

THANK GOD IT'S NOT A PDF!
Observations on what makes PDF publishing successful

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ABSTRACT:

Innovative publishing with PDF tends to go unnoticed because of the overwhelming number of poorly published PDF documents and the perception that PDF is a difficult format to use. This paper aims to highlight the notion that PDFs can be many things and, if published correctly, can be interesting and fun to use as well as solving a number of content and distribution issues for emerging publishing models.

This paper will be referring to a PDF as a final publishing format—not a workflow tool as used in pre-press, or in an office to share information.

During this session, I want to share with you some of my feelings about PDFs and explore the reasons why so many people cringe when confronted with PDF files. I usually hear that PDFs:

- are always too big and long to download
- are always the wrong size for a screen
- aren't as easy to navigate as HTML
- are too hard to read on a screen.

From the sound of it, a lot of people who are delivering content in PDF are making a lot of PDFs that just aren't satisfying the needs of their audiences. However, given a bit of forethought, PDF can be the optimum medium for content delivery when matched against the right criteria.

So let's have a look at where we can value add to a PDF to make it more usable and useful.

In my experience as a publisher, people require a PDF for these reasons:

- Content already in print needs to be provided on the internet, either for use onscreen or for end-user printing.
- New content needs to be developed for onscreen use.
- Print-based content needs to be scanned or otherwise digitised.
- Content needs to be delivered in a medium that supports multiple operating systems.

Left to their own devices, many individuals, when asked to produce a PDF, will just hit the 'PDF maker' button and out comes a high-fidelity PDF. What could be easier? What could be friendlier? Hit the button, out comes a PDF!

PDFs are so easy and simple to make that they can be made by anyone, at any time, for any reason.

However, what these PDFs lack is usability, functionality, and a relationship to the audience and the messages they are trying to deliver.

PDF is the delivery file format only

If the design is inappropriate, if the information architecture is poorly conceived, if the distilling process is not set for the right outcomes, then it is no wonder that many PDF documents are sent out into the world with a handicap and are then ‘picked on’ relentlessly.

The message that needs to get through is that PDF is only a content wrapper, and that it will only ever represent the design effort put into the original source document. As a content wrapper it does a wonderful job—it provides for functionality over a number of varied operating systems; it has great compression; it can wrap around a huge variety of source document formats; and it can provide a level of security not otherwise achievable in those formats. All this, plus a level of document fidelity between print and screen that has become one of the main features of the product.

But good PDFs—the ones with usability, functionality and an ability to communicate clearly—will only ever result when authors think about these things BEFORE they make the PDF file.

So let’s just revisit some publishing principles for a moment to refresh ourselves on the basics.

Publishing principles

People’s onscreen reading habits are not the same as their paper-based reading habits. Therefore different principles of design, layout and architecture should be applied to documents designed for onscreen use from those designed for print.

This is an important difference that is often overlooked in PDF publishing. As we all know, the one thing that has made Acrobat indispensable as a publishing tool is its ability to achieve absolute fidelity between paper products and their digital replicas.

An industry commentator recently wrote:

Acrobat has become the standard way to share and publish documents when complete fidelity between on-screen viewing and printed hardcopy is desired. Adobe spent years and millions of dollars establishing Acrobat as the market-leading universal document viewer, and its persistence has paid off.

So a lot of people, naturally, rely on that fidelity to kill two birds with one stone. But we often forget that we are looking at two completely different types of birds, and oftentimes our one stone is not going to achieve the same result with both of them.

It is one thing to digitise print-based documents for transmission over the digital network for printing at the other end. However, it is a completely different thing to pretend that just because these print-designed documents are now digital they can be palmed off as suitable documents to read onscreen.

Let's look at two PDF outcomes—a PDF document designed for reading on paper and a PDF document designed to be read on the screen.

Example 1: Print me - I'm a PDF!

Electronic Delivery

Acrobat 5 Makes the Pitch For Online Sharing

BY MARK WALTER AND JOHN PARSONS

Striving to attract corporate customers without alienating its longtime constituents, Adobe has introduced Acrobat 5, a new version of its venerable electronic document viewer. Accompanying the new software release is PDF 1.4, a new version of the underlying Portable Document Format specification. Though the new software sports an updated user interface and useful incremental improvements, it is probably the updates to PDF—including its metadata architecture, tagged PDF spec, and transparency model—that are most significant.

It's been two years since Adobe released Acrobat 4, and, in that time, it has managed to maintain its enviable position as a staple component of the modern computer desktop. Adobe estimates that more than 220 million copies of Acrobat Reader have been distributed—four times the number two years ago—and each month millions more get released through OEM deals and Adobe's Web site. Just as Netscape and Microsoft browsers have become the standard ways to surf the Web, so Acrobat has become the standard way to share and publish documents when complete fidelity between on-screen viewing and printed hardcopy is desired. Adobe spent years and millions of dollars establishing Acrobat as the market-leading universal document viewer, and its persistence has paid off.

For all its success with Acrobat, Adobe noticed in the late 1990s that the Web—and HTML—had muf-

and signature functions that are integral to corporate review cycles.

New features

A significant number of new features are aimed at corporate IT professionals. Tops on that list are changes to the installation software that help administrators install and maintain Acrobat on a shared network server, rather than buying separate licenses for every desktop. This centralized licensing can be accomplished through network deployment tools from vendors such as SMS and Tivoli; it allows administrators to configure specific functions for groups of users, such as where a given department will be storing their annotations. The central administration extends to maintenance as well. Updates and plug-ins can be configured to download off the Internet from Adobe's site, to download from an internal site, or to not automatical-

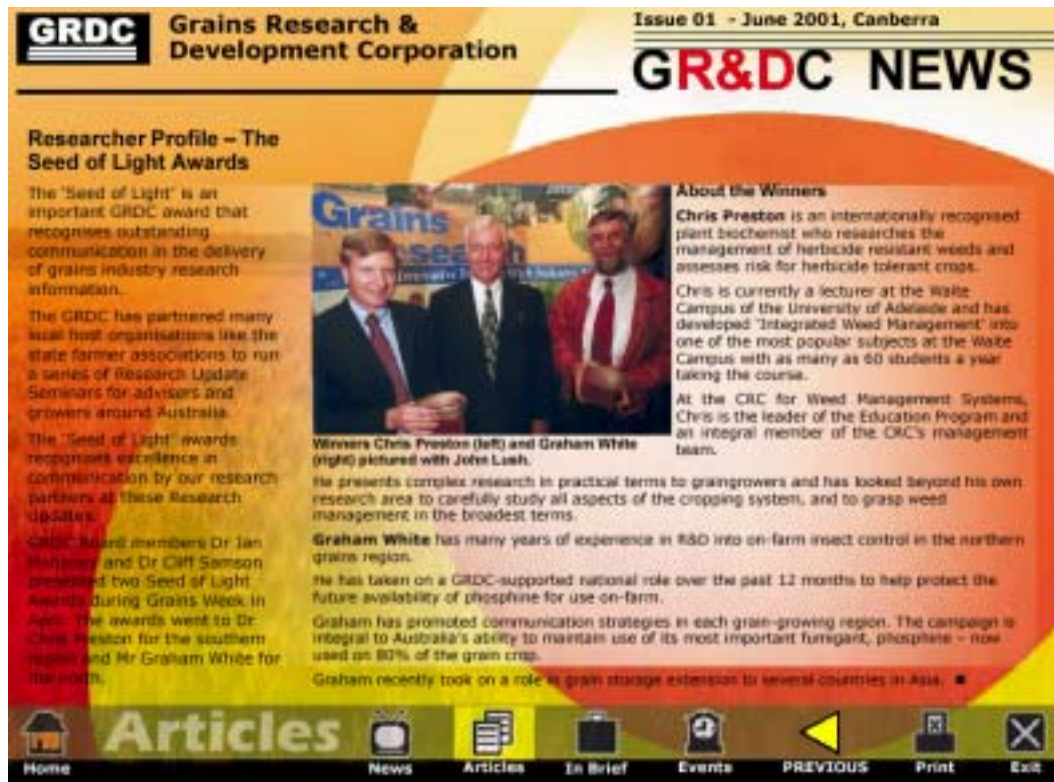
April 2, 2001 • *The Seybold Report* • *Analyzing Publishing Technologies*

This is a document designed for print, but digitised for dissemination. It does not seem to have any characteristics that tailor it to be read on the screen. We know this because it retains the hallmarks of a traditional printed document:

- *Page layout* is in the traditional double-column print model in a portrait orientation, and with a design that facilitates standard eye movements for reading print.
- *Typography* uses a traditional serif font at a size most suited for reading on paper.
- *Navigation* is by page number, which starts at page 8 and thus indicates that this is an extract of a larger printed item.
- *Architecture* is one-dimensional and linear. No obvious interactivity exists.
- *Writing and text style* are dense (an average of 100 words per paragraph; line spacing and letters per line are compact), and are not optimal for onscreen consumption.

When printed, this PDF loses none of its functionality. Conversely, as a document meant to be read onscreen, it uses none of the unique characteristics provided by the digital medium. This type of PDF should be clearly labelled 'Print me!'.

Example 2: Read me on any screen – I'm a PDF!



This document is designed to be read on the screen. It opens up in full screen mode without toolbars, which focuses readers' attention on the *content* and not on the *application*. Navigation is obvious and intuitive, and it delivers its message with clarity and speed to any computer using any operating system—exactly as the designer intended. Compressed for web delivery, this document has the hallmarks of a document created for screen use:

- *Page layout* is screen-sized, which eliminates scrolling, and facilitates whole-of-page eye scanning. A reader can see all of the page, all of the time.
- *Typography* uses a strong sans serif font at a size that renders letterforms clearly through a whole range of screen resolutions.
- *Navigation* is only by interaction and the reader can choose from a variety of navigation options (subject icons, named article options, previous and next options).
- *Architecture* is still one-dimensional but not linear.
- *Writing and text style* are designed for onscreen reading habits, featuring short paragraphs, bulleted lists and other writing techniques that facilitate screen scanning.

So if we want to create good documents for people to read onscreen, we ought to be clear about why we are making the document in PDF format and how we expect our audience to use it.

Screens aren't A4, B5, broadsheet or any of the regular print-publishing sizes

While the above is obvious to say, document creators who wish to publish in PDF for screen-based use are often caught up creating content in word processors or other applications designed for printed paper output. These applications have an interface design that is centred around making linear strings of paragraphs that only look good on sequential pieces of paper.

Any good print design guidebook will go into detail about print layouts and how they have developed over the last 600 years to facilitate reading rhythm and the left-to-right eye movements required to absorb western writing. However, these traditional conventions do not meet the emerging needs of the onscreen reading audience.

More appropriate onscreen design and layout conventions are being developed from within the internet design community. Usability of large documents in particular is becoming the focus of developments for onscreen materials. These new ideas contain elements that can be used for documents designed to be delivered in PDF format for onscreen use.

Document layout and design differ

Readers themselves are developing new habits to help them interpret onscreen design and layout, such as:

- developing an expectation that interactivity will be an element of onscreen design
- realising that icons in a design indicate interactivity as compared to graphics or illustrations and other non-textual items
- understanding that scrolling and over-granulation of text affect their ability to comprehend text.

Reading habits differ

It is now common knowledge that readers do not read large amounts of content directly from a screen. We scan material because we're good at it, we're usually in a hurry to get somewhere in cyberspace, and we know from experience that we don't always have to read every word. Good onscreen documents will assist readers to absorb content by:

- clear, concise writing
- well-structured content
- bullets, lists and other easily scanned text layouts
- typography that assists the visual recognition of letterforms and word shapes on the screen.

Document navigation differs

Our understanding of how to 'get around' content has been developing since papyrus went out of fashion and the book took its place. The 'page' and related navigation are so entrenched in our understanding of the written word that these concepts even infiltrate onscreen documents that have no need of linear paging.

Onscreen document design can assist intuitive navigation by offering consistent wayfinding tools. These can provide contextual clues to help position the reader in an information landscape, satisfying the questions 'Where am I?', 'Where am I going?' and

‘Where should I go next?’. Onscreen documents focus their navigation by assisting readers to progress through the text to places they know they want to reach.

Document usability differs

Print document designers don’t really need to usability test the traditional book model. They can fairly well guarantee that readers will understand the importance and function of elements such as a table of contents, index, page numbers, heading hierarchies and preliminary content. However, onscreen document designers cannot rely on any reader approaching their document with any form of established onscreen usability knowledge.

Usability testing, in any of its forms, is often overlooked, particularly when authors are rushing to have an existing print document converted to PDF. Readers don’t want a lesson on *how* to use a document before they can read what’s in it.

Immediacy differs

Readers have developed an expectation of immediacy with onscreen documents. They expect obvious interactivity in navigation and contextual hyperlinks, but they don’t expect to have to learn an application in order to use the content.

PDFs represent a hybrid conundrum, where publishing conventions are neither well defined nor easy to identify. We can borrow from web design guidelines. We can borrow from print conventions. It really just depends on what we are publishing, why we are publishing it, and how we expect our readers to use the information.

Some PDFs do get it right

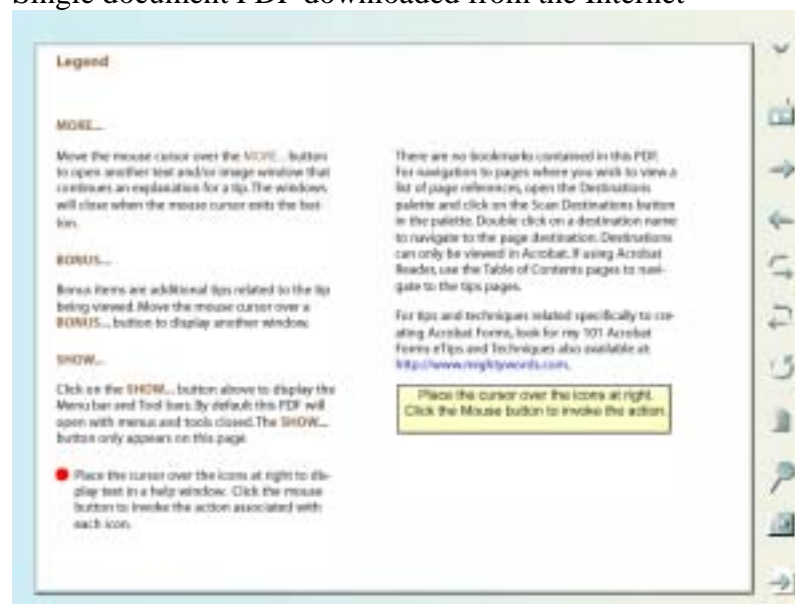
Innovative PDF publishing can be found in single documents, in libraries of documents, and in documents created solely for onscreen use. Here are some examples.

101 Acrobat 5.0 eTips and Techniques

Ted Padova

Author of the Acrobat 5.0 PDF Bible

Single document PDF downloaded from the Internet



Document Library on CD ROM
Civil Aviation Safety Authority
Virtual Library on CD ROM



**CIVIL AVIATION SAFETY AUTHORITY
AUSTRALIA**
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Elector				
Blind	Hospital	Power of Attorney		
Carer	ILL at home	Prison		
Changed address	Interpreter service	Referendum information		
Citizenship	Itinerant voter	Religious belief		
Complaint	Mental illness	Remove from Roll		
Deaf	Norfolk Island resident	Unable to sign form		
Death	Nursing home	Unsound mind		
Dementia	Overseas	Voting		
Elderly elector	Physically incapacitated	Witness		
Blind				
Assistance from Royal Blind Society	Require general postal voter			
Cannot sign form	Vote on behalf of a blind person			
Physically incapacitated				

HOME
Q&A
INFO DOCS
AEC CONTACTS
OPERATOR DOCS
FORMS
SEARCH
RESULTS

And one last observation. I recently saw this quote:

If the purpose of technology is to make our lives better, then that purpose is subverted when designers fail to pay due regard to the user and the context of use.

Until long, textual material on a screen offers greater opportunities than those already being offered by paper, it will never supersede its paper-based counterpart.