









## New Technologies for I/O and New Standards for Data Interchange

CSC340

- *Keyless data entry* -- bar coding, optical character recognition, special keyboards.
- Pen input -- several products in the market.

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- Electronic data interchange (EDI) -- data are transferred through telephone lines from one location to another; e.g., credit card charging
- Image and Document Interchange -- like electronic data interchange, e.g., law enforcement, banking.
- *HTML/XML/SGML* -- markup languages for documents; SGML is a general markup languages for documents.

## 😻 Choosing a System Architecture

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Here is a series of issues that need to be addressed:

- Establish batch and on-line computer processes; e.g., on-site conference registration.
- Determine process cycles, i.e., when does each process need to run, e.g., end-of-month, end-of-project.
- Establish processing locations -- identify user locations (and numbers).
- Distribute data to locations.

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- Distribute software subsystems to locations.
- Assign technology -- what hardware, software is going to run where?

Classification of Applications					
Span Type	Operational Support	Decision Support (browsing+analysis)	Real Time		
Group/Dept	E.g., regional inventory control	E.g., regional marketing info system	E.g., video conferencing within group		
Enterprise	E.g., enterprise- wide cash mgt	E.g., corporate data warehouse	E.g., enterpr- wide video- conference		
Inter- Enterprise	E.g., B2B Ecommerce	E.g., DBs for communities of interest	E.g., distributed multimedia over the internet		

Span Type	Operational Support	Decision Support (browsing+analysis)	Real Time	
Group/Dept	PC, Windows, OLTP, OO products	COTS (mainly SQL-based	Multimedia technology maturing	
Enterprise	ERPs, OLTP over private intranets	ERPs, Web- based products	ERPs, Web- based technologies	
Inter- Enterprise	Ecommerce technologies	Web-based technologies	Web-based technologies	

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