



EMERGENT LEADERSHIP IN SELF-ORGANIZING VIRTUAL TEAMS

Kevin Crowston*, Robert Heckman*, Nora Misiolek**, U. Yeliz Eseryel*
 *Syracuse University School of Information Studies, **Marist College



1) PROBLEM STATEMENT

Traditional leadership theories assume



- Organizational Setting
- Formal Roles
- Single leader/manager

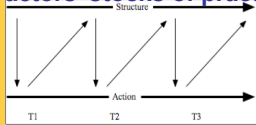
New leadership theories are needed for



- No organizational setting
- No formal roles
- Self-organizing

2) THEORY & DEFINITIONS

LEADERSHIP: Results in the reinforcement, creation & ongoing evolution of team structures.
STRUCTURE: Rules and resources that influence action
 Structure is “encoded in actors’ stocks of practical knowledge”
 (Barley & Tolbert, 1997)



3) PROPOSITIONS

Proposition 1: Leadership in virtual teams operates on two levels: *First-order leadership (1stOL)* is functional. *Second-order leadership (2ndOL)* is transformational.

Propositions 2 & 3: 1stOL & 2ndOL can be either centralized or distributed but in effective teams it’s more likely to observe;

Fluid, distributed, emergent, & widely shared 1stOL

Centralized 2ndOL

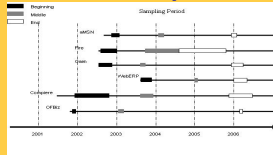
Proposition 4: 1stOL esp. Substantive task contribution

prerequisite for

2ndOL esp. Substantive task contribution

4) RESEARCH METHOD & DATA

- > Longitudinal multiple case study
- > Data: Email messages from developer mailing lists
- > 6 Free/Libre Open Source Software projects



> 60 decision episodes from three time periods

5) CASE SELECTION CRITERIA

a) Software Type
 Instant Messaging



ERP Systems



b) Project Success (Varying levels of success)



c) Data availability, and appropriate project history

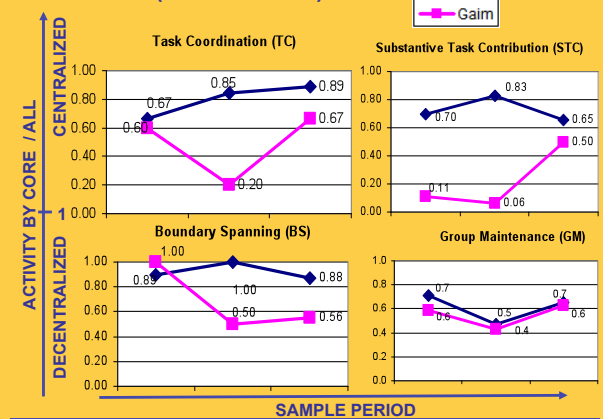
6) ANALYSIS

> Coding schema developed inductively & deductively.

FIRST ORDER LEADERSHIP BEHAVIORS		SECOND ORDER LEADERSHIP BEHAVIORS		
ITEM	SUB-ITEM	ITEM	SUB-ITEM	
Task	Task Assignment	Change Legitimation (Norms and Rules)	Creating new rules	
	Defining Timeline		Changing existing rules	
Substantive Task Contribution	Determining Scope		Create Domination (Authoritative and allocative resources)	Initiate Discussion for new Infrastructure or Strategic Initiatives
	Task Contribution			“Reflexive Monitoring” (Giddens)
Group	Apologies (Group cohesion)	Change Signification (Interpretive Schema)	Changing the rules about the technology use	
	Main tenance (Relationship)		Allocating/removing team efforts towards/ from a major change.	
	Explain Reasoning Behind a Decision		Write/edit documentation on processes	
Boundary Spanning	Providing knowledge from outside	Change Signification (Interpretive Schema)	Change strategic goal of project	
	Assist users		Reinforce rules	
	Link an outsider			

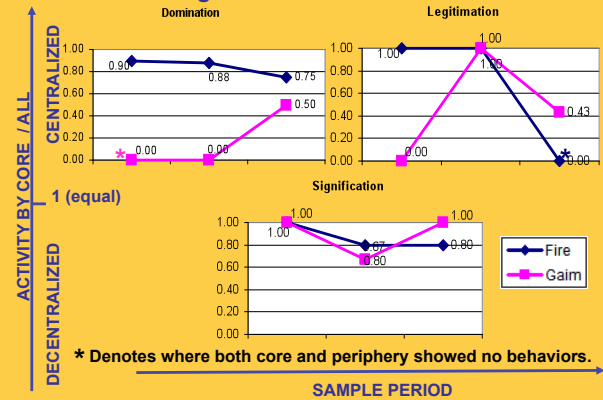
6) INITIAL FINDINGS

> More successful team (Gaim) shows more distributed (decentralized) 1stOL.



7) INITIAL FINDINGS

> Mixed results for 2ndOL: Fire shows more centralized domination. Gaim shows more centralized legitimation. Both teams show centralized signification.



* Denotes where both core and periphery showed no behaviors.