



# Overview of Facility Construction Market

- Enormous market
- Public and private sector
- Wide range of discrete industries
  - Multifamily housing
  - Hotels & casinos
  - Correctional facilities
  - Office buildings
  - Manufacturing & laboratories
  - Hospitals & healthcare

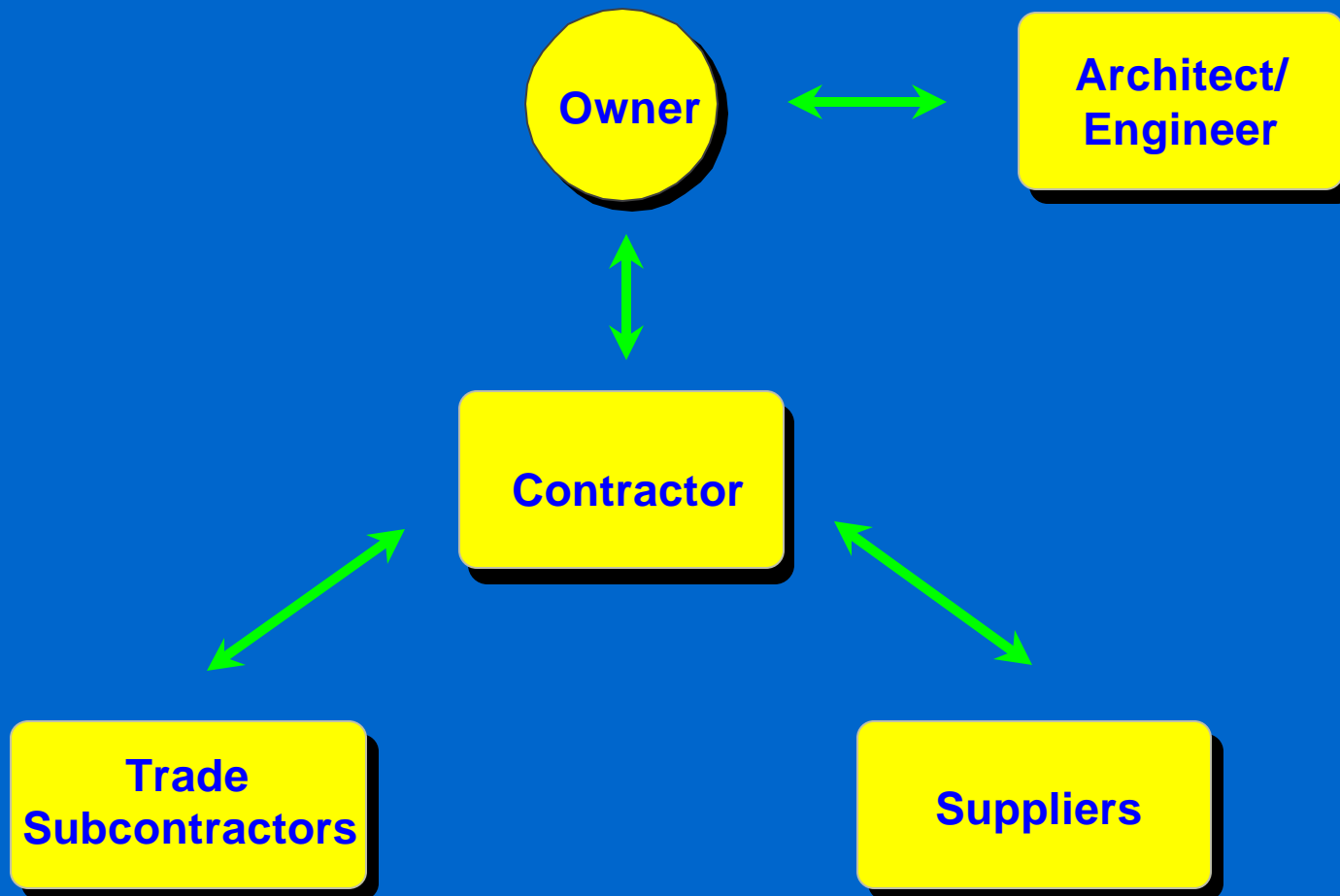
# Contracting Issues: Facility vs. Process Markets

- Role of aesthetics
  - Architect's role
  - Creation of unique projects
- Measuring cost & time metrics
- Owner sophistication
- Use of standard form industry contracts
- Characteristics of prime contractor

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- # Delivery Approaches: Facility Construction

- **Traditional approach**
  - Separation of design and construction
  - Low bid, lump sum
- **Movement to team integration**
  - Construction management
  - Design-build

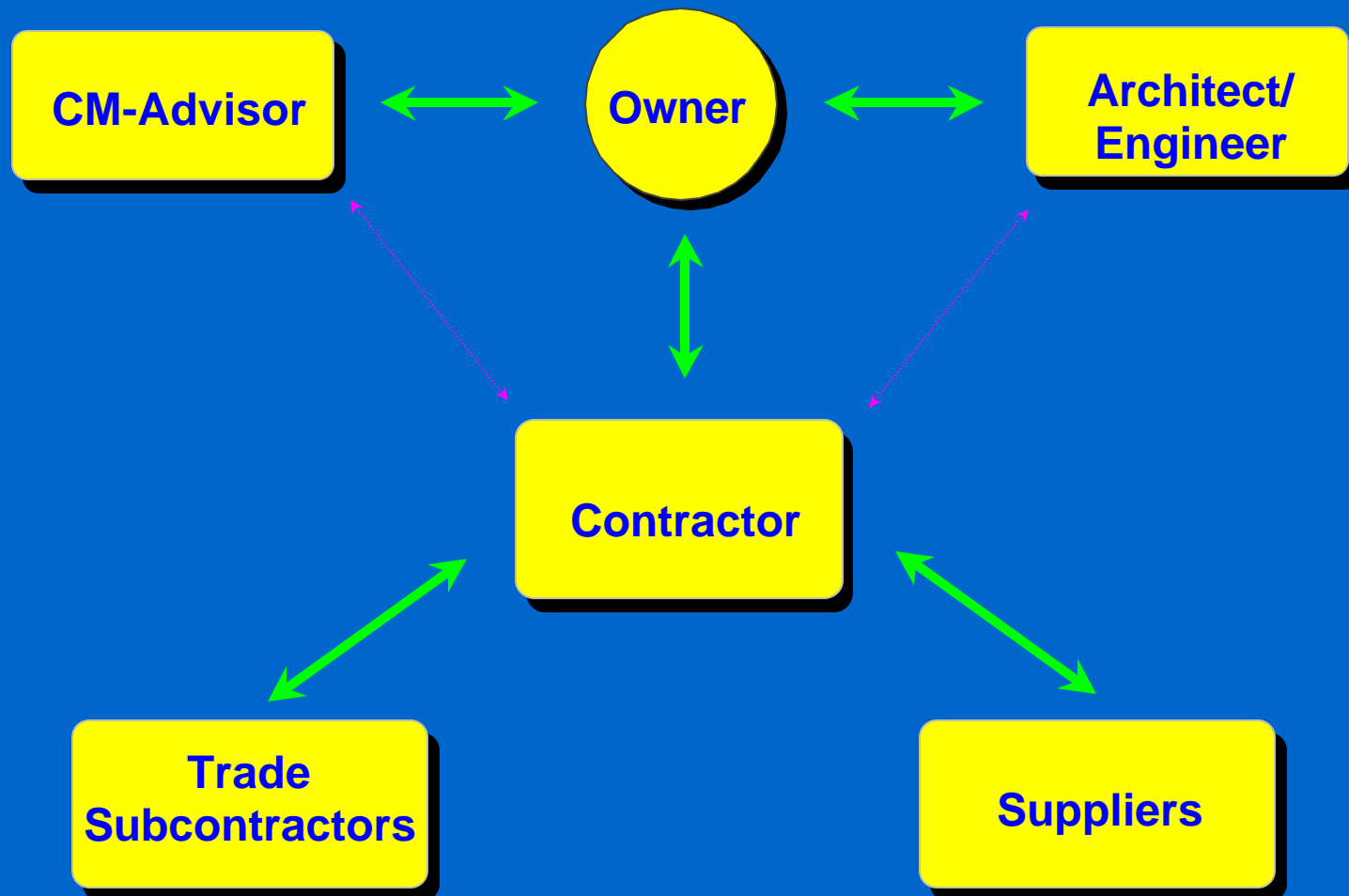
# Traditional Approach



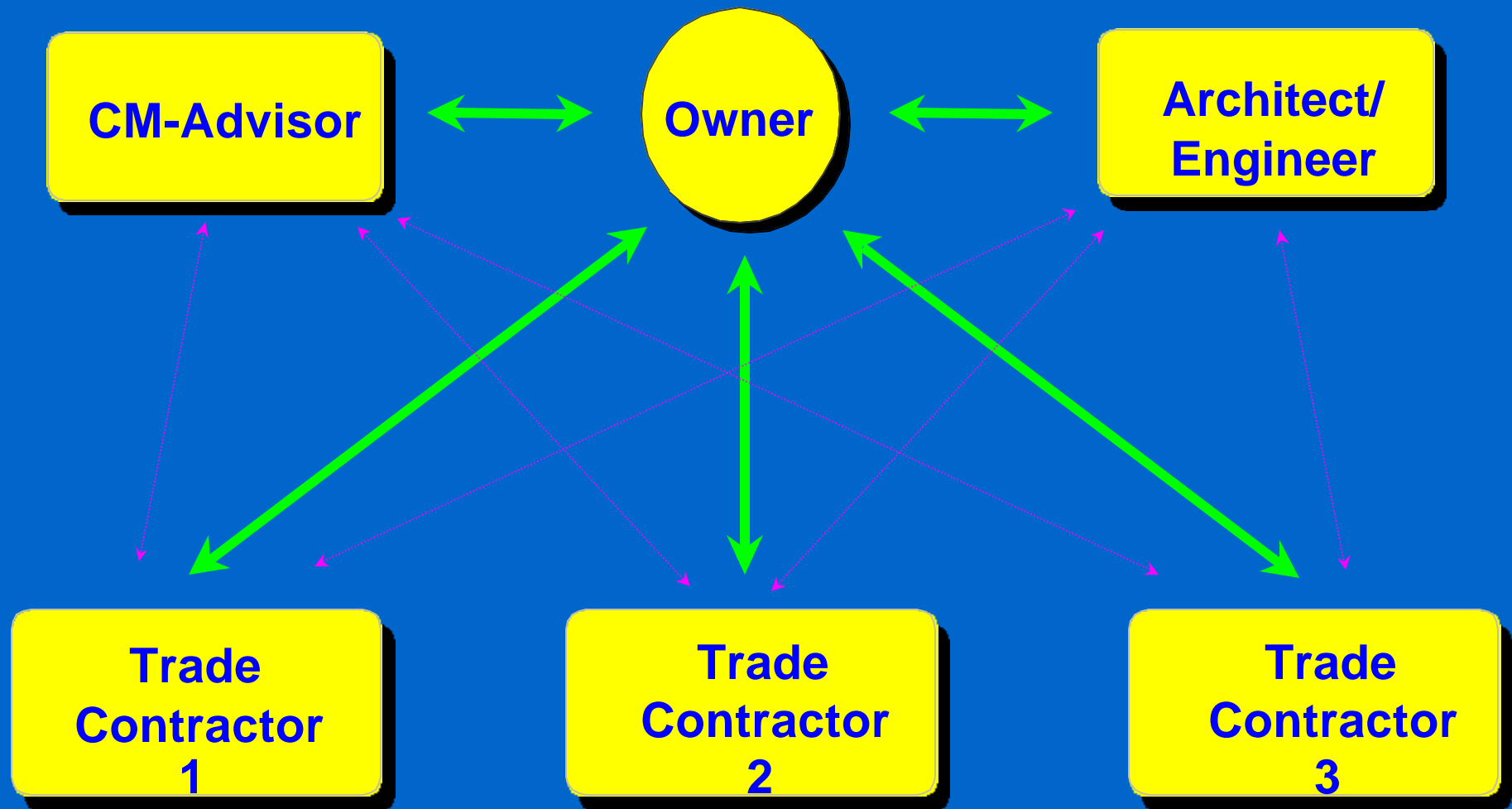
# Problems with Traditional Approach

- Non-integration of team
- Qualifications secondary to price
- Lack of accountability
- Inability to fast-track
- Late contractor involvement
- Infighting among team

# CM- Advisor (Type 1)

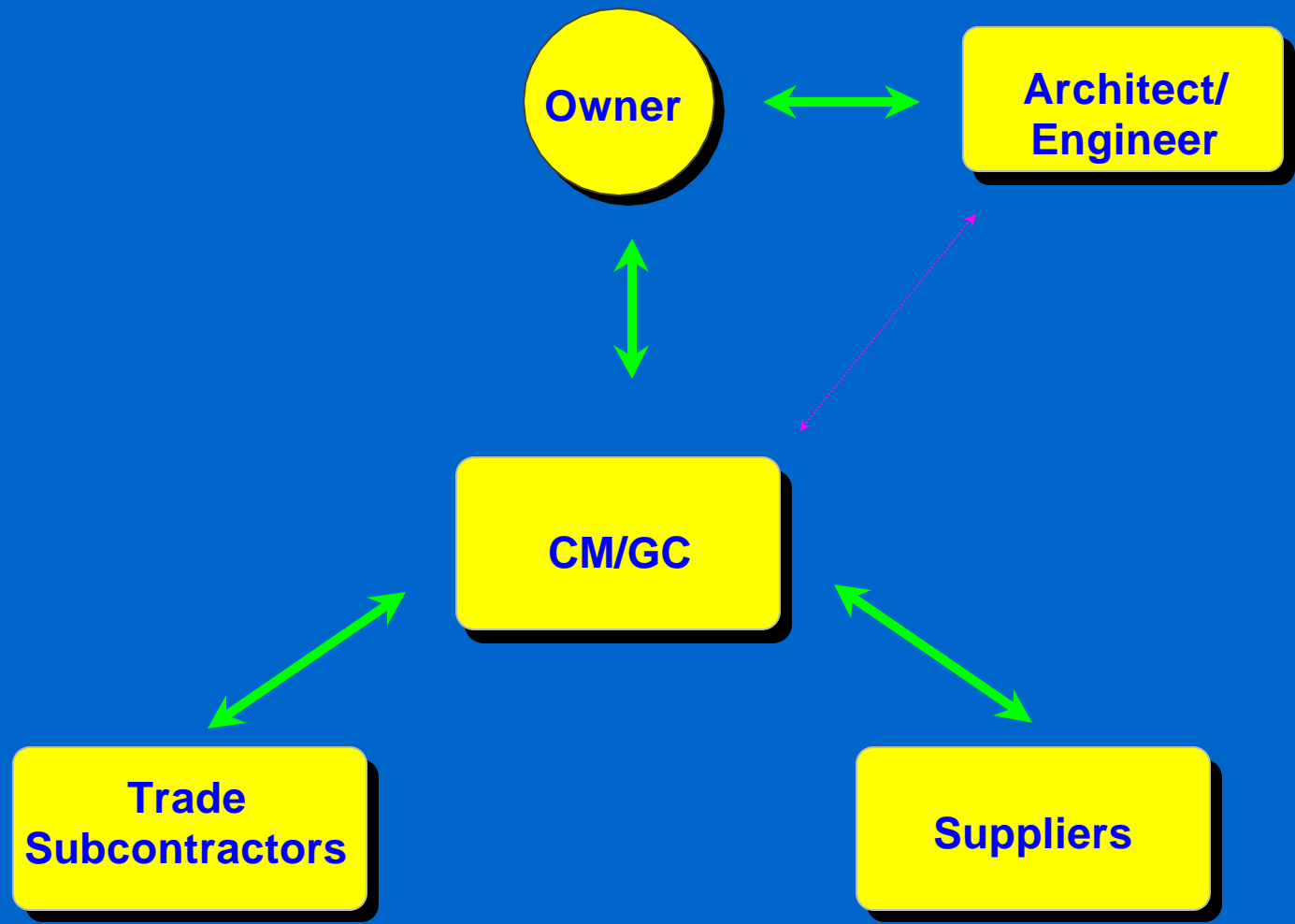


# CM- Advisor (Type 2)





# CM/GC

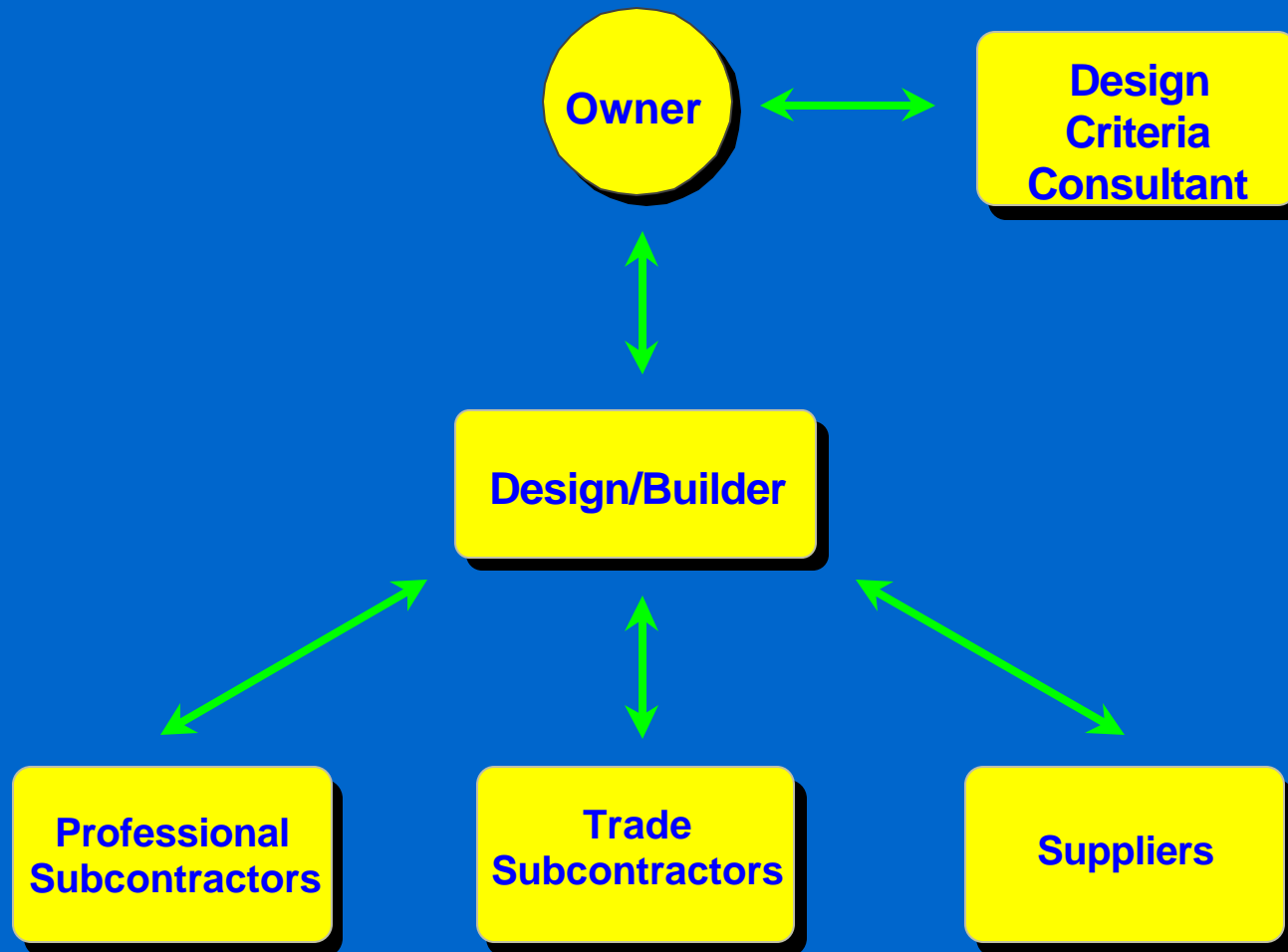


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# Construction Management: Partial Team Integration

- Professional management
- Negotiated procurement
- Early contractor involvement
- Cost-based (GMP) contracting
- General contractor as broker
- Owner's unrealistic expectations of perfection

# Design-Build



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# Design-Build: Full Team Integration

- **Single point of responsibility**
- **Early firm pricing**
- **Need for speed**
- **Lack of Owner resources to manage process**
- **Public sector endorsement**

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## **Team Integration: Reasons for Success**

- **Relationships enhanced**
- **Scope of project better defined**
- **Selection of qualified players**
- **Owner's drivers better understood**

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- # Studies of Facility Contracting Practices

- Sanvido/Konchar study for CII
- 351 facility projects
- Delivery systems considered:
  - traditional
  - at-risk CM
  - design-build

# Attributes of Best Performing Projects

- Adequate to excellent ability of owner to make decisions
- Adequate to excellent scope definition
- Excellent team communications
- Qualified contractor pool
- High ability to restrain contractor pool through prequalification & shortlisting

# Attributes of Worst Performing Projects

- Contractor engaged late in design process
- Limited or no prior team experience
- Onerous contract clauses
- Poor ability to make decisions
- Did not prequalify bidders



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- **Facility Team Integration:  
Impact on Contracting Practices**

- **Product mentality of Owner**
  - Pressure on A/E for perfection
  - Parties not used to pricing risk
- **Move to performance specifications**
- **Determining when to set the price**

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# Facility Team Integration: Impact on Contracting Practices (cont'd)

- Incentives
  - few early completion bonuses
  - lots of cost savings provisions
  - consideration of creative quality incentives
- Public sector procurement changes
- Teaming arrangements between A/Es and contractors

# **Conclusion: Contracting Strategies Make a Difference**

- **Delivery system facilitates, but does not ensure, success**
- **Balance procurement and delivery approaches**
- **Need reasonable allocation of risk**
- **Understand project and owner drivers**
- **Establish early integration of design and construction teams**