

Generic Business Process as integral to a Close Loop Information and Control System

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Information Integrity/Integrity Information System/Management Information System

Course Lecture # 19

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Lecture # 19

Generic Business Process as integral to a Close Loop Information and Control System

OVERVIEW

- Traditional Business IS – A Collective Decision process
- Modeling a business process
- Modeling a business process- A controls interpretation
- Open System View of Business IS
- Business Process IS View Model describing a generic business process as integral to an information & control system

Traditional Business IS – A Collective Decision process

- Most **information processing** involves some type of data conversion to information in *use* and, therefore, **is closely related to a decision process with an objective.**
- Even when the information is transmitted without changing form, as in a communication system, the issue is to decide the purpose or objective of the transmission.
- **Traditionally**, within the system-engineering framework, a **decision process is comprised** of these stages: **forecasting (prediction), evaluation of alternatives, and selection.**

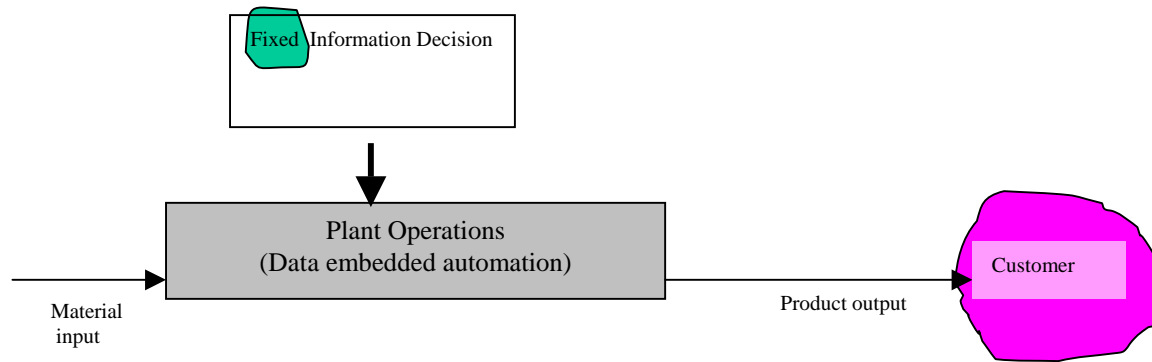


Fig.: Modeling a business process

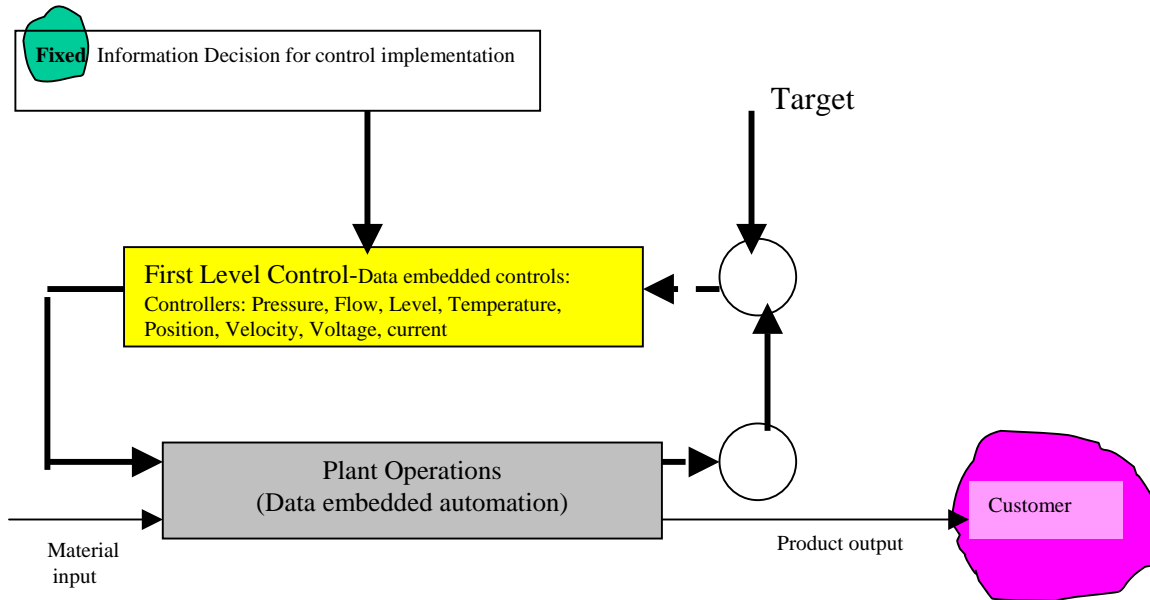


Fig.: Modeling a business process- A controls interpretation - 1

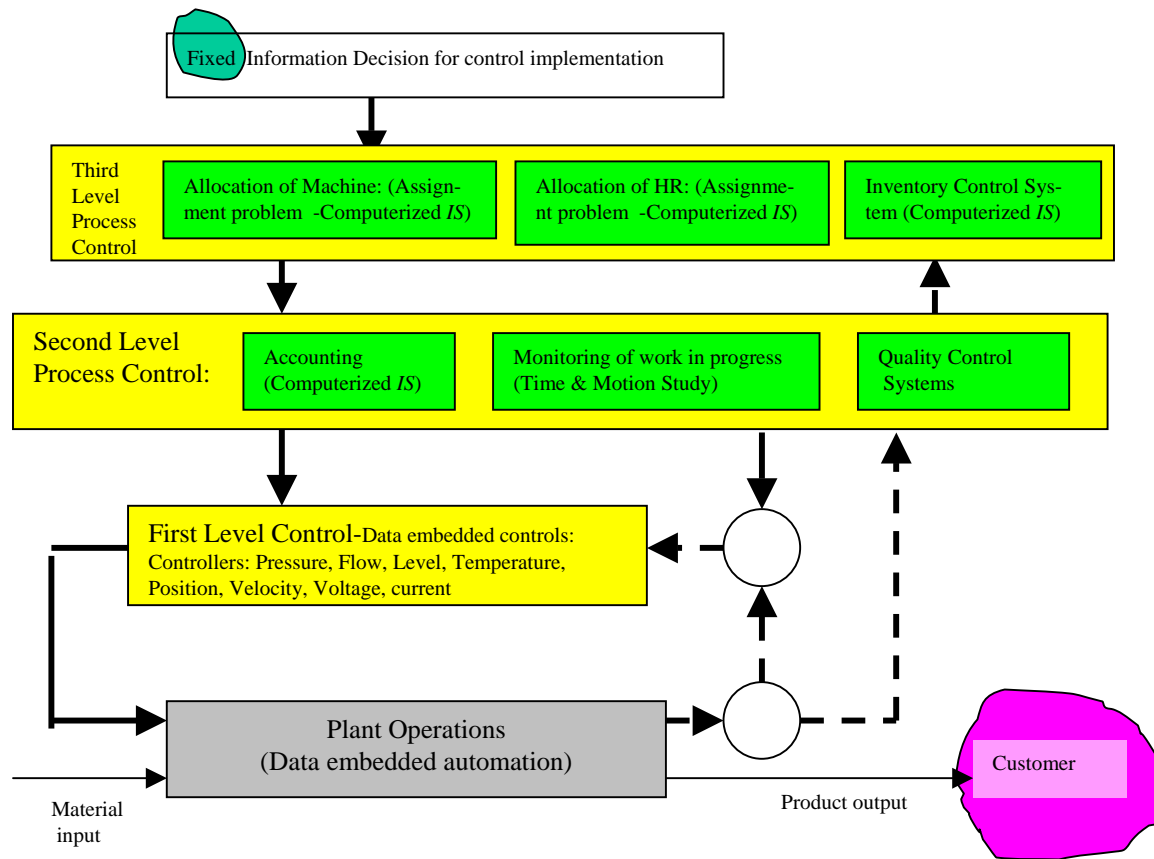


Fig.: Modeling a business process- A controls interpretation -2

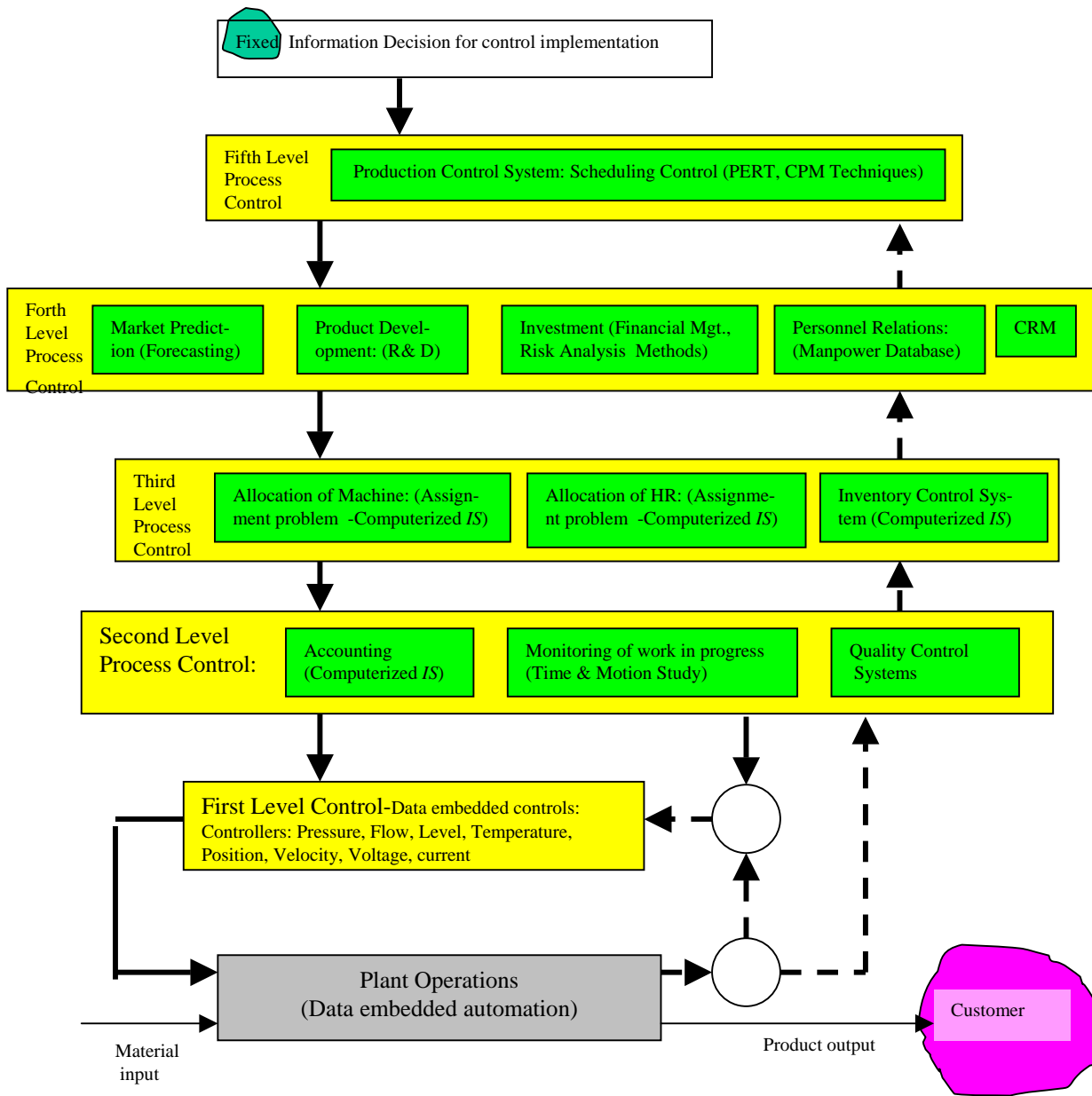
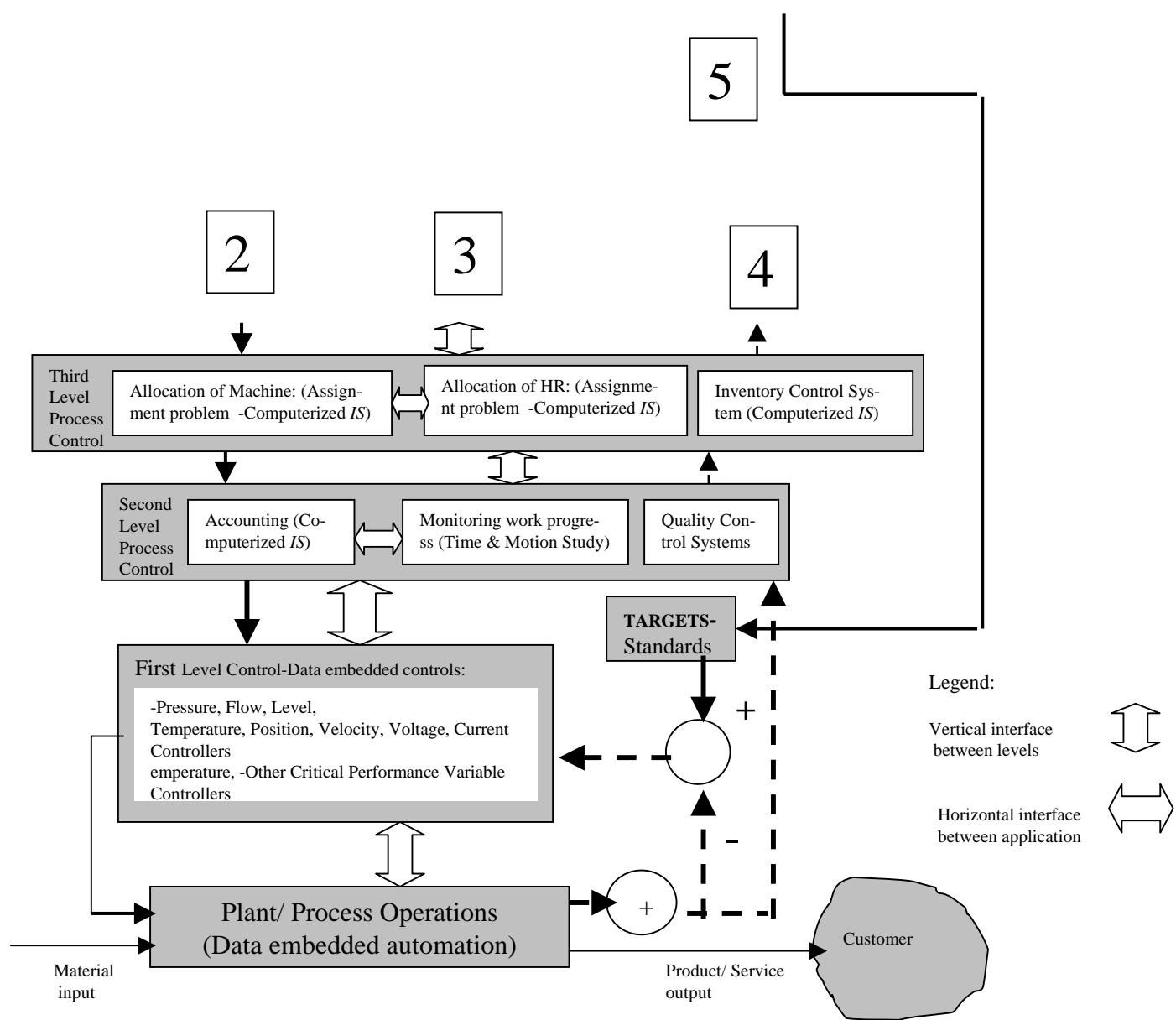


Fig.: Modeling a business process- A controls interpretation -3

OPEN SYSTEM VIEW OF BUSINESS IS

- Open system Business IS View certainly has all those stages as under the traditional business model.
- Additionally, it has:
 - Data embedded systems at all levels,
 - Resulting system interfaces, and
 - Real world based feedback information in respect of:
 - (a) customer requirements, which are becoming increasingly local and instant, product needs, (b) process costs and capabilities, (b) input orders, innovation desired, (c) questions, etc.

**Figure (B):
Business
Process IS
View Model
describing a
generic
business
process as
integral to a
close loop
information &
control system**



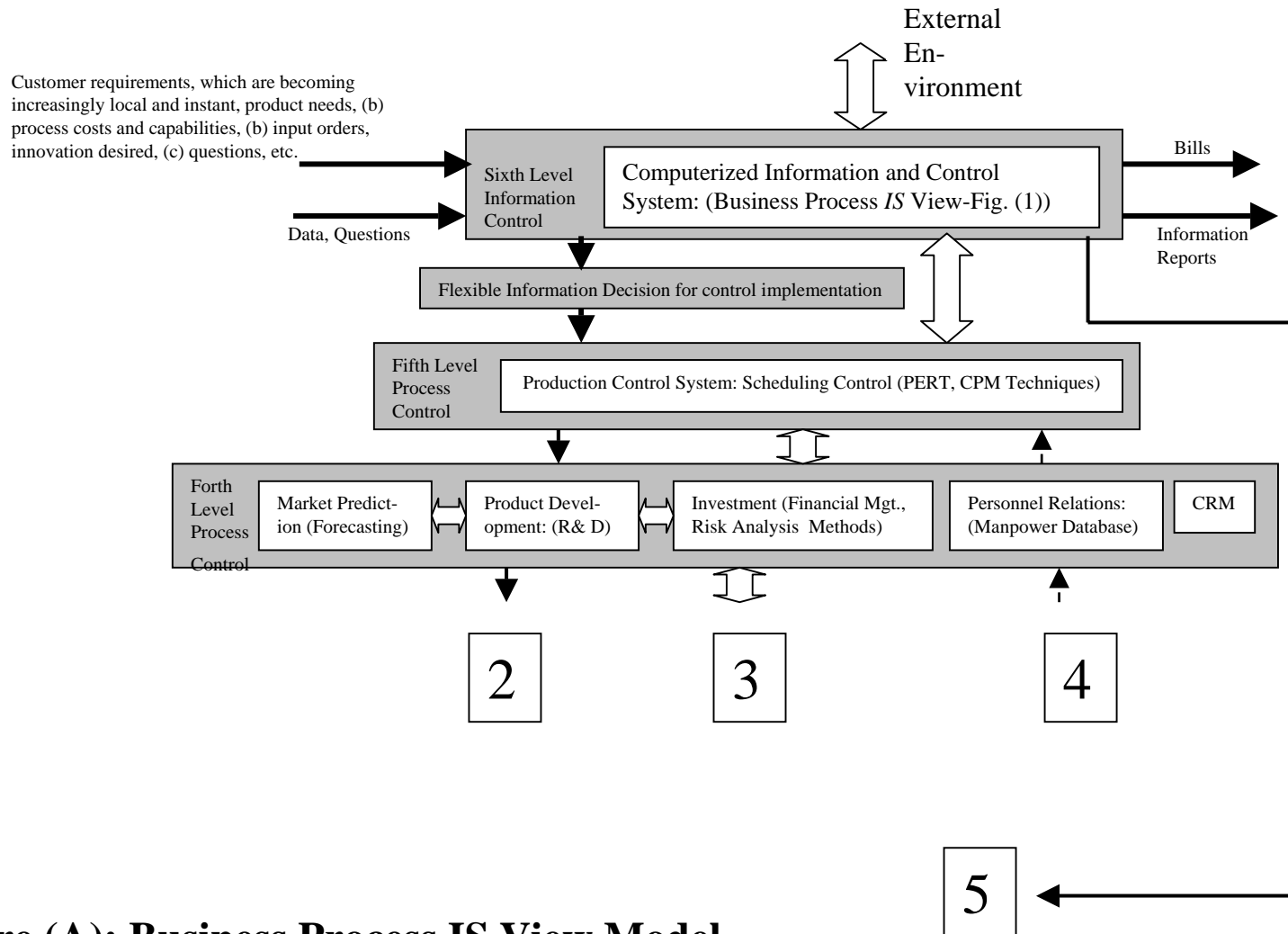


Figure (A): Business Process IS View Model describing a generic business process as integral to a close loop information & control system

Legend:

Vertical interface between levels



Horizontal interface between application



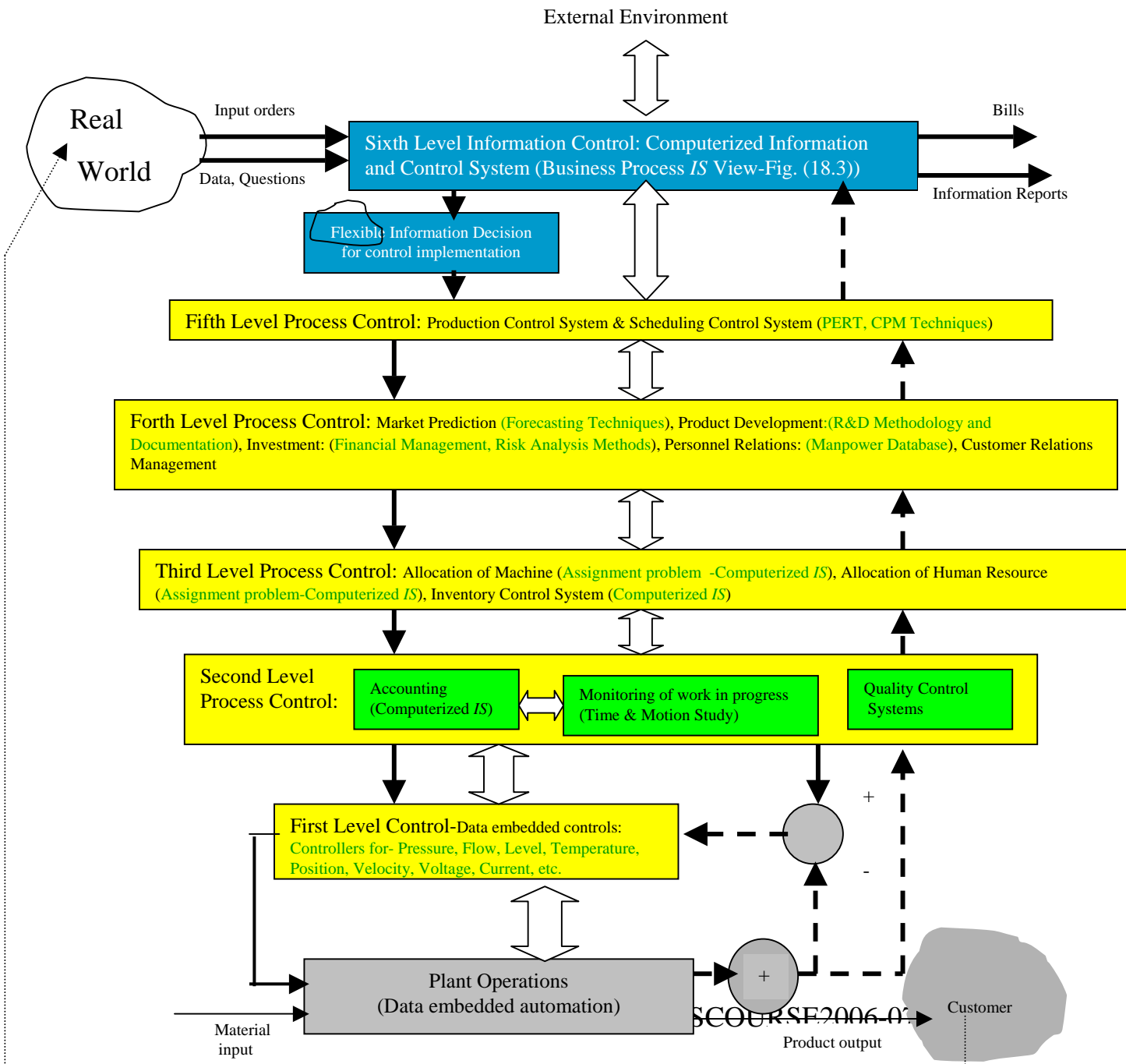


Figure:
Modeling an open system view of a business process, with a controls interpretation, as integral to a close loop information and control system

SUMMARY-1

- A generic business process, which has
 - Data embedded systems at all levels, namely,
 - Plant operation level,
 - Physical variable controls level.
 - Process control levels, and at
 - Information control level
 - resulting in vertical and horizontal system interfaces between its all external and internal system modules, and

SUMMARY-2

- Which is characterized by the real world feedback information in respect of:
 - (a) customer requirements, which are becoming increasingly local and instant, product needs,
 - (b) process costs and capabilities,
 - (b) input orders, innovation desired, and
 - (c) questions, etc.

presents itself as an an open system.

- This leads to modeling the business process as integral to a close loop information and control system.

EXERCISES

- (E16.1) Model an open system view of the generic business process with a controls interpretation as integral to a close loop information and control system.

THANK YOU