

# Use Before Uniformity

## Standardization for e-Business Documents

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Slide 1

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*

Slide 2



### Overview

1. Interoperable Electronic Transactions
2. What are Standards?
3. Standards for Interoperable Electronic Transactions
4. The Universal Business Language (UBL)

Slide 6

## Interoperable Electronic Transactions

- A basic requirement for two businesses to conduct business is that their business systems interoperate.
- Interoperability means all members of a trading community need to understand the documents they exchange.
- This is why they adopt common patterns.
  - Business process patterns:
    - procurement, payment, shipment, etc.
  - Transaction patterns:
    - request/response, offer/acceptance, etc.
  - Document patterns:
    - catalogue, purchase order, invoice, etc.
  - Component patterns:
    - party, address, payment, measurement, etc.

Slide 7

## Patterns Promote Interoperability

- Patterns are models that are sufficiently general, adaptable, and worthy of imitation that we can use them over and over again.
- Using patterns ensures business systems are robust but adaptable when technology or business conditions change.
- XML has become the preferred technology for presenting electronic information.
- Now we need patterns defined in a standard XML syntax.

*“Only 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*

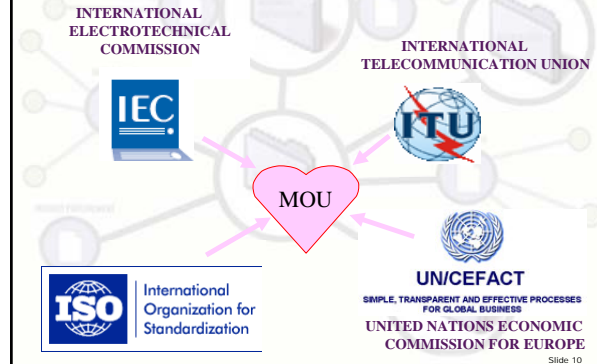
Slide 8

## What are standards?

- Standards are common patterns that have sanction or traction.
- Sanction (*Uniformity*)
  - officially approved
  - de jure (ISO/UN/IEC/ITU)
- Traction (*Use*)
  - widely used (eg. Ms-Office)
  - de facto
- History tells us traction is more important than sanction (HTML, TCP/IP, SMTP vs. ISO/OSI)
- Sanction is a means to achieve traction – not a goal in itself
- Hence we say “Use before Uniformity”

Slide 9

## Who Sanctions Standards?



Slide 10

## Plus Participating User Groups

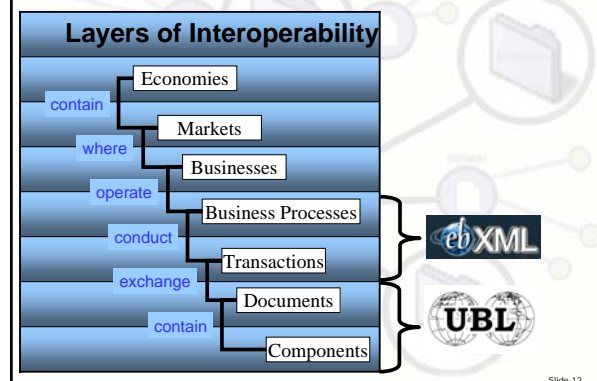
- **Organization for the Advancement of Structured Information Standards** **OASIS**
  - Collaboration with UN/ECE on the ebXML framework

and also...

- **Continuous Acquisition and Lifecycle Support (and NATO CALS)**
- **CEN/ISSS**
- **OAGI**
- **EAN\*UCC and Rosettanet (now GS1)**

Slide 11

## Standardization for e-Business



Slide 12

## Who manages ebXML?

- ebXML is ISO 15000:
  - ebXML Infrastructure is managed by OASIS.
  - ebXML Content is managed by UN/ECE (CEFACT).
- In reality it is unclear...
  - Business process descriptions span the separation.
  - OASIS has overlapping standards for ebXML and "Web Services" for business process and transactions.
  - UN/CEFACT work overlaps with ISO modeling standards.
  - XML documents and components are being tackled by OASIS (UBL)...
    - Because of historical misunderstanding.

Slide 13

## The Universal Business Language

- International, royalty-free library of electronic transaction documents.
- Designed in an open and accountable vendor-neutral OASIS Technical Committee.
- Early adopter of ebXML Core Component Technical Specification.
- Released May 1st 2004

[http://www.oasis-open.org/committees/tc\\_home.php?wg\\_abbrev=ubl](http://www.oasis-open.org/committees/tc_home.php?wg_abbrev=ubl)

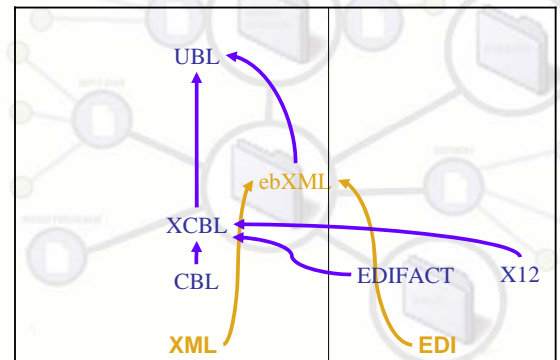
Slide 14

## An XML Syntax - a UBL Order

```
<BuyersID>20031234-1</BuyersID>
<cbc:IssueDate>2003-01-23</cbc:IssueDate>
<cac:BuyerParty>
  <cac:Party>
    <cbc:PartyName>
      <cbc:Name>Bills Microdevices</cbc:Name>
    </cac:PartyName>
    <cac:Address>
      <cbc:StreetName>Spring St</cbc:StreetName>
      <cbc:BuildingNumber>413</cbc:BuildingNumber>
      <cbc:CityName>Elgin</cbc:CityName>
      <cbc:PostalZone>60123</cbc:PostalZone>
      <cbc:CountrySubentityCode>IL</cbc:CountrySubentityCode>
    </cac:Address>
    <cac:Contact>
      <cbc:Name>George Tirebiter</cbc:Name>
    </cac:Contact>
  </cac:Party>
</cac:BuyerParty>
```

Slide 15

## UBL's Ancestry



Slide 16

## UBL includes...

- Order to Invoice document specifications.
- Library of re-usable components.
- XML Naming and Design rules.
- Forms Presentations and sample documents.
- Small Business Subset:
  - Simplified implementation profile for SMEs.
- UBL International Data Dictionary:
  - 600 elements translated into Chinese (Simplified and Traditional), Japanese, Korean, and Spanish.

Slide 17

## UBL 2.0

- Extended library.
  - 29 document types
  - Extended Procurement Process (Europe).
  - Transportation Process Documents (Asia).
- Aligning with UN/CEFACT projects.
  - ATG2 Core Component Type library.
- Release 3Q 2006.

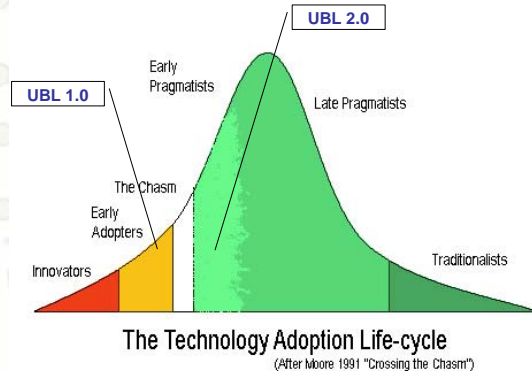
Slide 18

## Who is using UBL

- UBL has been adopted for invoicing by the governments of Denmark and Sweden and it will be adopted by the UK government's Zanzibar marketplace.
- The UBL Transportation Subcommittee is co-chaired by Singapore (Crimson Logic) and Hong Kong (DTTN).
- In the U.S., pieces of UBL are being used by the U.S. GSA (the federal procurement agency) the U.S. IRS (the federal taxation agency) and UBL will be used in a pilot project by the Dept. of Transport.

Slide 19

## UBL's Adoption Life-cycle



## Sanctioning UBL

- UBL 1.0 is an OASIS standard.
- UBL 2.0 aims to be an ISO standard.
- UBL has an invitation to bring the UBL activity into UN/CEFACT.
- There is an agreement in principle on a plan in which...
  - (1) UBL 2.0 will be recognized as a UN/CEFACT specification following its approval as an OASIS Standard.
  - (2) Further development of UBL will take place within a new UN/CEFACT working group.

Slide 21

## Why UBL will be successful

- **Uniformity = Sanction:**
  - Developed and maintained in a completely open and accountable standards process.
  - Is an international standard recognized under the MOU between all international standards bodies.
  - Based on ebXML Core Components.
- **Use = Traction:**
  - Available royalty-free and unencumbered.
  - Applies across all industry sectors and international trade.
  - Is currently being adopted for government procurement.
  - Based on library of re-usable components.
  - Fills the Web Services missing link.

*“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*

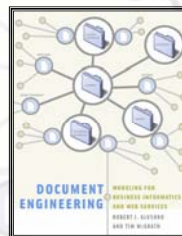
Slide 22

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Slide 23

## Thank You



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Slide 24