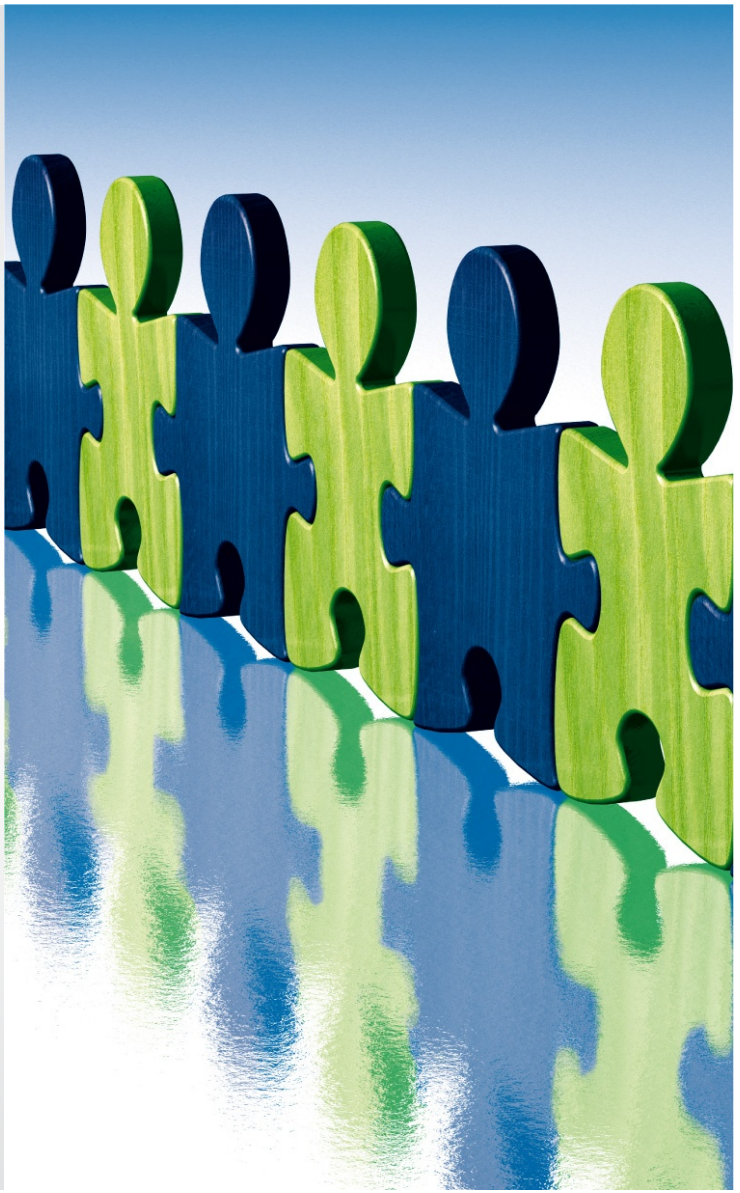
across

W3C Localisation Research Centre

3rd Multilingual Web Workshop

"Interoperability standards in the localization industry – Status today and opportunities for the future"



Across Systems

Sukumar Munshi

Limerick, 21September 2011

Agenda

- Introduction
- Interoperability standards in the localization industry
- Interoperability & perspectives
- Options for the future, discussion points
- Conclusions

“While the Localization industry matures, many views, perspectives, constraints and maturity issues are competing against each other when it comes to interoperability standards.“

„Interoperability is real when tools can seamlessly process files and interpret their content with no significant data loss.“

„The wealth interoperability can bring to localization remains an untapped potential, as many factors of a successful standard introduction are not taken into account.“

Definitions of Interoperability

>IEEE Glossary:

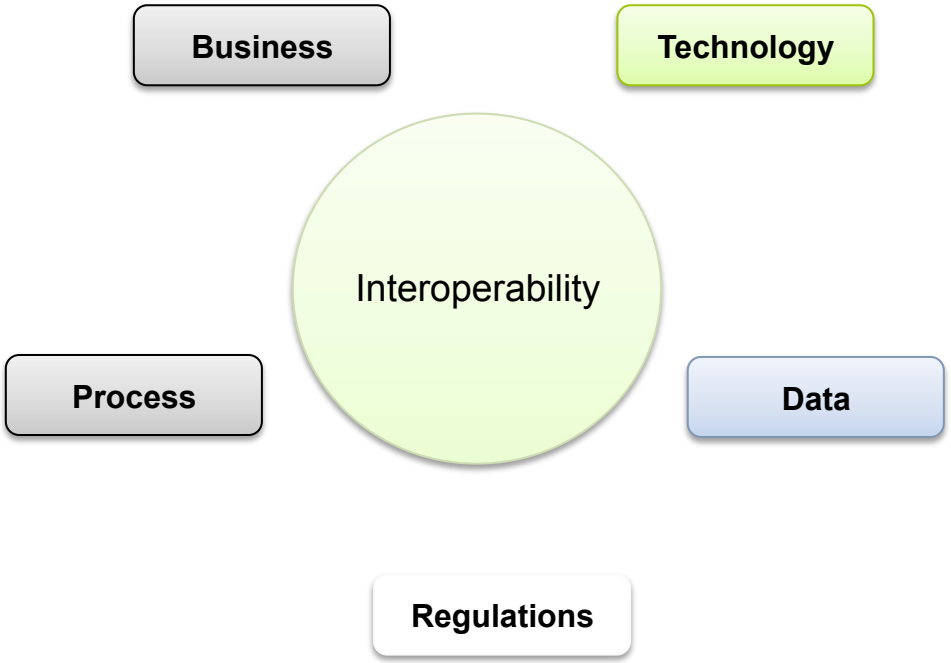
the ability of two or more systems or components to exchange information and to use the information that has been exchanged.

>WIKIPEDIA:

Interoperability is a property of a product or system, whose interfaces are completely understood, to work with other products or systems, present or future, without any restricted access or implementation.

Aspects of Interoperability

- Data management
- Technology usage
- Process Benefits
- Business purpose
- Regulatory aspects



Interoperability – who cares / who should

>Customers
- More flexibility onboarding new solutions
- Freedom of choice

>Language Service Providers
- Securing investments in current software
- Less pre- /post processing
- Flexibility with suppliers

- Software Vendors
  - Create less parsers
  - Concentrate on the core product
- Organizations
  - Interoperability matters to the industry
- Governmental institutions
  - Economical concerns

Interoperability Standards in Localization

Adoption rate

Common Denominator

Applicability

Depth of implementation

Business Relevance

Version support

Enhanced Version

Deprecated

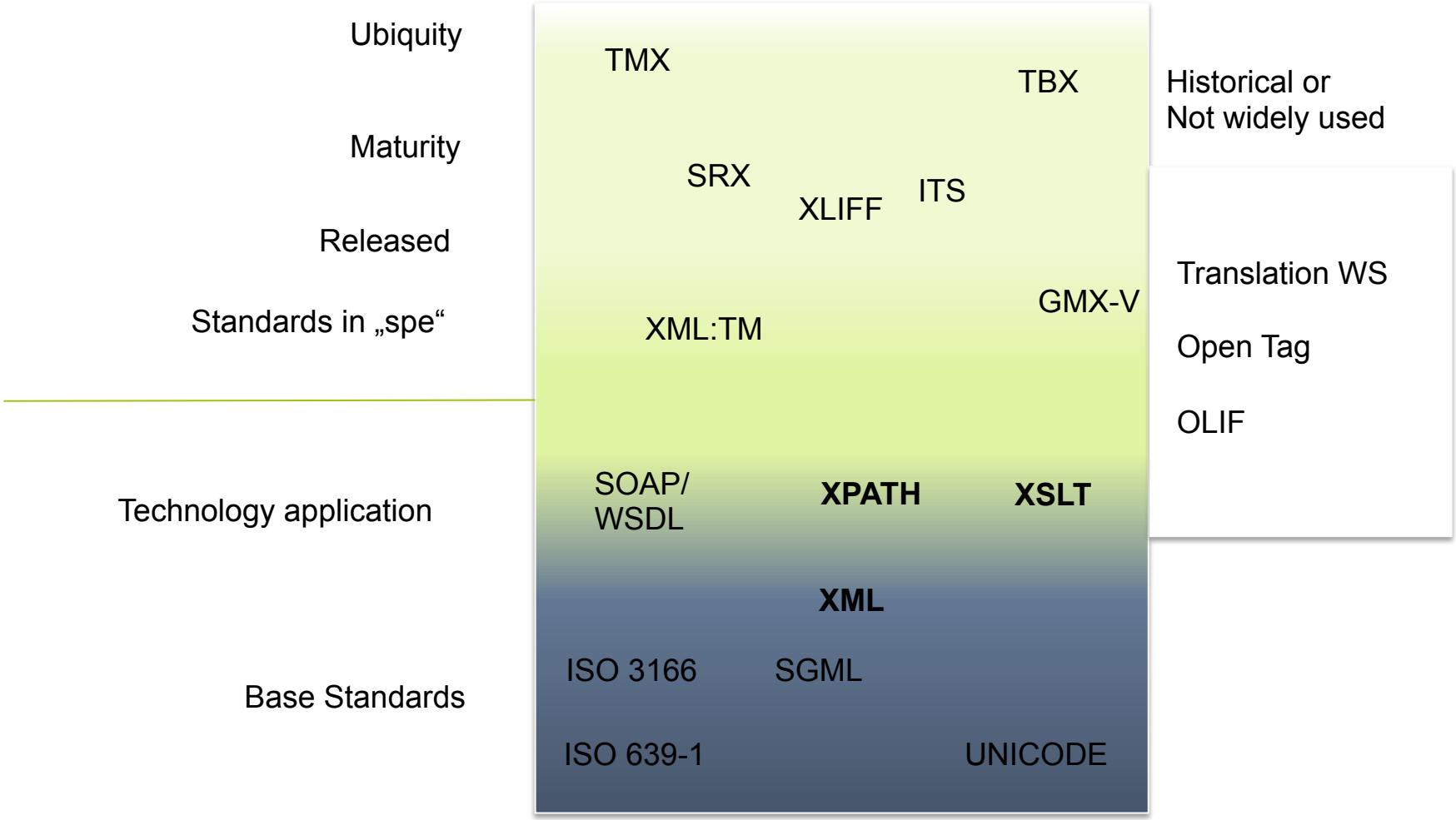
Training

Collaboration

Awareness

Certification

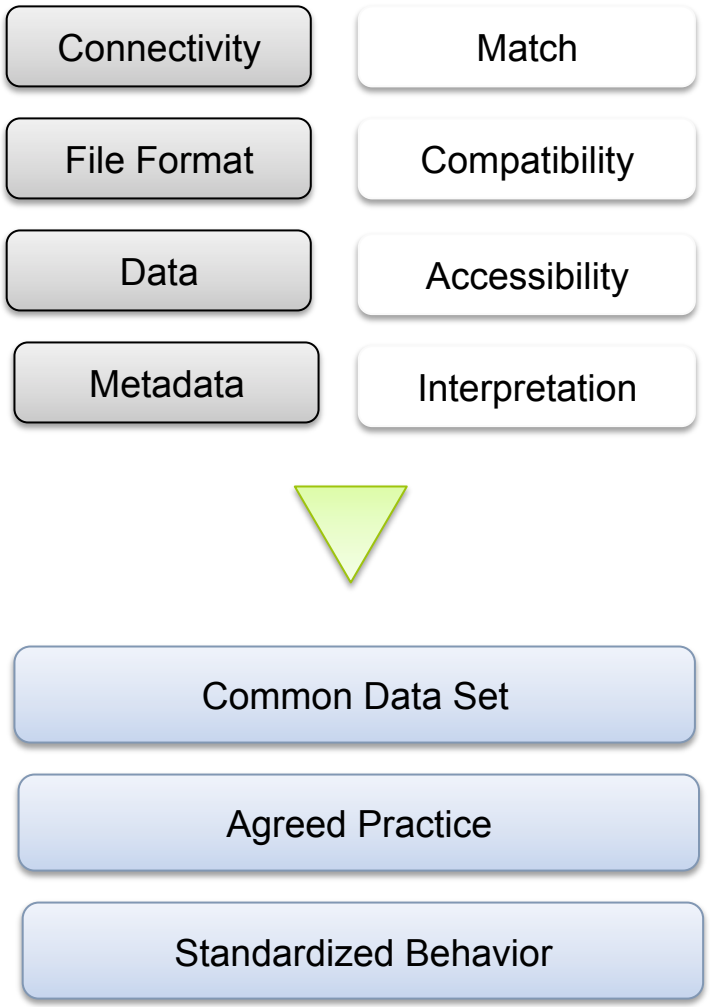
From Standard to Maturity



Interoperability Issues (XLIFF Other)

- Data set divergence
- Process and practice diversity
- Implementation depth and quality

- Tool to tool interoperability
- Process relevance



The benefits and cost of interoperability

Benefits

1. Prevent being locked-in
2. Repurpose data
3. Avoid costly pre-post processing
4. Concentrate on core task
5. Improve process efficiency

Caveats

1. Invest in precursors of standards
2. Mix innovation with standard application
3. Not invest at all
4. Standardize and inflate, while disconnecting from the beneficiaries
5. Make a poor implementation

Examples from other industries (1/2)

- DOCSIS – Data over Cable Service Interface Specification
- EDI - Electronic Data Interchange
- HL7 – Health Level 7

- Cable providers felt locked-in to proprietary technology
- Motivation to promote interoperability standards
- Price of $500 per modem in 1994
- Introduction of DOCSIS by CableLabs – Certification Program
- In 2005 Price fell $40

Examples from other industries (2/2)

- One of the NIST studies estimates that lack of interoperability led to a cost of US$ 15.8 billion to the US governmental infrastructure capital investments, i.e. on all governmental building and construction infrastructures.

- Excess of that amount in public money and therefore taxpayers' contributions (Gallagher et al, 2004).

>(Brunnermeier et al, 1999 and White et al, 2004) - estimates of cost for the US economy, arising from lack of interoperability:

- US$1 billion/year: engineering data in automotive
- US$5 billion/year: all supply chain data in automotive industry
- US$3.9 billion/year: all supply chain data in electronics industry.

Organizations and interest in interoperability

- ISO TC 37
- ETSI
- W3C
- OASIS
- GALA
- TAUS

- EU
- Unicode Consortium
- OMG
- SAE
- SIG

- [LISA]

The Gala Standards Initiative

- The industry does not suffer from lack of standards, more from lack of awareness
- Standards may not be in sync with evolving requirements
- Standards relevant to the industry are developed by many bodies
- Lack of training, promotion and best practices about localization standards

- Initiative to collaborate and facilitate work on standards, bring together disparate constituencies that are impacted by standards

The future of Interoperability

By 2015 …

- The pressure on interoperability has increased due to cloud based processing.
- The community of organisations, customers, suppliers and tool vendors will fully endorse supporting standards
- All interested parties will have agreed on how IO standards should be applied
- Tools will support the basic concepts of all current IO standards
- Added value will be on performance, throughput and solutions for specific applications of the standards

Conclusions

>A released specification does not make a standard successful.

>Standard generation and adoption is an immature process in the localization industry (or it just needs time).

>A successful standard is widely used in the industry and delivers benefits to all the interest groups involved.

>As the localization industry is progressing, pressure increases, the visibility of challenges in the industry and the need for standards is growing.

Fragen & Antworten