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# WP 8- Agrifood SC Decision-Making under Uncertainty

UPV (Universitat Politècnica de València)

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Secondment in ALSIA April - June 2019



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# WP 8- Agrifood SC Decision- Making under Uncertainty Teaching session

## INTRODUCTION TO ERP SYSTEMS

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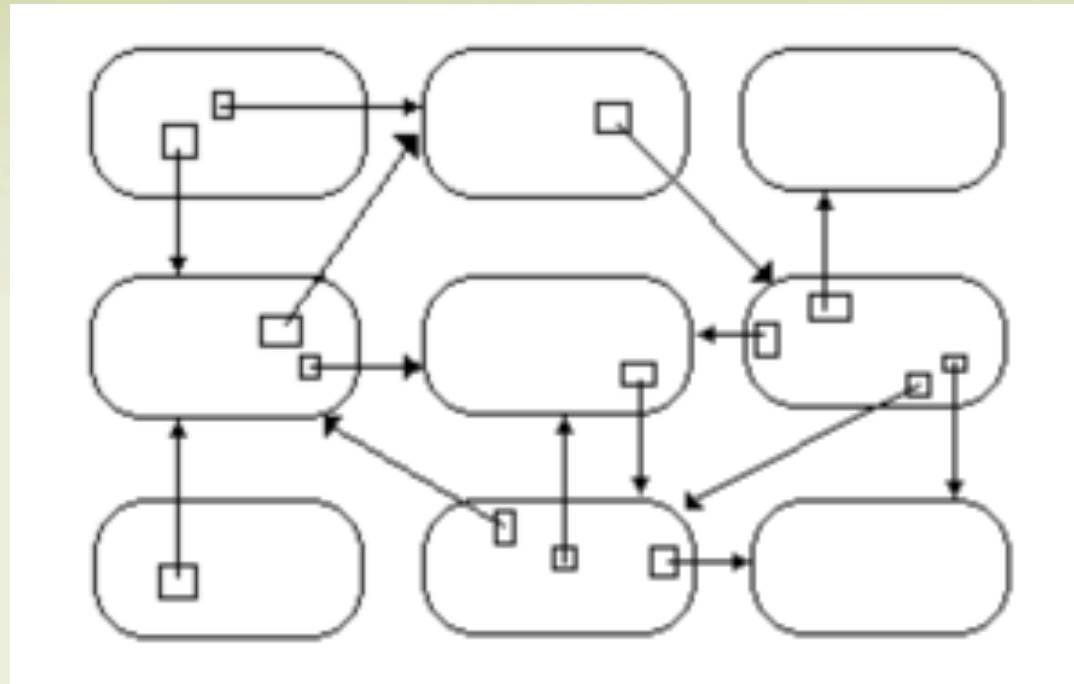
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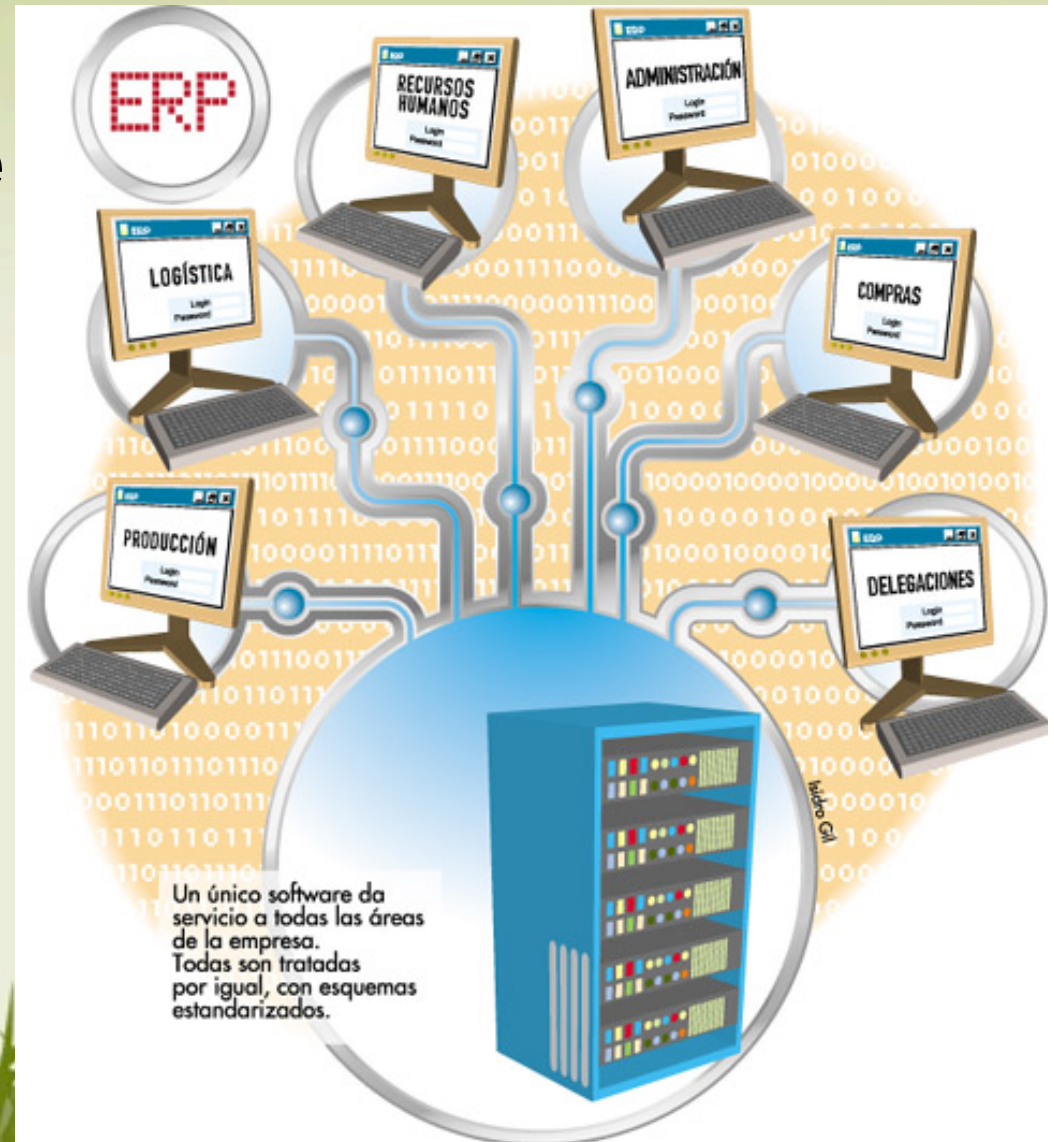
# Contents:

- **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



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## Human resources Accounting



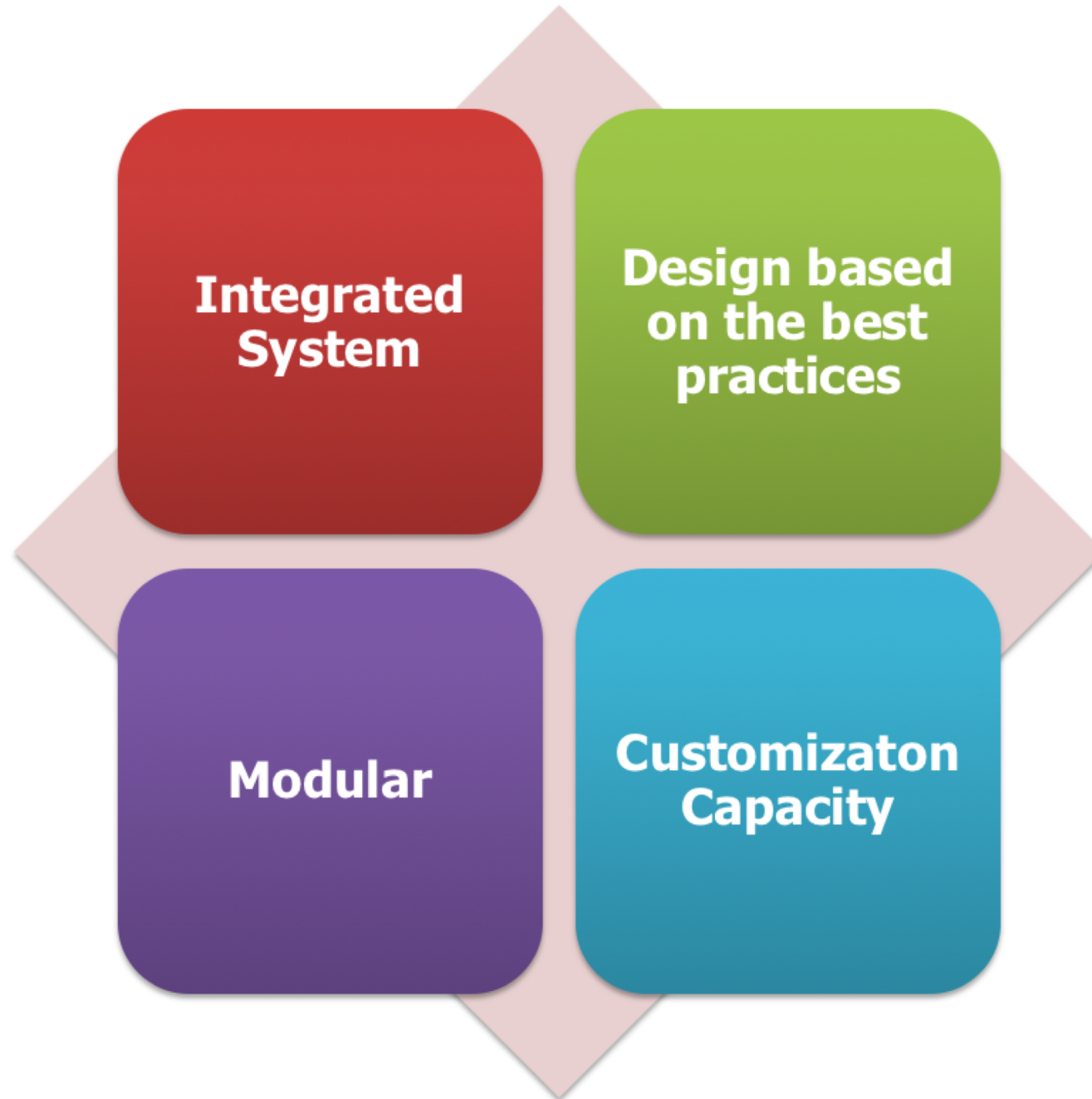
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## Manufacturing

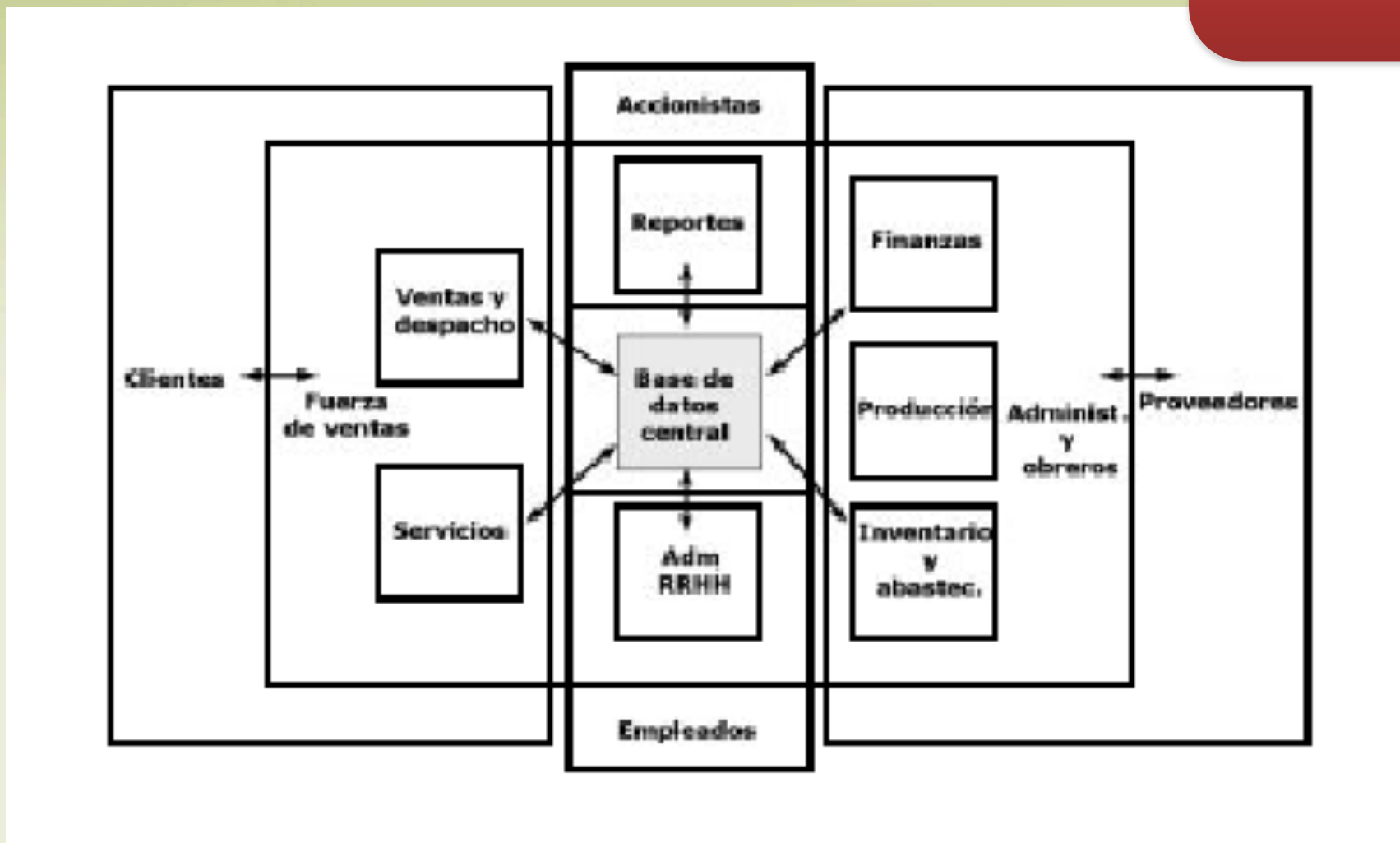


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# Characteristics of an ERP System (Saroka, 2002)



# Integrated System



(Davenport, 1998)





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Design  
based on  
the best  
practices

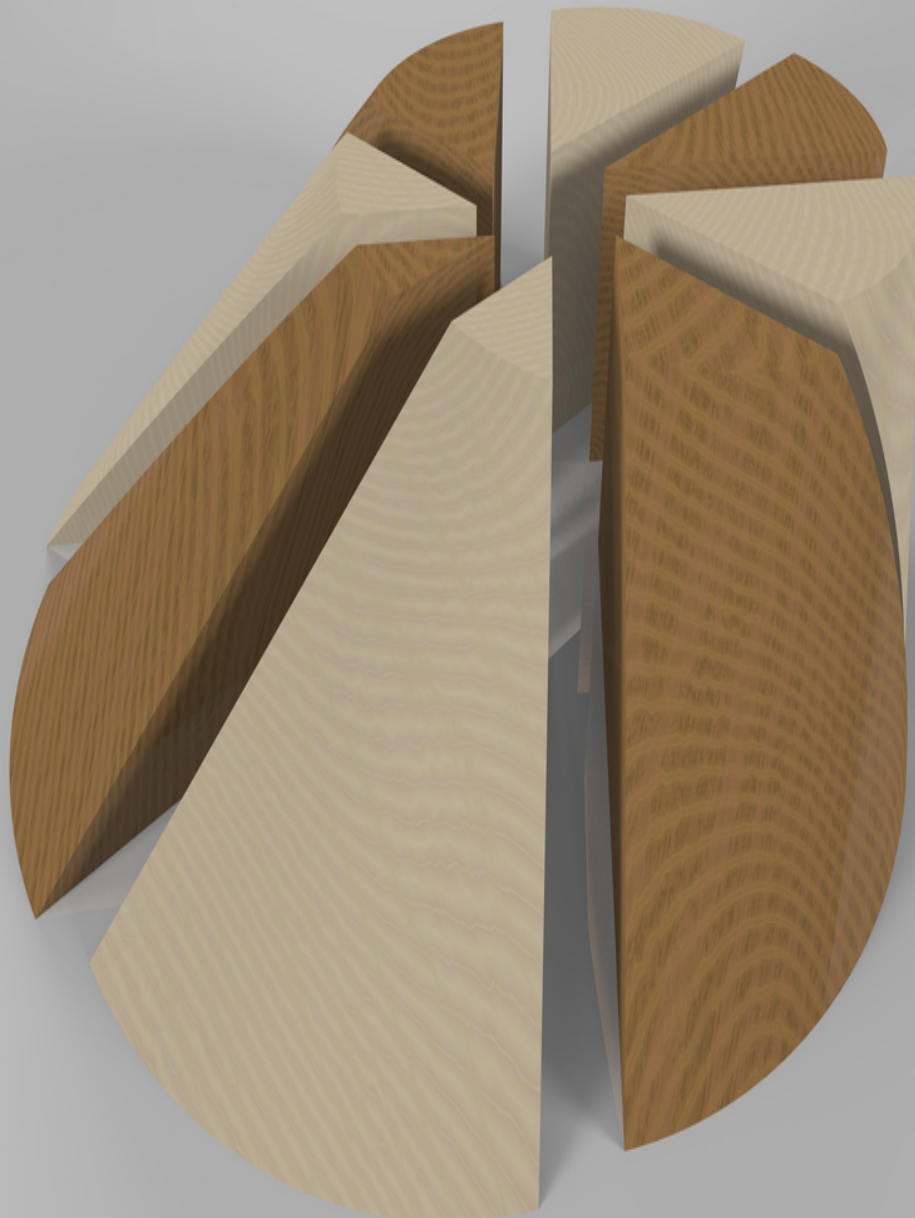
Generic solution; how  
a company works in  
general.

ERP companies  
implement these best  
practices



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Modular

**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.**

To **adapt** the system to each company's **particular** business processes

Each module offers **configuration tables** (or **parameters**)

Customisation  
capacity



# When parameters are not enough :

Programme modifications:

```
file(start<end) {  
    if( chars[start] == ' ' ) {  
        start++;  
        continue;  
    }  
}
```

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Customisation  
capacity

Conexion with  
external systems



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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**

**Impact:**

**Change Management** is one of the most important factors the success

**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**





## **Advantages**<sub>(Bradford,2002)</sub>:

- **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**<sub>(Bradford2002)</sub>:

- **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

Standarization of business processes



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