Internet as an E-business Backbone for Small and Medium Size Enterprises

Ivo Pejakovic B.Sc.,
FER Zagreb
ivo.pejakovic@fer.hr
INTRODUCTION

Accelerating the adoption of industry standards

The XML Industry Portal
SPONSORS: IBM, Sun, Oracle, SAP, ...
‘how to apply XML in industrial and commercial settings’.
ebXML vision

- ‘Provide an open XML-based infrastructure enabling the global use of electronic business information in an interoperable, secure and consistent manner by all parties.’
Why ebXML

- Enables globalisation in world economy
- Flexible, expandible architecture
- Interoperability
- Uses the Internet as an e-business backbone
Strategy

- Uses OASIS and UN/CEFACT to ensure global open standard
- Developing technical specifications for open ebXML infrastructure
- Cooperation with other developing initiatives and organizations
ebXML concept

- Standard mechanism for description of business processes
- Mechanism for registration and storage of meta models
- Mechanism for storing information about trading companies
- Mechanism for business agreement (CPA)
- Standardized Messaging Service
## ebXML technologies

<table>
<thead>
<tr>
<th>ebXML</th>
</tr>
</thead>
<tbody>
<tr>
<td>UML, UMM</td>
</tr>
<tr>
<td>XML Security, PKI, CA</td>
</tr>
<tr>
<td>Java, XML, SOAP</td>
</tr>
<tr>
<td>HTTP, SMTP</td>
</tr>
<tr>
<td>Internet</td>
</tr>
</tbody>
</table>
ebXML architecture
ebXML - Do BUSINESS

1. Gets ebXML specifications

2. Implements BSI

3. Registers Business Profile

4. Gets profile scenarios

5. Company 2 sends CPA

6. Company 1 accepts CPA

7. Do BUSINESS!

Company 1

- ebXML BO Library
- ebXML BP Model

Company 2

- ebXML BO Library
- ebXML BP Model

Specifications
Profile
Scenarios
ebXML – solution for SME

- developing countries – 90% or more of their economy is SME (small and medium-sized enterprises)
- ebXML – only globally developed and recognized open standard based on XML
- ebXML has global perspective
- coexistence with the other standards for B2B (UDDI, RosettaNet etc.)
ebXML – solution for SME

- Definition of the standard, common and widely accepted business documents
- A developing country has two strategies:
  - Development of its own set of documents
  - Implementation of a set of documents adopted as standard
- Reusability and well established definitions of business processes are crucial
ebXML – solution for SME

- implementation of the ebXML Registry & Repository for its own economy or joining to existing Registry & Repository
- Registry should be used for many business purposes
- Internet as a backbone – low-cost solutions for e-business
- not competitive to other similar initiatives (UDDI, RosettaNet, OAGIS ...)
- smooth transition of the national economies towards e-business
ebXML

laboratory implementation

- Implementation of business process “PURCHASE ORDER PROCESS WITH KNOWN VENDOR”:
  - CPA and CPP interfaces
  - XML editor for SOAP messages
ebXML laboratory implementation

CPP interface
ebXML laboratory implementation

CPA interface
ebXML laboratory implementation

XML editor for SOAP messages
ebXML laboratory implementation

- confirmed modularity of implementing an ebXML framework for B2B
- open technology (Java, J2EE, XML ...) - low costs
- current projects:
  - implementation of ebXML Registry & Repository
Thank you for your attention!

Are there any questions?