Emerging business value of OpenDocument format v1.0.

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**Emerging business value of
OpenDocument format v1.0.**
Page 2

Contents

The value of OpenDocument format, a critical open standard

In this current era of the Internet and globalization, organizations of all kinds must have the ability to freely share information, internally and with other organizations in order to be responsive, productive and innovative. Information technology relies on open standards used across these global ecosystems to provide the required level of data interoperability and collaboration. The Internet relies on open standards for managing Internet addresses (Domain Name Server [DNS]) and for sending and receiving data (TCP/IP). Indeed the World Wide Web would not exist without open-standards innovation centered on HyperText Transfer Protocol (HTTP) and Hypertext Markup Language (HTML), which serve as the primary method used to convey information to browsers across the Internet. The Internet and World Wide Web have both unequivocally proven how open standards create innovation and economic value.

One emerging area of standardization to facilitate interoperability and collaboration is the format for document editing, interchange, storage and retrieval. For instance, in government and education, where vast stores of information are kept as public records or research documents, document access and sharing is a top planning priority. In an environment where a single word processing application is widely used, organizations have largely defaulted to storing their documents in proprietary file formats. A weakness of this approach is that if a user were to employ an application that does not use the same file format, then that user would not be able to efficiently collaborate and exchange data with colleagues. In situations where different proprietary formats are used, the search, retrieval and reuse of vital business information stored in documents can become difficult if not impossible.

**Emerging business value of
OpenDocument format v1.0.**
Page 3

An alternative to proprietary document formats arrived when OASIS (Organization for the Advancement of Structured Information Standards) ratified the Open Document Format Specification for Office Applications (OpenDocument) v.1 in May 2005. Vendors are now adopting this open file format standard to move beyond proprietary formats in order to ensure document openness and interoperability for their customers and to accelerate innovation in new forms of collaboration.

The XML-based structure of OpenDocument format, shown in the upper screen grab, demonstrates the openness and readability of the content in comparison to the same file in a proprietary format, shown in the lower screen grab. The OpenDocument format can be easily searched and repurposed given the clear nature of XML. In contrast, as shown in the lower screen grab, proprietary, binary file formats can only be used by the application that created it.

Emerging business value of
OpenDocument format v1.0.
Page 4

The OpenDocument specification has many potential benefits:

- *Efficient interchange of information between various parts of an organization and between organizations*
- *Greater choice and control over the search and reuse of documents and the intellectual property contained within them*
- *Forward and backward compatibility and document data protection in perpetuity for end users*
- *Helping to create new, more competitive and creative organizational productivity and creativity tools*

OASIS and the OpenDocument standard

OASIS is a not-for-profit, global consortium that drives the development, convergence and adoption of e-business standards. Founded in 1993, OASIS has more than 5,000 participants representing over 600 organizations and individual members in 100 countries, and has produced several Web services, security and e-business standards. Among the vendors represented on the current board of directors are IBM, Sun Microsystems, Nokia, Oracle, SAP, BEA and Microsoft®. In 2002, OASIS established a technical committee to create an open, XML-based file format specification for office applications.

In 2005, the result of this work, Open Document Format for Office Applications v1.0, was approved by the OpenDocument Technical Committee as an OASIS Standard and submitted to ISO, the International Organization for Standardization, for approval. Multivendor stewardship will help ensure that the specification continues to evolve according to industry needs.

Software vendor response to OpenDocument

Several software vendors of personal productivity applications (word processing, spreadsheet and presentation software) participated in the OASIS technical committee and have already agreed to support the OpenDocument specification in their products. For example, native support for OpenDocument

is included in the new features of the open source office application suites OpenOffice, AbiWord and Writely. Proprietary solutions from software vendors, such as Sun and IBM, supporting OpenDocument format are now available.

At the time of this writing, Microsoft has no announced plans to support the OpenDocument file format in any of its planned releases.

Office applications that support the specification should and will allow users to employ the OpenDocument file format as the default "save" format for documents. Saving a document in this format means the document will not be encumbered by proprietary extensions and will be enabled to be edited easily and managed by other applications that conform to this specification. This ensures that the end user and others, with whom he or she might share the document, do not become trapped into using a proprietary solution supported by a single vendor. The clear text style of the format also allows for easy search, retrieval and use in new emerging forms of information management and collaboration.
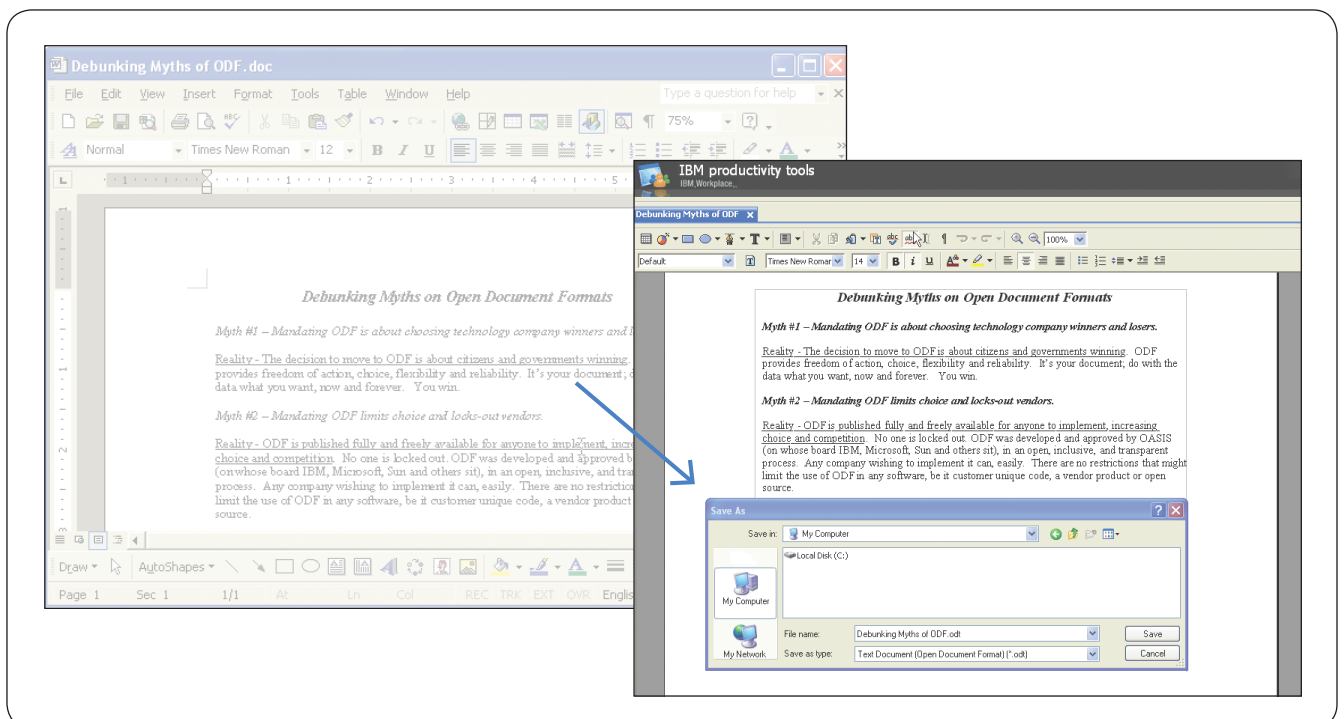
Using OpenDocument format (.od*), end users can choose the office application they prefer. Some OpenDocument format compliant applications, such as the IBM Productivity Editors, allow end users to open proprietary documents and easily convert them to the OpenDocument open-standards format.

Emerging business value of
OpenDocument format v1.0.
Page 6

Business challenges addressed by OpenDocument

The use of a single proprietary file format can create several serious problems for individuals, public institutions, government agencies and businesses.

Failure to facilitate collaboration and the exchange of critical information among communities

OpenDocument ensures information can flow within an organization and among organizations, while preserving freedom of choice in software purchases.

Recent efforts by state and national governments to provide easy access for the public to critical documents and formats have brought attention to the limitations of using a single, proprietary document format. OpenDocument helps enable easy access and reuse of information and services that are based on open standards, and at a lower cost than exists today. It also helps enable the platform-independent exchange of structured information between different applications, agencies and business partners, thereby eliminating stovepipes of information. With new history being made every day, in a climate of exponentially increasing document production, many government agencies understand the immediate benefits of changing their IT policy to support OpenDocument format. Through the adoption of open standards such as OpenDocument, government agencies can more easily encourage the development of creative services and solutions by their ecosystems of business partners.

**Emerging business value of
OpenDocument format v1.0.**
Page 7

Failure to provide free access to information and guarantee long-term retrieval
OpenDocument provides freedom of choice and reliability in the storage of
critical data and intellectual property in office documents.

By providing an alternative to proprietary technologies, OpenDocument
allows end users to embrace an open-standards approach to managing vital
documents. It helps assure that end users, such as governments and their
citizens, are able to access and share information now and for generations to
come without having to continue to pay unnecessary licensing fees to view or
edit information stored in proprietary formats. Organizations or individuals
can deploy any word processing application, thereby giving them greater con-
trol of their documents by decoupling file formats from the applications used
to create them, especially proprietary formats with accompanying limitations
and restrictions.

OpenDocument promotes long-term information retrieval by entrusting the
format to an independent standards body that operates as a community. This is
in contrast to a history of single vendor control, wherein backward file format
compatibility has not been guaranteed. Adoption of OpenDocument avoids
reliance on the life span of a piece of software to maintain access to vital
information. Unfortunately, experience has shown the life span of a software
application to be only a small fraction of the life span of critical documents,
such as birth or financial records.

Emerging business value of
**OpenDocument format v1.0.**
Page 8

Lack of competition among vendors can cause stagnation or even restrict innovation, and can make desktops more expensive

OpenDocument is the only open file format alternative that increases choice and promotes software vendor innovation.

Fully documented and freely available without restrictions for anyone to implement, the OpenDocument format supports increased competition. Developed and approved by OASIS in an open, inclusive and transparent process, OpenDocument has no restrictions on its use in any software, be it customer unique code, a vendor product or open source. Having several vendors embrace OpenDocument as a file format for their office applications provides freedom of choice for information technology purchasers by giving them the ability to choose among competing vendors' applications without becoming locked in to any one of them for long periods of time.

OpenDocument will spur innovation and creativity for the technology industry as a whole, since energy will be directed toward making better products based on the merits of the software rather than maintenance of a format control point that precludes multiple implementations from multiple vendors. The open, collaborative process for OpenDocument management helps ensure it will keep pace with change. The economics of a community-driven, open and freely available specification mean that any number of commercial and noncommercial entities can bring truly innovative functions to the market and can realistically pursue new and creative market opportunities. As innovation occurs and technology develops, OpenDocument can evolve accordingly. This is a great example of positive feedback between software and the standards supporting it.

It is likely that migration to an OpenDocument format-based product will be, in the long run, substantially less costly than alternatives, as purchasers will have many more cost-competitive offerings available to them and greater freedom of action in the use of their technology.

Emerging business value of
OpenDocument format v1.0.
Page 9
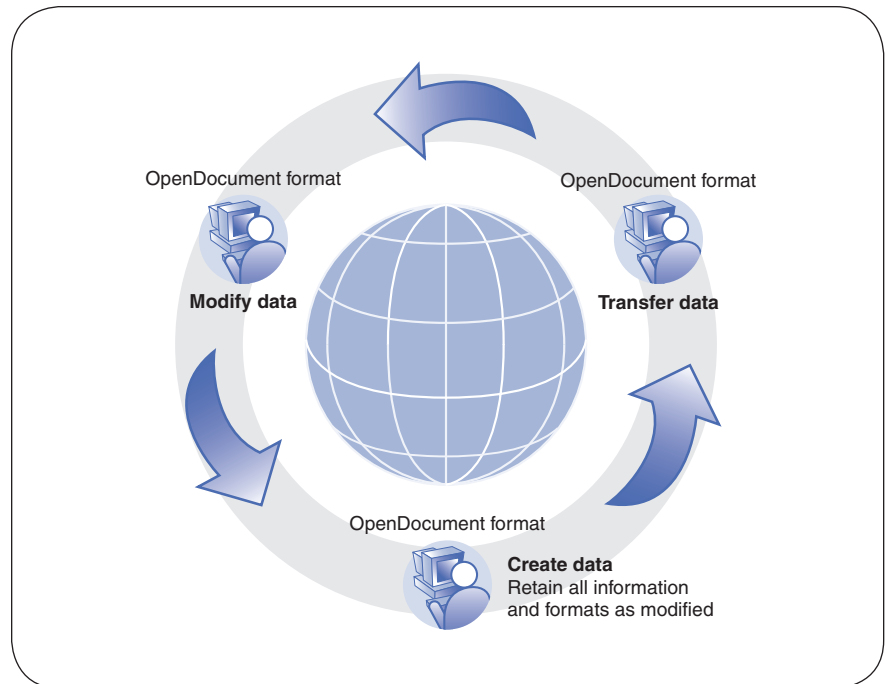
Use case scenarios

Government agencies around the world are adopting an open-standards strategy to ensure interoperability and flexibility, and to lower costs. These organizations are not mandating any specific software. They are mandating that the software they purchase must be based on critical open standards, such as OpenDocument. Since documents and the data embedded within them are the lifeblood of organizations, governments and their interactions with their citizens, standardization on OpenDocument helps to return control to the customer, instead of keeping it with a single vendor.

Emerging business value of
OpenDocument format v1.0.
Page 10

Commonwealth of Massachusetts

Massachusetts recently became the first state in the United States to mandate the use of open-standards-compliant office application software. Its Enterprise Technical Reference Model states that by January 1, 2007, executive agencies must use open-standards-compliant software for all documents they create or save. The state has identified OpenDocument file format as meeting this criteria today and is considering moving to applications that support the standard. Massachusetts agencies alone have more than 80,000 desktop clients that are moving to an open client strategy.

City of Mannheim, Germany

In a move toward a more open and flexible IT strategy, the City of Mannheim will be migrating to software, both open source and proprietary, that supports open standards. This long term plan has begun with the migration of server software and is planned to continue with migration of 3,500 desktops to open-standards-based applications. The desktop migration to OpenOffice is driven by the desire to use the OpenDocument format.

Singapore Ministry of Defense

In October 2005, Singapore Ministry of Defense decided to transition 20,000 desktops from proprietary software to an open-standards-based solution, to eliminate necessary software upgrade costs and to improve security.

Endorsements and adoption, worldwide

OpenDocument has been endorsed by the European Commission. France's Ministry of Finance and its Ministry of Economy, Finance and Industry; Brazil's Ministry of Health; the United Kingdom's Bristol City Council; and the City of Vienna in Austria are all adopting applications that support OpenDocument.

Summary

The momentum around the adoption of the OpenDocument format for office applications is building rapidly, and new business value is coming to light every day. Government agencies are leading the charge in their efforts to protect their vital information in perpetuity, to retain flexibility in vendor selection, and to keep the costs of doing business down by leveraging the OpenDocument format. Businesses worldwide faced with challenges, such as managing extensive supply chains, are also seeing benefits from adopting an OpenDocument strategy. Documents of all types must be searched and exchanged daily, and proprietary formats can stand in the way of that critical interoperability and collaboration. In addition, business owners and governments using solutions with proprietary file formats will face mounting costs of software upgrades without options for changing vendors. By using OpenDocument as the standard file format, organizations will be able to focus on driving process efficiencies and innovation while realizing cost savings.

For more information

For more fast-breaking news and thought leadership concerning the OpenDocument specification and related topics, refer to the following articles, Web sites and blogs.

Stephen O'Grady, Red Monk
redmonk.com/sogrady/archives/001082.html

Robert Sutor, IBM
ibm.com/developerworks/blogs/dw_blog.jspa?blog=384

Andrew Updegrove, ConsortiumInfo.org
consortiuminfo.org/newsblog/

Groklaw's resource page for OpenDocument format
groklaw.net/staticpages/index.php?page=20051216153153504

OpenDocument reference site
spreadopendocument.org

OASIS Web site
oasis-open.org

"Open Document Format for Office Applications (OpenDocument) v1.0,
OASIS Standard." 1 May 2005
**oasis-open.org/committees/download.php/12572/
OpenDocument-v1.0-os.pdf**

OpenDocument Fellowship Web site
opendocumentfellowship.org/Main/HomePage

"OpenDocument Format Gathers Steam"
news.com.com/2100-7344_3-5942913.html?tag=st.prev

"Debunking Myths on Open Document Formats (ODF)"
ibm.com/developerworks/blogs/dw_blog_comments.jspa?blog=
384&entry=98231

"Roadmap for Open ICT Ecosystems"
cyber.law.harvard.edu/epolicy/