

I.T.U. Faculty of Architecture  
Division of Construction Management  
**Construction Management and**

## **ECONOMICS COURSE**

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**Introduction to Construction  
Management**  
**Basic Concepts**

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# Basic Concepts

Project is defined as the set of production activities that:

- is fulfilled just once (unique),
- is not repeated (non-repetitive)
- has a pre-defined duration and start and finish time,
- has a pre-defined budget,
- Is fulfilled by a temporary organization

# Project

(batch size)

high

med

low

low

medium

high

(volume)

projects

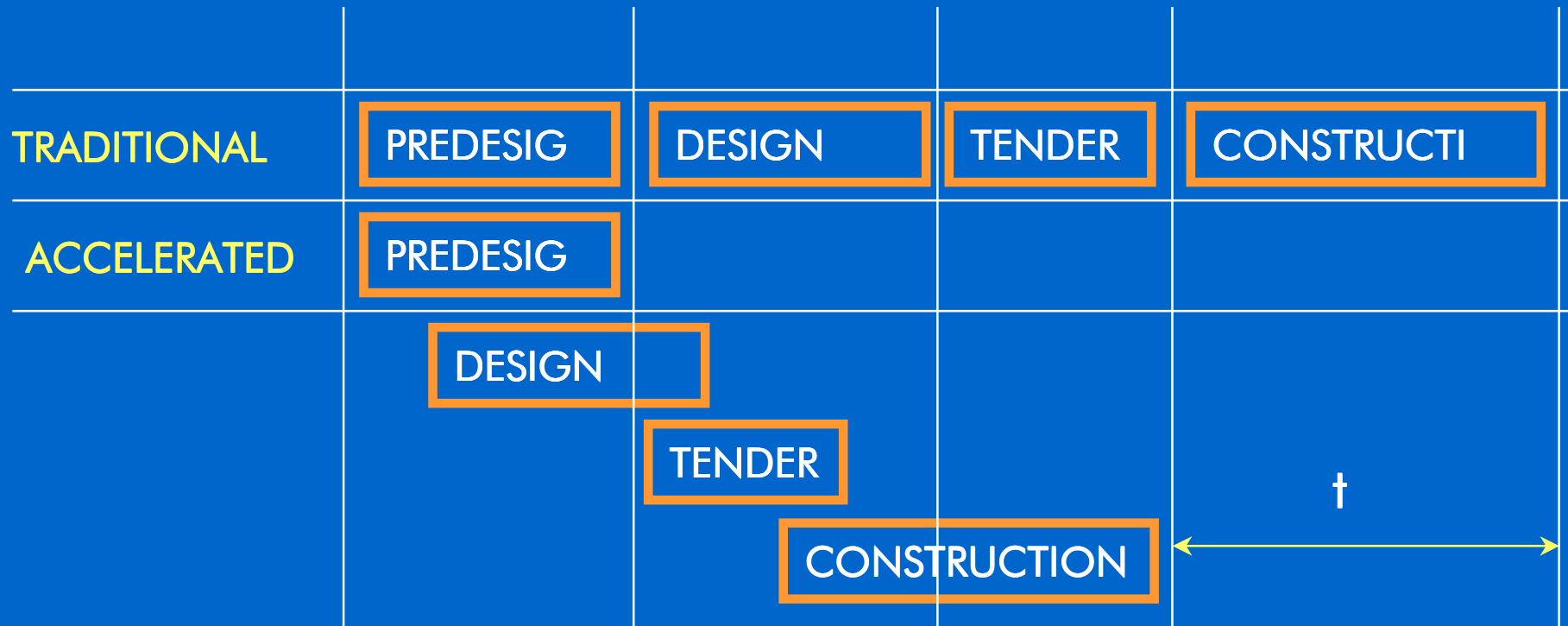
batch systems

mass  
production  
systems

# Phases of building production process

- Initiation,
- Pre-design,
- Design,
- Bidding,
- Tendering,
- Contracting,
- Construction,
- Close out,
- Operating,
- Demolition.

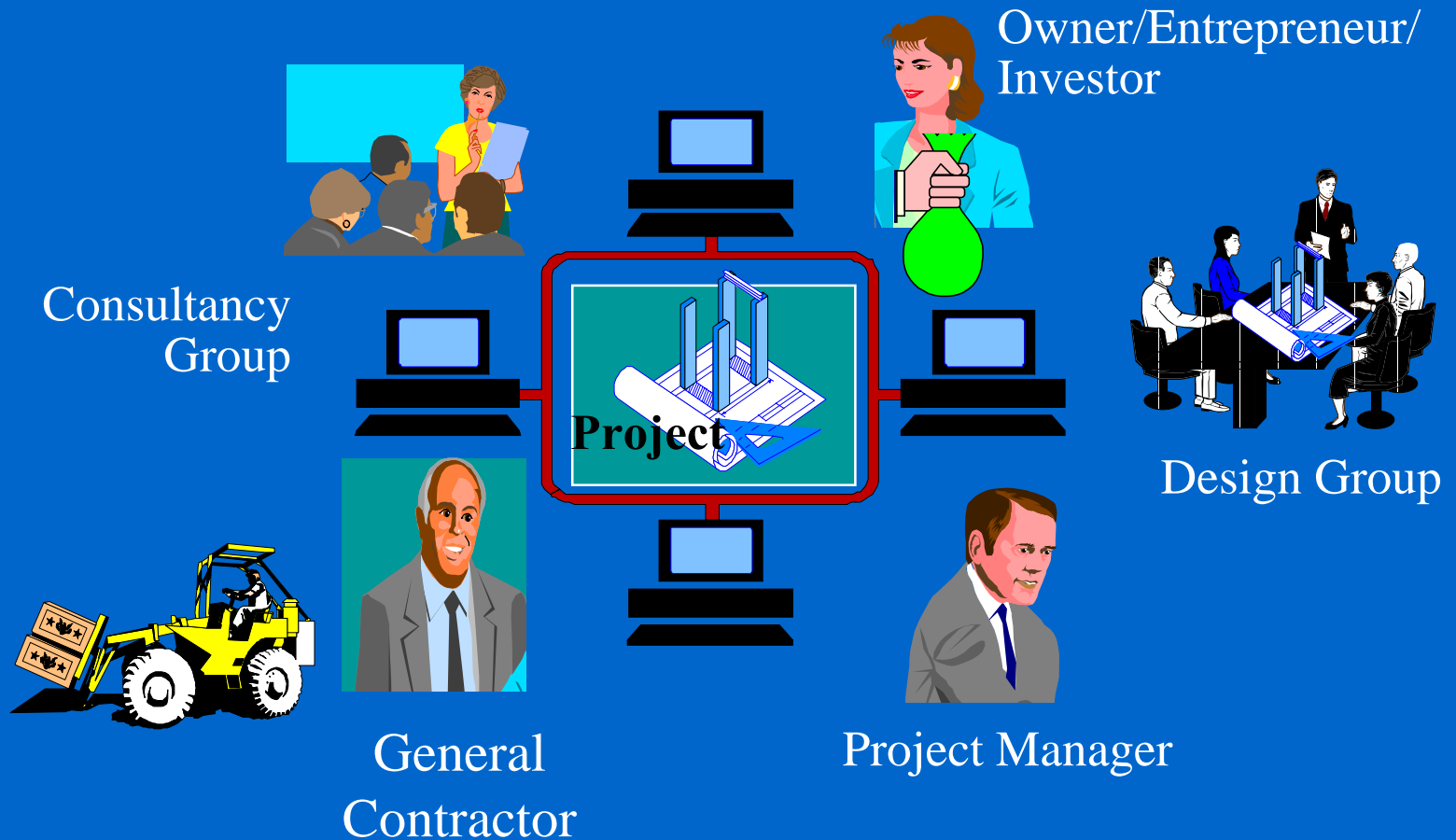
# Alternative processes



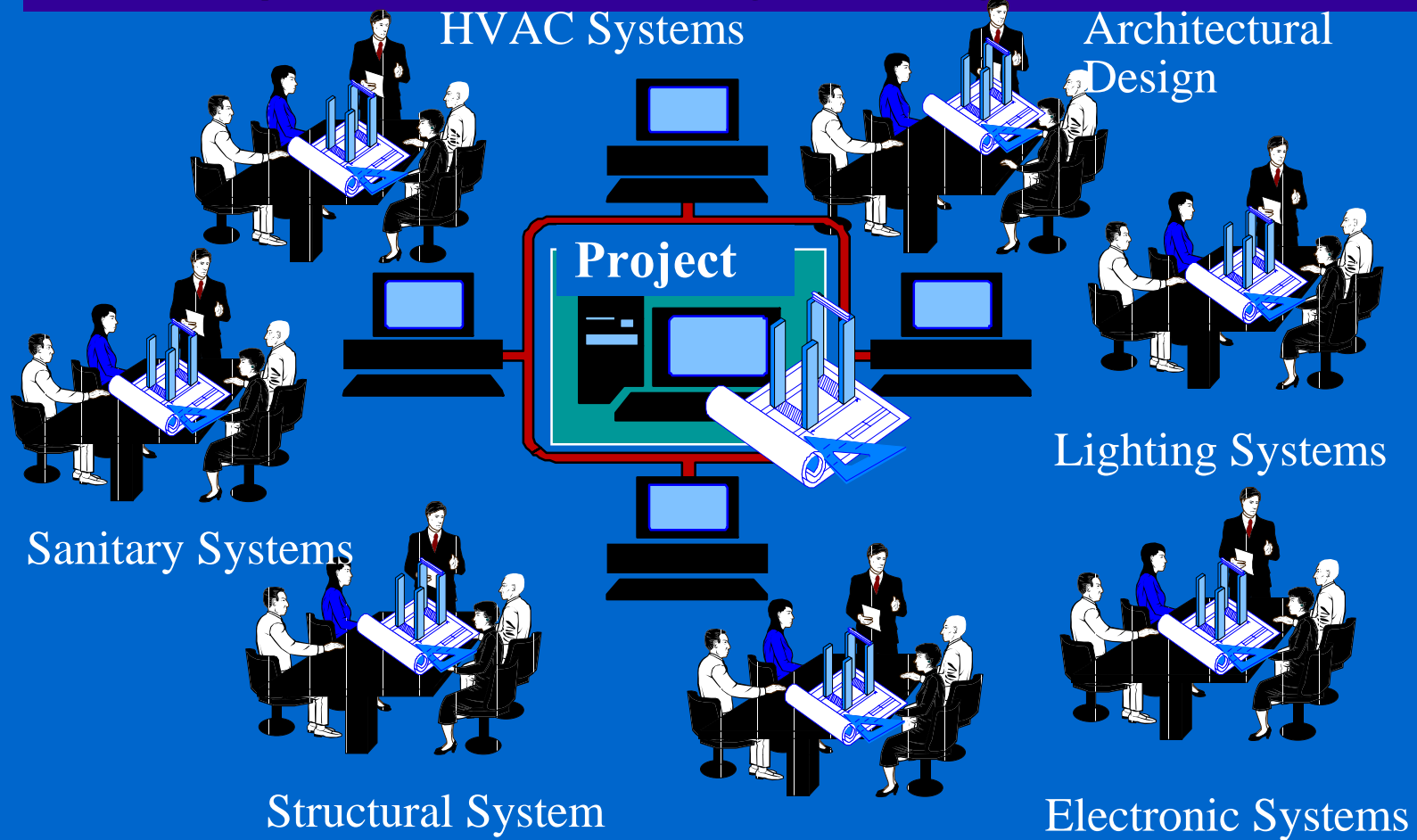
# Participants of building production

- Entrepreneurs
- Designers
- Consultancy Companies
- Suppliers /Vendors
- Contractors / Sub-contractors
- Software Developers
- Education Foundations
- Research Foundations
- Information Providers
- Public Authorities
- etc.

# Participants and their roles



# Participants of design stage





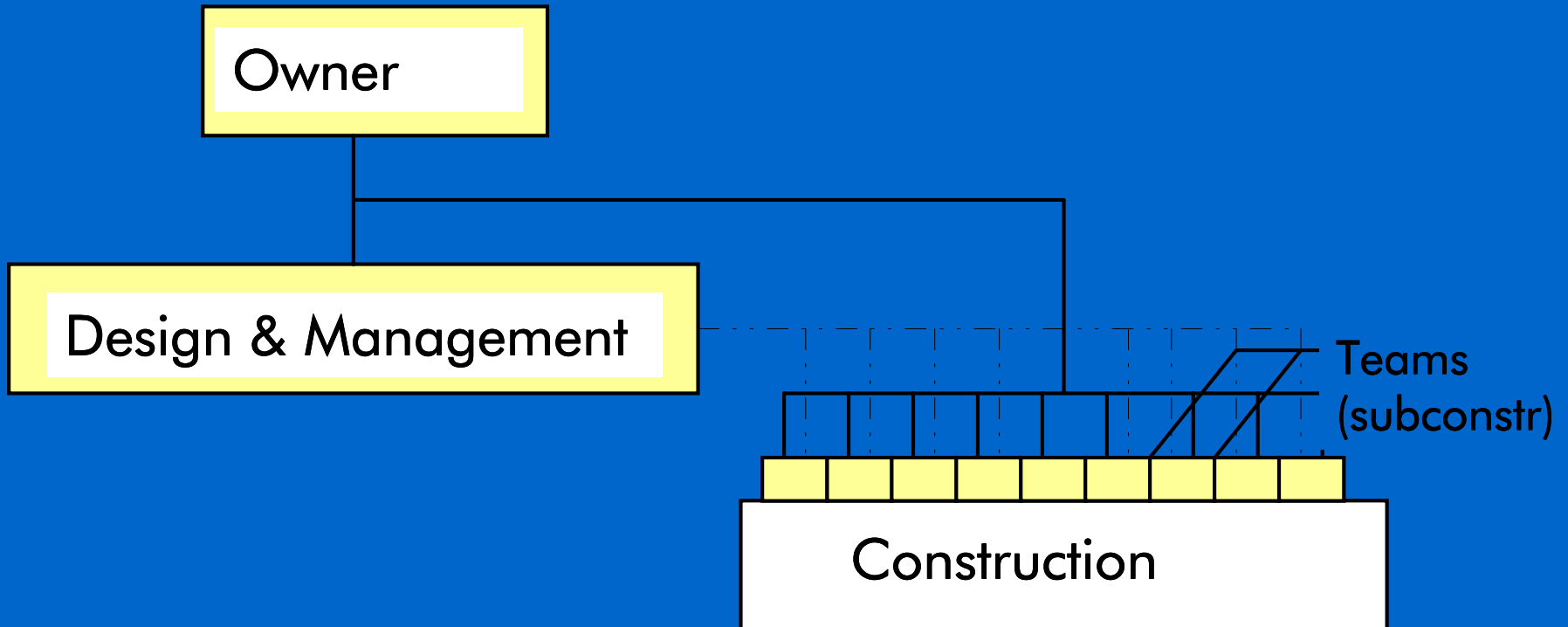
# Participants and roles (design+build)

Owner

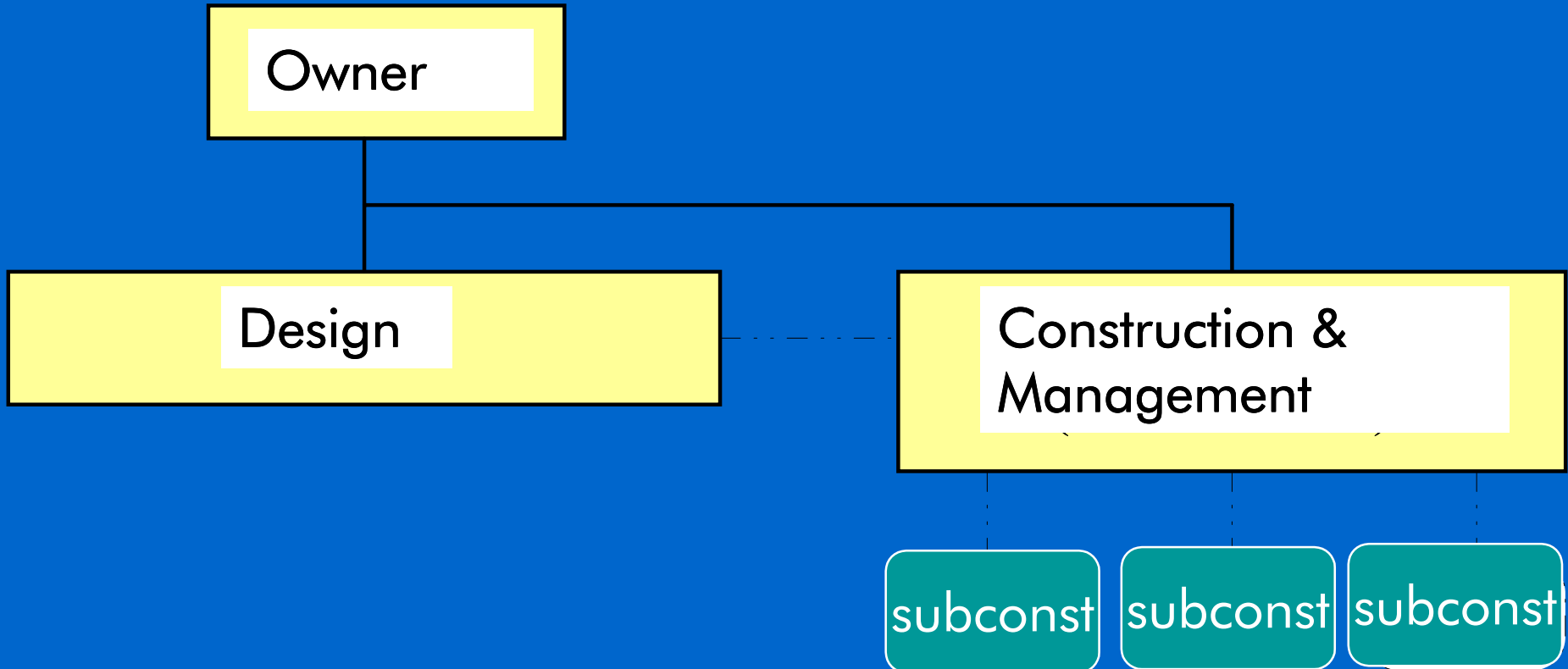
BENNETT, John, *International Construction Project Management - General Theory and Practice*, Oxford: Butterworth-Heinemann), 1991

Design, Management, Construction

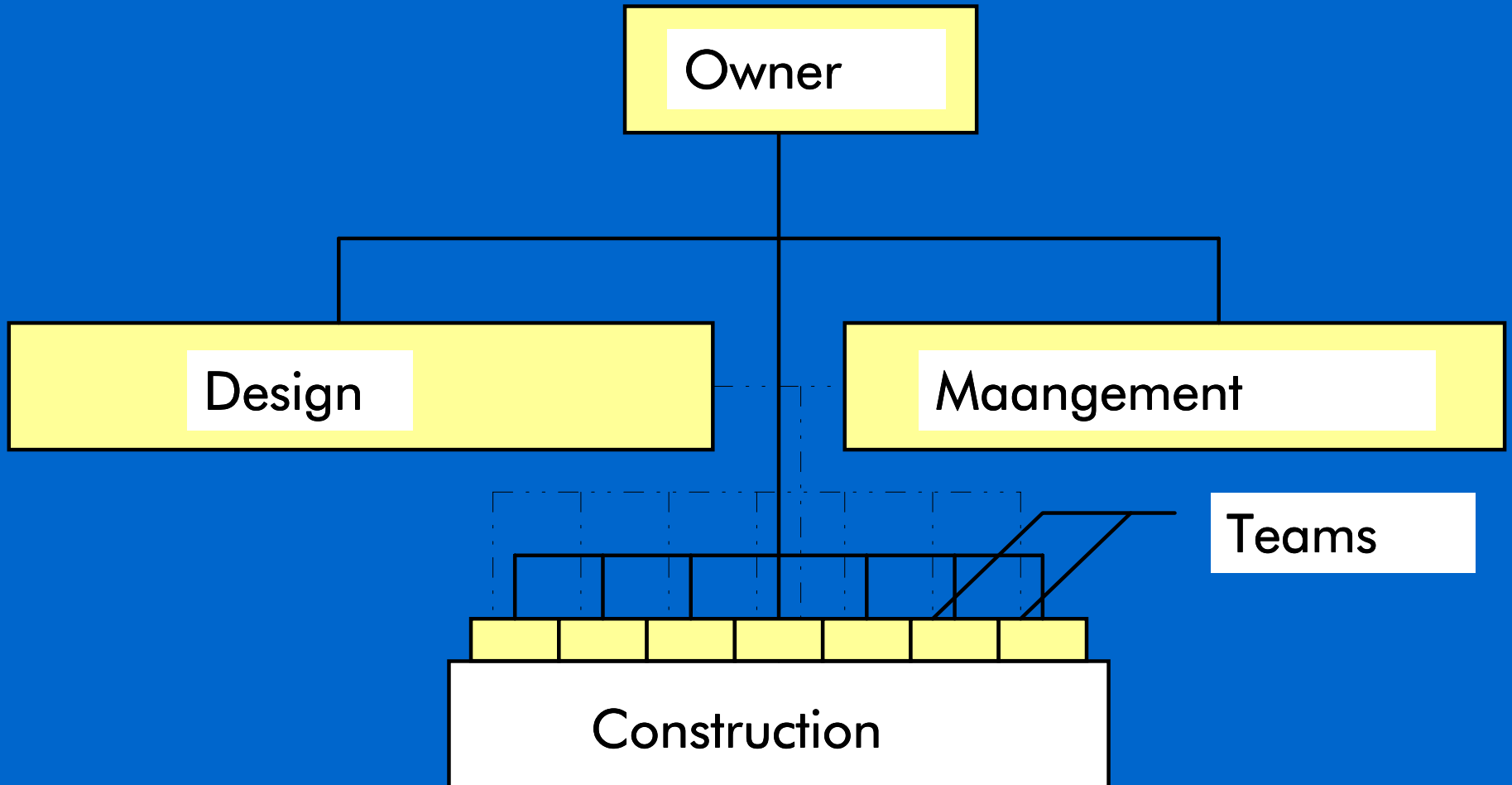
# Participants and roles (separate trades)



# Participants and roles (general constructor)



# Participants and roles (construction manag.)



# Management of Construction Projects

Management of Construction Projects is defined as:

- ✓ planning,
  - ✓ organizing,
  - ✓ executing, and
  - ✓ controlling,
- 
- managing

of a construction project from beginning to the end of building production process by considering,

- ✓ duration,
- ✓ cost, and
- ✓ quality

limitations given by the client.

# Basic problem areas in CM

