

Productivity Applications
from **ScanSoft**®

■ *Productivity White Paper*

Better PDF for Business™



Executive Summary

Existing investments in connected desktop PC systems, coupled with the pervasiveness of Microsoft Office, should provide organizations with the ability to easily automate their document processes. However, in spite of advances in technology, the costs associated with creating, sharing and storing documents continue to rise.

The single greatest challenge to streamlining document-based processes in business is the fact that there are two incompatible dominant electronic document formats - Microsoft® Office and PDF. Microsoft Office provides millions of corporate, government and academic professionals a rich environment for document creation and collaborative authoring. Unfortunately the editable Microsoft Word file format is not well suited for electronic publishing and online document storage. On the other hand, PDF has expanded from its traditional roots as a design and pre-press tool to an electronic file sharing standard providing business users with a format that is well suited for the distribution, viewing and archiving of documents.

The net result is that Microsoft Word is the standard for authoring and editing business documents, while PDF is becoming the preferred way of distributing and sharing business documents online.

The pervasiveness of Microsoft Word (400 million) and Adobe® Acrobat® Reader (500 million) gives rise to the need for document management solutions that enable the seamless movement of documents between the two dominant formats. To accomplish this, organizations must:

- Address the historical incompatibility between the two leading electronic document standards, Microsoft Word and PDF, which causes unnecessary and costly manual re-keying of information and slows down the document creation process.

This dilemma has been overcome through a collaboration between ScanSoft and Microsoft to create PDF Converter for Microsoft Word that instantly turns PDF files into fully-formatted Microsoft Word documents.

- Deliver the ability to create PDF files to every business desktop affordably.

This problem has been solved with ScanSoft PDF Create!, an affordable PDF creation solution designed with features specific for business and office environments.

- Introduce easy-to-use PDF solutions that can be productive for every office worker without the need for additional training or support.

This has been enabled through the seamless integration of ScanSoft PDF Converter Professional with Microsoft Office and the Microsoft Windows® operating system environment.

This white paper provides an overview of current electronic document trends, an understanding of the new role that PDF has gained within business and a summary of solutions that allow organizations to move information more seamlessly between Microsoft Office and PDF.

The Business Document Lifecycle

The Internet has changed many things, including the way we create and share documents. The fax machine and postal mail have been largely replaced by e-mail, while magazines and research journals now deliver their valuable information just as frequently via the Web as in print. Almost every office worker uses a computer, and a vast majority of those are connected via local and global networks.

“Turn Every Paper Process into a Digital Process”

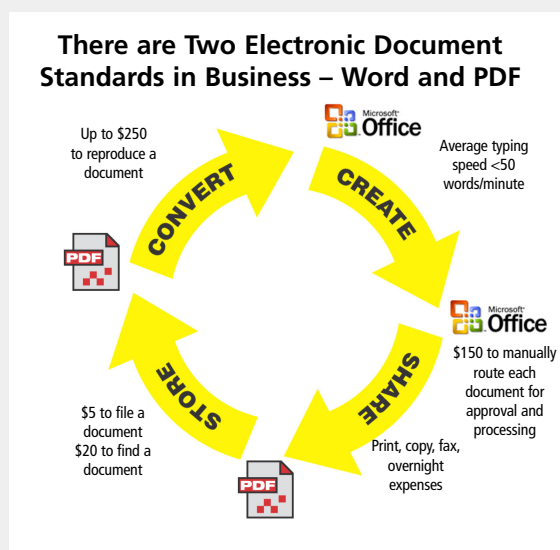
– “Business @ The Speed of Thought” by Bill Gates

If only it was that easy. In spite of tremendous advances in technology and networks, business leaders continue to struggle with the productivity challenges associated with creating, sharing and working with documents. No matter the size of the organization, manual document processes represent the greatest barrier to enhanced operational efficiency and improved worker productivity.

The connectivity and ease of information sharing enabled by the Internet offers organizations both opportunities and challenges when it comes to the business document lifecycle. Many have found that the ability to share documents electronically doesn’t directly translate into increased productivity, since serious issues of working with documents still need to be overcome. In spite of the level of electronic sophistication within modern organizations, few would believe that they have achieved the goals of a true “paperless office.”

The most significant barrier to implementing seamless document lifecycles is the lack of a single, universal standard for creating, editing, sharing and storing documents. Instead there are two competing electronic document standards – Microsoft Word and the portable document format, or PDF. Both of these formats are pervasive because they each deliver value within different phases of the document lifecycle - Microsoft Word is a superior tool for creating and sharing documents, while PDF has distinct advantages for the sharing and storing of documents.

Nearly all business documents are created and edited using Microsoft Word because it augments powerful authoring capabilities with efficient revision tools. With Microsoft Office, teams of people can easily participate in the creation of documents because changes and comments are tracked automatically.



Historically office workers have shared business documents as a source file, which can be convenient if the recipient has the source application installed on their system. However, the recipient not only has the ability to change the document, they can also see hidden information within the source file itself. For example, the Track Changes feature in Microsoft Word retains the draft(s) text and data in the Word document, providing others with a way to learn perhaps more than the author really intended to share. Other applications like Microsoft PowerPoint® are also a source of hidden information, as charts and graphs embedded within a slide also contain the actual data used to build the bar, line or pie chart. While the author may want to show data as a percentage, the numerical data is easily accessed when sharing the .ppt file. Sharing documents as PDF overcomes this issue because the conversion of Word and PowerPoint files into PDF “flattens” the document, stripping it of hidden and potentially sensitive information in the process. This is just one of the reasons that PDF has become a popular way to share and store business documents.

The Evolution of PDF

The portable document format (PDF) is the format of choice for sharing documents online, and has become the digital equivalent of physical paper. With over 500 million downloads of Adobe® Reader, and more than 1,200 vendors delivering solutions based on the industry standard, PDF is certainly pervasive.

But why has PDF gained such widespread popularity? Because it does things that you can't do easily – or at all – with the Microsoft Word (.doc) and other source formats.

Invented by Adobe® Systems as an open standard, PDF pre-dates the Web. It was originally embraced by the graphic design and color pre-press community – who value PDF today more than ever – because it enables PDF workflows. With PDF, designers and printers can electronically share direct mail pieces and advertisements, replacing the costly and slow process of printing and mailing paper-based blue lines and color proofs. Over time features have been added to PDF to address even more opportunities within this community, including support for prepress and preflight tools, color separation, layers, and other features for designers, printers and publishers.

With the advent of HTML, the document format of the Web, many thought that PDF would be limited to use within the design and print community. But while HTML and Web browsers that present HTML pages enabled wide distribution of content over the Internet, HTML fell short in a number of important areas. First, HTML doesn't guarantee that the presentation of the document will be identical on different browsers or operating systems. You've seen the effect of this when text and graphics within a Web browser show up in different locations when you print the Web page to paper. Second, HTML is difficult to share offline because the presentation of linked pictures and text are dependent upon having a continuous connection to the Web. PDF is different from HTML because it was invented with the intent of duplicating the fidelity of paper online, including the precise preservation of a document's layout and the true representation of its colors. Also, because PDF is a self-contained document format, it is easy to share complete documents with or without a live Internet connection. And because Adobe® Reader is freely available on many different systems, PDF has become a de-facto standard for sharing same-as-paper business documents online – on the Web, over email and through connected network environments.

Sharing electronic documents as PDF provides professional offices with significant benefits. PDF documents are compact and easy to e-mail, can be universally viewed on the Web, and print just as if they came from the original application. PDF files have compressed file sizes, password security, 128-bit encryption, and support watermarks, bookmarks, hyperlinks and more. PDF files also allow others to view and print a document without the need for the original authoring application. This is especially valuable for sharing documents from highly specialized applications, such as photo editing (JASC Paint Shop® Pro), layout (Microsoft Publisher®), CAD (Autodesk® AutoCAD®), drawing (Microsoft Visio®), accounting (Intuit® QuickBooks®), and contact management (ACT!™).

In short, PDF delivers many needed and unique benefits to those wishing to share "same as paper" business documents online.

- PDF files can be smaller than the original file

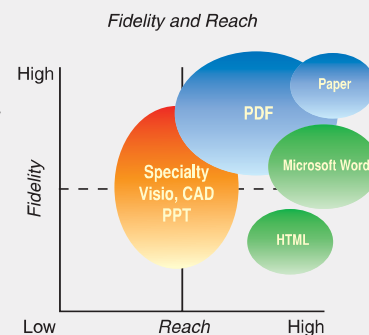
Converting PowerPoint and other formats into PDF often enables the sharing of documents that otherwise would be too big for e-mail servers that have size limits on attachments

- PDF is less susceptible to viruses than other formats

Word and other applications can carry harmful viruses that are not as easily attached to a PDF file

- PDF "flattens" a document

Converting to PDF removes hidden information contained in the source format, adding an important level of security to sensitive documents



- PDF is not an editing format

PDF enables business documents and forms to be shared in a way that prohibits changes to the original

- PDF documents look the same online as when you print them

Web pages will print differently from browser to browser and system to system

- PDF documents can be secured more easily than other formats

The ubiquitous Adobe Reader, and growing number of 3rd party PDF products, enable the use of secure PDF documents

- PDF allows others to view documents without needing the authoring application

While Word, Excel and PowerPoint are ubiquitous, drawing, CAD, accounting and other specialized applications are not. Sharing as PDF removes the dependency of the recipient to have, and know how to use, specialized applications.

While PDF was initially embraced by design and print professionals, its benefits have been discovered by business professionals. ScanSoft, a leading supplier of productivity applications, conducted a survey of business professionals, and found that 44% felt that being able to create PDF files from Microsoft Office was “extremely important,” with an additional 28% saying that it was “important.” In the same survey, 33% felt that creating PDF files from other PC applications was extremely important, with an additional 34% stating that it was important.

If more than 60% of business professionals surveyed have a strong need for creating PDF, why are fewer than 10% of business desktops empowered with the ability to create PDF files? In the survey, ScanSoft discovered that business users wanted a solution that had the price, features and performance designed specifically for office professionals. Existing solutions, including Adobe® Acrobat® Standard (\$249) and Adobe Acrobat Professional (\$449), had robust features needed by design professionals, and lacked features needed by business – such as converting PDF into fully-formatted Microsoft Word documents.

Fortunately, the file format for PDF is an open standard, meaning that companies that wish to develop solutions that utilize PDF can do so. This has led to an ever increasing number of PDF products; many designed specifically for professional office environments and priced to enable PDF on every business desktop.

PDF and Word = Better for Business

PDF Converter Professional eliminates the productivity issues caused by the traditional incompatibilities between Microsoft Word and PDF. For the first time ever, users now have the ability to create PDF files from any PC application and turn existing PDF files into fully-formatted Microsoft Word documents.

ScanSoft PDF Converter Professional combines the power to create PDF files from any PC application with the amazing ability to turn PDF files into fully-formatted Microsoft Word documents or forms in a single, affordable and easy-to-use application! Now it is easy to create industry-standard PDF files that can be easily e-mailed, universally viewed and printed just as if they came from the source application. PDF files can be instantly converted into Microsoft Word documents and forms that are easily edited and look just like the original, complete with all the formatting and graphics. PDF Converter Professional will save organizations time and money by making it easy and cost-effective to work with PDF files.

Create PDF files from any PC Application

ScanSoft PDF Create! is the fast, reliable and affordable way to turn all of your PC documents, drawings and images into

industry-standard PDF files. Now you can instantly create PDF documents that are compact and easy to e-mail, can be universally viewed on the Web and that print just as if they came from the source application. PDF Create! provides all of the advanced features you need, including compatibility with all PDF file types (even the new 1.5), compressed file sizes, password security, 128-bit encryption, batch conversion of multiple files at a time, watermarks, bookmarks, hyperlinks and more. PDF Create! is compatible with ScanSoft PaperPort® Pro Office, Adobe® Acrobat® and Reader, as well as other PDF viewing or editing applications.

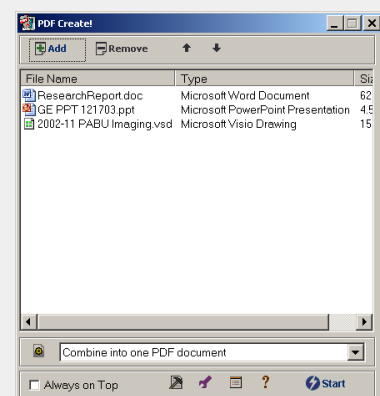
Business Requirements – PDF Creation

- **Affordable PDF creation for every person in the organization.**
- **Easy to deploy and use. Network install and no training required.**
- **Industry-Standard PDF**
Supports PDF v1.3, v1.4, and the latest v1.5; also supports PDF XML tags. Creates 100% industry-standard PDF files that can be read, printed, or processed by popular PDF viewer programs –such as ScanSoft PaperPort® Pro Office and Adobe® Acrobat® Reader.
- **High-Quality PDF**
Creates the highest quality PDF files from nearly all Microsoft Windows® applications, retaining the precise layout of the original document.
- **Optimized, Small File Sizes**
Optimizes PDF file sizes, resulting in dramatically smaller files. Supports industry-standard compression options, including loss-less and JPG 2000, and enables optimization for the Web.
- **Passwords and Security**
Users can add passwords to PDF files, requiring others to know the password in order to view or print the document. 40-bit and 128-bit encryption can also be applied to the PDF file, with the user able to control whether the document can be viewed, printed, edited, copied or annotated.
- **Automated Batch Creation**
The PDF Create! Assistant makes it fast and easy to batch create PDF documents – from multiple files and multiple file types at the same time. Users can use drag and drop to add files to the batch, or can simply select the range of files they wish to turn into PDF.
- **Merging Documents**
Users can select a range of original files, and have them copied as PDF files – into separate PDF files or into a single combined PDF document. Users can also merge multiple files into a single PDF page-by-page, which is ideal for merging letter text into a letterhead template document, or to merge form data into a form template.



"We've recognized for some time that using PDF to share business documents can provide us with an added level of security and convenience, but found existing solutions too expensive for wide deployment. With PDF Create!, ScanSoft has distilled the best of PDF into a product that is easy-to-use, has the features we need and is affordable enough to put on every PC."

– Dr. Allan Shapiro
Manager of Business Development
Alda Pharmaceuticals



- **Automatic PDF-to-e-Mail**
Users can choose to have PDF files automatically added as an attachment to an e-mail message, simplifying the sharing of documents over the Internet.
- **Watermarks and Stamps**
Users can apply watermarks and stamps to their documents, choosing from a pre-made selection, or creating custom versions. Custom watermarks can be applied from other PDF files, or created within the PDF Create! Assistant.
- **Short-cuts and Application Integration**
PDF Create! allows users to create PDF files from practically any PC application, accessing its functionality through a printer interface. ScanSoft has integrated toolbar icons for PDF Create! with a number of popular applications, including Microsoft Word, PowerPoint and Outlook®. Users can also create PDF files using the right-mouse shortcut in Windows Explorer.
- **Advanced Font Embedding, Graphics and Page Size Controls**
Supports font embedding for all standard and non-standard fonts, and also supports shading and transparency conversions. Users can select the graphics resolution of the resulting PDF, and can control PDF page size and orientation. The product supports the creation of custom page sizes and automatic scaling in inches, millimeters and points.
- **International Language Support**
Supports international double-byte character sets, enabling users to create PDF documents using almost any Latin, Cyrillic or Asian character set.
- **Does not Require Adobe® Acrobat®**
Users can create PDF files without the need for any additional software.

Overcoming Productivity Issues with PDF

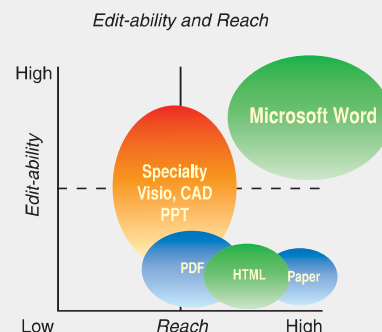
Unlike Microsoft Word and other document editing formats, PDF does not contain critical information relating to the authoring of a document. If you have ever created a PDF file, you'll remember that what you actually did was "print" to PDF from Microsoft Word or another application. Just like printing to paper, the PDF file contains text, fonts, colors, graphics, etc. But also like printing to paper, PDF does not contain the hidden document layout information about where columns start and stop, where paragraphs flow, or any of the other embedded information stored in the authoring application file. Have you ever printed a PowerPoint file to PDF and wondered where the presentation animations went? In the same way that PowerPoint animations don't show up when you print to paper, they are lost when you create a PDF file.

Because of the loss of critical document layout information, sharing documents using PDF can create significant barriers to productivity. This is especially true if the user needs to edit or modify the information frozen in a PDF document. The process of manually reproducing PDF documents within Microsoft Word is tedious and costly. There are many independent studies that provide data that clearly shows that reliance on paper and manual document processes result in significant costs. A recent study by Coopers & Lybrand found that the cost to reproduce a single document averaged \$250, which is supported by the IDC study "The High Cost of Not Finding Information," which found that the cost of recreating documents represented \$5,000 per employee per year to an average organization. (Labor costs rise in proportion to the size of the document and the complexity of its layout.)

Consider the following analysis:

Business Requirements – PDF Creation

- Average Knowledge worker salary = \$80,000
- 1/3 of productive time is spent recreating documents and information (Coopers & Lybrand)
- 5% of that time is tied to PDF productivity issues (ScanSoft estimate)
- Yields a PDF inefficiency cost of approximately \$1,300 per year, per employee
- If PDF files could be automatically converted into Microsoft Word – complete with text, columns, tables and graphics – a 500 person organization could recover as much as \$650K annually in lost labor



“PDF Converter has saved me hundreds of hours because I haven’t had to re-type PDF documents. It is quick at what it does, has good accuracy and is an excellent product.”

**– Chris Mattmann
Software Engineer, NASA JPL**

PDF provides value in the document lifecycle and contains some capabilities that are unique. At the same time, users need the ability to seamlessly convert a PDF back into Microsoft Word for easy editing – a capability delivered through ScanSoft PDF Converter.

Converting PDF into Microsoft Word

ScanSoft PDF Converter for Microsoft Word is the world's #1 solution for instantly turning PDF files into fully-formatted Microsoft® Word documents and forms – complete with text, columns, tables, and graphics. Developed through a collaborative effort between ScanSoft and Microsoft, PDF Converter works within the applications that you already use every day, including Microsoft Word, Outlook®, Internet Explorer, and Windows® Explorer. With PDF Converter, every person in the organization can use the information and graphics frozen in PDF files, saving hundreds of dollars of labor by eliminating manual keying and layout tasks.

PDF Converter delivers significant productivity benefits to every department by eliminating the need to manually reproduce documents and provides ready access to the information and graphics frozen in PDF. Examples include:

All Departments – Have a PDF file, but can’t find the original document? PDF Converter helps business professionals recover information from PDF files when the source document cannot be located.

Sales – Request for Proposals are almost always delivered as a PDF that must be manually re-keyed into Microsoft Word for a response taking valuable time away from working on the actual proposal's content. PDF Converter can turn a 30-page PDF into a Microsoft Word file in about a minute, saving hours of labor.

Legal – PDF documents like interrogatories and legal research are often re-keyed taking additional time and increasing the chance for human error. PDF Converter avoids both.

Marketing, Technical Writing – PDF versions of documents often are the only remaining version of data sheets, user guides and technical documentation. Instead of spending time trying to find the right Microsoft Word file, professionals can convert the published PDF knowing that they are adding their edits to the current version.

Engineering – Manufacturing information is frequently published as PDF, and the source documents are often unavailable when needed. Turning PDF files into Microsoft Word documents provides fast access to the information.

Business Requirements – PDF to Word

- **Precise Conversion of PDF into Microsoft Word**

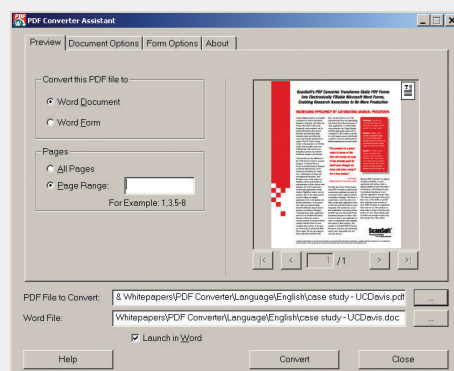
PDF Converter instantly turns PDF files into fully-formatted Microsoft Word documents – complete with text, columns, tables and graphics. Leveraging the world's best document conversion technology from ScanSoft, users have the option of duplicating the original with flowing columns and wrapped graphics, or creating a true-page representation using text and graphics boxes.

- **Convert PDF Forms**

PDF Converter includes Logical Form Recognition™ (LFR), advanced form conversion technology used by the IRS, Secret Service and other leading organizations. Now users can turn static PDF forms into Microsoft Word forms that can be edited or filled.

- **PDF Converter Assistant**

PDF Converter delivers unmatched ease of use thanks to the PDF Converter Assistant. Users can now convert PDF documents quickly with only a few mouse clicks, without ever needing to run Microsoft Word. This speeds the conversion process and allows users to create editable documents for any application that supports .doc or .rtf formats.



- **PDF Thumbnail Preview and Page Ranges**

Converting large PDF documents is now a breeze with PDF Converter. Users can preview the pages within a PDF file, and select a specific page or page range for the conversion process instead of wasting time by opening the file in Acrobat.

- **PDF Passwords and Encryption**

PDF Converter will not convert protected PDF files. It supports allowing users to apply passwords to access and convert protected PDF documents.

- **PDF Image Files**

For PDF files that are created from scanners or imaging applications, PDF Converter will process those images into Microsoft Word. Users can control the number of image pages processed into Microsoft Word, as well as the resolution used for graphics.

- **Application Integration**

Developed in collaboration between Microsoft and ScanSoft, PDF Converter is seamlessly integrated into the “File Open” menu in Microsoft Word. Short cut buttons and right mouse access is available within Microsoft Word, Outlook, Internet Explorer, Windows Explorer and the Microsoft Windows desktop.

- **Does not require additional software or Adobe Acrobat**

PDF Converter does not require any Adobe software on the system.

Summary

Nearly every professional office environment uses Microsoft Word and PDF at different points during the lifecycle of a business document. The incompatibilities of these two dominant formats creates inefficiencies, which can now be overcome through new solutions from ScanSoft.

PDF Create! is an affordable alternative to Adobe Acrobat, providing business users with everything they need to create PDF from all of their PC applications at a price that allows it to be deployed on every business desktop.

PDF Converter turns PDF files into fully-formatted Microsoft Word documents – something Adobe Acrobat and other PDF creation applications simply cannot do. By eliminating the need to re-type documents, PDF Converter delivers real cost savings and productivity gains to organizations of any size.

For more information please visit www.ScanSoft.com/PDF, or call 800.443.7077.

Electronic Document Facts

- Microsoft Word has over 400 million users (Microsoft)*
- 10 million copies of Adobe® Acrobat® have been sold.**
- Over 500 million downloads of Adobe (Acrobat) Reader (Forbes.com)
- Over 18 million PDF files are indexed by Google.com, many of them originally authored in Microsoft Word and PowerPoint
- PDF is the only digital format allowed by the US FDA for new drug submissions
- There are over 5 million .doc and .rtf files indexed by Google.com
- An estimated 30 million PowerPoint presentations are presented each business day (Microsoft)
- 1 million .ppt files are indexed by Google.com

* "Office Online Debuts, Comprehensive New Web Repository of Microsoft Office Resources", September 2003, Microsoft.com

** "The Trojan Document", Forbes.com, July 2003; Interview with Bruce Chizen, CEO of Adobe Systems.



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