



دانشگاه علم و صنعت ایران

مدیریت تیمی یکپارچه

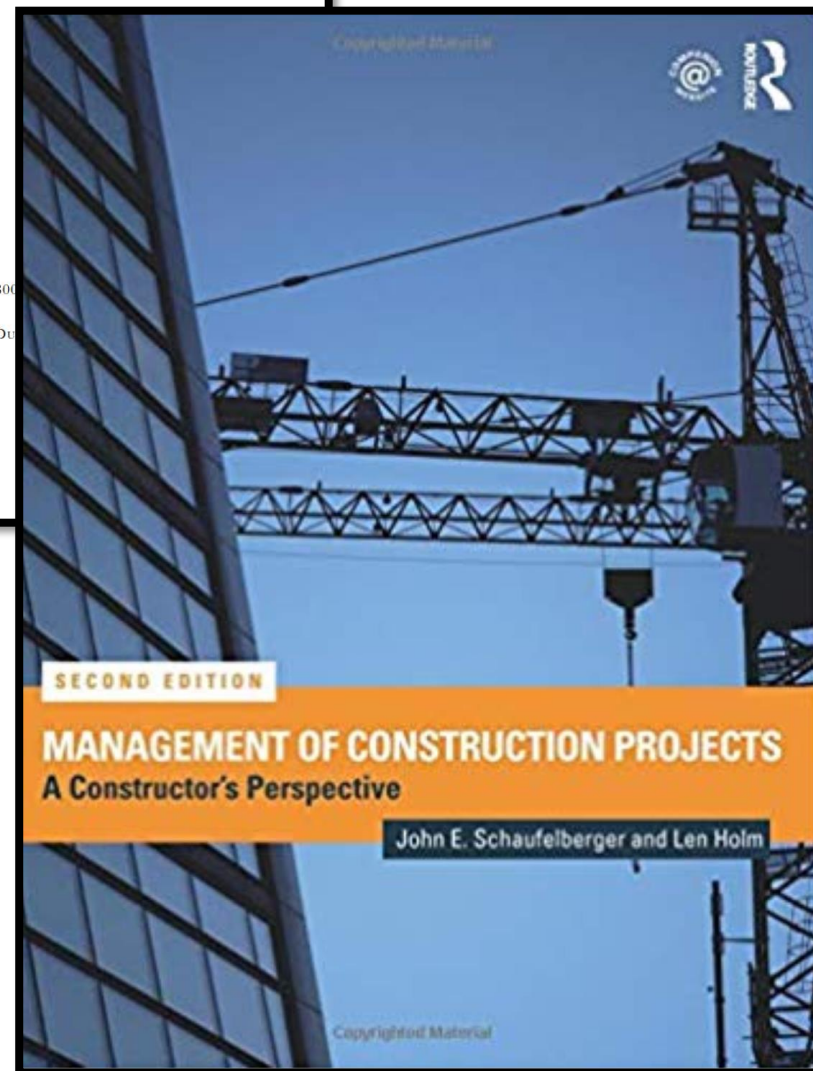
جلسه سوم- مبانی طراحی محیطی، نظریه
و روش‌ها- اسفند ماه 1398

Managing Integrated Project Delivery

CMAA

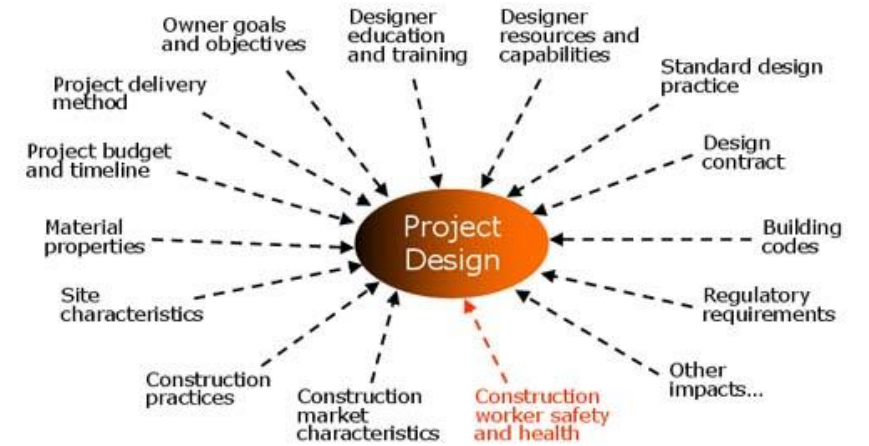
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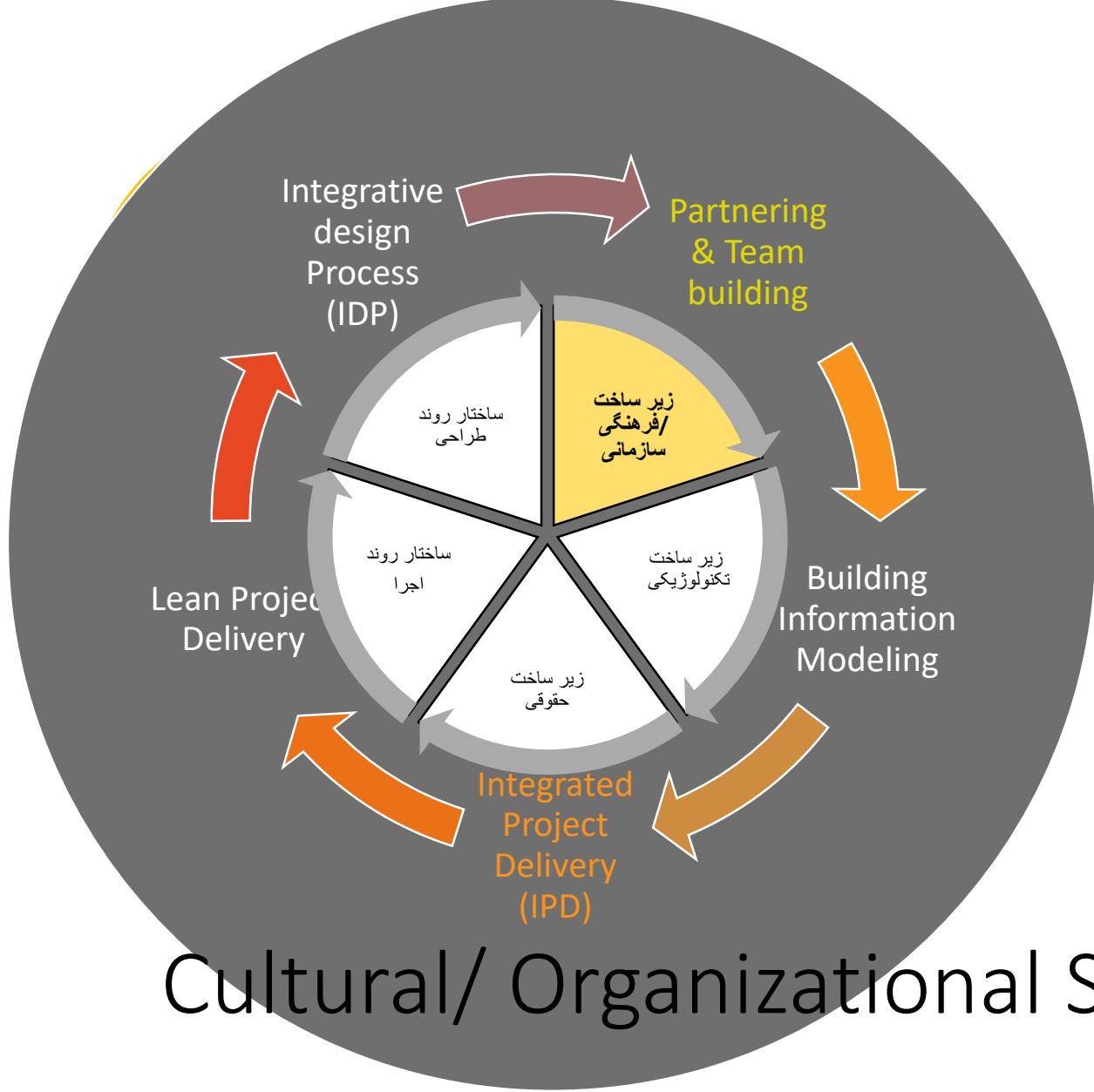
CHUCK THOMSEN, FAIA, FCMIA; JOEL DARRINGTON, ESQ., DENNIS DU



Construction Projects Cultural Environment

- Construction Projects: Many people/
numerous organizations
- Successful projects: Close working relationship
- Contract language: Adversarial relationship
→ Contract disputes/ litigation



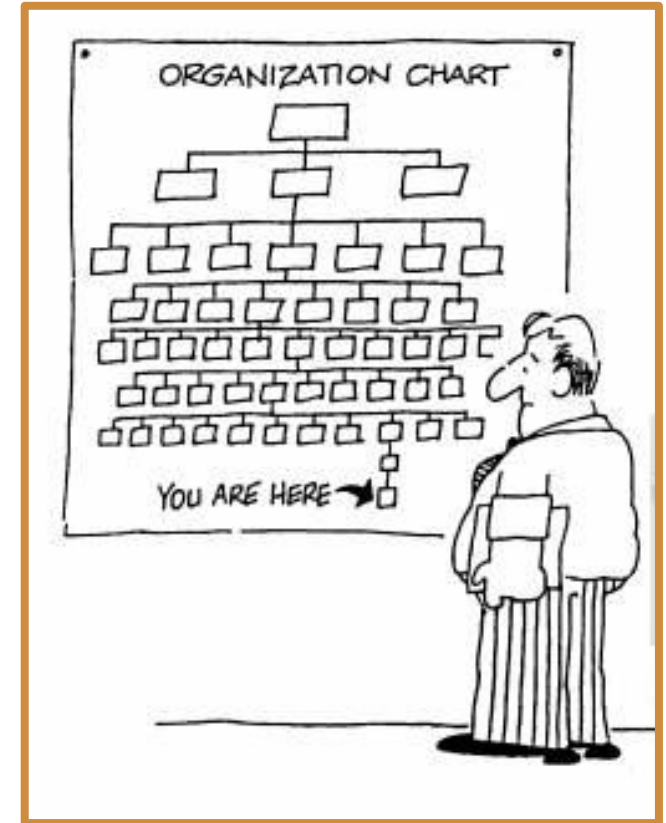
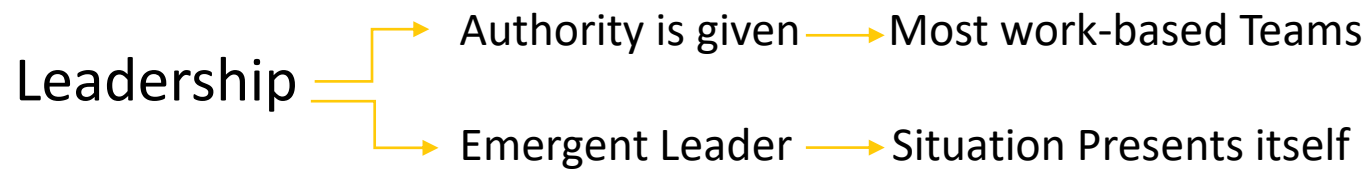


- Integrated Teams
- Integrated governance
- High-Performance teams

Main Dynamics of Teams

- Main dynamics acted out in teams:

1) hierarchy, or power =>



2) relatedness, or collaboration => element of initiative: not a submissive act of following certain rules: Proactively seeking out how to help one another



Integrated Teams

- synchrony
- Face-to-face interaction

Governance



- Integrated governance/ leadership, by executive committee The members comprised of at least the Owner, prime A, prime CM or GC, and often key subs/ key consultants.
- The Executive council is responsible for the day-to-day management and leadership on the project & operates on a consensus basis.
- The council members act more as leaders!

BOSS



LEADER



Drives
employees

Depends on
authority

Inspires
fear

Says,
"I"

Places blame
for the breakdown

Knows
how it is done

Uses
people

Takes
credit

Commands

Says,
"Go"



Coach
them

On
goodwill

Generate
enthusiasm

Says,
"We"

Fixes
the breakdown

Shows
how it is done

Develops
people

Gives
credit

Ask

Says,
"Let's go"





High-Performance teams

- Integration will be only realized with a change in culture.
- People remain under the payroll & supervision of their respective organizations, but assume more roles based on their individual skills & project needs.
- Partnering activities to build a more open, collaborative culture to foster trust among participants.

Contractor

Owner

Architect



**+(Subcontractors, Principal Suppliers,
Primary building inspectors)**

Partnering

- Increasing Performance
- Reducing Disputes
- Ease of communication

Partnering Facts



Developed in North America in 1980s as a response to Japan's strengths in key manufacturing industries.



Reduces costs by 30% and times by 40% compared to traditional approaches



Strategic Partnering can reduce costs by 40% & time by 50% compared to traditional approaches.



Substantial benefits at first, full benefits after several projects (Strategic Partnering).

The Essence of Project Partnering

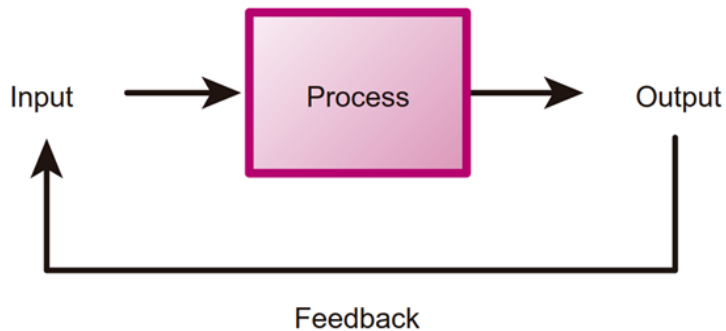


Figure 1.2 Controlled system

- Win-win mentality as opposed to Zero-sum game” mentality.
- “The best conflict-resolution strategy is one that prevents conflicts from occurring”.
- *“Science now sees the whole planet as a richly interconnected network in which feedback gives parts the ability to survive and develop. This ability is called self-organization and science now identifies self-organizing networks as the most robust and effective form of organization for living things”.*

-Partnering in the Construction Industry by John Bennett and Sarah Peace

Principle Causes of Dispute



Unrealistic expectations

Unrealistic risk-shifting

Ambiguous contract documents

Low bid / fixed price contracts



Poor communications



Inadequate management



Failure to deal promptly with changes and unexpected conditions



Lack of team spirit and cooperation



Confrontational and/or litigious mind-set and approach



Passing disputes to higher levels or to lawyers – rather than take responsibility

Prevention of Destructive and Expensive Conflict using Soft Skills

Respect

Trust

Commitment

Open Communication

Shared Goals

Continuous education

Timely responsiveness

Feedback system



Partnering Contract Provision



Proposed by owner, emphasizes a cooperative approach



Voluntary participation



One- to two-day workshops



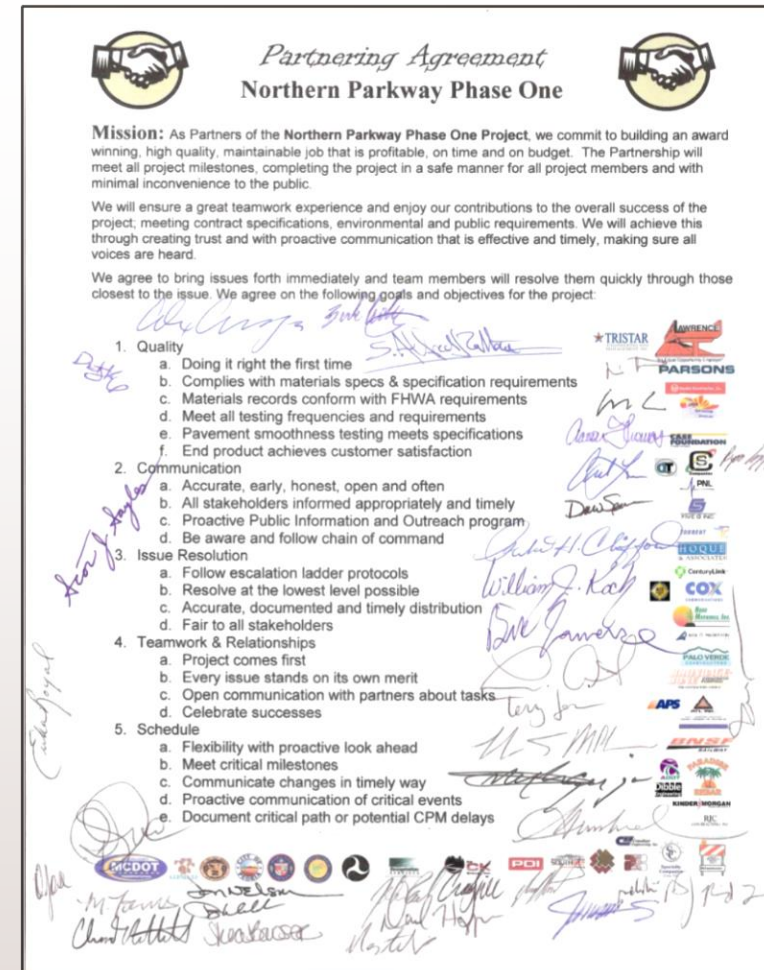
Owner responsible for workshop facilities, contractor half of the cost for facilitator.



On-going working arrangement; withdrawal upon written notice

Objectives of the Workshop

- For project participants to get to know each other
- For participants to understand the project success criteria of each other
- To begin team building
- To develop a **partnering charter**, containing a mission statement, collective goals and objectives for the project.
- To determine Decision making/ communication plan
- To identify potential problems and mitigation measures
- To establish ways to improve performance/ to establish an evaluation system



Decision Making/ Communication Plan

Issue Resolution Plan

Performance Improvement/ Evaluation Plan

Collective Goals



- Mutual objectives may deal with many process- and product-related issues including:
 - Value for money
 - Reliable quality
 - Fast Construction
 - Costs within agreed budget
- Operating & maintenance efficiency
- Improved efficiency for users
- Architectural quality
- A specific technical innovation
- Safe construction
- No claims ...

Decision Making/ Communication Plan

Agreement on:

- Decision making system
- Quality/Cost/Time control system
- Form & frequency of face-to-face meetings/ other ways of bringing team member together

- The nature of the decision-making systems is directly influenced by whether the client needs the project to produce a standard answer or an original design.

Wide discussion=>
capturing most inspiring contributions

Standard procedures=>
less cost & time



Issue Resolution System

- Start at the lowest level
- Escalate unresolved problems upward in a timely manner
- Do not jump levels of authority
- Do not ignore the problem
- Make only those decisions you feel comfortable with; escalate unresolved issues upward.

Designer	Owner	Contractor	Time
Managing Partner	Chief Executive	Chief Executive	2 days
Project Sponsor	Vice President	Vice President	1 day
Project Manager	Project Manager	Project Manager	4 hours
Design Coordinator	Project Engineer	Superintendent	4 hours
Designer	Inspector	Foreman	2 hours

Performance Improvement

- Project teams new to partnering should aim at one modest improvement that all members of the team regard as important.
- As experience of partnering grows, the scale and range of improvements will increase.
- It is important that performance improvements in one area do not distract work teams from continuing to deliver their established normal performance in all other areas.



Means to improve performance

- Competition doesn't work in construction industry!
- Investment in training and innovation
- Benchmarking
- Try various ideas, continue with actions that work and change those that deliver no improvements





Evaluation Plan

- Teams measure their own performance
- Expressed in positive terms
- Recognize strong areas
- Develop action plans for weak areas
- Publicize and celebrate success.
- Lessons captured to be used on future projects.

Team Building

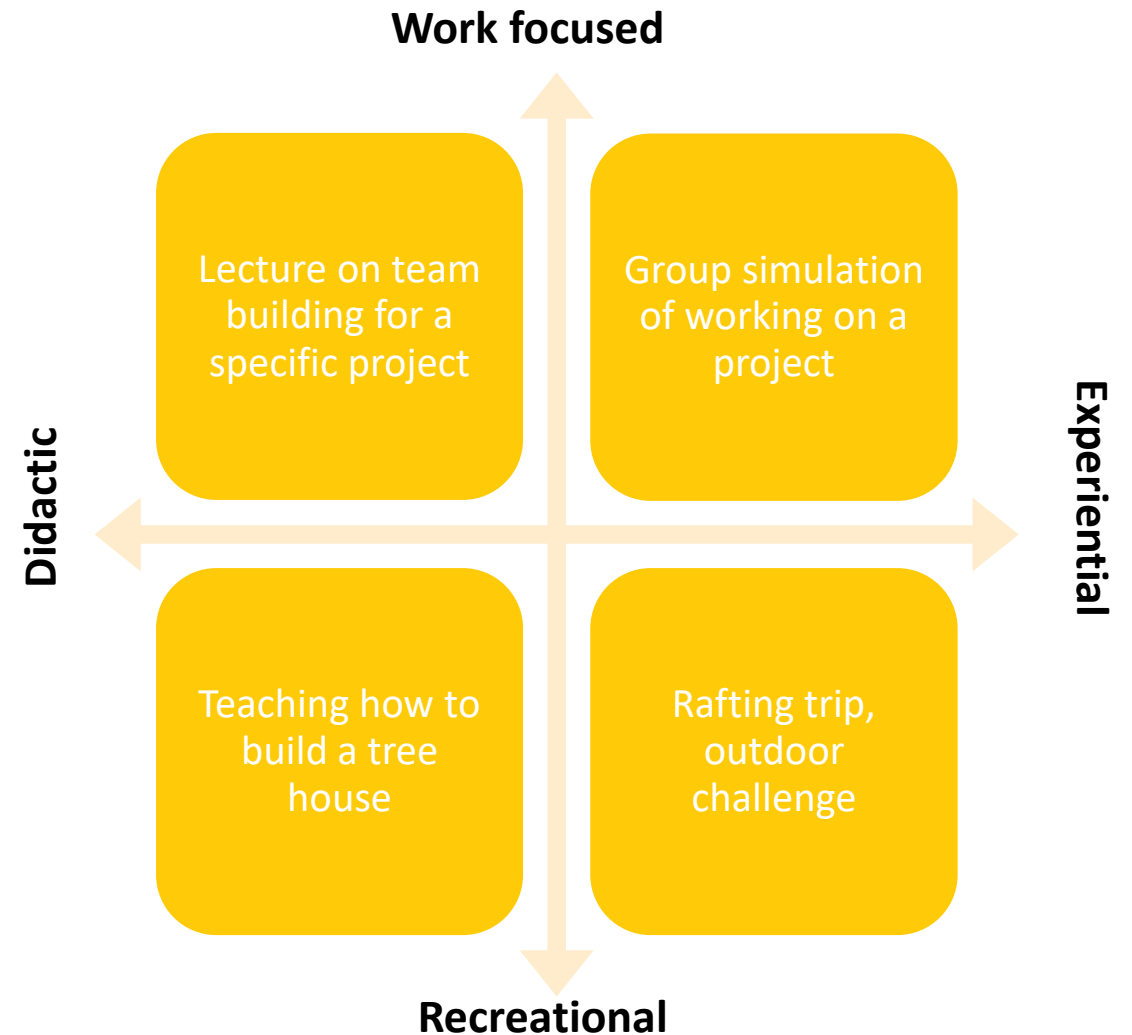
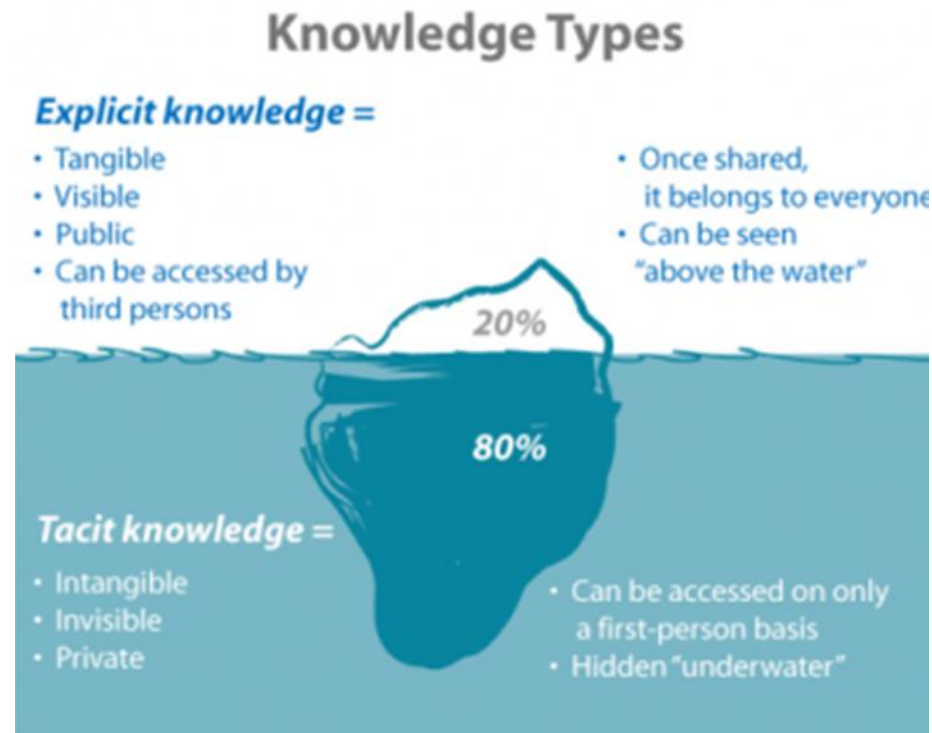


- Team building is the process of bringing together a diverse group of individuals and seeking to resolve differences, remove impediments, and proactively develop the group into a focused, motivated team that strives to accomplish the common mission
- A period of team building may be needed for new teams to create effective bonds of **trust, concern, support, and respect.**



Team Building

- Challenge of Organizations & team leaders: **How to internalize these concepts?**

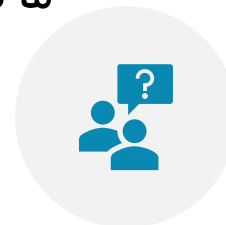


نمونه
سوال‌هایی که
می‌توانید در
نوشتن بازتاب
در نظر
بگیرید....

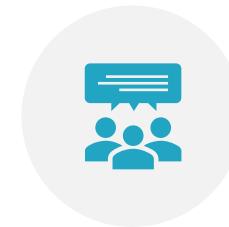


#PARTNERING

در ارتباط با یک نمونه موردی موفق از
مشارکت میان سازمانی در پروژه
عمرانی تحقیق کرده و نتایج تحقیق را با
ما به اشتراک بگذارید.



چه انتقاداتی به
رویکرد شراکت در
مقیاس جهانی وارد
است؟



#TEAM BUILDING

در ارتباط با یک نمونه
موردی موفق از اجرای
فعالیت تیم سازی در یک
پروژه عمرانی تحقیق کرده و
نتایج تحقیق را با ما به
اشتراک بگذارید.