



# The Value of Standards for eBusiness

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## Overview

1. What are Standards?

2. Why Use Them?

3. Who Makes Them?

4. UBL: an eBusiness Standard

5. Customizing UBL for Specific Contexts

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## The Value of Standards for eBusiness

### 1. What are Standards?

*Houses are built to live in, not to look on;  
therefore, let use be preferred before  
uniformity, except where both may be had.*

– Sir Francis Bacon, "Essays: Of Building",  
1623

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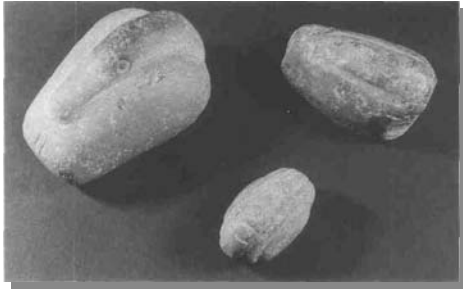


## Standards are Patterns

- A **pattern** is a model that is sufficiently general, adaptable, and worthy of imitation that it can be reused:
  - **General:** so that it can apply to a meaningfully large set of uses.
  - **Adaptable:** because every implementation's requirements may (will) differ in details.
  - **Worthy:** because are supposed to benefit by following the pattern rather than being impaired.
- A **standard** is a pattern that is formalized and widely adopted.

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## Standardization is an old business concept



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## Patterns in Business

- At a high level businesses follow similar patterns:
  - Common external influences:
    - Laws, Taxes, Market forces (especially those in the same industry).
  - Common internal influences and goals:
    - Profits, efficiency, environmental impacts.
  - Common activities:
    - Rent or buy, furnish, and insure their business locations, hire employees, procure and pay for supplies, market and sell their goods and services, etc.
- We have terms like procure, pay, order, and invoice to describe common business patterns.
- And there are patterns in the business processes and documents to support these patterns.

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## How Patterns Become Standards

- Standards are common patterns that have sanction or traction.
- **Sanction**
  - Officially approved or de jure.
- **Traction**
  - Widely used or de facto.
- History tells us traction is more important than sanction
  - Internet versus ISO/OSI.
- So sanction is only a means to achieve traction
  - not a goal in itself.
- What makes a standard is adoption.

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## Standards Adoption

- Adoption is most likely when the standard is:
  - Credible.
    - Why sanction matters.
    - Developed in an open process to the consensus of all the stakeholders.
  - Freely accessible.
    - Licensing cost and IPR.
  - Checkable for conformance.
    - We can demonstrate compliance or compatibility.
- And, of course it must be...
  - General, adaptable and worthy.

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# The Standards Maturity Model

Level 5 – “Functionally adequate” version is ubiquitous.

Level 4 – Many use “functionally adequate” version.

Level 3 – “Functionally adequate” version of standard is approved.

Level 2 – Version 1.0 of the standard is proposed.

Level 1 – Many recognize the problem.

[acknowledgements to Ross Altman, 2005]



# The Value of Standards for eBusiness

## 2. Why Use Standards?

*“We used to have a 48-month product development cycle; now we’re down to 18 months, and we’re trying to get to a year. When you have that kind of rapid change, you have to have architectures and standards and interoperability. Think of standards as an accelerator to your business.”*

-Tony Scott, CTO for General Motors



## Benefits -The Carrots

- Implement solutions faster
- Allow adoption of related solutions
- Enable collaboration
- Manage the risk of adopting new technologies
- Reduce implementation and maintenance costs.
- Encourages and reinforcing consistency
- Enable interoperability
- Stop re-inventing the wheel



## Coercion - The Sticks

- Administrative or legal:
  - Tax Authorities, Customs, Government
- Market Forces:
  - Hubs and Spokes
  - Wal-Mart
- Competitive Forces:
  - Keeping up with the competition
  - Dell, Microsoft
  - RFID



# The Value of Standards for eBusiness

## 3. Who Makes Standards?

*"Laws [and Standards] are like sausages, it is better not to see them being made."  
- Apologies to Otto von Bismarck*



# The eBusiness Standards MoU



# Specific Technology Consortia

- OASIS
  - XML standards for e-business
  - Collaborates with UN/CEFACT on the ebXML
- World Wide Web Consortium (W3C)
  - Web infrastructure standards
- The Internet Engineering Task Force (IETF)
  - Internet standards



# But wait, there's more...

- Industry solutions developed to fill a requirement not met by other standards:
  - Rosettanet, XBRL, OAGIS, GS1, etc.
  - Gain momentum and become a standards business.
- Proprietary solutions:
  - The original SOAP and WS specifications.
- There is a natural selection or Darwinian effect at play.
- The market will decide...
  - but only if given the correct information.



# The Value of Standards for eBusiness

## 4. The Universal Business Language - an eBusiness Standard

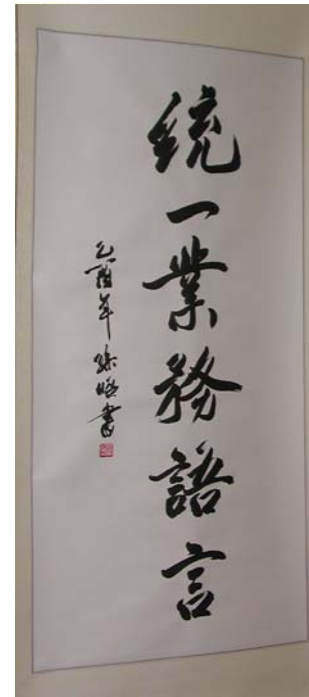
*"Standardization on a single XML syntax can pave the way for interoperability and the commoditization of business systems that history teaches us is inevitable."*

– Jon Bosak (Chair of XML and now Chair of UBL)

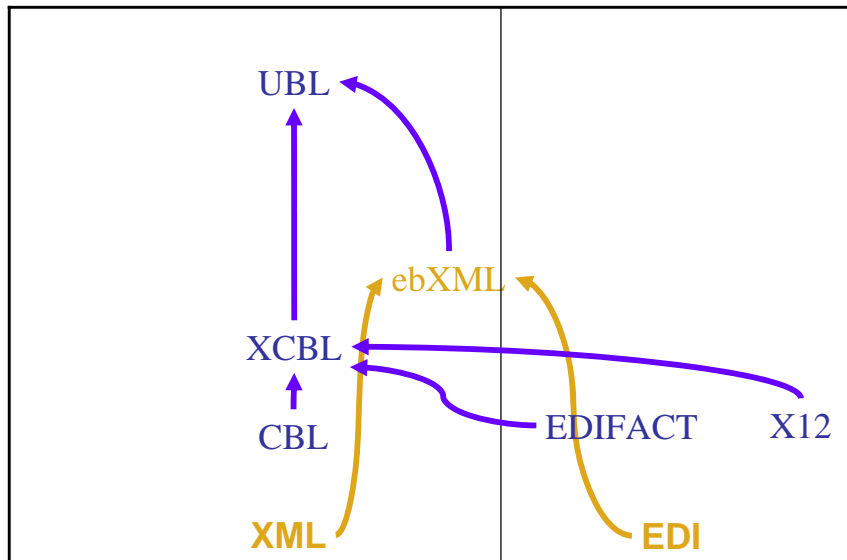


# What is UBL?

- Royalty-free library of business document patterns in XML syntax.
- Released as an OASIS standard on May 1st 2004.
- The "HTML of web commerce".
- Version 2.0 due October 2006.



# UBL's Ancestry



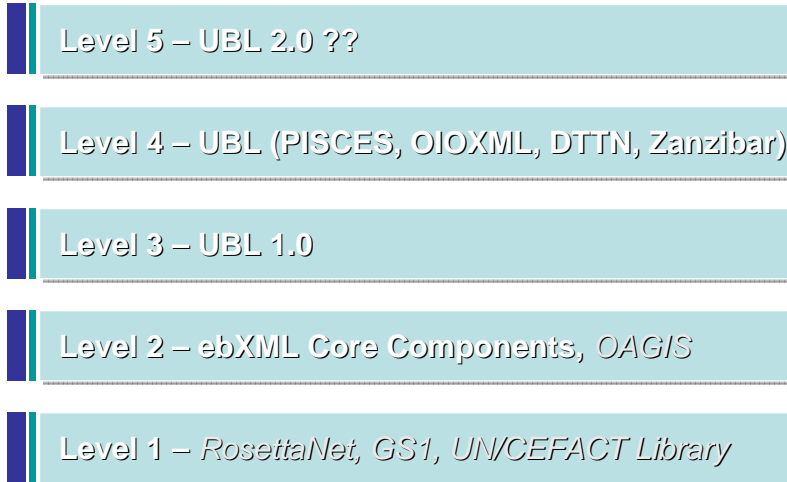
# UBL has Sanction and Traction



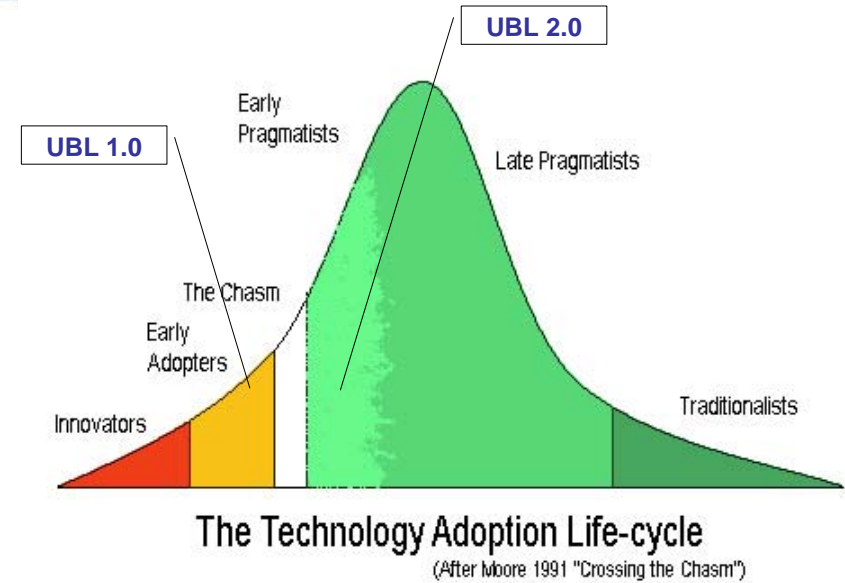
- **Sanction:**
  - An OASIS standard.
  - Based on ebXML Core Components.
  - UBL has an invitation to bring the UBL activity into UN/CEFACT.
  - Aiming to be an ISO standard.
- **Traction:**
  - Adopted for government e-procurement and international trade.
  - Based on library of re-usable components.
  - Available royalty-free and unencumbered.
  - Active user community contributing to further development and enhancements.



## ebXML Content Standards Maturity



## UBL's Adoption Life-cycle



## The Value of Standards for eBusiness

### 5. Customizing UBL for Specific Contexts

*"The 80/20 approach that makes UBL easy to implement in standard systems is the same principle that has spread the usage of XML in the IT industry to become a 'viral technology' like HTML and HTTP" – Jon Bosak*



## Diversity in Business

- A business needs to differentiate itself from competitors.
  - Every business is different, that's why it is a business!
  - Different industry, geopolitical, and regulatory contexts.
- The context in which businesses operate is increasingly dynamic.
  - Technology and business models are continuously coevolving.
- No standard will meet all requirements.



# The Pareto 80/20 Principle

- 80% of results come from 20% effort.
- A useful standard will address 80% of the requirements.
  - However, this 80% will differ for each implementation.
- Customization is needed for the remaining 20%.
- This remaining 20% also follows an 80/20 Rule.
  - Another 20% effort gives 80% of the remaining 20%.
  - We never get all the way there.
  - The “long tail” phenomena.

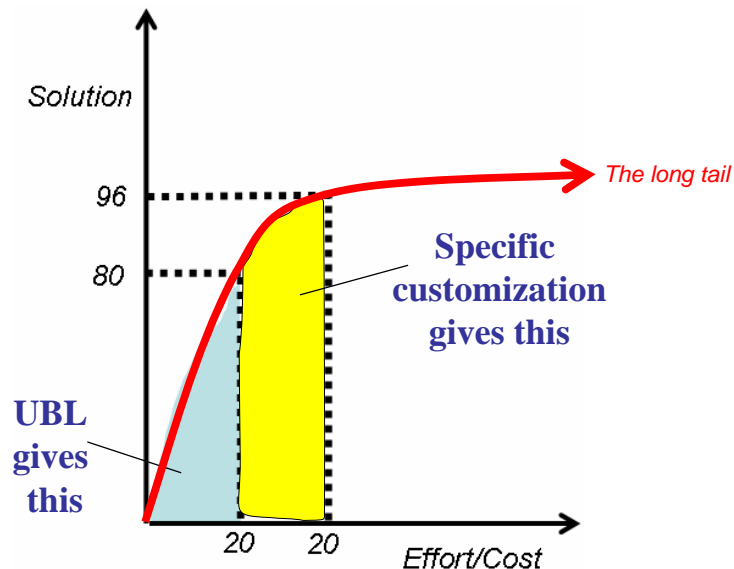


# Customizing UBL

- UBL 1.0 was designed on an 80/20 principle.
- 20 % of the library would be useful for 80% of the requirements.
- The 20% remainder would require a customization of the library.
- This means 80% of UBL implementations will require some customization to suit their context of use.
- So think of UBL as a set of building blocks for eBusiness document components.



# UBL and the 80/20 Rule

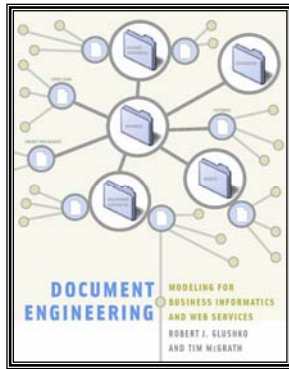


# Summary

1. What are Standards?
  - Reusable patterns with traction
2. Why Use Them?
  - Gain advantage
  - Prevent disadvantage
3. Who Makes Them?
  - De facto and de jure bodies
4. UBL: an eBusiness Standard
  - A library of XML business document patterns
5. Customizing UBL for Specific Contexts
  - The 80/20 Rule



# Thank You



... <http://www.docengineering.com>



# References:

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- Ross Altman “Streamlining Integration”
  - [http://www.idg.co.nz/cio.nsf/7d340e599cc57ae6cc2569fa007a006d/eb327fc9bda20af7cc256e78000a500d/\\$FILE/ATTYRIKM/Wellington,%20New%20Zealand%20Roadshow%20-%202031%20March%202004.ppt](http://www.idg.co.nz/cio.nsf/7d340e599cc57ae6cc2569fa007a006d/eb327fc9bda20af7cc256e78000a500d/$FILE/ATTYRIKM/Wellington,%20New%20Zealand%20Roadshow%20-%202031%20March%202004.ppt)
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