

E-Business Strategy
”Dir&Db Marketing, B2B”
MBA/USQ

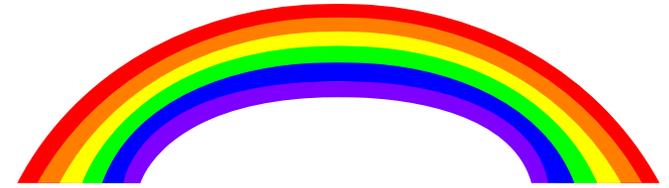
Lecture 2

(August 10, 2000)

Tralvex (Rex) Yeap MAAAI MSCS

University of Leeds

Outline



- ✓ Quick Review on Lecture 1
- ✓ Email Feedback
- ✓ M4: Strategies for Database Marketing
 - o Introduction to Direct Marketing
 - o Direct Marketing: Traditional Means vs Multi-media
 - o Introduction to Database Marketing
 - o Database Marketing: Benefits & Usage
 - o Business Intelligence & Data Mining*
 - o Data & Text Mining Applications*
 - o Business Intelligence Video* (from IBM)
- ✓ M5: Business-to-Business
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 - o Simplified e-Business Process Model
- ✓ M5: Business-to-Business (cont)
 - o Supply Chain Management
 - o Traditional vs e-Business Supply Chain
 - o Enterprise Resource Planning*
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 - o From EDI to the Internet*
- ✓ Class Activity 1: Assignment 1 Discussion
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- ✓ Class Activity 3: Case Studies – 4x
- ✓ Additional Handouts for L2
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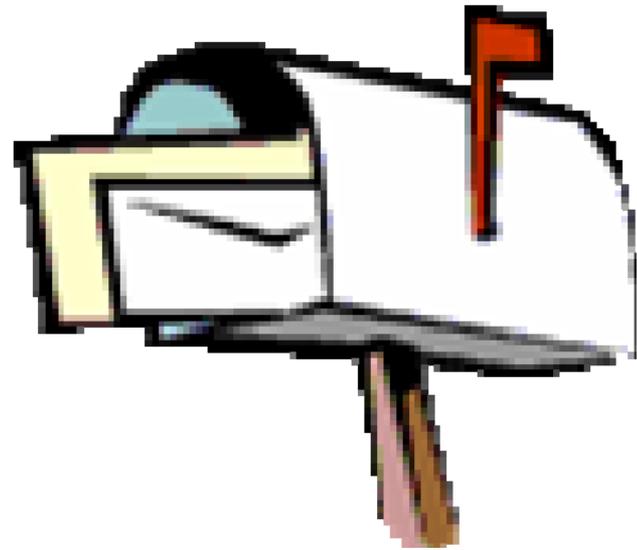
Quick Review on Lecture 1



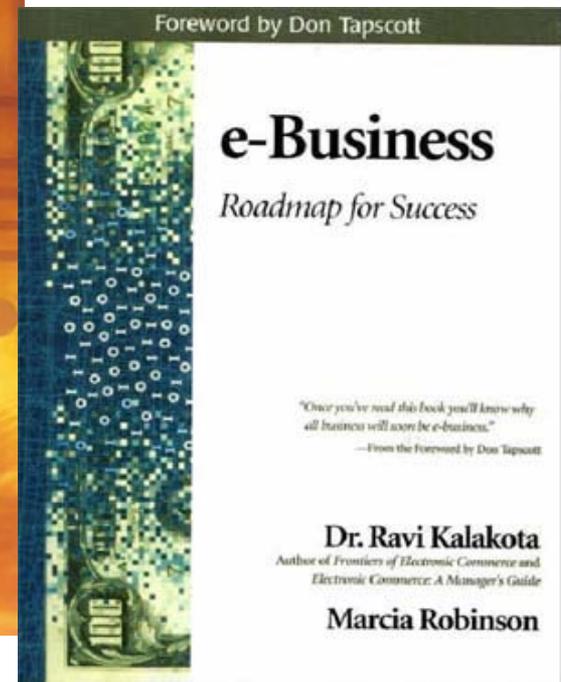
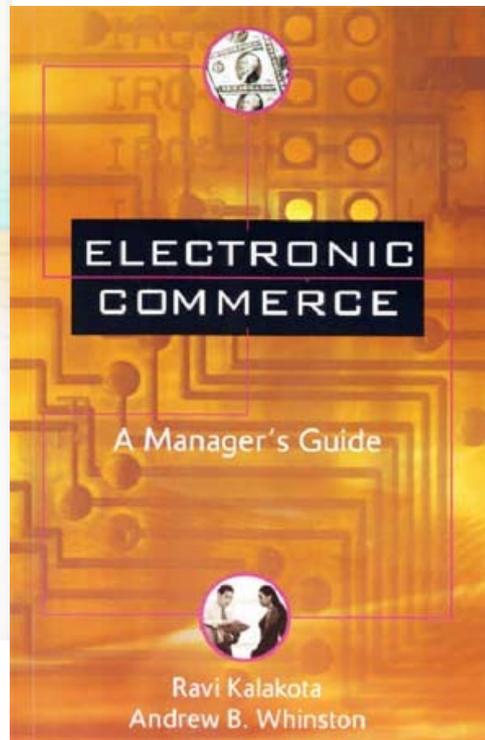
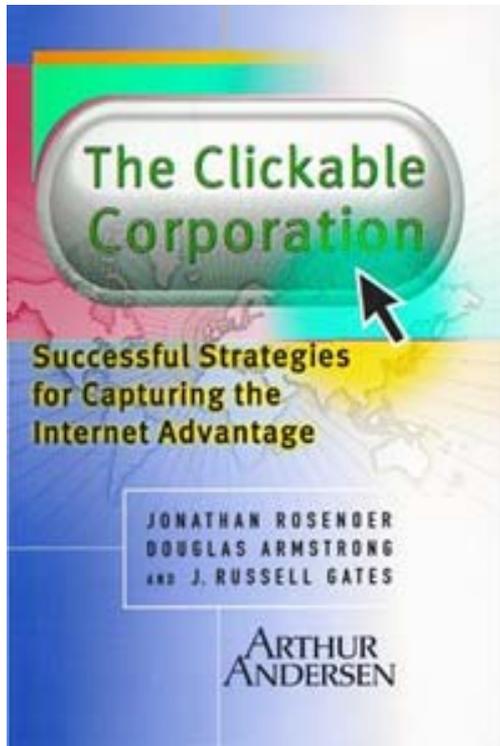
- ✓ N-ways Introduction
- ✓ Course Outline:
 - Requirements and Expectation
 - Module Assessment
 - Recommended Books
 - Layout of Course
 - Strategies for Local Lectures
 - Virtual Office Hours
- ✓ Course Delivery Methods
- ✓ General Reference for the Course
- ✓ Organization of EBS Website
- ✓ Modules for Lecture 1
- ✓ **M1: Introduction to EB**
- ✓ M2: Technologies for EB
- ✓ M3: Internet Marketing
- ✓ Class Activity 1: Survey
- ✓ Class Activity 2: Reading
- ✓ Class Activity 3: Assignment
- ✓ Class Activity 4: Reading
- ✓ Additional Handouts for L1

Email Feedback

- ✓ Email discussions /
feedback from
27 Jul - 10 Aug 2000



eAvailable Books



M4: Strategies for Database Marketing

Introduction to Direct Marketing



- ✓ Direct marketing is about getting the company **sales message out** and have **customers responding directly** to the company.
- ✓ The key here is that when customer respond to the sales message, they do it **directly** to the company.
- ✓ The response could be calling a number, faxing an order form, returning a coupon to the store, or sending an order form through the mail. There are just numerous ways this could work.

M4: Strategies for Database Marketing

Direct Marketing: **Traditional Means**

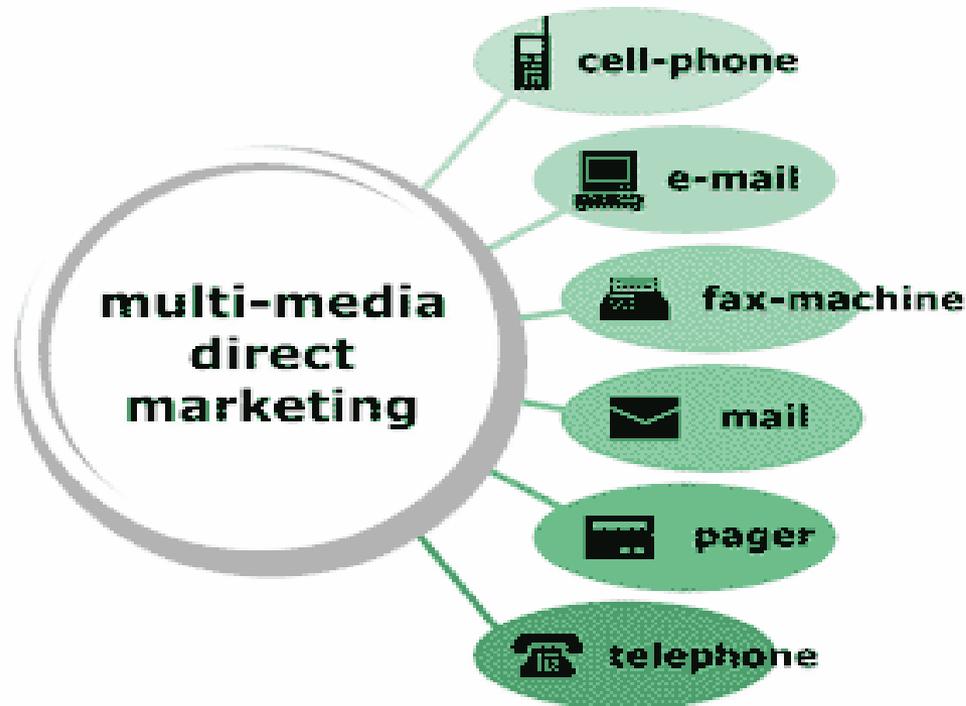


Traditional Means of Direct Marketing:

- ✓ Direct Mail
- ✓ Mail Drops / Un-addressed Direct Mail
- ✓ Alternative Distribution
- ✓ Advertising
- ✓ Events
- ✓ Sponsorships
- ✓ Public Relations
- ✓ Inserts and Posters

M4: Strategies for Database Marketing

Direct Marketing: **Multi-media**



- ✓ Check out Doubleclick.net article on “Ten Tips for Successful Direct Marketing **Banners** on the Web”

http://www.doubleclick.net/learning_center/research_findings/direct_tips.htm

M4: Strategies for Database Marketing

Introduction to Database Marketing



- ✓ Database marketing is a **marketing and sales system** that continually **gathers, refines, and utilizes information** and data that then **drives relevant marketing and sales communications and programs** (like sales calls, direct mail pieces, advertising, and more) to selected companies in order to acquire new customers, retain customers, generate more business from existing customers, and create long-term loyalty.
- ✓ While direct marketing describes a collection of tactics (such as direct mail, advertising, events, fax, email, etc.), database marketing describes a way of **organizing a company's entire marketing and sales process**.

M4: Strategies for Database Marketing

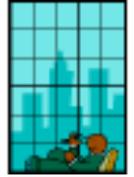
Database Marketing: **Benefits**



- ✓ Improve direct marketing department **quality** and **effectiveness**
- ✓ **Reduce** direct marketing **costs** via development and use of analytical and statistical capabilities.
- ✓ **Boost** retail **traffic** and **sales**
- ✓ **Increase** leads and sales
- ✓ **Increase** market share thru customer & site analysis.
- ✓ **Identify** new market opportunities
- ✓ **Marketing-oriented** media budgeting
- ✓ **Combat** aggressive marketing competition
- ✓ **Cut** sales force costs

M4: Strategies for Database Marketing

Database Marketing: Usage



Database Marketing can be used to:

- ✓ Find out what **characteristics** of the **best customers** have in common so that one can target the next programs to prospects that have those same characteristics.
- ✓ Learn which **market segments** bring the **most revenue** and which ones bring the highest average revenue. These might be very different industries, in which case might want to market differently to each one.
- ✓ Find out **what types of industries** respond to what types of **promotions** so as to decide where to spend the advertising and marketing dollars the next time.
- ✓ Identify **new customers** and create programs that will encourage them to buy again.
- ✓ **Reward** the **most frequent buyers** and the buyers that bring the highest revenue.

M4: Strategies for Database Marketing

Business Intelligence & Data Mining*



- ✓ **Business intelligence (BI)** is a broad category of application and technologies for **gathering, storing, analyzing, and providing access to data** to help enterprise users make **better business decisions**.
- ✓ **BI applications** include the activities of decision support system, query and reporting, online analytical processing (online analytical processing), statistical analysis, forecasting, and data mining.
- ✓ **Data mining** is the analysis of **data for relationships** that have not previously been discovered.

For example, the sales records for a particular brand of tennis racket might, if sufficiently analyzed and related to other market data, reveal a seasonal correlation with the purchase by the same parties of golf equipment.

M4: Strategies for Database Marketing

Data Mining Applications*



Data mining **applications** include:

- ✓ **Associations**, or when one event can be correlated to another event (beer purchasers buy peanuts a certain percentage of the time).
- ✓ **Sequences**, or one event leading to another later event (a rug purchase followed by a purchase of curtains) .
- ✓ **Classification**, or the recognition of patterns and a resulting new organization of data (for example, profiles of customers who make purchases).
- ✓ **Clustering**, or finding and visualizing groups of facts not previously known.
- ✓ **Forecasting**, or simply discovering patterns in the data that can lead to predictions about the future.

M4: Strategies for Database Marketing



Text Mining & Applications*

- ✓ **Text mining** is an emerging technology for **analyzing large collections of unstructured documents** for the purposes of extracting **interesting and non-trivial patterns or knowledge**. It can be envisaged as a leap from data mining or knowledge discovery from (structured) databases.

- ✓ Text mining system provides a **competitive edge** for a company to process and take advantage of a large quantity of textual information. The potential applications are countless. Some examples:
 1. **Customer profile analysis**, e.g., mining incoming emails for customers' complaint and feedback.
 2. **Patent analysis**, e.g., analyzing patent databases for major technology players, trends, and opportunities.
 3. **Information dissemination**, e.g., organizing and summarizing trade news and reports for personalized information services.
 4. **Company resource planning**, e.g., mining a company's reports and correspondences for activities, status, and problems reported.

M4: Strategies for Database Marketing

Business Intelligence Video* (from IBM)



Solutions

- Customer Relationship Management
- Financial Analysis & Research Tools
- Fraud and Risk Management
- Supply Chain Management
- e-business
- Business Intelligence for Technicians

The IBM Business Intelligence Solutions CD contains illustrated success stories from the following customers and partners.

<u>Customers</u>	<u>IBM Business Partners</u>
Ingram Books	Arbor
Aetna US Healthcare	Cognos
Bell Canada	ETI
Sapient Health Network	Vality
State of Mississippi	Pro America
Cadbury	Vision Associates
FinanceWise	PSR
Safeway	Seagate Software
John Hancock	SearchCafe.Com
Mellon Bank	Business Objects
PCS Health Systems	PetraH

Visual Warehouse Intelligent Miner DB2 OLAP Server
Business Intelligence

- ✓ Free IBM Business Intelligence CDROM
<http://www-4.ibm.com/software/data/busn-intel/cdrom.html>

M5: Business-to-Business

Introduction (revisit)



- ✓ **Business-to-business** implies the selling of products and services between **corporations** and the **automation of systems** via integration.
- ✓ This category of commerce typically involves **suppliers, distributors, manufacturers, stores, etc.**
- ✓ Most of the transactions occur **directly** between two systems.
- ✓ For example, suppose that an **aircraft company** wants to build a plane. The plane requires parts from both large and small suppliers. goal of e-commerce is to automate the entire supply chain. In this example, we call this automation "**supply chain management**" (the process of tying together multiple suppliers of goods to create the final product).

M5: Business-to-Business

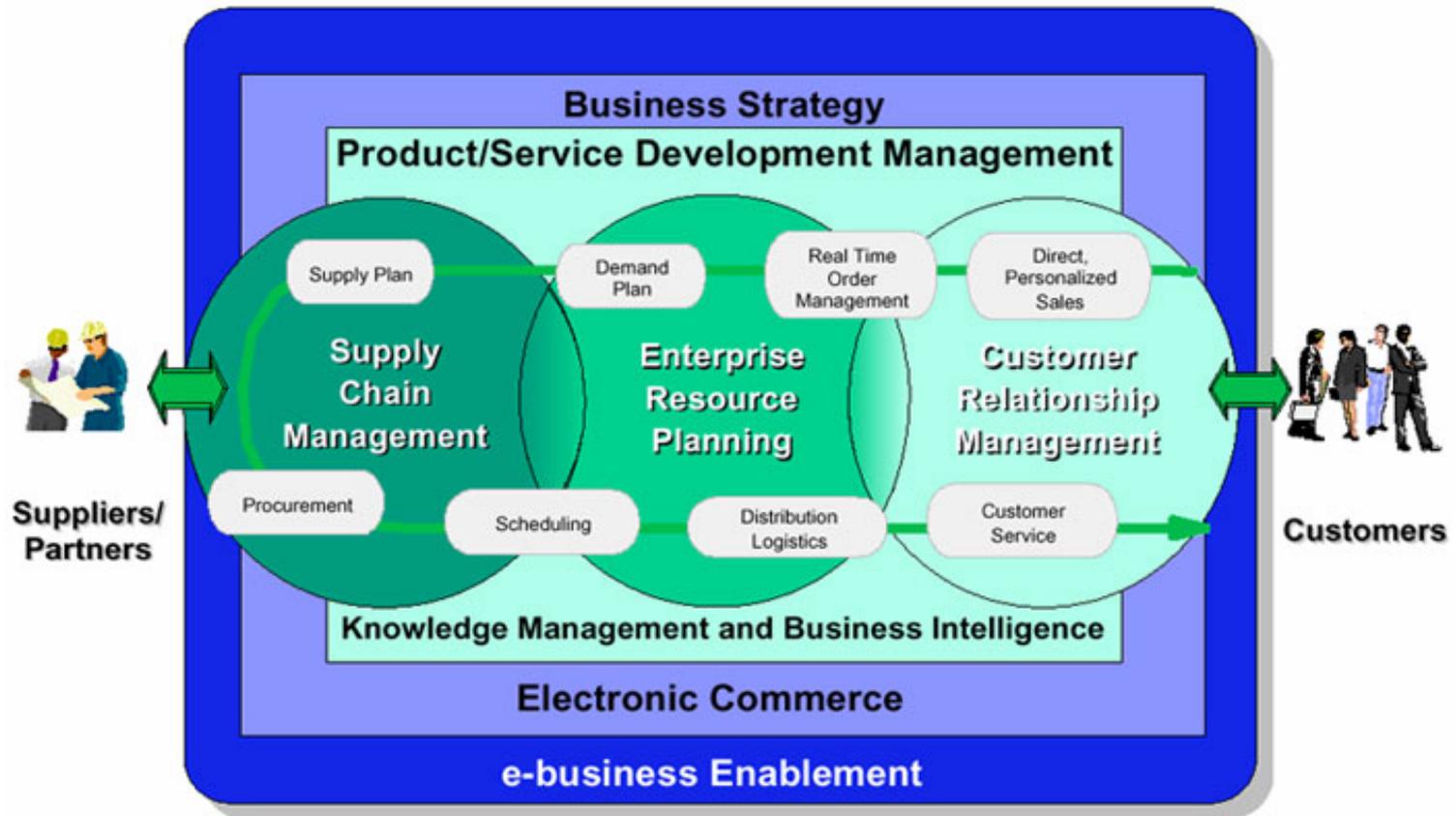
Module Scope *(limited)*



- ✓ Supply Chain Management
- ✓ Electronic Data Interchange

M5: Business-to-Business

Simplified e-Business Process Model

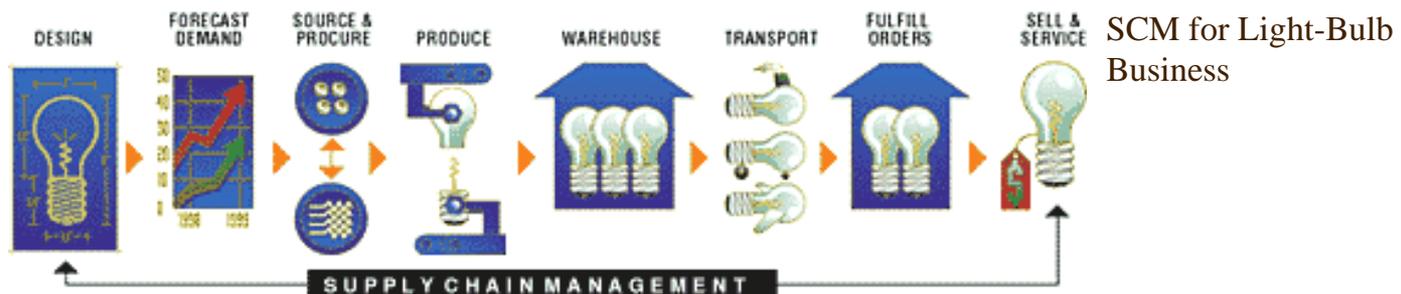


Integrating the value chain with e-Commerce as the enabler
 (adapted from e-business foundation: Roadmap to e-commerce, IBM)

M5: Business-to-Business Supply Chain Management



- ✓ A **supply chain** is the **process** of moving goods from the **customer order** through the **raw materials stage, supply, production, and distribution** of products to the customer.
- ✓ Managing the chain of events in this process is what is known as **supply chain management**.
- ✓ **Effective management** must take into account **coordinating all the different pieces of this chain** as quickly as possible without losing any of the quality or customer satisfaction, while still keeping costs down.

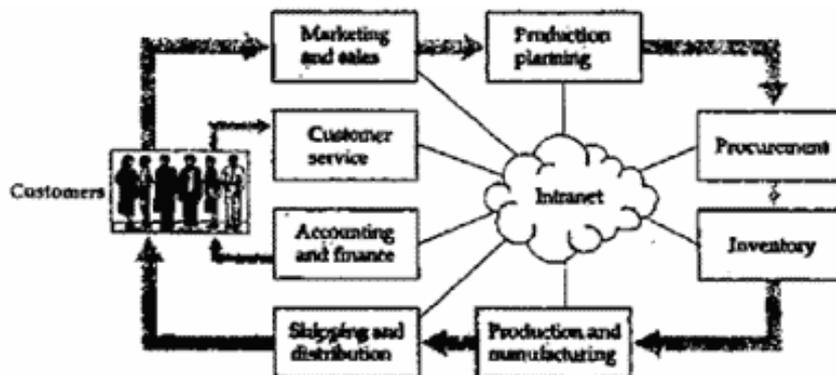


M5: Business-to-Business

Supply Chain Management (cont)



- ✓ All organizations have **supply chains** of **varying degrees**, depending upon the size of the organization and the type of product manufactured.
- ✓ Supply-chain management **takes isolated business functions** - marketing, material management, purchasing, manufacturing, and distribution - and allows them to **function in tandem**.



An intranet linking supply chain-functions
(Adapted from 'Electronic Commerce: A Manager's Guide, 1997)

M5: Business-to-Business

Traditional vs e-Business Supply Chain



	Traditional Supply Chain	e-business Supply Chain
Infrastructure	Dedicated, private networks	Shared, global network
Information	Shared as feasible within the company; only with great cost/complexity outside the company	Whenever demand requires, with worldwide access, to whoever is authorized
Team	Intra-company teams, with additional members added with difficulty and requiring customized administration methods	Inter-company teams, with global members joining and leaving quickly, securely, and with consistent, easy-to-use administration
Control	Physically controlled by connection in internal corporate network and/or simple user I.D. and password access	Permission controlled, where data is accessible from anywhere on the globe, with sophisticated security for authentication and authorization
Process	Physical models and face-to-face meetings with limitations such as travel and delivery of information	Virtual product modeling and worldwide simultaneous engineering with integrated video-conferencing, Internet phone links, visual notes

Comparison of Traditional Supply Chain Solutions to an e-business approach (Adapted from IBM)

M5: Business-to-Business Enterprise Resource Planning*



- ✓ **Enterprise Resource Planning (ERP)** is an integrated information system that serves all departments within an enterprise.
- ✓ Evolving out of the **manufacturing industry**, ERP implies the use of packaged software rather than proprietary software written by or for one customer.
- ✓ An ERP system can include software for **manufacturing, order entry, accounts receivable and payable, general ledger, purchasing, warehousing, transportation and human resources.**
- ✓ The **major ERP vendors** are SAP, PeopleSoft, Oracle, Baan and J.D. Edwards. Lawson Software specializes in back-end processing that integrates with another vendor's manufacturing system.

For more: read “ERP Systems -- Using IT to gain a competitive advantage” by **Shankarnarayanan S**
<http://www.expressindia.com/newads/bsl/advant.htm>

M5: Business-to-Business Customer Relationship Management*

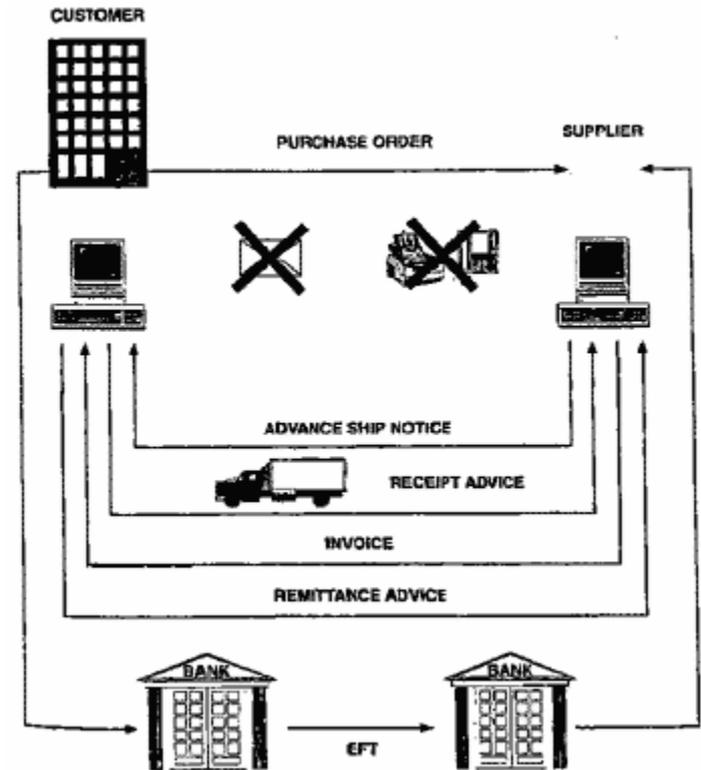


- ✓ **Customer Relationship Management (CRM)** is an enterprise-wide software applications that allow companies to **manage** every aspect of their **relationship with a customer**.
- ✓ The aim of these systems is to assist in building **lasting customer relationships** - to turn **customer satisfaction** into **customer loyalty**.
- ✓ Customer information acquired from **sales, marketing, customer service, and support** is **captured and stored** in a centralised database. The system may provide **data-mining facilities** that support an opportunity management system. It may also be **integrated** with other systems such as **accounting** and **manufacturing** for a truly enterprise-wide system with thousands of users.

M5: Business-to-Business Electronic Data Interchange



- ✓ **Electronic Data Interchange (EDI)** is a **paperless exchange of structured data** between two computers.
- ✓ Common forms such as **purchase orders, shipping documents, invoices** and many other trading documents are replaced by an **agreed message standard format, using electronic means.**



The EDI Transactional Flow
(Adapted from 'Managing the Supply Chain: A Strategic Perspective, 1996)

M5: Business-to-Business

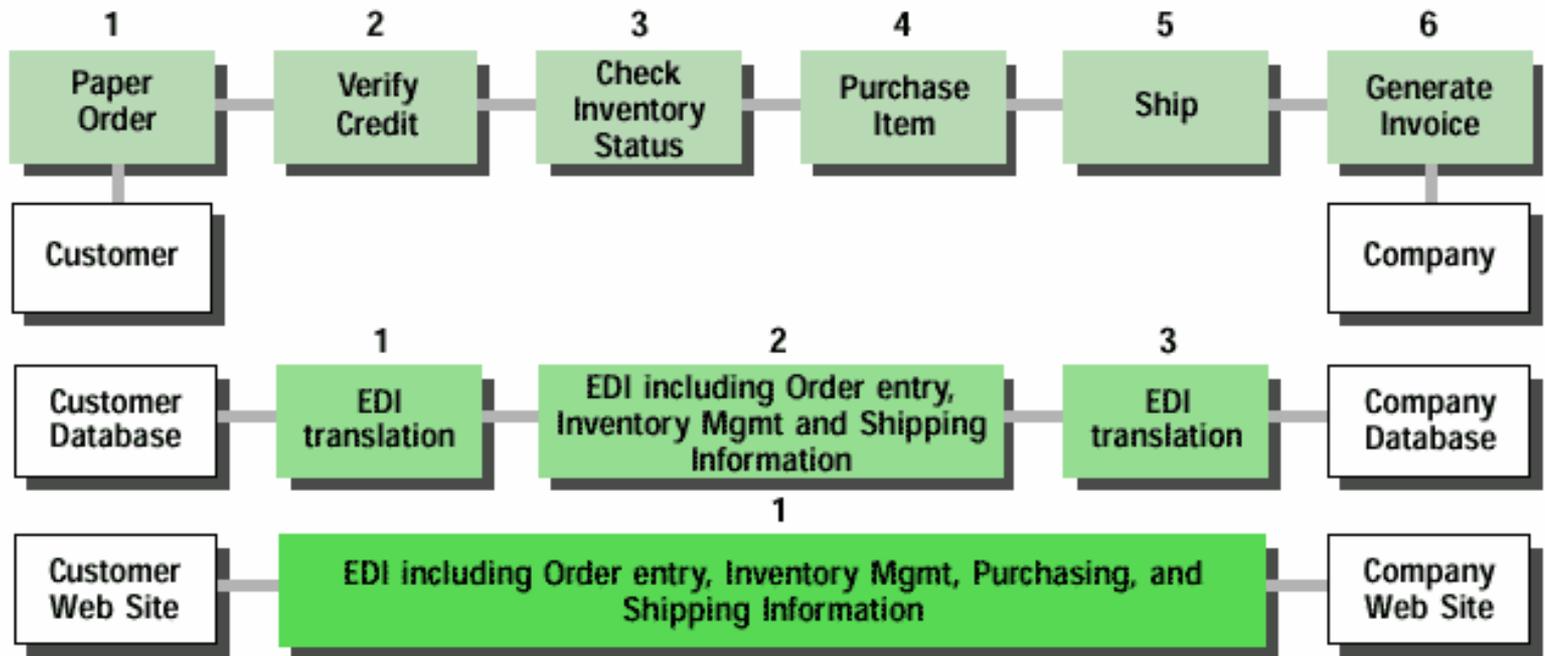
EDI: Costs and Benefits



	DIRECT	INDIRECT
BENEFITS	<ul style="list-style-type: none"> o Highly efficient use of computers o Reduce cost of intercompany information delivery o Improved accuracy of information o Reduced time of information delivery o Improved efficiency in the areas of: <ul style="list-style-type: none"> - order processing - order placement - accounts payable/receivable o Reduced inventory levels 	<ul style="list-style-type: none"> o Availability of staff for other assignments o Faster, better informed management decisions o Improved project management o Easier communication o Increased span of control o Improved trading relationship
COST	<ul style="list-style-type: none"> o Potentially high costs to fully integrate application systems o Need to modify/establish procedures o Need to modify existing systems o Requires effort/resource to work with trading partners o Potential loss of transaction security 	<ul style="list-style-type: none"> o Disorganisation and lower productivity o Need to build/maintain redundant systems o Few managers/staff able to understand the technology o Task forces relatively unproductive o Need new security procedures and products

EDI costs and benefits (Adapted from 'Managing the Supply Chain: A Strategic Perspective, 1996)

M5: Business-to-Business Internet EDI*



Paper Order Processing █
 Translational EDI █
 Internet EDI █

Paper Order Processing, Traditional EDI & Internet EDI (Adapted from 'Business-to-Business Connectivity on the Internet: EDI, Intermediaries, and Dimensions Interorganizational' by Palmer et al.)

M5: Business-to-Business

From EDI to the Internet*



- ✓ EDI favours the **big players**, the **low entry costs** for **Internet-based trading systems** are allowing many large retailers to communicate electronically with all their suppliers, irrespective of size.
- ✓ **To remain competitive**, organisations are continually faced with challenges to **improve the efficiency of their operations**. Companies in the retail industry can no longer rely on improved internal processes to be competitive; they have to extend the reach of their efficiency to external companies. It is now necessary to **monitor thousands of external data points** and be prepared to **react quickly and automatically** to information across the entire supply chain system.

Source: e-Business in the Supply Chain by O'Sullivan et al. 1998

http://houns54.clearlake.ibm.com/solutions/supplychain/scmpub.nsf/detailcontacts/e_library_splash_page?OpenDocument

M5: Business-to-Business

From EDI to the Internet* (cont)



- ✓ Unlike EDI, or other **closed systems**, anyone can talk to anyone via the Internet. In the past certain computers were allowed to communicate with other designated machines. This was application-to-application technology. The **Internet** offers **person-to-person** and **person-to-application** interactivity.

- ✓ There are four key reasons why the Internet has spur e-business in the supply chain:
 - ✓ **low entry costs**;
 - ✓ **fast return on investment**;
 - ✓ **protection of existing investment** because EDI can be integrated with web technologies;
 - ✓ **ease of connectivity** (many organisations have seen a return from simply setting up e-mail accounts and communicating with suppliers electronically).

Class Activity 1: Assignment 1 Discussion

Weighting: 20%, Max Words: 2000



It is likely that electronic commerce will affect every organisation in our society. From the list below, you are required to **choose one** type of organisation and **write a report** explaining how you think your chosen organisation is likely to be affected. You must include both **positive** and **negative** effects. You are then required to **identify** and **recommend several ways** in which this type of organisation should **respond to survive** in this new economy.

Types of organisation or industries:

- | | |
|-----------------------------------|-------------------------|
| A. Banking and Finance | G. Retailing |
| B. IT industries | H. Transport |
| C. Communications Services | I. Education |
| D. Business Services | J. Manufacturing |
| E. Health | K. Agriculture |
| F. Media and Entertainment | L. Mining |

Suggestion: Start your assignment with “The selected industry for this report is *education industry*, **in particular** *distance learning education industry*.”

Class Activity 2: Reading

“e-Business in the Supply Chain”



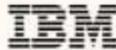
e-business

in the supply chain

creating value in a networked marketplace

Denis O'Sullivan ♦ Carole Richmond ♦ Thomas Power

In association with
IBM Management Consulting



You can reach the IBM e-business supply chain site by following this link:
<http://www.ibm.com/solutions/supchain>

e-business

Published and distributed by



The Authors

Denis O'Sullivan IBM Supply Chain Industry Executive, Europe, has been a supply chain and logistics professional for more than 20 years. He was in senior management roles in international logistics services companies before becoming a logistics and supply chain consultant. He was managing director of Transcontainer Services, India and European operations and marketing director of the American transport services company ITL. He has also spent several years in senior management with companies from the USA, UK and other European countries. Since joining IBM, Denis has focused on helping companies improve their supply chains through the application of Internet based technology.

He is a Fellow of the Institute of Logistics (UK), a member of the Council for Logistics Management (USA) and a member of the German Logistics Institute (Bauhaus-Universität Logistik).

• osull@uk.ibm.com



Carole Richmond is a consultant offering guidance on new connected technologies, what differences they make to individuals, organisations and society, and how to manage them effectively and profitably. She is currently writing a book on e-commerce strategies and tactics to guarantee victory in the next few years, to be published by John Wiley in 1998. She worked previously as a senior producer with Microsoft Network, where she set up and managed a news team for MSN UK. Prior to that she held several positions in publishing and was a freelance writer for ten years.

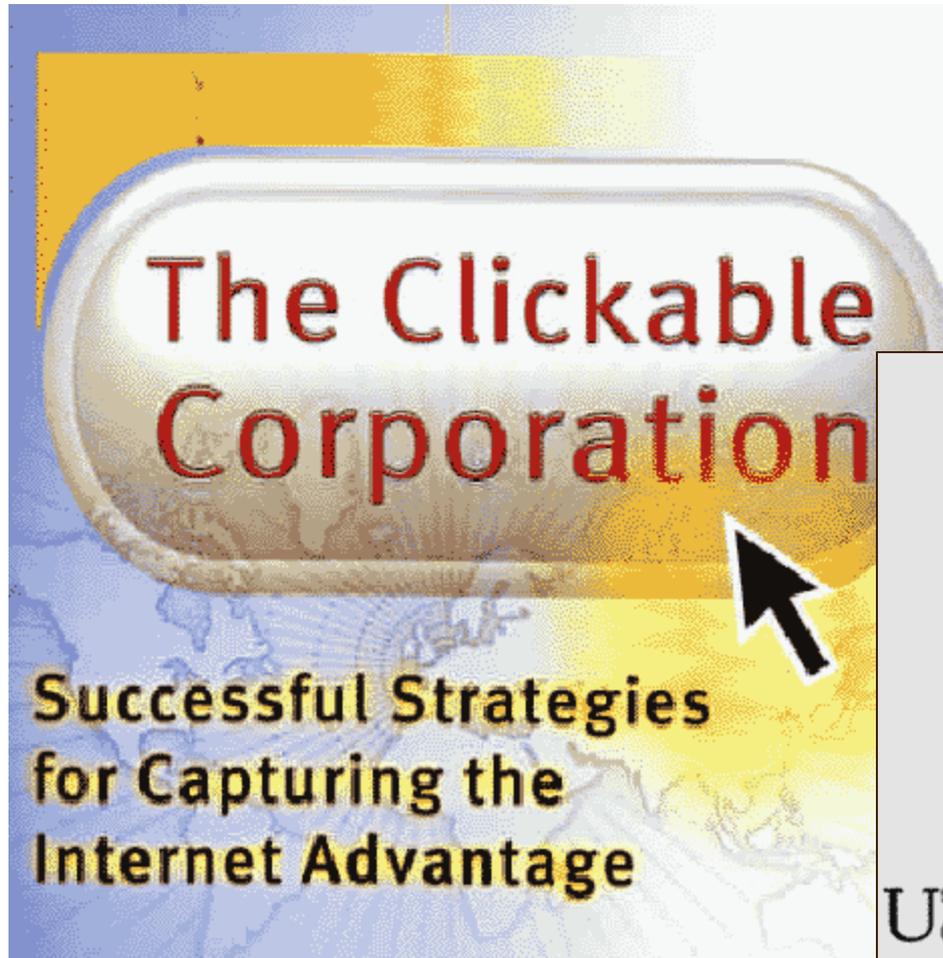


Thomas Power is an e-commerce expert whose activities include consulting, training, book writing, public speaking, and buying and selling Internet companies. In 1997 he sold ITV Group, of which he became group managing director in 1995, having bought the business in 22 months. In 1998 he sold the world's first electronic e-commerce marketplace to BT. Prior to that he worked with Microsoft and Intelnet, founded DNS Europe.



Class Activity 3: Case Studies (4x)

“Clickable Corporation”, Chp 7 – Click with Community



- ✓ GeoCities
- ✓ SeniorNet
- ✓ Purple Moon
- ✓ Women.com



Additional Handouts for Lecture 2



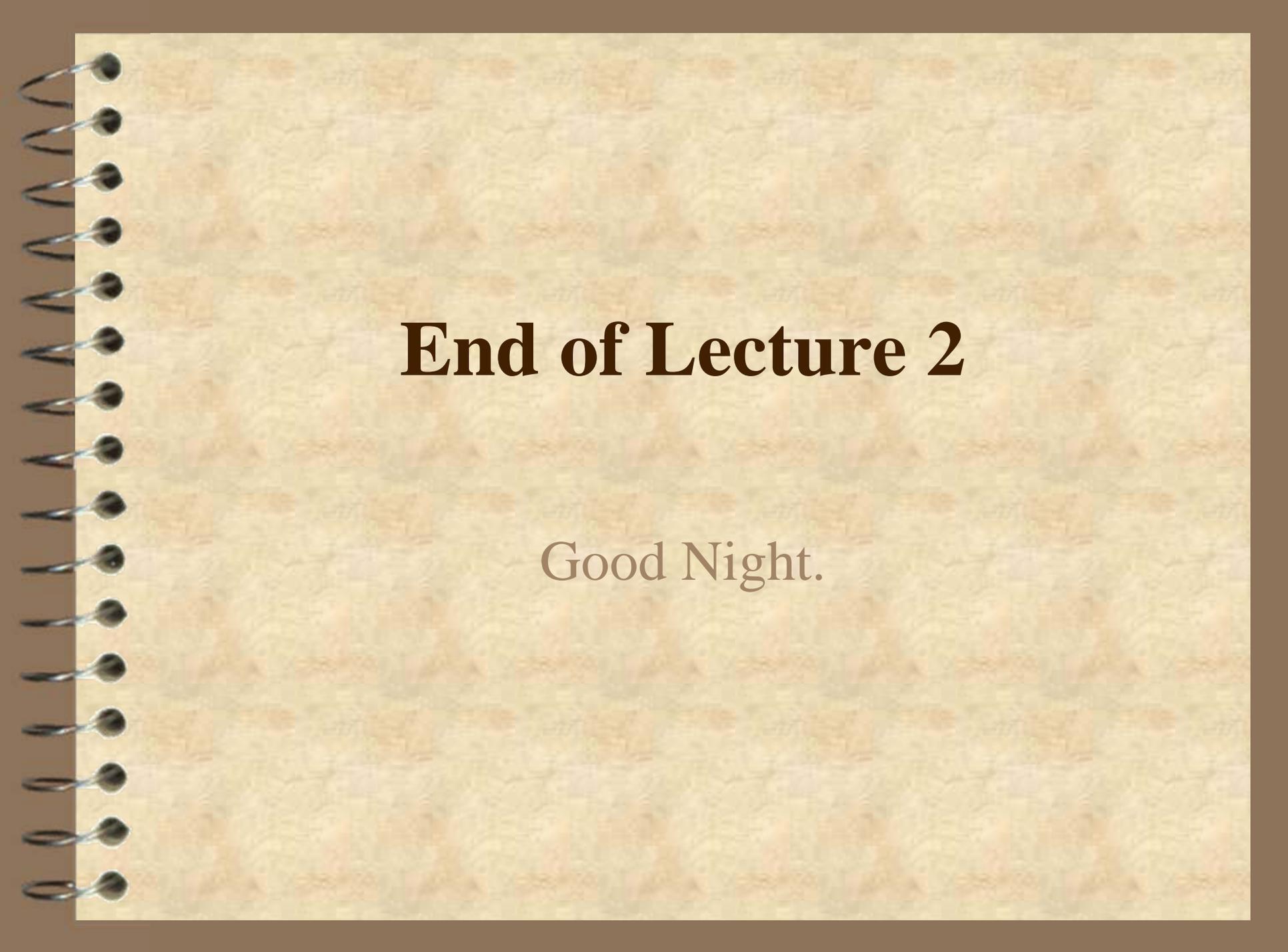
- ✓ 1. E-Business in the Supply Chain (IBM Solutions – SC)
- ✓ 2. Clickable Corporation: Chapter 7 “Click with Community”
- ✓ 3. A Practical Guide to Investing in Internet Businesses**
- ✓ 4. Web Server Statistics - JSAIC (Intelligence gathering purposes)

** Full-text of the report is available only on the EBS Website (4.2mb, 300 pages)

What's in Store for Lecture 3



- ✓ Module 6. Internet Payments & Banking
- ✓ Module 7. Security Issues in Electronic Commerce
- ✓ Assignment 2 Discussion
- ✓ Case Studies, Discussion

A spiral-bound notebook with a light beige, textured cover. The spiral binding is on the left side. The text is centered on the page.

End of Lecture 2

Good Night.