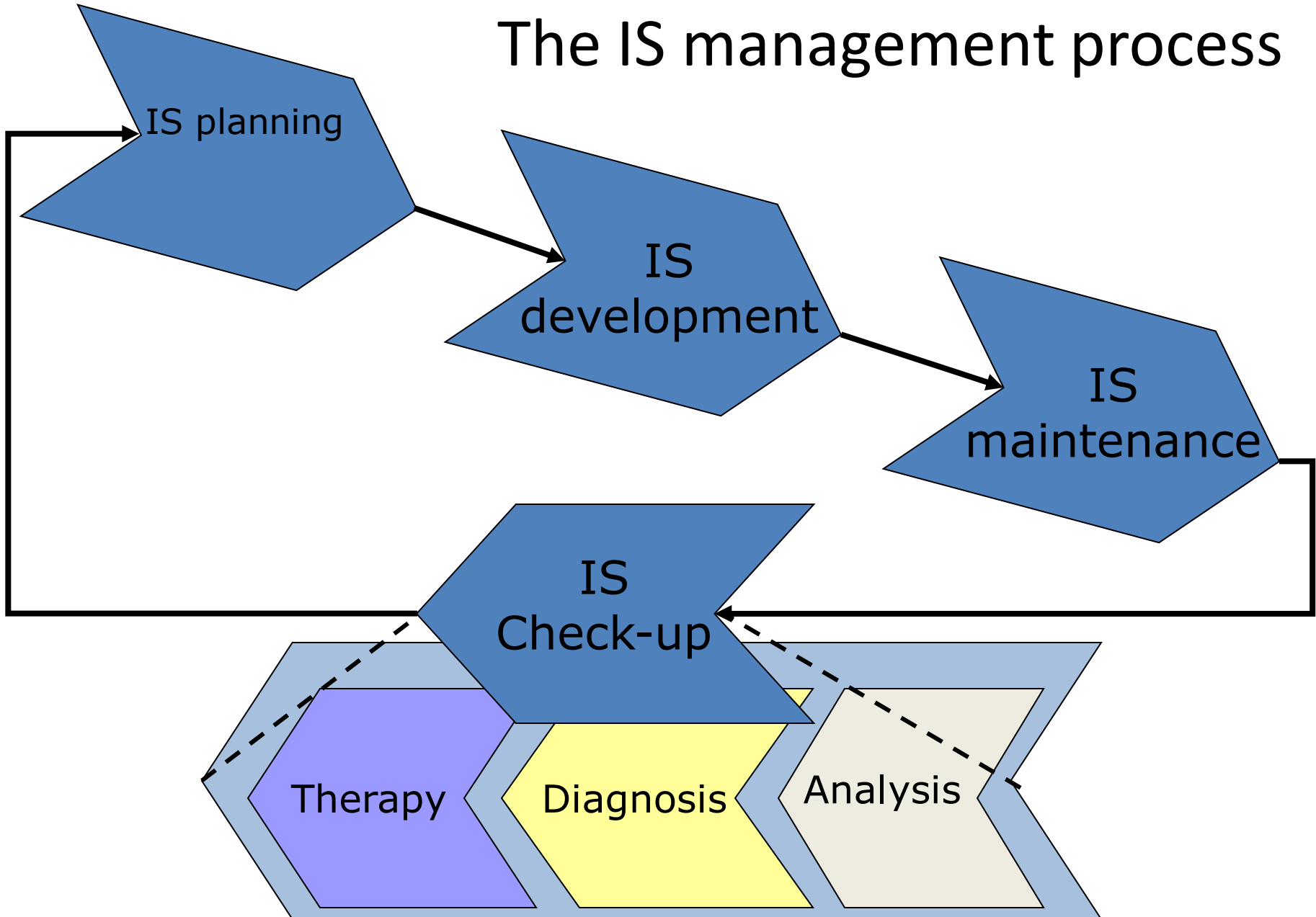


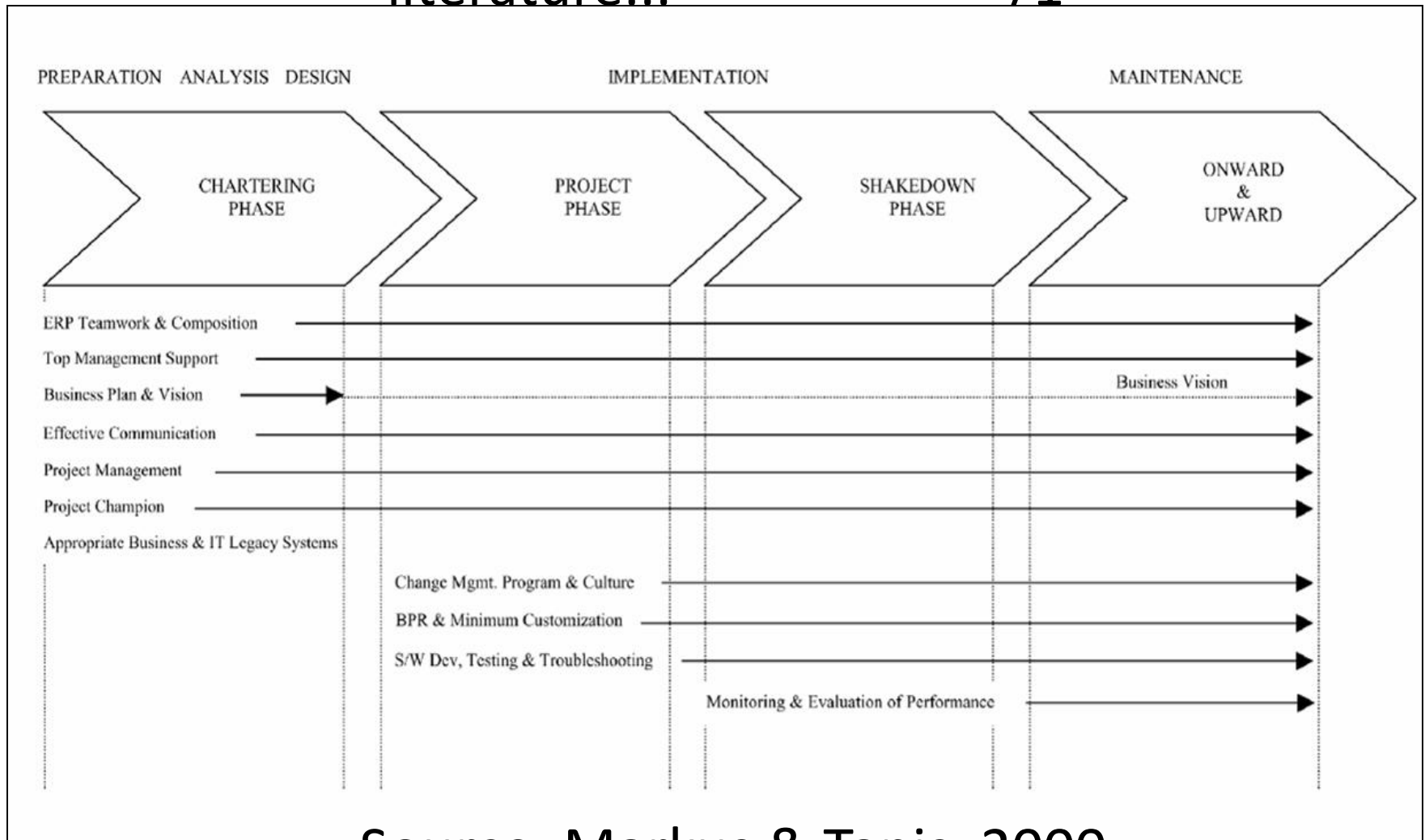
# **ERP adoption life-cycle**

**Information Systems Design**

# The IS management process

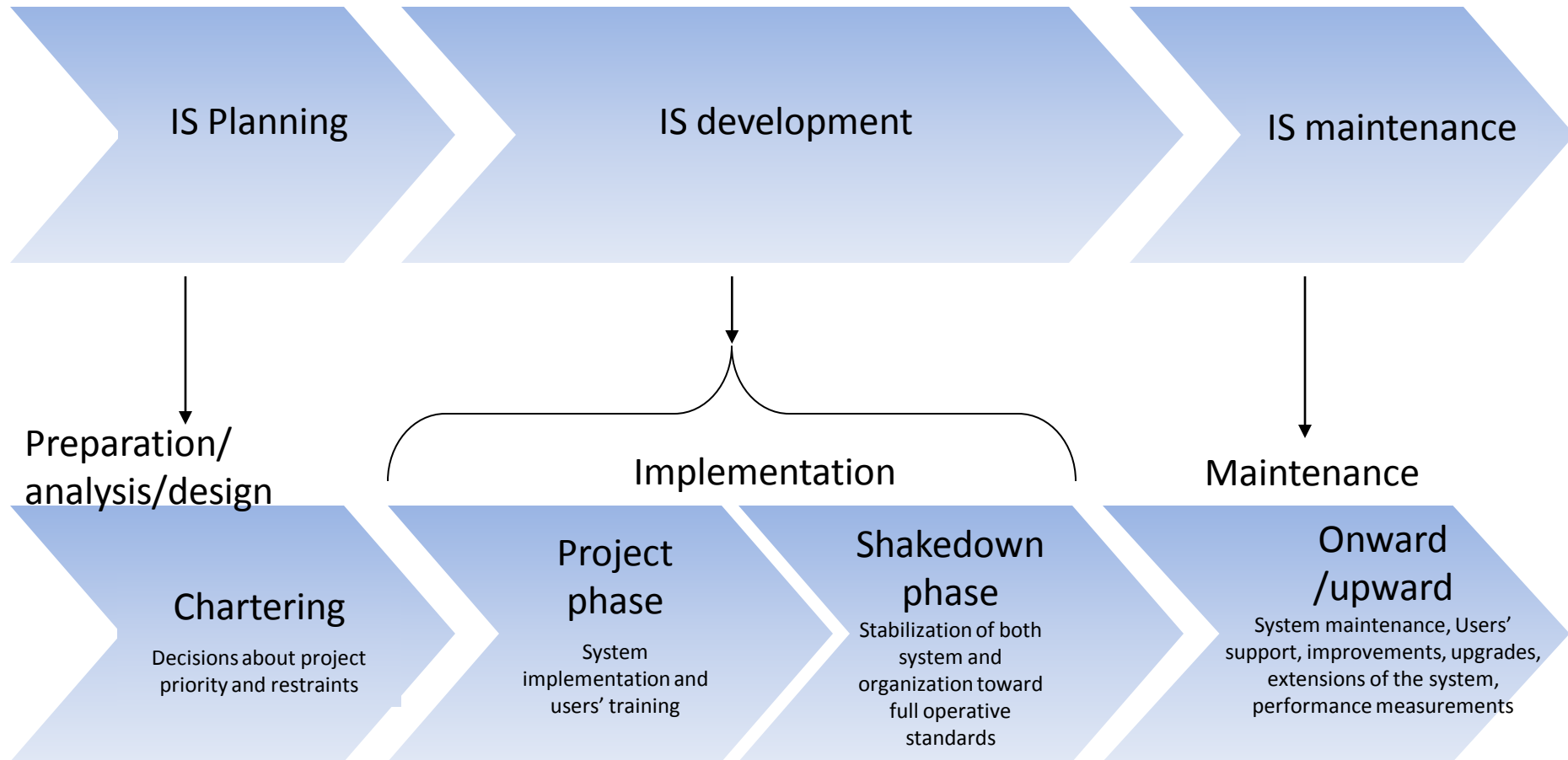


# ERP adoption cycle: what is suggested by the literature... /1



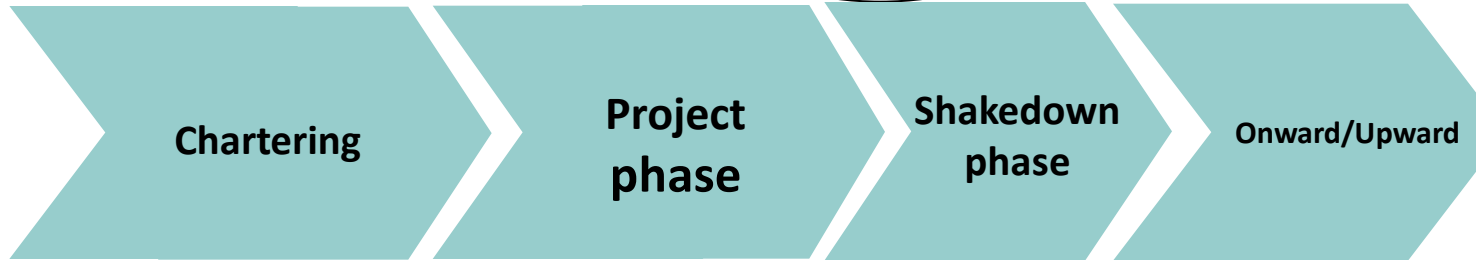
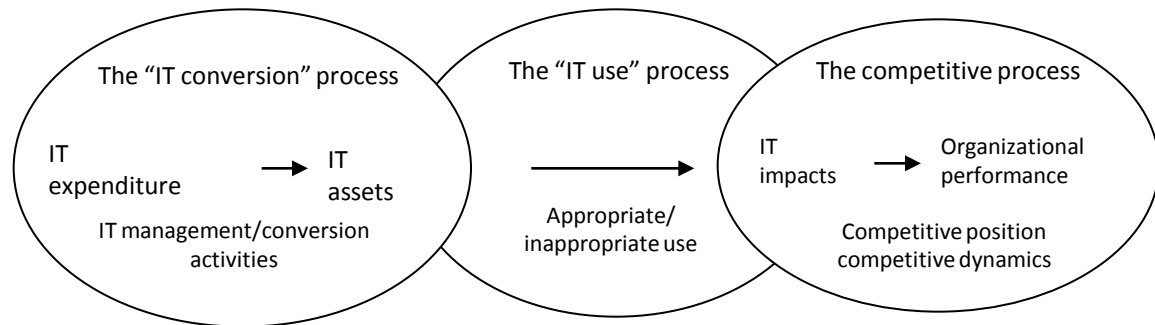
Source: Markus & Tanis, 2000

# IS management process and ERP implementation



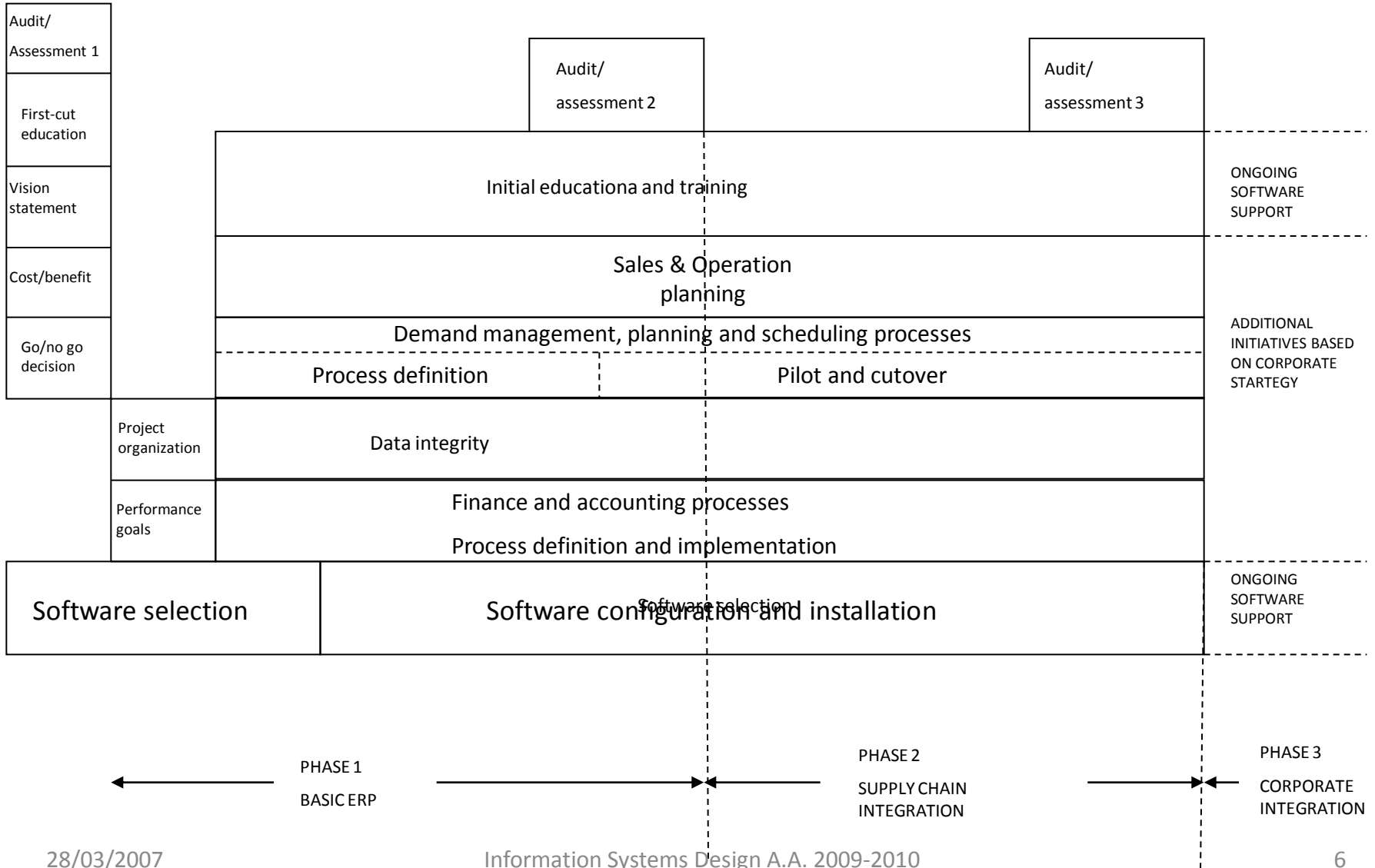
# ERP adoption cycle: what is suggested by the literature... /2

**Soh and Markus Model (1995)**

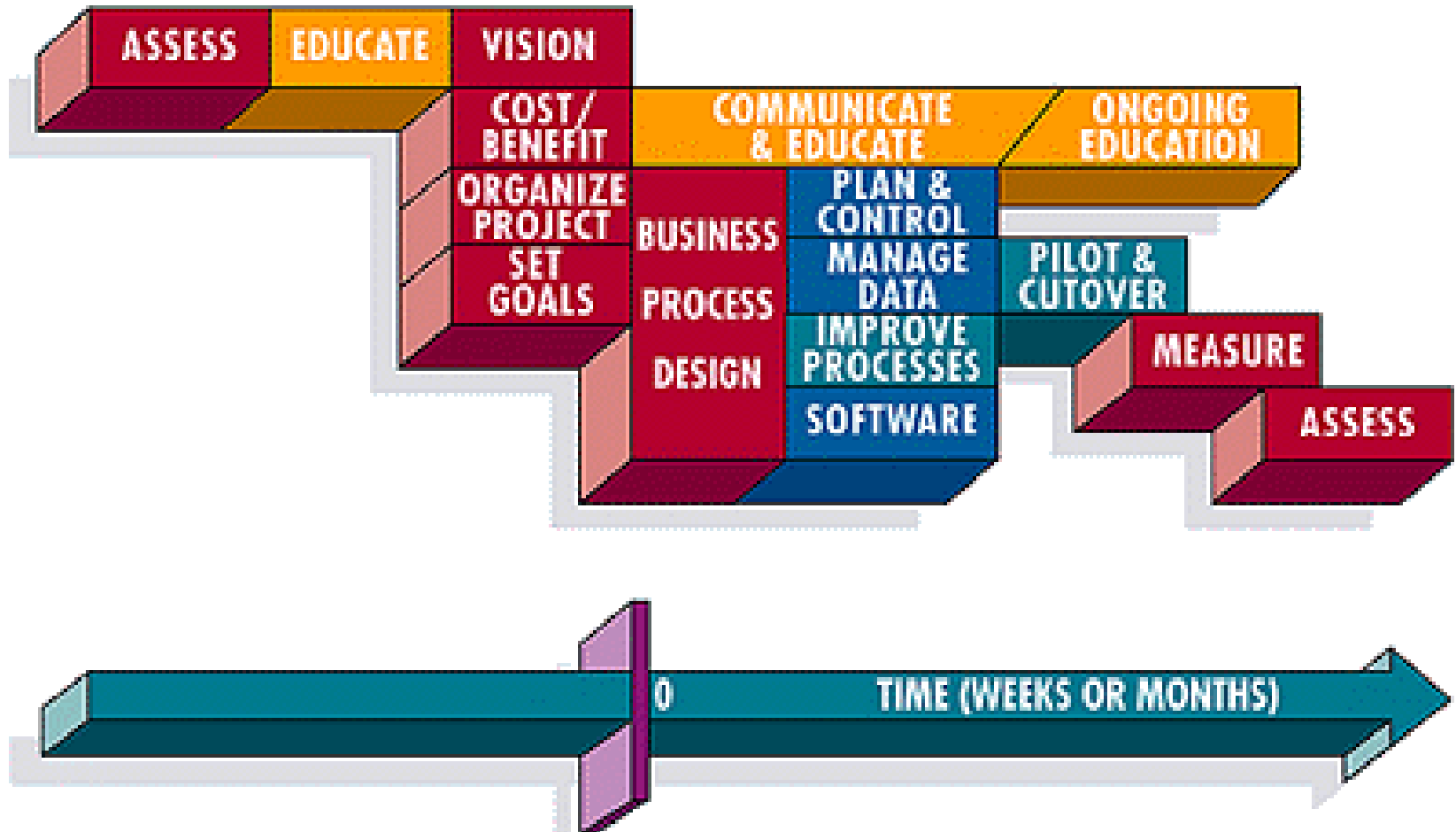


**Markus and Tanis Model (2000)**

# Management of ERP implementation: what consultants suggest (proven path) /1

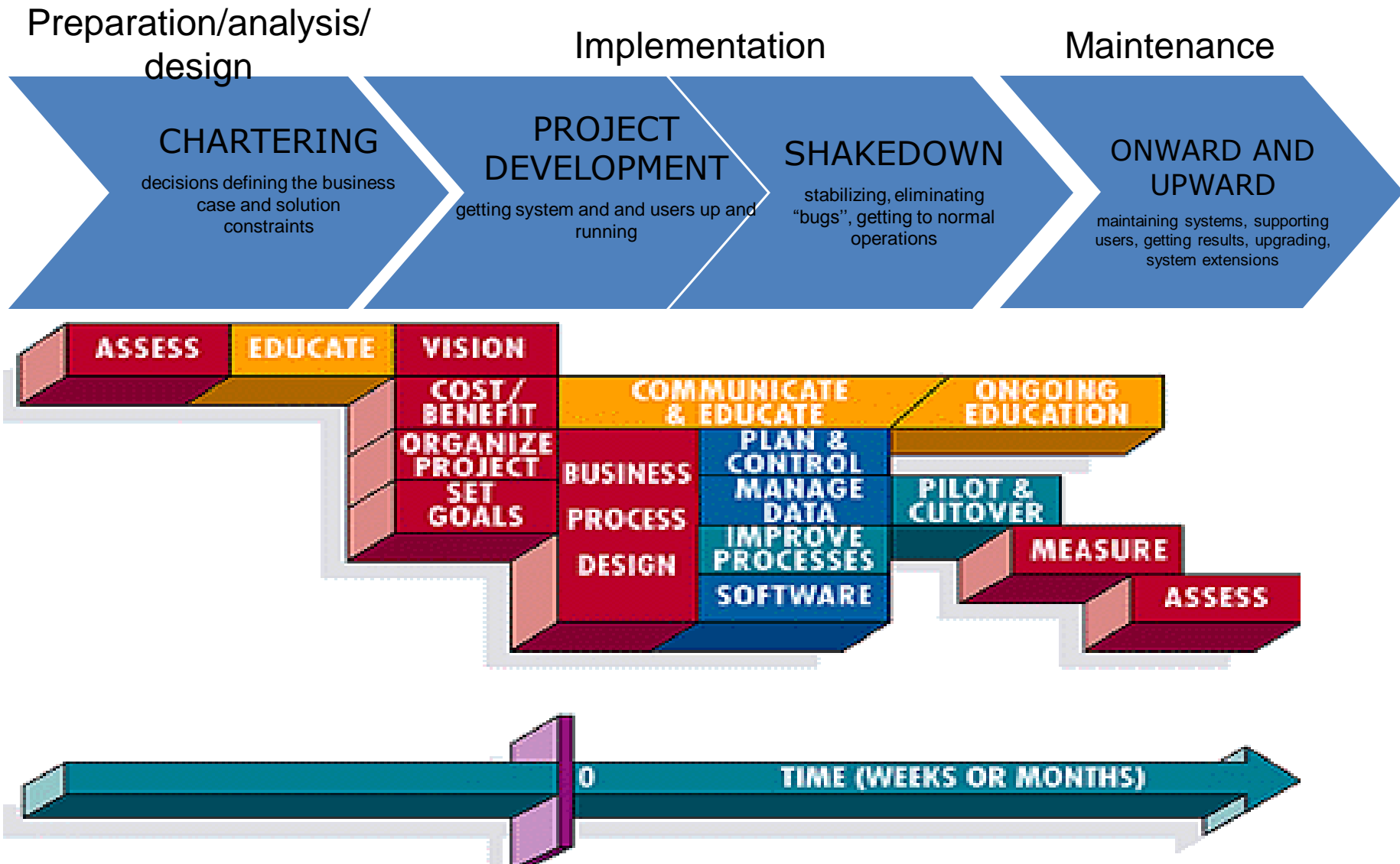


# Management of ERP implementation: what consultants suggest (proven path) /2



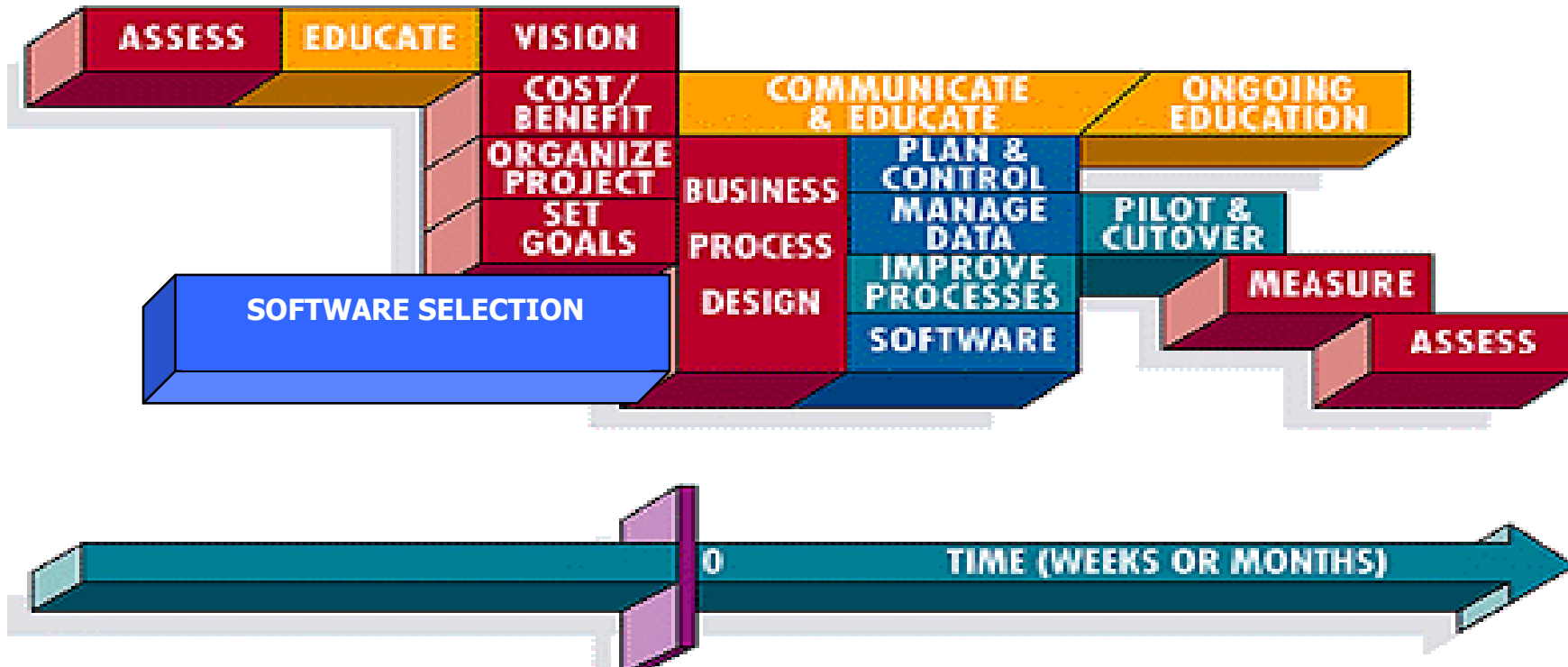
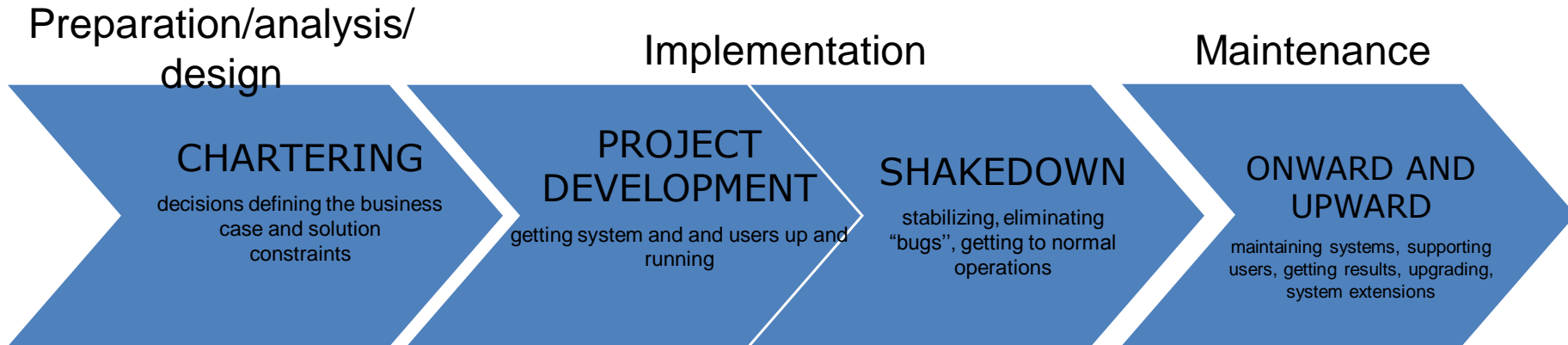
Source: Oliverwight.com

# ERP adoption: an hybrid approach (adoption cycle + Proven Path)

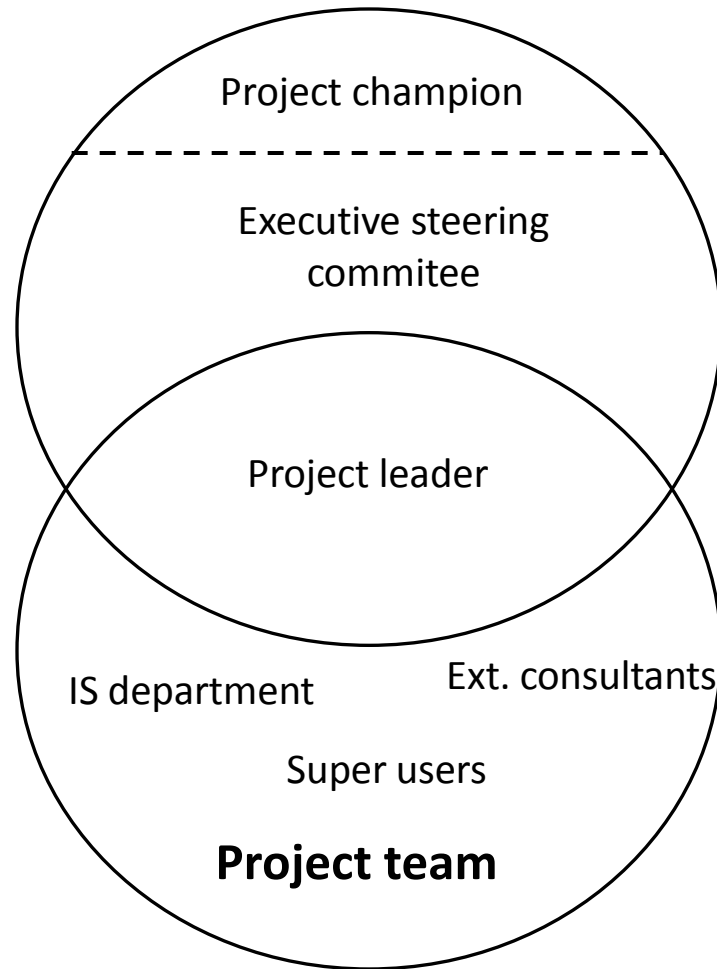




# ERP adoption: from the customer's perspective



# The project team and the other actors

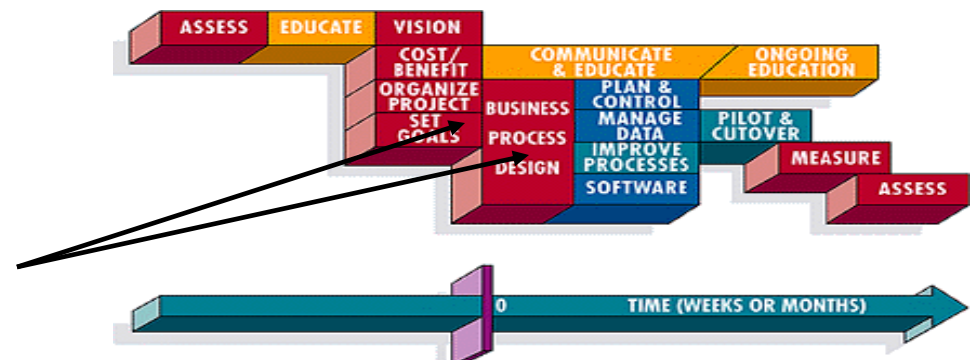


# ERP implementation: what about the vendors' perspective?

1. Analysis of customer's requirements
2. Presentation and discussion of the requirements
3. Detailed analysis
4. Customization analysis and implementation
5. Data retrieval from legacy systems
6. Training and implementation
7. "go-live" advice
8. "go-live"
9. Shift from the project team configuration to the End-Users' support service

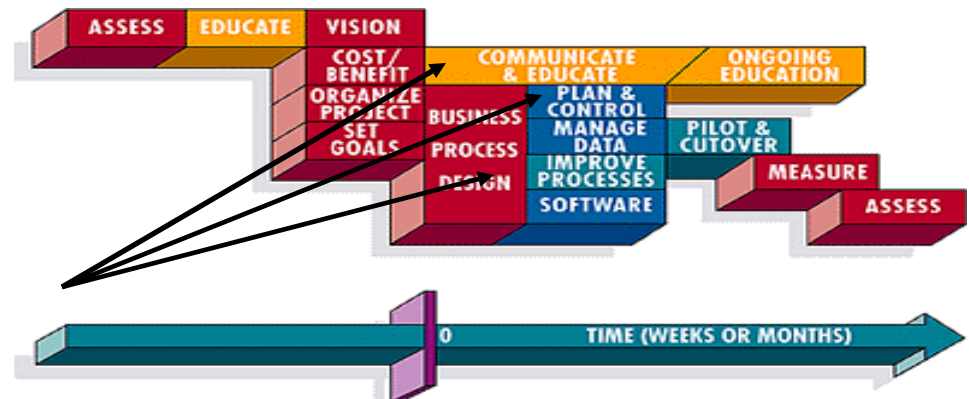
# Analysis of customer's requirements

- **Participants:** external consultants and “super-users”
- **Goal:** knowledge of the customer requirements as to both the IS and organizational flows → direct interviews to top management and users
- **Operative procedures:** analysis of customers' procedural flows by ext. consultants
- **Output:** getting full knowledge of customer's reality → feasibility study → requirements and constraints → re-definition of information flows → identification of areas and procedures to be improved
- **Extent of End-Users' involvement:** kept informed about project progress, involved, if necessary.



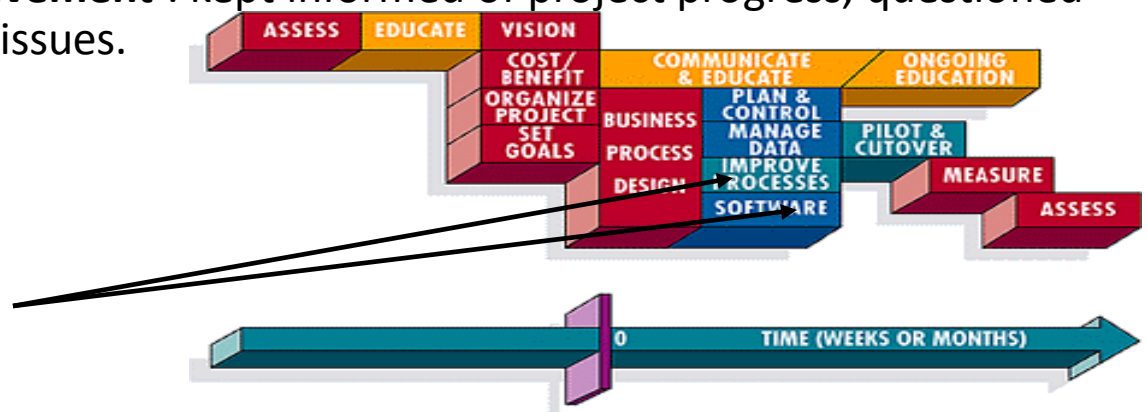
# Presentation and discussion of the requirements

- **Participants:** Top management, project team, project leader, external consultants
- **Goal:** to agree about the likely ways of covering customer's requirements with the existing (standard) software functionalities. Possible proposals about development issues and flows to be re-engineered are shown and discussed
- **Operative procedures :** Analysis of both the technical proposals and the appraisal for the whole implementation.
- **Output :** **Definition of an exhaustive and detailed project plan.**
- **Extent of End-Users' involvement :** kept informed about project progress.



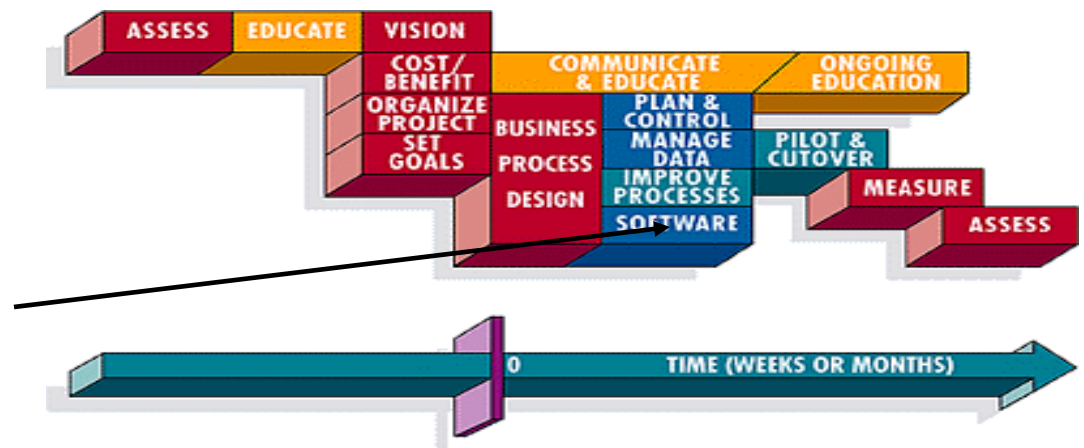
# Detailed analysis

- **Participants** : “super users” (all), IS resources and the external consultants.
- **Goal** : detailed examination of the existing functionalities proposals by the vendor about
  - the existing functionalities that are not included in the software package
  - the new functionalities that are not included in the package
  - the definition of the final result and the implementation priorities
- **Operative procedures** : meetings with “super users” to compare the existing procedures with the best practices embedded in the software package
- **Output**: Official documents describing the functionalities to be implemented. Brief summary of the customizations required and evaluation of time and costs. Plan for managing organizational changes.
- **Extent of End-Users' involvement** : kept informed of project progress, questioned about specific procedural issues.



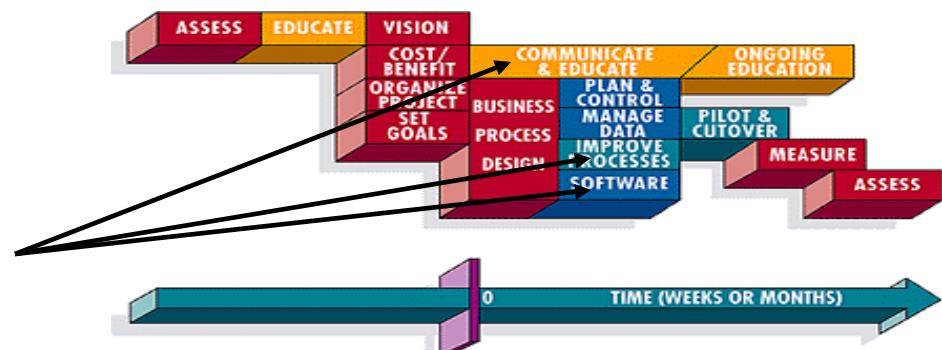
# Customization analysis and implementation /1

- **Where** : analysis, final tests and acceptance → by the customer  
development and test → by the vendor
- **Participants** :
  - Analysis: “super users”, IS department, external consultants
  - Definition of specifications: IS department and ext. Consultants
  - Development: ext. consultants
- **Goal** : micro-analysis and implementation of the customizations which were **previously agreed/approved with/by the customer**



# Customization analysis and implementation /2

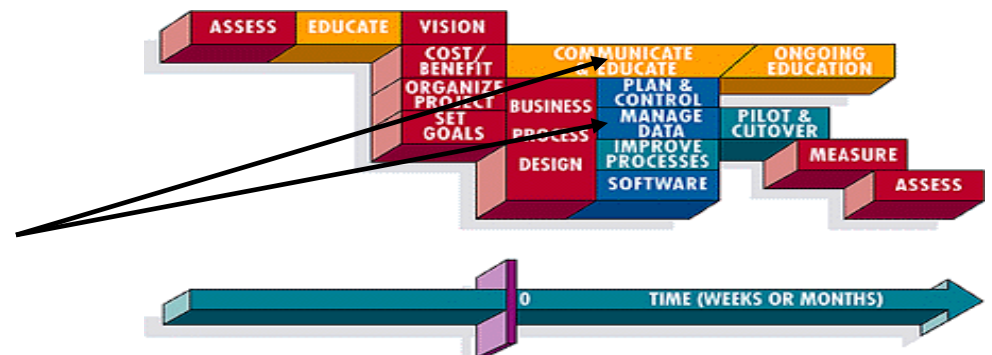
- **Operative procedures :**
  - **Ext. consultants:**
  - detailed analysis of the specifications for both the implementation and the customizations, hard coding of the new functionalities → external and internal test → implementation at the customer
  - **Customer:** takes part to the analysis, tests and deliberates the developed software which is subject to verification. Definition and formalization of the organizational procedures
- **Output :** micro-analysis specifications, reports of acceptance, organizational procedures.
- **Extent of End-Users' involvement:** kept informed of project progress and questioned about specific procedural issues.





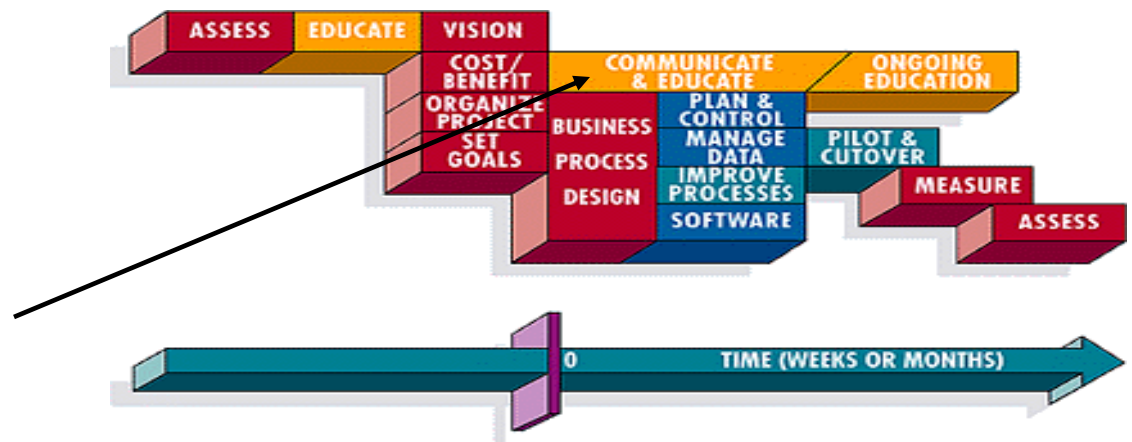
# Data retrieval from legacy systems

- **Participants** : IS department, Ext. Consultants, Users only if a manual retrieval is required
- **Goal** : definition of the procedures for data migration, enabling the customer to get the required procedure (software-based or manual) ready.
- **Operative procedures** : Joined analysis, Hard coding by the customer's IS department of software procedure suitable with the legacy systems.
- **Output** : Software or manual procedures: → defined, tested, repeatable
- **Extent of End-Users' involvement** : kept informed of project progress, questioned about specific procedural issues or other issues.



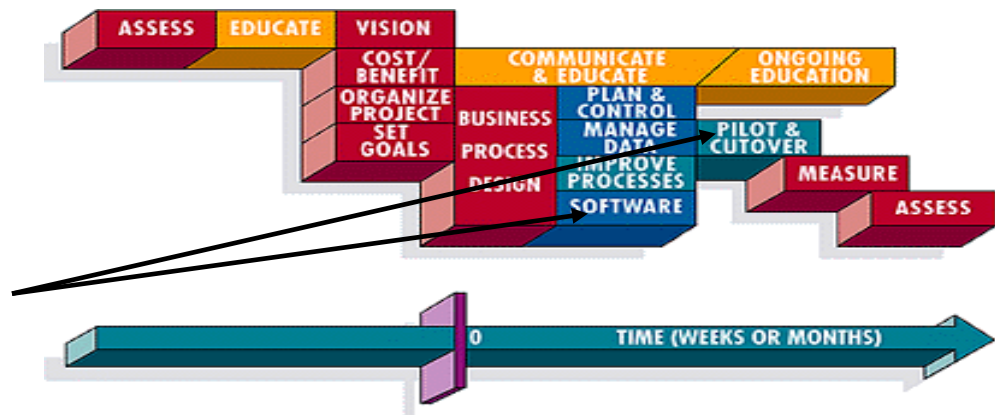
# Training

- **Participants** : Ext. consultants, End users, super users, IS department
- **Goal** : to show the ERP systems, get the end users trained on the new functionalities they will be in charge of.
- **Operative procedures** : test standard and/or custom procedures on practical data.
- **Output** : enable the end users to make use of the new software in its final configuration.
- **Extent of End-Users' involvement** : Education and training



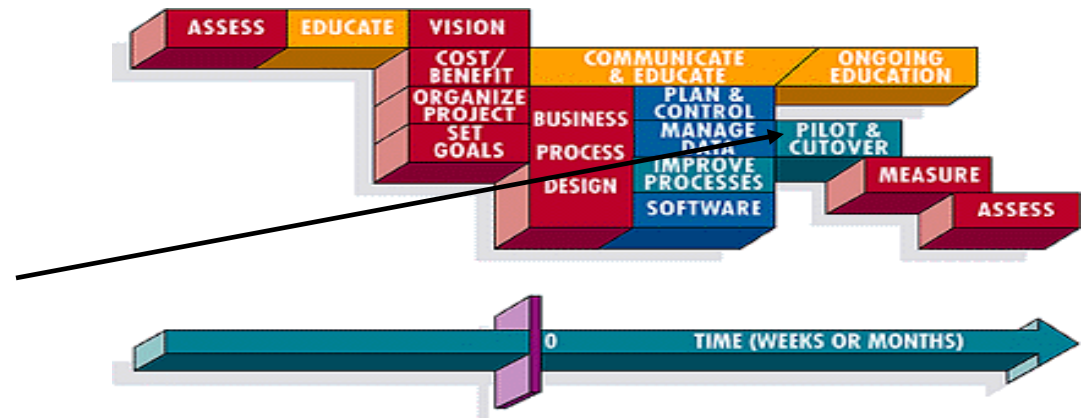
# “Go Live” advice

- **Participants** : Ext. consultants, super users, IS department
- **Goal**: definition and timing of system set-up
- **Operative procedures** : loading of parametrization data loading (i.g. Master account, re-order points..)
- **Output** : Ready for the actual “go-live!”
- **Extent of End-Users' involvement** : full involvement.



# “Going live”

- **When:** a definitive and likely date has to be defined
- **Participants:** Ext. consultants, End users, super users, IS department
- **Goal :** “go live” with the new system.
- **Operative procedures :** Closing activities on the old system, data migration, monitoring of “go live”.
- **Output :** Actual “go live”, definitive shut down of the old system, customer acceptance.
- **Extent of End-Users' involvement:** full involvement



# Shift from the project team configuration to the End-Users' support service

- **When:** at the end of the “go live” period
- **Participants :** Ext. Consultants, IS department
- **Goal:** to keep the customer and the external support service in touch → regular maintenance.
- **Operative procedures:** each users' request has to be managed by a person in charge of the relationship with the external support service → Periodical report to end users about the current state of their requests.
- **Output :** Final report concerning the end of the project.

# ERP adoption: scheduling /1

- **Month 1&2:** analysis of the general requirements and of the organizational issues (planning)
- **Month 2:** implementation of accounting, finance, quality, warehouse, active/passive cycle modules
- **Month 2:** beginning of the functional activities (procedures)

# ERP adoption: scheduling /2

- **Month 3 & 4:** completing the activities of functional analysis, definition of the specifications, beginning of training and customization activities
- **Month 5, 6 & 7:** carrying on training activities on accounting, finance, quality, warehouse, active/passive cycle modules
- **Month 7:** implementation of customizations

# ERP adoption: scheduling /3

## **Month 8, 9 & 10: “go live”**

- Accountability, Finance & Control
- Active/passive cycle
- Quality
- Warehouse & Logistics
- Production management

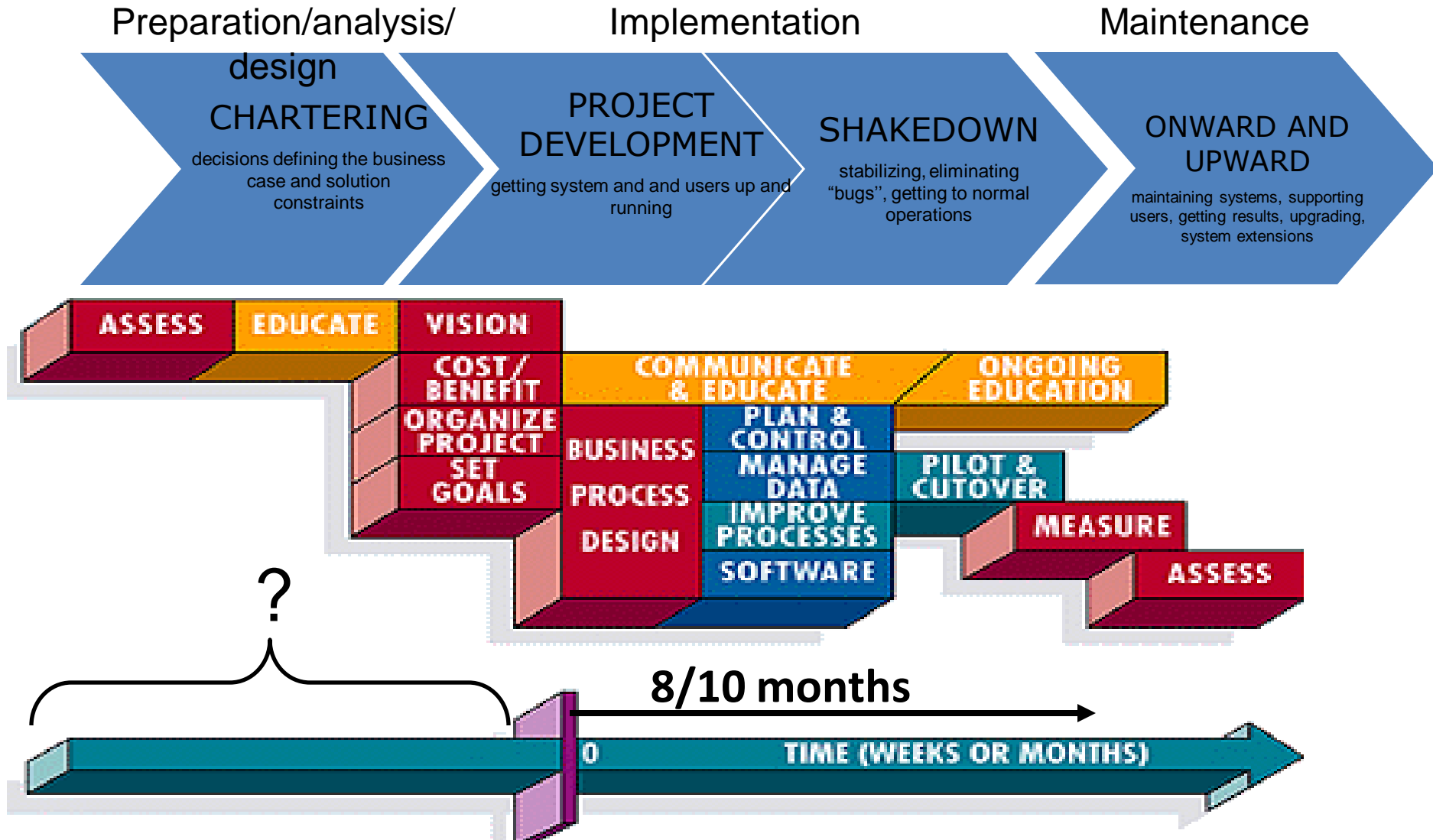


# ERP adoption: scheduling /4

## **Month 10, 11 & 12: Go live**

- Production planning and control
- Treasury
- Any other “non core” module (i.g. PLM, BI..)

# ERP adoption: an hybrid approach (adoption cycle + Proven Path)



# An ERP System

## Development Methodology /1

- Phase 1: Planning
  - ERP oversight committee
  - Project team
- Phase 2: Analysis
  - Collection of requirements from in-house work groups
  - Identify business reengineering initiatives
  - Select vendors
  - Prototypes may be developed

# An ERP System Development Methodology /2

- Phase 3: Design
  - Interfaces determined
  - Hardware design
  - Middleware issues
  - End users trained
- Phase 4: Implementation
  - Installation
  - Configuration into cohesive system

# An ERP System Development Methodology /3

- Phase 5: Support
  - Training
  - Maintenance

# Special Topics on ERP Development /1

- Select a comprehensive package
  - Preliminary evaluation
  - Detailed evaluation
  - Vendor presentations
  - On-site visits
  - Final decision

# Special Topics on ERP Development /2

- Linking applications to an ERP package
  - Purchasing middleware
  - Select software vendors that partner with ERP packages
  - Vendor-provided or in-house link development
- Using ERP packages for application development
  - Investigate vendor-supplied development tools
  - Developers often become system integrators