Understanding System from Business Viewpoint

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Reference:

Alter, S. (2002). Information Systems: Foundation of eBusiness. Prentice Hall.

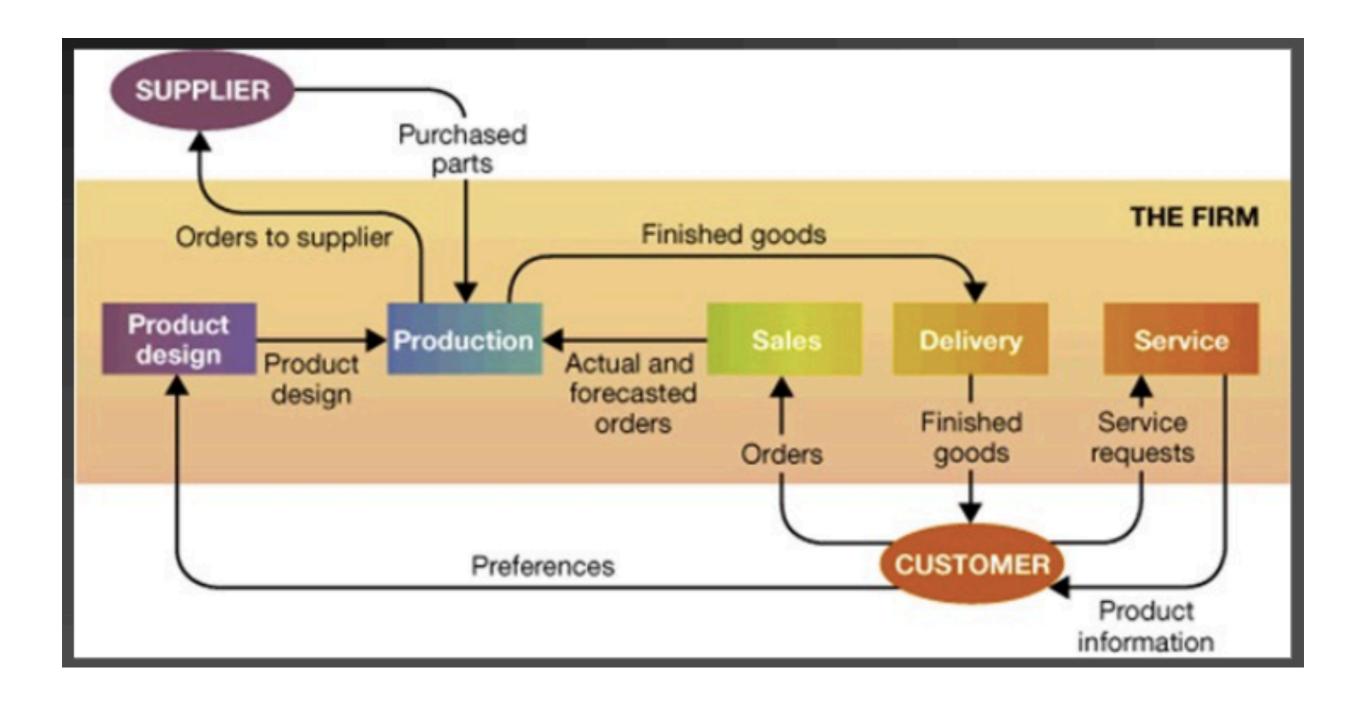
Businesses Operate Through Systems

Systems:

a set of interacting components that operate together to accomplish a purpose

• Subsystem:

a system component, has all the feature of a system, but it is part of a larger system.



Systems Terminology

- Purpose
 - The reason for the system's existence
 - The reference for measuring the system's success
- Boundary
 - Separates the system from its environment
- Environment
 - Everything pertinent to the system that is outside the boundary

Systems Terminology (Cont)

- Inputs
 - Objects and information that enter the system from the environment
- Outputs
 - Objects and information that enter the environment from the systems

Business Process and the Value Chain

- Business Process
 - A related group of steps (subprocesses) and or activities that user resources (including information) to create value for internal and external customers
 - subprocess = a well-defined part of process
 - activity = less well-defined process component
 - an important role of IT is to transform an activity into a better-defined subprocess.

Business Process and the Value Chain

- A process must add value for its customer
- Always analyze whether a process or sub process adds value or not
 - An obvious but surprisingly often overlooked point

Business Processes & Functional Areas

- Traditional organizational structure is centered around functional areas
 - may reinforce an inward looking orientation (functional silos)
- Current trend: reorganize around customer-oriented processes.

Three types of processes

- Processes that cross functional areas
- Processes related to a specific functional area
- Activities and subprocesses occuring in every functional area



Possible problems when functional areas are overemphasized

Business Processes and Functional Areas of Business

Business Process requiring coordinated work from many functional areas

- Creating a coordinated plan for an entire business
 - Creating new product
 - Fulfilling customer orders

Business process typically within a functional area

Engineering

- Performing research about new method
- Determining how to produce products
- Determining how to improve production processes

Sales and Marketing

- Identifying potential customers
- Defining customer wants and needs
- Identifying market opportunities
- Making customers aware of the products
- Persuading costumers to buy the product
- Performing the sales transaction

Production

- Purchasing materials
- Assembling or fabricating the product
- Delivering the product
- Servicing the product and supporting the customer

Accounting and Finance

- Performing financial transaction
- Creating financial statements
- Paying taxes
- Investing cash
- Financing operation

Human Resources

- Determining hiring requirements
- Hiring people
- Introducing employees to the way the company operates
- paying employees
- Administering employee benefits
- Administering disciplinary actions and terminations

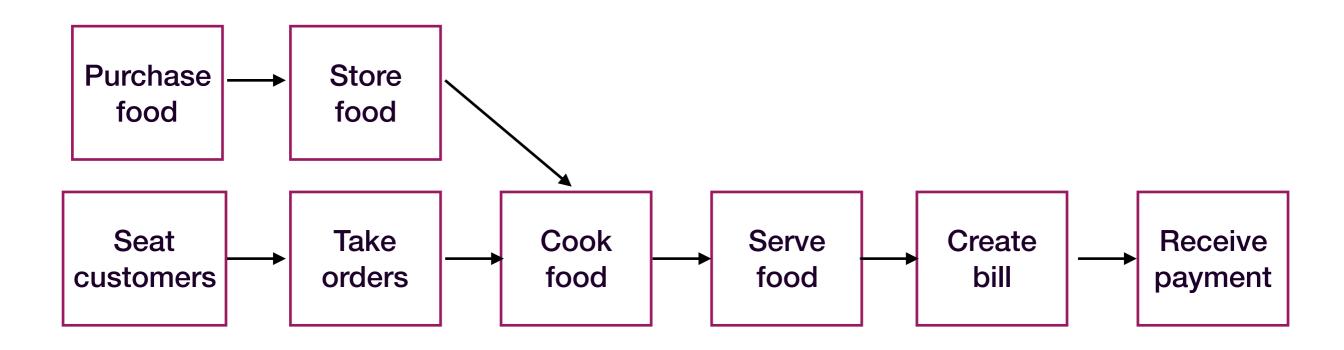
Subprocesses and activities occurring in all functional areas

Communicating with other people o Analyzing data o Motivating employees
 Planning the work that will be done o Keeping track of work being done
 Providing feedback to employees

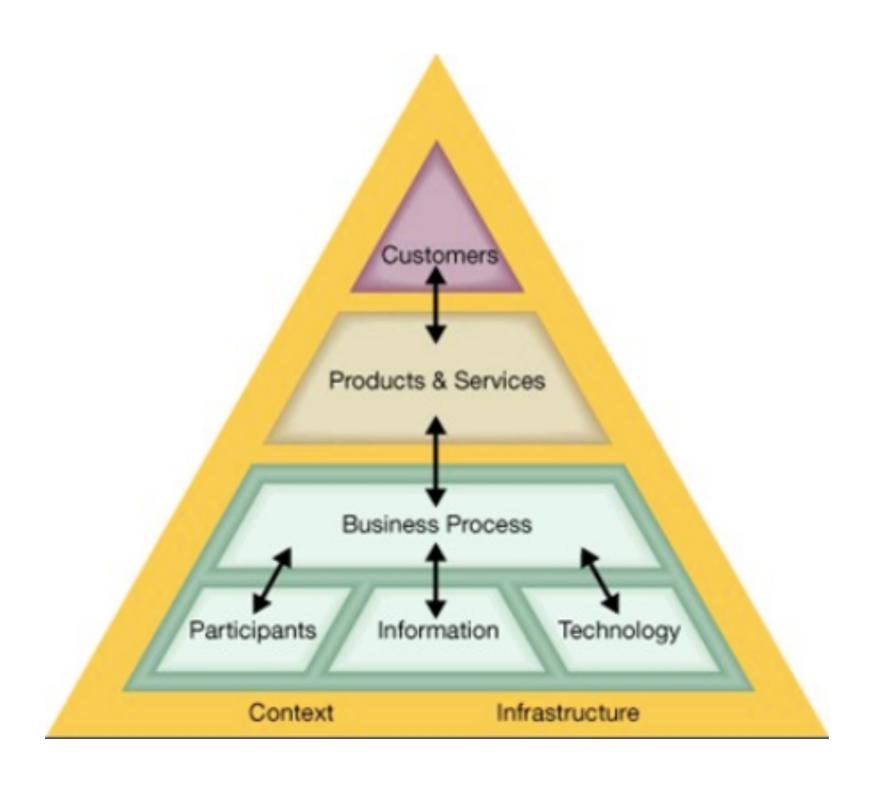
The Value Chain

- The set of processes used by a firm to create value to its customers. Includes:
 - Primary processes directly create the value as perceived by the customer
 - Support processes indirectly create value by supporting the primary process

Primary Processes for a Hypothetical Restaurant



Intro to The Worksystem Framework



Thank You