

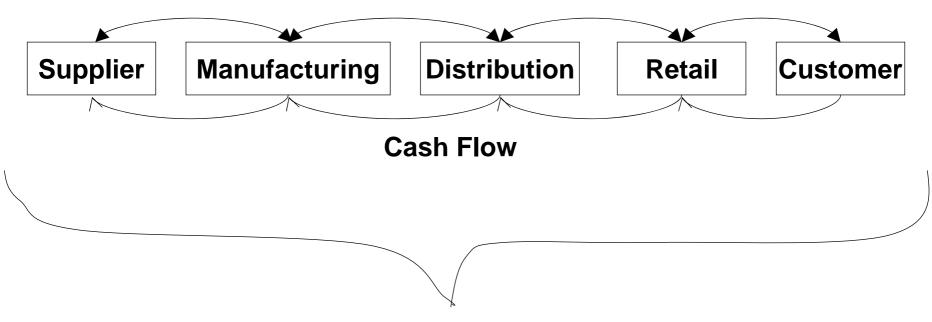
# ERP Course: Supply Chain Chapter 9 from Mary Sumner

Peter Dolog dolog [at] cs [dot] aau [dot] dk 5.2.47 Information Systems September 26, 2007



# **Supply Chain**

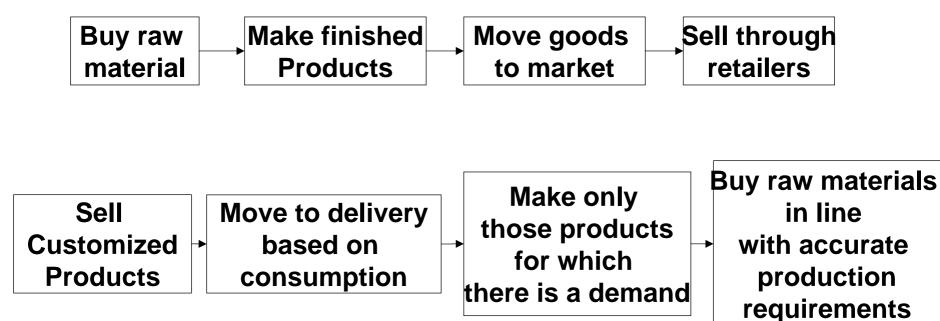
### **Information Exchange**



### **Products Exchange**

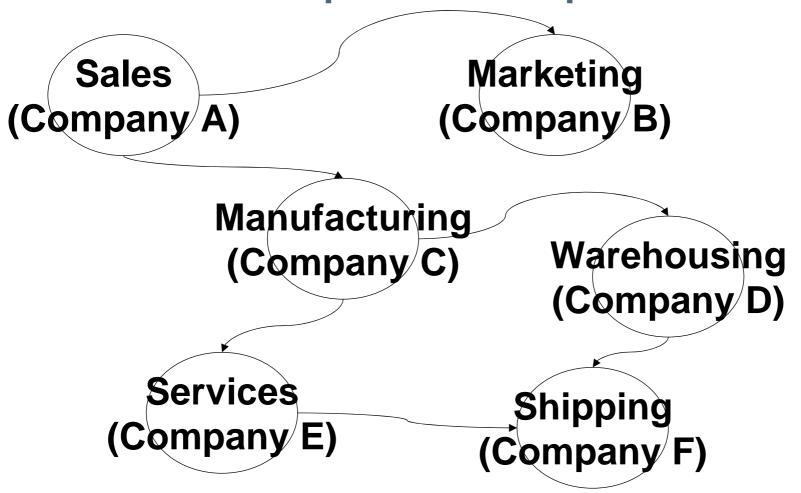


### Material vs. Customer Driven





### **Distributed Independent Companies**





# **Examples**

Wall Mart – links to suppliers and when to restock the wall mart inventory
Ford and General Motors – dierect link to supplier order entry systems
Hallmark – continuos replenishment for having right products on retailers stores



## **Shared Information**

Consumers: demand + forecast

Retailers: on-hand inventory, consumer sales data

- Distributors: on-hand inventory, retailers' orders, shipping notices
- Carriers: in-transit inventory, planned shipments, delivery schedules
- Manufacturers: on-hand inventory, material production schedule, actual production completed, distributors' orders, shipping notices
- Suppliers: on-hand inventory, material production schedule, actual production completed, manufacturers' orders, shipping notices



# **Goals of Supply Chain Management**

To focus just on competencies which company is good at Outsourcing other activities To reduce costs To reduce inventory Cycle time improvement Customer service



### **Partnerships**

In the past – negotiating with several suppliers => long times Nowadays – partnerships between suppliers and consumers, vendor managed inventory

Retail decreases cost associated with inventory managements Manufacturer benefits from larger volumes of orders from retailers

Manufacturer pro-actively monitors stocks of the retailer and compares them to placed orders

Customer benefits from on-time delivery



# **Strategies for coordination**

Open Market Cooperation Single-Level Coordination Multiple-level Coordination Full Coordination



### eBusiness

Virtual value chain Selling and buying products electronically Activities supported:

- Inbound logistics lower costs
- Customized productions low costs
- Faster communication
- Marketing and sales help for newcommers
- Faster support for customer service



## **Coca-Cola example**

Inbound logistics – connections between Coke suppliers
Production – Coke and bottles
Management – worldwide communication
Marketing and sales – cellular linked vending machines
Customer support – provide more timely delivery to trade customers



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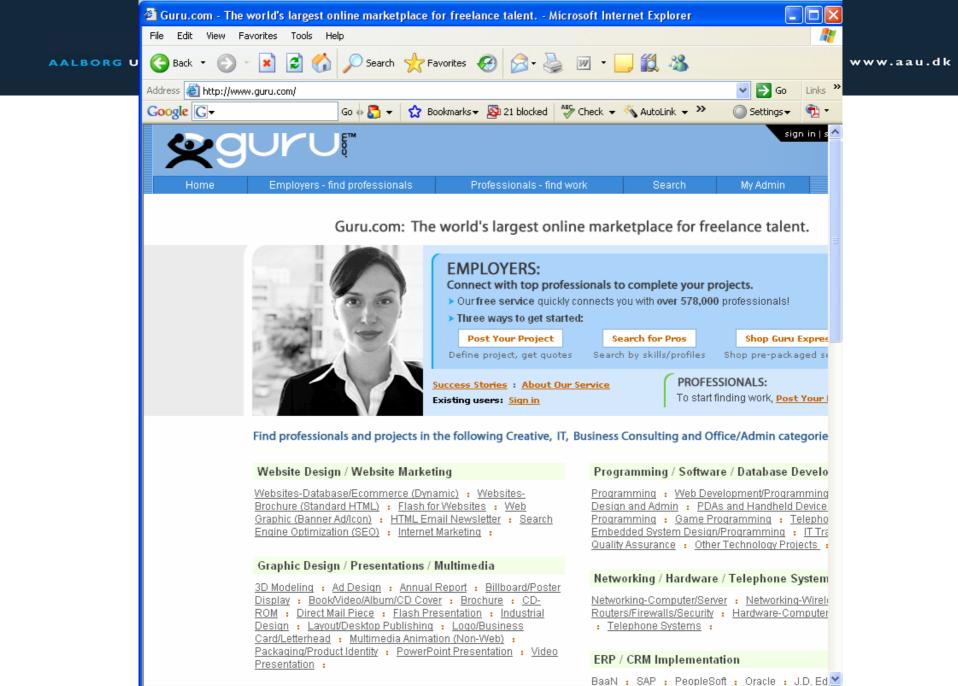
	Transaction	Contract	Partnership
Basis of Interaction	Buyer/seller exchange	Prior contracts govern exchange	collaborative goals and processes (common product design)
Level of Integration	Low	Medium	High
Coordination	based on supply and demand	contract determines level of coordination	interogranizatio nal processes
Information Exchange	one-way exchange	information exchange defined in contract	two-way, interactive exchange of information



### **Business-to-Business**

eProcurement Realizing business between companies electronicaly on the web eProcurement web sites offering services for registered users Clustered according to offered services Systematic sourcing Hot spot sourcing Manufacturing Reduce transactions costs

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- Turn trade ins and aged inventory into cash faster
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### eProcurement

B2B purchase and sale of procucts and services Lookups for buyers and sellers Prices can be specified or provided for bids Volume discounts Special offers Some level of automation through APIs



### eProcurement types

Outsources ERP to the web

e-MRO (maintanance, repair and operating – customer support) e-sourcing – identifying new suppliers on the internet

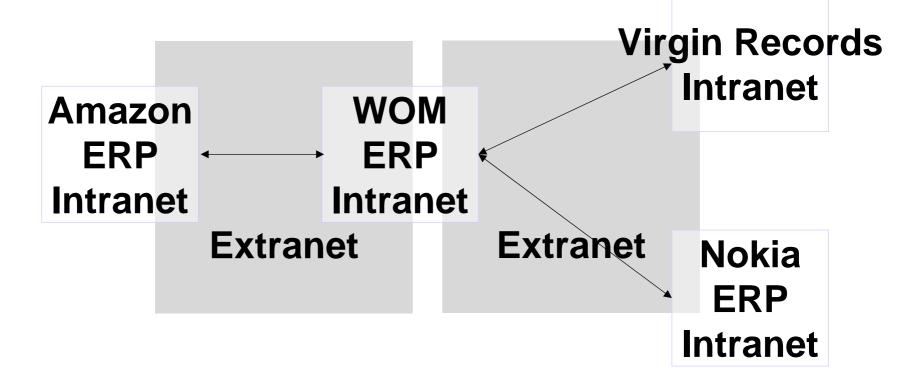
e-tendering – analysis of the market based on send and received messages on internet

e-reverse auctioning

e-informing – distributing purchasing iformation









# **Roles in eProcurement**

Administrative manager Purchasing manager Vendor Accounting



# **Business Inteligence**

ERP creates raw data Collection and aggregation to datamarts and datawarehouses Using multidimensional data structures to analyse data Data mining techniques



## **Questions to be Answered by BI**

What are characteristics of potential defectors in case of grocery stores
Who are the most profitable customers
What is an effectiveness of various marketing programs
Which customers are best prospects for credit card promotions
Which credit limits to establish for various applicants
What is a long term value of various customers