



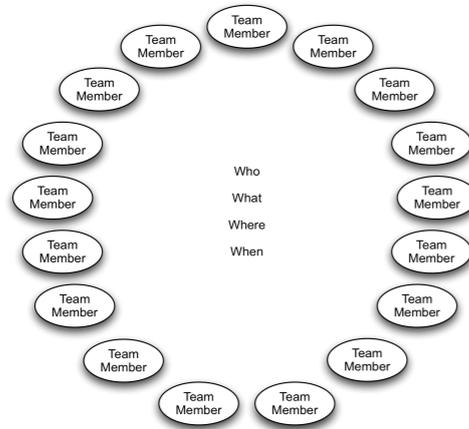
Study of Trust as an Organizational Contingency Part II: Examining Four Dimensions of Trust in ELICIT Experimentation

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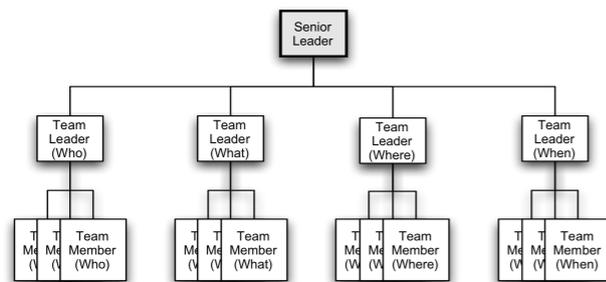
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- Based on previous analysis and results (Powley & Nissen, 2009):
 - Flexible Edge/Trust organizations were more accurate than Rigid Hierarchy/Trust organizations
 - In Rigid Hierarchy/Low trust organizations speed in decision making was high and low in the Edge organization
- What specific factors of trust explain these performance effects?

- Crisis prevention and counterterrorism efforts require trust among coalition groups
- Trust matters for organizational performance
- Performance depends on design parameters

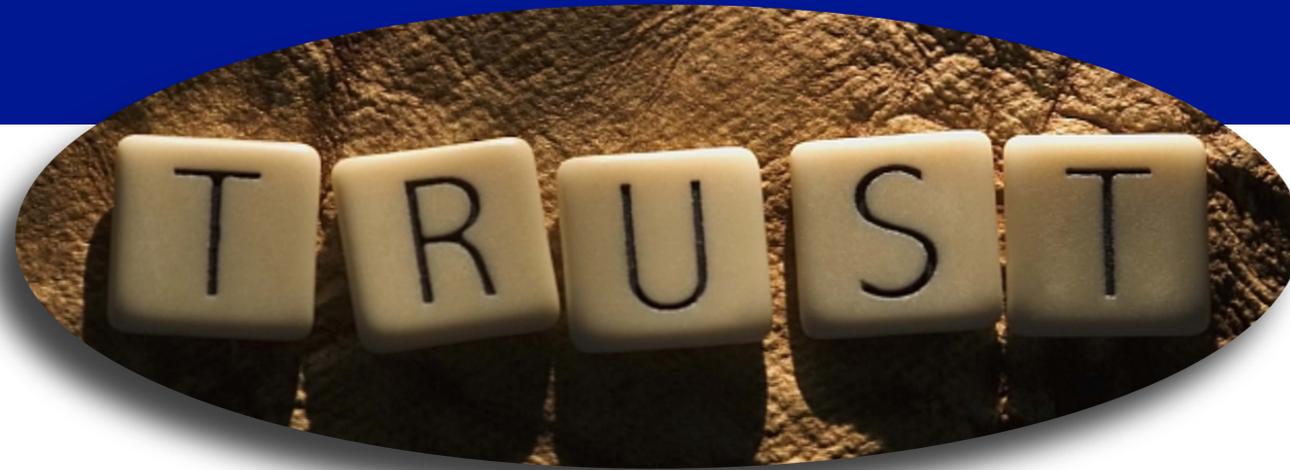


- Edge, flexible, networked, flat; information flows freely between organization members



- Hierarchical, command and control, rigid; information flows up and down the chain of command

(Alberts & Hayes, 2005)



“the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that party” (Mayer, Davis, & Schoorman, 1995)

- Openness
- Concern
- Competence
- Reliability



(Mishra & Mishra, 1994; see also Mayer, Davis, & Schoorman, 1995)

- 2x2 factorial: manipulate organization type and trust

	Trust	Low Trust
Rigid Hierarchy	Rigid Hierarchy characterized by Trust	Rigid Hierarchy characterized by Low Trust
Flexible Edge	Flexible Edge characterized by Trust	Flexible Edge characterized by Low Trust

- *Hypothesis 1*: Edge/Trust demonstrates high levels of competence and openness; perform accurately and timely
- *Hypothesis 2*: Edge/Trust demonstrate moderate or low levels of concern; perform accurately and timely
- *Hypothesis 3*: Hierarchy/Low trust demonstrate high levels of reliability; perform accurately and timely

- ELICIT Laboratory Experimentation
 - Pilot session
 - 8 Experimental Groups
 - ELICIT Environment (i.e., client-server version with co-located players in networked computer labs)
 - Simulation Exercise: “Organization” members identify the Who, What, Where, and When (time of day, day, and month) of a terrorist attack

- Subjects
 - 136 military junior officers (acting as intelligence officers)
 - Participants consisted of mid-career US and Coalition military officers and government employees
- Treatment Groups
 - Subjects assigned to one of four groups (17 players in each condition)
 - Experiment was run twice on consecutive days for a total of eight experiment groups
- Like coalitions
 - Each group contained equally distributed representation of military service branch, officer subspecialties, gender, rank, and country of service

- Trust
 - Subjects briefed on expectations for high trust
 - Subjects encouraged to share information, work cooperatively,
- Low Trust
 - Subjects briefed on expectations for low trust
 - Subjects may withhold information, may be moles or free riders

- Levels of trust in the organization were measured in all experimental groups
- 16-item survey included questions about each of the four constructs (Mishra & Mishra, 1994), such as
 - “I believe that members of my organization are **competent** and knowledgeable”
 - “I believe that members of my organization are **reliable**”
 - “I believe that members of my organization are straightforward with employees” (**openness**)
 - “I believe that members of my organization do not try to take advantage of employees” (**concern**)

- *Accuracy*: How well did organization members identify Who, What, Where, and When (time of day, day, month) of the imminent attack?
- *Speed*: How quickly did individuals identify?

- Edge/Trust condition: has highest level of overall trust as measured by survey
- *Competence* and *reliability* important for both Edge/Trust and Hierarchy/Low trust condition
- A negative correlation between performance accuracy and speed AND organization structure
- High correlations between trust factors suggest multicollinearity

- Models where Speed is the dependent variable show statistical significance: *openness* and *reliability* are the significant factors (particularly for a hierarchy organization structure)
- Accuracy as the dependent variable is only significant when trust is a single construct

- None of the hypothesis were supported
- An alternative regression shows that *reliability* and *concern* explain the speed dimension, but not accuracy

- Reliability is an important factor to explain expediting decision-making (speed)
- Trust is more a unitary construct vice four separate factors
- Accuracy affected by structure type; trust level has more noticeable impact on speed during problem solving
- A manager should foster knowledge, skills sets, task completion, and sense of loyalty in his or her employees (competence & reliability)

- Managers can achieve better performance outcomes under low trust conditions by structuring as a hierarchy, even if outcomes are not as high as a Edge/Trust configuration
- Managers can distinguish the effects of trust level and structure type

Acknowledgements

- The research described in this paper was funded in part by the Command and Control Research Program through the Center for Edge Power at the Naval Postgraduate School

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