



TREASURY RESOURCES

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The Impact of Electronic Commerce on Treasury Management



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What is Electronic Commerce?

Electronic Commerce is an umbrella term denoting the automation or “digitalization” of the trade cycle .

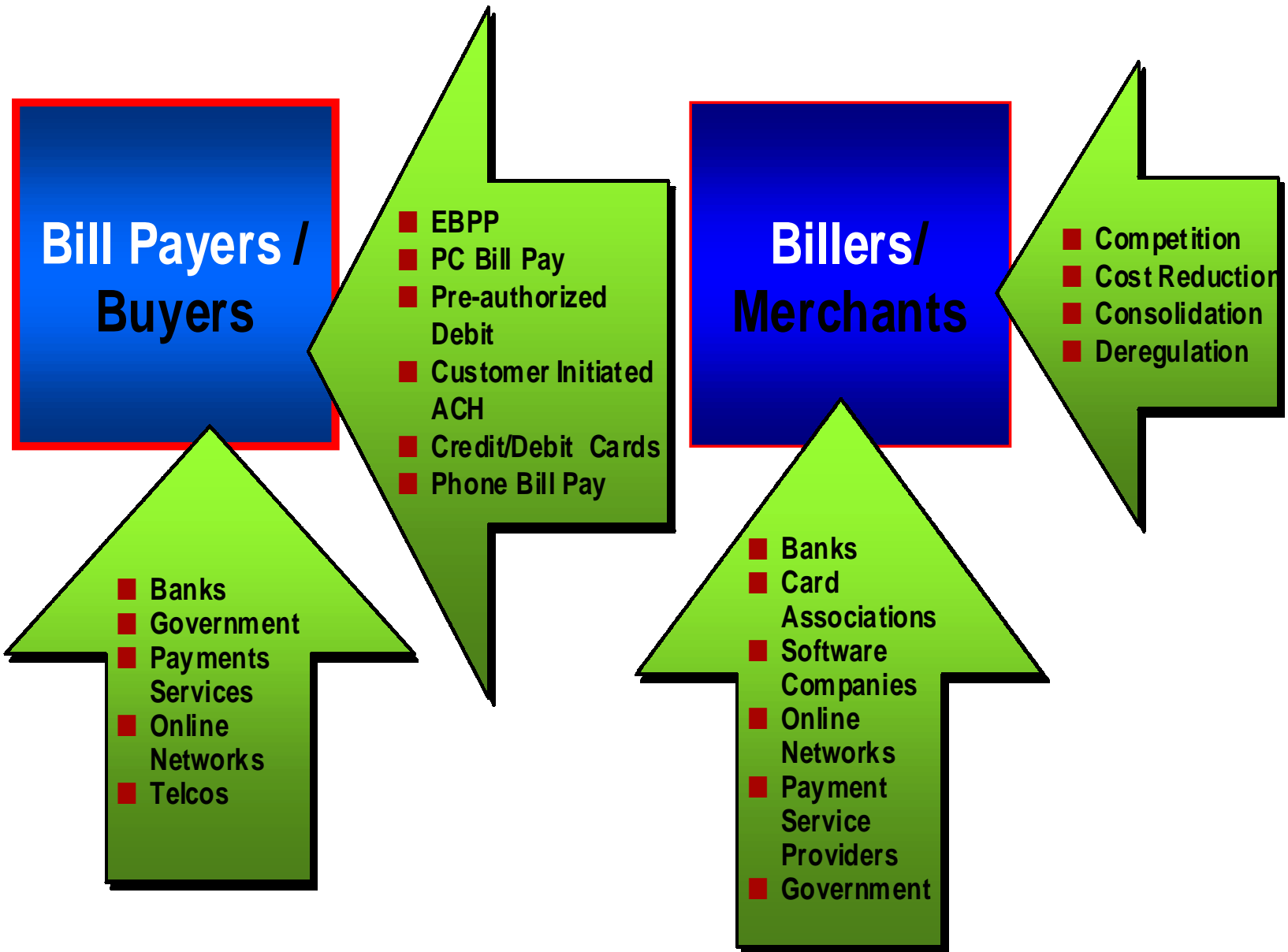
Think of it as a toolbox. EDI, intranets, the Internet, and web-sites are tools in the toolbox.



**The intent is to
increase efficiency.**

experience the revolution

External Factors Driving Conversion to Electronic Payments

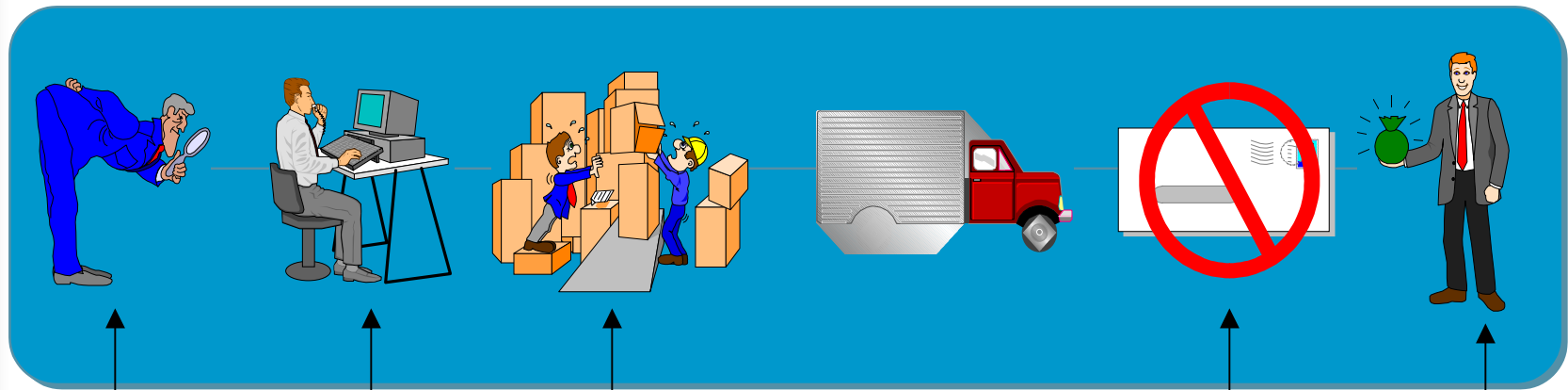




Other Internal Factors

- It is an entire process, not a transaction
- Broader impact across your organization
- New skill sets needed
- Stronger, deeper relationships needed
- Internal champion can be an important driver

EC Impact on Standard Trade Cycle



Order goods via
vendor's website

Complete purchase
via Internet (paperless)

JIT Inventory
Management

Send billing info
electronically via
EDI or EBPP

Receive payments
via EFT



Electronic Commerce

Usage of the Internet and Electronic Commerce is growing exponentially. Primary focus is on:

- Trading Partner Enablement/Supply Chain Integration
- Electronic Bill Presentment & Payment
- Network-based marketplaces and auctions
- On-line procurement and catalogs

Number one obstacle to increase growth is concerns about security and perceptions of risk

- Strong encryption becoming commonplace as a base level requirement
- Digital Certificate models are beginning to mature



Why Now?

There has been more information produced in the last 30 years than during the previous 5,000. A weekday edition of the The New York Times contains more information than the average person was likely to come across in a lifetime during 17th-century England. The information supply available to us doubles every five years.

Computing power is 8,000 times less expensive than it was 30 years ago. If we had similar progress in automotive technology, you could buy a Lexus for \$2. It would travel at the speed of sound and go about 600 miles on a thimble of gas.

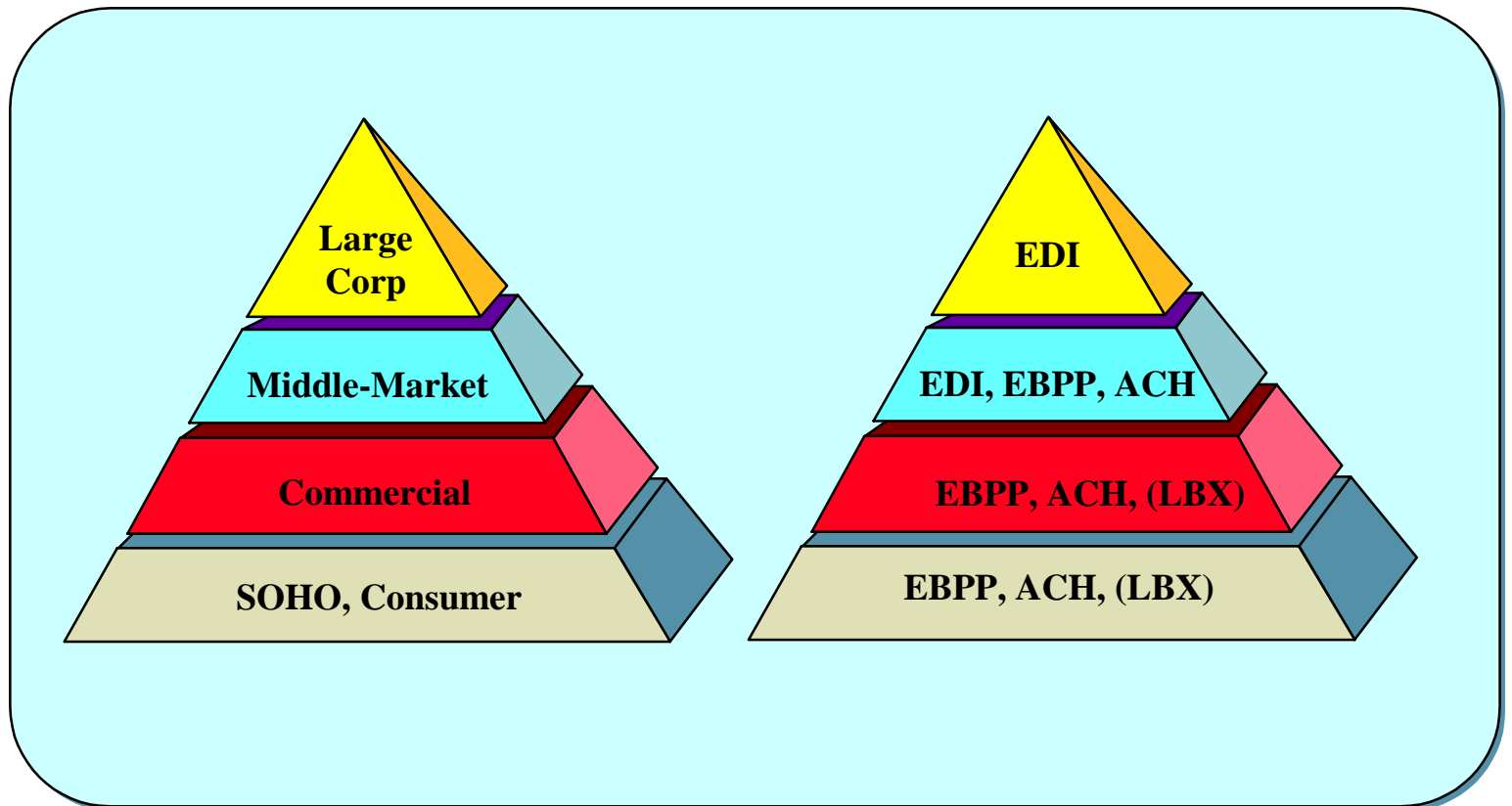
You're in China and you decide to use your credit card. Getting credit approval involves a 46,000 mile journey over phones and computers. The job is completed in five seconds.

Emerging Electronic Commerce Alternatives



- Electronic Data Interchange
- Internet EDI
- Electronic Bill Presentment & Payment
- Purchasing Card
- Receivables Management
- Other EC Applications

Segment-based EC Solutions





Which Payment Type is Best?

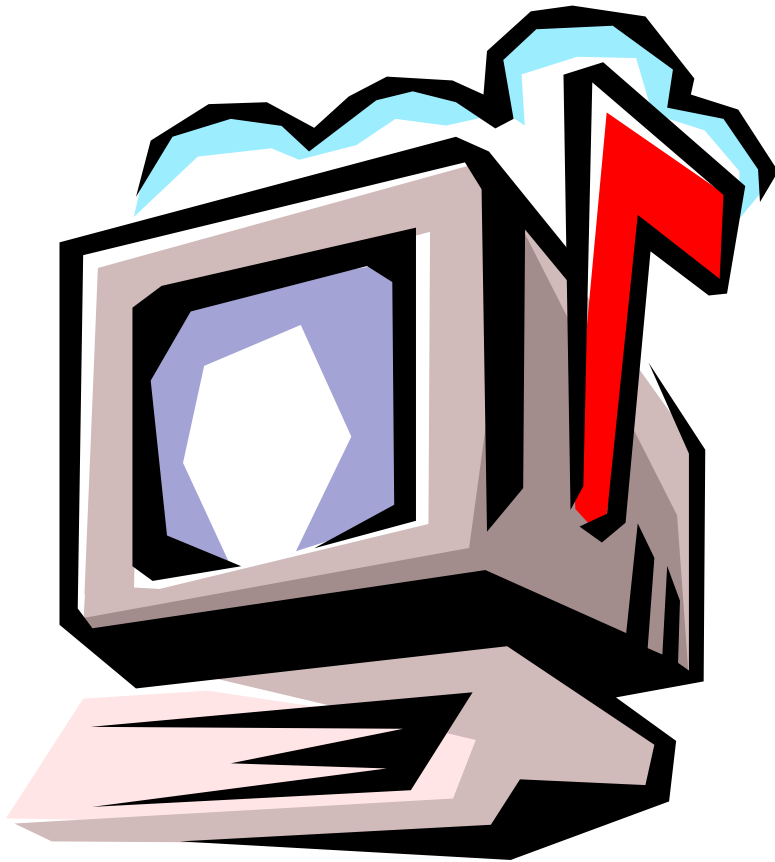
- Internal Capabilities
- Trading Partner Relationships
 - Recurring vs. Occasional
 - Information exchange needs
 - Strategic vs. Tactical
 - Relative strength of the participants
 - Business vs. Consumer payments

EC and Commercial Payments

- Financial EDI
- Electronic Bill Presentment and Payment (EBPP)
- Purchasing Card



Consumer Payments



- Credit/Debit Cards
- Stored Value Cards/Digital Cash
- Electronic Bill Presentment (B2C)

Commercial Payments

High Value Recurring Payments	High Value Non- Recurring Payments
Low Value Recurring Payments	Low Value Non- Recurring Payments



High Value Recurring Payments

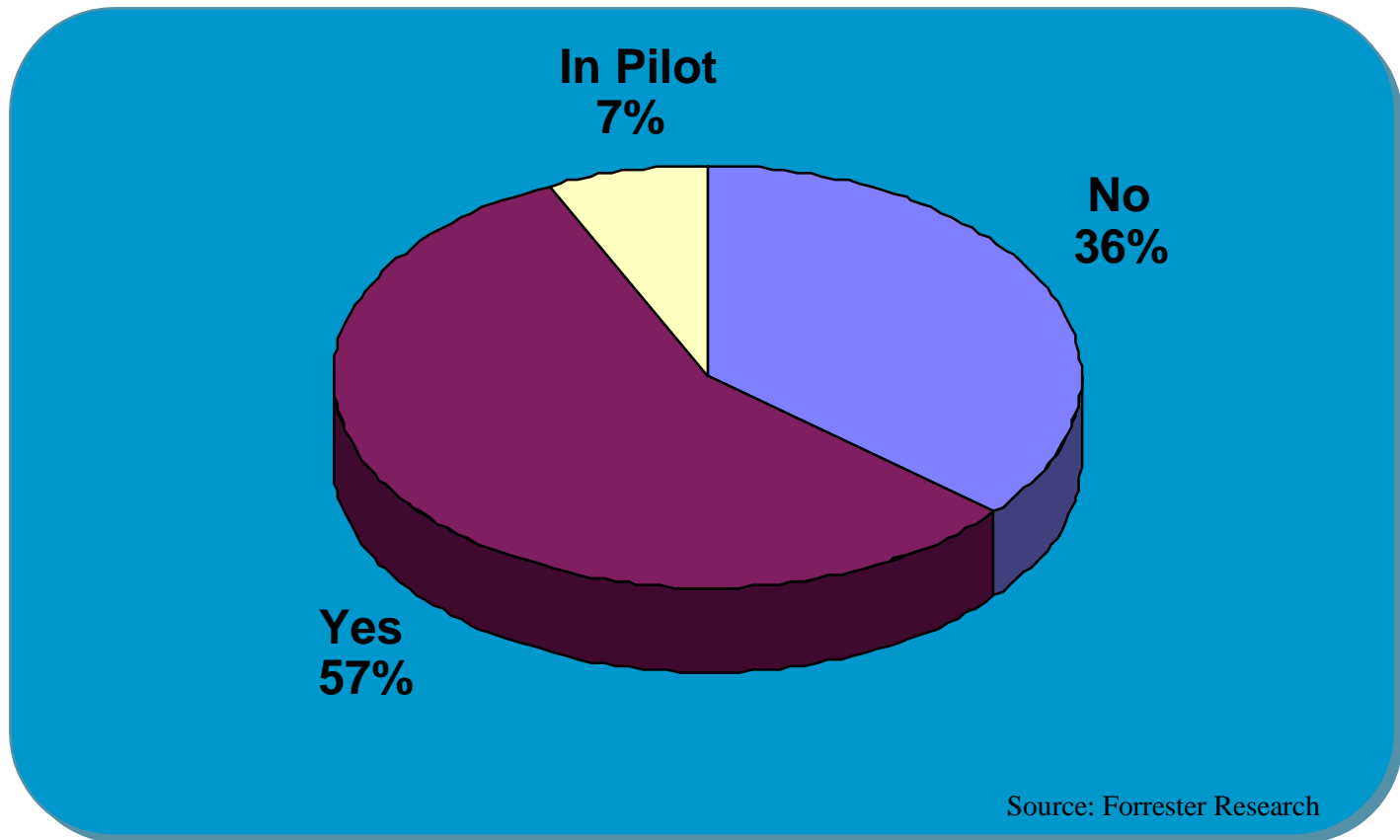
- Small % of PO's represent the majority of purchasing dollars
- Strong trading partner relationships
- Quality and timing requirements
- Need for an integrated process



Internet EDI

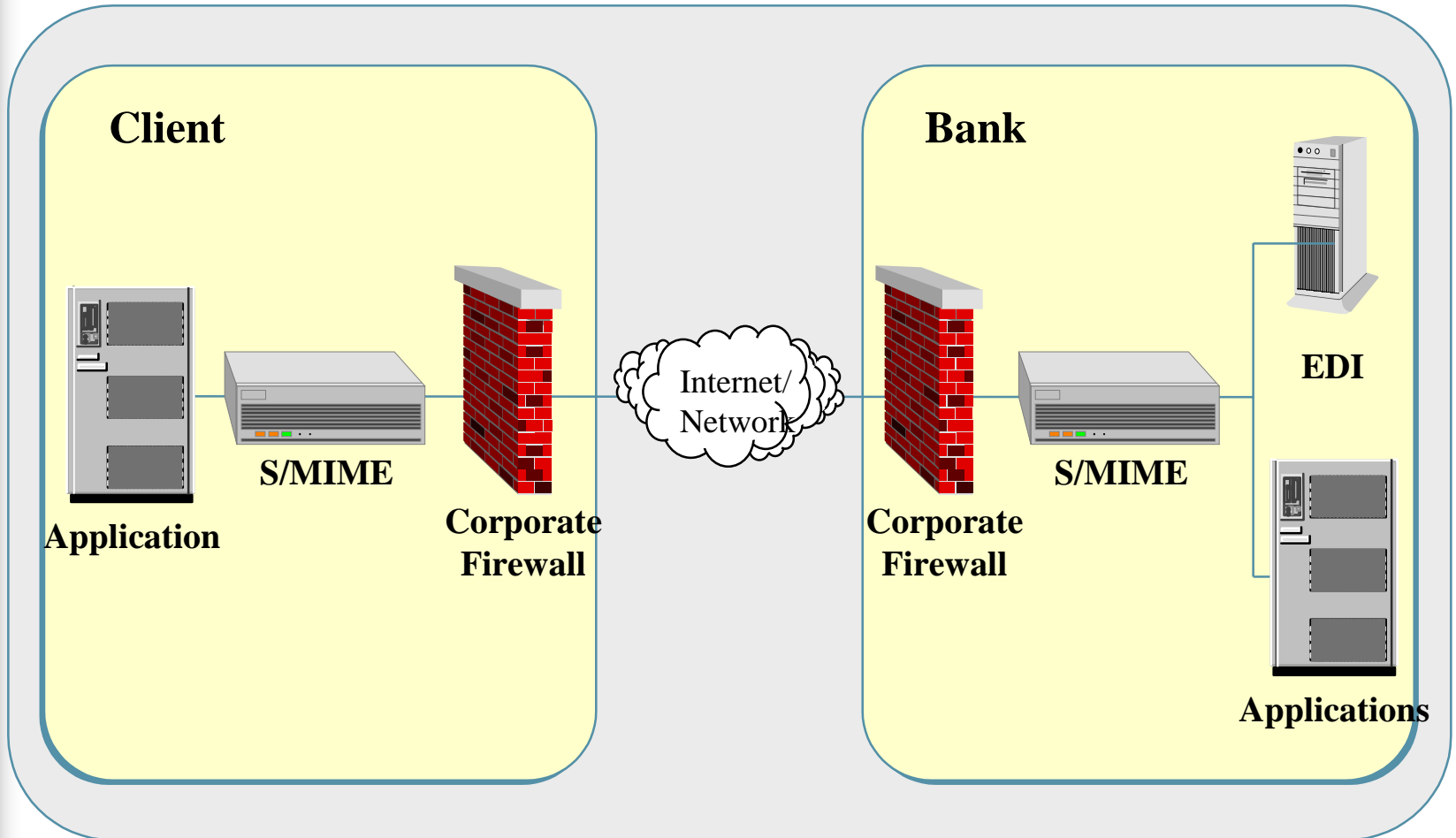
- **Uses standard EDI messaging (X12) over the Internet as opposed to a VAN. Primary motive is cost reduction.**
- **“All you can eat” pricing model attractive relative to VANS. Analysts predict savings of up to 70%.**
- **Initial pilots tended to be non-mission critical information. Today, payments are made and all forms of business info is exchanged.**

Internet EDI



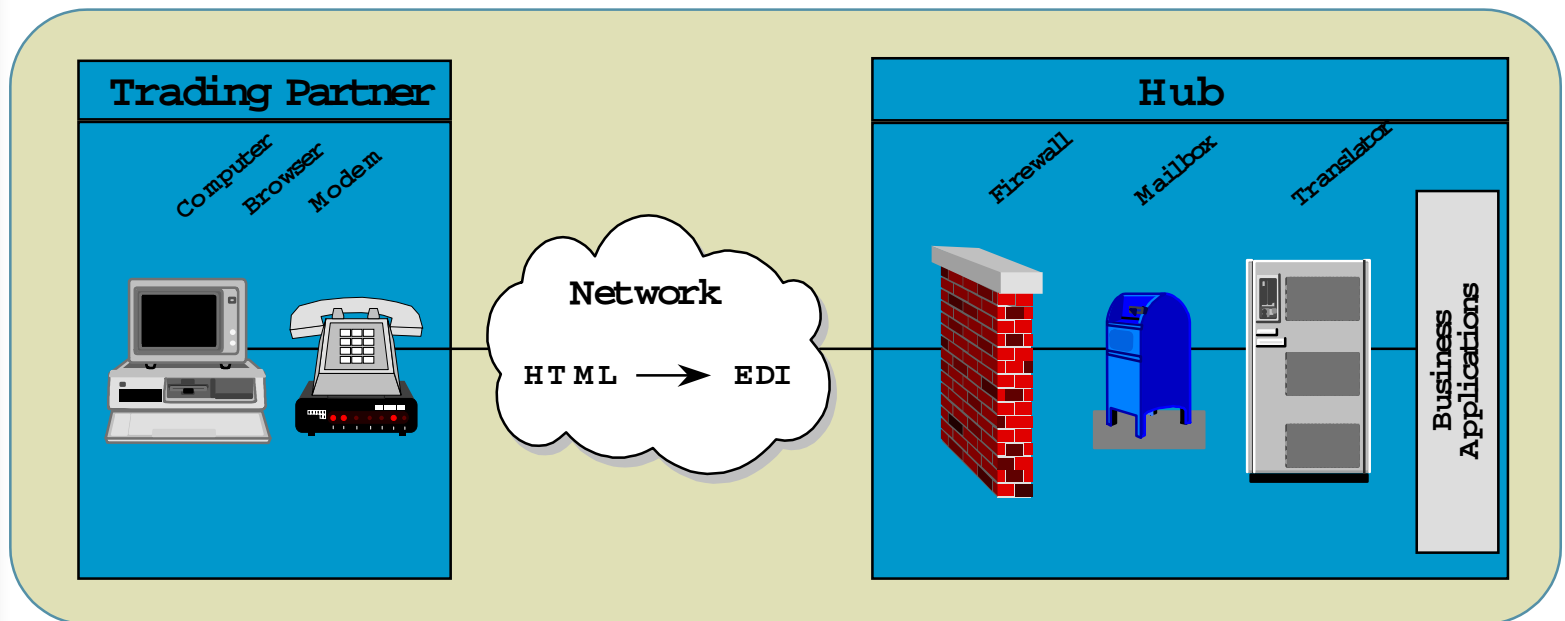
Fortune 1000 companies looking to take EDI to the Internet

Internet Information Delivery



Forms-based EDI

Allows for translation between HTML documents and standard EDI
Targets small to middle -market enterprises (SME's)
Uses standard browser and PC technology



Commercial Payments

High Value Recurring Payments	High Value Non-Recurring Payments
Low Value Recurring Payments	Low Value Non-Recurring Payments



Electronic Bill Presentment and Payment (EBPP)

- Uses Browser-based technology to simplify presentation of invoices
- Bridges capability gaps between buyer and seller
- Delivers cost savings for invoice delivery, remittance processing and cash application



EBPP Features

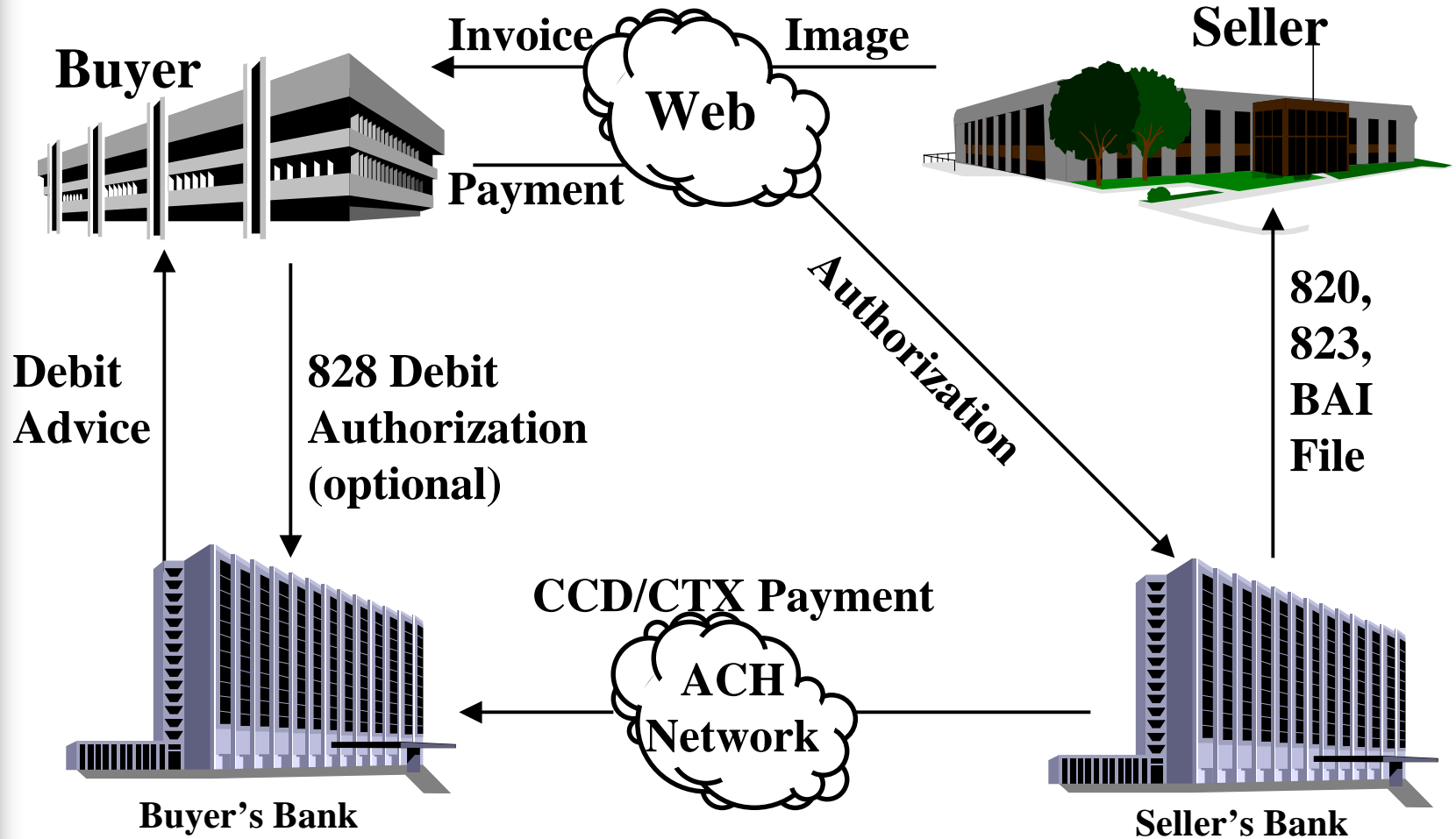
- Receive invoice and “click to pay”
- Print hardcopy of invoices
- Proof of invoice delivery
- Adjustments documentation
- Link to catalogues, Web sites, etc.
 - on-line ordering
 - electronic commerce extensions



EBPP Cycle

- Statements or bills are rendered in an electronic form on the web.
- Multiple bills are consolidated at one site.
- Customers visit the web-site to interact with their bills.
- Customers review bills and schedules payments.
- Remittance information is returned to the biller electronically.
- Payments are routed from the customer's bank account to the biller's account.

EBPP Cycle



Commercial Payments

High Value Recurring Payments	High Value Non-Recurring Payments
Low Value Recurring Payments	Low Value Non-Recurring Payments



Low Value Non-Recurring Payments

- Majority of invoices represent small % of the dollars
- Little or no supplier relationship
- Many non-PO purchases
- Extensive work for A/P and A/R

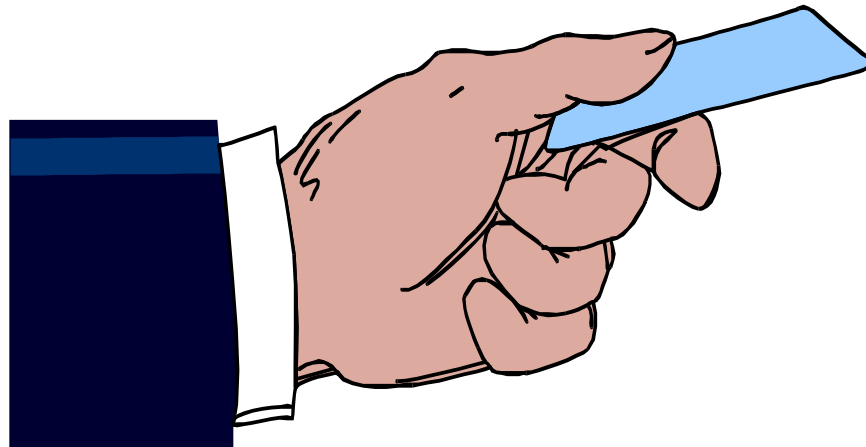


What is a Purchasing Card?

- Charge card issued to designated employees
- Used to make small dollar purchases
- Limits established on types of purchases

Purchasing Card Controls

- MCC - Merchant Category Codes
- Each supplier assigned to a category
- Categories can be included or excluded





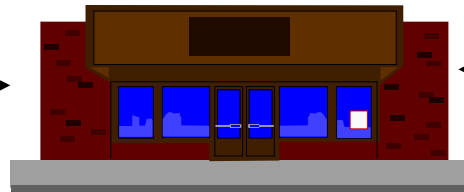
Purchasing Card Controls

- Monthly limit established for Company
- Each card can be assigned:
 - an individual limit
 - a maximum purchase amount
 - a maximum number of transactions per month
 - MCC inclusions/exclusions

P-Card Authorization Process



Employee

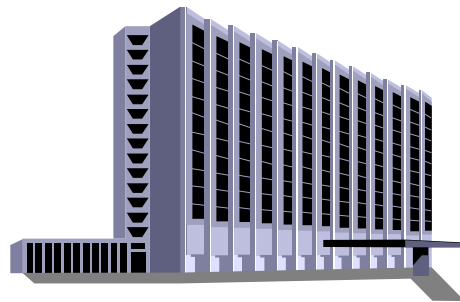


Merchant

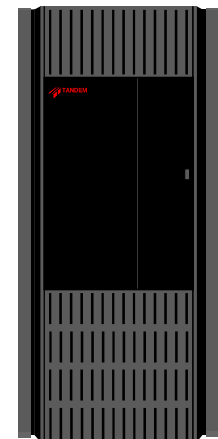


**Authorization
Processing**

- Transaction \$ limit
- Supplier type
- Spending limits

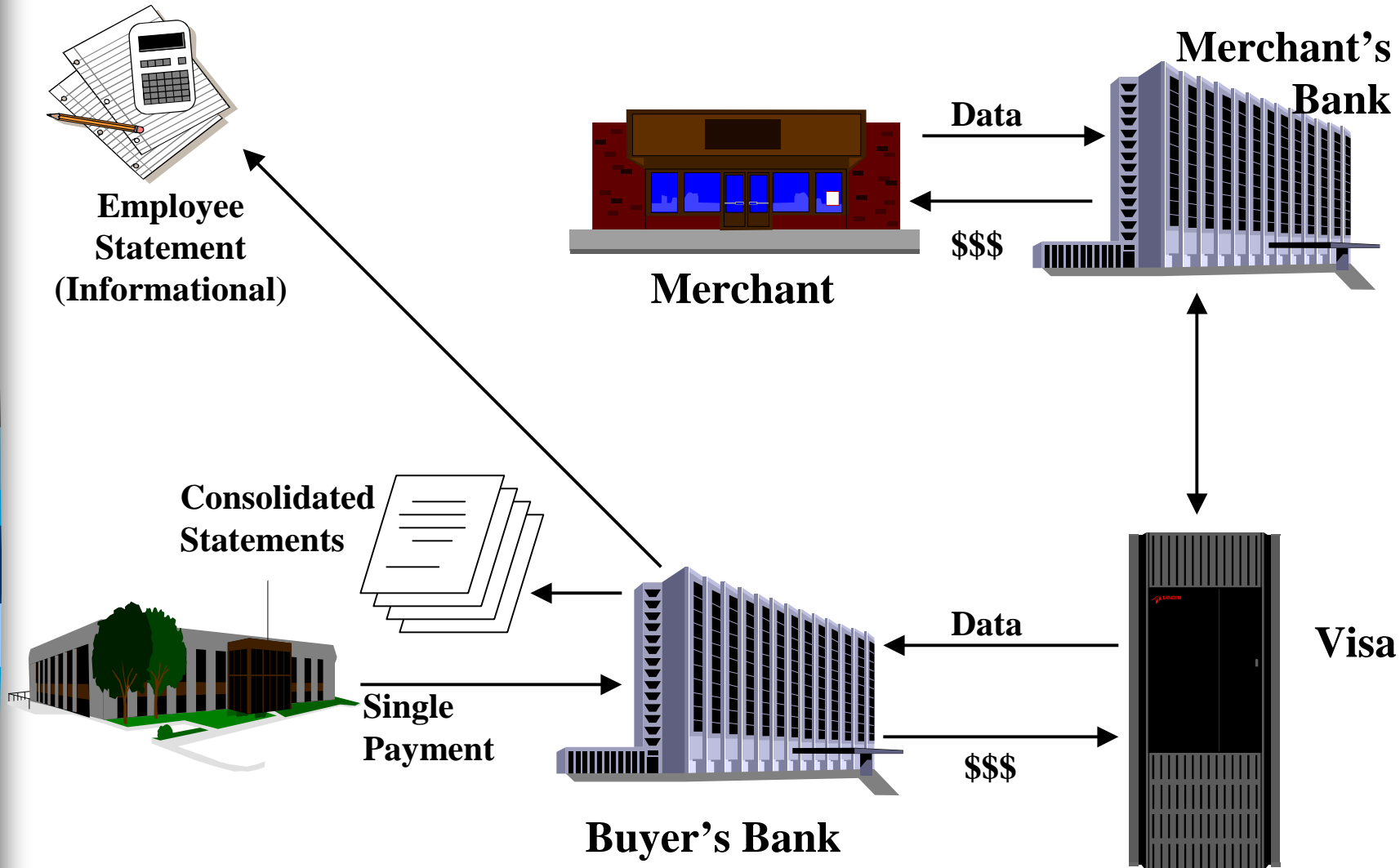


Buyer's Bank



Visa

P-Card Settlement Process





Purchase Card

Benefits to Sellers

- Faster payment terms
- Reduced invoicing and collection costs
- Reduced credit expenses
- Improved customer service



Purchase Card

Benefits to Buyers

- Reduced A/P costs
- Improved control over small dollar purchases
- Reduced cycle times
- Improved supplier relationships



Purchase Card Barriers

- Current purchasing processes
- Existing controls and procedures
- Multiple department approvals
- Supplier attitudes

Commercial Payments

High Value Recurring Payments	High Value Non-Recurring Payments WIRE TRANSFER
Low Value Recurring Payments	Low Value Non-Recurring Payments

Commercial Payments Summary

High Value Recurring Payments EDI	High Value Non-Recurring Payments Wire
Low Value Recurring Payments EBPP	Low Value Non-Recurring Payments Purchasing Card

Comprehensive Collections

Streamline all payments into one electronic transmission

- Paper-based payments
- EFT (ACH & Wire), EDI
- Credit Cards
- Internet/EBPP



Receivable Management - Comprehensive Collections



Receiving Entity

Consolidated
Transmission



RDFI

Check

ACH

Wire

Credit Card

Third Party
Transactions



Benefits of Comprehensive Collections

- Increased Accuracy - Error Reduction
- Timeliness
- Reallocation of Resources
- Decrease in Days in A/R
- Customer Satisfaction



EC & Accounts Receivable

Focus on EC integration into accounts receivable process

- Invoicing
- Receiving & Processing Payments
- Applying Payments against Open Invoices
- Posting Information to Client's Internal Accounting System



Other Internet Applications

■ Balance & Transaction Reporting

- Receive account information from several banks without installing software
- View balances from virtually any location
 - password protection
 - data encryption
 - dual controls



Other Internet Applications

- Transaction Initiation
 - Web-based EFT initiation
 - ACH
 - Wire Transfer
- Browser based reporting and transaction initiation will be forthcoming
- Security Issues



Security Issues

- Security concerns or perceived lack of security is often cited as the #1 impediment to participation in EC.
- Internet Security Tools
 - 128-bit SSL encryption
 - Virtual Private Networks
 - Digital Certificates



Internet Customer Service

- Banks will offer websites as a “one-stop” service for multiple services
 - On-Line Customer Service
 - Routine Account Services
 - Transaction Initiation
 - Customer Self-Service Options
 - Presentment of Statements
 - Electronic Gateway to Client Services



The Personal Touch - Is It Always Required?

- Current Applications that help customers solve their own problems and allow for self-service:
 - On-line Travel
 - On-line FAQ's & Research
 - On-line Shopping & Auctions
 - On-line Trading & Banking
- The Internet provides convenience for customers
- The Internet provides cost reductions for companies

***The Internet for Self Service,
Humans for Premium Service***

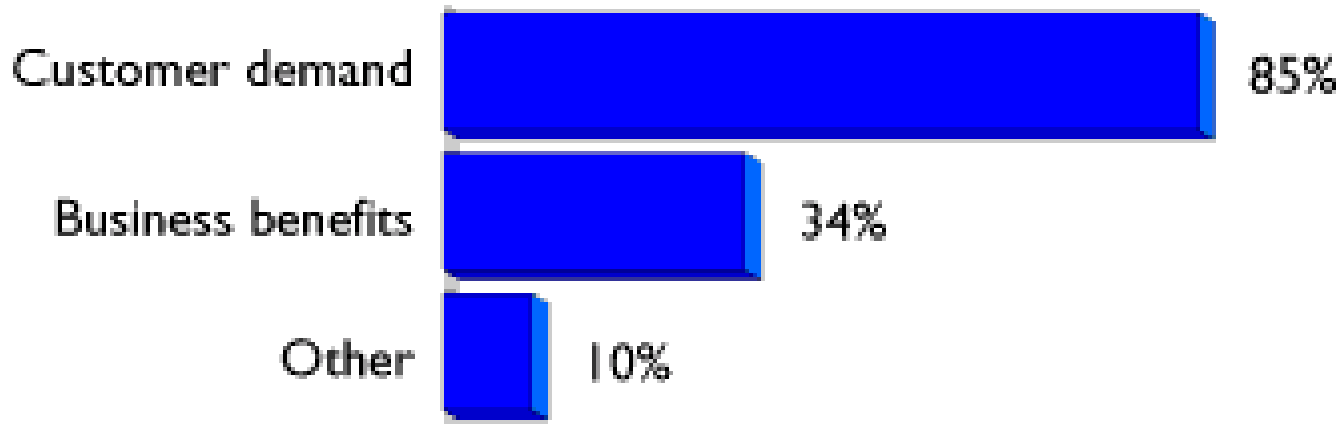


Better Customer Service Economics

- Forrester Research predicts a 43% drop in labor cost per customer contact by the year 2000 for a \$650 million business.
 - Internet enables customer service to handle 33% more capacity with the same staff level.
 - Self-Service absorbs 20% of customer contacts and attracts one-third of new support customers.

Internet Customer Service is in Demand

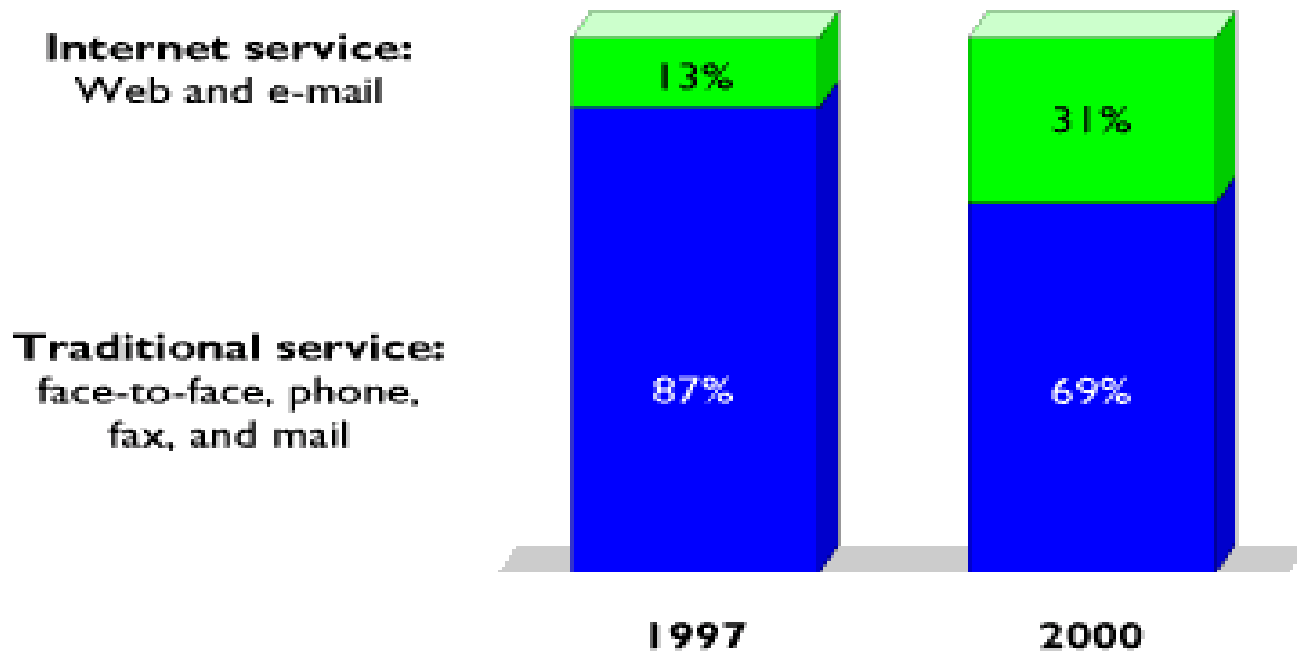
“Why are you providing customer service over the Internet?”



Percent of 41 companies with active Internet customer service
(multiple responses accepted)

Customer Service - Market Expectations

“How many of your customer inquiries will be addressed over the Internet in 1997? In 2000?”



Average percentages of 41 companies with active Internet customer service



Summary

- Understand the dynamics of your cash management/EC needs
 - *Strategic advantage?*
 - *Cost reduction?*
 - *Process Improvement?*
 - *Can you dictate terms?*
 - *Cash flow implications?*
 - *Control implications?*
 - *Liability?*



Summary

- Where are your customers, suppliers and competitors in terms of readiness?
 - *Most EDI technologies require willing partners*
- Prioritize your projects
 - *Identify your goal*
 - *“Early win”?*
 - *Competitive advantage?*
 - *Cost reduction/revenue enhancement?*
 - *Find the highest payoff opportunity*



Summary

- Investigate thoroughly before committing resources
 - *Technology is changing rapidly.*
 - *Legal issues?*
 - *Acceptance issues?*
 - *Implementation issues?*