



Discussion: System Approach in e-Business

Course prepared for:

4th topic : System Approach as Platform for e-Business

Pertemuan 8: - eBusiness and Eco-System

- eBusiness: Concept & Context

Source:

- Steven Alter, *Information System, The Foundation of E-Business*, Prentice Hall, Fourth Edition, 2002.
- **Husni S. Sastramihardja, Course Hands Out, 2019**



Concepts in construction of e-business

Konsep diperlukan dalam mengkonstruksi e-Business

**Business
Concept**

**System
Concept**

**Technology
Concept**

e-Business

**Concept
Construction ??**

**Customer
Concept**



The Concept...

Memaknai konsep sistem dalam pengembangan eBusiness ?

..... Enterprise Engineering ??

Fondation for approaching to Design e-Business:

- (1) Find and Defining Concepts & Principles (Raison d'être) of "Roles & Contribution" of an e-business in supporting the sustainable advantages for "corporate business";**
- (2) Following the Engineering Principles & Methodes to plan, develop, and maintain the application of e-business for certain purpose.**
- (3) General idea of the Engineering Cycle consist of 5 phases: Problem definition, System analysis, System design, System implementation, System operation (& maintenance). For the course, there are 2 other phases are proposed to enlarge possible idea. The 2 phases are System marketing and System Installation.**
- (4) System Consideration**
- (5) System Requirement**
- (6) System Specification**



Engineering Approach to Design e-Business

The Concept...

Memaknai konsep sistem dalam pengembangan eBusiness ?

..... Enterprise Engineering ??

Try to DEFINE YOUR Concept...



Engineering Cycle



What is the TARGET ???



EE : rooted in both (organizational & information system) sciences ←
supported by 3 concepts (Enterprise Ontology, E-Architecture, E-Governance).

E-Ontology: Understanding of an enterprise in a way that is fully independent of any implementation

The (one and only) E-ontological model shows the essence of its operation:

- The starting point for designing & implementing all kinds of changes;
- Extremely stable over time; most changes appear to be changes in the implementation.

E-Architecture: Concerns the (identification, specification, & application of “design principles”),

which come in addition to the specific requirements of every change project.

“Design principles”: The operational shape of an enterprise’s strategic basis (mission, vision).

- Only in this way can one achieve & guarantee that the operations of an enterprise are fully compliant with its mission & strategies.

E-Governance: Organizational conditions for incorporating E-ontology & E-architecture in an enterprise’s practice

- ← the EE approach feasible & beneficial.



Adapted from Source: Jan A.P. Hoogervorst, *Enterprise Governance & Enterprise Engineering*. 117, Sogeti Nederland B.V., Diemen, The Netherlands, 2009

ENTERPRISE: Consciously coordinated social entity with a relatively identifiable boundary, that functions on a relatively continuous basis to achieve a common goal or a set of goals [Robbin 1990, page 4 in Jan A.P. Hoogervorst, 2009].

Specific characteristics:

**Enterprise is a - social entity; goal orientation;
consciously & intentionally created or designed; &
beg to the question as to “how enterprise must be designed”.**

Important to make the intended system function (relative to the system environment) →
part of the system definition.

This provides the following characteristics of a system [Dietz 2006]:

SYSTEM: Function (C, E, P, S)

C = the system *composition*: the set of system elements

E = the system *environment*: the elements outside the system with which the system interacts

P = the system *production*: the products or services that *C* delivers to *E*

S = the system *structure*: the interaction relationships between the elements of *C* mutually, and
between the elements of *C* and the elements of *E*.



HSS: Boundary Layers Of Enterprise System





Engineering Cycle

The Concept...

Alternative Definition & Views of E-Business

Adapted from Source: Steven Alter, Information System, The Foundation of E-Business, Prentice-Hall, 4th Edition, 2002

→ Try to understand for your Case, and define the vision of your business system

- E-BUSINESS:**
- (1).** The practice of performing & coordinating Critical BPs (designing product etc...) through the extensive use of computer & communication technology & computerized data;
 - (2)** Everything having to do with the application of ICT to the conduct of business between company and consumer;
 - (3)** Includes e-commerce & covers internal processes such as Production, Inventory management, Product development, Risk management, finance, knowledge management, Human resource;
 - (4)** The use of internet & other digital technology for organizational communication & coordination and the management of the firm;
 - (5)** Computer complex fusion of BPs enterprise application & organizational structure necessary to create a high performance business model;
 - (6)** [IBM] "a Secure, flexible & integrated approach to delivering differential business value by combining the systems and processes that run core-business operation with the simplicity and reach made possible by internet technology.



Define the Context

EXPLORING YOUR CONTEXT

DEFINE BP & FA of Business → Requirement & Technology

<i>Consideration</i>	<i>Requirement</i>	<i>Specification</i>	
Function Area	Business Process	System Requirement	Roles of IT Technology

You have your own focus, OK ? → fill up the table

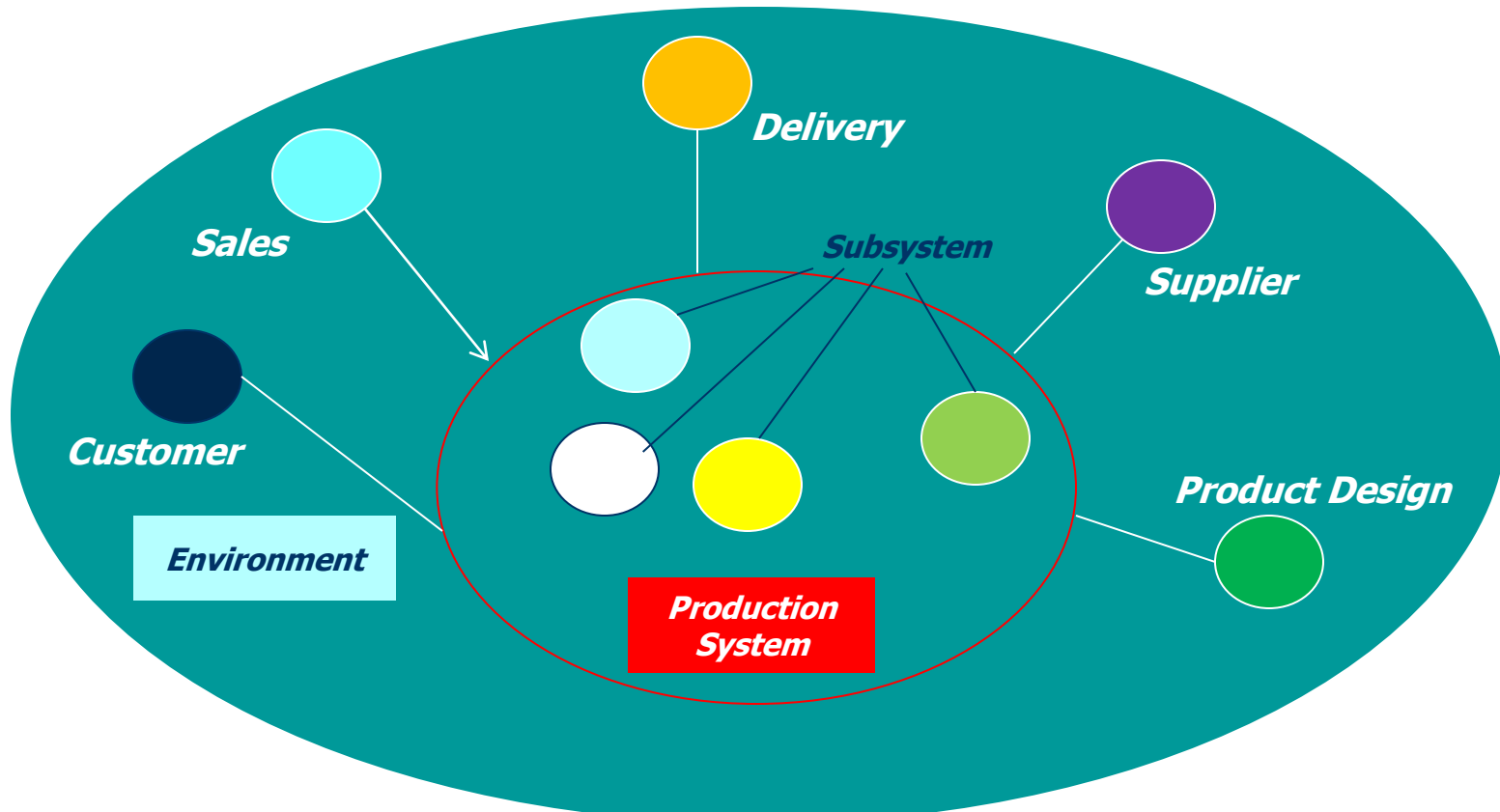


Define the Context

Structuring your idea of business system

WORK SYSTEM → The Context

System in which human participants and/or machines perform a business process



→ Use Data Flow Diagram
to explore "the detail of your Business Process"



... IT IS ABOUT "CREATIVITY" ...

Adapted from Steven Alter, Information System, The Foundation of E-Business, Prentice Hall, Fourth Edition, 2002.

