The Process Analysis as a Frame to Merge Social and Technical Issues in the Design of Information and Management Systems

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My Experience

- **Development of Management Systems for Quality and Sustainability**

- **Process Analysis as support to design the Management System**

- **Organizational Behavior as a key feature of Management System**

Socio-technical Perspective. Keywords

- **Human needs must not be forgotten when technical systems are introduced**
- **Research approach has an action component**
- **No theory without practice, no practice without research**

Contents and Proposals

- **Analysing the meaning of 'Socio-technical perspective' in the current scenario**

- **Suggesting the Process Analysis as a possible support for 'Socio-technical design'**

- **Proposing research on Analysis criteria and Design process**

What does 'Social' mean?

- **The social relationship between employer-employee has evolved in the relationships between the organization and its stakeholders**
- **The identity of an organization is deeply influenced by social behaviors**
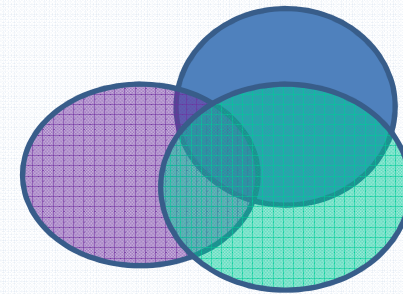
External and internal context

What does 'technical' mean ?

- **Databases for decision making**

- **Erp systems for production and provision of services**

- **Web systems for marketing, sales and purchases**

- **Automation for manufacturing and office activities**

The Proposed Approach

- **The Process Analysis could be a frame to merge the social and the technical issues**
- **The Process Analysis is a common point in the fields of:**
  - **Information Systems**
  - **Management Systems**
  - **Organizational Behavior**
- **The Process Analysis could be an effective tool for supporting design**

Process Analysis. Challenging points

- **Adaptive Case Mangement: methods for analyising the complexity of the organizations**

- **Forthcoming ISO Standards: the concept of 'promoting awareness of the process approach'**

- **Organizational Behaviour studies: direction and causal order of processes**
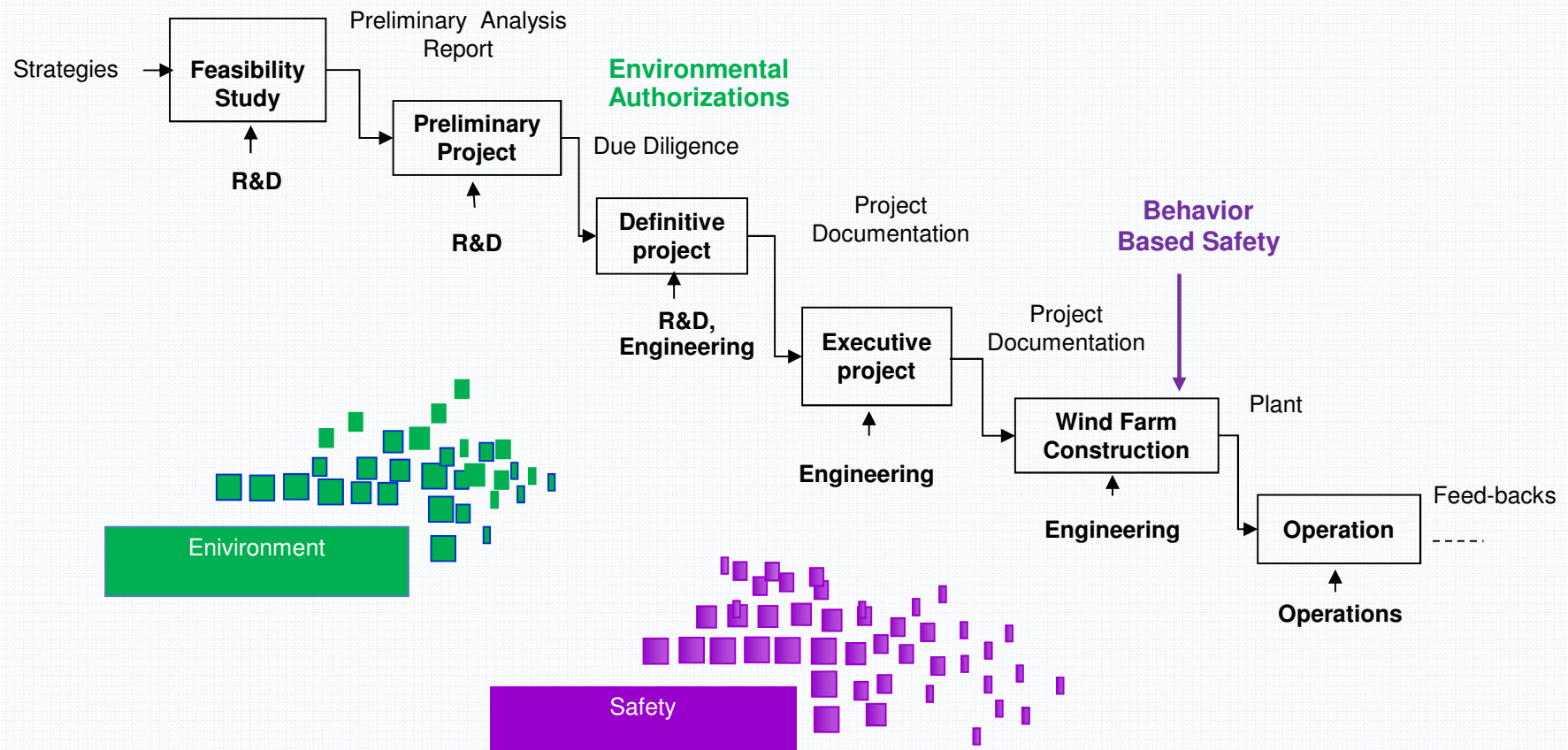
Process Analysis. Weak points

- **Methods and tools subordinated to Information Technology**

- **In Organizational Behavior, prevalence of an academic approach**

- **Attention to describe the results and not the practice exploited to reach them**
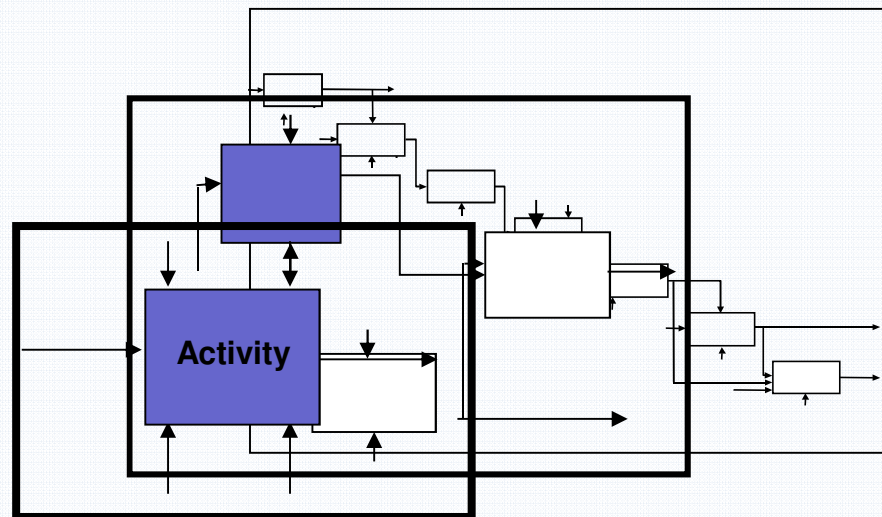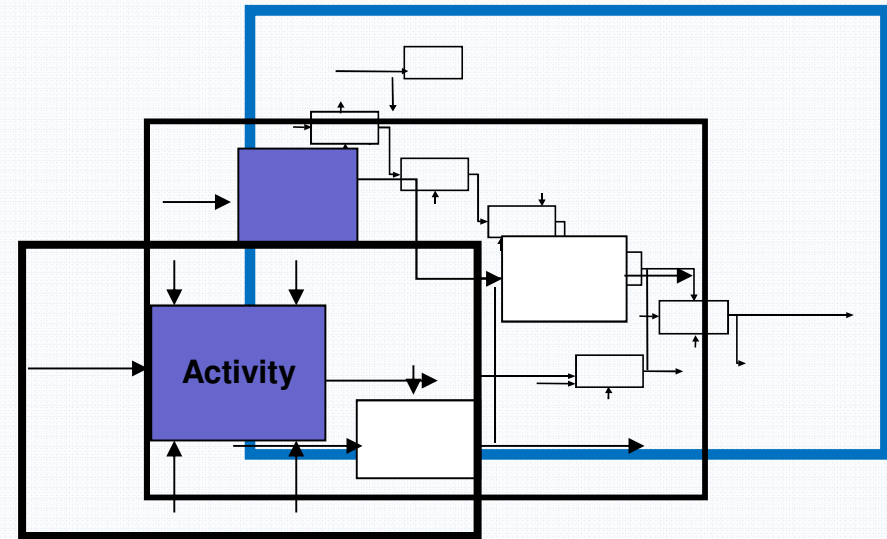
Research proposal.
Process Analysis Criteria

- **How the criteria followed for the analysis could be useful to encompass complexity**

- **Some topic to address:**
  - The mangement model of the organization
  - The context of the company and the stakeholder's point of view
  - The direction for performing the analysis

- **Several factors and several coordinates describe the conceptual space**

Stakeholder's points of view

Strategies → **Feasibility Study**

Preliminary Analysis Report

Environmental Authorizations

R&D

Preliminary Project

Due Diligence

R&D

Definitive project

Project Documentation

R&D, Engineering

Executive project

Project Documentation

Behavior Based Safety

Engineering

Wind Farm Construction

Plant

Engineering

Operation

Feed-backs

Operations
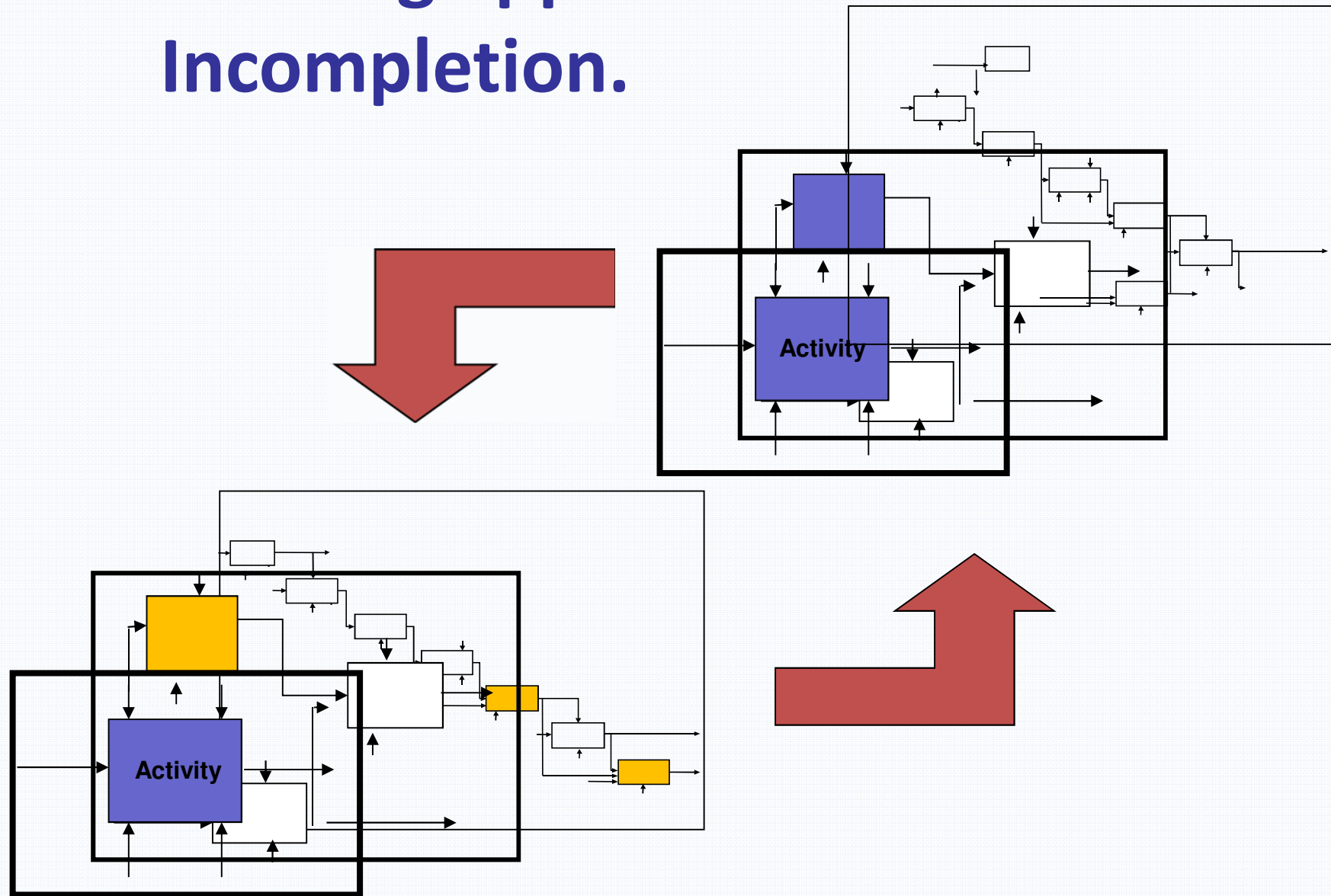
Enivironment

Safety

Direction of the analysis

Research proposal.
Design

- **How the design could support a social approach**
- **Some topic to address:**
  - **Process Analysis could be useful to capture and modify social and collective behaviour**
  - **Defining the scope, the interfaces, the internal and external subjects that compose the working team**
  - **Never-ending approach. The design could not end with the releasing of a result**
- **Exploring and defining the phases and the features of the design process**

Never-ending approach.
Incompletion.

Outlook

- **Merging Information Systems, Management Systems and Social Behavior to effectively support the organizations**

- **Performing cross functional activities with researchers and practioners**

Thank you