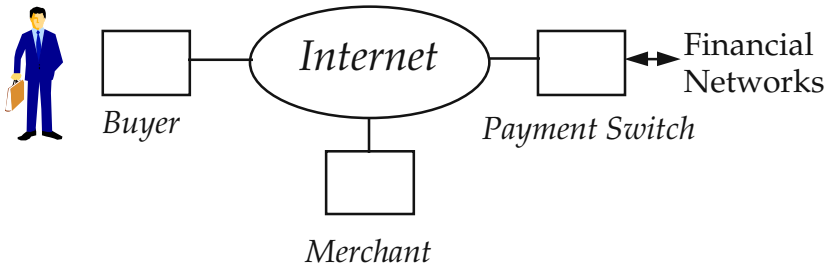
Payment Switches for Open Networks

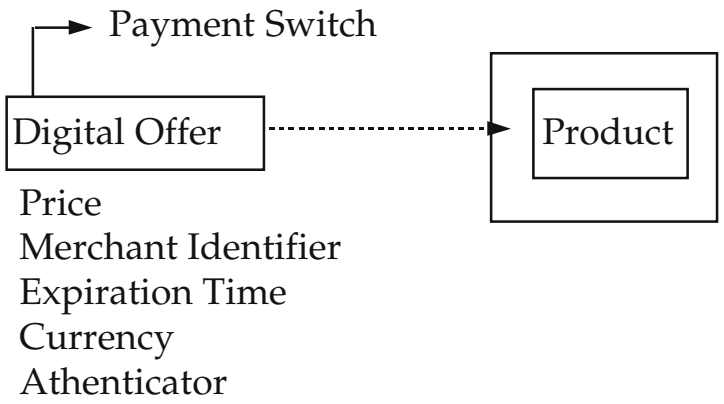
- David K. Gifford
- Lawrence C. Stewart
- Andrew C. Payne
- G. Winfield Treese

http://www.openmarket.com/

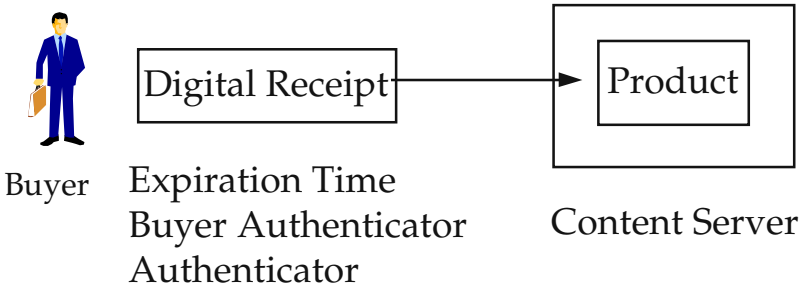
The Open Market Payment System



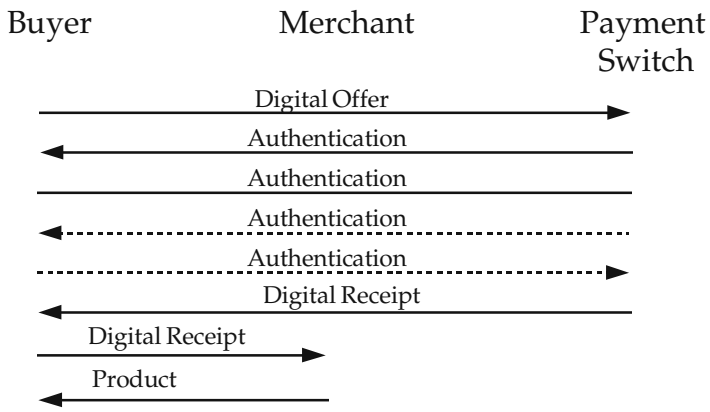
Digital Offers Describe Items for Sale



Digital Receipts Vend Products



Payment System Protocol



Authentication Technology

- (Multiple) Passwords
- One-time Passwords
- IP Address
- Secure Channels
- Replay Detection
- Modular
- Transaction Specific

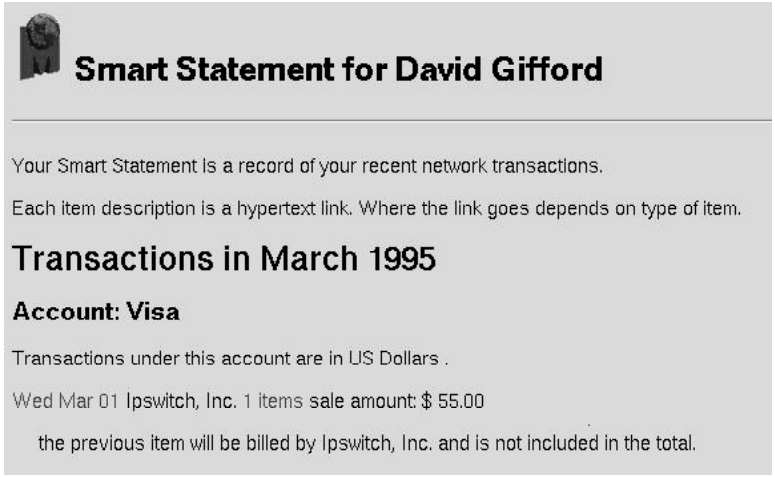
Authorization Technology

- Real-time authorization against financial system networks
- Velocity checking
- Modular
- Transaction specific
- Buyer controls

Smart Statements™

- Interactive transaction log display
- For buyers and merchants
- Extensive customer service support
- Access controlled

Smart Statement™



Failure Resiliency

- Smart Statements™ record outcome of a transaction on client failure
- Definitive record for buyer and merchant

Experience: System Requirements for Commerce

- Link payment to content
- Clear model of failure and recovery
- Reflect real-world relationships and behavior
- Customer service
  - Recovery from failures
  - Dispute resolution
  - Duplicate transactions

Models of Commerce

- Retail goods
- Subscription services
- Time-based access
- Small-value transactions (e.g., pay-per-page)
- Different forms of payment may be appropriate
- Payment protocol may depend on requirements of the financial instrument
- Business on-line reflects business in the real world

Payment Switches Connect the Internet to the Financial System

- Fully integrated into the Web via URL encodings of digital offers and receipts
- Modular real-time authentication and authorization
- Automated customer service with Smart Statements™

http://www.openmarket.com/