Improving Profitability Using Customer Service Information Systems in the Forest Products Industry

Michael Haas Penn State University
Richard Vlosky Louisiana State University

Wood Technology Show, 1997

Customer Service Information Systems

- To solve service problems a major distributor of wood products installs an on-line network for its key customers so that they can enter orders directly into its computer.

- A softwood lumber company applies bar codes to its lumber for inventory control purposes and adopts an electronic data interchange (EDI) partnership with its large home center customers.

Customer Service Information Systems

….continued

- When budget axes fell in the 1990's a dominant architectural firm had to cut fees to keep paced with low-cost shops. The company started with E-mail and began sending electronic blueprints to customers' computers --35 cents and 20 seconds a blueprint compared with about 25 dollars and 24 hours for overnight delivery.

Improving Profitability Using Customer Service Information Systems

I. Customer Service

II. Profitability & Competitive Advantage

III. Customer Service Information Systems

- A. Quick Response EDI
- B. Buyer-Supplier Networks
- C. The Internet
- D. Customer Comment Tracking Software

IV. Considerations for Implementation

V. Q & A

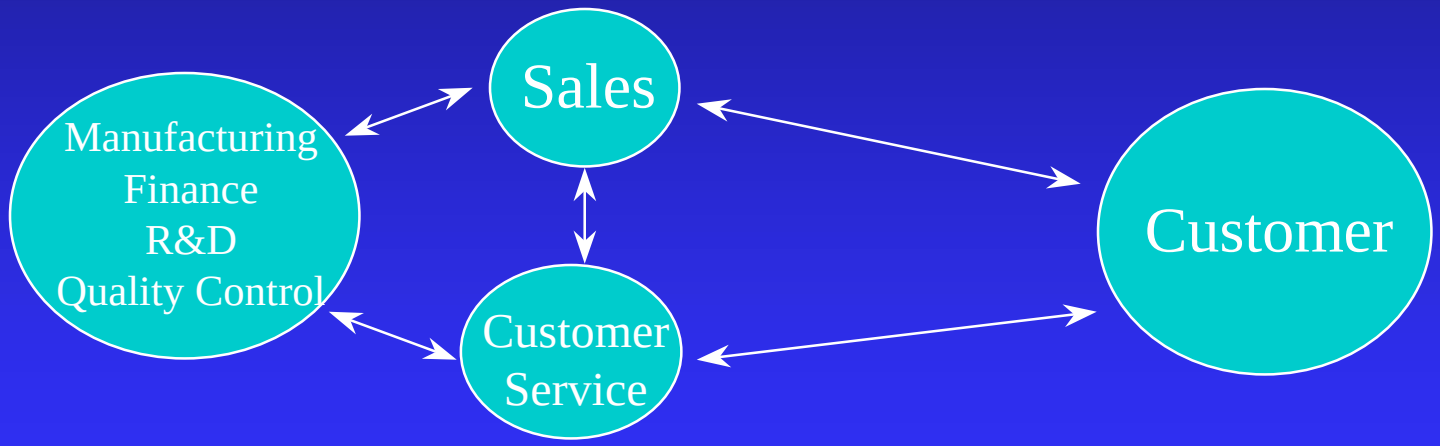
I. Customer Service

- Part of a firm's product mix.

Customer Service

….continued

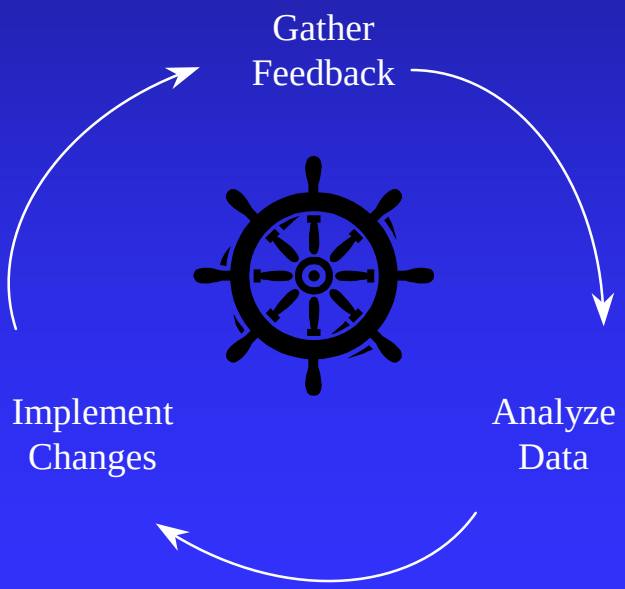
- An important hub for information exchange between customers and a firm.



Customer Service

….continued

- Feedback from customers can be used navigate the marketplace.



Customer Service

….continued

- Can provide intelligence regarding:
  - A product’s position in the marketplace
  - The direction of a market segment
  - The competition’s activities

“Know thy customer” is often easier said than done. Why?

- Large amounts of information are collected.
- Information can be widely scattered throughout organizations.
- Information is recorded inconsistently.

Effective Customer Service

- Now within reach thanks to computer technology:
  - high-powered desktops
  - database technology
  - specialized software
  - network technology
- But is technology an answer in itself?

Effective Customer Service

….continued

- Must be tied to a firm's marketing strategy.
- Must answer the questions:
  - "What services should we provide?"
  - "To whom do we offer these services?"
  - "At what level do we offer these services?"
  - "What resources are required to deliver service at the desired level?"
  - "How much service is too much service?"
  - "How do we change our service when needed?"

II. Profitability & Competitive Advantage

- The concept of value is a key to both.
- Value is ultimately measured in what buyers are willing to pay for a product or service.
- Value may come from:
  - offering lower prices than competitors for equivalent benefits
  - providing unique benefits that more than offset a higher price

Profitability & Competitive Advantage

….continued

- Customer Service Information Systems can *directly* enhance profitability & competitive advantage by:
  - lowering the cost of doing business with customers
  - adding service dimensions to products that will offset a higher price

Profitability & Competitive Advantage

….continued

- Customer Service Information Systems can *indirectly* enhance profitability & competitive advantage by providing:
  - increase customer loyalty
  - increase referrals
  - feedback for new product/service ideas
  - market intelligence
    - industry trends/direction
    - competitor activities

III. Customer Service Information Systems

A. Quick Response EDI
B. Buyer-Supplier Networks
C. The Internet
D. Customer Comment Tracking Software

Quick Response Electronic Data Interchange

- Quick Response (QR) is the integration of UPC and EDI.
  - (UPC) Universal Product Code
  - (EDI) Electronic Data Interchange
- A QR system allows efficient coordination and execution of business processes between buyer and seller.

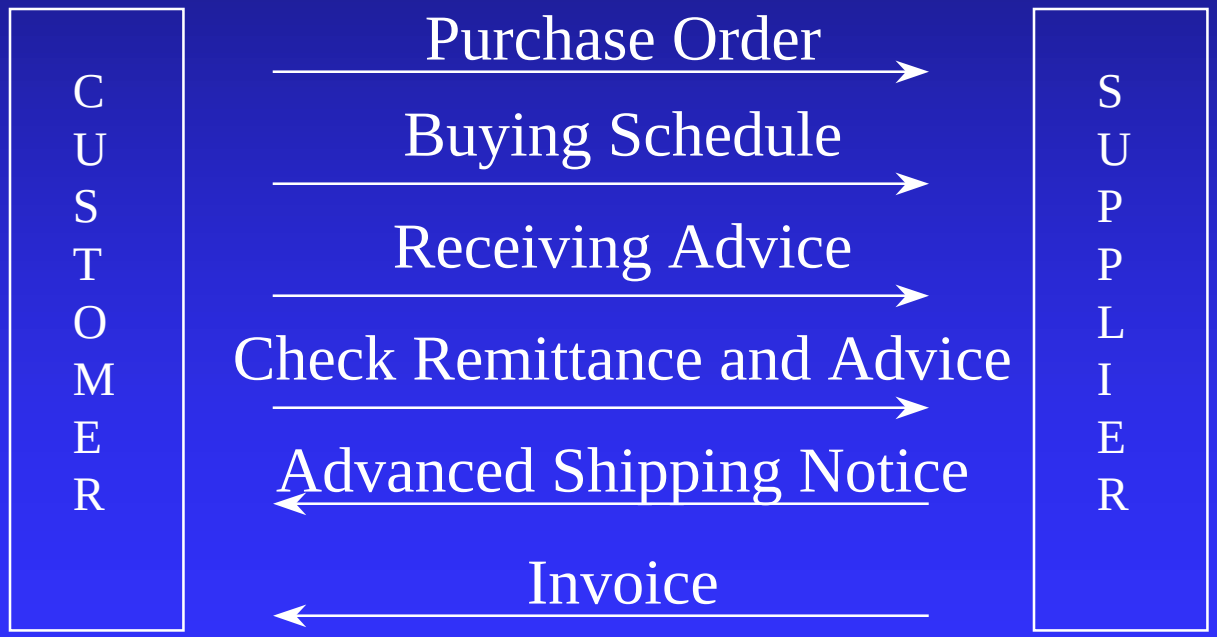
Universal Product Code (UPC)

- Symbols established by the Uniform Code Council (UCC) that are machine readable (scannable).
- How scanning works:
  - Units of product are bar coded and scanned.
  - Inventory management systems track information regarding the units.
    - contents
    - location
    - descriptions

Electronic Data Interchange (EDI)

….continued

Typical EDI Business Transactions



Quick Response Electronic Data Interchange

- The integration of UPC and EDI.
- How QR looks from the Supplier side:
  - Bar Codes are affixed to product units to identify type, size, customer, etc.
  - An EDI Advanced Shipping Notice (ASN) is sent to the customer notifying their receiving dock that the product is enroute.

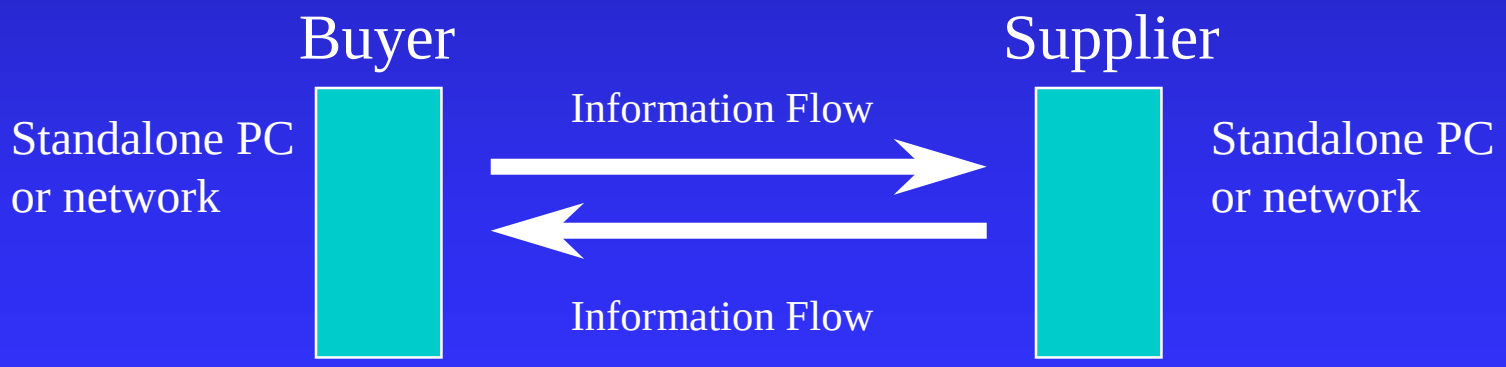
Quick Response Electronic Data Interchange

….continued

- How QR looks from the Customer side:
  - The unit bar code is scanned upon reception and the customer's receiving system is updated.
  - The customer's system compares the bar code data to the EDI ship notice.
    - If o.k., inventory and purchasing are automatically updated.
    - If problems arise, a discrepancy report is generated and shipped to the supplier for resolution.
  - Accounts payable system validates the receipt and price, then authorizes electronic payment.

Buyer-Supplier Networks

- Networks are established that directly link buyers to suppliers through:
  - Local Area Networks (LANs)
  - Wide Area Networks (WANs)



Buyer-Supplier Networks

….continued

- Networks allow firms to exchange:
  - Production information
  - Delivery schedules
  - Pricing information
  - Technical assistance

The Internet

- A new business climate is developing, with the Internet serving as the medium.
- “Electronic markets” now exist via the World Wide Web (WWW).
- Corporate web sites provide opportunities for firms to:
  - promote and sell products
  - develop customer service linkages

The Internet

….continued

- Internet services give customers the opportunity to:
  - communicate directly with suppliers across functions or departments
  - check order status
  - obtain shipping information
  - report problems
  - suggest improvements in product/service offerings

The Internet

….continued

- Common Gateway Interface (CGI)
  - Allows site administrators to control access of web site users.
  - Allows 2-way communication between buyer and seller at the site.
- Secured Sockets Layer (SSL)
  - Assures security of data transmissions via the internet.

Customer Comment Tracking Software

- Simple customer service systems can be developed with deployment of comment tracking software.
- Feedback from customers can be cataloged and tracked regarding:
  - service needs
  - product shortcomings

Customer Comment Tracking Software

….continued

- Software types:
  - Off-the-shelf packages
    - Microsoft *Access*
    - Symantec *Q&A*
    - Future Labs *TALKShow*
    - Raosoft *Survey*
  - Custom software

Custom Software

- Database software that integrates data from customers including shipping, account status, order entry, etc.
- Electronic bulletin boards.
- The sky is the limit!

Implementation Considerations

- Cost: systems need not be expensive to be good!
- Strategy: any system should meet specific needs in a company's competitive strategy.
- Flexibility: systems should be expandable and/or integrate with current systems.
- Value: does the system provide value for the firm and its customers?

Conclusion

- Customer Service
- II. Profitability & Competitive Advantage
- III. Customer Service Information Systems
  - Quick Response EDI
  - Buyer-Supplier Networks
  - The Internet
  - Customer Comment Tracking Software
- IV. Considerations for Implementation

Questions & Answers