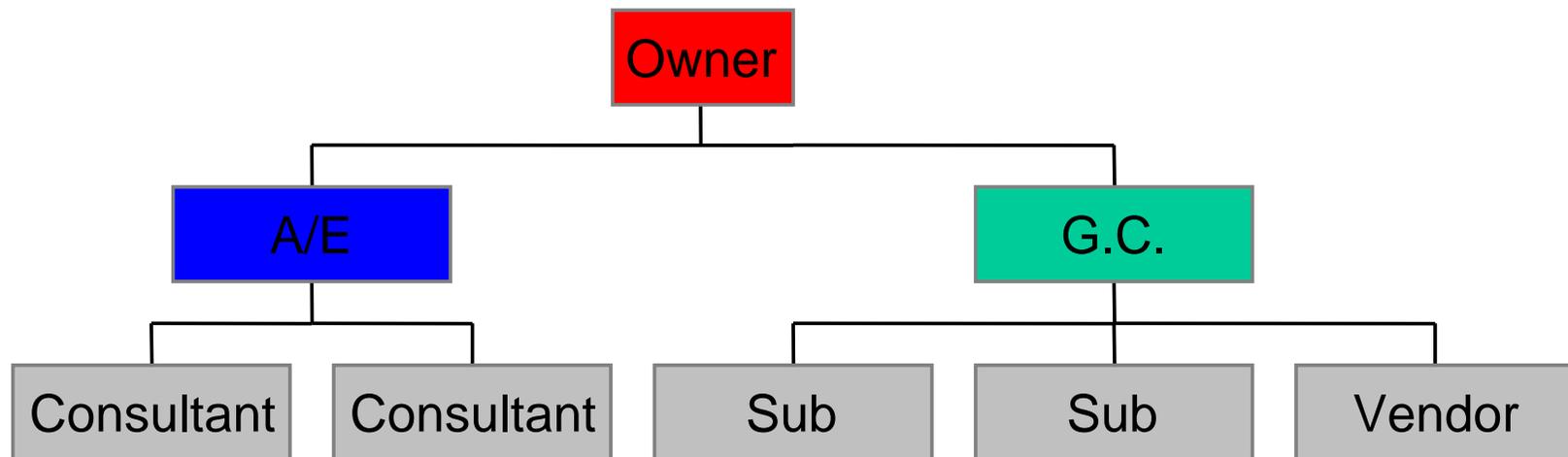


CONSTRUCTION PROJECT DELIVERY SYSTEMS:

What They Really Mean,
and How They Really Work

By: Mark C. Friedlander

Traditional Tri-Partite Structure



Advantages

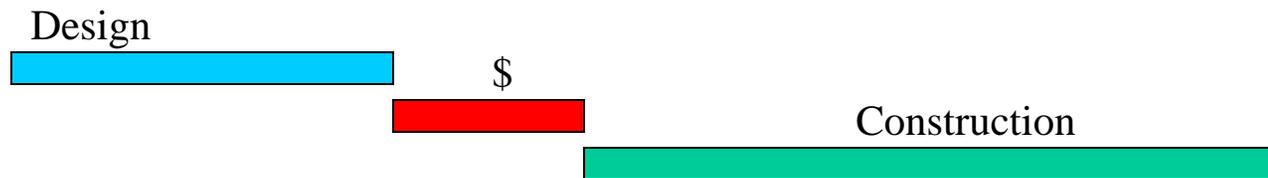
- It is common, so the marketplace is comfortable with it.
- Plans are usually complete prior to bidding or final pricing.

Disadvantages

- Often little contractor input during design.
- Slower delivery time due to back-to-back phasing.
- Often adversarial relationship between G.C. and A/E.
- Price and schedule information obtained late.

Traditional vs. Fast Tracking

Traditional



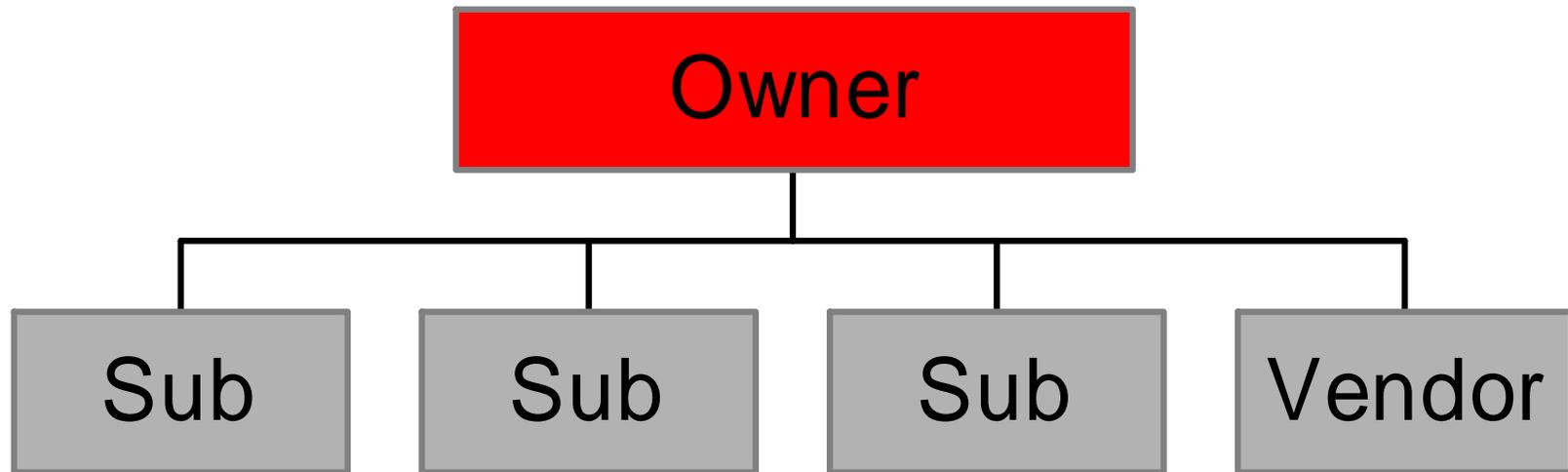
Fast-tracked



Advantage: Delivery Speed

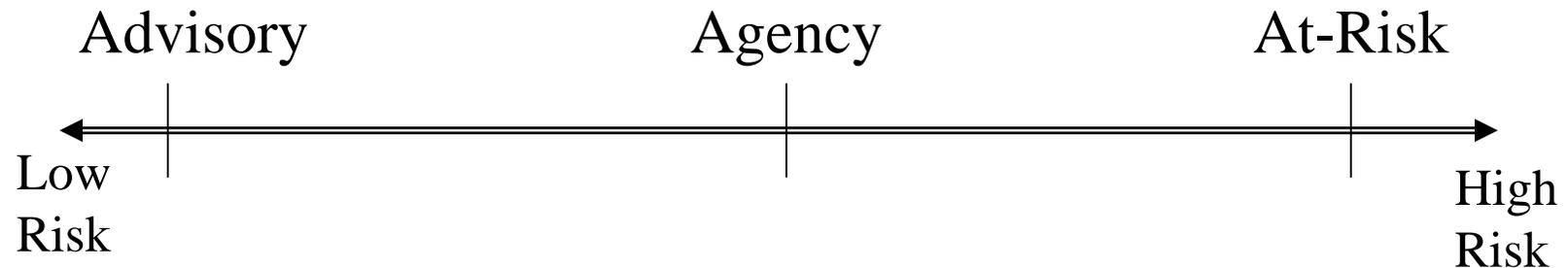
Disadvantage: Loss of Cost Control

Multiple Prime Trade Contractors



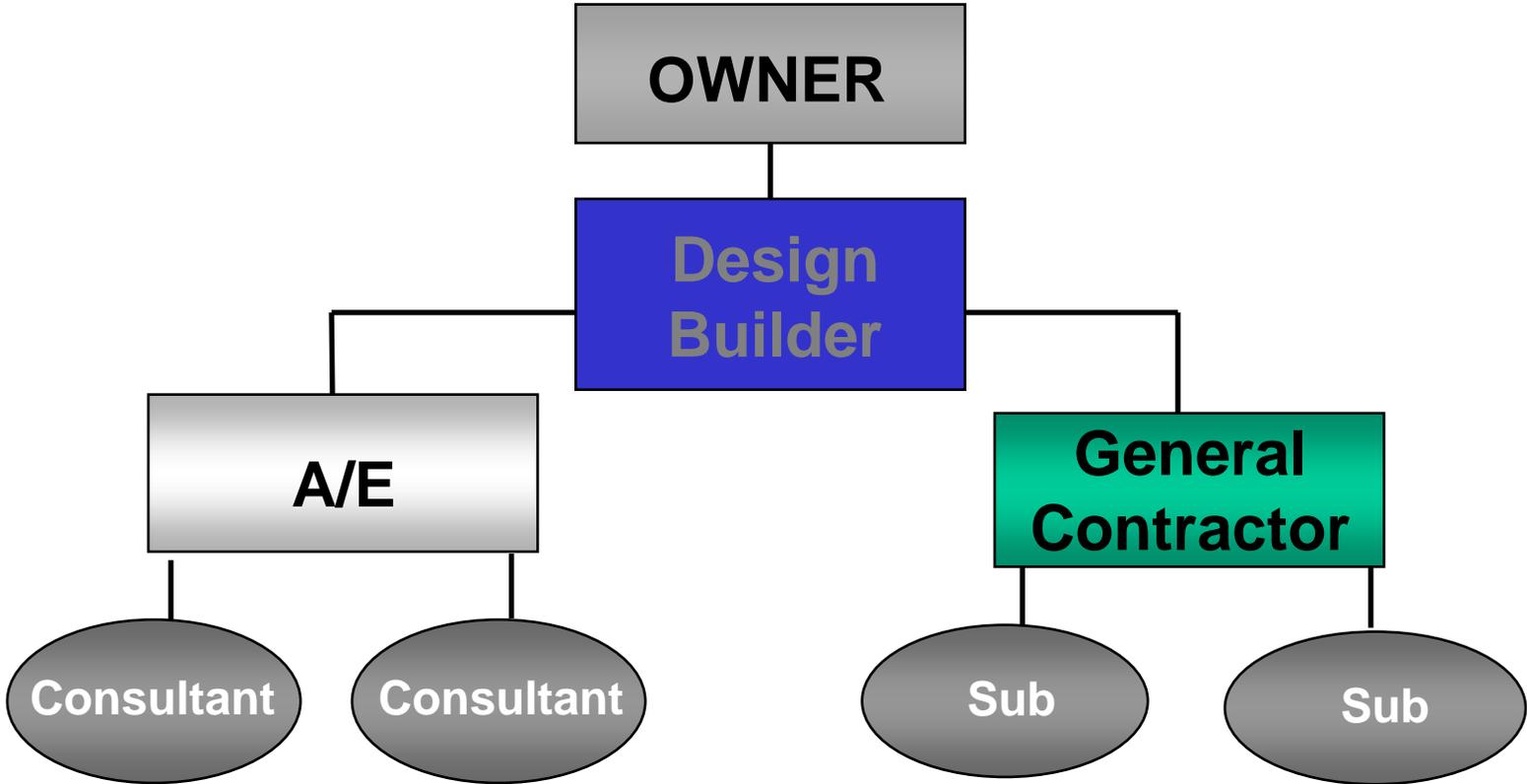
- No role for GC.
- Owners rarely able to manage and coordinate project successfully.
- Owner liable for management and coordination problems.

Risk Spectrum of Construction Management



- Most useful element of CM: Involvement during design.
- At-Risk CM similar to General Contractor
- Advisory CM is another layer of consulting.
- Agency CM is coordination and management for a fee.

Classical Design Build



Types Of Design-Build Relationships

- Integrated Company
- Contractor Prime, A/E Sub
- A/E Prime, Contractor Sub
- A/E Prime, Multiple Trade Subs
- Design-Builder Prime, A/E and Contractor Each Subs
- Joint Business Venture by A/E and Contractor

What's Different With Design-Build

- Speed of project delivery.
- Single point responsibility (for Owner).
- Greater and earlier cost certainty.
- Better communication of design intent.
- Less litigation and disputes.
- Greater control of information by design-build team.
- Negotiated pricing.
- A/E and GC not adversarial.
- Need to learn new relationships.

A New Paradigm for Providing Services

Traditional

1. A/E focuses on its deliverables
2. Defensive detailing of plans
3. A/E fully responsible for plans
4. A/E's try to minimize design alternatives
5. Check cost when CD's nearly complete

Design-Build

- Design by system with “looping” feedback with provision of out-of-sequence information
- Informal communication of design intent
- Contractor checks plans for “facial” problems
- Design-build team explores cost-saving alternatives
- Cost input throughout design process