

Construction Project Management



Procurement

Procurement



**To obtain by particular
care & effort**

Procurement

**Concepts of
Procurement**

Procurement

Includes purchasing of

equipment

materials

supplies

labor

&

services

required for construction

&

implementation of a project

Procurement

It also includes related activities of

tracking & expediting

routing & shipment

materials & equipment handling

Procurement

It also includes Related activities of

accountability & warehousing

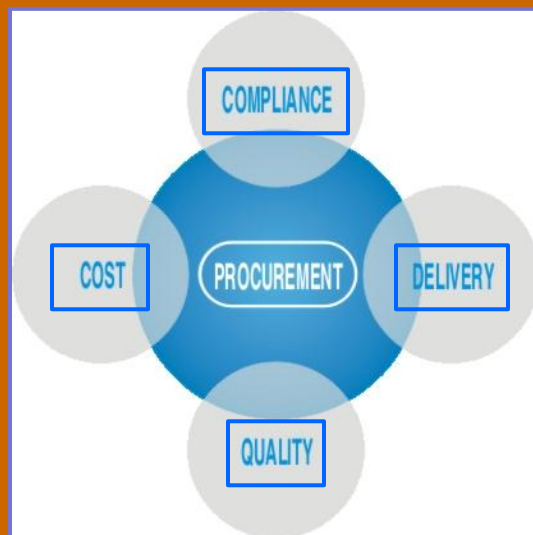
final acceptance documentation

Procurement

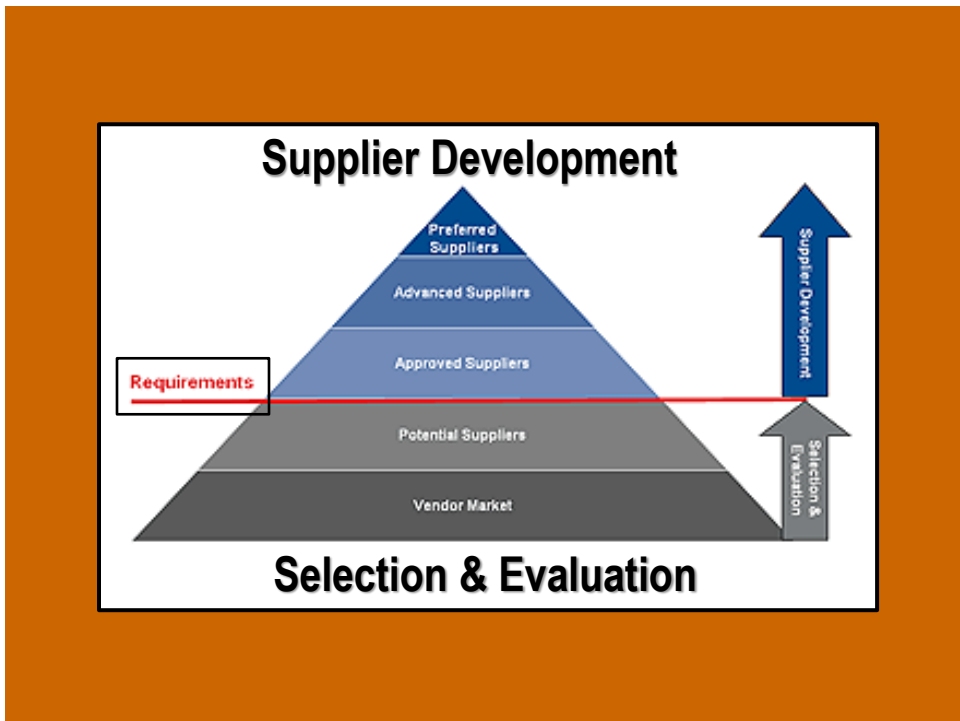
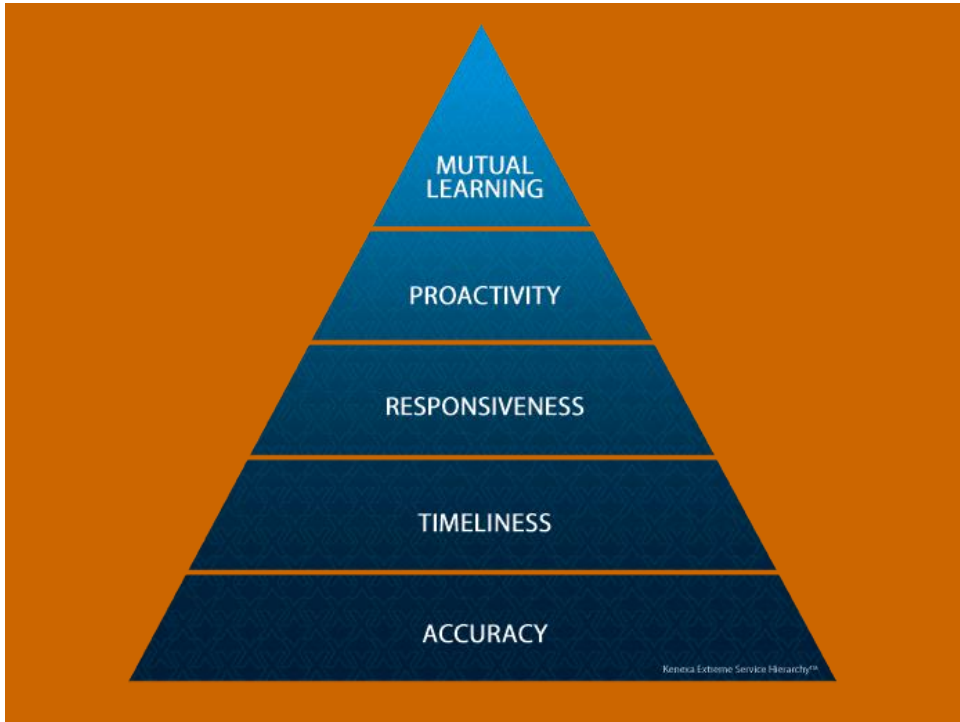
It also includes Related activities of

**ultimate disposal of
surplus items at job end**

**Procurement
&
procurement - related activities
occur during all phases
of a construction project**



Procurement



**recurring scarcities of both
manufactured goods
&
raw materials
on a domestic & worldwide basis
offer a challenge to experienced
industry professionals**

**Major procurement
for a construction project
may be handled almost entirely
by one organization
(Design - build project)**

Or may be split between

Owner designer

General contractor

&

sub - contractors

On a professional CM project

The project manager

handles procurement

of long – lead items

in order to advance

overall completion dates

**Methods & practices differ
with individual firms & projects**

**A general contractor
may receive bids from
sub – contractors,
material suppliers,
&
equipment manufacturers**

**who can refer to
completed plans & specifications
before bidding**

**On a traditional cm project
procurement practices may be
significantly different
from those of a
design – construct**

**or
turnkey firm
engaged in a
phased construction program**

**Certain basic principles
are common
to each general approach
to construction procurement**

General Industry Practices

Procurement

&

Procurement – related activities

Interface with other

project activities & controls

throughout the project's life cycle

Procurement

The Procurement Cycle

Definitions of Principal Documents

Purchasing & Contracting Practices

Relation to Other Control Systems

Control of Materials Procurement

Inventory Theory

Procurement

The Procurement Cycle

**Simple
purchases**

**Major design,
manufacturing
& shipment
Procedures**

Procurement

The Procurement Cycle

Procurement

Definitions to help understand the principal documents needed in the purchasing process

Prime Contract

Purchase Order

Sub – Contract

Agreements & Leases

Procurement

Definitions to help understand the principal documents needed in the purchasing process

Prime Contract

Procurement

Definitions to help understand the principal documents needed in the purchasing process

Purchase Order

Fig. 14-1

Procurement

Definitions to help understand the principal documents needed in the purchasing process

Sub – Contract

Procurement

Definitions to help understand the principal documents needed in the purchasing process

Agreements & Leases

Procurement

Purchasing & Contracting Practices

- 1. Requisitions**
- 2. Prequalification & Bid List Preparation**
- 3. Requests for Quotation**
- 4. Bid Receipt & Evaluation**
- 5. Recommendation for Purchase**
- 6. Award & Preparation of Documents**
- 7. Changes in Contract Documents**

Procurement

Purchasing & Contracting Practices

- 1. Requisitions**

Fig. 14-2

Procurement

Purchasing & Contracting Practices

2. Prequalification & Bid List Preparation

Procurement

Purchasing & Contracting Practices

3. Requests for Quotation

Bid Documents
(for purchase)

Compare to Bidding Documents for Work

Procurement

Purchasing & Contracting Practices

4. Bid Receipt & Evaluation

Procurement

Purchasing & Contracting Practices

5. Recommendation for Purchase

Fig. 14-3

Procurement
Purchasing & Contracting Practices

6. Award & Preparation of Documents

Fig. 14-4

Procurement
Purchasing & Contracting Practices

7. Changes in Contract Documents

Fig. 7-8

Procurement

Relation to Other Control Systems

Fig. 14-5

Reporting

Expediting

Fig. 14-6 Table 14-1

Procurement

Control of Materials Procurement

Fig. 14-7

Procurement

Inventory Theory

Purchase Costs

Shipping Costs

Holding Costs

Shortage Costs

Just In Time Inventory Management

Trade – offs

Procurement

