



GSOE9820 – Engineering Project Management

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Never Stand Still

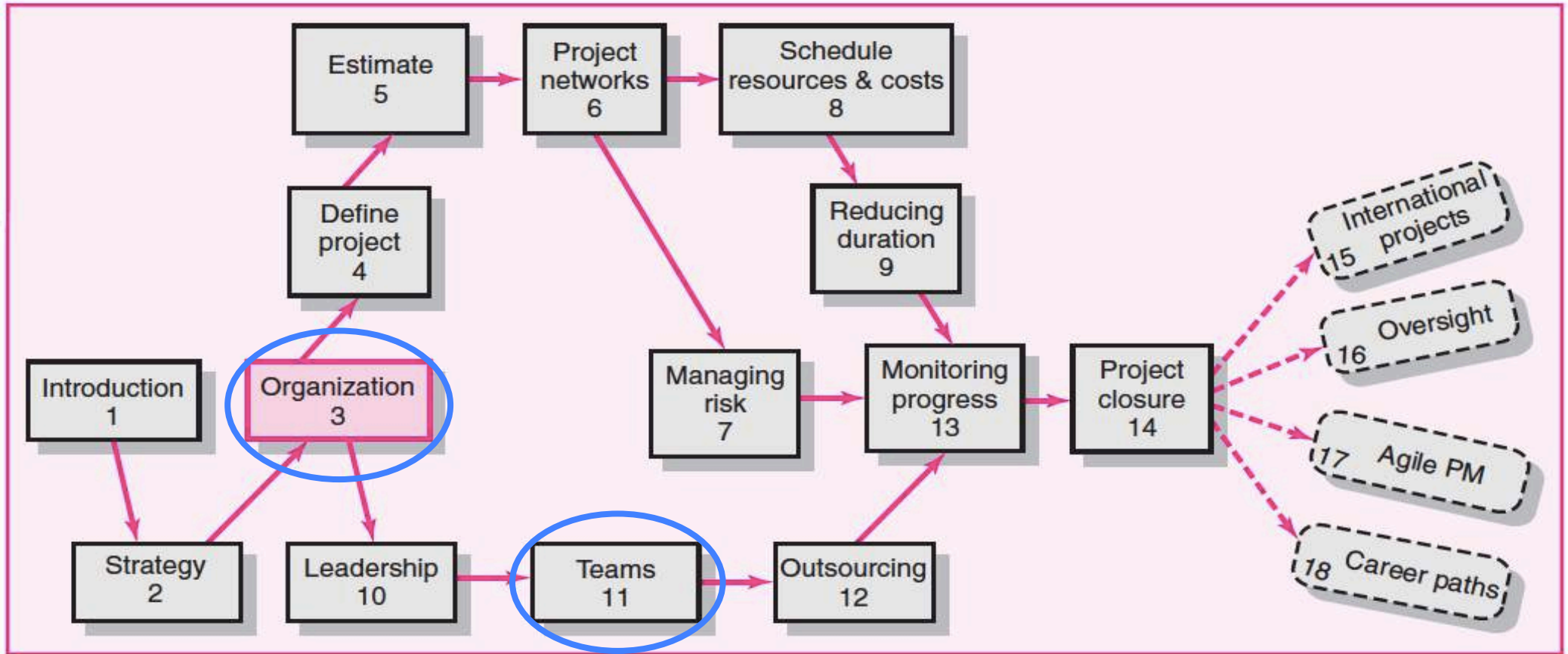
Faculty of Engineering

School of Mechanical and Manufacturing Engineering

Week 4

Dynamic Teams, Projects and Organisational structures and Culture

Course Roadmap



Organisational structure

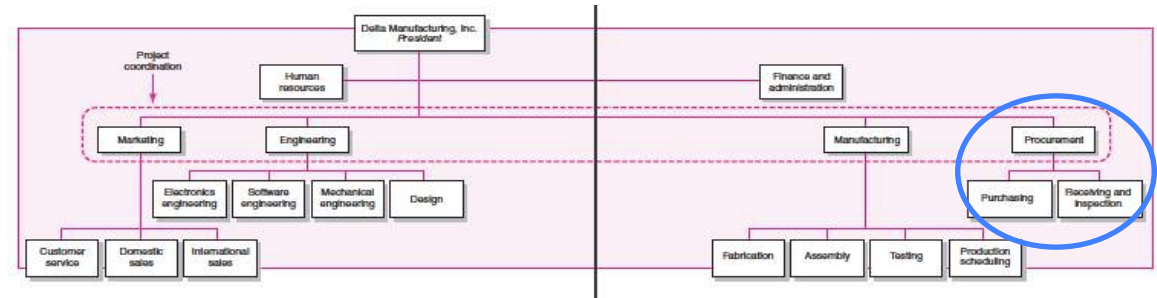
“An organisational structure defines how activities such as task allocation, coordination and supervision are directed towards the achievement of organizational aims”.



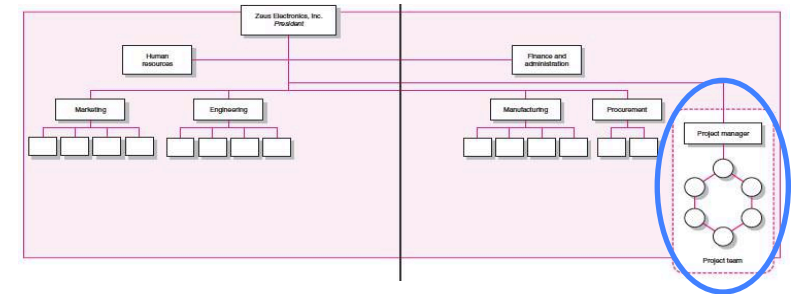
Reference: Pugh, D. S., ed. (1990). Organization Theory: Selected Readings. Harmondsworth: Penguin

Common types of project management structures

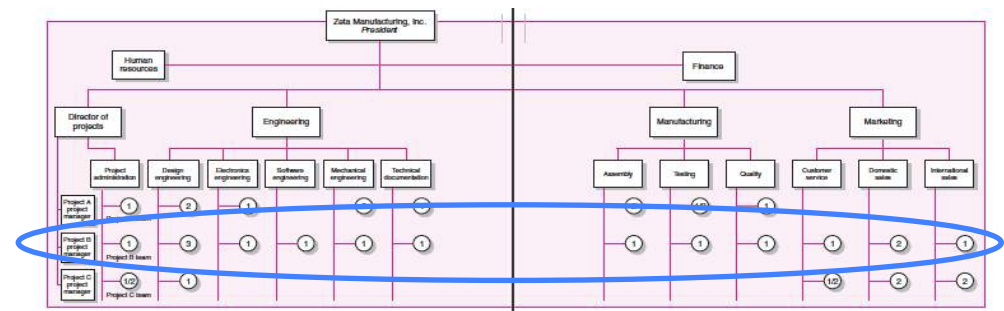
- Functional



- Dedicated Project Teams /Projectized



- Matrix



Reference: Gray, C & Larson, E, Project Management, 5th Ed. McGraw-Hill

Reality of project organisation structure

Every company has its own ideas about how to organize itself and its work.

It is highly probable that if three companies doing similar work could be compared, three different organization structures would be found.

Further, all three companies might be equally successful (or equally unsuccessful), implying that it is not always possible to say with any degree of confidence that there is one best organization solution.

Choosing the most appropriate project structure



Choosing the most appropriate project structure

Org Structure>	<i>Functional</i>	<i>Matrix</i>			<i>Projectized</i>
Characteristics		Weak	Balanced	Strong	
Project Mgr's Authority	Little or None	Limited	Low to Moderate	Moderate to High	High to Almost Total
Resource Availability	Little or None	Limited	Low to Moderate	Moderate to High	High to Almost Total
Who controls project budget	Functional Manager	Functional Manager	Mixed	Project Manager	Project Manager
Project Mgr's Role	Part-time	Part-time	Full-time	Full-time	Full-time
Project Mgr Admin Staff	Part-time	Part-time	Part-time	Full-time	Full-time

Functional Organisation of projects

- Different segments of the project are delegated to respective functional units.
- Coordination is maintained through normal management channels.
- Used when the interest of one functional area dominates the project or one functional area has a dominant interest in the project's success.

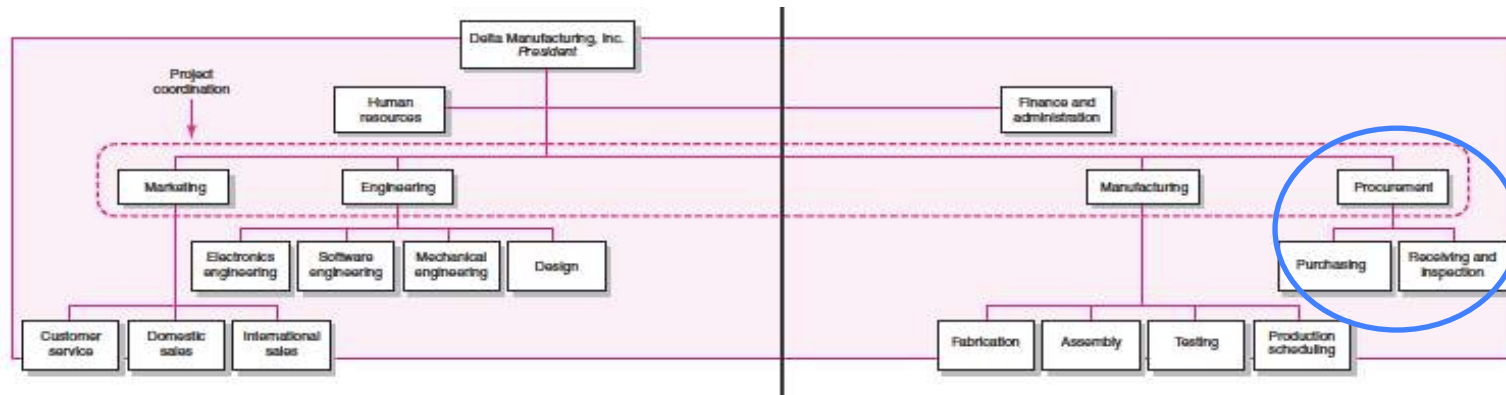
Functional

Advantages

1. No/little org. change
2. Flexibility in use of staff
3. In-Depth Expertise
4. Easy Post-Project Transition

Disadvantages

1. Lack of Focus for project
2. Poor Integration across org.
3. Typically slower to complete
4. Lack of Ownership



Dedicated Project Teams

- Teams operate as separate units under the leadership of a full-time project manager.
- In a ***projectised*** organization where projects are the dominant form of business, functional departments are responsible for providing support for its teams.

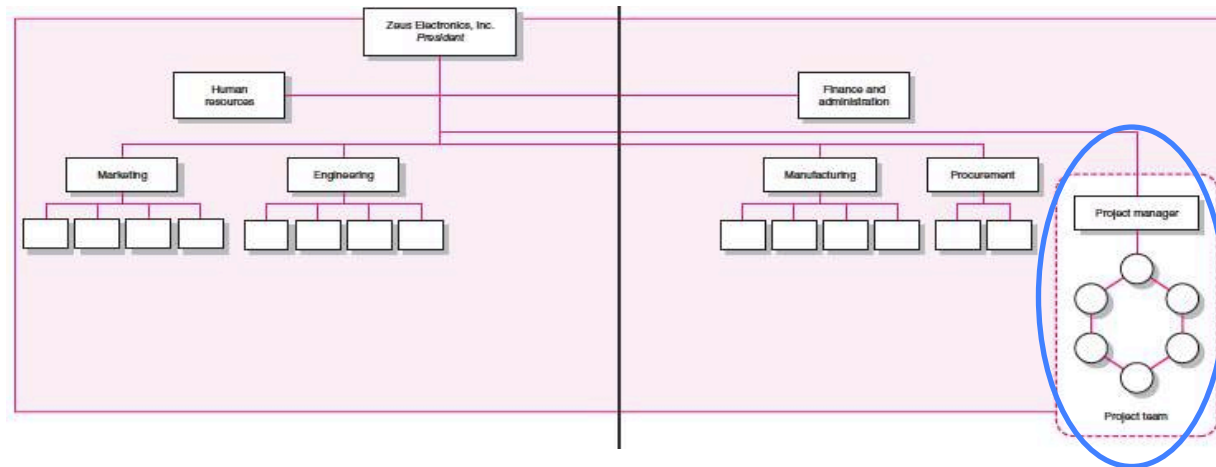
Dedicated project teams

Advantages

1. Simple – independent from functional organisation
2. Fast – Full attention
3. Cohesive - motivated
4. Cross-functional integration

Disadvantages

1. Expensive – additional staff
2. Internal strife – “us vs. them”
3. Limited technological expertise
4. Difficult post-project transition – staff reassignments



Matrix Organisation of projects

- Hybrid organizational structure (matrix) is overlaid on the normal functional structure.
 - Two chains of command/ “bosses” (functional and project)
 - Project participants report ***simultaneously*** to both functional and project managers.
- Matrix structure optimizes the use of resources.
 - Allows for participation on multiple projects while performing normal functional duties.
 - Achieves a greater integration of expertise and project requirements.

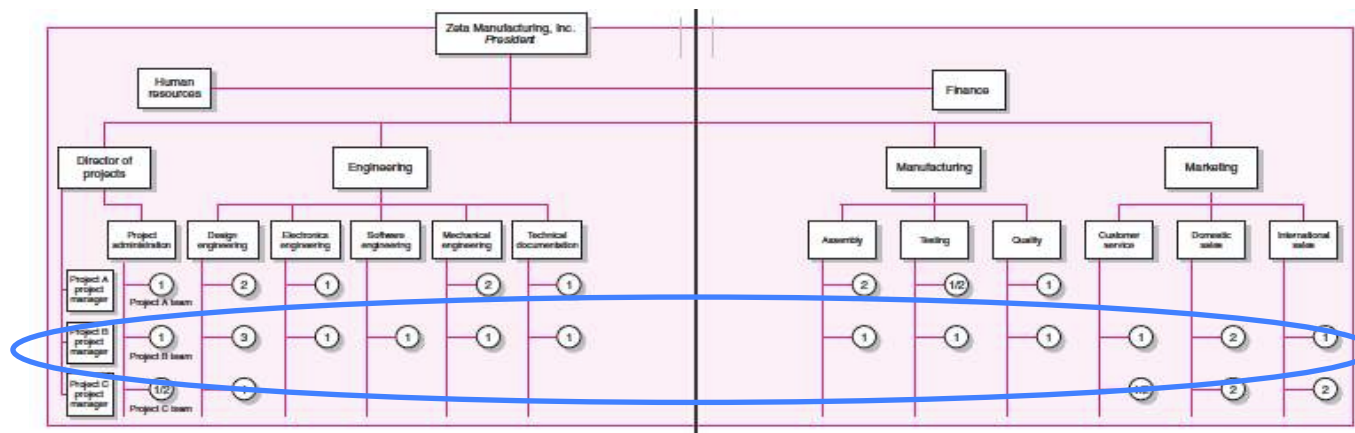
Matrix

Advantages

1. Efficient – sharing resources
2. Strong project focus – dedicated PM
3. Easier post-project transition
4. Flexible – use of appropriate expertise and resources

Disadvantages

1. Dysfunctional conflict – PM and FM tension
2. Infighting – Different priorities
3. Stressful – who is my boss?
4. Slow – consensus needed



Different Matrix forms

Weak

- The authority of the functional manager predominates and the project manager has indirect authority.

Balanced

- The project manager sets the overall plan and the functional manager determines how the work is to be done.

Strong

- The project manager has broader control and functional departments act as subcontractors to the project.

What does an ineffective team look like?

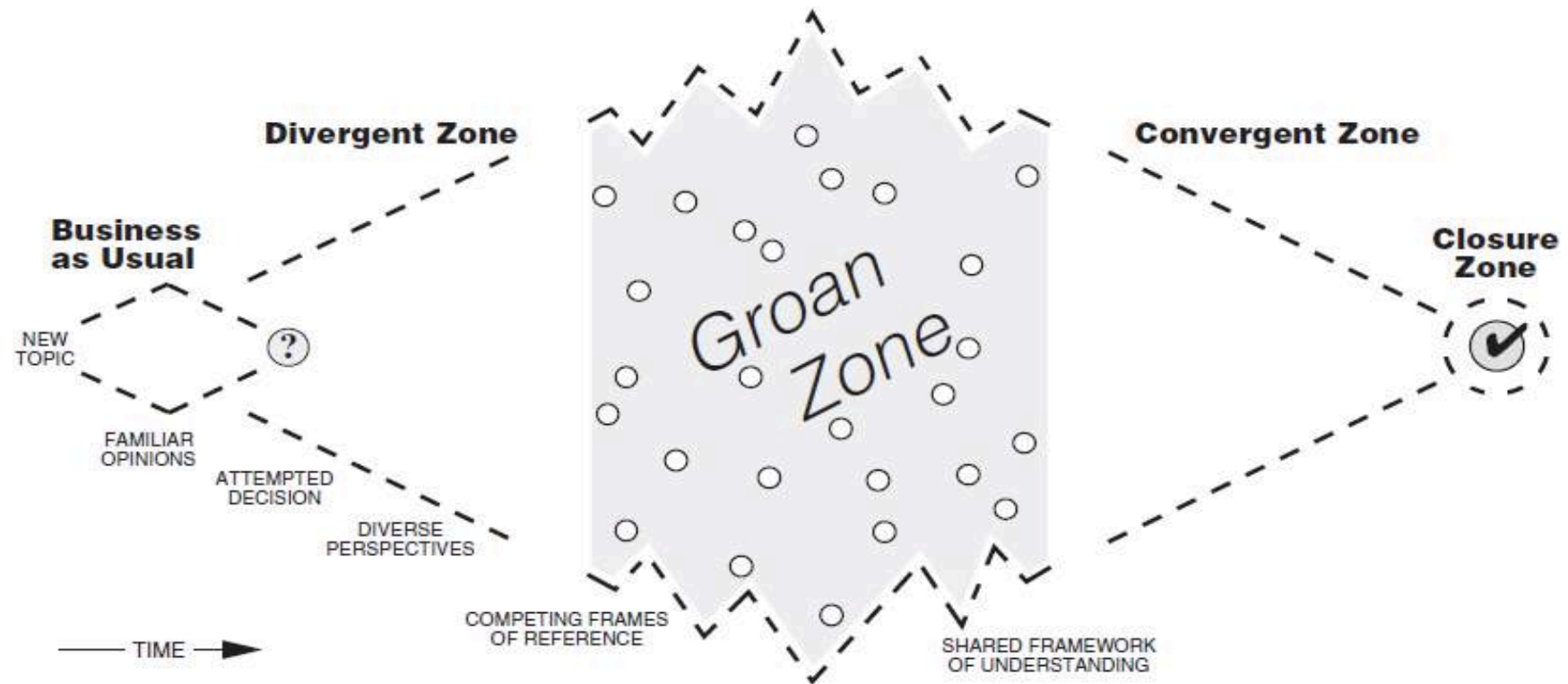
Teams that are not working effectively together will display the characteristics listed below.

- Lack of communication among team members.
- No clear roles and responsibilities for team members.
- Team members “throw work over the wall” to other team members, with lack of concern for timelines or work quality.
- Team members work alone, rarely sharing information and offering assistance.
- Team members blame others for what goes wrong, no one accepts responsibility.
- Team members do not support others on the team.
- Team members are frequently absent thereby causing slippage in the timeline and additional work for their team members.

Tuckman's Stages of team development.

Phase	Forming	Storming	Norming	Performing
				
General Observations	Uncertainty about roles, looking outside for guidance.	Growing confidence in team, rejecting outside authority.	Concern about being different, wanting to be part of team.	Concern with getting the job done.

What Team Participation Looks like



What does an effective team look like?

The characteristics of effective, successful teams include:

- Clear communication among all members
- Regular brainstorming session with all members participating
- Consensus among team members
- Problem solving done by the group
- Commitment to the project and the other team members
- Regular team meetings which are effective and inclusive
- Timely hand off from team members to others to ensure the project keeps moving in the right direction
- Positive, supportive working relationships among all team members



To get high performing teams ...

Do you need a particular type of organisational culture?

Organisational Culture

What is organisational culture?

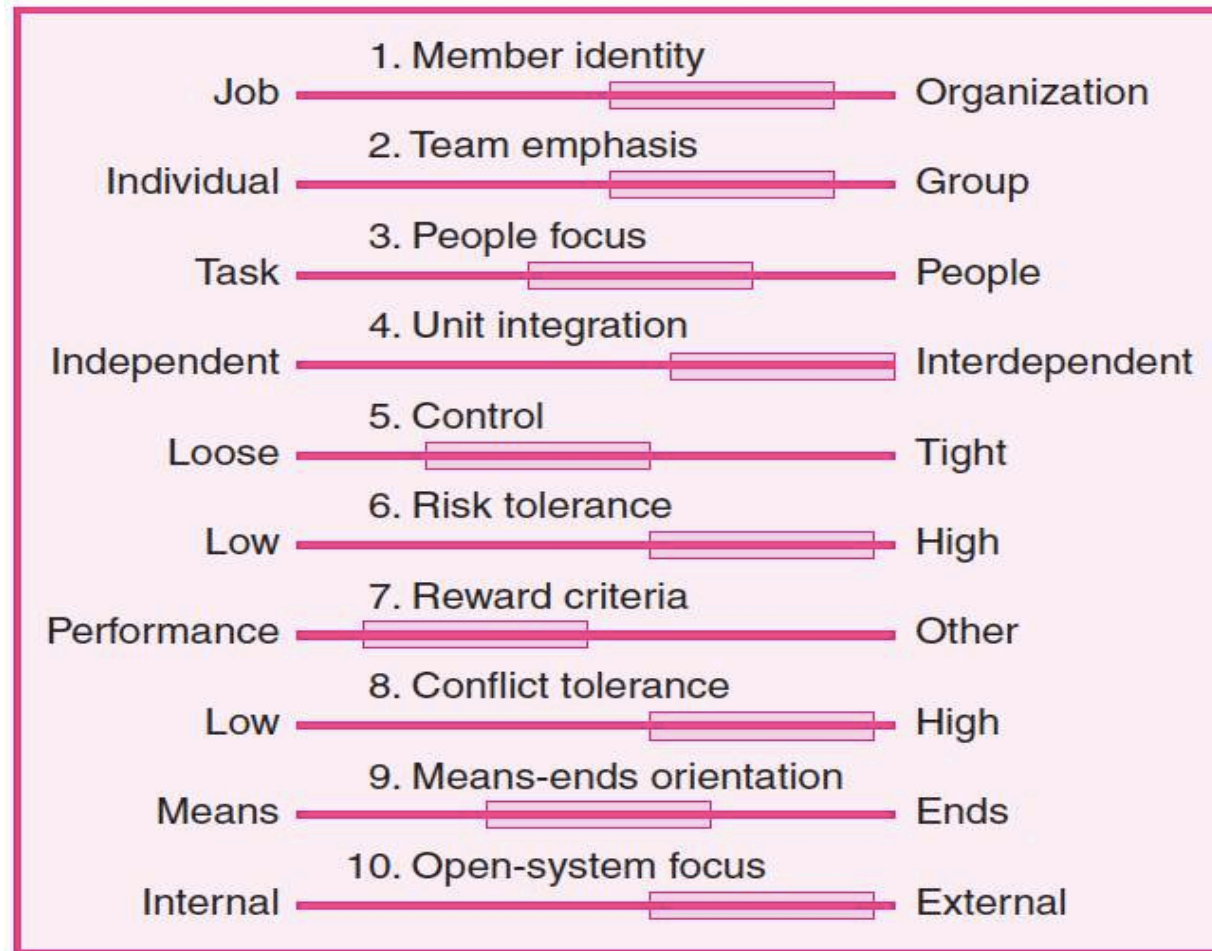
- A system of shared norms, beliefs, values, and assumptions which bind people together, thereby creating shared meanings.
- The “personality” of the organization that sets it personality apart from other organizations.
 - Provides a sense of identify to its members.
 - Helps legitimize the management system of the organization.
 - Clarifies and reinforces standards of behavior.
 - Often voiced as “*this is the way we do things around here*”

Identifying Cultural Characteristics

- Study the physical characteristics of an organization.
- Read about the organization.
- Observe how people interact within the organization.
- Interpret stories and folklore surrounding the organization.



10 Organisational cultural dimensions



Working with cultural differences

What is it like to operate in a different culture?...

What is diversity?

Is it personal? Cultural? Professional?
Something else?

How might we get value out of diverse points of view...

Try them on!!!

1. Listen and be curious
(as if hearing a story)
2. Like trying on a jacket
3. Speak your point of view
as something for
others to 'try on'

Summary

1. Organisational Structures

- Three types: functional, dedicated, matrix
- No single right answer

2. Teams Dynamics:

- Tuckerman's model: forming, storming, norming, performing
- The 'groan zone' is normal

3. Culture:

- Recognise what could get in the way of your ability to create room for multiple points of view
- Be open and suspend judgment so that you can hear everything that's possible. Then choose.
- The ability to work with differences, whilst having common values, can make or break your performance as a team