Bringing EDI to the Internet

Dennis Holland
Comm-Press Technologies, Inc. Vice President of Marketing
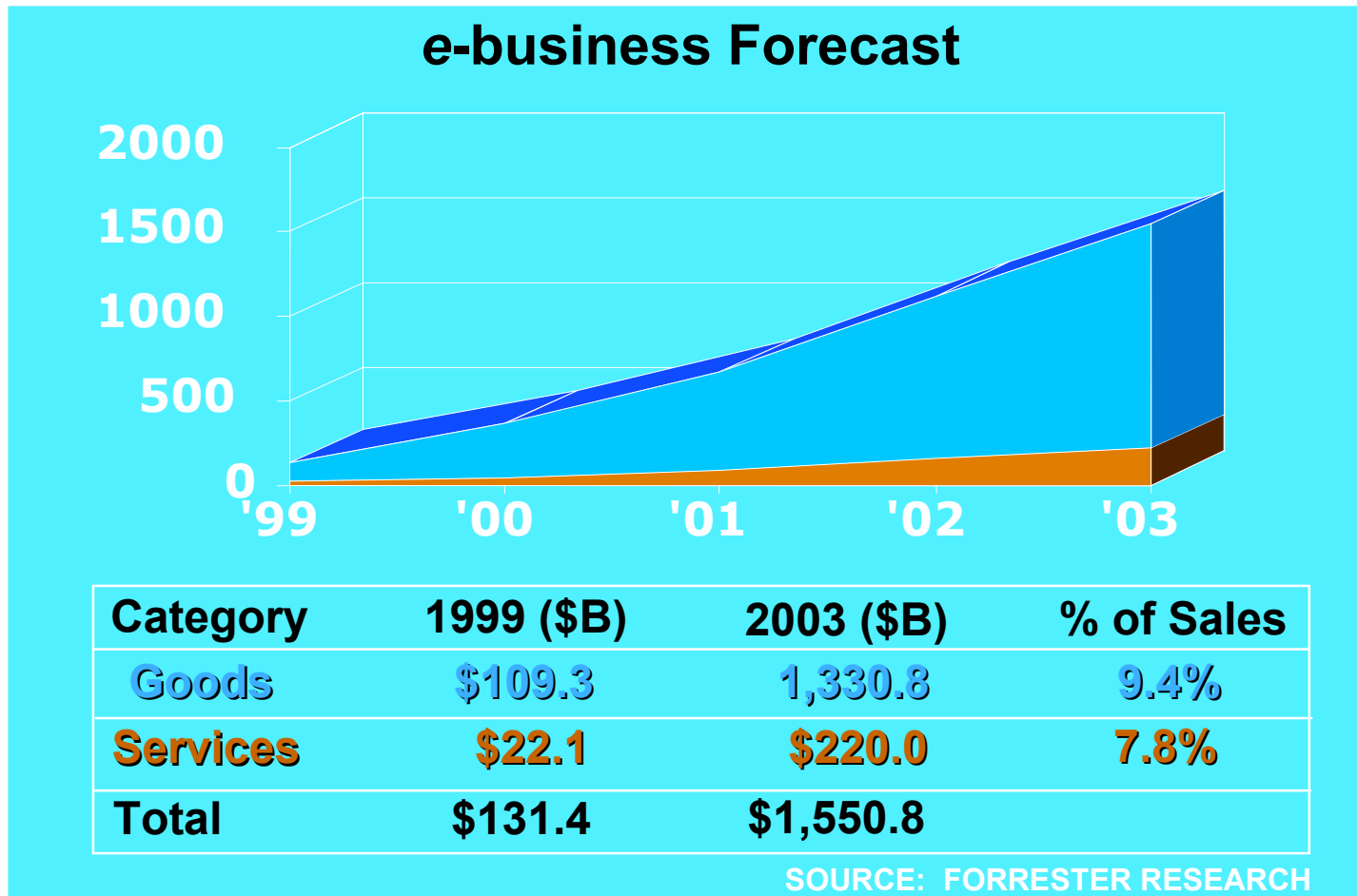
COMM·PRESS
TECHNOLOGIES, INC.

The Millennium Marketplace

"By the year 2003, more than 1.5 trillion will be spent on business-to-business e-commerce."
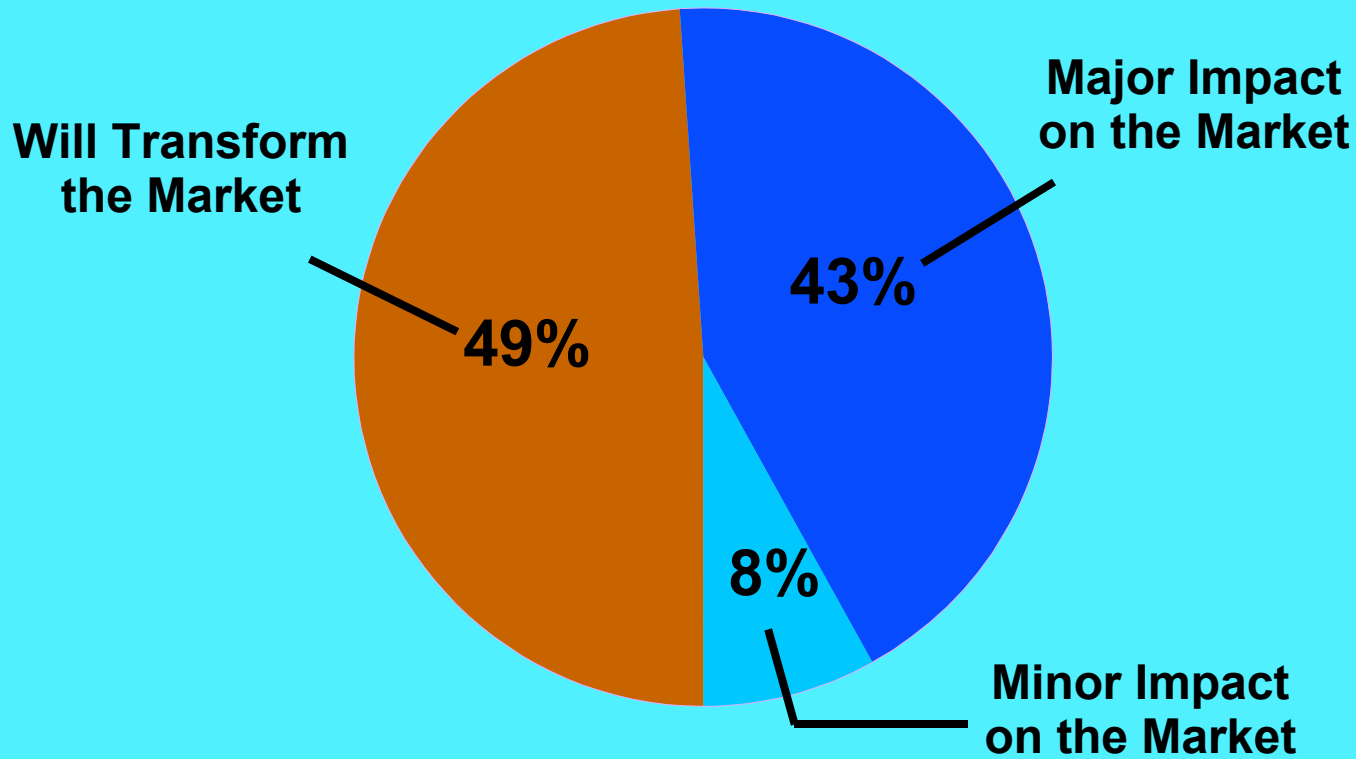
Forrester Research

The Millennium Marketplace

e-business Forecast

Category	1999 ($B)	2003 ($B)	% of Sales
Goods	$109.3	1,330.8	9.4%
Services	$22.1	$220.0	7.8%
Total	$131.4	$1,550.8	

SOURCE: FORRESTER RESEARCH

The Millennium Marketplace

The Net's Impact on the World Marketplace Within 3 Years

Will Transform the Market

49%

Major Impact on the Market

43%
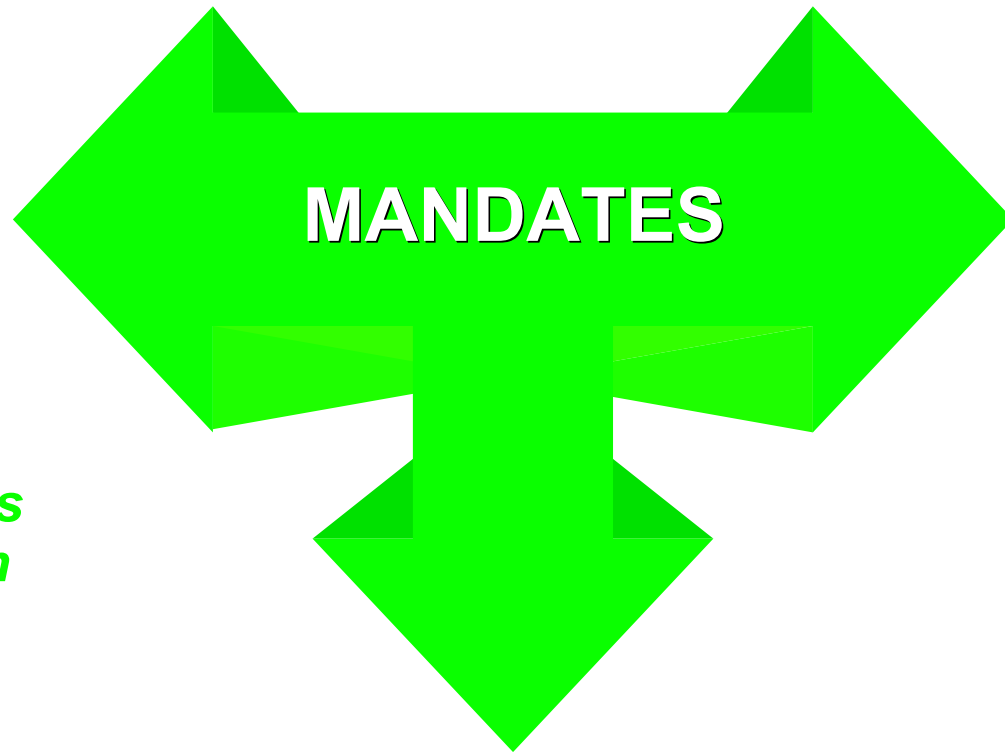
8%

Minor Impact on the Market

FROM A SURVEY OF MORE THAN 500 CEOs AND BUSINESS LEADERS WORLDWIDE. SOURCE: "COMPETING IN THE DIGITAL AGE," BOOZ-ALLEN &HAMILTON AND THE ECONOMIST
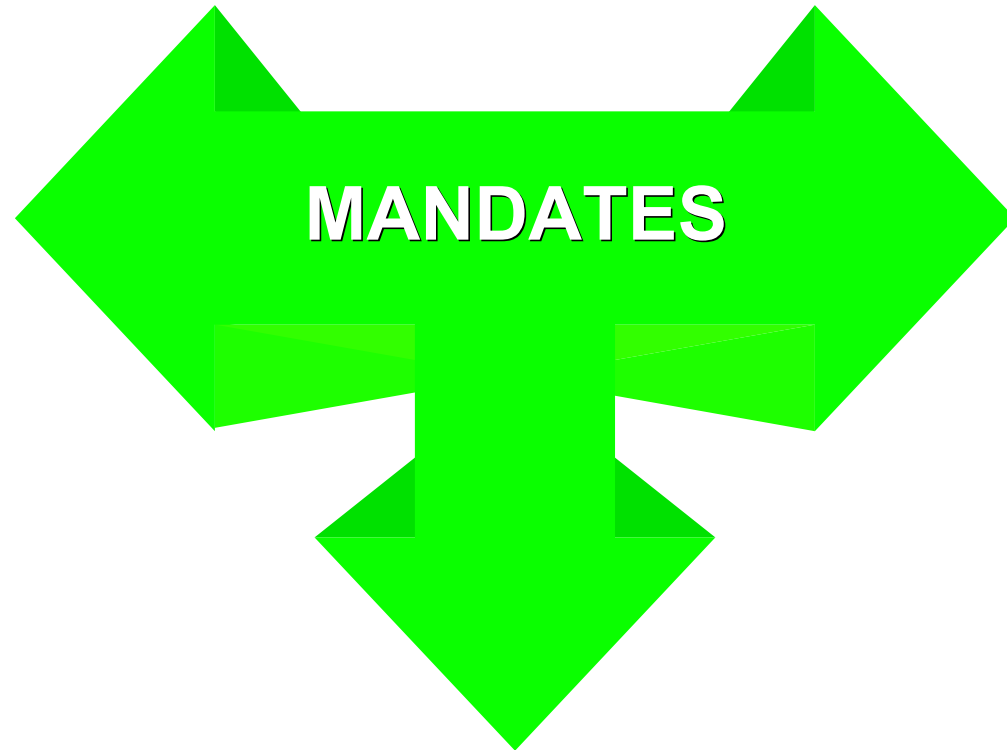
Marketplace Mandates

Maximize Your Speed to Market

Your business strategy will only be as good as its timeliness and execution

MANDATES

Marketplace Mandates
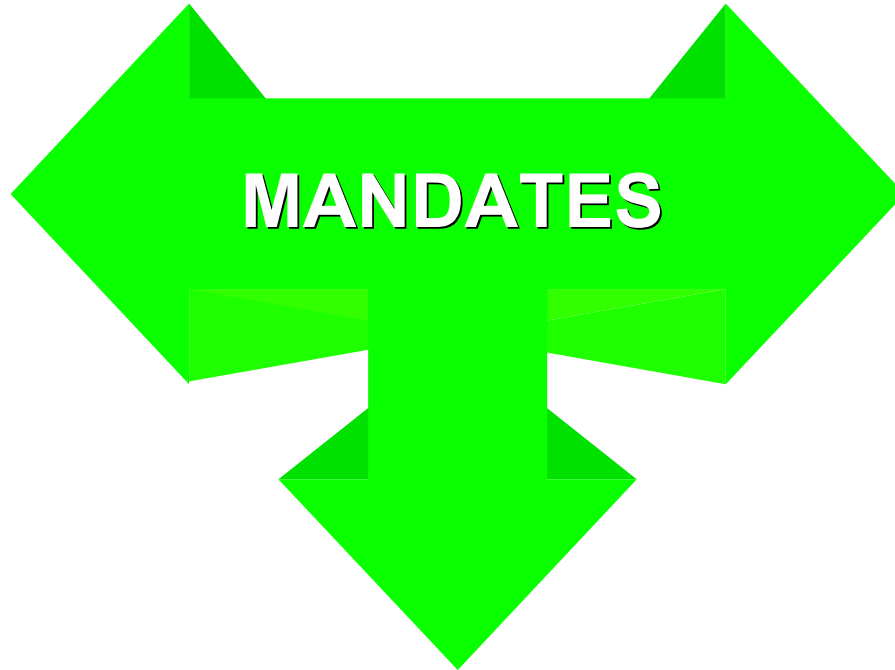
Maximize Your Speed to Market

MANDATES

Accelerate Your Revenues and Market Share Growth

Your stockholder and trading community confidence will depend on it

Marketplace Mandates

Maximize Your Speed to Market
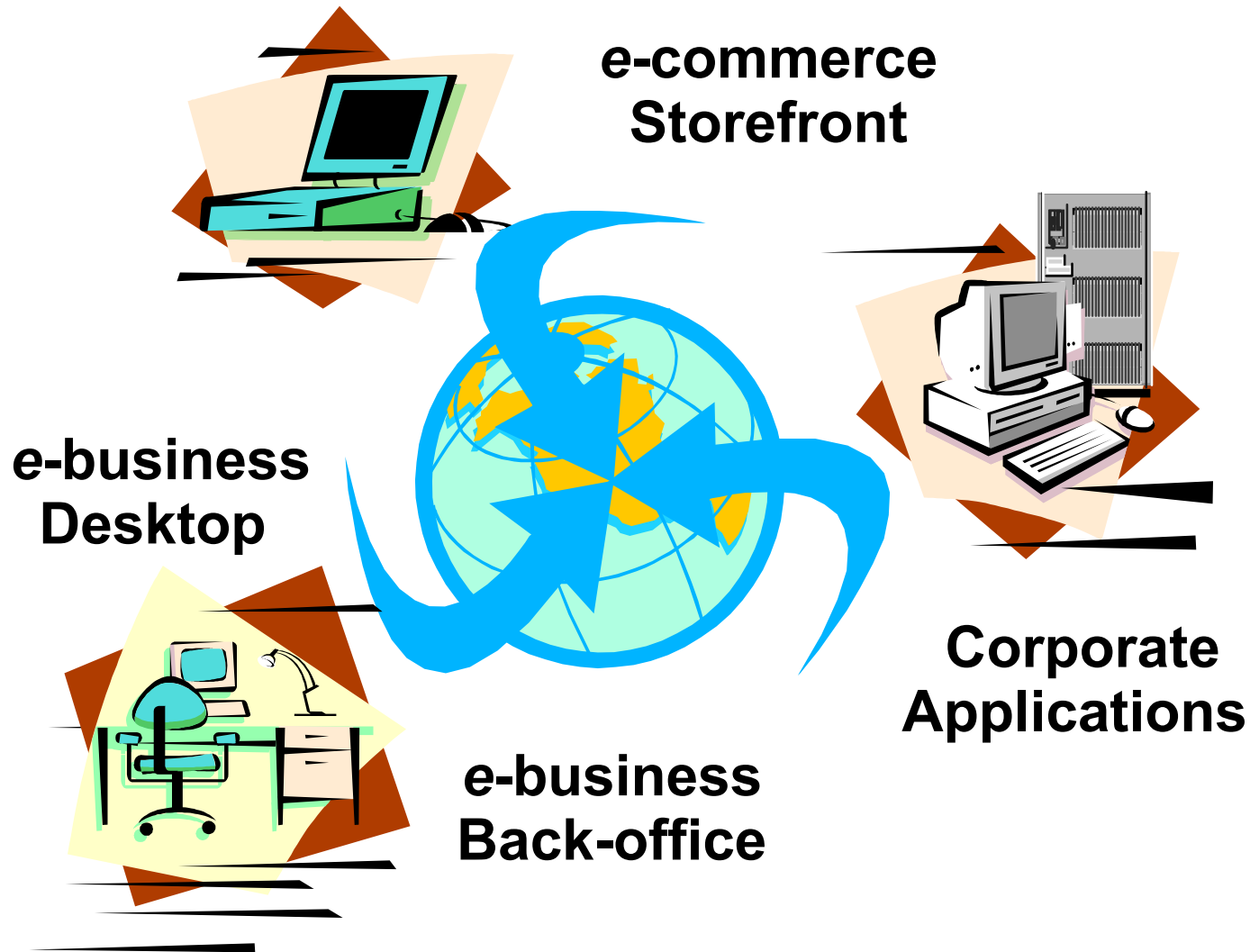
MANDATES

Make Internet Technologies Work for You

Your ability to compete, prosper and grow will require it

Accelerate Your Revenues and Market Share Growth

Exploiting the Millennium Marketplace

e-commerce
Storefront

e-business
Desktop

Corporate
Applications

e-business
Back-office

Exploiting the Millennium Marketplace

You Must Use a "Component" Strategy to:

- Enhance your ability to react to new technologies/standards
- Provide the freedom to quickly change vendors and products as your market demands
- Create best total value in terms of responsiveness, reliability, security and cost

Making Component Decisions

- ✓ ✦ Business Process(es)

- ✓ ✦ Access

- ☐ ✦ Transport

- ☐ ✦ Security / Compression

- ☐ ✦ Data Transformation

- ☐ ✦ Hosting

- ☐ ✦ Delivery and Deployment

Marketplace Confusion

Access?

Internet   Extranet   VANs

Transport

Security / Compression

Data Transformation

Hosting

Delivery and Deployment

Business
Partner

Business
Partner

Marketplace Confusion

Access

Internet Extranet VANs

Transport?

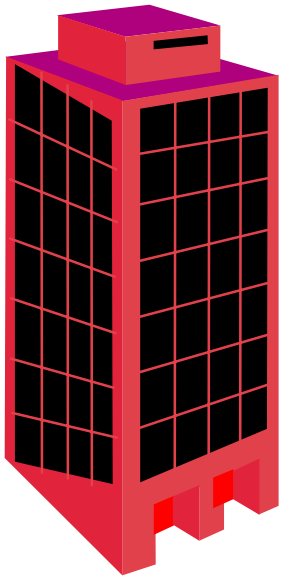ASYNC   SNA   FTP   MQSeries
BISYNC   HTTP   SMTP

Security / Compression
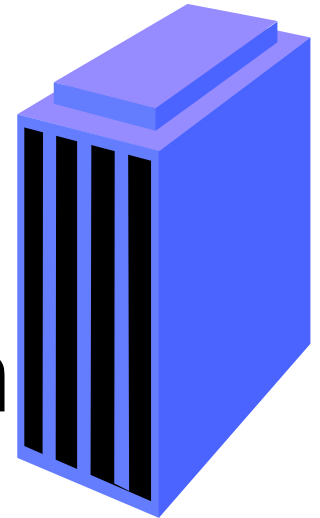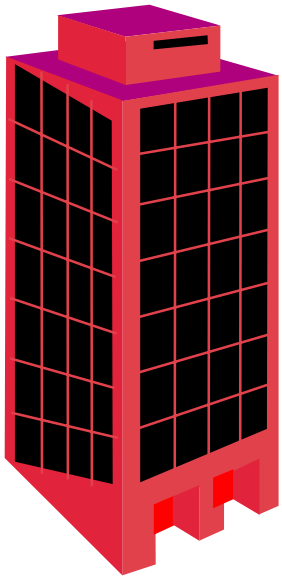
Data Transformation

Hosting

Delivery and Deployment

Business Partner

Business Partner

Marketplace Confusion

Access

Internet   VANs

Extranet

Transport

ASYNC   SNA   FTP   MQSeries

BISYNC   HTTP   SMTP

Security / Compression?

S/MIME   X12.58   SSL 3.0

ISO   Certificate Authority

Data Transformation

Hosting

Delivery and Deployment

Business Partner

Business Partner

Marketplace Confusion

Access

Internet   VANs
     Extranet
Transport

ASYNC   SNA   FTP   MQSeries
     BISYNC   HTTP   SMTP

Security / Compression

S/MIME   X12.58 SSL 3.0
ISO   Certificate Authority
Data Transformation?

HTML XML EDIFACT X12
Hosting

Delivery and Deployment

Business
Partner

Business
Partner

Marketplace Confusion

Access

Internet   Extranet   VANs

Transport

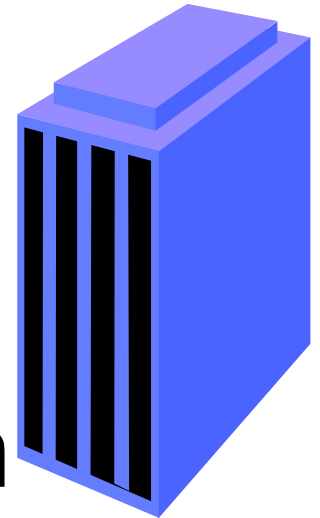ASYNC   SNA   FTP   MQSeries
BISYNC   HTTP   SMTP

Security / Compression

S/MIME   X12.58   SSL 3.0
ISO   Certificate Authority

Data Transformation

HTML   XML   EDIFACT   X12

Hosting?

ISP   Outsource   ASP   In-House

Delivery and Deployment

Business
Partner

Business
Partner

Marketplace Confusion

Access

Internet   VANs

Extranet

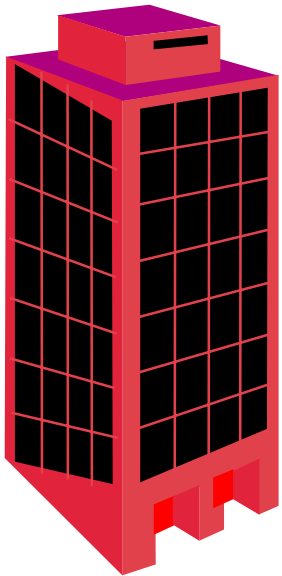## Transport

ASYNC   SNA   FTP   MQSeries

BISYNC   HTTP   SMTP

Security / Compression

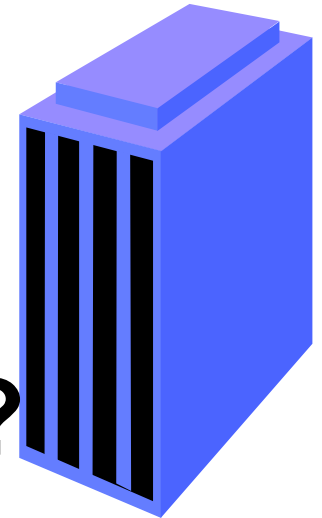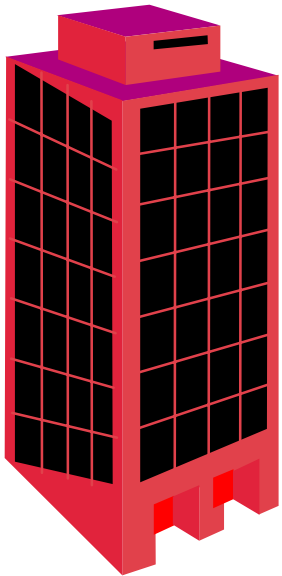S/MIME   X12.58   SSL 3.0

ISO   Certificate Authority
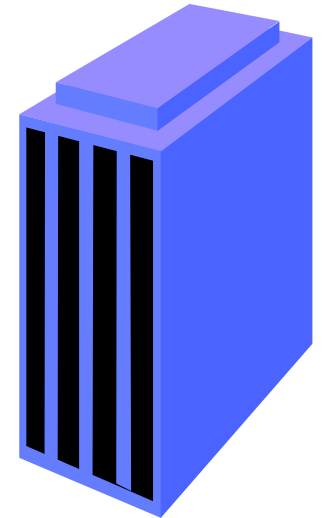
Data Transformation

HTML   XML   EDIFACT   X12

Hosting

ISP   Outsource   ASP   In-House
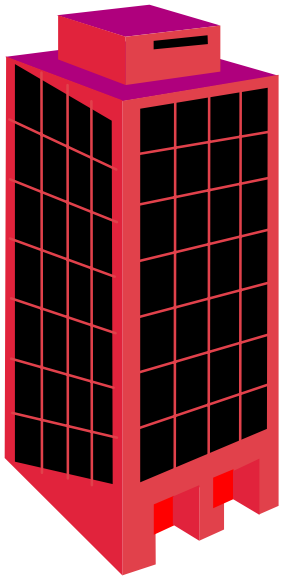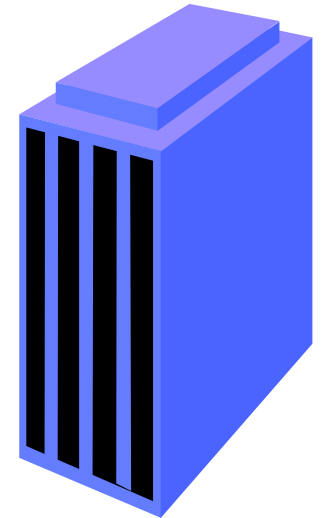
Delivery and Deployment?

In-House   Local   Build   ASP

Remote

Maintenance   Buy
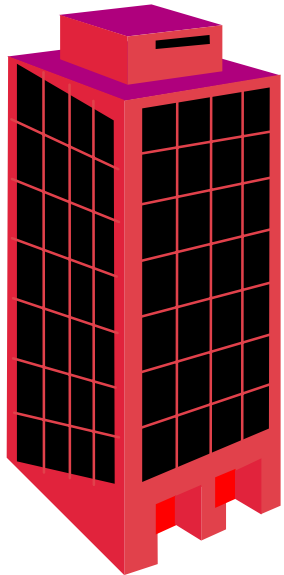
Business Partner
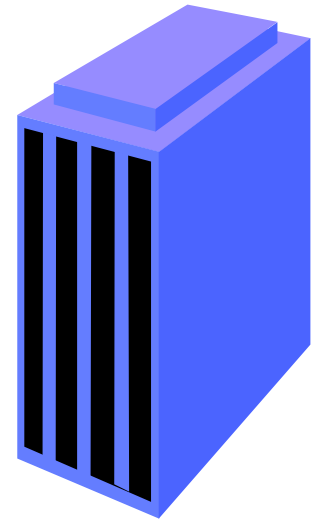
Business Partner

Millennium Marketplace - *Plug and Play Components*

Data Transformation

Access
(Network Interoperability)

Transport
(Protocols, Standards and Structures)

Business Processes

Delivery & Deployment
(Technical Requirements)

Security & Compression
(Integrated Applications)
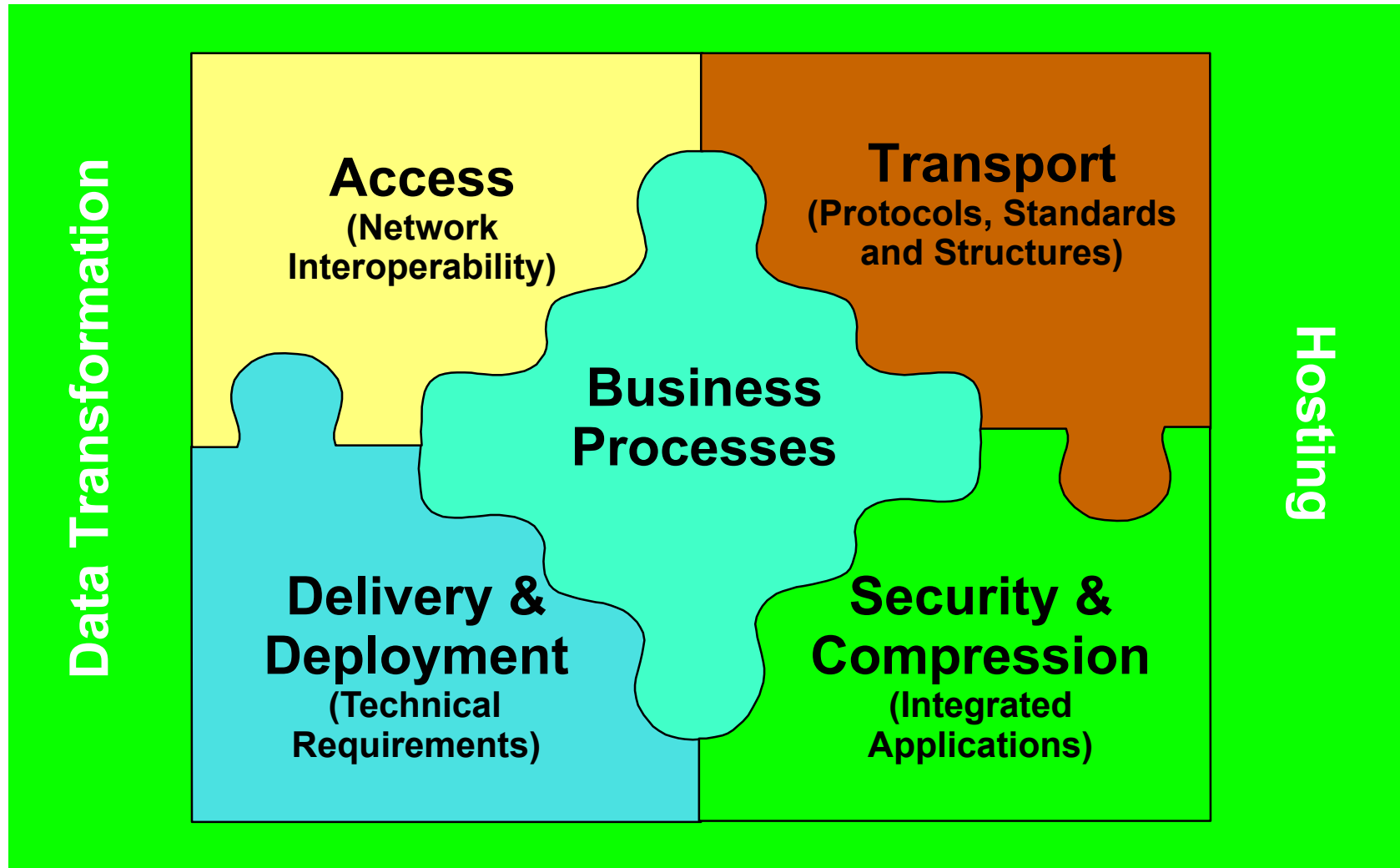
Hosting

Comm-Press Technologies Contributions to the Millennium Marketplace

Data Transformation

Hosting

Transport
(Protocols, Standards and Structures)

Delivery & Deployment
(Technical Requirements)

Security & Compression
(Integrated Applications)

Other Contributions to the Millennium Marketplace

Data Transformation

Access
(Network Interoperability)

Business Processes
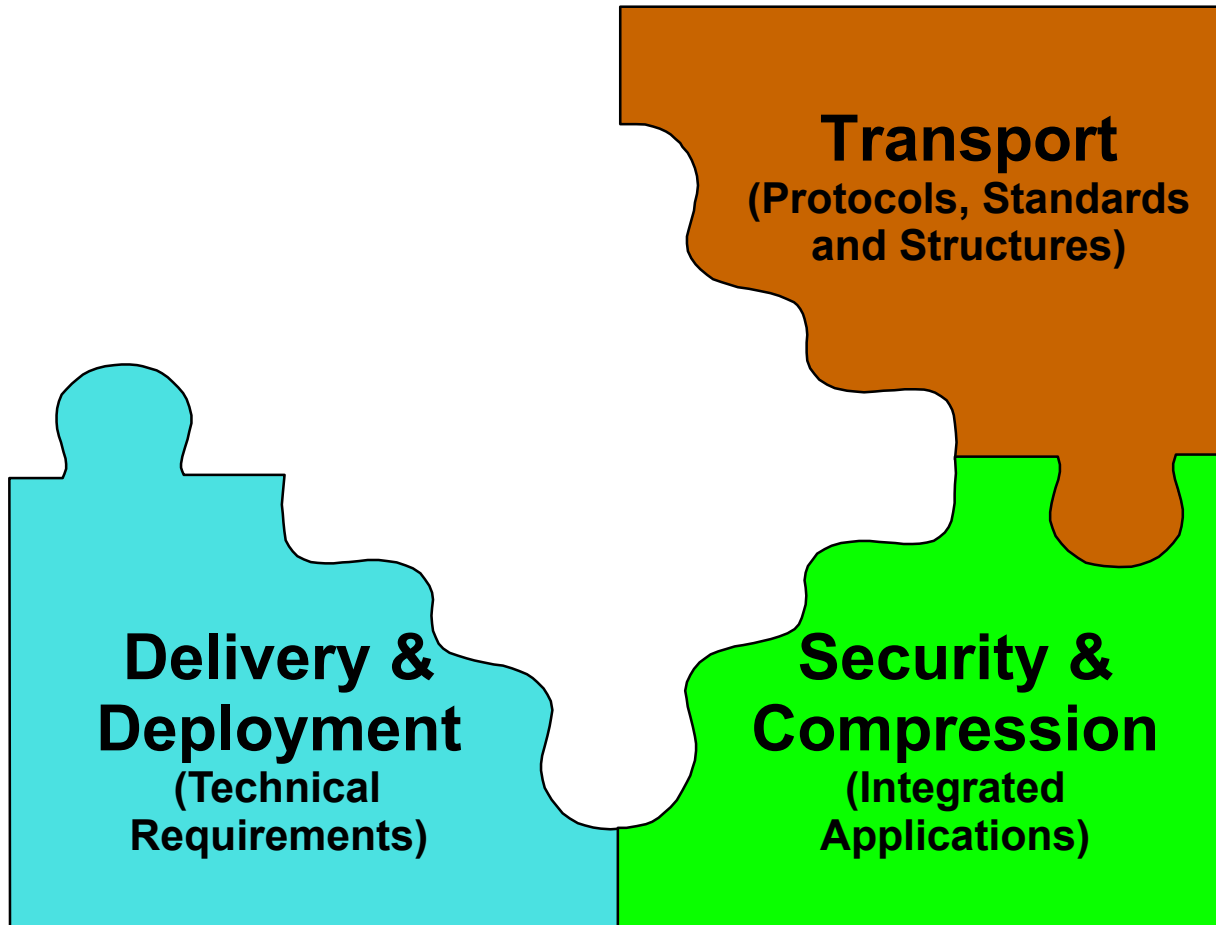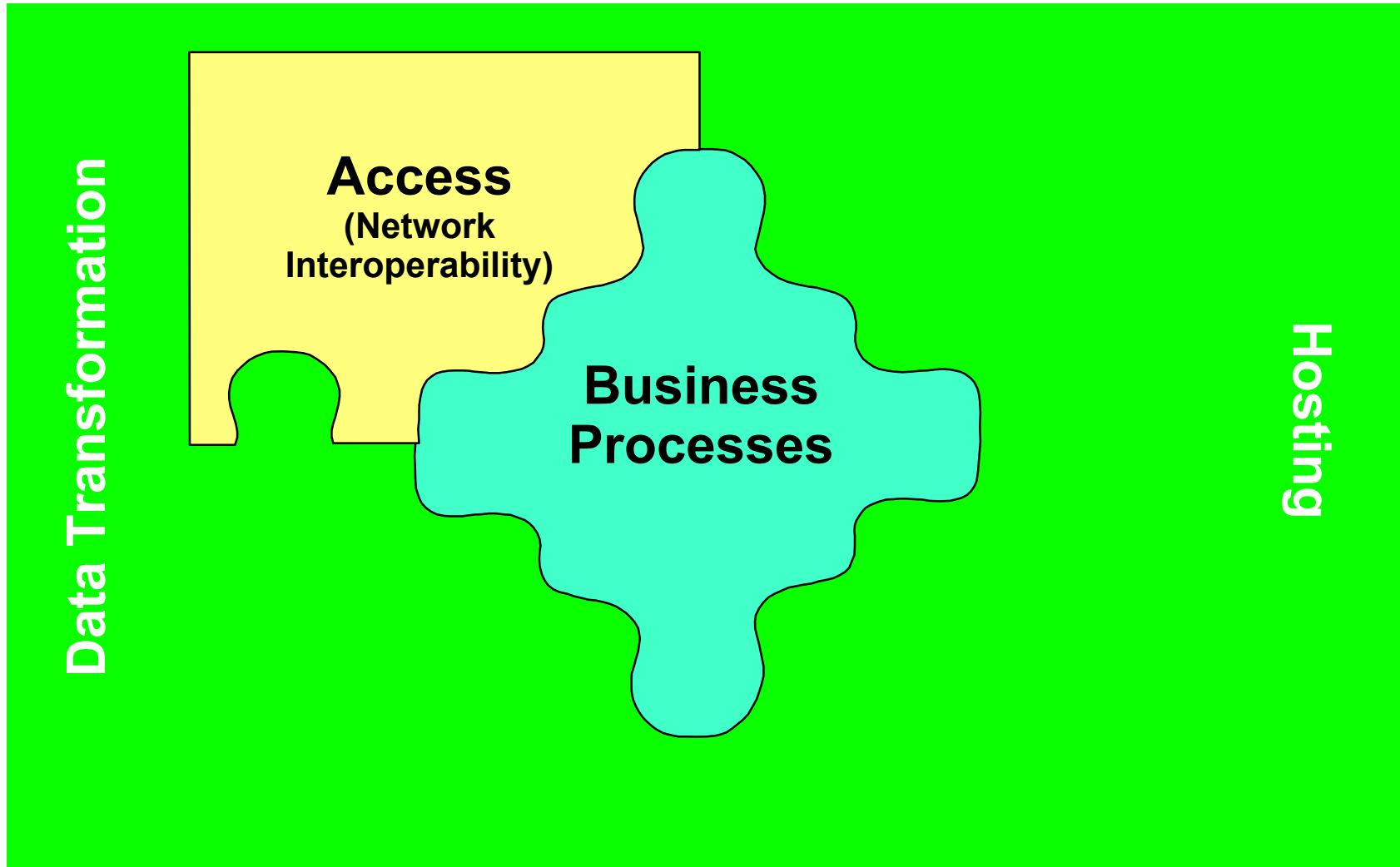
Hosting

Lasting Value in the Millennium Marketplace

Data Transformation

Hosting

Access
(Network Interoperability)

Transport
(Protocols, Standards and Structures)

Business Processes

Delivery & Deployment
(Technical Requirements)

Security & Compression
(Integrated Applications)
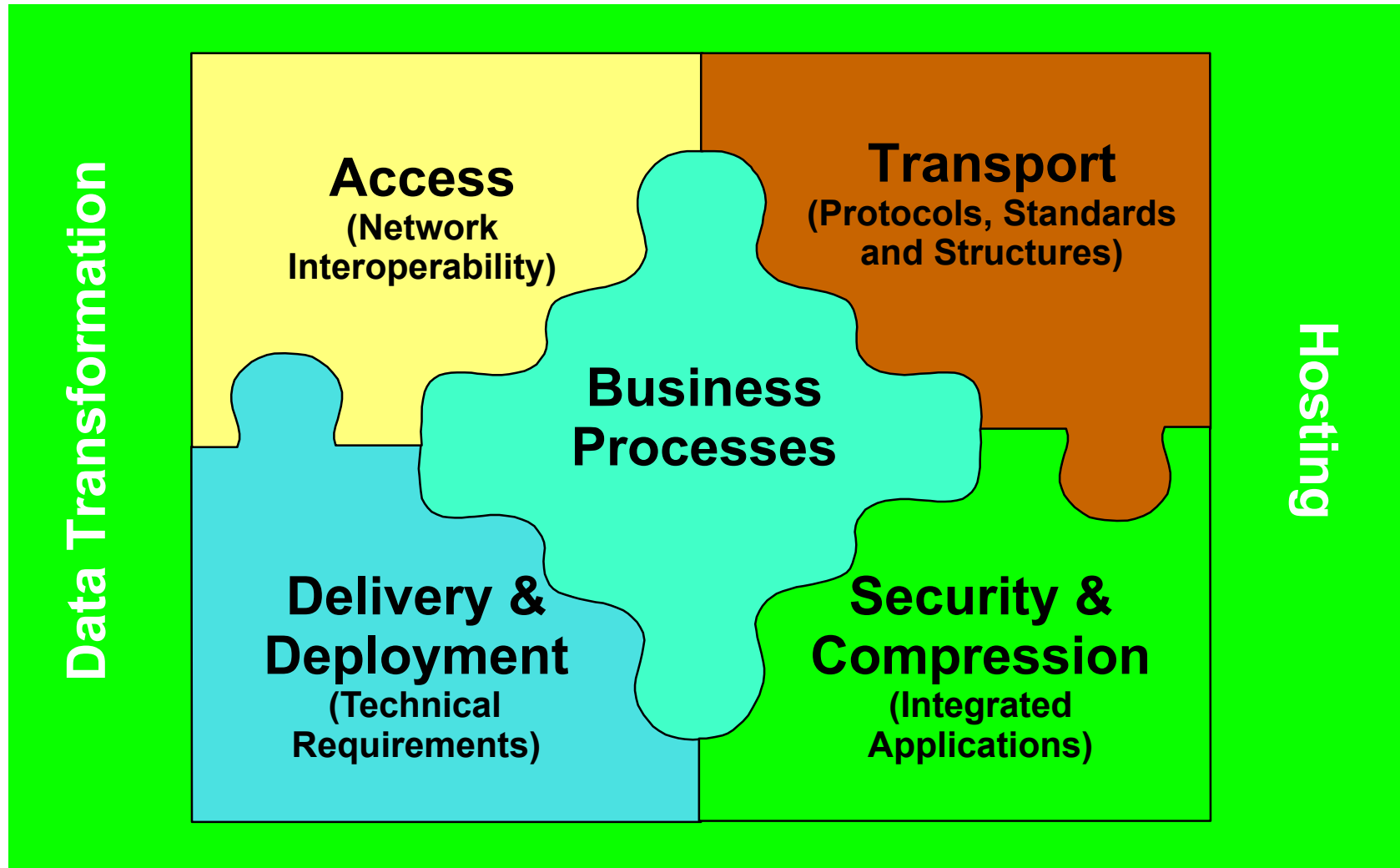
Data Structure and Transport

EDI VANS

Internet

Extranet(s)

EDIFACT

Proprietary

X.12

XML

Proprietary

XML
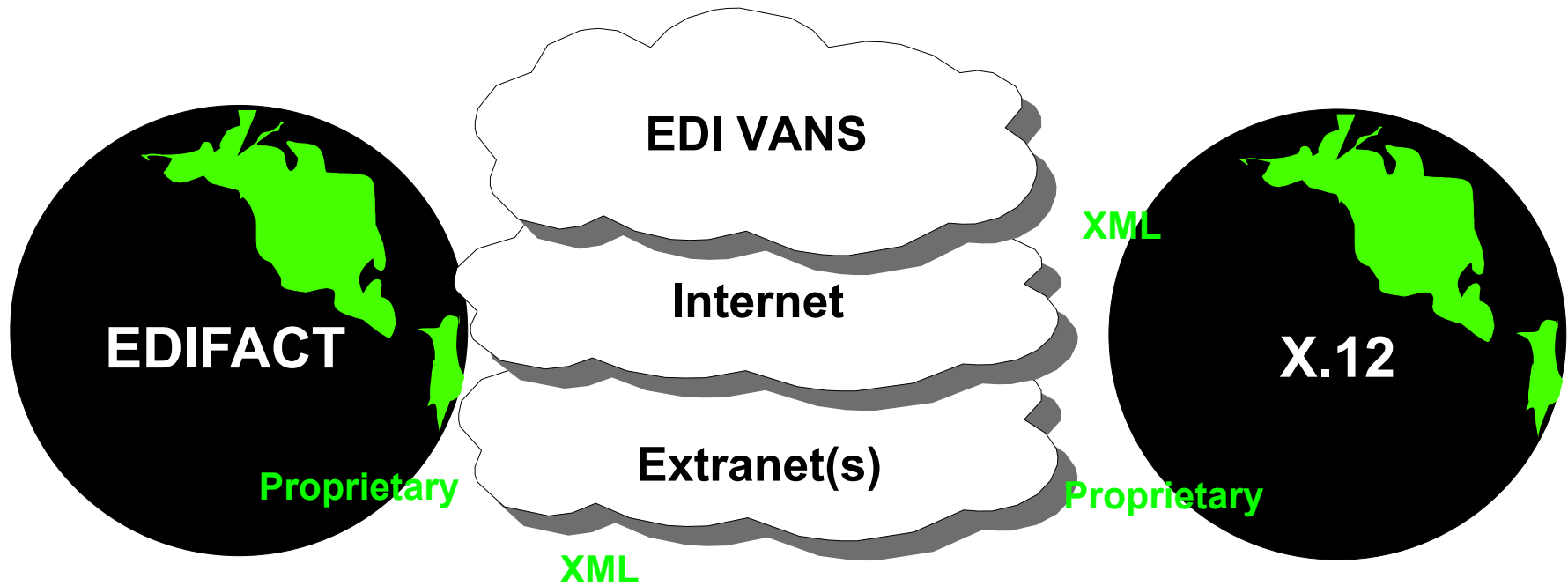
Commodity ➡ **Access**

Commodity ➡ **Hosting**

Commodity ➡ **Application Software (Data Transfer)**

Legacy Pre-Requisites

✦ Legacy EDI Features = Common Business Practices

+ Communication Sessions - Positive ID

+ Acknowledgement at Communication Layer

+ Audit Trails & Archiving

+ Known, Reliable Intermediary

+ Common 24-Hour Mailbox….Minimize Sessions, Simplifies Routing

+ Handle High Volume of Data

+ Transaction Routing (ISA based)

….pre-requisites for any change in EDI

Security Pre-Requisites

✦ EDI Transaction Security Mandates

+ Security for Groups, Transactions

+ Verifiable, not Perishable Security

+ Retention of Digital Signatures

+ Protect/Validate Transactions, not Packets

Applying X12.58 Security

2. Authenticate/Compress/Encrypt

S1E

S1S

S1A   SVA

1. Assure

| ISA | GS | ST | ....data.... | SE | GE | IEA |

.....at the group level

Affordable Security

~Webserver~
Trading partner registration
Software distribution

~KeyManager~
Certifying Authority
Data Classification

~SCTY FTP SERVER~

Internet

Secure Net

Traditional EDI

EDI Server

Internal Application

~Secure EDI FTP~
EDI GUI & Batch Interface
Secure FTP Client
X12.58 Security
Certificate Services

Logon Security
Session Security (Non-Repudiation)
Link Level Security (SSL 3.0)
Transaction Level Security (X12.58)
File Level Security (X12.58)
Defensible Security vs Perishable
Cross System Security/Compression
Encryption/Authentication/Assurance

e-business EDI...*Deployment and Delivery*

~Webserver~
Trading partner registration
Software distribution

~KeyManager~
Certifying Authority
Data Classification

~SCTY FTP SERVER~

Internet

Secure Net

Traditional EDI

EDI Server

Internal Application

~EasyAccess 2000~
EDI GUI & Batch Interface
Secure FTP Client
X12.58 Security, SSL 3.0
Certificate Services

Trading Partner Registration
Software Distribution
Certificate Services & Validation
Internet EDI Admin Services
X12.58 Security & Compression
Enabling Services
Secure FTP Server & Clients

Bringing EDI to the Internet

Interoperability for All Trading Partners

EasyAccess 2000
Secure FTP Client

EasyAccess 2000
Secure FTP Client

Internet

Secure Extranet

Existing Commercial
EDI Applications on
Secure Network(s)

EasyAccess 2000
Secure FTP Client

Internet FTP Gateway
to Secure Network

EasyAccess 2000
Secure FTP Client

SSL 3.0 Logon & Link Security

In the Clear

X12.58 - 4010 Transaction Level and File Level Security

Part I

Hang Ten with DI - A Decade of Innovation

DI1786

Why Secure FTP for Business?

✦Secure EDI FTP Clients

….address all requirements for Internet and EC EDI…(x12, EDIFACT)

✦New Price Point

……….affordable Internet/Extranet EDI and Security

✦Trading Partner & Security Management Applications

…………..affordable administration

✦ Client Software for both Extranet and Internet Trading Partners

……………….. easy to use, easy to maintain for all

✦EDI FTP Client Software displaces Bisync/ Async communications

……………………….little disruption of Existing EDI

✦Web based Software Configuration and Distribution

…………………………...…easy to implement and manage

✦Integrated Security Administration

…………………..…………….minimal effort for enhanced security

Why Secure EDI FTP?

- Packaging of client software
  - + Affordable price
  - + Low cost of implementation
  - + Low cost of administration

- High Performance Data Compression

- Trading Partner Administration by Hub or SP

- Platforms Supported (MVS, OS/400, UNIX, PC)

- Business Partnerships (SPs, Translators, Hubs, Associations, EDI Client Software Providers)
  - + Network access providers, application providers
  - + Hubs (Key Accounts, Associations)

Why Secure EDI FTP? (cont.)

✦ Established FTP Gateways
  + *IBM Global Network*, Sterling Commerce, Sterling Connect Mail
  + GEIS EDI*Switch, GEIS Enterprise, EDI*Switch, DEC OpenVMS
  + DEC EDI, MCI, and more to come

✦ EDI Translators providing FTP Support
  + St Paul, RMS, EXTOL, GENTRAN, DNS and more

✦ Flexibility to use any one or more Gateway, flexibility to easily change application, provider and/or service

✦ Works with X12, EDIFACT and Proprietary Data

✦ EDI Mail Services (audit, archiving, transaction routing) are the same for all Trading Partners

…..traditional EDI on the Internet

Why IBM Global Secure EDI FTP?

✦ Only SSL FTP Gateway

✦ Includes EDI SSL PKI (Certificates)

✦ Most competent FTP Gateway

    + Supports Expedite Options

✦ Promotes EasyAccess 2000 Client

✦ Business Alliance with Comm-Press Technologies, Inc.

Your Internet EDI Opportunity

✦IETF Architects	….TLS SSL 3.0
✦X12 and DISA	….X12.58
✦Translators	....plug and play FTP-TLS/X12
✦Service Providers	….FTP (TLS) Gateways
✦Application Providers	….FTP (TLS) Gateways
✦Bulk Data Transfer	….No to SMTP, S/MIME, EDIINT

….influence your Steering Committees to right solutions
…..ask your EDI Service Provider about its FTP Gateway
…..match X12.58 solutions to your requirements

EDI on the Internet

✦ It's simpler than you think, use

  + Your existing DI translator

  + Your existing business processes

  + Your existing Internet Service Provider

  + Your existing EDI Service Provider

….choose the right EDI FTP Client Software
…..choose X12.58 where you need it
….don't settle for less

Earning Relationships That Last

✦ Design *maximum quality* and *flexibility* into all products

✦ Maintain a *"quick response"* attitude towards all customer requirements

✦ Offer *comprehensive solutions* with market-leading security and efficiency while maintaining industry standards

✦ Implement *creative business agreements* that anticipate evolving market needs