DOCUMENT OVERLOAD

Managing Paper Documents & Digital Documents Inside & Outside your organization.

Document 3.0: Smart Documents for Intelligent Business

The corporate world is aglow with semantic buzzwords like virtualization, Web 2.0 (and now 3.0) cloud computing and the like. These trending topics that will no doubt change our technological landscape, eventually. But while we wait for these overarching projections to materialize there are real changes taking place on the ground. Real changes that we need to be ready for.

One of those tactical, on-the-ground changes is how we define, treat and manage our documents. While document management might not be as flashy and exciting as trendy inventions like new iPad apps--your employees don't interact with their flashy apps all day every day. The truth is: how you treat your documents matters, and how your employees interact with them matters. Consider the following document management stats that illustrate just how essential document management and the evolution of documents is:

- 15 % of all documents are misfiled or misplaced and the average of that is $120 per document
- 30 % of documents in daily circulation contain obsolete information
- 7.5 % of all documents get lost at some point and the average cost to recreate one lost file is $220

What this information tells us is that we need to think critically about how we handle these documents that are woven into our daily lives and into the fabric of our businesses. We need to begin thinking about efficiency and productivity when it comes to documents; we need to treat our documents like our phones, and use them smarter. Creating smarter processes around document manipulation is the key to getting a competitive advantage with documents, especially now that we are entering the Document 3.0 era.

Document 3.0: The Technology

These new 'smart' documents under the Document 3.0 tidal wave will...

- Be smarter and proactive, and will intuitively perform tasks for us.
- Enable improved search functions and content mining.
- Seek information and create information maps with multimedia content and hyperlinks.
- Be cloud-based.
- Be free from the confines of proprietary application-based constructs.
- Merge paper- and electronic-based documents.
- Liberate documents from storage via easily-accessed indexing.
- Allow for re-purposing, importation and integration into new and up-to-date documents.
- Empower users with the freedom to create documents from non-linear information gathering methods.
- Create virtual paths through multiple linked documents.
- Facilitate true, real-time collaboration.
- The new kind of document technology currently being released, and still in development, is fueling the Document 3.0 revolution. These dynamic and evolving documents will bring speed, automation and efficiency to organizations—but more importantly will bring true collaboration, freedom of expression and intelligence. They will be powerful, and highly effective.

The Evolution of Document 1.0: From Caveman to Computerman

Document creation began with the first written recordings of the human language, on cave walls. But we've come a long way from Paleolithic cave paintings. We are no longer forced to etch static ideas into a specific, and permanent, medium.

- It took a long time to get past time-consuming stone carvings but eventually we were bestowed with paper from China's Han dynasty. It's now 2,000 years later and the majority of our documents are still recorded on paper. While the medium has held up, and improved over time, it is inherently flawed in that: it's a physical format, is both flat and static, creates permanent content and offers in-person viewing only.

Document 2.0: The Electronic Evolution

It's plain to see that paper-document use was archaic and was in desperate need of an overhaul. Enter digital document creation and storage. With the invention and proliferation of the computer we saw the digital document revolution, or Document 2.0—which served as the biggest leap forward in two millennia. It brought us malleable, editable documents that, thanks to the internet, could be shared over long distances. Well done computer, well done.

These new digital documents could be easily revised, searched, stored and shared. They could be easily replicated thanks to sophisticated design and layout features, and even began automating processes thanks to auto-formatting and form-filling capabilities. These new, dynamic documents used bold new technology like hyperlinks, XML-based formats and metadata to transcend former limitations. Manual processes were replaced by digital workflows. Information flowed and productivity increased while environmental impact was reduced.

But, just looking at your cellphone will show you how far computers have come, and our documents are undergoing a parallel transformation. Enter Document 3.0.

Document 3.0: The Smart Document

Despite being surrounded by smart devices, from our cellphones to our cars, we are still smack dab in the middle of the 2.0 era of documentation. But with the emerging technologies in the docu-arena it is the time to begin thinking critically about where our documents will take us, and what these next-gen documents will embody.

There are a number of reasons to get excited about this impending transformation: your users will have easier, finger-tip access to information via cloud-based documents, your users will be challenged and creatively encouraged through boundary-less, non-proprietary applications and documents, multi-author collaborations and exciting new document types.

New technologies and advancements will also lead to increased across-the-board standardization as we switch from proprietary, application-based formats to open standards, like Extensible Mark-up Language (XML). These developments are bringing structure to the unstructured and are automating the manual. These documents' new file formats will revolutionize documents across a variety of industries, including HR-XML technology in Human Resources and XBRL technology for financial services.

Another giant leap forward in terms of next-gen documents will be the remarkable gains in content mining. Consider this, every year the world creates 800MB of data per person. That's a lot of content. So much content is being added to the world's cache in fact that IDC estimates that more than 2,400 exabytes of data will be added to the cloud this year alone. Content mining therefore holds paramount significance within the corporation, as users strive for conclusive knowledge through information gathering. In the Document 3.0 era data search, retrieval and content mining will be exceptionally powerful thanks to tools like Factspotter™ and Hybrid Categorization.

Factspotter™ is a new natural language processing technology from the Xerox Innovation Group designed to assist computers understand our complex languages. Thanks to Factspotter™ we will turn our unstructured data into coded data, mine-able data in digital databases. Technology like this will have far-reaching impacts throughout the litigation, medical research, risk management industries and in other dynamic fields.

The Hybrid Categorizer is another cutting-edge Xerox

document-driven invention. It uses visual and textual clues to automate the sorting and routing of documents while extracting pivotal information. The ability to super sort the massive streams of data corporations are expecting to be flooded with, will almost single-handedly help corporations stave off Information Overload.

Technologies like Factspotter™ and the Hybrid Categorizer use logic and natural language-processing abilities that will smoothly transition us from unstructured documents to structured, mine-able data columns. And while they are the future, they are also just the tip of the document iceberg.

The Progress of Paper

Digital documents aren't the only ones to get an overhaul as of late. The document revolution has left no stone unturned because even paper documents have gotten upgrades. Consider the changing role of paper in corporate settings when a Optical Character Recognition (OCR) glyph or bar code is added—it brings paper into digital workflows.

OCR technology is about to get another update with Document 3.0 as OCR documents upgrade to Radio Frequency ID (RFID) tags, tags that will change the world of document tracking. This new technology may soon include advanced tracking elements like alarm-based physical tracking for corporations needing to carefully contain proprietary information. Other paper document advancements could include printing micro-batteries, circuitry and antennas onto the paper, resulting in intelligent, self-powered devices with remote sensing and communications ability; the new iPaper if you will.

There are applications beyond high-tech business intelligence, like Xerox's reusable paper. Xerox found that up to 40 % of printed documents had less than a 24-hour life cycle before hitting the recycle bin, so they created reusable paper that can be erased and reprinted on—helping both the environment and corporations' bottom lines. These surprising paper-based innovations will ensure that paper documents remain a critical part of Document 3.0—because let's face it, very few of us have gone paperless despite our noblest of intentions.

Digital Documents: Proactive, Intuitive and Working for YOU

The dynamic new documents in the 3.0 revolution are no longer reactive instruments of work, they are proactive tools for success. These new intuitive documents take their cue from you then work quasi-independently to get the job done.

Their 'intuitivity' comes from learning our viewing preferences and from their ability to present visually-appealing info that

works across today's variety of platforms and devices. Their ability to automatically search for, and update, content means Document 3.0 documents will remain evergreen and relevant. The applications of these new documents will be customizable across the enterprise, with department-relevant tasks like database, internet and social network searching for marketing and customer communication insights.

From a higher perspective the new Document 3.0 software driving these documents also offers high-level perspectives on work being done and forces employee accountability thanks to their comprehensive audit trails. Audit trails also makes collaboration easier and empowers employees to track their progress.

And the icing on the cake? They will automate the time-consuming document manipulations that turn employees into zombie-like button pushers—freeing them up for more dynamic work.

Real-World Applications for Space-Age Documents

Unlike many flashy technological innovations, the advancement of Document 3.0 is driven by real-world worker needs and aspirations for productivity gains. They are practical solutions for current departmental pains. Take mailrooms for example, their reputation stands on their efficiency, and by leveraging 3.0 Documents their filing, sorting and routing capabilities go through the roof, as does the ability for users to track document passage through the department. Another example would be Accounts Payable, who could leverage these emerging technologies to finally move over paper-based processes to paperless smart documents, all the while improving inter-department communication and vendor loyalty.

Aside from departmental productivity gains, specific industries will also benefit greatly from these new documents. Most notably is the medical profession, who have been itching to make the move to electronic records for some time. Just imagine the impact of e-documents with an auditable trail that can be easily passed, tracked and shared throughout the various practitioners, specialists, hospitals and other facets of the healthcare industry.

The legal profession is also be anxiously anticipating the arrival of 3.0 documents as their management process of legal records has always been a thorn in their side, being difficult to manage whilst never being able to access the records fast enough—not to mention the litigation and regulatory approvals that are needed. The new 3.0 documents will save millions in management costs while reducing the risk of noncompliance and will simultaneously create finger-tip availability and quick searching abilities.

The 3.0 Future

Documents are quickly evolving and so are our needs. The new role for documents in our virtualized, cloud-based economies will automate archaic processes, become proactive, be searchable like Google, they'll be auditable, and more. They'll touch every department on a daily basis and become indispensable in our lives. 15 years down the road we will look back and wonder how we ever functioned without them.

Documents 3.0 will help us build our corporate strategies, track progress, keep records, sell products, keep us up to date and record transactions. But most importantly they will turn raw data into business intelligence. A true digital document renaissance.

As they grow, expand and learn they will perform all their standard duties and handfuls more—but they'll do it at light speed, with agility, while transcending barriers.