Standards in Government: Innovation, Equality, Access

John H Terpstra,
CTO, Primastasys Inc.
jht@primastasys.com
Overview

- Definition of Terms
- Problems and Opportunities
- The Present Dilemma
Definition of Terms
Definition of Terms: Standards

- A rule or model, by the authority of public opinion, or by respectable opinions, or by custom or general consent - *Noah Webster*, 1828

- A measure of conformance, or value, or commonality; with general public acceptance.

- A model of authority or excellence.
Definition of Terms: Government

- The system of polity in a state; that form of fundamental rules and principles by which a nation or state is governed, or by which individual members of a body politic are to regulate their social actions; a constitution, either written or unwritten, by which the rights and duties of citizens and public officers are prescribed and defined; as a monarchial government or a republican government. - Noah Webster, 1828
Definition of Terms: Innovation

- Change made by introduction of something new; change in established laws, customs, rites or practices; *Innovation* is expedient, when it remedies an evil, and safe, when men are prepared to receive it.

Often used in an ill sense, for a change that disturbs settled opinions and practices without an equivalent advantage. - *Noah Webster*, 1828
Definition of Terms: Equality

• An agreement of things in dimensions, quantity or quality; likeness; similarity in regard to two things compared. …

The same degree of dignity or claims; as the equality of men in the scale of being; the equality of nobles of the same rank; an equality of rights. Evenness; uniformity; plainness.

- Noah Webster, 1828
Definition of Terms: Access

• A coming to; near approach; admittance; admission; as to gain access to a prince.

Means of approach; liberty to approach; implying previous obstacles. The result of which is an increase in wealth or territory, together with a right to the thing added or to the improvement thereof. - Noah Webster, 1828
Topic Summary: Standards in Government

- Authoritative rules that regulate the rights and duties of public officials in respect of change of law, custom or practice to remove an evil; to which are attached the same degree of dignity, or rights, in liberty to approach with a right to the thing added.

- Examples:
  - Public documents - created to inform the public today and perpetually in respect of that information.
Identifying The Issues

Problems & Opportunities
Overview

• Standards
  – General Attributes
  – Polarization Concerns
  – Open Standards Definition
    • Creation Process
    • Implementors
    • Beneficiaries

• Impact
  – Past
  – Present
  – Future
Attributes of IT Standards

- Adopted uniformly
  - by those who govern for the well being of the public in general and without prejudice or condition.
  - Protected and managed with due public process
- A safe-guard against potential risk and exposure
  - Requirements:
    - Risk analysis and review
    - A long-term perspective
    - General public acceptance
    - General and broad-spread adoption
    - Maintenance: auditing, review and development
Problem of Polarization

• Must NOT consider the debate in terms of being against or for something
  - Open Public Royalty-free Standards
    • NOT anti-Microsoft
    • NOT pro software socialism

• We must get back to the technical issues
  - AND their Implications
  - Avoid emotions - focus on facts
Open Standards Defined

- What does OPEN mean?
  - There must be agreement about this, otherwise there will be nothing but opinion and emotion

- Three key players / areas of influence (AoI)
  - Standards creators
  - Implementors
  - Consumers / users

What are the key issues for each?
**Conditions of Open Standards**

- Open participation throughout the process
- **Consensus** without dominant forces
- **Due process** used to resolve issues
- Open IPR - available to all implementors
- Globally deployable
- Open to change through due process
- Open specification so everyone can use it
- Open interface - supports migration, no secrets
- Open use
- On-going support
Drivers
- Market development
  - Incentives to invest in new markets
- Market control
  - Share-holders demand predictability in the business
  - Competitors erode predictability and profitability
  - Change of competitive landscape is uncomfortable:
    FEAR seeks control as a security mechanism because competitors LACK TRUST in each other
Cooperation & Trust are better than control
- Non-discriminatory so all benefit
Drivers

- Need to produce a working product
  - Standardization expedites development
- Governed by production/distribution cost efficiency
  - Standardization reduces costs and helps interoperability
    - Larger market potential for the resulting product
- Avoidance of technical obstacles
  - Easier to resolve with an open standardization process
- Political agenda plays no key role
  - Duplicity has no place in standardization!
Aol: Consumers

- **Drivers**
  - **Cost reduction** through increased competition
  - Increased competition provides *greater choice*
  - **No vendor lock-in**
    - Critical factor in public information
- **Political efficiencies**
  - One proprietary size NEVER fits all
    - Thailand - can not afford software priced at USA levels
      - Microsoft released a cut-down version of Windows XP priced to meet Thai market capabilities
    - Peru - need to reduce export of domestic product
    - Europe - anti-USA sentiments
Impact on the Past

- Sorry, we can not change the past, but we can make a smarter decision today.
  - Old office files will require conversion a new format.
    - If the right format is chosen it should not be necessary to repeat this exercise within the next decade or two.

- The problem:
  - There was no office file format standard
  - Microsoft changed the DOC format repetitively as new enhancements to MS Office were released
    - A means of coercing updates and upgrades
Impact on the Present

- The Web is moving from HTML to XML
- Office formats are moving to XML
  - OpenDocument Format is an XML wrapper around standard XML file format data
    - Is open for all to use
  - Microsoft Open XML is an XML wrapper around a proprietary binary data format (like DOC)
    - Is not open for use in free software (see next slide)

- It makes sense to choose an open XML format that will be used by all - except Microsoft!
Was recently submitted their Office 12 Open XML specification to ECMA for certification as a standard
- They now assert a “not to sue” covenant on open source use
  - However, according to several experts who have reviewed the proposed standard, there are many MS-specific elements in the specification that make it almost impossible to fully implement in any application other than MS Office itself.
Impact on the Future

- As more data is stored in open public royalty-free standards compliant XML formats
  - The cost of data conversion will drop dramatically
  - No vendor will be locked out of the market unless they choose not to play
  - Competition will increase with resulting reduction in the cost of office automation
- Vendor lock-in will be a thing of the past
- Consumers have more choice
- Consumers possibly get a better IT solution
What About Assistive Technologies?

• I glad you asked:
  – AT is orthogonal to the file format question
• But since you asked:
  – Let's look at the costs of the solution heralded by some in the Massacusetts debacle:
    Windows XP Pro       $ 299
    MS Office Standard   $ 350
    JAWSNT/S             $1295
    Magic SM/S           $ 210

  Total: $2154
Novell SUSE Linux Desktop Cost

• For comparison with the Microsoft Windows what does the same solution cost for Linux?
  – Let's see:
    Novell SUSE Linux 10.0    $59.95 USD

Includes:
OpenOffice 2.0, Screen magnifiers, Screen readers, speech to text, text to speech, on-screen keyboards, high contrast screen facilities, color enhancement facilities, much more - all fully integrated.
Which AT Solution is Affordable?

• Remember:
  – Those who need AT solutions are not affluent
    • Lower cost solution means more people CAN benefit
  – The lower cost solution does not require specialist installation and support
  – The lower cost solution already implements the ODF document format standard

• What are you waiting for?
  – A permission note from your mother?
**Nota Bene - Note Well**

- Assistive Technologies are specialty programs that interface with other application software to provide a means of enhancement on-screen, via voice, or via touch sensitive means to help those who have visual, voice, and/or physical impairment.

- This does NOT affect the data file format for office applications.
Comparing Office Products

- Microsoft Office is not free
- OpenOffice is free

- Both products will require periodic updating to permit access to current document formats

- Continued provision by government (public) officials of documents in Microsoft formats thus compels citizens to be Microsoft customers!
Summary: The Opportunity

- The OASIS OpenDocument ODF file format standard for office automation products will reduce costs for all consumers
  - Reduced costs means that governments can provide better and more timely information services
- Open public royalty-free standards are a most important community interests safe-guard
A Mis-Understanding?

The Present Dilemma
About Baking An Omelet

- The saying goes: “You can not bake a good omelet without breaking a few eggs!”

- It is not possible to introduce a much needed document format standard without causing change
  - After all that is the purpose of doing it.
Public Concern

• Microsoft will be affected by the acceptance of the OpenDocument ODF file format standard
  – They will either support it in MS Office, or suffer loss of business - that is their choice
  – It will increase consumer choice and lower costs
    • Microsoft Office revenue will decline

• This is NOT anti-Microsoft any more than the introduction of the motor vehicle was against the horse and buggy!
Is the Present Solution the Best?

- I have experience with supporting a visually impaired PC user who has Windows XP Home, JAWS and Microsoft Office Standard
  - It crashes his machine regularly causing loss of work
  - He has a Linux system that is stable and has AT support that works well most of the time
    - Sound fails once in a while - requires logout/login only
    - But it has never crashed, and has not lost any work in over 15 months - It took 1 hour to get used to OpenOffice

- Conclusion: Windows is NOT the Ideal Solution
Is Linux Best for Everyone?

- Assistive Technology on Linux desktops
  - KDE 3.4 is not as good as it is under Gnome 2.12

- OpenOffice does not suit all users for all tasks
  - But it does meet the needs of most users rather well
  - Clearly, one size shoe does not fit all feet!

- No-one is forced to use Linux
  - No-one should be forced to use MS Windows either
  - Also no citizen should be forced to buy MS Office
Reflection Time

• Standards in Government means:
  – Authoritative rules that regulate the rights and duties of public officials in respect of change of law, custom or practice to remove an evil; to which are attached the same degree of dignity, or rights, in liberty to approach with a right to the thing added.

• At what cost does the continued use of MS Office and its proprietary file format meet the demands of Standards in Government?
What will you do?