

*Elcom Systems*<sup>TM</sup>

**Elcom Systems and RSA:  
Securing Business-to-Business  
Electronic Commerce**

**David Wolf  
President, Elcom Systems**

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# Elcom Systems' Business

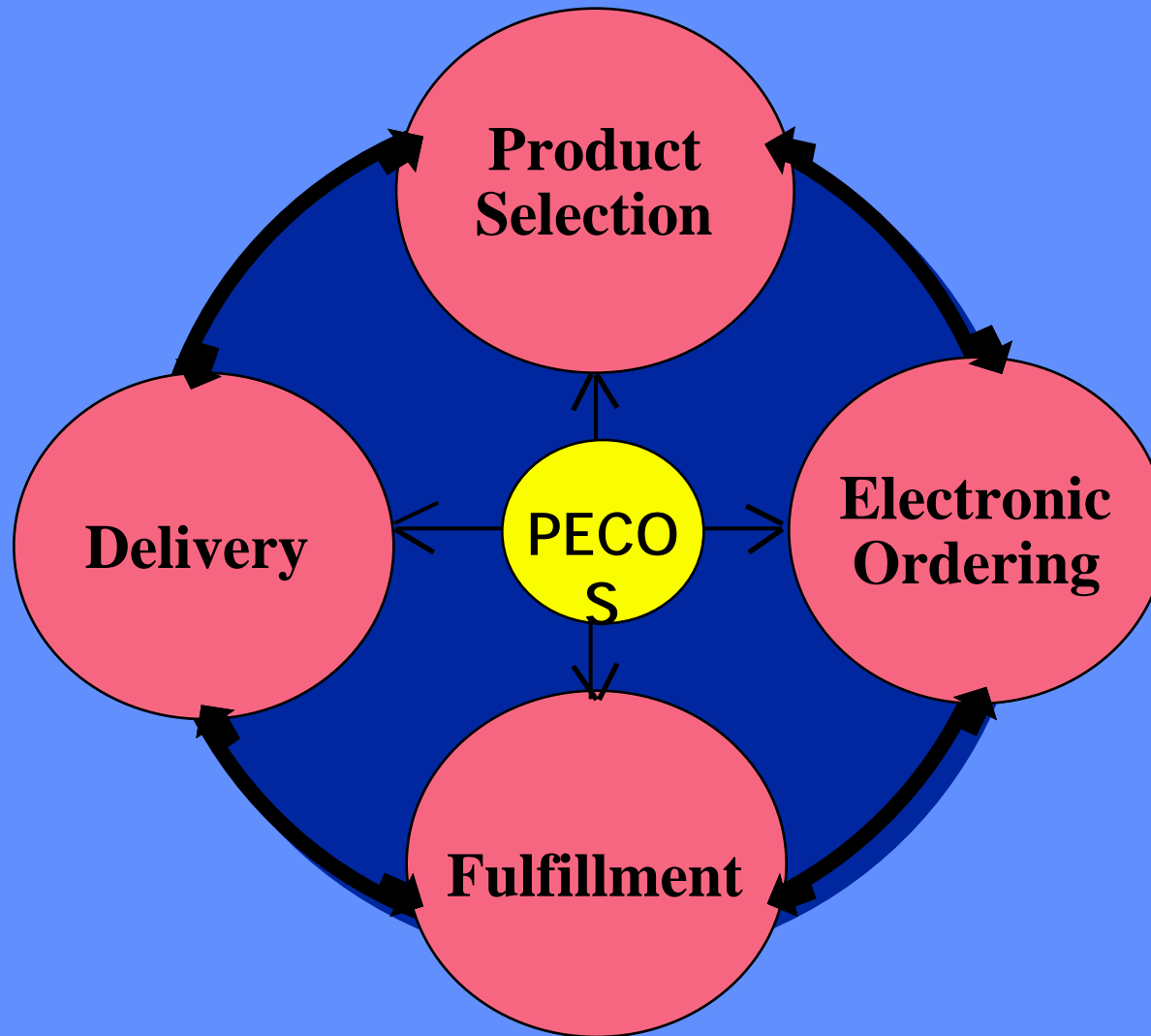
*“Elcom Systems is the leader in full-circle electronic commerce systems, linking buyers and sellers in real time throughout the product selection, ordering, fulfillment and delivery process.*

*The company provides a full range of integrated private telephone network, Internet/intranet and Web-based solutions, giving customers the choice to implement electronic commerce solutions that support their business strategies.”*

# **Elcom Systems Overview**

- ◆ **ELCOM Systems = Electronic Commerce Systems**
- ◆ **Wholly Owned Subsidiary of Elcom International (NASDAQ:ELCO)**
- ◆ **Headquartered in Boston -- European Offices in London**
- ◆ **Developed PECOS as Generic Electronic Commerce Enabling Technology**
- ◆ **Business System and Full Development Environment**
  - ◆ **Developer and System Administration Tools**
- ◆ **Full Range of Systems Solutions**
  - ◆ **Complete Range of Consulting Services**

# PECOS: *The Electronic Commerce Circle*



# Evolution of Distribution Channels

## Retail Stores



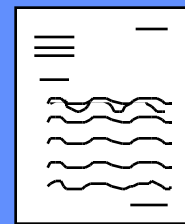
- Many Points of Distribution
- Multiple Inventory Locations

## Superstores



- Fewer Points of Distribution
- Multiple Inventory Locations

## Mail Order



- Single Point of Distribution
- Centralized Inventory

## Electronic Commerce



- Electronic Catalog
- Easy To Use
- Direct Delivery
- Convenience, not Location

Margin and Competitive Pressures Create Demand for Electronic Efficiencies

Lower

(Return on Invested Capital)

Higher

# Benefits of Implementing Electronic Commerce Solutions

- ◆ **Differentiated Marketing Offering**
  - ◆ On-line Pricing and Availability
  - ◆ Customized Information
- ◆ **Reduce Order Processing Costs**
  - ◆ Eliminate Telephone Transactions
  - ◆ Fewer Opportunities for Human Error
  - ◆ Remove Redundant Costs
  - ◆ Real-Time Order Confirmation
- ◆ **Increase Customer Satisfaction**
  - ◆ Convert from Transaction-Based to Process-Based Relationships

# PECOS

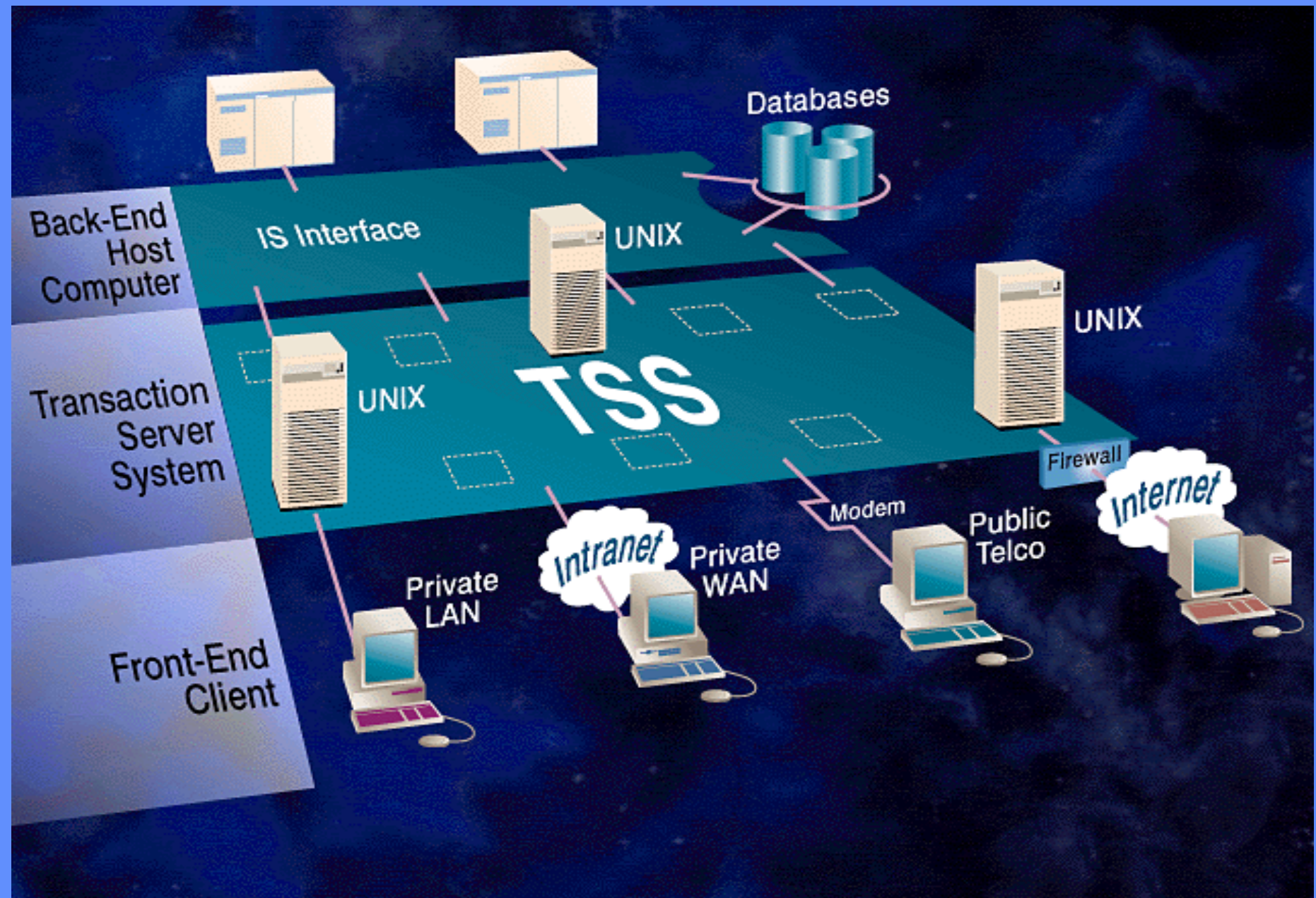
## *Personal Electronic Catalog & Ordering System*

- ♦ **Interactive and Dynamic Client/Server System**
  - ♦ **CD-ROM for Multimedia; No Bandwidth Limitations**
- ♦ **Front-end Clients Managed by UNIX Back end**
  - ♦ **Distributed Database on Front-end PCs (Catalog)**
  - ♦ **Private Network, Intranet and Internet Enabled**
- ♦ **Transaction Server System Links to Enterprise/Information Systems**
- ♦ **Open Systems Architecture: Windows/UNIX, TCP/IP**

# PECOS.net

- ◆ **Provides High-Level Transaction Processing on the World Wide Web**
- ◆ **Browser-Compliant PECOS Technology**
  - ◆ **Java Applet Infrastructure**
  - ◆ **Uses Standard Java-Enabled Browsers**
- ◆ **Utilizes the Same Proven, Industrial-Strength Transaction Server System as PECOS**
- ◆ **Common Development Environment**

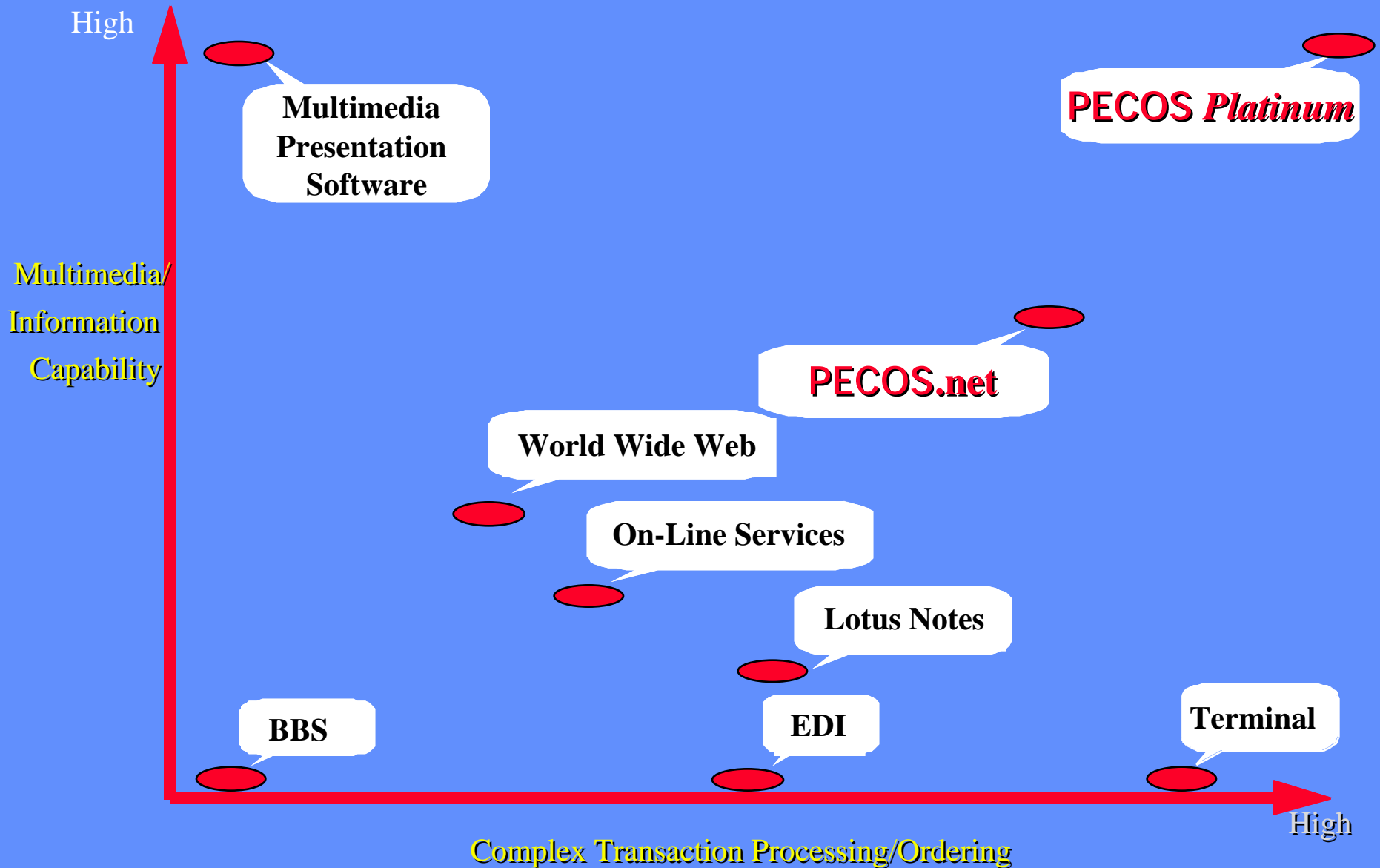
# PECOS SYSTEM ARCHITECTURE



# The Elcom Advantage

- ♦ **Packaged Application**
  - ♦ **Rapid Time to Market**
  - ♦ **Demonstrable Functionality**
  - ♦ **Predictable Implementation Cost**
- ♦ **Multiple Presentation and Communication Options**
  - ♦ **CD-ROM for Information and Videos**
  - ♦ **Private Modem-based Network for Security**
  - ♦ **Internet for Low-Cost Communications and High Availability**
- ♦ **Real-Time Links to Existing Systems**

# Technology Position Matrix



# **Elcom Systems**

## **Customer Overview**

- ◆ **Include Manufacturers, Distributors, Direct Marketers**

### **Representative Customers:**

- ◆ **Daisytek**
- ◆ **Catalink Direct**
- ◆ **Penn Ventilator**
- ◆ **Orion (UK)**
- ◆ **ShopLink**
- ◆ **Blue Star (NZ)**

***PECOS Applies to Any Industry***

# **Security for Business-to-Business Electronic Commerce: Reality vs. Perception**

# Transition from Private to Public Networks

- ◆ **More Public = More Security Concerns**
- ◆ **LAN/WAN**
- ◆ **Intranet**
- ◆ **Internet**
- ◆ **World Wide Web**

# What is at stake?

- ◆ **Revenue**
- ◆ **Customer Relationships**
- ◆ **Enterprise Data**

# Who is responsible?

- u **EDI model: service provider**
- u **E-commerce model: merchant or service provider**

# Elcom and RSA

- u Signed partnership agreement in 1996
- u RSA = Added Value
- u Provide full range of choices
  - u Elcom Systems (ESI) Security
  - u Individualized Packet Security (IPS)
  - u RSA Data Security

# Customers are Enthusiastic

- u “With RSA Data Security, we can meet the demand for electronic commerce over the Internet, while insuring our customers that their sensitive data will remain completely private. RSA’s expertise and credibility allow us to confidently extend our business to the Internet, providing added convenience and cost savings for our customers.” -

**Jim Rousou, President and CEO,  
Catalink Direct**

# Case Study: Catalink Direct, Norwood, MA

- ◆ **\$600 million PC Products Remarketer**
- ◆ **Using Internet-enabled PECOS**
- ◆ **Customers interested in doing business over the Internet created demand**

# **RSA Technology Secures Data Transfer via the Internet**

- u Use RSA technology to create secure channel**
- u PECOS front end client negotiates with back end server to establish secure connection**
  - u Mutual authentication between client and server**
- u Encrypt each piece of data that is transmitted**

# **RSA's BSAFE Cryptographic Toolkit**

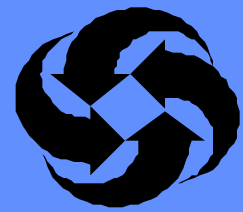
- u Creates the encrypted pieces of data that do the authentication (PKCS)**
- u Enables negotiation of secure channel parameters (PKCS)**
- u Encrypts data being transmitted (RC4 symmetrical encryption technology)**

# Catalink Demo

# Futures

- u **Additional PECOS/RSA installations**
- u **PECOS.net and future RSA Java-enabled products**

**Elcom Systems and RSA:  
Ongoing Partnership  
Between the Leader in Data  
Security and the Leader in  
Full-Circle Electronic  
Commerce**



*Elcom Systems™*

**Thank You**