Collaborative Commerce
Technology allows allied businesses to work together to best meet the demands of the marketplace.
Technology facilitates
- Communication
- Sharing information
- Collaborative planning and research
Overview

Companies wishing to collaborate with outside companies need technology infrastructure that eases/promotes collaboration. Based on open standards (where they exist) allowing for maximum flexibility and rapid reengineering. *Internal mode of operating that supports collaboration.* Ability to handle outsourced or collaborative functions with as much efficiency as internalized processes.

Dell's Value Web

- CMs/OEMs
- Component suppliers
- Third party HW and SW suppliers
- Logistics companies
- System integrators
- Distributors
- Repair and support companies
- Customer

Physical flows, including products and services

Information flows
Supply Chain Management

"A complex process that requires the coordination of many activities so that the shipment of goods and services from supplier right through to customer is done efficiently and effectively for all parties concerned.

SCM aims to minimize inventory levels, optimize production and increase throughput, decrease manufacturing time, optimize logistics and distribution, streamline order fulfillment, and overall reduce costs associated with these activities"—Turban, et al

Typical supply chain problems

Supply chains can be long, involving many partners in different places.

Materials and information must flow among many players. Can be slow and error-prone when done manually.

Quality and other problems with materials can ripple throughout entire supply chain.

Pure EC companies likely to have more supply chain problems because they lack logistics infrastructure and rely on external services.
Collaborative Commerce

Viewing members of our supply chain as partners and working with them in a collaborative way.

Using technology to share information—business intelligence—for our good and the improvement of our suppliers or customers.

A manufacturing or sales company is only as good as the products they have to work with.

Supply chain integration vs. supply chain usage

Example of collaboration:

Vendor-Managed Inventory (VMI)

Elements of Collaborative Commerce

Communicating with suppliers about

- Upcoming needs—new products or components
- Upcoming demand—quantities needed
- New innovations

In order to enable supplier to

- Develop products to meet our specific needs
- Have products available when needed
- Insure that capacity and production is sufficient
- Contribute ideas to our forthcoming products
Collaborative Commerce Participants

Upstream supply chain—our suppliers
Downstream supply chain—our customers
Internal supply chain—departments in our company which collaborate

Success depends on:
- Degree to which all participants willingly contribute.
- Information availability and exchange
- Speed, cost, quality
- How well collaboration integrated into each company’s way of doing business

If we don’t collaborate...

New product development delayed waiting on supplier to provide components.
Product quality potentially lowered by inadequate products from supplier.
Logistical problems—can’t get merchandise when needed, where needed.
Overall reduction in quality of product or service we provide to our end customer.
Example

The Bullwhip Effect—coping with erratic order volume.
Retailer A plans a big promotion selling Company Y YoYos.
Retailer A orders 1 million YoYos from Company Y.
Company Y doesn’t have 1 million YoYos in stock, so they can only sell 500,000.
Company Y decides to build a new YoYo factory, seeing all the money upcoming from future sales to Retailer A.
Retailer A’s promotion ends. They don’t need any more YoYos.

Economics of Collaboration

Communicating with suppliers about future purchases allows supplier to
adjust their production quantities
not create or carry excess inventory
by doing above, reduce their cost of production, allowing them to lower our prices
custom make products to best suit our needs
gain benefit from our knowledge of the market (and we gain from theirs)—knowledge management
Barriers to Collaboration

Technical problems—networking computer systems, providing security, etc.

Concerns about sharing corporate knowledge with suppliers

Lack of willingness to participate in collaboration activities

Examples of Collaboration

CPFR—Collaborative Planning, Forecasting, and Replenishment
  Working with upstream or downstream partners to plan orders.
  Improve demand forecasting
  Improve logistics efficiency

APS—Advanced Planning and Scheduling systems
  Working to find optimal solutions to complex manufacturing problems through effective scheduling
  Using our manufacturing capabilities to its fullest
Examples of Collaboration

PLM—Product Lifecycle Management

Sharing information on new product development ideas, retiring of products, etc.

Managing Collaboration—Key questions

1. Corporate culture: How difficult is it to introduce e-collaboration?
2. How much can be shared with business partners?
3. Who benefits are there from options such as vendor-managed inventory?
4. What are the costs of various options? Do benefits outweigh costs?