

e-Business

Presented by:

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Ben's Background

- **e-Business Solutions Advisor – Tam Group**
- **Analyst/Designer - Contextual-Commerce Site**
- **Analyst/Designer - Home-Grown Financial ERP**
- **Consultant - Packaged Application Integration**

Introduction

- e-Business vs. e-Commerce
 - Used interchangeably
 - Subtle differences

BROAD Definition

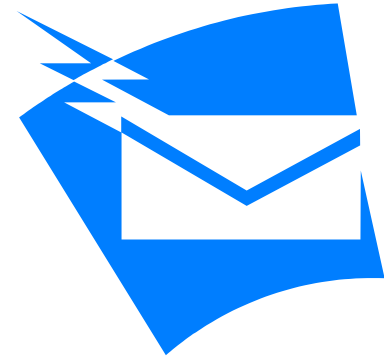
Phone



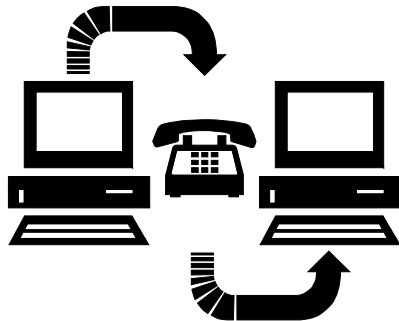
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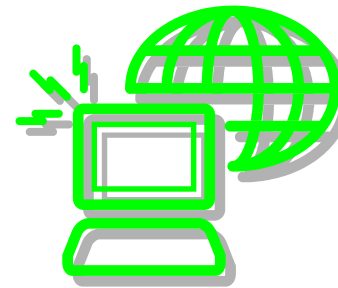
e-mail



EDI



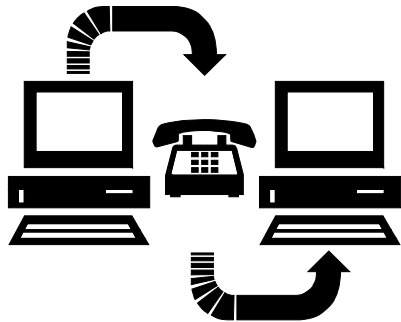
Internet



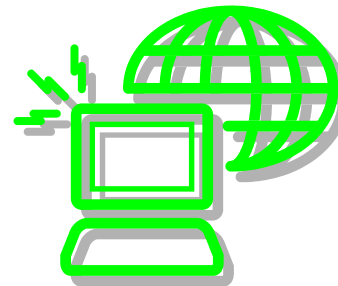
Narrow Definition

- Focus on DATA

EDI



Internet



Benefits of e-Business

- Better
- Faster
- Cheaper

A Brief History of EDI

- Late 60's – Need is Realized
- Late 60's – Electronic Data is exchanged.
GM, Super Valu, K-Mart, and Sears
- 1975 –Inter-Industry EDI Standard released.
Covering Air/Ocean/Rail/Some Banking.
- 1981 – ANSI X12 Standard Released

Moving Beyond EDI

- Where did all of this ‘e-everything’ come from?
 - The Internet
 - Development of XML

A Brief History of XML

- 1986 – SGML becomes ISO Standard
- 11/96 – XML introduced at SGML conf.
- 2/98 – XML becomes W3C Recommendation
- Early 1998 to Present – explosion of XML tools and wide-spread acceptance as integration tool.

Fact: There is only 1 version of XML.

Current e-Business Topics

- B2C
- B2B
- Marketplaces
- PAIN

B2C = Business to Consumer

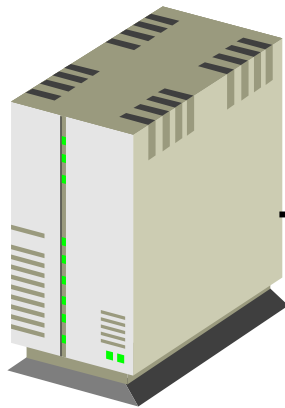


- Provide Information
- Sell Goods and Services
- Initiated by Consumer

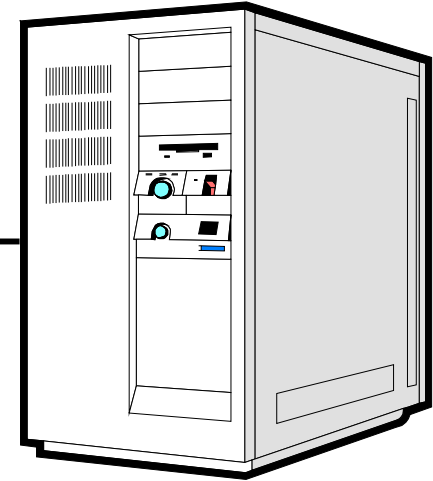
B2C Technology

- Not the most successful model:
 - Difficult ROI.
 - Requires attracting new business.
- Trend was to ‘develop our own’
 - Many packages available now to make B2C easier. (e.g. IBM CommerceSuite).

B2B = Business to Business



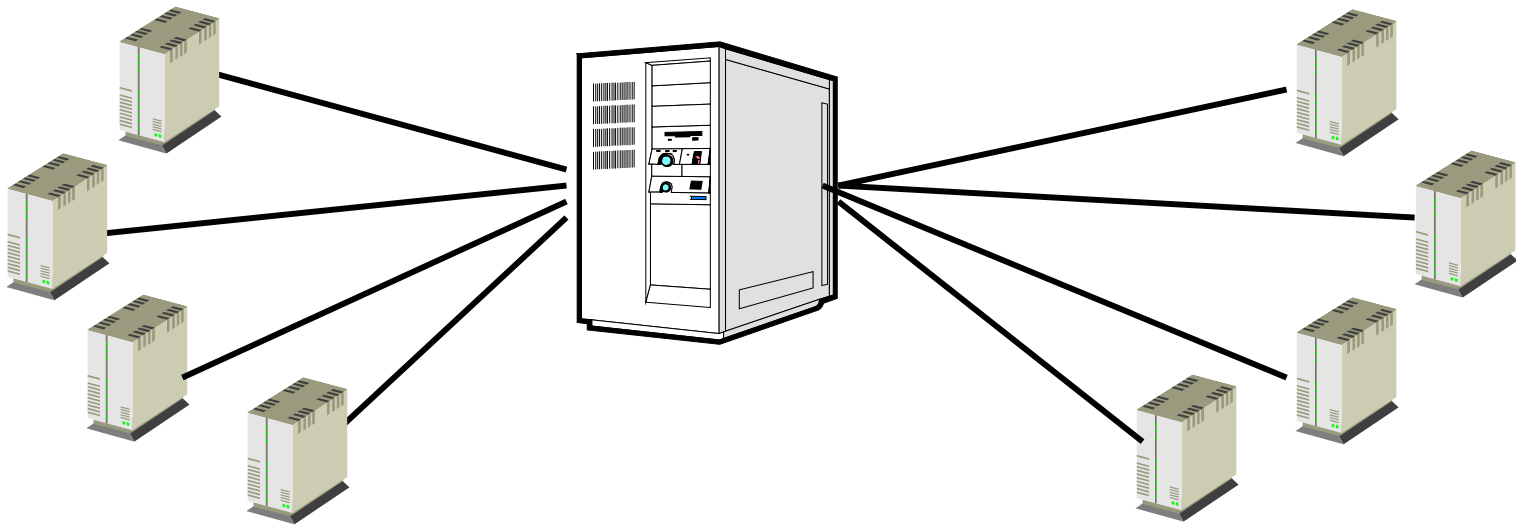
**Any
Network**



- Business Apps ‘Talk’ - Pass data automatically.
- Use any medium - Internet/Direct Phone Line/VAN.
- Bi-directional, initiated at either end.

Marketplaces

- Intermediary provides virtual marketplace for buyers and sellers.
- Works like B2B2B



Issues Related to e-Business

When exposing Systems and Data on the Internet, be aware of the following:

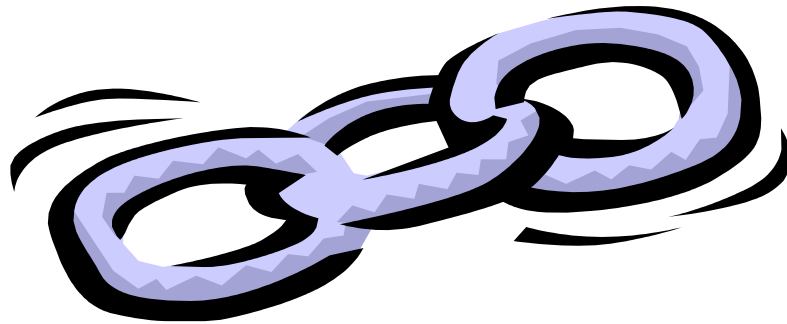
- Privacy
- Authentication
- Integrity
- Non-repudiation

Privacy

- The document cannot be read except by the intended recipient.
- The document cannot be tampered with in transit.

Authentication

- Access to data and applications is restricted to those that provide proof of identity.
- Digital Certificates provide ‘Chain of Trust’



Integrity

- Guarantees that the document has not been modified or corrupted.
- Will detect change or loss to check that the document sent matches exactly the document received.

Non-repudiation

- Each transaction is tracked through the entire process.
- Receivers cannot deny the receipt of a message.

Making B2B Work

- XML
- Messaging Protocols (ebXML, BizTalk)
- Security/Encryption
- Peer to Peer vs. Hub and Spoke

XML

- XML provides a method for creating structured data.
- Human Readable
- Easy to learn

XML and EDI compared

- **EDI** is terse, difficult to read
 - VANs Charge by the character
 - limited storage and bandwidth
- **XML** is a more verbose format.
 - Created in times of relative abundance (Computing Power, Storage, Bandwidth)
 - Works well with the Internet and Java.

Protocols & Standards

- Protocols allow for:
 - Guaranteed Message Delivery
 - Complex Messaging dialogues
- Leading Standards
 - ebXML (UN/CEFACT, Sun, IBM, Others)
 - BizTalk (Microsoft)
- Both are progressing and changing rapidly

Models

- Peer to Peer
 - Benefits: Direct Connection, No Charges
- Hub and Spoke
 - Benefits: Less Set-up/Mapping
 - Drawbacks: Subscription or per use Charges
Not able to react as quickly

Challenges

- Integration
 - Communicating with Business Systems esp. when modified
 - Setting up appropriate Security
- Agreement on Standards
 - Need for trading partners to expect data format
 - Comply with a standard or create your own

The New e-Business Community

- International Standards for communicating
- Open-Source Software
- Industry Specific Standards as necessary
- Internet Time vs. Batch Processing
- Barriers to entry reduced
 - Cost, Resources, Processing Power

Bringing it all together

- Well planned Internet strategies will allow for B2B, B2C and participation in Marketplaces as need and opportunity dictate.

Implementing for ROI

- Take advantage of the applications and databases that support your business.
- Connect to Trading Partners to collaborate activities and inventories.
- Automate redundant communication tasks.
- Allow Customer self-service.

e-Business and the iSeries

- Multi-purpose, reliable business system
- Strong Security Model
- LPAR – Logical Partitioning (V5R1)
- WebSphere
 - Standard & Advanced Editions
 - Tomcat