

chairman's message

The Criticality of Interoperability

Dear Friends

In the always-on, always connected new world of work, IT infrastructure within organizations is becoming more heterogenous and complex. With innovation and a spurt of new technologies, this heterogeneity will only increase. It is therefore important that the industry appreciates demands of users for greater interoperability, as interoperability has become as important as security and reliability.

Microsoft outlined its vision for interoperability way back in February 2005, when Bill Gates wrote to customers about the company's intent to develop software that was interoperable "by design." Microsoft began working on this goal, based on a broad commitment to the Extensible Markup Language (XML). Since then, the company has announced more than 30 interoperability deliverables that include the movement of dozens of specifications to the Open Specification Promise (OSP) and landmark technology interoperability projects such as the Linux and Windows virtualization.

The aim has been to address interoperability holistically and at numerous levels in order to better connect people, data and diverse systems. Therefore, while at the one end the company has been

building interoperability into its products and technologies, at the other, it has been working closely with customers, partners and IT organizations to build bridges between technologies.

We have also been participating in standards bodies and supporting standards in products to foster interoperability. Our initiatives around Open XML—where we submitted it to Ecma International, which has in turn presented it to ISO for ratification—further underline our commitment to standards, interoperability and enhancing choices for customers.

Clearly, the issue of standards is not new. Standards have predated the IT industry and even within the IT industry, as would be expected, the approach to standards has evolved continuously.

Interestingly, users, the main beneficiaries of this trend, truly support the idea of multiple standards. And why not? While one standard offers better functionality in one area, a second may provide improved capabilities in another part of the usage spectrum.

Customers like the idea of selecting a technology that works best for them in a particular scenario and want heterogeneous environments to work together seamlessly.

Microsoft's interoperability investments have provided significant benefits to customers and the industry, but we believe that more can be done. As we reiterate our commitment to interoperability in the years ahead, our focus will be on helping users get the most from our products in a heterogeneous software environment.

Ravi Venkatesan

Chairman, Microsoft India



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—Professor Ashok Jhunjunwala,
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A Matter of Choice

In order to leverage the new technologies becoming available to them, and exercise the power of choice, customers are looking for solutions that provide seamless and smooth interoperability by adhering to global standards. Multiple standards exist today that deal with different functionalities and different user requirements.

Vijay Kapur, National Technology Officer, Microsoft India, talks about the importance of interoperability and dispels a few myths related to the issue of standardization.

Interoperability Matters

Today's world is getting defined by mobile devices, more powerful processing, increasing storage and faster bandwidth, which are transforming everything from healthcare to entertainment, education, global trade and much more. Customers want to be able to take advantage of the new business scenarios and new opportunities that these innovations are enabling and have more choice when it comes to technology solutions. In fact, to achieve the promise of the Internet era, interoperability is an absolute essential.

Interoperability between products from different vendors is required to reduce complexity for customers and allow them to focus on creating strategic advantage rather than solving the issues that arise when information technology systems don't work together well. They can share data between disparate data sources and multiple applications. They can preserve their investments in existing systems through easy data interoperability, while accessing additional functionality and cost effectiveness that new technologies provide.

Interoperability by Design

Microsoft's approach to interoperability helps customers focus on the issues most important to their business and operational needs such as increasing productivity, improving business processes, connecting with customers, collaborating with other organizations, and reducing costs. Microsoft delivers interoperability by building it directly into its products, engaging with the

broader IT community, providing access to its technologies, and supporting technology standards.

- **Products:** Microsoft® products are engineered to be easy-to-use and broadly interoperable with other applications and technology platforms right out of the box.
- **Community:** Microsoft works with customers, partners, and competitors to develop technologies that meet shared interoperability needs and promote the development of the IT industry as a whole.
- **Access:** Microsoft enables others to build compelling technologies and commercial success by providing companies access to Microsoft protocols, data formats and technology assets so that they can develop tools and bridges in order to translate between them.
- **Standards:** Microsoft actively engages with standards-setting organizations and supports thousands of technical and industry standards that encourage interoperability between Microsoft and non-Microsoft technologies.

Interoperability and Standards: The Inextricable Link

Microsoft's "Interoperable by Design" initiative shows that Interoperability can only be dealt with effectively by using a multi-pronged approach, in order to appreciate the relevance of standards to interoperability, it is worthwhile examining the existing domain of documents.

After all, what is it that is allowing

people to seamlessly exchange documents created

by one application with a different application? It is standards.

How are users preventing their documents from being locked into a single product or vendor? It's standards yet again.

What is allowing customers to do all of this and still have the capability to deal with the breadth of usage scenarios that exist today and may emerge in the future? Standards!

Clearly, today's users of state-of-the-art technologies need choices and nowhere has this become more apparent than in the "new world of documents," where multiplicity of standards is the need of the hour and an imperative for power users.

The document world is also in the midst of a major debate, concerning two key standards and their reasons to co-exist. While at the one end, there is ODF, backed by IBM, Red Hat, Sun and the open source community, on the other side is Microsoft developed Open XML, which has been garnering the mindshare and support of the IT industry, the Government and academia over the recent months.

While ODF 1.0 has been accepted as a standard by global standards body, ISO, Microsoft, based on feedback from its customers, has produced the specifications for Open XML by working with industry, government bodies, and customers at Ecma. After 12-months of intensive work, Open XML was ratified by Ecma as an Open Standard (Ecma 376) and submitted to ISO for ratification as an ISO standard. The process of ratification of Open XML

is currently underway at ISO, and it is expected to become an ISO standard by March-April, 2008. Associated with the standardization of Open XML is a debate that is raising questions about whether the market needs more than one standard and whether customers are better off when they have a multiplicity of choices.

Multiplicity of Standards: Meeting Different Customer Needs

The feeling among analysts and industry watchers is that multiple formats and standards have coexisted in the past and should continue to coexist so that users can choose what best meets their needs. The creation of XML-based document formats continues this evolution. Users should expect the creation of new formats in the future as technology evolves, and, as has always been the case, and they should be able to choose the formats that work best for them. Microsoft's investment in the Open XML document formats and its open approach toward embracing interoperability with other formats will benefit the entire IT industry and the users.

The fact of the matter is that different standards have different merits and functionality, which is why they need to coexist.

Some have questioned whether ISO should ratify Open XML now that ODF 1.0 has been accredited there. It is important to appreciate that Open XML and ODF are fundamentally different formats that meet different needs in the marketplace, and the standardization and use of one does not preclude the standardization and use of the other. While there may be some overlap, Open XML brings vastly greater capabilities to the market that enables exciting new productivity scenarios.

In order to truly understand the importance of

standardization and the need for multiple options for users, one must explore some of the myths that are currently doing the rounds of the industry.

MYTH 1: Standardization is not important in the document world.

Clearly, this issue is not open to debate. One can only look back at the times when binary formats were in use by vendors, which were closed. The specifications were not available. If anyone wanted to implement them, support was not available. They had to undertake reverse engineering. Customers, from both the industry and Government were concerned about what would happen to their data—and whether they would have access to it sometime in the future, when the technology evolved.

MYTH 2: Vendor lock-in is an outcome of standardization.

On the contrary, the reverse is true. When a single vendor, or body of vendors submit the formats developed by them to a standards body for ratification, and when this format does indeed become a standard, it moves out of the control of the vendor/vendors. Users can implement the specifications in a proprietary product or an open source product. There is no vendor lock it. In fact, the standards body becomes the custodian of the specification and responsible for the maintenance and future of that specification. Customers no longer need to be dependent on any one vendor or be locked into its products. This is what is happening with the pdf format for instance, that Adobe has submitted to ISO for standardization.

MYTH 3: We need only one standard.

This is a myth that is currently being perpetuated in the market to prevent the reality of multiple standards in the documents space. The fact is that prior to the emergence of either ODF or Open

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XML, a number of document formats already existed as ISO standards such as the Open Document Architecture, DSSSL, etc. Had this indeed been the case, anything emerging subsequently should not have become a standard. The ISO is not a body that is exclusive in nature. It believes if there is a market requirement, however niche that market may be, and if that market needs a standard, it must have it.

MYTH 4: One standard fits all!

This is sheer fallacy!. The fact is that document functionality has been evolving over the years. Today, you have "intelligent" documents that can connect to databases. If you are creating an invoice in your word processor, it will be able to pick up data from a back-end database. In such a situation where



document functionality spans an entire continuum rather than a point, you may have a document standard, which is very good at one end of the spectrum, but may not be able to provide functionality at the other end. At the same time, there may be a standard at the other end of the spectrum, which may be very good. These standards may overlap, but their functionalities and capabilities would be vastly different. As technology evolves, new ways of working with documents will emerge and enter the standardization stream. They too will become standards, because they will provide better, more capable solutions.

MYTH 5: Multiple standards cannot exist.

As a matter of fact, multiple co-existing standards are not unusual in the IT industry. Take the instance of digital image formats, such as JPEG, PNG, TIFF and CGM, each of which is an ISO

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DEFINING INTEROPERABILITY

The Microsoft Perspective

Interoperability, according to Microsoft is about connecting people, data, and diverse systems. Microsoft is investing in interoperability so customers can get the most from existing IT infrastructures as well as next-generation technologies. To achieve this vision, Microsoft defines interoperability to include various technical, semantic, and operational considerations.

- **Connecting people describes the workflows and collaboration that occur within and between organizations at the “people” level—the social aspect of work.**
- **Connecting data addresses the need to access different data sources, optimize information flows, and integrate structured data (e.g., databases) and unstructured data (e.g., files).**
- **Connecting diverse systems includes technical and operational processes within and between organizations and ranges from simple connectivity between internal systems to industry frameworks that facilitate value-chain workflows.**

standard, and meets different needs in the marketplace.

E-mail is another example. There are formats such as X.400, SMTP, POP3, IMAP, which people use without thinking. Customers, in fact, are freely implementing the standard they want, based on their requirements and how well it meets their needs. It is not unlike people choosing a particular mode of transportation, when they want to travel from one place to another. While someone may drive, another may fly and yet another take a train. Though all three are different ways to travel, they are fundamentally different and serve different communities. It is important for different standards to coexist, because they all serve fundamentally different user needs.

MYTH 6: No interoperability when there are multiple standards.

It is certainly not true that multiple standards and interoperability don't mix especially in the IT domain and in the area of software, specifically. An important distinction that has been lacking in the standards discussion to date is the fact that IT, and more specifically software, is fundamentally different from physical systems—railroads, nuts and bolts, or even spectrum—due to its malleability and because it can be

readily “translated.” In software, it is generally possible to translate between systems and even generations at a very low cost.

Look at the situation with document formats today. There already exists an open source project to create a translator between ODF and Open XML that will be available to anyone wanting to translate documents from one file format to another. The work being done by the Fraunhofer FOKUS eGovernment Lab in Germany in association with the German Standards Body DIN to create the technical guidance for translation between document formats, is another example. E-mail can be seamlessly translated between the various formats that exist and so have graphics, music, video, etc.

It must be said therefore that there is really no battle regarding standards—nothing that says only one can exist. Rather, it is about offering customers the maximum choice, so that they can harness the strengths, capabilities and functionality of the standard or standards that best meet their needs to fulfil their requirements and achieve their business goals. The end goal is interoperability, which allows multiple technologies to coexist and enables customers to leverage these immense options.

Portrait of an Evolving, Interoperable Document File Format

The past decade has seen an important shift in the way people and organizations work with documents. Documents are no longer merely simple text but are evolving into “intelligent” documents that can include transactional data, connect to databases and allow automated document assembly, etc. As the concepts of “document management” and “data exchange” evolve, document formats are evolving to support these exciting new productivity scenarios.

In the past, “binary” file formats (such as .doc) offered rich features but there was a trade off in terms of data interoperability with other programs. The advent of XML marked a significant evolution in the area of document processing. With XML, data within one file can be easily accessed, greatly facilitating interoperability and reuse in a variety of ways. Today, it is rapidly becoming the industry standard for sophisticated document management and data exchange.

Microsoft first leveraged XML in 1999 with Office 2000, and dramatically increased this capability with Office 2003 in 2002. In light of the increased usage, governments wanted these formats to be made open standards. In 2004, The EU issued a set of recommendations that specifically requested Microsoft to consider submitting its new XML-based formats to a standards body of its choice!

The aim was to help consumers, governments and businesses more effectively unleash the power of the billions of business productivity documents created using Microsoft Office over the years—many of which

were in the process of being archived and converted to more open, accessible and manageable - XML based document formats.

This was also in line with Microsoft’s vision to make it easy to create, access and share data between different systems on the network. The vision was developed in response to the fact that

MICROSOFT SPEAK

“The Open XML-DAISY XML translator builds on Microsoft’s long-standing commitment to promoting information access for users with disabilities. For users, the ability to ‘Save as DAISY’ in Microsoft Office Word represents an important validation of disabled users’ needs and sends a powerful message to society at large.”

—SANJAY MANCHANDA,
*Director, Business
Division, Microsoft India*

companies were often forced to adopt inefficient and duplicative business processes because business-critical information frequently ended up locked inside data storage systems, such as databases that employees didn’t know how to access, or business-productivity documents, such as a long-forgotten spreadsheet stored on an employee’s PC. Microsoft wanted documents to be represented using a standardized, stable and open format so that the owners of the content could use and repurpose it in whatever way they wanted, independent of the software they used to create it.

In 2005, Microsoft joined numerous organizations to submit Open XML to the well-known international standards body Ecma International, that has been creating open standards for over 40 years and that works very closely with ISO.

At Ecma a technical committee was formed, comprising, amongst others, IT companies like Apple, Intel, and Novell, government institutions that had a strong interest in document archival such as the British Library, and the US Library of Congress, and “power” users of documents like BP and Barclays Capital. The aim was to define an XML format that would support the sophisticated present and future scenarios and also be “capable of faithfully representing the pre-existing corpus of word-processing documents, presentations, and spreadsheets.”

Fostering Innovation and Interoperability

By co-submitting the Office Open XML file formats to Ecma, Microsoft hoped

to further foster both innovation and interoperability across office-productivity applications and tools, content management systems, content assembly systems and broad line-of-business systems. It felt it could create an open standard that would enable both public and private-sector customers, technology providers and developers around the globe to work with the Office Open XML formats without barriers, with or without Microsoft products.

On December 8, 2006 the Ecma General Assembly voted to approve the adoption of Open XML as an international open standard, and also to submit Open XML for ratification by ISO, a process that is currently underway.

Garnering Developer and Government support

Meanwhile, developers worldwide are using Open XML in a variety of diverse and innovative solutions and competitors are already implementing the capability to work with Open XML files. For instance, Novell, Corel, and Sun already support, or are planning to support it in their upcoming versions of Office Suites. In fact, even the iPhone supports Open XML! This is in addition to a whole host of other applications using Open XML globally. In each of their cases, Open XML has helped them reduce costs as it has become easier to decode and display the Office Formats. The fact that it comes with a Royalty Free usage License makes it available to developers of all hues to work without

paying any royalty or requiring any license from Microsoft.

Likewise, Governments around the world, including Denmark, Switzerland and the State of Massachusetts in the US, have accepted Open XML as a standard alongside ODF. Solutions using Open XML are being deployed in Florida to better manage amendments to legislative bills. In Austria it is being used in eGovernment applications. Clearly, Open XML is already an open standard and being increasingly deployed by Governments.

Open XML and India

There is a strong case for India to endorse Open XML as a standard. Over the last two decades, there has been a great proliferation of Microsoft technologies across the country, which means millions of documents exist in binary document formats like .doc, .xls, and .ppt. Microsoft in fact, remains a leader in India's "document domain," with its products such as Word and MS Office, which are available in local languages. Clearly, users need to access their data repositories, even when technology moves forward. Open XML, which offers backward compatibility, will provide them with this crucial functionality.

Interestingly, Open XML has been receiving significant support from both the Indian industry, the Government (including NGOs) and now, increasingly, the academia. While Government elites have been appreciative of the fact that Microsoft has responded to requests about opening up its file formats and specifications and getting them endorsed by leading standards bodies, the industry, including companies like MS Technology and Intrasphere, have built innovative products that leverage Open XML. The industry is keen to implement Open XML for developing innovative IP, reduce time-to-market, comply with Government regulations more easily and enable a greater reuse of information.

Wherever Microsoft has engaged, it has received a very positive response back on its position vis-à-vis Open XML. The academia too has come out strongly in support of Open XML. Well-known thought leaders from India's premier engineering institutions, have come forward and supported the need

Open XML Lends a Helping Hand

A collaborative development project between Microsoft and DAISY, will transform millions of Open XML documents into the world's most widely used accessible format for people with print disabilities.

THE INITIATIVE: A partnership between Microsoft Corp. and the Digital Accessible Information System (DAISY) Consortium, for a joint standards-based development project that will make it possible for computer users who are blind or print disabled to make better use of assistive technology in their daily lives.

TARGETED AT: The 180 million blind or visually impaired people worldwide and the millions more who are otherwise print disabled, (unable to process text because of cognitive, learning, devel-

opmental, perceptual or physical disabilities) and deprived of all the rich visual data.

THE BENEFIT: The Open XML to DAISY XML translator for Microsoft Office Word will begin the translation of Open XML-based content into an enriched multimedia format accessible to users around the world, regardless of the degree of their visual impairments. DAISY material can be played on dedicated devices or on PCs by installing special software. DAISY gives users the option of visually following the text in large print as it is heard. People who are blind can track auditory output using a refreshable Braille display composed of tiny electronically-activated pins that pop up to denote words on screen as they pass their fingertips along the display.

THE AVAILABILITY: The "Save As DAISY" plug-in will be available for customers in early 2008.





OPEN XML AS AN ISO STANDARD Benefits to Users

- When it becomes an ISO standard the Open XML file format will be fully documented in great detail to make it extremely stable.
- This stability will enable broad adoption, guaranteeing future-proof archiving for billions of documents and millions of public and private-sector customers worldwide.
- It will enable Microsoft partners to develop a wide set of tools and platforms that foster interoperability across office productivity applications and with line-of-business systems.
- Office has become the *de facto* standard for document creation and exchange. A significant volume of documents have been created by thousands of products utilizing the current binary formats of Microsoft Office. Open XML is good for everybody, because it takes a specification compatible with Microsoft's current documents and moves it into the public domain.
- The longevity of access to the many billions of existing documents is making it imperative for Open XML to become a standard. It is vital that easy access to this vast array of knowledge, records, decisions, contracts and literature continues. In this digital age, no-one keeps physical copies of anything for very long—there is just too much information. Going forward, searching and finding physical records would be impractical, as would translation of all those documents to a new standard. Users need to retain the ability to access the digital form of earlier documents. The Open XML standard supports backwards compatibility.
- Not standardizing Open XML means that over time all organizations with legacy Office documents will need to migrate them to a new format that was not designed to maintain compatibility with what has already been created.
- This will have a cost impact and productivity impact for all organizations because it will force software users, to choose between openness and compatibility for their documents.

"With the largest blind population in the world, India needs initiatives like these to redress the problems faced by the visually challenged. The announcement is monumental: it provides a clear, production path for organizations and universities who will be able to use the Microsoft plug-in to move into DAISY XML."

—DIPENDRA MANOCHA,
*Director IT and Services,
NAB and President of the
DAISY Forum of India*

for multiple standards (see Q&A section within this issue of *Interface*).

The Next Step in the Journey

As of now, Open XML has reached the ballot stage and comments from the national standards bodies that were received along with their votes (Yes, No, or Abstain) after the Technical Review are being discussed. This input will go to the Ecma, which will examine them and work on preparing dispositions that will satisfy the comments. In fact, as this issue goes to print, Ecma has already published draft dispositions to over 50 percent of the comments and aims to complete this exercise by January 14, 2008. Once the comments are addressed, they will once again go back to the respective national bodies, to discuss whether they satisfy the concerns and questions they raised. There will be a Ballot Resolution Meeting in the last week of February 2008 at which all the National Standards Bodies will gather to discuss the dispositions.

It is expected that Open XML will become an ISO standard by March-April 2008.

Intrasphere Uses Open XML to Enhance Structured Content Creation for Customers

Faced with customers who needed to improve drug label content management, Intrasphere chose Open XML formats to develop its cutting-edge solution PharmaCM. Today, using the software, companies can comply with Government regulations, provide a comfortable word processing environment for label authors and offer greater reuse of information.

The Situation

Intrasphere, a specialist in solutions for pharmaceutical and life sciences companies, needed to help its customers comply with Government regulations, which required them to submit content in multiple formats including XML and MS Word. This was a challenging situation as content authors lacked XML skills.

Companies had to use an XML editing tool to edit the drug labels and rendering tools to try to convert an XML document into an Office Word document. However, they found it difficult to apply the exact desired formatting to Office Word documents. Many content authors had to devote a significant amount of manual effort to fix the rendered word processing documents. In June, 2006, Intrasphere set out to find a better way for its customers to meet their structured content needs.

The Solution

By August, Intrasphere had identified a potential solution using Open XML formats and Microsoft Office SharePoint Server 2007 to support structured content management. Intrasphere developers in India took on the task of producing the new solution and by December, 2006, the company had a working prototype.

Open XML a self describing XML format allowed easy conversion to other formats, including other XML formats. It helped Intrasphere embed its custom XML formats along with custom metadata inside the Open XML document and edit Open XML documents right inside a word processing environment.

The new solution PharmaCM could also be configured to support a variety

of structured content management processes, including clinical trial registries and drug labeling. Authoring labels in PharmaCM became as straightforward as authoring in a word processing program. It also supported the creation of PDF and .html renditions of the label document.

The same platform also provided a solution for managing clinical protocol registration. It enabled medical knowledge workers to download content directly, from the clinical trials government web site, compare and edit Open XML Content, and improve the efficiency of their clinical protocol registration processes, and overall quality control. All this from within their familiar word processing programs!

Benefits

Intrasphere leveraged Open XML to create PharmaCM, a solution which provides customers with the following benefits:

■ Easier regulatory compliance

PharmaCM simplifies the process for submitting labels and securing government agency approval, making it quick and easy. Pharma companies have to maintain multiple versions of the same content in different formats, but with PharmaCM, they need to create content only once, and repurpose it across different label types.

■ Increased user comfort

With PharmaCM, Intrasphere customers can provide a familiar productive IT environment for their employees. Label authors, unable to deal with XML tagging, can work with a comfortable word processing environment to quickly and successfully deliver submission-ready documents.

■ Enhanced knowledge sharing

Intrasphere is making it easier for its customers to reuse their existing data because the use of Open XML promotes interoperability. Previously, information was locked inside whatever format was used for capturing it. With structured content using XML, companies can search for and share content with departments that can use it for everything, from marketing, and promotions to packaging and Web site purposes.

■ Faster time-to-market

Intrasphere needed only five months, to develop and test its new solution owing to the speed of development using Open XML. Open XML cut the development time by at least 50 percent, giving the company more options to achieve the required functionality in the most optimum way.

“With Open XML there is no need for XML editing tools... authors can work in the word processing environment, that’s familiar to them and let Open XML take care of the metadata in the background.”

—RON LACY, *Client Partner,*
Intrasphere Technologies

“Customers constantly want to use standards and ideally, they want to be able to use more than one standard.”

—Professor ASHOK JHUNJHUNWALA, IIT Chennai



Interface talks to Prof. Ashok Jhunjunwala of IIT Chennai on the important issue of Interoperability and on why multiple standards are becoming a way of life in today's world.

Why is the issue of interoperability very important for customers and vendors in today's context?

The answer to this question seems obvious. The fact is that no customer wants to get locked into a particular vendor, particularly when that user is getting material from different people. Today's companies purchase software from different vendors. Their users need an environment where they can pick files from different people, use them and read them. Clearly, in this scenario, interoperability is an absolute must.

What are the prerequisites of Interoperability? How can an industry ensure interoperability?

In order to ensure Interoperability, standards—possibly a few—have to coexist. Also, the different applications and systems have to be able to use these different standards. As long as the material received conforms to standards, there is no problem. Standards are the key to Interoperability and ensure that people adhere to them. Proprietary stuff hurts because then users get locked into software that is not interoperable. Non-standard proprietary stuff really hurts!

What are your thoughts on the existence of multiple standards?

Besides better choices for customers, multiple standards also ensure evolution. Normally, a single standard can suffocate.

Customers constantly want to use standards and ideally, they want to be able to use more than one standard. I personally do not believe that there has to be just one standard. At the same time, having too many standards also hurts. Therefore, a few standards, which are accepted by the industry and customers, should coexist. Having a few standards encourages competition, and helps these standards evolve faster and not get stuck in a technological time-warp.

Providing choices to customers is something we often hear about?

Besides better choices for customers, multiple standards also ensure evolution. Normally, a single standard can suffocate. Innovations need not be adopted by standards at all times. If there are multiple standards, evolution happens faster. To give an example, if certain innovations are not adopted by one standard but by another, the latter will move forward and gain favour with customers. In this situation, the first standard will be compelled to embrace that innovation. I want to emphasize the fact that standards have to evolve and not remain stagnant. As technologies evolve, as innovation takes place, standards have to evolve too. That's the key argument, where more than one standard helps.

Can customers be involved in this quest for interoperability?

Customers become important at the time of standards formulation. Customers using certain proprietary stuff may want it to evolve in a certain way and become a standard. It is here that customer feedback is key.

In light of what you have said, do you believe Ecma's Office Open XML needs to become an ISO standard. Is there a requirement for another standard when one, in the form of the open community's ODF, already exists?

My feeling is that for years Microsoft used to offer proprietary software. Most of us used to say, 'I wish they used standards.' The fact is that the Microsoft format is widely used by customers and the industry. In fact, it is fortunate that Microsoft is willing to put its own formats on a standard platform. I think the standard platform should adopt it and evolve it into a standard. One must realize that the contribution to make it a standard will not just come from Microsoft alone, but from other industry players and the academia.

I do believe there should be multiple standards in the document world. I see no problem in having two or three standards in documents as long as the standards as open and people are able to build interfaces to them. Take for example Open Office. Open Office has gone out of its way to read the Microsoft Word format. Why? Because Microsoft Word is more or less the dominant practice. However, the task is made difficult by the fact that the MS format is not in the standards domain. One really has to do a lot of work to be able to extract what needs to be done. Once it is standard, any software developer will be able to utilize that standard. Also, in this situation, having more than one standard will also boost innovation. It will be possible to incorporate different things in different standards at different times.

Will customers gain by the Office Open XML file formats becoming an ISO standard?

Very clearly, since most of us use Microsoft documents. And if Open XML becomes a standard, users will definitely benefit. What will happen is that multiple small companies will come up, utilize that standard and offer a range of software, even in competition to Microsoft. To my mind that is a very good thing that can happen.

SWARAJ to liberate Panchayati Raj System

Microsoft launches integrated solution at its first Government Leadership Summit

The first Microsoft Government Leadership Summit, held in November in New Delhi, served as a platform for the launch of SWARAJ, a state-of-the-art solution for managing the Panchayati Raj System in the country.

Announcing the availability of the solution, Union Minister for Panchayati Raj and Youth Affairs and Sports, Mani Shankar Aiyar, said it addressed the information needs for all the five tiers of Panchayati Raj which included the Ministry of Panchayati Raj at the Central Level, Panchayati Raj Departments at State level, District Administration at the District level, Panchayat Samitis/BDOs at the Block and Gram Panchayats at the Village level. The Minister also released a compendium of e-governance

initiatives in India titled “India {e}nnovates.”

SWARAJ, meanwhile offers the following features:

- It is a single integrated application, which can run in both connected and unconnected scenarios and can provide critical information on the schemes, funds, land and works besides baseline information to evolve Panchayats’ infrastructure and human development indices.
- It has inbuilt analytical tools to study the data collected on a real time basis.
- Through this integrated application, the data needs to be input only once and one application can provide the complete information any time.

Reliance Communications Partners with Microsoft to Deliver IPTV in India on the Microsoft Mediaroom Platform

Contract estimated at US\$ 500 million

Reliance Communications and Microsoft have announced a strategic partnership to deliver a highly connected, personalized TV experience to consumers in India through Reliance’s IPTV service, which will be powered by the award-winning Microsoft® Mediaroom™ Internet Protocol Television (IPTV) software platform. The announcement was made by Anil D Ambani, Chairman, Reliance Communications, and Steve Ballmer, CEO of Microsoft, at a press event held in Mumbai. Reliance Communications will have the exclusive deployment rights for the platform in India.

Reliance’s IPTV service, powered by the Microsoft Mediaroom platform, will allow Reliance to deliver entirely new, connected and personalized television experiences for Indian consumers, with

several advanced features, such as video-on-demand (VOD), digital video recording (DVR), instant channel changing, and personal media sharing. IPTV subscribers will be able to watch

popular standard definition (SD) content as well as high definition (HD) content, for the first time in India, at the click of a button from the

comfort of their homes, and enjoy a connected entertainment experience that will soon allow them to watch their favorite shows on their TV or PC. The service will be launched by fiscal end (March 2008).



Interoperability Lab set up in Bangalore

Marks a first for Microsoft in India

November was the month that Microsoft launched its first Interoperability Lab in India. The lab, co-located at the Microsoft Technical Center in Bangalore, is geared to develop open source applications on the Windows platform and advance Windows-Linux interoperability through operational support and sustained community involvement. The lab will also enable customers envision and test interoperable solutions across infrastructure, application and management layers. The facility will encompass all benefits of the technical centre which include access to world class infrastructure, experts and our Open Source Lab in Redmond.

The Interoperability Lab will showcase, envision and build interoperability solutions for specific heterogeneous technology scenarios like cross platform rich web application and line of business application integration, virtualisation and management of heterogeneous platforms.

Microsoft Achieves Interoperability Milestones

Microsoft has extended its Open Specification Promise (OSP) as the next step in its commitment towards enhancing interoperability. OSP is a simple, clear way to reassure a broad audience of developers and customers that Microsoft specification(s) can be used for free, easily, now and forever. This covers each individual specification designated on the public list (posted at www.microsoft.com/interop/osp/). The OSP applies to anyone who is building software and or hardware to implement one or more of those specification(s). A developer can choose to implement all or part of the specification(s).

With this announcement, the Open Specification Promise (OSP) has been extended to the hypercall API within Windows Server virtualization. The hypercall API is the mechanism by which partners develop high-quality virtualization solutions. Now these APIs will be available for cross-platform use by any virtualization vendor, enabling them to integrate their software to Windows Server 2008 and the Windows Server virtualization for free, now and forever.



Microsoft launches Office 2007 Prepaid Edition at 1499 in India

Offers easy, flexible, affordable access to original Microsoft Office for home users and small businesses.



Microsoft has launched Microsoft® Office Professional 2007 Prepaid Edition in India, bringing the power of its Office productivity suite to home users and small businesses at a very affordable price. Available as a six-month subscription for Rs. 1499, the new prepaid model gives customers a flexible and affordable way to buy original the 2007 Microsoft Office. At the end of the six month period, three-month renewable subscriptions will also be available. This is the first time in India that an office productivity suite will be available as a prepaid version.

CUSTOMER SPEAK

“Now the best office productivity software is more affordable.”

—ABHISHEK SINGH,
Owner, Siddhartha Infotech,
a software development
company

“We take PCs on lease and getting Office Professional 2007 on subscription makes a great business sense.”

—RAVI SIKAND
Owner, North Star India Pvt.
Ltd., a mid-sized contact center

Easy to Buy, Easy to Use

- Currently, customers can purchase their PCs with a free trial of 2007 Microsoft Office pre-installed via the “Office Ready” PC program.
- They can purchase a “Prepaid Starter Kit” for a six-month subscription to Microsoft Office Professional 2007.
- A 25-character product key on the back of each kit activates their software over the Internet for this period. Customers can renew their subscription via a 3-month Prepaid Renewal Card which costs Rs. 1299.
- Customers can continue to access, view and print their existing Office documents and data even when the subscription expires, while they will require an active subscription to create new files and edit or modify existing ones.
- Customers can also choose to convert their prepaid subscription to a perpetual license at any stage.

Microsoft felicitates E-governance Award Winners

List of Microsoft e-Governance Awardees 2007

NAME OF THE PROJECT	CATEGORY OF AWARD
1 Meghdoot, Department of Posts	IT for Service Delivery
2 DGS&D's e-Tender Management System	IT for Efficiency
3 SMS Based Farmer Facilitation System – Haryana (Directorate of Agriculture)	Innovation with IT
4 Control Office Automation	IT for Functions of National –CRIS Importance
5 Information Kerala Mission – Kerala	IT for Local Self Governance
6 Nemmadi–Karnataka	IT for Rural Development

Microsoft announced the winners of its second “Microsoft E-governance awards” at the Microsoft Government Leadership Summit. The annual awards, set up to recognize the most impactful E-governance applications in the country, received 54 nominations across various categories. At the end of the day, it was six E-governance applications, implemented across the country that grabbed the spotlight.

The underlying theme for the awards this year was “Reaching out through ICT” and the projects nominated include those developed by state governments, the central government or private companies in partnership with Microsoft. Michel Van Der Bel, Vice President, Public Sector, Microsoft International, presented the awards to the winners.

The Microsoft E-governance awards showcase IT projects that have significantly enhanced delivery of citizen services and have ushered in a more participative and transparent form of governance.

Berkman Study Emphasizes Need for Governments to Support Open ICT Ecosystem

The Berkman Center for Internet & Society at Harvard University, has facilitated the creation of a ROADMAP for Open ICT ecosystems. The aim has been to provide policymakers, managers and other stakeholders from industry and civil society a user-friendly tool for understanding what open ICT ecosystems are, why they are embraced and how to evolve them. As a result, the study hopes to change how people see and manage ICT ecosystems and innovation.

This ROADMAP and the best practices and recommendations it provides, represents an unprecedented collaborative effort of senior government officials from thirteen nations, thought leaders from five global organizations, experts from two leading technology companies and academics from one of the world's most respected universities. Economic growth depends increasingly on information and communications technologies (ICT); countries, enterprises and individuals need to harness this power through collaboration, innovation and development. This report demonstrates, by its process and its outcome, the enormous potential of open collaboration and information sharing.

The study is timely on account of the following:

- It presents relevant and timely information about the benefits and practical use of open technologies
- The ROADMAP is the first full resource for anyone either designing or implementing open ICT ecosystems. It shares how open ICT ecosystems enable efficiency, innovation and growth.
- It focuses on Case studies that highlight the limitless possibilities. One case details how Denmark has achieved remarkable cost-savings through the government's use of an open standard. Another focuses on how in India, the government has been collaborating with business to promote innovative services within the entrepreneur community based on open architectures.
- It shows how Open standards bind together open ICT ecosystems and drive interoperability.

To evolve to open ICT ecosystems, governments have taken different approaches; the report shares these best practices. It reiterates the fact that success in the use of open environments requires active participation and support from governments. For example, the government of Chile has decreed that all digital documents must conform to an open standard in a pragmatic three-phase rollout. By mandating interoperability and changing procurement policies, the government will reap clear economic benefits that support the use of these open processes. Similarly, Japan is revising its laws to dictate that where open standards exist they will be given priority in government procurements. Successful results depend on successful beginnings and the Study offers users the most comprehensive toolkit available to create their own unique roadmap.

Document Formats Survey Shows Growing Interest in XML-based Standards

Interoperability and choice are key factors driving strong Open XML adoption in Europe and the US, says IDC

IT managers at large organizations are increasingly interested in employing XML-based standards, including Open XML, among their document standards, according to a study of US and European organizations conducted by IDC. The survey polled 200 government and private-sector organizations to better understand which factors drive adoption of open document standards.

The IDC Study threw up the following results:

- the majority of respondents said interoperability between productivity tools, long-term archiving, and ease of transition from an existing base of documents to a new standard were the primary criteria used to evaluate organization-wide adoption of a given standard.
- large organizations with diverse business needs preferred multiple document standards
- although IT managers appeared to strongly prefer a single standard to reduce cost and complexity of the implementation, line-of-business managers closer to the daily needs of business supported the desire for multiple document standards
- the standards Portable Document Format (PDF), Open XML and OpenDocument Format (ODF) were all in use today, with PDF viewed as the dominant standard and Open XML demonstrating "more traction in the market compared to other XML-based standards"
- companies in Europe with an interest in Open XML were expected to be piloting or fully deploying the standard a year down the line. Those interested in ODF were more likely to be in the "consideration" phase rather than piloting or fully deploying it within that same time frame.
- pragmatic business needs were clearly on top-of-the-mind when it came to standards adoption, both within the public and private sectors. The survey results revealed that multiple document standards were being deployed today, and that companies were seeing the transition of the existing base of documents as one of the most important criteria when selecting a document standard.

