2004 WDI / WBIC Customer Conference
Global Business Transformation

A Look Back as we Move Forward

Randy Smith

WebSphere. software

eS² Inc.
ebusiness Solutions to the Next Power

e business software

Objectives

- Look at EDI and WDI over the past decade and a half
  - History of DISA – celebrating its 25th year
  - History of DI / WDI – celebrating its 15th year
  - Evolution of EDI
- EDI today
- EDI for the future
  - Where are we going over the next five years?

"Those who cannot remember the past are condemned to repeat it."
-George Santayana

"If you don't take a mental picture of where you started - you will never realize how far you have come!"

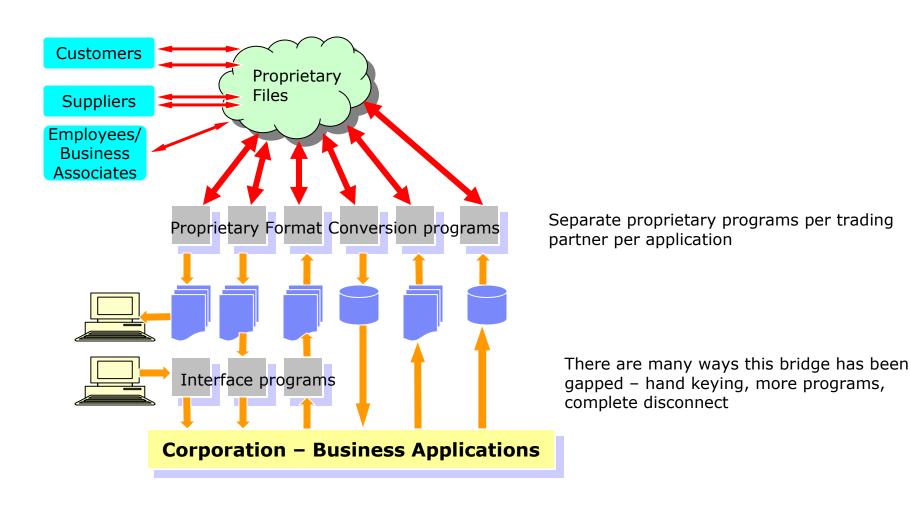*Randy Smith, eSI2*

First..... Looking back

WebSphere. software

eSR² Inc.
ebusiness Solutions to the Next Power

e business software

Proprietary Electronic Delivery

Customers

Suppliers

Employees/
Business
Associates

Proprietary Files

Proprietary Format Conversion programs

Separate proprietary programs per trading partner per application

Interface programs

There are many ways this bridge has been gapped – hand keying, more programs, complete disconnect
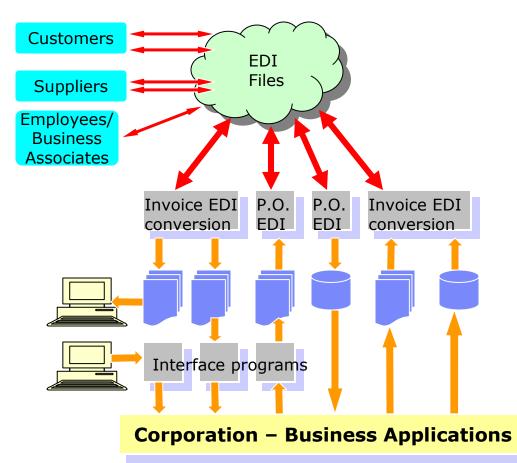
Corporation – Business Applications

History of DISA

- 1979 - ANSI designated an "Accredited Standards Committee for EDI – ASC X12.
- 1979 - First standard based on TDCC structure.
- 1982 - Publication of Version 1 of American National Standards, which are ANSI certified releases of draft X12 standards.
- 1986 - X12F Finance Subcommittee forms to serve the B2B needs of the financial industry.
- 1990 - Alignment Task Group to recommend steps to converge X12 standards and EDIFACT messages
- 1991 - X12N Insurance Subcommittee created to serve the B2B need of the insurance and healthcare industry.
- 1996 - ASC X12 is instrumental in having language included in HIPAA.
- 1998 - ASC X12 eyes modeled approach to Object Oriented EDI and the potential synergy of X12 EDI and XML.
- 2000 - The Health Insurance Portability & Accountability Act (HIPAA) transaction regulation is published adopting nine X12 transactions for the health care industry .
- 2003 - Gartner praises ASC X12's syntax neutral architecture –
  - Context Inspired Component Architecture - enabling the development of XML business messages and encourages a CICA-like approach for XML business development.

Then Came EDI

Customers

Suppliers

Employees/
Business
Associates

EDI
Files

Invoice EDI
conversion

P.O.
EDI

P.O.
EDI

Invoice EDI
conversion

Separate home grown EDI translation
programs per application / transaction set and
even by partner

Interface programs

There are many ways this bridge has been
gapped – hand keying, more programs,
complete disconnect

Corporation – Business Applications

Looking back

- **1989 - Events of the time**
  - ➢ Median Family Income: $34,213
  - ➢ Median Price Of A New House: $120,000
  - ➢ New Car: $14,645
  - ➢ Gallon of Gas: $1.06
  - ➢ Loaf Of Bread: $0.74
  - ➢ Postage Stamp: $0.25
  - ➢ Prime Interest Rate Reaches 21.5%

Evolution of EDI

	x.12	EDIFACT
➢	1989 - 2030	EDI89A
➢	1990 - 2040	EDI90A
➢	1991 - 3010	EDI91A
➢	1993 - 3030	EDI93A
➢	1995 - 3050	EDI95A
➢	1997 - 3070	EDI97A
➢	1998 - 4010	EDI98A
➢	2000 - 4030	EDI00A
➢	2004 - 5010	EDI04A

Then Came Commercial Translation Software

Customers

Suppliers

Employees/
Business
Associates

EDI
Files

EDI Translation Software

Single Translation Software Package to handle all applications and trading partners

Interface programs

Interfacing the new e.Business processes to the existing core applications is now the challenge

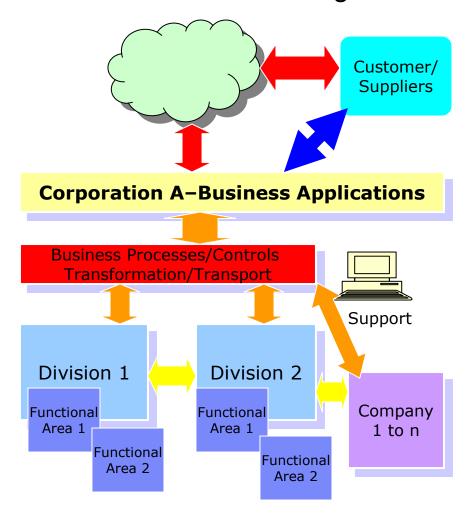**Corporation – Business Applications**

History of DI/WDI

- ➢ 1989 - Version 1.1
- ➢ 1990 - version 1.2
- ➢ 1991 - Version 1.3
- ➢ 1993 - Version 1.4
- ➢ 1995 - Version 1.5
- ➢ 1997 - Version 2.1
- ➢ 1998 - Version 3.1
- ➢ 2002 - WDI 3.1 MP
- ➢ 2002 - WDI 3.2 MP
- ➢ 2003 - WDI 3.2 zOS

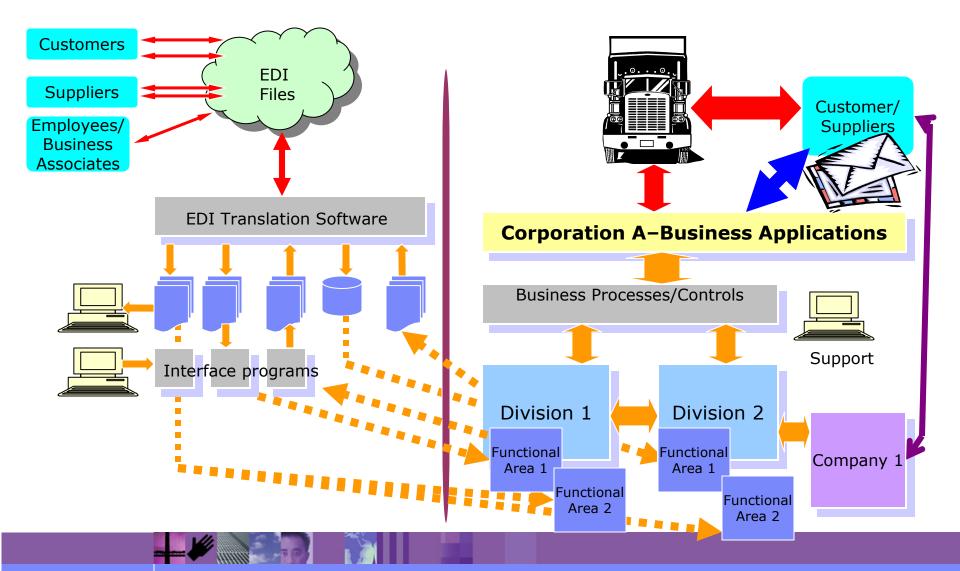# EDI – Business Transactions Integration

eBusiness Phases – An evolution

- **e-Business – Phase I –** simply the "on-ramp" to the e-business superhighway

  - ➢ Web publishing, Web presence

  - ➢ Email

  - ➢ Employee access to information

  - ➢ Focus: B2C and Small corporations

- **e-Business – Phase II –** Enterprise Integration

  - ➢ Companies integrate their IT structures within their own business and across other businesses

    Internally within the company

    Externally with Customers and suppliers

  - ➢ Focus: B2B, small, medium and large corporations

  - ➢ Autonomous Information presentation

The Results……

Customers

Suppliers

Employees/
Business
Associates

EDI
Files

EDI Translation Software

Interface programs

Corporation A–Business Applications

Customer/
Suppliers

Business Processes/Controls

Support

Division 1

Division 2

Functional
Area 1

Functional
Area 2

Functional
Area 1

Functional
Area 2

Company 1

EDI today

WebSphere. software

eSi² Inc.
ebusiness Solutions to the Next Power

e business software
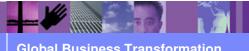
EDI Today

➢ Continues to be the cornerstone for business integration / process controls already in place….

➢ EDI is a mission critical part of companies B2B strategies

  With most of the necessary business processes/controls

➢ 95% of Fortune 500 companies use EDI

➢ 80% of business transactions are conducted via EDI today

➢ EDI continues to deliver significant return on investment

➢ Last 2 decades - EDI had a major impact on Business productivity gains

➢ EDI continues to evolve in response to new enterprise and industry requirements, competitive pressures (e.g. HIPAA, AS1, AS2)

➢ Widely used across all Industry sectors

➢ Supports over 1/3 of the United States GDP

➢ Between 12-15 million transactions are processed every day

➢ All Major Software providers re-tooling to incorporate EDI into new product offerings

  Bundling of EDI into many "integration" type product tools
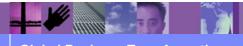
25 Years later…. (2004)

➢ EDI transactions represent between 80% - 90% of the total business-to-business transaction traffic

➢ EDI transactions are growing 3% - 5% annually

➢ X12 EDI currently supports 315 transactions sets

EDI Today and Tomorrow
(The tides have turned)

- # WDI 3.2
- # EDI is still going strong

EDI for the Future

WebSphere. software

eSI² Inc.
ebusiness Solutions to the Next Power

ⓔ business software

Real Business World Challenges

- Corporate Business / Economic
  - ➢ Slow growth
  - ➢ Low Profits
  - ➢ Reduced Budgets
  - ➢ Staff reductions
  - ➢ Cost containment
  - ➢ Mergers / Consolidations / Acquisitions
- I.S.
  - ➢ Tight Budgets
  - ➢ Reduced staff
  - ➢ Overwhelmed with projects
  - ➢ Overdue projects
  - ➢ Increased costs and overhead

Real Business World Challenges

- **Business Integration Challenges**

  ➢ **Unconnected infrastructure investments**

  Provide seamless integration with new business units

  Link packaged applications with legacy systems

  ➢ **Accelerated costs of managing disparate systems**

  Integrate across heterogeneous islands of automation

  Mitigate people and skill shortages

  ➢ **Increased industry and government regulations**

  Industry standards

  Government regulations

  ➢ **Reaching new markets with critical speed**

  Support new standards for process automation

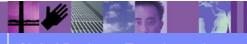 Maintain systems and asset security

Progress…. Yes….. Goal… no

Phase I	Phase II	Phase III	Phase IV

Today — **Business Demands**

Phase I

Basic Presence

Web Site

Phase II

Basic e-Com Websites

Buy/Sell Catalogs

"e-Facade"

Phase III

Integrated E-Business Tx -> Proc

Workflow Integration

Phase IV

eCommunity Integration

Business Functions/ Process Integration

CIO Top Spending Priorities

1. Integrating systems and processes
2. Lowering costs
3. Strategic planning/aligning IT and business goals
4. Implementing data security and privacy measures
5. Automating/optimizing the supply chain
6. Enabling/enhancing e-commerce
7. External business-to-business customer service/relationship management
8. Knowledge management/leveraging intellectual assets
9. Project management improvement
10. External business-to-consumer customer service/relationship management
11. User training/education/satisfaction
12. Implementing new technologies
13. Staff development/retention
14. Managing IT globally

What are the most current drivers and trends related to EDI?

- **EDI technology has risen in importance of late**

- **EDI's value proposition is still very strong**

- **XML-based alternatives**
  - ➤ more expensive and more complicated to implement than the EDI systems they were intended to replace
  - ➤ It is also becoming increasingly clear that XML-based data standards will not replace the traditional EDI standards (X12, EDIFACT) in most situations
  - ➤ Increased adoption of EDI by Small-to-Midsize Enterprises is limiting the value of newer data standards

- **Major Drivers related to EDI today……**
  - ➤ Technology retrenchment
  - ➤ EDI is changing
  - ➤ High penetration of EDI in many sectors:
  - ➤ Hub-pressure increasing

What are the most current drivers and trends related to EDI?

- **Trends**

  - ➤ **EDI usage will continue to grow:**

    Larger hub companies

    Midsize organizations .

    Companies already using EDI

  - ➤ **Value-added network (VAN) market stabilizes:**

    Traditional VANS have evolved

    New Internet Services players offering "VAN" style services (mailboxes, store and forward, etc.)

  - ➤ **EDI over the Internet will not gain dominance:**

    Scalability issues related to management of individual point-to-point communication links

  - ➤ **Hybrid EDI systems will become more common:**

    Hybrid systems that provide integrated EDI and BPI functionality

  - ➤ **Use of universal translators will grow:**

    Rather than forcing a single standard, organizations will find it much easier to implement universal translation capability, **making the data standards issue somewhat of a moot point**

    (Source: GIGA-Market research – IT Treads 2003, 5/19/03)

What are the most current drivers and trends related to EDI?

- **Trends**

  ➤ **EDI growth will continue to grow on the foreseeable business horizon (5-8 years)**

  ➤ **EDI/XML co-existence**

  CICA - Context Inspired Component Architecture

  As conflicting XML messages proliferate, ASC X12 is using its open, consensus-based standards process to create a new generation of e-business messaging, providing a foundation for tomorrow's technology environments.

  ASC X12's new XML architecture, called Context Inspired Component Architecture (CICA), enables individuals to build XML business documents in a cross-industry setting and ensures organizations a significant return of investment

eBusiness Phases – An evolution

- **e-Business – Phase I –** simply the "on-ramp" to the e-business superhighway

  ➢ Web publishing, Web presence

  ➢ Email

  ➢ Employee access to information

  ➢ Focus: B2C and Small corporations

- **e-Business – Phase II –** Enterprise Integration

  ➢ Companies integrate their IT structures within their own business and across other businesses

    Internally within the company

    Externally with Customers and suppliers

  ➢ Focus: B2B, small, medium and large corporations

  ➢ Autonomous Information presentation

- **e-Business – Phase III**

  ➢ eBusiness On-Demand

    Companies and IT infrastructures dynamically adapting to changes

EDI Today and Tomorrow
(The tides have turned)

- # Focus renewed

  ➢ June 14, 2004 – Computerworld - EDI: Alive and Well After All
    These Years - Transactions increase despite XML option.

- # The Giant opens his eyes

  ➢ March 22, 2004 – ZDNet - Microsoft updates business offerings
    - The company said the network can now process documents
    based on the electronic data interchange (EDI) standard.

- # EDI and XML co-existing

The Vision…

Integrate with the WebSphere Vision
    Modeler / Monitor - for transaction flow monitoring
    WBI Message Broker
    WBI Server
    WBI Foundation

Improve operational integration
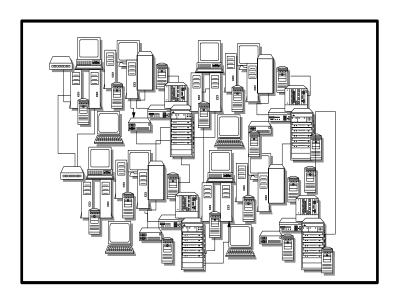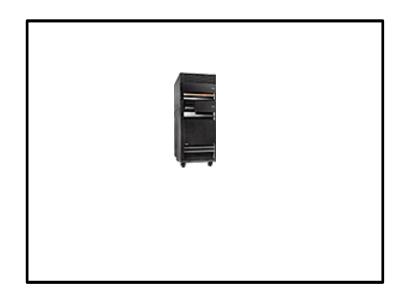   message tracking
    message logging

Timely comments......

- Frank G. Soltis, IBM's iSeries chief Scientist, (created the technology-independent architecture used in the AS/400 and iSeries)

  ➤ "As many companies begin to integrate their IT structures within their own business and across other businesses, they are creating some incredibly complex infrastructures

  ➤ Direct customer experience has shown that the IT infrastructures being used by most companies today are not prepared to support a responsive, highly dynamic, integrated business environment.

  ➤ Companies are finding they need an infrastructure that is designed for the on demand operating environment.

  ➤ That infrastructure has to be integrated, open, virtualized, and autonomic"

Business Simplification Model

Summary

"Those who cannot remember the past are condemned to repeat it."

-George Santayana