

The slide features a decorative background on the left side consisting of four vertical bars of increasing height and a satellite image of a coastline. The bars are colored dark blue, medium blue, light blue, and very light blue from left to right. The satellite image shows a dark coastline with some buildings and a road, set against a lighter background of water or land.

Influence of Organizational Structure on Effectiveness of Post-Disaster Management

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Our recent tragedy...

Liouguei Tourist Information Center

Before and after Morakot Typhoon
(8/8, 2009)



Problems

- A crisis of sudden disaster overwhelm a normal administrative organization.
- Lack of coordination (& lack of information)

Mexico Earthquake	Kobe Earthquake	Morakot Typhoon
9/19/1985, magnitude 8.1	1/17/1995, magnitude 7.2	8/8/2009,
Fail to response quickly- until the third day	Slow response of formal rescuing until the third day	Proper response until the second day
Common symptom: Slow-to-warm-up governmental system in emergency		

A Successful Case

- In the 1999 Taiwan Earthquake, an emergency situation in Taipei was successfully taken care of by employing an emergency organization at the site.
- Effective quick response of rescuing life under rubble.



❑ An apartment building collapsed

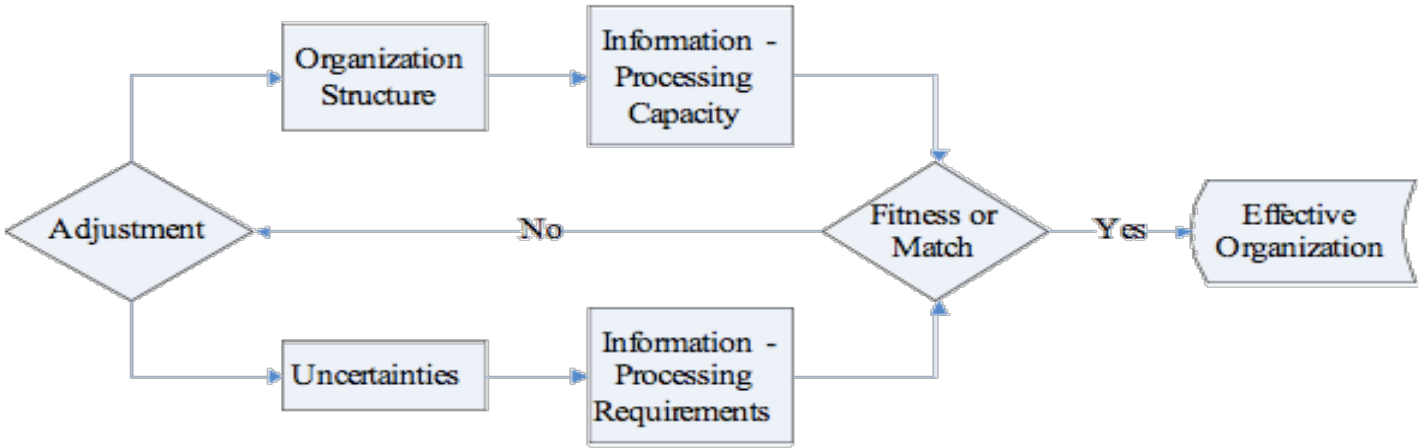


Interests & Issues

- **Four post-disaster phases:** Rescuing, Demolishing, Restoration, and Reconstruction .
- **Contingency** Theory: there is no best structure for all situations (Thompson, 1967 & Galbraith, 1974).
- How organization structure affect effectiveness of these post-disaster actions?
- **Organizational Structure**
- **Organizational Effectiveness**
- **Coordination**

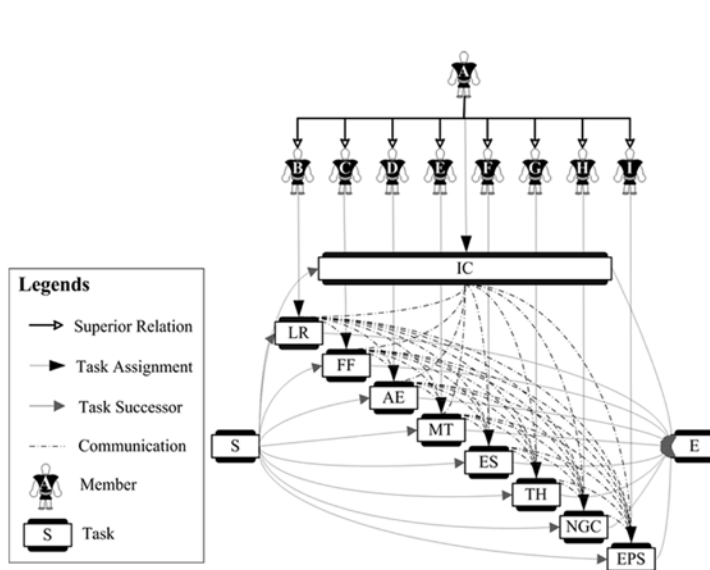
Effectiveness of organization

❑ Conceptual views for designing an effective organization

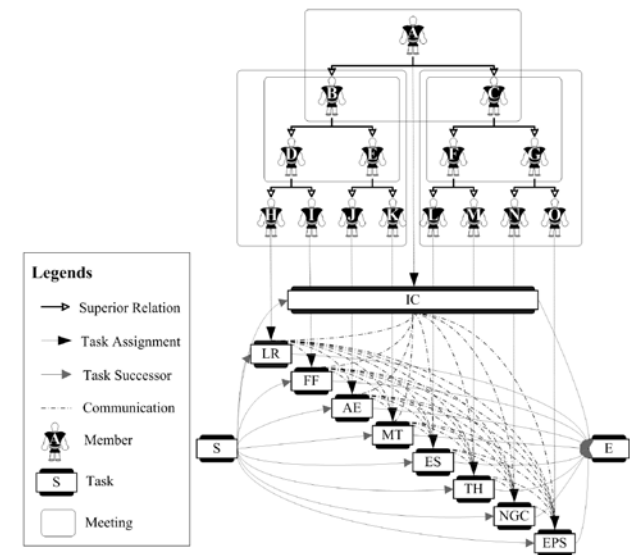


Phase	1	2	3	4
Goal	Rescuing	Demolishing	Restoration	Reconstruction
Effective ness	Rapidity	Rapidity and Process Quality	Rapidity and Project Quality	Overall Quality

VDT Simulation

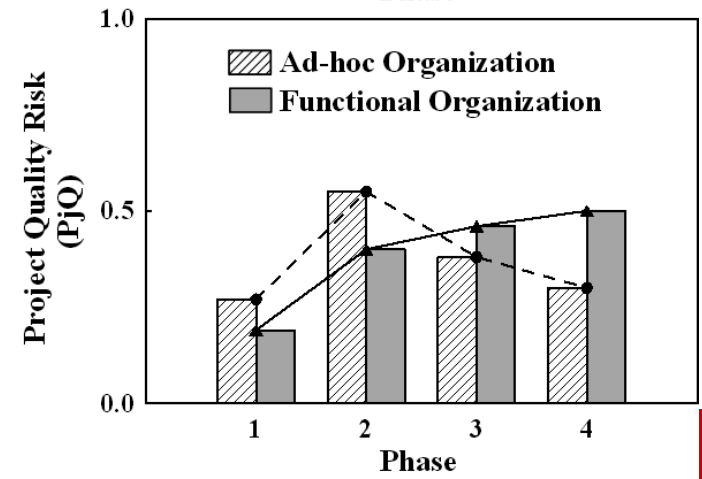
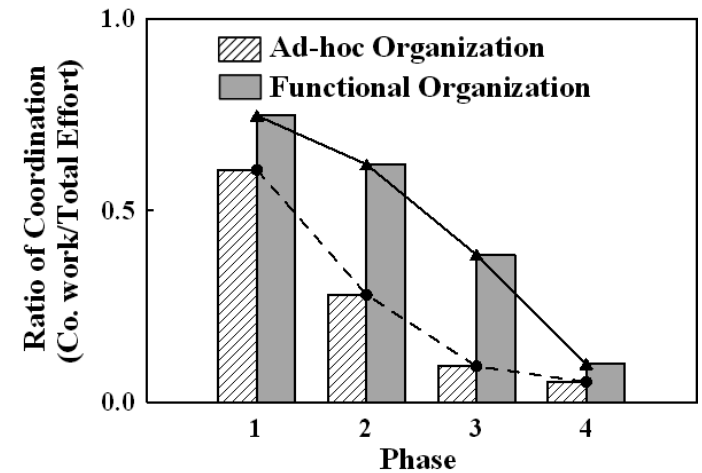
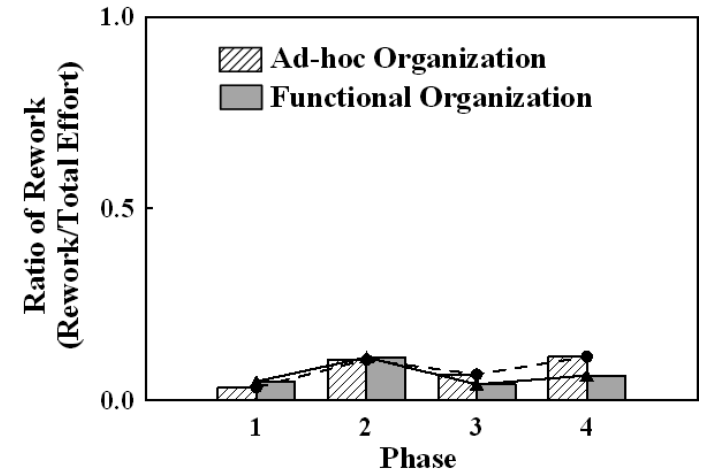
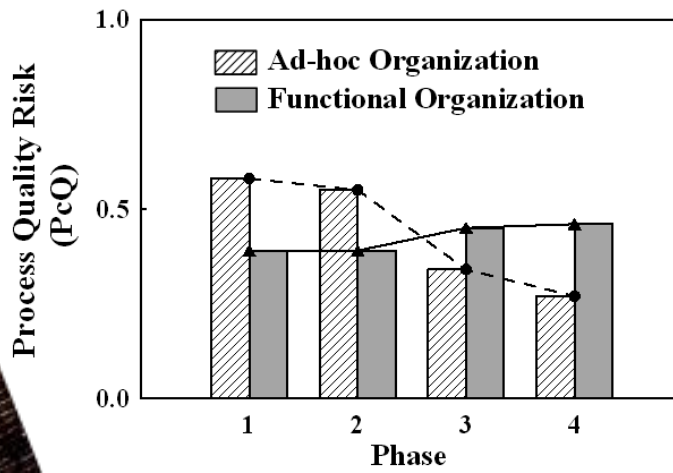
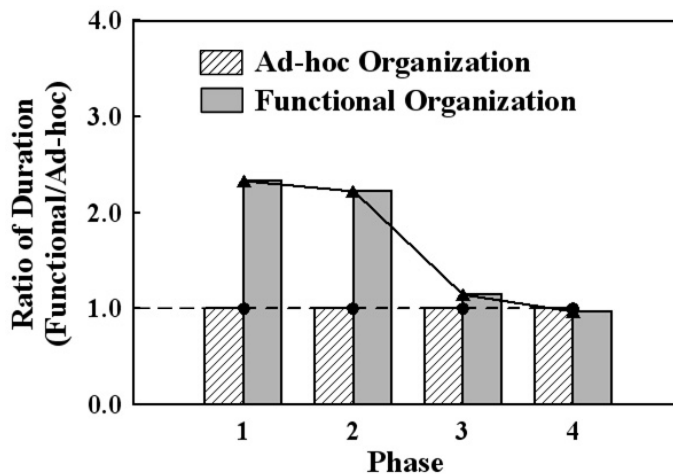


Position	Description	Task	Description
A	Commander	IC	Information Control
B	Labor Resue Team	LR	Life Rescuing
C	Fire Fighting Team	FF	Fire Fighting
D	Ambulance Escorting Team	AE	Ambulance Escorting
E	Medical Team	MT	Medical Treatment
F	Equipment Supply	ES	Equipment Supplying
G	Technological Help Team	TH	Technological Helping
H	Natural Gas Team	NGC	Natural Gas Securing
I	Power Supply	EPS	Electrical Power Supplying



Position	Description	Task	Description
A	Mayor	IC	Information Control
B	Dept. of Security & Health	LR	Life Rescuing
C	Dept. of Public Works & Finance	FF	Fire Fighting
D	Emergency Dispatch Center	AE	Ambulance Escorting
E	Division of Medical Affairs	MT	Medical Treatment
F	New Construction office	ES	Equipment Supplying
G	Public Utility Administration	TH	Technological Helping
H	Station of Disaster Rescue	NGC	Natural Gas Securing
I	District HQs	EPS	Electrical Power Supplying
J	Ambulance Center		
K	Taipei City Hospital		
L	Road Maintenance Section		
M	Construction Engineers		
N	Natural Gas Section		
O	Electrical Power Section		

Results



Conclusions

- **Ad-hoc** organization is effective to deal with emergent situations. Its flat structure can facilitate coordination for emergency bypassing cumbersome administrative barricades induced by hierarchical structure.
- The benefits employing ad-hoc organization are not obvious for dealing with later restoration and reconstruction works.
- **Ad-hoc** organization for handling emergency should enlist people with authority.

Preferred Organization

1. Preferred configuration
2. Preferred coordinating mechanism
3. Key part of organization

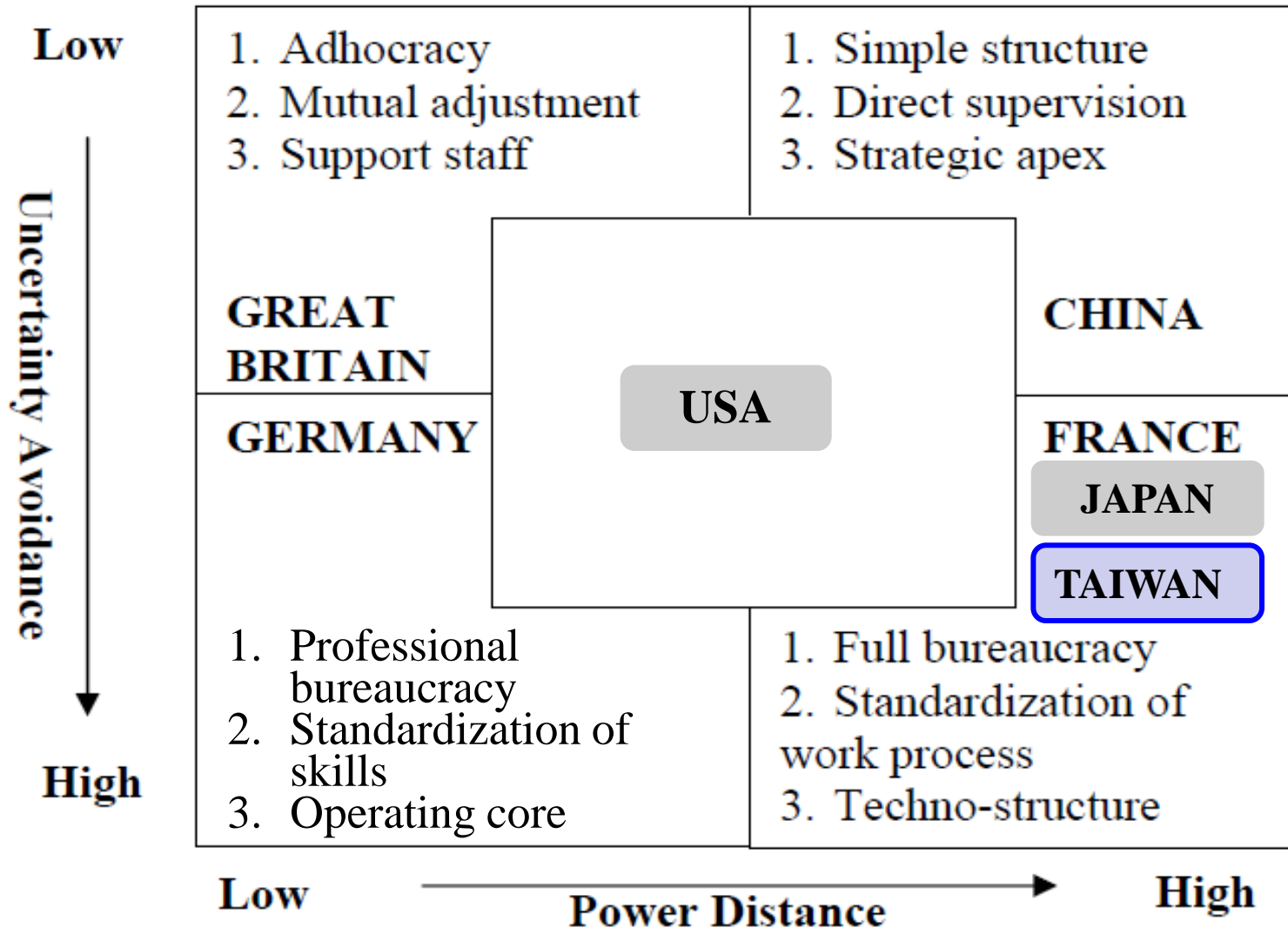


Figure 7.2 Five Preferred Configuration of Organizations (Hofstede & Hofstede, 2005, p 255)