



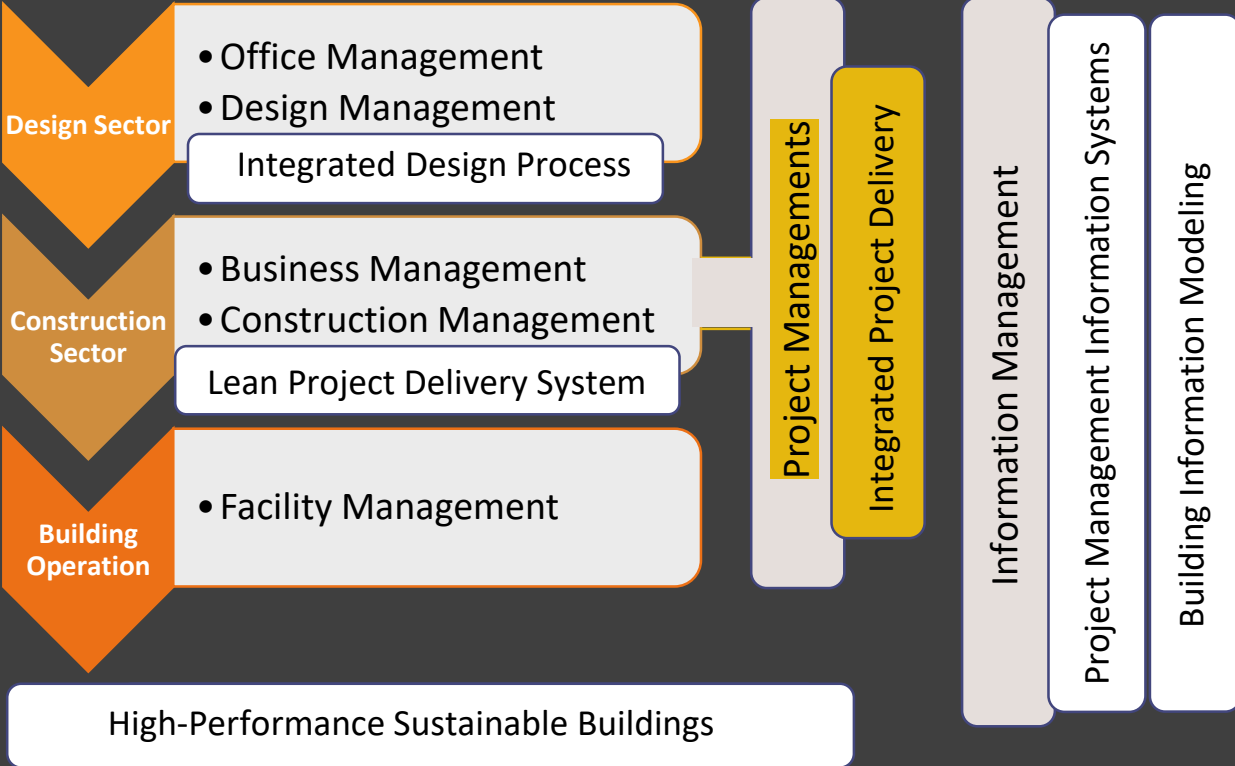
# Advanced Design & Construction Management Techniques- Managing Integrated Project Deliveries

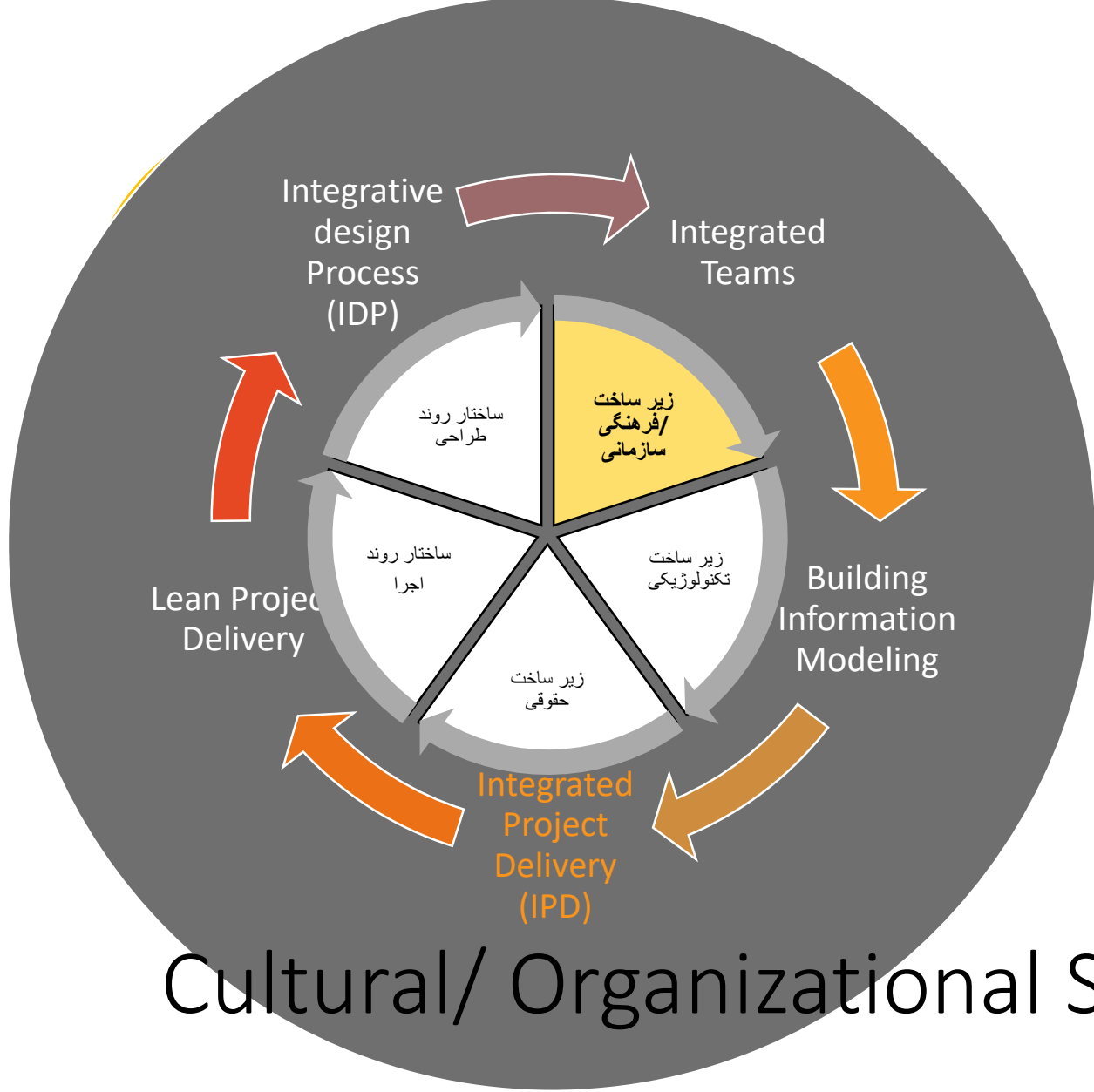
جلسه پنجم- فروردین ماه 1398- مدیریت پروژه

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# Introduction

- **Partnering & Team Building**





- Integrated Teams
- Integrated governance
- High-Performance teams



# Integrated Teams

- synchrony
- Face-to-face interaction

# Governance



- Integrated governance/ leadership, by executive committee (i.e. the Core Group, Project Management Team, Management group, etc.)
- 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!



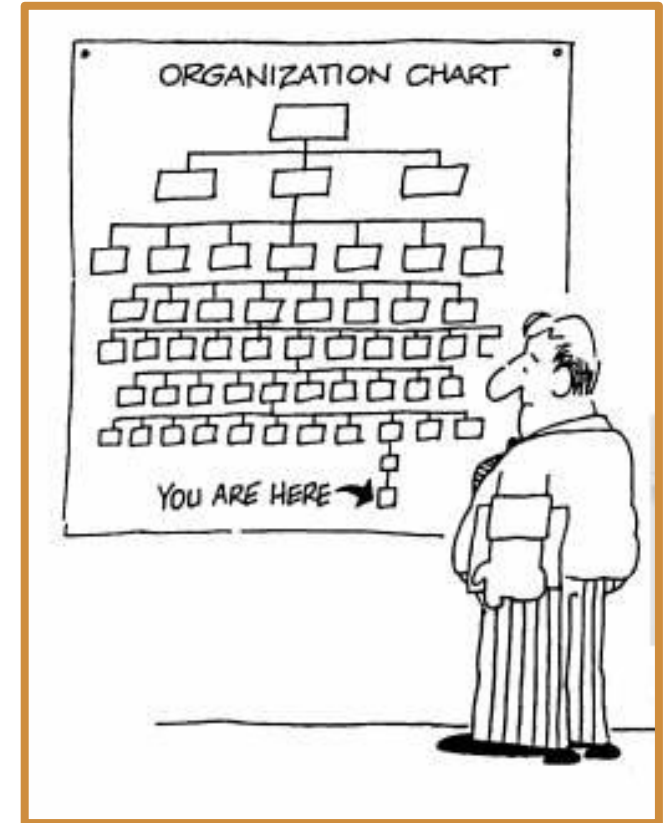
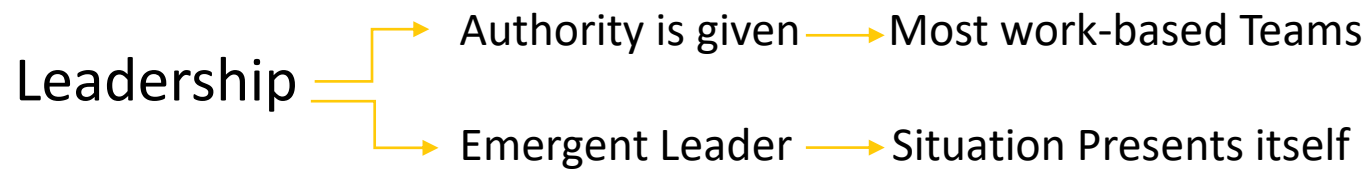
# High-Performance teams

- The benefits of IPD 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.

# 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



Contractor

Owner

Architect



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

# Partnering

- Increasing Performance
- Reducing Disputes
- Ease of communication



# Partnering Facts

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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

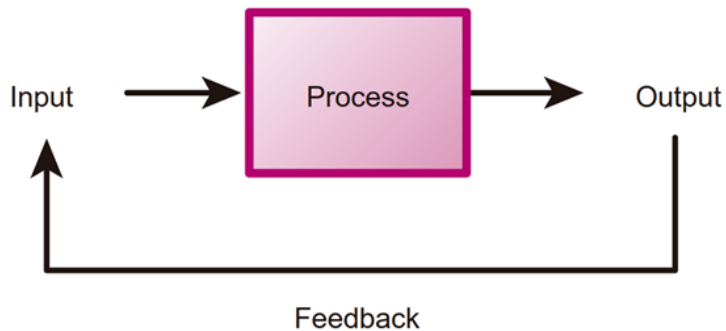


Figure 1.2 Controlled system

- 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

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



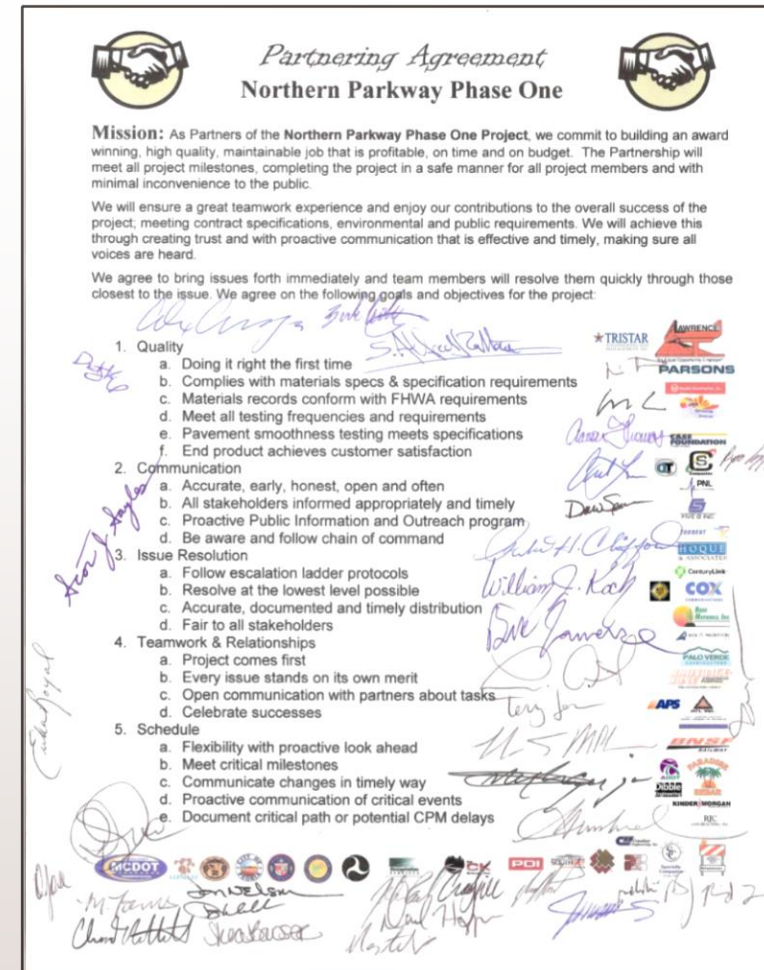
Owner responsible for workshop facilities, contractor half of the cost for facilitator.



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.

<b>Designer</b>	<b>Owner</b>	<b>Contractor</b>	<b>Time</b>
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

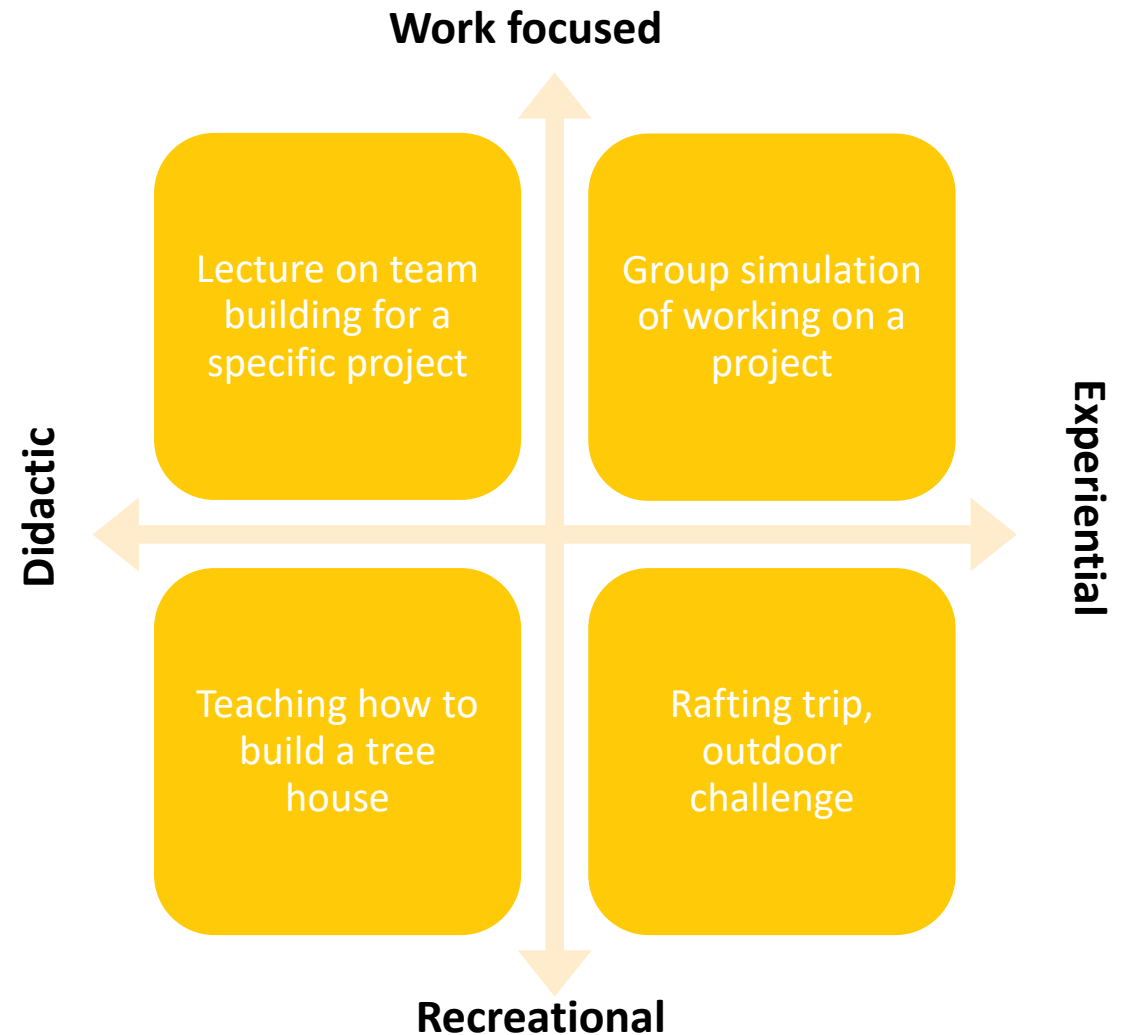
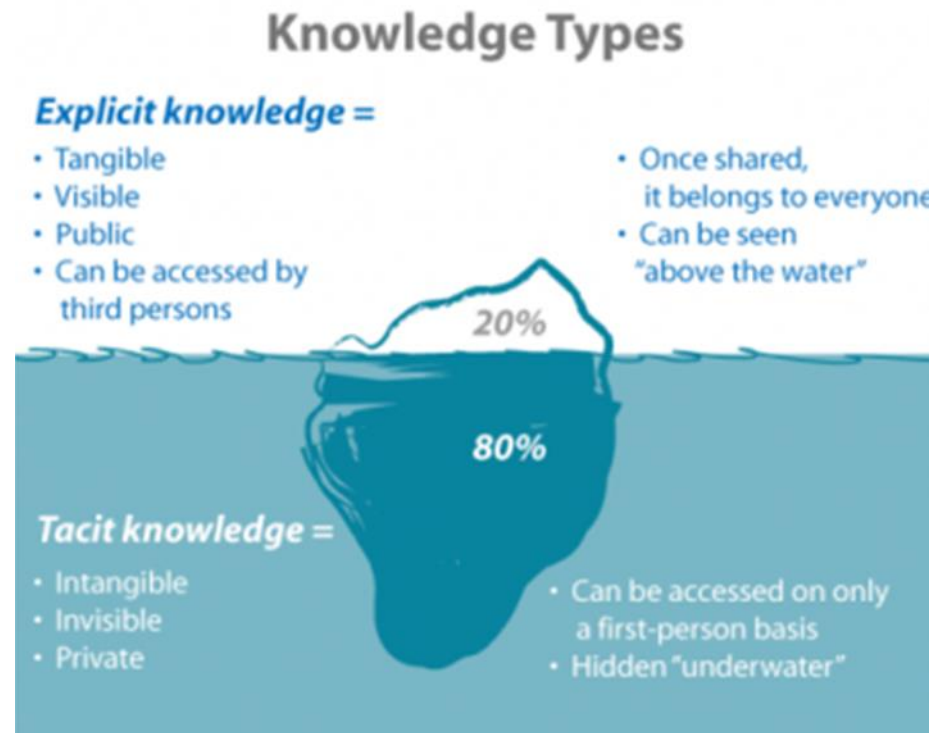


- Team building is the process of bringing together a diverse group of individuals and seeking to resolve differences, remove impediments, and proactively develop the group into a focused, motivated team that strives to accomplish the common mission
- A period of team building may be needed for new teams 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 می توانید در  
نوشتن بازتاب  
در نظر  
بگیرید....



1- پارتترینگ چه  
معایی می تواند داشته  
باشد؟



2- به نظر شما  
مشکلات اعمال روش  
پارتترینگ در  
کشورمان چه می تواند  
باشد؟



3- بررسی نمونه  
موردی که در آن از  
پارتترینگ استفاده شده  
است.

# Preparation Reading for Next Class:

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Subject:

The discovery phase in IDP projects

(فاز مطالعات و تحقیقات اولیه در روش طراحی  
بیکپارچه)

