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Prepress Success in a Multichannel World

Managing content preparation for production and delivery through multiple channels

Over the life of a title, “books”—physical books or otherwise—reach readers through a variety of production channels.

Prepare your titles for these different channels by...

- Focusing on attributes valued by the reader
- Using standards neutral to the channel of production
- Owning and controlling your digital assets
- Take control of the metadata—the data that describes critical attributes of the book to be delivered



“Readers value books, not at all the processes that make them. They value both their content and the ability to access the content.” –David Collier Brown

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Value Attributes



Key Value Attributes

Key value attributes are those characteristics that will:

- provide distinction that drives reader selection
- are necessary to the reader for comprehension or function
- help make the title “discoverable,” such as branding or genre cues

For example, we need to consider—

- Is it a title, subject or author that will be specifically sought out, or is it one among many waiting to be “discovered”?
- Is it part of a set or series meant to appear together, or a unique standalone title?
- Will the images and type “read” when displayed as a thumbnail in a browser?



Focus On Key Value Attributes

Attributes important in the past may be less so in a multichannel world.

- Cover stamping, embossing, die cuts or spot varnishes aren't practical options for digitally printed books, e-books or online delivery.
- Pantone spot colors will likely be converted to process color in a digital print delivery; paper stocks and bindings may need to change.
- In a quick to market world, insisting on design specifics like “just the right shade” and “dead on alignment” can delay getting the book to market without actually lending value to the reader.
- One option to consider is putting cover/caseside spines in a separate file from the fronts and backs so the size can be more easily changed to match changes in paper bulk.



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Standards



Industry Standards Help Make Books “Channel Neutral”

- Embrace a standard for delivered PDF that ensures files are delivered “print ready,” because that’s what you’ve paid for.
- Plan for creating a text-only file to support search engine optimization, like adding “alternative text” for content in images.
- If your title is headed to web or app delivery, consider tagging the text using one of several XML conventions for easier conversion.
- Avoid instance-specific color target, like profiles or output curves. Target standard color space reproduction.
- Abandon “conventions” that are no longer useful as “standards,” such as conventional print codes or printing numbers.



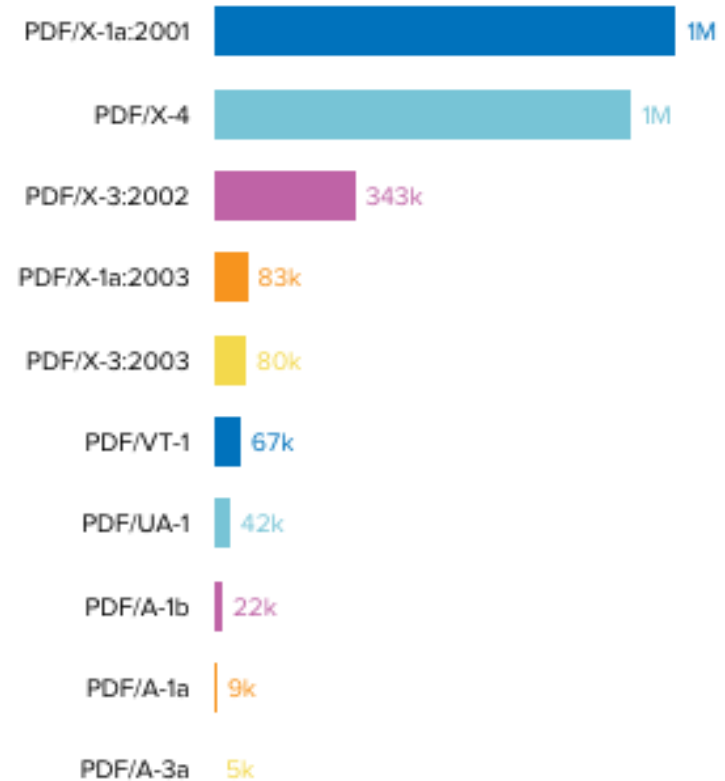
Embracing Standards—PDF/X-1a

- The PDF/X standard was designed with the specific intent of reliable “blind exchange.”
- The PDF/X-1a standard has existed for years, with widespread support in applications.
- Layers are useful for laying out content, but NOT for delivered files.
- It’s a standard (not a format) that normalizes basic file construction. issues that can be stumbling blocks.
- It does NOT specify geometry—trim boxes, bleed, etc.—as requirements.
- No support for native transparency, like in X-4? Good!



Top 10 PDF Standards, Versions

PDF Versions Processed through Enfocus Pitstop, 1 yr



Embracing Standards—PDF/X-1a

- Many good references and resources exist—see *PDF/X in a Nutshell*, available at pdfa.org or PDF specification references from the Ghent Workgroup at gwg.org.
- Many websites and vendors provide online preflighting (such as our own at lscscout.com) to help certify your files are ready to print.
- In the past, some may have recommended breaking up large PDF files—or delivering single page files—due to limited bandwidth. That's typically not an issue any longer, and disrupts the intended sequence.



Standards for Book Tagging

- Using XML tags can relay the structure of a title to software that can be used to convert it to ebook, web or app delivery
- A “schema” describes specific XML tags and how they should be used to be understood by other software.
- Numerous XML standards (XBITS, ONIX) have been established for books. They can convey a book’s structure and content, but also manufacturing specifications and ordering transactions.
- The most important thing is not necessarily whether or how XML tags are used, but that IF they are used they should be consistent with an industry standard.



Standardize Your Color Space

- Avoid the use of device- or condition-specific color profiles to manage color or to set “output intent.” These target only specific presses and papers and don’t translate easily to other presses/papers.
- Many have heard of the Idealliance G7 protocol, an ANSI/CGATS specification. It does NOT describe a target color space. Rather, it describes a way to manage color—using neutral gray values for reference—that helps ensure consistent appearance on any press that follows that same protocol.
- Overall, the principle is to manage color in a way that is NOT specific to one instance—one press, one stock, use of custom output curves or profiles—to ensure reliable reproduction in different channels.



Copyright and Print Code Data— Standard, or Tradition

- The “standard” format of the print code on a book’s copyright page looks something like this:

10 9 8 7 6 5 4 3 2 1 20 21 22 23 24

- That’s an old convention based on film reproduction—numbers would be opaqued or scratched off for each new printing.
- What it’s *really* about—what’s important in a modern manufacturing, CPSIA-aware world—is traceability to the time and place of manufacture.
- There are LOTS of ways to provide that traceability—why not PO number, or date and place of output?
- This “traditional” format is based on being read by a human—it’s not data easily updated through automation.



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Digital Asset Management



Asset Control—Be the One Authoritative Source

- Every file you send to print is actually only a copy of the original file. Retain that original file and treat it as you would any asset.
- Be sure to receive and retain the original layout file (InDesign, Quark, etc), keep it updated with EVERY new printing. Generate each new PDF for printing from that original.
- The ONLY version of the file that is actually made to be edited is your original, so keep it current (copyright and price updates, etc).
- Generating a complete new file for reprints avoids many pitfalls and preserves the integrity and sequence of the original you approved.
- Many options are available for Digital Asset Management systems, and digital storage prices have dropped exponentially over the years.



Asset Control—Storage

- Data storage is less expensive, but it's not forever. Data storage technology changes quickly data stored long term can suffer corruption
- Local data storage and cloud-based storage work well together. Keep a copy on your own local system as your working file. And when you deliver it to a channel, send a copy to cloud storage automatically.
- Putting data into cloud storage is less costly than pulling it out, so use it for writing and storing rather than pulling and distributing.

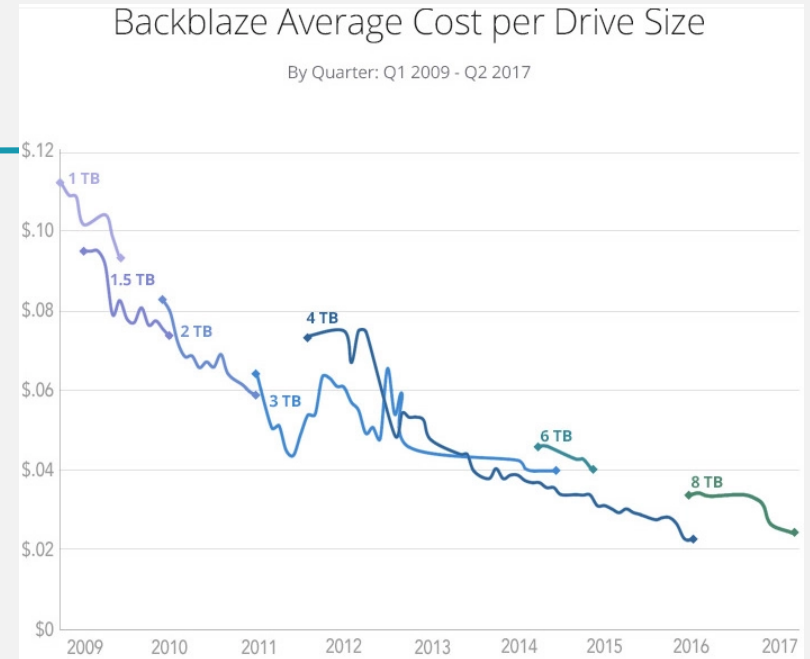


Table 1. Price History of Some Storage Services

Service	Launch date	Launch \$/GB/mo	2012 \$/GB/mo	Price Drop %/yr
Amazon S3	Mar '06	0.15	0.13	3
Rackspace	May '08	0.15	0.15	0
Azure	Nov '09	0.15	0.14	3
Google	Oct '11	0.13	0.13	0



Asset Control—Versions and Reprints

- Layers in layout files are a great way to add version content. But in the PDF delivered to print—or online—there is little gained or saved by using layers or version spot colors.
 - Only one version can print at a time, so deliver one complete PDF for each version and you know how it will actually print without the need for color mapping, selecting layers, or complex book maps and instructions.
 - Makeready savings from plate changes can still be realized on press when you specify the color separation to be changed.
- On reprints, deliver a complete, new file with all your changes in it.
 - Delivering corrections as single pages destroys the sequential integrity of the approved original. With a complete file you also eliminate the risk of reflow.
 - Delivering single pages means several output steps to generate multiple files instead of one step to produce one file. Work with your composition vendor on an efficient way to create one new file for any reprint.



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Metadata Management



Metadata Control—Data In, Automation Out

- Just in time inventory means faster turns—no room for delay or error. Automation of prepress is essential to meet this need and requires reliable, accurate metadata as inputs.
 - Metadata is the data that describes the ITEM to be delivered—size, colors, page count, stocks, etc.
 - Just as important is the other metadata that defines the ORDER itself—quantities, prices, delivery instructions, freight billing, etc.
- Even if different systems don't “talk” with each other, automation is only possible if metadata is delivered in a structured form (discrete fields) and it is RELIABLE and CONSISTENT. Control what data is put into each field and make sure it's the same throughout.



Metadata Control—Data not Text

- To be useful a data field must always contain data of the same type that does not require human understanding and interpretation.
- Text comments or instructions are the worst possible kind of data—too much room for error and machines can't interpret what they read.
- Use data entry restrictions so it's impossible to enter invalid values.
- **Example:** A customer has fields for outside cover color and inside cover color. But lack of controls allowed them to enter “4/1” in just the outside cover field. Humans can understand that as a 4-color outside and 1-color inside, but data systems see that as a date!
- It's best to transfer data from system to system without re-entry. Even cut and paste is better than rekeying data—a macro could be your best friend!



Multichannel Delivery = Fast to Market

To maximize the value of books, we want to make use of every available channel for production and delivery. We can create a “channel neutral” digital file that can be quickly and faithfully reproduced if we...

- Recognize the key value attributes we want customers to recognize
- Use standards to prepare “neutral” content ready to go
- Take ownership of our assets so we deliver exactly what we want to reproduce
- Deliver metadata for the book *and* the order that is consistent, reliable, and supports automation.



A stack of several books is shown on the right side of the image. The books have various colored spines, including red, blue, and brown. A dark blue rectangular box with a white border is overlaid on the top right corner of the stack. Inside this box, the text "look manufacturing mastered" is written in white, with "look" on the first line, "manufacturing" on the second line, and "mastered" on the third line. The background of the entire image is a soft, out-of-focus light blue and white gradient.

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Best regards,
Dirk Hiler &
Damon Lincourt,
LSC Communications