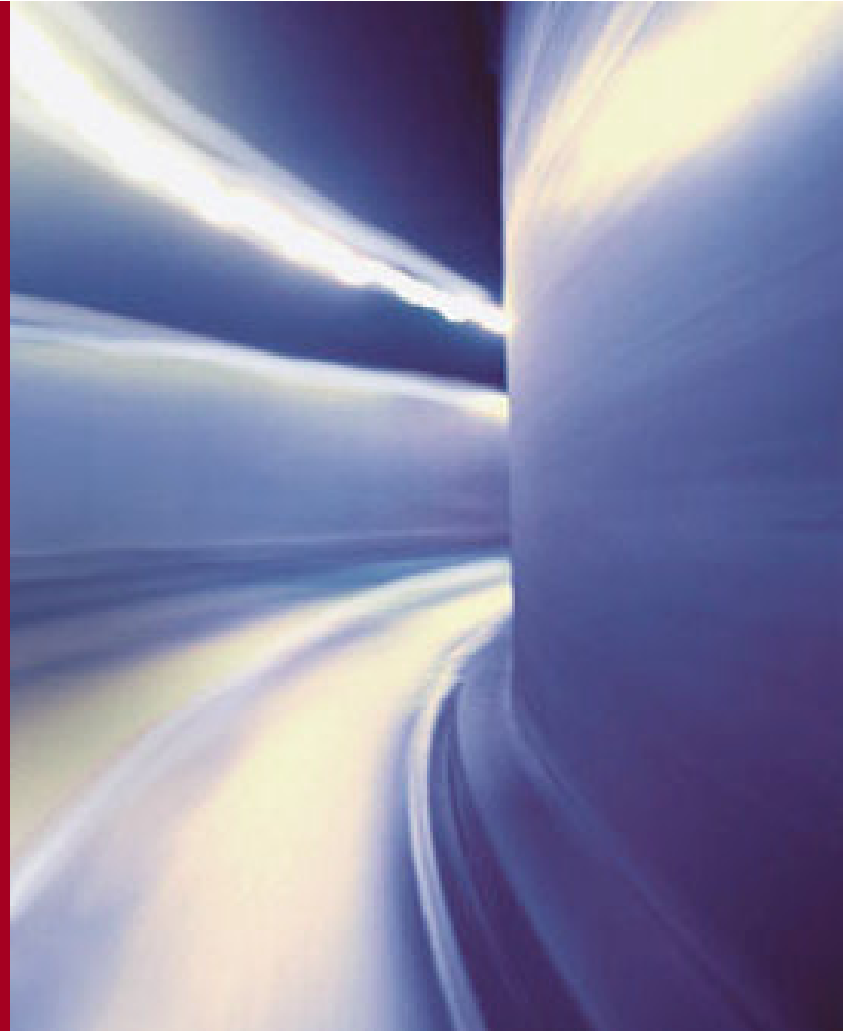


Verity, Inc.

March 2004

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Chief XML Architect



VERITY BUSINESS



The Value Behind an Open Standards Approach



Proprietary vs. Open Standards

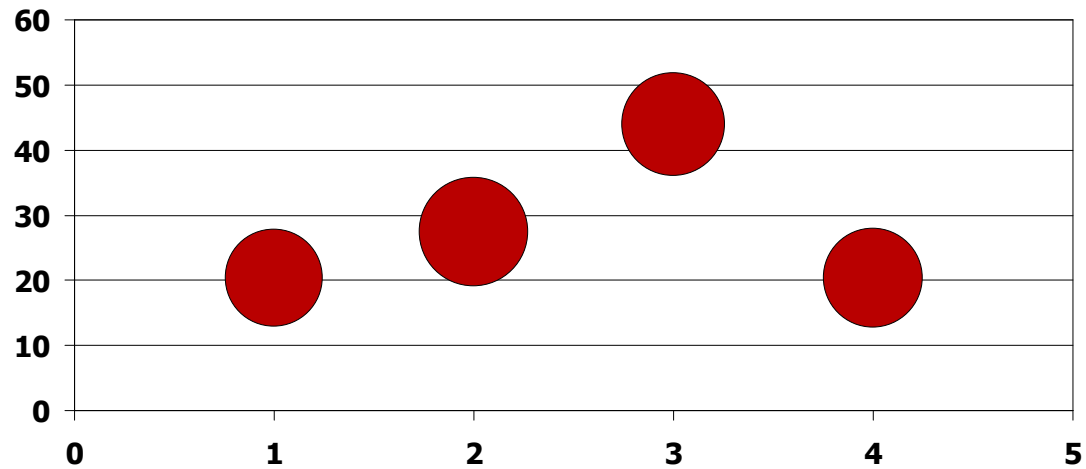


- *Proprietary Standard*
 - Typically owned by a corporation.
 - The owner, who can change it at will, licenses its use and typically prevents inspection of internal code.
- *Open Standard*
 - A published standard that can be used by all.
 - It is managed by a standards organization, which oversees its dissemination and evolution.
 - The primary standard-setting group for the Internet is the **World Wide Web Consortium (W3C)**.

Based on the second quarter of fiscal 2004



Standards Continuum



Proprietary

Partial

Standards-based



THE OPPORTUNITY



Three Approaches to Open Standards



- Adapted Open Standards Approach
 - Proprietary eForm technology
 - Vendors on the client side of the eForms challenge
 - Recently announced open systems-based solutions that include server-side workflow and transaction processing
- Partial Open Standards Approach
 - Proprietary versions of XML
 - Vendors recently implemented partially open-standards compliant solutions to address eForms and workflow
 - Mandatory to have products on desktop
- Authentic Open Standards Approach
 - Zero client, open client support
 - Vendors committed to open standards from the beginning
 - eForms/workflow products built from ground up based on industry standards



Disadvantages of Proprietary Technology



- Closed (even partially) solutions run the following risks:
 - Reduce or eliminate future flexibility
 - Huge costs associated with change-out
 - Increased costs for compatibility and connectivity
 - Incompatibility with other packages due to lack of standards



The Future of an Open Approach



–The **World Wide Web** is overwhelmingly standards-driven

- http://...
- .../index.html
- URL
- TCP/IP
- Email

–Open standards ensure that products will improve -- **not only in quality but also in cost**

–Open standards provides **new forms of cooperative communication and exchange** that can both standardize and energize an entire industry

Example

Early adoption of a single, open digital cell phone standard drove rapid use in Europe that has far exceeded that of the United States.

Equipment manufacturers only have **one set of specifications to address**, services such as messaging and two-way data transfer are being offered much faster and much more comprehensively than in the U.S.



W3C



- Leading the Web to its full potential
 - Developers of XML, HTML, XHTML, and XForms
 - Accessibility guidelines, universal access
 - Device independence, multimodal access
 - Web Services



XForms



- Overview
 - XML forms, XML in, XML out,
 - Widely implemented
 - Reduces need for programming
 - Leverages existing investment
- Resources
 - Engines:
 - Client-side: FormsPlayer, Novell, Oracle
 - Server-side: ChibaSoft, Novell, IBM
 - Validator:
 - <http://xformsinstitute.com/validator/>
 - Books:
 - O'Reilly XForms Essentials
 - Addison XForms: XML Powered Web Forms



XForms Future



- Part of XHTML 2.0
- Even better graphics with SVG integration
- XForms 1.1 includes minor updates

"W3C's XForms gives authors more power and flexibility while improving the user experience. The XForms Working Group has provided a model that makes it easy for implementors to develop and reuse form components, integrate them into Web services, and deliver functionality to users and devices previously not possible."

Steven Pemberton, Chair of the W3C XForms Working Group



Summary – Open Standards



- Open Standards Approach
 - Industry-accepted rules and protocols
 - Leverage already-approved and deployed technology regardless of
 - Business need
 - Computer architecture
 - User-adopted formats in place
- Benefits
 - Provides the broadest levels of savings and uses for diverse departments across the enterprise
 - Entire business enterprise can take full advantage of the value of the Internet
 - Ensures bi-directional communication with legacy business systems
 - Sharing of documents and data both inside and outside the enterprise



Demo



Verity™