integration costs, and mixed technologies that limit future flexibility and reduce reliability. The right system architecture 1) shares a common database schema, common business objects, and a common Web-based user interface, 2) deploys seamlessly across existing intranet and Internet infrastructures, and 3) integrates with other systems using standard protocols and integration approaches.

### PTC'S Dynamic Publishing System: An Integral Enterprise Publishing Solution

The PTC Dynamic Publishing System delivers the industry's first and only integral solution that enables companies to create the publications' content, collaborate effectively, control and manage content and associated configurations, and automate the process of communicating content to all relevant channels. The Dynamic Publishing

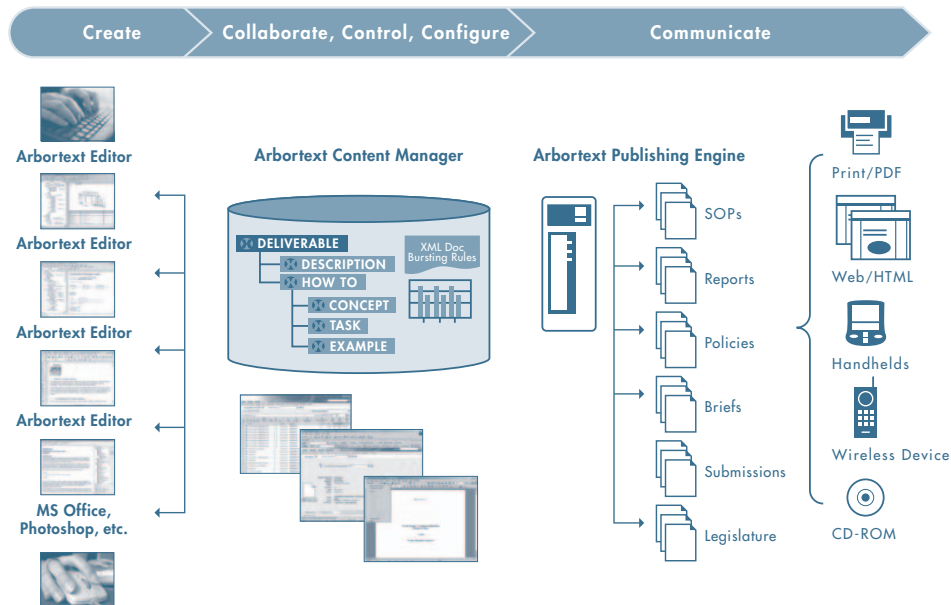
System can help you dramatically improve the quality of your information, while you gain significant savings in time and costs. PTC lets you combine text, tables, graphs, and images into rich, interactive documentation that automatically updates when a component is changed. This solution ensures high performance and interoperability, provides an integrated view, and fully automates the publishing process.

### Optimizing the Technical Publications Process with the PTC Product Development System

Manufacturing companies who tend to incorporate engineering design data in their technical publications would find additional value in the PTC Product Development System (PDS). In addition to offering all capabilities of the Dynamic Publishing System, the PDS enables manufacturers to embed digital design (CAD) models in their publications and to manage bills of materials (BOM) and a broad range of product development processes, including engineering change. Learn more about how the PDS can help you improve your technical publications process by visiting:

[http://www.ptc.com/products/product\\_development\\_system.htm](http://www.ptc.com/products/product_development_system.htm)

<sup>5</sup>Arbortext Publishing Engine can be used with other content management systems as well as file systems.



### Flexible System Architecture

Some companies may choose to integrate what they consider to be the best applications from multiple vendors to create a custom publishing system. Although this strategy provides a comprehensive footprint of capabilities, the resulting system usually requires high deployment and maintenance costs. Those organizations will need highly technical IT teams with the skills necessary to reconcile a variety of issues: the data and process models; conflicting technology architectures and implementations; multiple databases and asynchronous product upgrade cycles. Upgrading any one application could break the fragile system, limiting the ability to add capabilities over time. The worst aspect of this strategy is that the integration and maintenance of the system becomes the sole responsibility of the user instead of the vendors, and is a risky proposition.

In order to minimize deployment costs and risk and to maximize ease of adoption, PTC has designed an integral, Internet-based, and fully interoperable system. The Dynamic Publishing System can be deployed incrementally and quickly, with low risk and low cost of ownership, for an immediate return on investment. However, the architecture can easily accommodate future needs—such as additional users, additional capabilities and/or deep process integrations to other systems. The Dynamic Publishing System enables you to realize the vision of a fully automated publishing process that is integrated with your business processes. The PTC Dynamic Publishing System is the only integral enterprise publishing system.

**Integral**—PTC's Dynamic Publishing System technology is designed to work together as one cohesive system with no redundant, overlapping, or conflicting modules. The user experience is seamless across all applications.

**Internet**—PTC's Dynamic Publishing System technology utilizes a Pure Internet infrastructure that deploys seamlessly across both the enterprise and the broader value chain.

**Interoperable**—While integral within the scope of publishing, PTC's Dynamic Publishing System technology is an open system that integrates easily with other enterprise systems and authoring applications.

### PTC Global Services Ensures Organizations Realize the Maximum Value from Their Dynamic Publishing Investment

Deploying the right software is critical to automating the publishing process. But to truly realize the cost savings and time-to-market benefits from automation, customers need to ensure that everyone—from senior executives to end-users—adopts the change that comes with new technology and improved processes. In an environment where people are already accustomed to using desktop publishing tools, adoption can be a challenge.

At PTC, we recognize the importance of user adoption. Our Global Services team offers solutions that help you not only implement the Dynamic Publishing System, but also drive adoption of the system within your organization. After years of deploying new processes and technology across thousands of customer sites, our Global Services team is able to anticipate the cultural and geographical adoption challenges you'll face – and help you overcome them.

Each project begins with an examination of your current staffing, processes, and technology to determine the optimal deployment strategy and quickest path to value for your organization. We then guide you through each step of our standard Realized Value Methodology, which includes the steps required to facilitate adoption including a unique training approach called Precision Learning.

#### PTC Global Services Helps You:

- Define your business and user requirements for your publishing needs
- Determine content re-use needs within your authoring environment and define an optimum strategy for bursting your publications
- Design the appropriate stylesheets to meet your publishing requirements
- Develop efficient workflows to streamline your authoring and publishing processes
- Define an appropriate data model to support your content
- Realize more value—faster.

To learn more about how Arbortext products can help your company create and deliver high-quality product information, please visit our website at:  
<https://www.single-sourcing.com/>

## Conclusion

Poor information quality and inefficient content management processes hamper the effectiveness and financial success of organizations. Traditional publishing software contributes to inconsistencies in the sequence and structure of information and forces redundant processes and multiple manual document updates. Inefficiencies in the publication-development process force organizations to release incomplete or inaccurate documentation, which ultimately result in lost market opportunity, high costs, and low customer satisfaction.

A dynamic publishing solution must provide all required capabilities for: creating structured and reusable content; collaborating when developing that content; controlling and automating the content and processes related to publishing; configuring the content; and communicating the content via relevant media for the right audiences.

The PTC Dynamic Publishing System delivers the industry's first and only integral solution for automating and optimizing the publishing process. The Dynamic Publishing System includes the ability:

- for authors to create content in a way that can maximize its reuse
- to facilitate collaboration and review with subject matter experts
- to control and manage content, its configuration, and associated processes
- to manage document configurations and automatically configure publications
- to automatically communicate information by distributing content to multiple target audiences in the media that best suits their needs

These capabilities are built on an architecture that was designed to address the challenges of today's distributed environment. With the Dynamic Publishing System, PTC shoulders the responsibility of ensuring that all system components work in an integral fashion, ensuring that the user experience is optimal.

The Dynamic Publishing System's Internet architecture eases deployment across existing IT infrastructure, and its interoperable characteristics facilitate sharing information between and among other desktop and enterprise systems. As a result, PTC's Dynamic Publishing System minimizes deployment time, improves maintainability, and lowers total cost of ownership. Furthermore, PTC Global Services is available to ensure an easy transition to the new system and publication process, as well as to maximize widespread adoption of the solution.