

E-Business Implementation The Singapore Experience

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Chairman
Automatic Data Capture Technical Committee
of Singapore IT Standards Committee



APEC ebXML Symposium
21-23 July 2004
Bangkok, Thailand



1

Presentation Outline

- **Part 1**
How Singapore Government Agency created a secure and trusted infrastructure for e-business
- **Part 2**
How Singapore help the retail industry to scope up an e-business project
- **Part 3**
How Singapore implement e-business for the FMCG industry



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2

Part 1 Introduction

- E-Business has emerged as one of the most exciting and promising ways to enable companies to offer goods and services to their customers and potential customers globally.



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3

A Framework to Build Trust and Confidence in E-Business

- A secure public key infrastructure
- Establishing confidence in e-business
- Establishing credit bureau service
- Building user confidence
 - Trust Mark
 - Privacy Concerns



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4

Legislation Passed by Singapore

- Electronic Transaction Act (ETA) which was passed in July 1998, aims to facilitate e-business by eliminating any barriers to e-business resulting from uncertainties over writing and signature requirements. A review of the ETA 1998 is currently in place to ensure that laws and legal framework remain relevant and competitive with international developments and changes
Legal Guide to the Electronic Transactions Act 1998.



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5

Legislation Passed by Singapore

- Electronic Transactions (Certification Authority) Regulations was passed in 1999 to ensure high standards of integrity, security and service levels for licensed Certification Authorities (CAs) in Singapore.
Salient Features of the Certification Authority Regulations.
- Computer Misuse Act is aimed at protecting computers, computer programmes and data stored in computers from unauthorised access, modification, interception and interference.



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6

Creating a Secure and Trusted Infrastructure

- In order to enhance the robustness of Singapore's E-Business infrastructure to provide an environment in which both businesses and consumers could conduct online transactions confidently and securely, the Singapore Government has put in place a secure and trusted e-business infrastructure based on key initiatives listed in the following slides.



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7

Singapore's Efforts in developing infrastructure and confidence for e-Business

- **9 June 1999**
The Singapore One, a broadband network was launched to enable consumers to enjoy shopping, computer games, e-learning, movies, reservation of tickets and borrowing of library books from computers at home.
- **9 June 1999**
The Singapore National Electronic Product Catalogue was established to facilitate electronic business. It provides the platform for product data synchronisation.



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8

Singapore's Efforts in developing infrastructure and confidence for e-Business

- Creating a global seamless online environment involves creating a legal environment that recognises and facilitates electronic transactions across borders and eliminating outdated regulations. The Singapore Government has worked to create a conducive legal and pro-business policy environment to allow e-business and the internet to reach their full potential through various legislation and regulatory frameworks.



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9

Developing a Public Key Infrastructure (PKI)

- The Singapore Government recognises, as does the industry players, that internet security is essential to safeguard transactions of those who use e-business. As a result of this common objective, the PKI Forum Singapore, comprising 19 key industry players including the Singapore Government, SingTel, DBS, CISCO Systems, Netrust, Phillip Securities, CrimsonLogic, NETS, NEC and VISA International, was formed in March 2001.



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10

Developing a Public Key Infrastructure (PKI)

- PKI verifies the identity of the parties to an online transaction, ensures data has not been altered in transit, prevents a party from repudiating having sent the message, and makes certain that data remains confidential. The delivery of high-value or sensitive and confidential information online depends upon establishing a PKI to insure security, privacy, confidentiality and legally protected transactions in an electronic environment.



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11

Asia PKI Forum

- The PKI Forum Singapore together with Japan and Korea took the lead to form the Asia PKI Forum in June 2001. The seven member countries include Singapore, Japan, Korea, Hong Kong China, Chinese Taipei, China and Malaysia. In an effort to achieve international interoperability, an MOU was signed by Singapore, Japan and Korea to kick-start an experiment that will facilitate interoperability of digital certificates amongst the participating countries.



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12

Putting in place Secure E-Payment Services and Applications

- The willingness of a customer to transact and make payments online is a good proxy indicator of the user confidence and trust in electronic business. To put in place a robust and secure payment infrastructure, the Singapore Government has been collaborating with key industry partners and government agencies on a comprehensive suite of e-payment services which offer users an additional and convenient way of paying for their online transactions.



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13

Putting in place Secure E-Payment Services and Applications

- For debit payments, the Singapore Government recently facilitated the agreement between NETS and BCSIS to interconnect their payment switches for online direct debit. For credit card payments, IDA is working with the card associations to ensure that a secure user authentication service is in place as a means to minimise online credit card fraud. These debit and credit transactions are verified using the security framework of ebanking sites of the participating banks.



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14

Putting in place Secure E-Payment Services and Applications

- The secure user authentication enables participating card issuing banks to validate an on-line cardholder's identity through authentication methods including passwords, digital certificates or biometrics during the on-line checkout process. This is a major step in helping merchants to have more confidence in e-business. More importantly, it ensures that the customer make his online payments in a secure and trusted environment.



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15

Part 2 How Singapore help the FMCG industry to scope up an e-business project

Background

- Infocomm Development Authority of Singapore (IDA)
 - ✓ A Government Agency leading Singapore's drive to be a global infocomm centre and world-wide digital hub
 - ✓ Connected Singapore blueprint
 - Aims for Singapore to become one of the world's premier infocomm capitals
 - Transform industries



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16

Part 2 How Singapore help the FMCG industry to scope up an e-business project

- Singapore retail industry
 - Less productive than those in developed economies
 - Low adoption of e-business
 - costly and propriety point-to-point EDI systems



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17

Electronic Supply Chain Management Eco-System

- Jointly initiated by ECR Singapore, SPRING and IDA
- ECR E-Business Standards Working Group
 - Formed in Jan 03
 - Chaired by Unilever Singapore
 - Members:
 - ✓ Retailers: Major Retail Chains
 - ✓ Manufacturers/Distributors: Asia Pacific Brewery, Energizer, KAO, Nestle, Sime Darby, Edible Products, Unilever, Yeo Hiap Seng
 - ✓ Government Agencies: SPRING and IDA
 - ✓ Role
 - build consensus and agree on e-business standards
 - engage industry to implement standards



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18

Electronic Supply Chain Management Eco-System

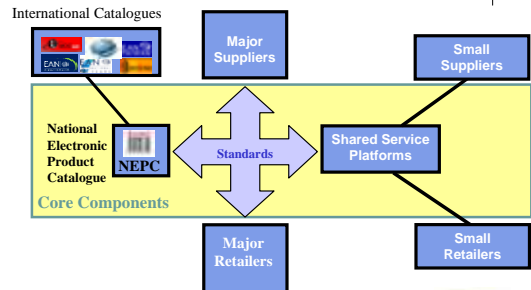
- Two-year project
- Major retailers lead the way
 - ✓ Implement e-procurement projects based on the standards
 - ✓ Establish shared service platforms for smaller suppliers
 - More than 100 suppliers already connected
- SANC build a National Electronic Product Catalogue
- Estimated cost : S\$20m (US\$11.4m)



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Electronic Supply Chain Management Eco-System



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Part 3 How Singapore implement e-business for the FMCG industry

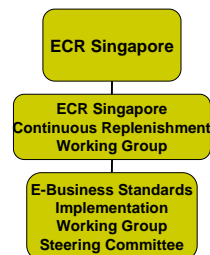
- This project was jointly organised by ECR Singapore, Spring Singapore (the national standards body) and IDA (the government agency which promotes Singapore to be a global infocomm centre).



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The E-Business Standards Organisation Structure



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E-Business Project

PHASE 1

- Initial project was to do CRP (Continuous Replenishment) with retailers

PHASE 2

- To continue with CRP and to expand it to food service sector and healthcare sector.



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E-Business Project

Objectives

- To reduce out of stocks
- Carry right quantity of inventory
- More effective and smooth operations
- Increase sales



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E-Business Project Implementation

Weaknesses

- Supplier, retailer, IT Systems different (operating on different platforms and many interfaces required).
- Significant amount of manual tracking. High operation cost i.e. employing people to track stocks.
- High percentage of errors.



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25

ECR Singapore Continuous Replenishment Working Group

- The Working Group has concluded that to effectively implement Continuous Replenishment, E-Business process needs to be put in place.



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26

ECR Singapore Continuous Replenishment Working Group

Recommendation

- Provide a lower cost E-Business solution via XML.
- To adopt EAN.UCC XML Standard Messages which is a Global Standard endorsed by Global Commerce Initiative (GCI) to facilitate local and global exchanges of electronic messages.



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27

E-Business Solution Implementation

- Initiated jointly by ECR Singapore, IDA and SPRING Singapore
- Support by 3 major retail chains (Initially)
- Support by suppliers involving more than 1,000 companies including SMEs
- Duration of project: 2003 / 2005



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28

Launch of E-Business Project

- This project was announced by Dr. Lee Boon Yang, Minister for Information, Communications and the Arts on 21st August 2003 as part of the E-SCM Eco-System for the FMCG Industry.
- This project was presented at the 6th Annual ECR Asia Conference on 9th October 2003 in Seoul, Korea.



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29

E-Business Project

Part 1

- Adoption of EAN.UCC XML Message Standards Version 1.31

Part 2

- Implementation



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30

The E-Business Implementation Objectives

Short Term Objectives

- Eliminate inefficiencies along the Supply Chain and increase productivity through implementing E-Business Standards.
- Increase sales and profit through better availability and more efficient cost.

Long Term Objectives

- To move Singapore FMCG Industry to an International level that is comparable with those in Europe.



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31

The E-Business Implementation

Strategy

1. Using the Global E-Business Messaging Standards by EAN International
2. The development of a National Electronic Product Catalogue
3. Establish international linkages



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32

National Electronic Product Catalogue (NEPC)

- SANC will enhance NEPC to enlarge the database and to connect with e-catalogues in Europe, USA and Asia
- NEPC will have a section on “New Product”.



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33

Global Location Number

- A Location Number database has been developed and it is located at SANC website.
- It has been enhanced and interconnected with 60 global location number database in other countries.



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34

The E-Business Implementation

Tactics

- E-Procurement by major retail chains
- Continuous Replenishment to reduce out-of-stock situations and to optimise inventory levels to reduce wastage in the supply chain.



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35

Profile of Suppliers

Major Suppliers (S\$100,000 per month)	17%
Medium Suppliers (S\$50,000 – S\$100,000 per month)	10%
Small Suppliers (below S\$50,000 per month)	73%
Total	100%

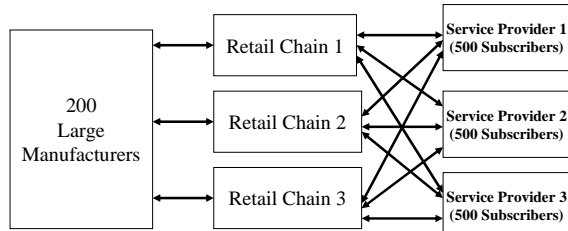


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36

The E-Business Model Retailers Connect to All Service Providers



This will enable a supplier when connected to any service provider able to communicate with all retailers.

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37

Interoperability

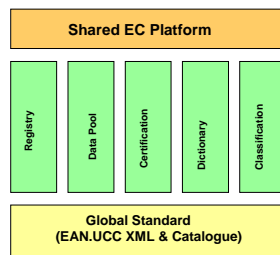
- Suppliers will be able to connect with all retailers directly through the adoption of E-Business Standards
- Suppliers can also connect with all retailers by just linking with one single service provider

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38

The Infrastructure of E-Business Platform



Overview of the B2B EC Infrastructure

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39

Phase I

- Purchase Order
- Purchase Order Response
- Despatch Advice
- Invoice/Credit Note
- Single Order Multi-location Delivery

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40

Phase II

- Sales Report
- Goods Return
- Confirmation of Receipt of Goods
- Request for Trading
- Free text for Remarks

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41

Partial Order

- It was agreed that Partial Order would not be accepted.
- Any order not fulfilled will be treated as cancelled.

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42

E-Business: Benefits

- Reduce out-of-Stock problems
- Reduce inventory levels
- Reduce errors in Purchase Orders
- Reduce errors in Delivery Orders
- Reduce errors in Invoices



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43

E-Business: Benefits (continued)

- Achieve real time inventory data
- Achieve accurate sales forecast
- Achieve accurate party data exchanges through Global Location Number Database
- Achieve data alignment through the National Electronic Product Catalogue



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44

Impact to Industry

On a global basis, the benefits derived for error free electronic transactions and out-of-stock situation amount to US\$20 billion for FMCG industry.



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45

Next

- The EAN.UCC XML Standard will be extended to cover activities between manufacturers and their distributors/wholesalers
- It will also be extended for the communication between Singapore companies and the manufacturing plants outside Singapore
- Discussions have already started in this direction with ECR Singapore's counterparts in Malaysia, Hong Kong and Korea.



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46

EAN International CEO's Comments On This E-Business Project

"It is an outstanding news to know that a new standard (XML) will finally be implemented. As you know, the EAN community made an extra ordinary effort to develop this standard and it is an outstanding news that it is finally being implemented. Thanks for your effort."

Mr. Miguel-Angel Lopera
2nd August 2003



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47

Acknowledgement from EAN International On This Project

EAN International has acknowledged that Singapore is the first country in the world to implement the EAN.UCC XML Standard in such a large scale involving more than 1,000 companies which includes SME companies.



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48

The National Electronic Product Catalogue (NEPC)

- To ensure error-free e-business transactions, data synchronisation through NEPC needs to be used.



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49

What is NEPC ?

- An internet accessible repository of product information and images in a standard electronic format



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50

Objectives of NEPC

- To achieve master data alignment or maintenance of accurate and synchronised product information of trading partners to facilitate e-procurement.
- To remove unnecessary costs and increase the efficiency of the entire supply chain by improving the quality of the data exchanged.



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51

Benefits of NEPC

- Enforces standard identification of products using EAN.UCC product identification numbers throughout the entire supply chain.
- Optimises space management in store and warehouse.
- Supports Computer Assisted Ordering
- Supports Continuous Replenishment



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52



<http://www.nepc.sanc.org.sg>



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53

Steps to join NEPC

- Join SANC as a member
- Nominate at least one person from the company as the NEPC Administrator as the main contact person for all issues related to NEPC.
- Once registered as SANC/NEPC member, a set of user id and password will be issued to each authorised personnel to access NEPC.
- Training on how to access NEPC will be provided for all new members.



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54

Responsibilities of NEPC Administrator

- Registering their company to access NEPC.
- Constantly maintaining the accuracy of product information in NEPC.
- Adding new product information into NEPC via the website.
- Deleting obsolete products from the catalogue.
- Granting catalogue access to members of their organisation for viewing of product information.



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55

NEPC Users



- Suppliers
- Retailers
- SANC
- Guest (generic log on user id for non SANC/NEPC members)
- www.nepc.sanc.org.sg



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56

Supplier's Functionalities

- Browsing of product information and images
- Add New Product Information
- Amend Product Information
- Delete Product Information
- Search for product by category, brand, supplier or by keyword



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57

Submitting Product Information

- NEPC Administrator will submit their company's product information via the online NEPC.
- NEPC Administrator should read through the NEPC Data Dictionary to understand the various data fields definitions & how the information should be entered before keying in the product information.
- All information submitted via the website will be reflected instantly on the screen.



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58

Amending/Deleting Product Information

- Suppliers should constantly update all product information in NEPC.
- All amendments made via the website will be reflected instantaneously.
- All deletions done using the website will also be reflected instantaneously.



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59

Product Images

- Suppliers who wish to have their product images (new or replacement of existing images) featured in NEPC will require the assistance of SANC.
- Suppliers may submit photographs, brochures or digital images of their products to SANC for imaging and uploading to NEPC.



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60

Product Images

Minimum requirements for coloured photographs, product brochures :

- Coloured Photographs (minimum 3R size) featuring only a single product in an upright position with plain white or grey background.
- The EAN/UPC barcode number must be written behind the photographs/brochures.
- Overlapping/stacking of products featured in photographs/brochures are not acceptable.



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61

Product Images

Digitised product images

- Must be in jpeg format.
- Digitised images should be saved using the product barcode number as the filename, eg, 8881234567895.jpg



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62

Charges Involved

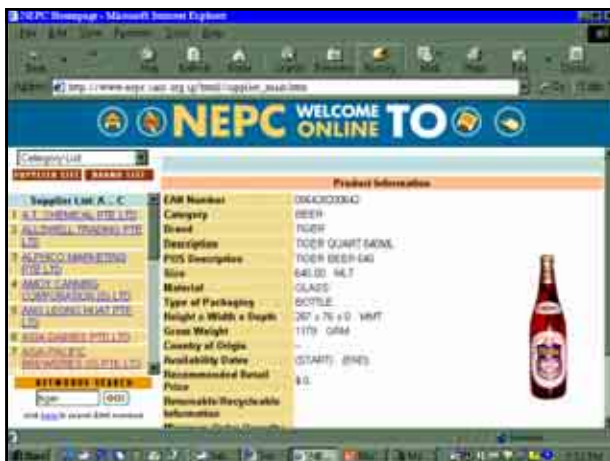
Submission of product data	Free
Display of product image	S\$65 per product + 5% GST
Replacement of product image	S\$65 per product + 5% GST
Digitising product advertising filmlet	S\$500 per filmlet + 5% GST
Incorporating digitised product advertising filmlet into NEPC	S\$300 per filmlet + 5% GST



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63



Next Steps

- Promote adoption by suppliers and other supermarket retailers
- Extend to other retail segments
- Extend to the Hospitality and F&B industries
- Extend to other messages
 - eg, Sales Report, Cross Docking related
- Extend to international transactions
 - SANC is in discussion with counterparts in Malaysia, Hong Kong and Korea



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67

Thank You !

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68

e-Trade Korea, Innovation 2007 e-Trade Platform

Korea e-Trade System : Strategy and Architecture

e-Trade Korea, Innovation 2007 : e-Trade Platform



APEC Symposium on ebXML for
Internet Paperless Trading and
Collaborative e-Business

July 21-23, 2004
Bangkok, Thailand


Presented by Chaemee Kim
e-Trade Platform Architect, KTNET



e-Trade Korea, Innovation 2007 e-Trade Platform

Table of Contents

1. Background
2. Strategy
3. Roadmap of e-Trade Platform
4. e-Trade Platform Architecture
5. Implementation Plan
6. ROI



e-Trade Korea, Innovation 2007 e-Trade Platform

1. Background

- Vision : e-Trade Korea, Innovation 2007
- Organization : National e-Trade Facilitation Committee, July 2002
- e-Trade Process Innovation BPR/ISP as One of e-Government Projects, December 2003 ~ June 2004

National e-Trade Facilitation Committee

Chair : Prime Minister
Secretary : Ministry of Commerce, Industry and Energy
Committee : Ministers & Chief in Private Sector

Government Ministry of Commerce, Industry and Energy Ministry of Finance and Economy Ministry of Foreign Affairs and Trade Ministry of Information and Communication Ministry of Construction and Transportation Ministry of Maritime Affairs and Fisheries Ministry of Justice Korea Customs Service and more	Private Sector Korea International Trade Association Korea Trade Investment Promotion Agency Federation of Korean Industry Korea Chamber of Commerce and Industry Private e-Trade Facilitation Committee Korea Trade Network And more
---	---

Administrative Committee

Chair : Vice Minister of MOCIE
Secretary : Director General for Trade Policy
Committee : Director of Bureau, Private

e-Trade Task Force

Chair : Director General of MOCIE,
Trade Policy
Committee : Director of Public, Private

Private e-Trade Facilitation Committee

Secretariat

Platform
W/G


Finance
W/G

Logistics
/ Customs
W/G

Law
/ Global
W/G

Marketing
W/G

Pilot
W/G

-2- 

e-Trade Korea, Innovation 2007 e-Trade Platform

2. Strategy

Process Innovation

- ◆ Current Process Analysis & To-be Process Modeling
- Marketing
- Financial Settlement
- License/Certificate
- Insurance
- Logistics
- Trade Declaration

Legal System on e-Trade

- ◆ Institutional Model
- ◆ Incentive & Community Supporting System
- ◆ Bilateral/Multilateral Agreement on International Collaboration

Law and System

Information Strategic Planning

- ◆ e-Trade Platform Design
- ◆ Standard
- ◆ Integration & Interface
- ◆ Action Plan (2004-2007)
- ◆ Organization

Global Network

- ◆ International Collaboration
- ◆ Mutual Recognition on Global e-Trade
- ◆ APEC, WCO, UNICEFACT, PAA, EU IST, ASEM, Asia PKI

1 Strategy

Internet Based National e-Trade Infrastructure

2 Strategy


Seamless e-Trade Service

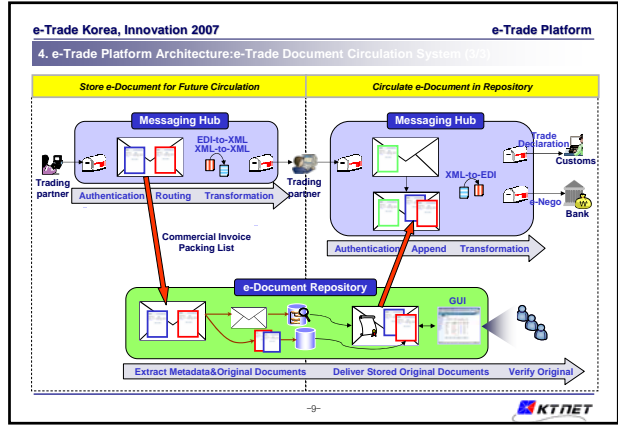
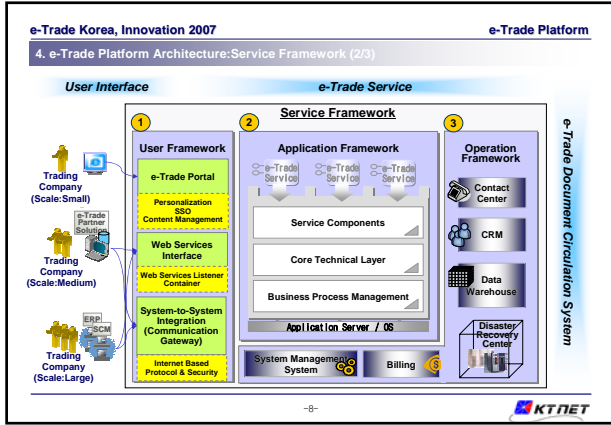
3 Strategy

International Collaboration for Cross Border Paperless Trading

4 Strategy

Acceleration of e-Trade Community

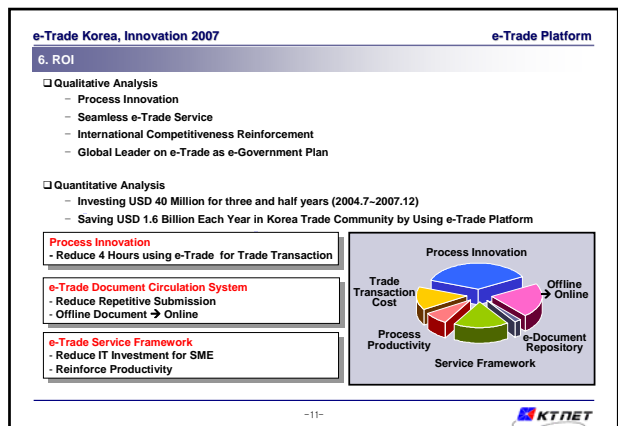
-3- 



e-Trade Korea, Innovation 2007 **e-Trade Platform**

5. Implementation Plan

Phase	[1] Building Core Infrastructure 2004.7 - 2005.12	[2] Enhancing Infrastructure - 2006.12	[3] Upgrading User Environment - 2007.12
Goal	<ul style="list-style-type: none"> Build Core Infrastructure of e-Trade Platform Standardize e-Trade Documents 	<ul style="list-style-type: none"> Enhance Core Infrastructure fulfilling Seamless e-Trade Service Implementation 	<ul style="list-style-type: none"> Upgrade User's e-Trade System Environment Establish Global Network
Action	<ul style="list-style-type: none"> <e-Trade Document Circulation System> <ul style="list-style-type: none"> New e-Document Repository e-Standard Registry (ebXML RegRep) Enhancement Messaging Hub (EDI, XML) Pilot Project L/C Consolidation & Settlement Limit Management Service <Document Standardization> <ul style="list-style-type: none"> Document Standard ebXML Core Component based XML Schema EDI-to-XML Transformation <Service Framework : Application> <Reorganization of Law and System> 	<ul style="list-style-type: none"> <e-Trade Document Circulation System> <ul style="list-style-type: none"> Enhancement e-Document Repository <Service Framework : User> <ul style="list-style-type: none"> e-Trade Portal <Seamless e-Trade Service> <ul style="list-style-type: none"> License/Certificate System based on e-Life Cycle Marketing Supporting System <Interface with Related Parties> 	<ul style="list-style-type: none"> <Service Framework : Operation> <ul style="list-style-type: none"> e-Trade Solution for SME Remote Disaster Recovery Center <Seamless e-Trade Service> <ul style="list-style-type: none"> e-Trade Settlement <Global Network> <ul style="list-style-type: none"> e-CIO e-B/L FAA, ASEM WCO, APEC, UNCEFACT <Interface with Related Parties>



BizDex Overview

ebXML and WebServices – for businesses large and small

Steve Capell
 Director e-Business Strategy
 Red Wahoo
 Steve.capell@redwahoo.com



www.redwahoo.com

1

The BizDex Vision

The BizDex Strategy

BizDex Overview

2

BizDex Background

- A 2001 government study showed that broad scale automation of collaborative business processes offers significant value to the Australian economy (2% of GDP), but only if wide spread adoption of B2B may be achieved.
- A 2002 government sponsored symposium in Melbourne agreed that, to date, technology has been unable to deliver on broad scale B2B interoperability. The symposium recommended an ebXML architecture and a commercial / governance framework as a mechanism to drive B2B interoperability.
- Proof-of-concept projects run during 2003 have led to the pilot infrastructure now known as "BizDex".

3

The problem for Business

Government

Argghhhhhh!
 Just fax me

NOT SCALEABLE

Each connection requires a different technical solution.

4

Imagine if . . .

Imagine if someone created a solution, that automatically set up B2B collaborations . . .



- Between multiple trading partners.
- Across many different business processes.
- Using a variety of certified B2B standards and off the shelf enterprise applications.

5

Imagine if . . .

Imagine if peer-to-peer B2B collaborations could be set up . . .




- Leveraging existing infrastructure.
- Without disengaging existing VAN or e-Marketplace relationships.
- Without altering internal business processes.
- Without constantly engaging costly professional services.
- Without paying ongoing subscription or transaction fees.
- For a one time cost of less than \$100 per trading partner.



6

The BizDex Vision




To bring B2B interoperability to:

- Common business processes.
- Using different software applications.
- Between thousands of businesses.

7

The Challenge



To reduce set-up costs to the point where genuine system-to-system B2B interoperability may be justified even for low transaction volumes.

8

The BizDex Strategy



Automate
B2B Set-Up

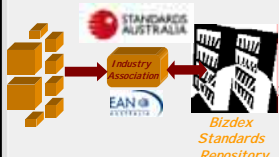
Simplify
the Standards Landscape

Spread
B2B compliance costs

9

How Does BizDex work?

Simplify the Standards Landscape



- An industry working group gains certification of an existing process or uses BizDex to assemble a new public process for use by the community.
- A recognized standards body provides methodology, structure and a governance framework.

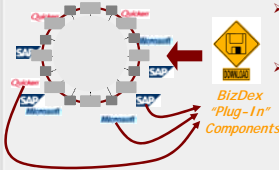
BizDex Standards Repository

Governance, re-use and cross-industry harmonization Simplifies the Standards Landscape.

10

How Does BizDex work?

Spread B2B Compliance Costs



- Opportunities emerge to build B2B communities.
- Organisations build "plug-in" components which enable enterprise applications to comply with public processes.


BizDex "Plug-In" Components

Integration costs are reduced by Spreading the costs across users of the same enterprise platform.

11

How Does BizDex work?

Automate B2B Set Up



- Businesses publish their profiles and search for partner profiles on BizDex.
- Profiles include:
 - Contact Information (White Pages)
 - Classification Information (Yellow Pages)
 - Business Service Interface (Green Pages)

BizDex Registry Service

BizDex reduces cost by providing a partner discovery framework and single point for profile maintenance.

12

How Does BizDex work?

Automate B2B Set Up

BizDex Private Process Repository

BizDex Trading Partner Agreement Service

- Trading partners may download plug-in components to BizDex Connector or existing middleware infrastructure.
- Trading partners may use BizDex to calculate the agreement and configure their middleware platforms.

BizDex reduces cost by Automating the set-up of B2B Collaborations.

13

How Does BizDex work?

Transacting with BizDex

- Once set-up, trading partners exchange transactions **directly** and pay no transaction fees.
- Transactions are secure and reliable, complying with public process requirements.

Business transactions are peer-to-peer and so not visible to the BizDex Framework.

14

How Does BizDex work?

Manage the B2B Community

BizDex Community Management Service

- Large enterprises building a community may use BizDex Lifecycle Management services.
- BizDex assist communities to manage change.
 - Public Process Change
 - New Partners
 - Partner Changes

15

What does BizDex provide?

- A governed repository of public standards.
- A service to manage the B2B community.
- A governed library of integration components.
- A platform for set-up of B2B integrations.
- A service to set-up B2B trading partner agreements.
- A service to manage the trading partner lifecycle.

16

BizDex Business Review

Public - Private Partnership
Commercial model

17

BizDex in a nutshell

BizDex is a service, supported by a commercial and governance framework which provides the environment necessary for B2B collaborations to flourish.

BizDex is built upon a collection of infrastructure components:

- A Standards Library.
- A Registry of Community Data.
- Commercial Services.

18

BizDex Ownership

Independent Vendors or Industry Leaders

19

BizDex Ownership

The BizDex Board

- Currently BizDex reports to the CI TEC Board.
- Propose to establish BizDex Pty. Ltd. as a not-for-profit entity.
- Charter to reflect the interests of the "Public Good".
- Currently sponsored by Standards Australia and NOIE but seeking to expand ownership and board structure.

20

Proposed Mission of the BizDex Board

To be a trusted and independent, not-for-profit, consortia of government and recognized standards bodies, committed to B2B standards simplification, partnering with private enterprise to deliver low cost, scaleable, B2B interoperability to all Australian businesses.

21

Public Infrastructure Funding

Funded through Standards Creation activity.

- Branded use of infrastructure.
- Subscriptions
- Professional Services:
 - Public Process Creation.
 - Certification Services.
- Revenue share of commercial services.

Supported by Government and Standards Bodies.

22

Commercial Business Model

Free Services

Registration and Discovery

- Registration on BizDex is a free service.
- Trading Partner search and discovery is a free service.

23

What Does the Customer Pay? Commercial Model

Optional User Pays Services

Last Mile Integration

- Customers may choose to purchase integration components from BizDex.
- Customers may choose to use the BizDex connector platform or existing middleware infrastructure.

24

Commercial Business Model

Optional User Pays Services

Trading Partner Agreement

- Customers may choose to have BizDex establish a trading agreement.
- Trading partners negotiate the distribution of agreement calculation fees.
- The customer only pays once the set-up and agreement is complete.

25

Commercial Business Model

Optional User Pays Services

Community Management

- Customers may choose to use BizDex Community Management Services.
- Community Life Cycle Management
- Community Status Reporting
- Community Change Management

26

Commercial Model Value Proposition

- Core BizDex services are free.
- BizDex commercial services are optional.
- Customers may re-use their own private infrastructure.
- Payment for commercial services is delayed to point of use.
- Governance and certification underpins quality of service.
- Service providers compete in an open technical and commercial framework.
- Use of BizDex is open to individual businesses and communities such as VAN's or e-Marketplaces.

27

Who is BizDex for?

Government

Industry Associations

Large Business Small Business

ERP Software Vendors

SME Software Vendors

B2Bi Software Vendors

VAN's & Marketplaces

28

BizDex Project Review

Where are we now?

Issues & challenges

29

BizDex – Past, Present and Future.

Needs Assessment

Phase 1 Proof of Concept

Production Infrastructure Build

Populate Library of Industry Standards

Industry Consultation April 2002

Engage Working Group January 2003

Industry Consultation December 2003

TOL grant awarded to Standards Australia December 2003

BizDex Production Release planned for early, 2005.

30

Issues, challenges, next steps

- *Consensus amongst diverse stakeholders*
 - *Vendors promote their own technology & "standards"*
 - *Governments are risk averse*
 - *Standards bodies are wary of new business models*
- *Aligning benefits and costs*
 - *Benefits from a B2B automation are often one-sided. The company that is reaping the benefits needs to provide incentives to its partners to collaborate.*
- *Release BizDex data model and interface definitions as public*
 - *Release BizDex data model and interface definitions as public standards*
 - *Provide a certification framework for "BizDex compliant" implementations*

BizDex Technology Review

BizDex Overview

BizLib Repository in detail

BizDex Registry in detail

BizLink Connector in detail

How does BizDex work?

BizDex is a collection of open infrastructure components that, together with a commercial and governance framework, provide the environment necessary for B2B collaborations to flourish.

What makes up a Public Process?

Business Domain Model

Layer	Relevant Standards
Process	Alignment domain layers
	Modeling: UNCEFACT UMM (UML profile) Syntax: ebXML BPSS (BCSS in future) Libraries: RosettaNet PIPs
Information	Modeling: UNCEFACT CCTS (UML profile) Syntax: XML (UBL / UN naming & design rules) Libraries: EDIFACT UNCEFACT Core Components UBL, OAGIS (horizontal) EANcom, xbrl, HL7, etc. (industry)
	Trust: ABN-DSC (future - federated domains) Protocol: WS-Security (message), SSL (transport)
Message	Protocol: ebXML MS, EDINT AST/ASZ, SOAP Extended WS-stack (WS-RM/Transact)

Standards exist at each layer. A robust methodology and governance structure is required to harness the capability.

Public, Private – What is the Difference?

Whatever a trading partner has to do to comply with the public process.

The language of the community.

How is a public process defined?

BizLib – Start by modeling the business collaboration

From "helicopter" domain view down to detailed service model

37

Generate the process schema from the model

38

Then generate the information schema

39

Harmonise and publish to BizLib repository

40

BizLib in a nutshell

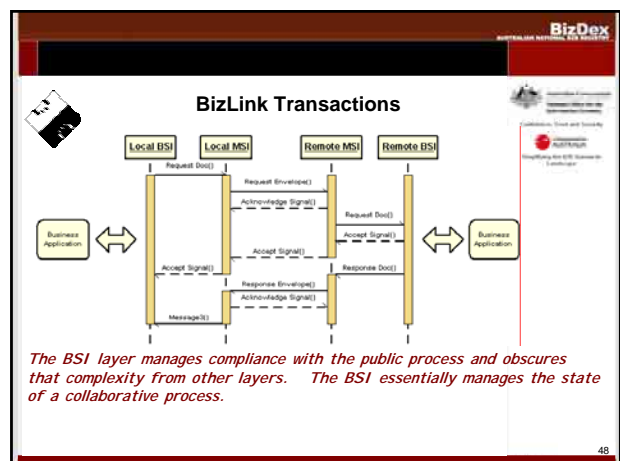
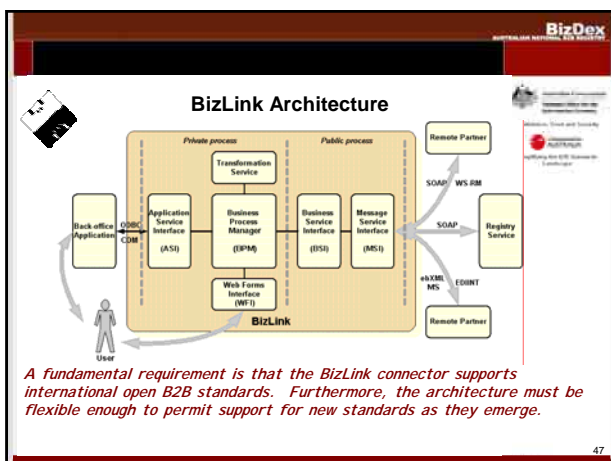
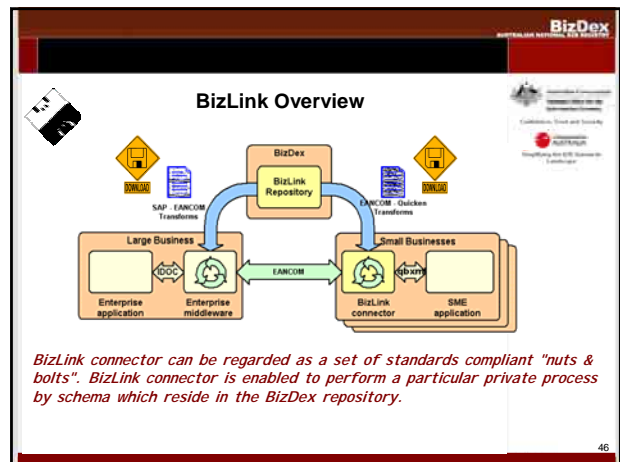
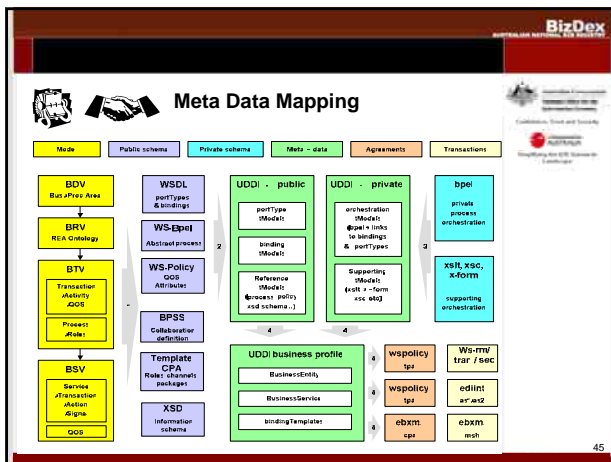
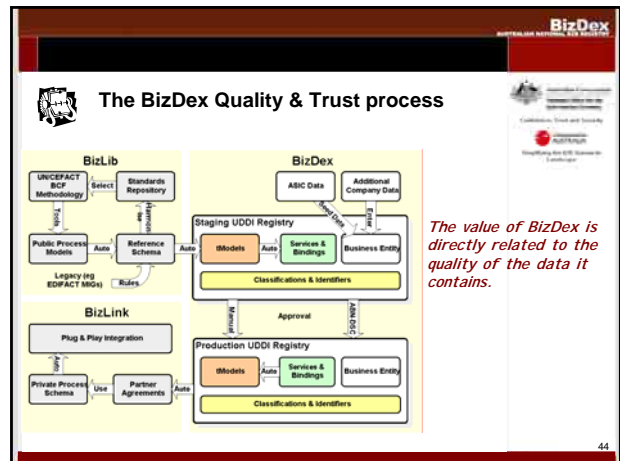
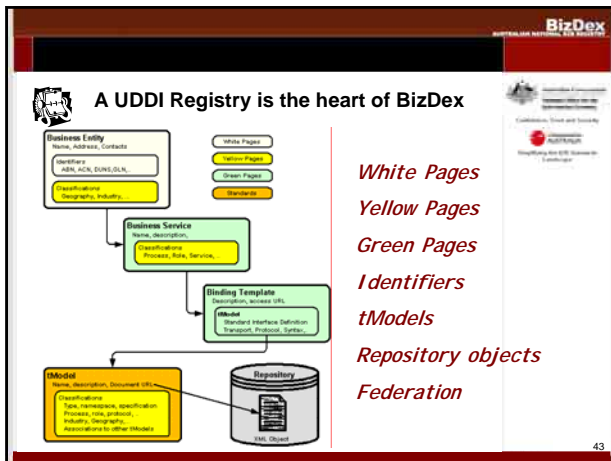
BizLib Provides:

- Tools & Methodologies
- Certification Processes
- Harmonisation Framework
- Naming & Design Rules
- Independent Governance

41

BizDex - The role of a registry service

42



BizLink – private processes

The BPM is the heart of the BizLink connector.

It is responsible to execute all the steps defined in the BPEL private process schema.

49

BizLink – self configuration

Before BizLink can process an inbound message, it needs to be "programmed" with appropriate private process schema and partner profiles.

50

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- > A service to set-up B2B trading partner agreements.
- > A service to manage the trading partner lifecycle.

51

The Scenario

David Rouse
Trading Partner
Liaison Officer
IDES US Inc.

Steve Capell
Managing Director
Red Wahoo Pty.Ltd.

52

The Five Steps

Invite Set-Up Negotiate Transact

53

Open Discussion

54

BizDex Overview

ebXML and WebServices – for businesses large and small



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