Business process IS view comprising a multistage decision process and as a continuous individual information origination and processing situation in the presence of uncertainty – An Elaboration

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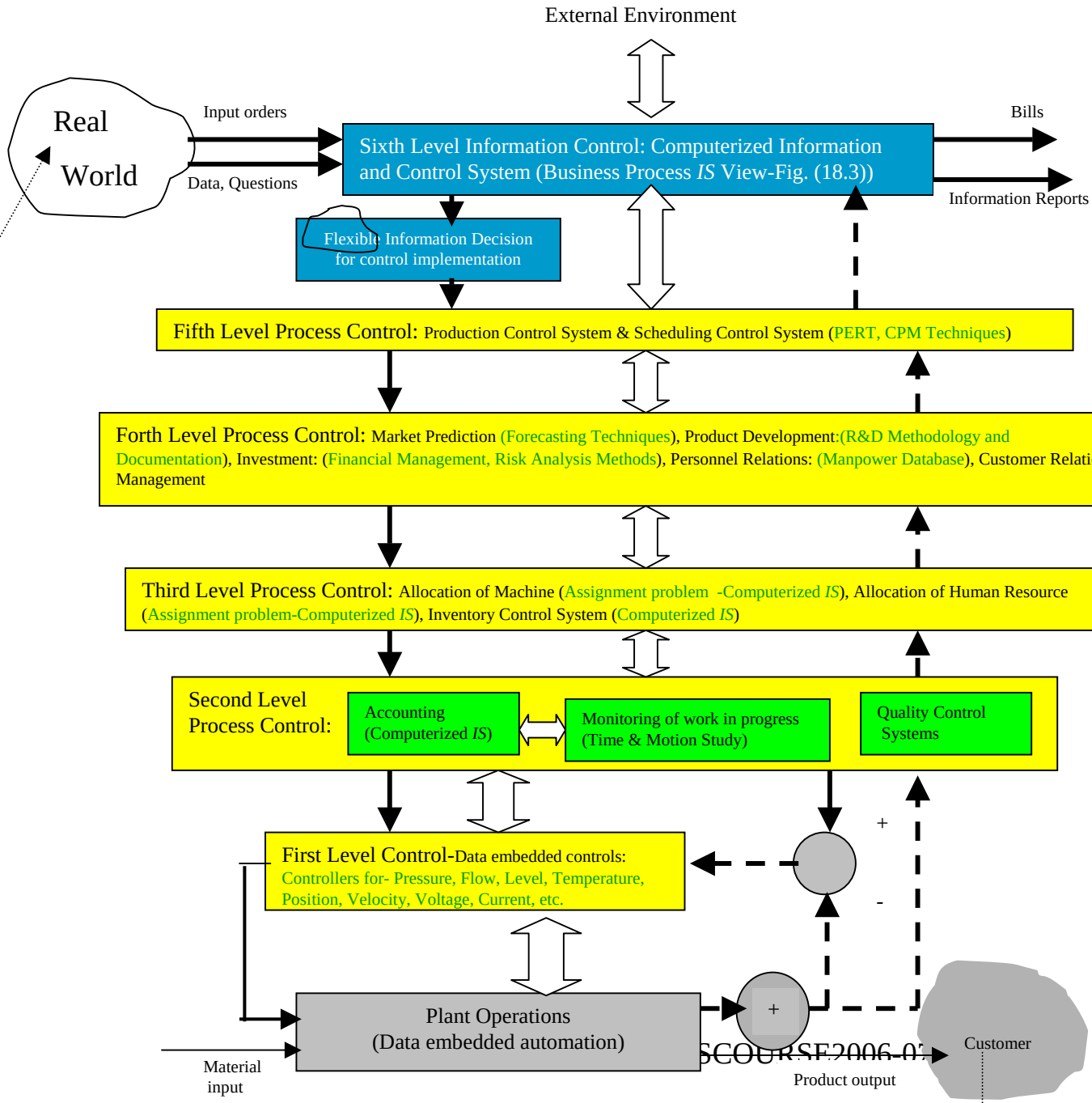


Figure: Modeling a business process, with a controls interpretation, as integral to a close loop information and control system

Open system View of Business IS – A Multiple Stage Decision process: Towards Individual Information Originating & Processing Situation

- **Further,** the information and control system based model of a **business process is an open system spanning multiple stages**:
  - *defining* the business **goal set**;
  - *obtaining* **'many factors'** & **'multiple criteria'** characterizing the problem (task) complexity;
  - *recognizing* (deciding) on the problem **(operable goal setting)**;
  - *defining* planning & design **constraints and opportunity spaces**;
  - characterizing problem complexity--*culling out* **useful (relevant) information variables**;
  - *recognizing* **relationships (interdependencies) between culled out information variables**;
  - *developing* **state transition models defining dynamic behavior** of culled out state (information) variables; and
  - undertaking **customized planning & design for** *generating* **solution alternatives for evaluation and selection of flexible information decision.**

Open System View of Business IS – Towards a Continuous Individual Information Originating & Processing Situation characterized by uncertainty

* As with traditional “collective” decision process model, the “individual information originating and processing situation” also has uncertainty due to input noise, process parametric noise, and measurement.

- In addition it has uncertainty due to “application” emphasis, failures of embedded systems, and system complexity.
- Further, at each of its decision stages, these information originating and processing activities are affected by uncertainties due to the system environmental factors of 5“C”s.
- All this results in errors in information processed from stage to stage, leading to loss of Information Integrity in *IS* and in information therefrom.

An Elaboration….

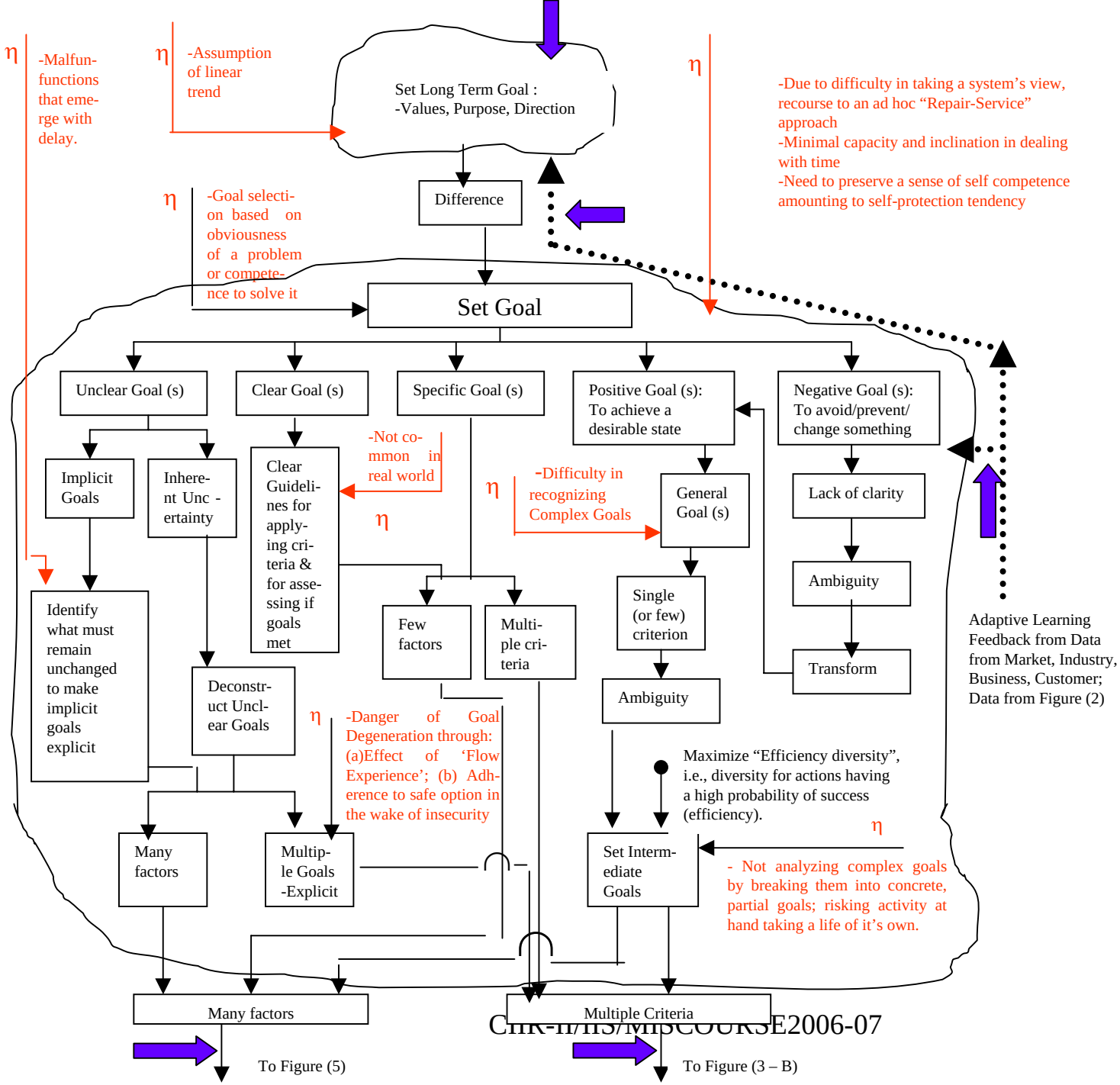


Figure: Systems representation of Information base and its processing for Setting Operable Goal – From 'Set Goal' to obtaining 'Many Factors' & 'Multiple Criteria' characterizing Problem Complexity

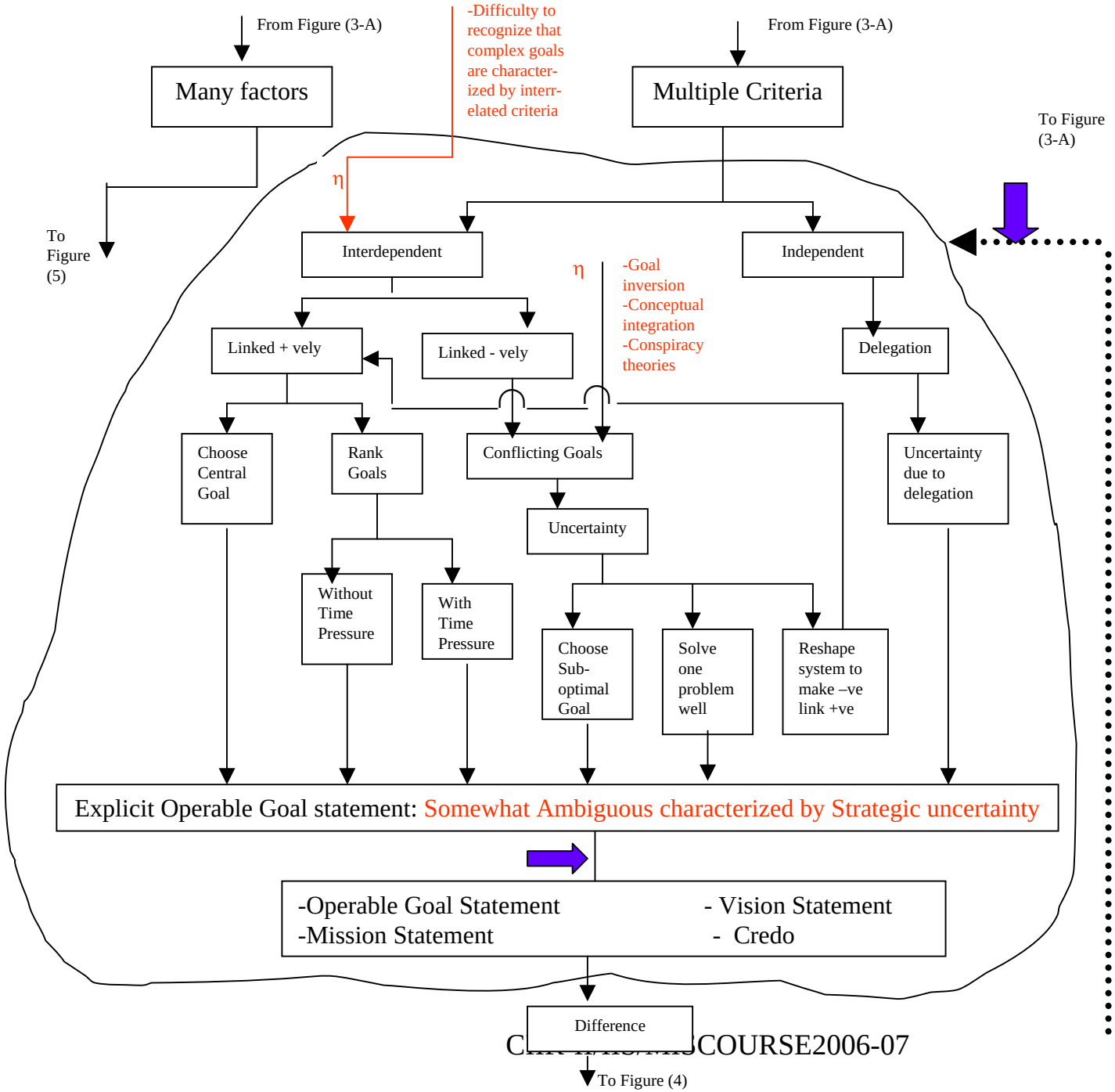


Figure: Systems representation of Information base and its processing for Setting Operable Goal – From 'Many Factors' & 'Multiple Criteria' characterizing Problem Complexity to Operable Goal Statement

Adaptive Learning Feedback
Feedback Data from Market, Industry, Business, Customer; Data from Figure (2)

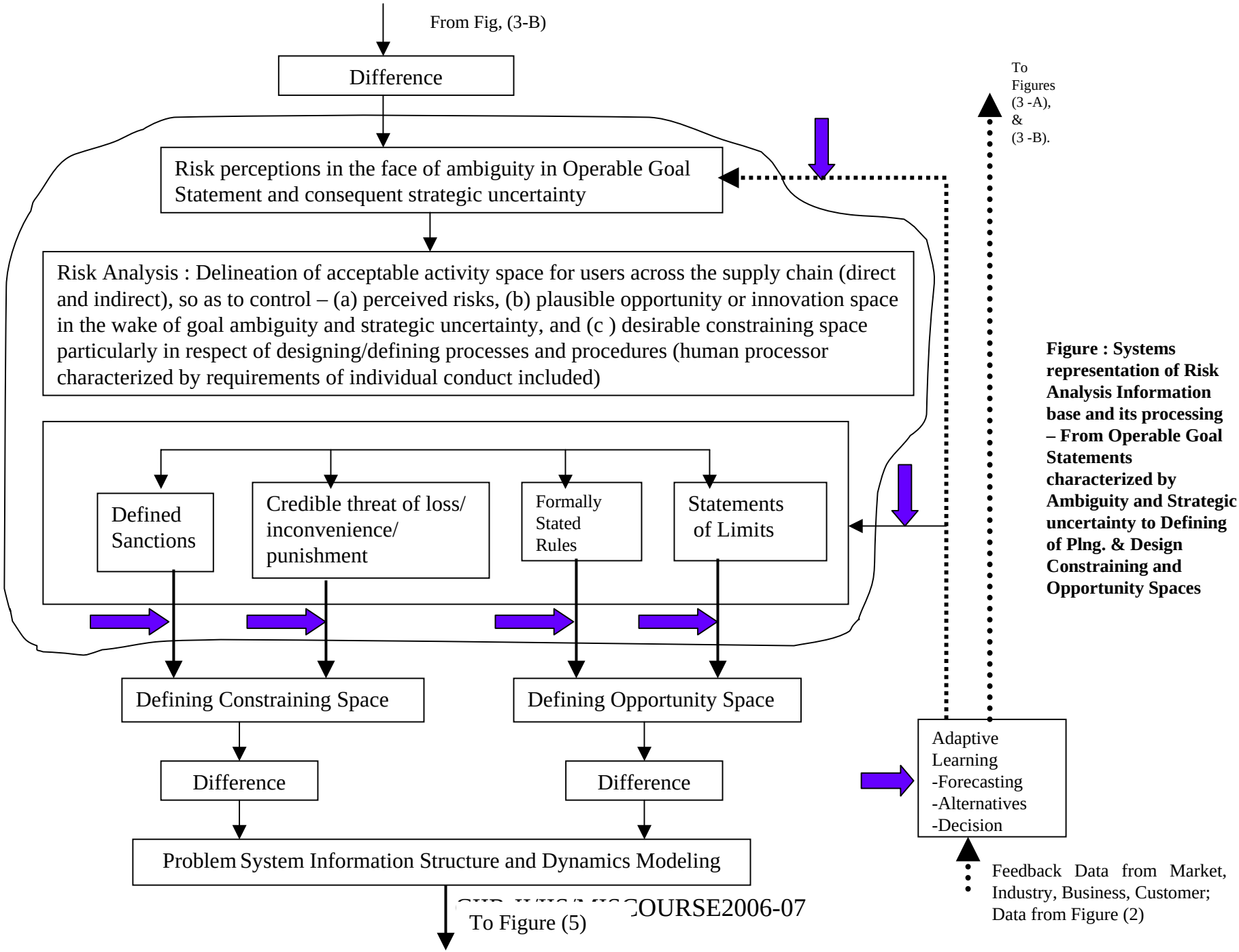


Figure : Systems representation of Risk Analysis Information base and its processing – From Operable Goal Statements characterized by Ambiguity and Strategic uncertainty to Defining of Plng. & Design Constraining and Opportunity Spaces

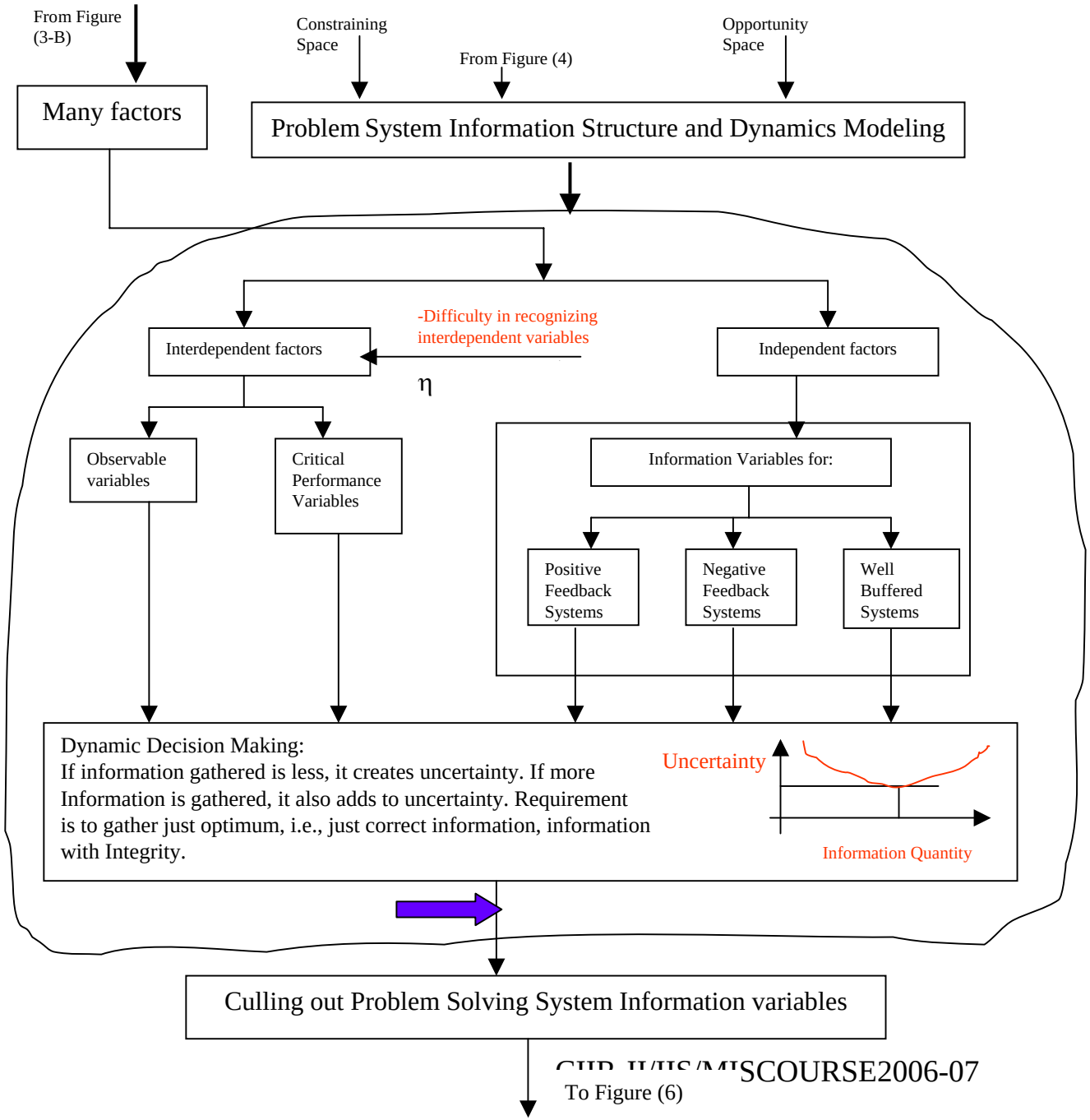


Figure: Systems representation of Information base for Problem Information Structure Modeling – From Many Factor Information Variables to Problem Solving System Information Variables

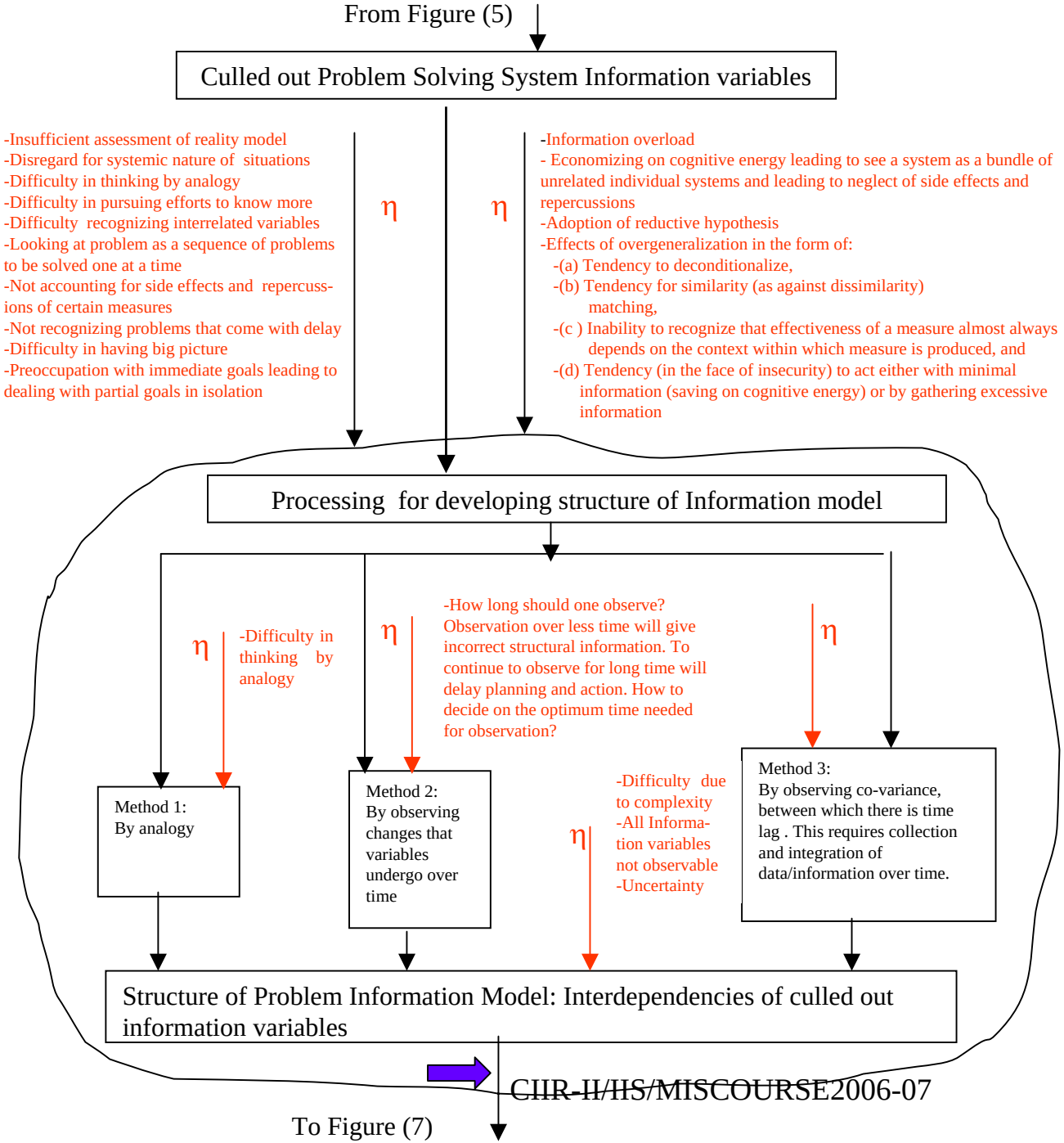
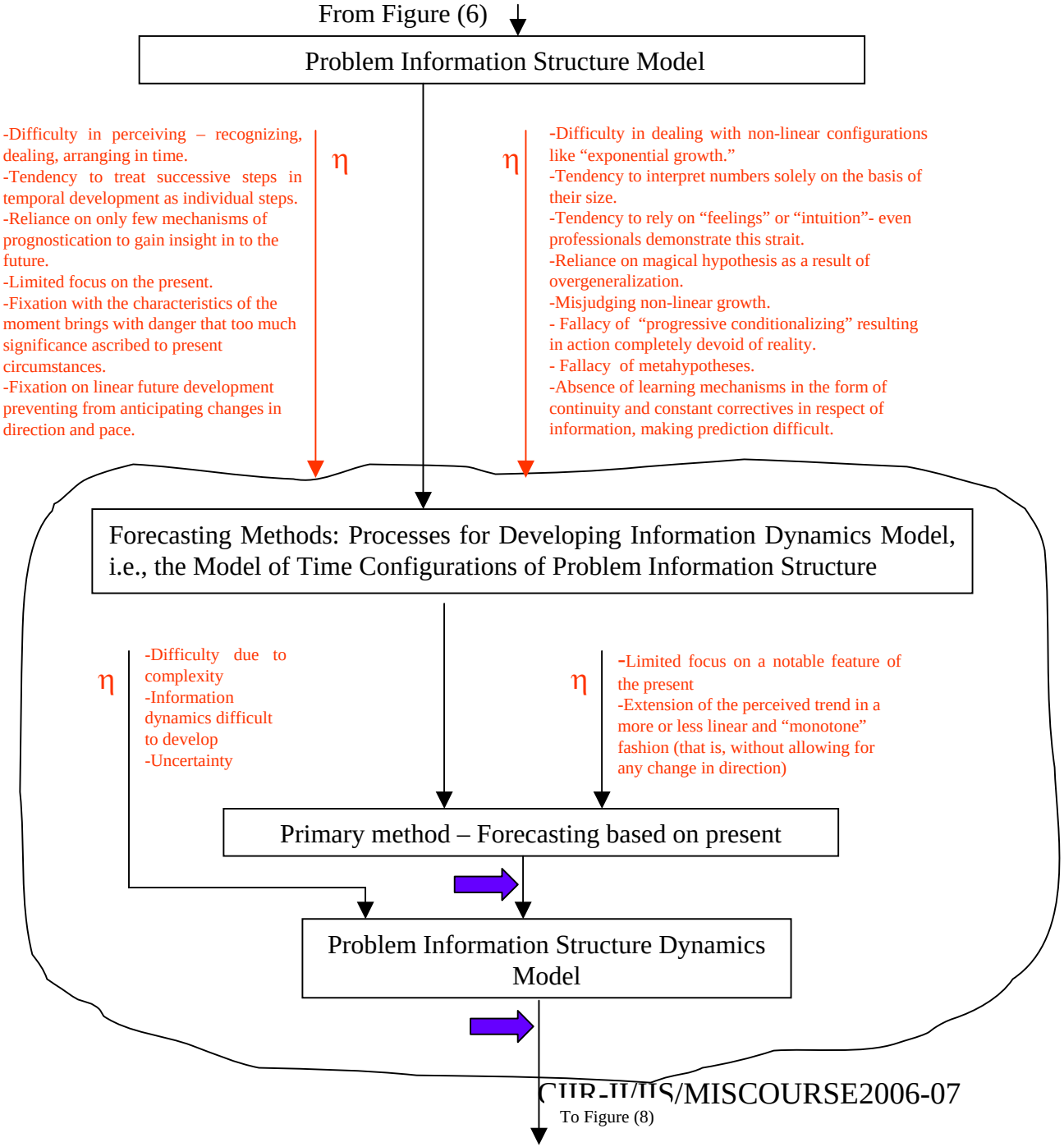


Figure: Systems representation of Information base for Problem Information Structure Modeling – From Problem Solving System information Variables to Problem Solving Information Structure Model

Feedback Data from Market, Industry, Business, Customer; Data from Figure (2)



To Figures
(3 -A),
(3 -B),
& (4)

Figure: Systems representation of Information base for Problem Information Structure Dynamics Modeling – From Problem Solving System Information Structure Model to Problem Solving Information Structure Dynamics Model

Feedback Data from Market, Industry, Business, Customer; Data from Figure (2)

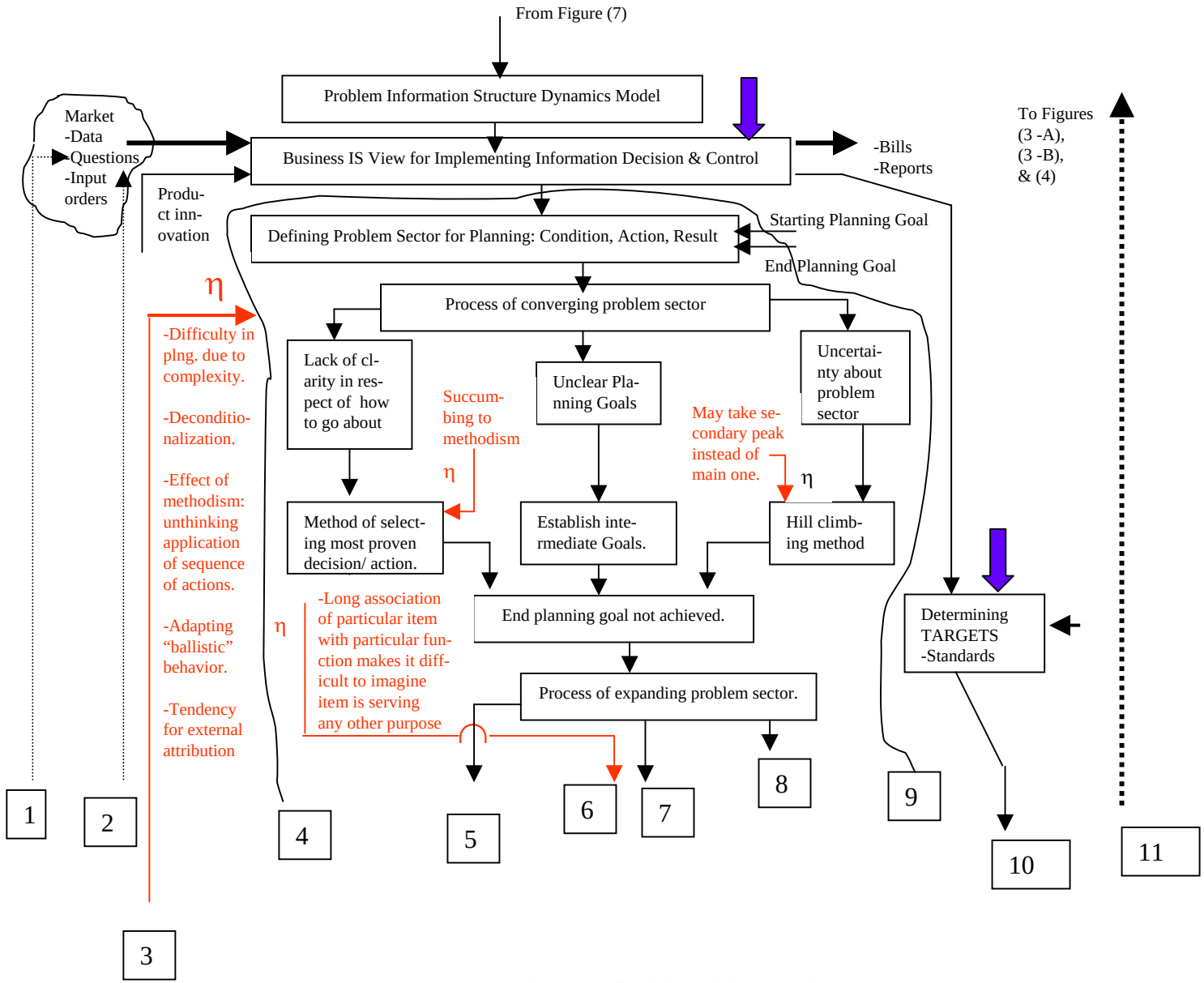


Figure (a) : Systems representation of Information base for Flexible Information Decision – From Problem Information Structure Dynamics Model to Flexible Information Decision

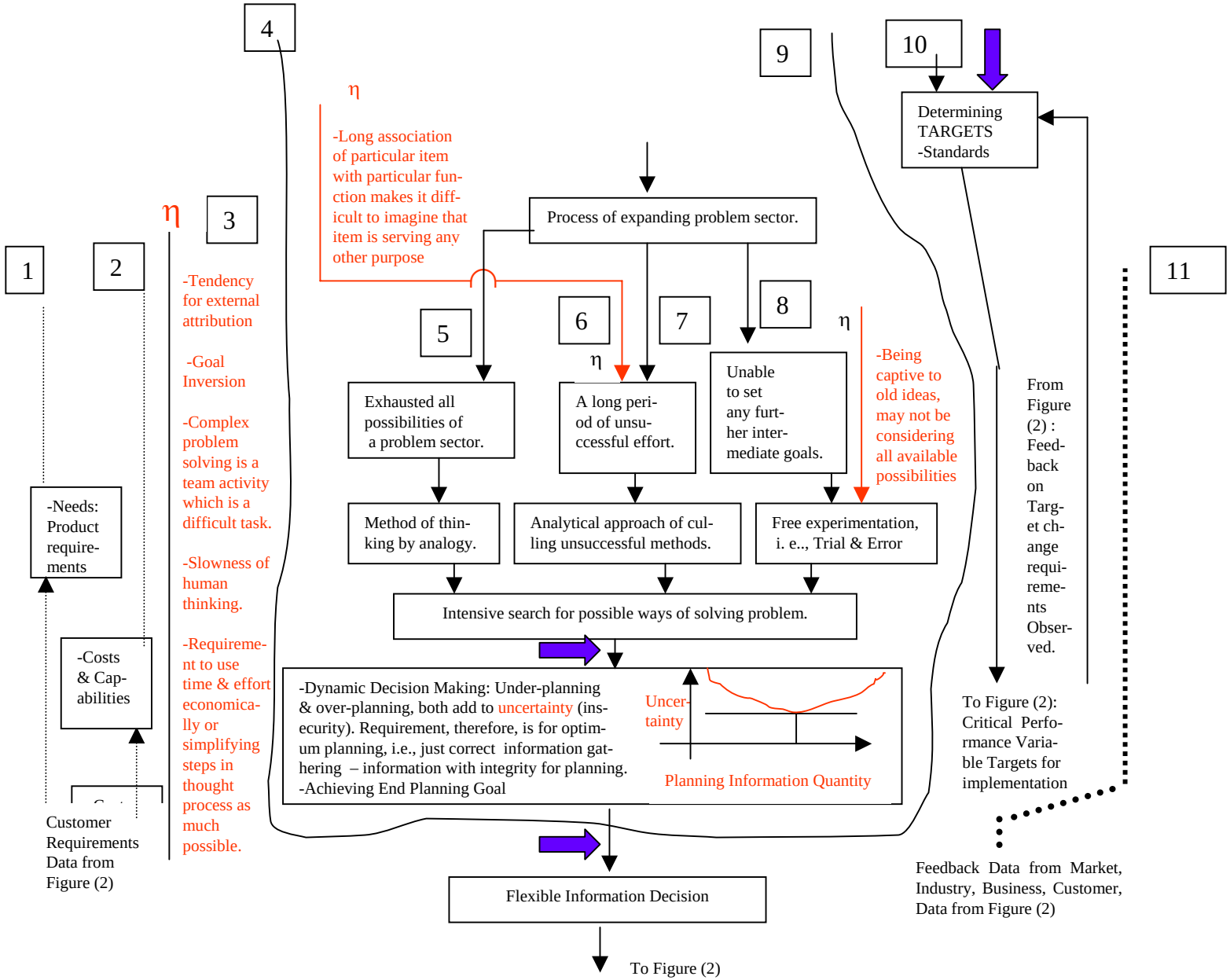


Figure (b) : Systems representation of Information base for Flexible Information Decision – From Problem Information Structure Dynamics Model to Flexible Information Decision

THANK YOU