

System Types & SCM — CIS 211 — Duke Hutchings

System Categorizations: TPS/DSS/EIS & CRM/SCM/ERP

SCM: Supply Chain Management

Office: 314 Duke Bldg

Office Hours

3:30 — 5:00 Mondays and Wednesdays

8:00 — 9:30 Tuesdays

1:30 — 3:00 Thursdays

appointments always welcome

Acknowledgement

The content of the following slides is based on Chapters 9 & 10 and Business Plug-in B8 of

Business Driven Technology (3rd edition)

by P. Baltzan, A. Phillips, & S. Haag

ISBN: 9780073376745

Web site: <http://www.mhhe.com/bdt3e/>

Part I: TPS, DSS, & EIS

Types of Information Systems

(GI) What is EZPass? What type of IS is it?

TPS — Transaction Processing System

Inputs Business transactions data

Processing Post data to database

Outputs Reports about transactions

Users Operations personnel, Analysts

Examples Point-of-sales (POS): scanner, bar code, credit card, etc.

Class registration system

EZPass system (uses RFID)

Types of Information Systems

What type of IS would a university application submission and approval system be?

What are some components that you would envision?

DSS — Decision Support System

Inputs Data from one or more sources (often TPS)

Processing Real-time response to requests

Outputs Analysis presentation, possibly suggestion

Users Decision makers, aides

Examples Creating an RFM model

University application approval

Price comparison could qualify (Student tours)

Types of Information Systems

What type of system is [Map of the Market](#)?

Why would Smart Money provide this for free?

EIS — Executive Information System

- Inputs** Aggregate data from many areas (internal and external)
- Processing** Typically interactive, as a DSS, often “hands-free”
- Outputs** Histories, Projections, often visual
- Users** CEOs & High-level managers

Examples Executive (BI) Dashboards
[Institutional Research](#) Dashboards

Note Maintenance often very expensive

Many systems have TP, DS, and EI components

SCM — Supply Chain Management

Part II: SCM (Supply Chain Management)

SCM — Supply Chain Management

Key topics

What the supply chain is

How information technology affects SCM

Visibility & the *bullwhip effect*

The information driver

The Supply Chain

(in class, we'll “draw” on this slide)

Supplier

Organization

Customer

Supply Chain Activities

Plan (how will we measure success?)

Source (work with suppliers)

Make (internal production with supplies)

Deliver (provide to customers)

Return

The textbook authors indicated that return is the most problematic part of the supply chain. Why do you think that this is the case?

IT & SCM

Visibility & the *bullwhip effect*

Remember BudNet? Suppose that the system is invisible...

Visibility & the *bullwhip effect*

Remember BudNet? Suppose that the system is invisible...

(G4) What tradeoffs do organizations make?

Other Discussion Points

Supporting Organizational Goals & Gaining buy-in

Forecasting consumer/customer behavior (CRM & SCM collide)

Increasing the speed with which products are made

(G5) Who is more efficient: *Store* or *Mail-Order* video organizations?

Facilities

Transportation

Information

(G5) Who is more efficient: *Store* or *Mail-Order* video organizations?

Facilities

Transportation

Information

What about Redbox?

What about Pay Per View (aka On-Demand)?

IT & SCM

Keys about the *information* driver

Level of sharing

Pull vs. Push

These are separate issues!

Databases & SCM

(G6) How do databases come into play?

How does TPS, DSS, or EIS fit with SCM?

How do SCM and CRM compare?

Assignments — CIS 211 — Duke Hutchings

Homework Exercise 5 (see Web schedule)

Reading Exercise 7 (see Web schedule)

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