WP 8- Agrifood SC Decision-Making under Uncertainty

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Secondment in ALSIA April - June 2019
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Teaching session

INTRODUCTION TO ERP SYSTEMS

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Contents:

- Definition and Characteristics of ERP Systems
- Reason to Acquire Them
- Impact on Organisation
- Advantages and Disadvantages of ERP Systems
An introduction to ERP Systems
An ERP system is:

A packet of standard programmes that allows a company to automate and include most of its business processes, to share data and practices with all organisation members, and to produce and access information in a real-time setting.
Purchases and Sales

Human resources
Accounting

Manufacturing

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Characteristics of an ERP System (Saroka, 2002):

- Integrated System
- Design based on the best practices
- Modular
- Customization Capacity
Integrated System

(Davenport, 1998)
Design based on the best practices

Generic solution; how a company works in general.

ERP companies implement these best practices

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Functionality is divided into modules, which can be installed according to the company’s requirements.

Most companies install accounting and financing modules, but not all of them opt for human resources or manufacturing modules.

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To **adapt** the system to each company’s **particular** business processes
Each module offers **configuration tables** (or parameters)
When parameters are not enough:

Programme modifications:

```
if ( chars[start] == ' ' ) {
    start++;
    continue;
}
```
The real reasons to implement an ERP system are not technological, but are essentially linked to business.
Impact:

One of the problems is the technology challenge.

But the main problems are BUSINESS PROBLEMS.

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Impact:

**Change Management** is one of the most important factors for the success of projects.

Effective change management ensures that the organisation and personnel are prepared for new processes and systems.
Impact:

ERP system imposes its own logic in the strategy, organization and culture of a company: ERPs push them towards a total integration.

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Advantages (Bradford, 2002):

- Information online in real time in all the company.
- Información disponible en tiempo real en toda la organización
- Reduction of inaccuracies.
- ERP systems act as a template to standardise the business processes
Disadvantages (Bradford 2002):

- Standardization of business processes
- Very complex for simplex contexts
- Technological dependency
- Expensive
Definition and characteristics

- Integrated system
- Best practices
- Modular
- Customization

Motivation for implementation

- Improve the business processes

Impact in organizations

- Business problems
- Change Management
- Integration

Advantages and disadvantages

- Confident information in real time
- Standardization of business processes
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