

EXPLAINING POST-IMPLEMENTATION EMPLOYEE SYSTEM USE AND JOB PERFORMANCE: IMPACTS OF THE CONTENT AND SOURCE OF SOCIAL NETWORK TIES

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Appendix A

Key Social Networks Research, 2006–2010

Authors	Year	Journal	Type of Network Studied	DVs
Hsieh et al.	2008	MISQ	Personal network (based on Valente 1995; measured by asking "what percent of the people you know has adopted internet TV)	Continued use intention
Sykes et al.	2009	MISQ	Give-help and get-help (advice network)	System use
Devaraj et al.	2008	ISR	Collaboration network	Ease of Use; Usefulness; Intention to use
Bampo et al.	2008	ISR	Communication networks (based on word-of-mouth); Digital networks are examined in terms of random networks, scale-free networks and small world networks	Campaign's performance
Forman et al.	2008	ISR	Network of reviewers with shared geographical location	Online product sales; Helpfulness rating; Subsequent reviewer disclosure of identity descriptive information
Hahn et al.	2008	ISR	Collaborative network	New project team formation (Developer joining of a project within the first two months of its initiation; Number of developers joining a project; Joining a particular project)
Hinz and Spann	2008	ISR	Friendship and information networks (information network between friends, family and colleagues)	Bidding behavior
Kane and Alavi	2008	ISR	Multi-modal information network	Organizational performance
Robert et al.	2008	ISR	Workflow, communication and advice network (asked team members how much they worked with, communicated with and depended on other employees)	Knowledge integration; Team decision quality

Authors	Year	Journal	Type of Network Studied	DVs
Trier	2008	ISR	Communication network	Network formation
Zhu and Watts	2010	ISR	Communication networks (based on email communication). As a robustness check, measured network among criminals belonging to same gang	Task performance
Chi et al.	2010	ISR	Interfirm alliance networks (joint-ventures and strategic alliances)	Competitive action (volume, complexity and heterogeneity of action)
Chellappa and Saraf	2010	ISR	Interfirm alliance network	Choice of alliance partner; firm performance
Balkundi and Harrison	2006	AMJ	Advice, friendship networks	Team effectiveness (viability and performance)
Perry-Smith	2006	AMJ	Communication network	Creativity
Joshi et al.	2006	AMJ	Network conceptualized as members belonging to minority groups	Individual pay
Shipilov	2006	AMJ	Interfirm network	Firm performance
Beckman	2006	AMJ	Network conceptualized in terms of founding members with common prior company affiliations	Exploitative behaviors; Explorative behaviors; Firm performance
Perretti and Negro	2006	AMJ	Coordination network	Presence of new comers; Presence of new combinations of team members
Conlon et al.	2006	AMJ	Network of authors who have already published in a prominent journals	Scientific impact
Chen et al.	2007	AMJ	Network of competitors	Perceived competitive tension; Volume of a focal firm's attack
Hillman et al.	2007	AMJ	Interorganizational networks (number of links to other firms with women directors)	Female representation on board of directors
Carson et al.	2007	AMJ	Leadership network measured based on the response to "to what extent do you depend on the team member for leadership"	Level of shared leadership in a team; Team performance
Stam and Elfring	2008	AMJ	Advice network measured in terms of the information shared with other firms	Firm performance
Chua et al.	2008	AMJ	Friendship network, advice network, network based on economic exchanges among managers	Affect-based trust; Cognition-based trust
Kang	2008	AMJ	Director interlocks	Market value of firms with director-interlocks to other firms accused of financial reporting fraud; Reputational penalties
McDonald et al.	2008	AMJ	Advice network	Advice-seeking behavior; Firm performance
Ozcan and Eisenhardt	2009	AMJ	Network ties assessed on the dimensions of trust, communication, conflict and achievement	Likelihood of forming portfolios with high performing attributes; Firm performance
Jokisaari and Nurmi	2009	AMJ	Informal networks	Perceived supervisor support; Work mastery; Growth in salary; Job satisfaction

Authors	Year	Journal	Type of Network Studied	DVs
Mitsuhashi and Grece	2009	AMJ	Interorganizational alliances	Likelihood of forming alliances; Organizational growth; Organizational failure rate; Organizational performance
McDermott et al.	2009	AMJ	Interfirm network	Level of product upgrading
Tortoriello and Krackhardt	2010	AMJ	Advice network (knowledge sharing network)	Generation of innovations
Westphal and Graebner	2010	AMJ	Friendship network between CEOs	Formal board independence; CEO verbal impression management; Analyst appraisals of firm
Wong and Boh	2010	AMJ	Advocate's social network	Managers' reputations for trustworthiness among their peers; Self-efficacy
Greve et al.	2010	AMJ	Interfirm alliance	Firm's withdrawal from interfirm alliances
Guler and Guillén	2010	AMJ	Firm's home country network	Rate of firm's foreign market entry
Martin and Eisenhardt	2010	AMJ	Communication network at the business unit	Business unit collaboration
McDonald and Westphal	2010	AMJ	Friendship network	CEO social identification with corporate elite; Strategic help provided by CEOs to other CEOs
Tsai and Wu	2010	AMJ	Co-citation network	
Lechner et al.	2010	AMJ	Intergroup communication network (measured in terms of frequency of interaction)	Performance of strategic unit
Phelps	2010	AMJ	Firm's alliance network	Firm's degree of exploratory innovation
Shipilov et al.	2010	AMJ	Board interlocks	Organization's adoption of a practice (and second-wave of adoption)
Flynn and Wiltermuth	2010	AMJ	Advice network	Consensus (perception of the degree to which others share individual's views on ethical matters)
Semadeni and Anderson	2010	AMJ	SNA used only in the operationalization. Imitation was calculated based on the correlation between the use of key terms used in the description of services (using Bonacich normalization routine)	Imitation
Dacin et al.	2010	AMJ	General concept of "social network"; conceptualized in terms of students belonging to Oxbridge college	Identity; shift in social position
Bowler and Brass	2006	JAP	Help/advice network, friendship network	Performance and receipt of Interpersonal commitment behavior
Ferrin et al.	2006	JAP	Trust network measured by asking "to what extent do you trust X"; OCB was measured based on help/advice network	Trust in coworker; Coworker OCB

Authors	Year	Journal	Type of Network Studied	DVs
Levin et al.	2006	JAP	Egocentric network measuring the length of the relationship between individuals; advice network	Level of trust
Simons et al.	2007	JAP	Based on homophily but does not apply SNA	Behavioral integrity; Trust in management; Interpersonal justice perceptions; Global satisfaction; Affective commitment; Intent to stay
Colquitt et al.	2007	JAP	Task interdependence network	Perceived helpfulness ; Perceived trust
Venkataramani and Dalal	2007	JAP	Positive and negative affective networks	Helping behavior; harming behavior
Avery et al.	2007	JAP	Based on social identity theory but does not apply SNA	Employee engagement
de Jong et al.	2007	JAP	Workflow network ("how dependent are you on X for materials, means, information, etc.")	Perceived receipt of help from coworker; trust in coworker
Anderson et al.	2008	JAP	Network of employees in an organization	Influence (measured based on coworker rating)
Zohar and Tenne-Gazit	2008	JAP	Communication and friendship networks	Climate strength
Lau and Liden	2008	JAP	Trust network measured by asking "do you	Extent to which employees are trusted talk to X about confidential work-related matters"
Chiaburu and Harrison	2008	JAP	Advice network measured in terms of the information provided by coworkers	Role perceptions (role ambiguity, role conflict, role overload); Work attitudes (job satisfaction, job involvement, organizational commitment); Withdrawal (effort reduction, absenteeism, intent to quit, turnover); Interpersonal effectiveness; Organizational effectiveness
Scott and Judge	2009	JAP	Work communication network	Agreement among coworkers about the popularity of a given employee; Organizational citizenship behavior; Counter-productive work behavior
Lai et al.	2009	JAP	Friendship network	Willingness to accept i-deal
Zhou et al.	2009	JAP	Advice networks	Creativity
Baer	2010	JAP	Communication network (measured in terms of frequency, closeness and duration of interaction)	Creativity
Venkataramani and Tangirala	2010	JAP	Workflow networks (measured in terms of interactions with fellow employees)	Personal influence; Voice behavior
Venkataramani et al.	2010	JAP	Advice network	Job satisfaction; Turnover intention

Appendix B

Instrument

Social Network Survey Questions

	I contact this person for advice related to my work:				
	Many times a day	Once a day	Once a week	Once a month	Less than once a month
Name 1	1	2	3	4	5
Name 2	1	2	3	4	5
....					
Name n-1	1	2	3	4	5

	How would you rate your social relationship with...				
	Casual acquaintance	Acquaintance	Casual friend	A friend	A good friend
Name 1	1	2	3	4	5
Name 2	1	2	3	4	5
....					
Name n-1	1	2	3	4	5

	This person makes it difficult to do my work:				
	Many times a day	Once a day	Once a week	Once a month	Less than once a month
Name 1	1	2	3	4	5
Name 2	1	2	3	4	5
....					
Name n-1	1	2	3	4	5

Deep Structure Use (7-point Likert agreement scale)

1. I use the “weekly summary report” feature to understand my progress.
2. I use the “compare performance” feature to benchmark my performance against the work of my peers.
3. I use the “feedback” feature to provide input to others on their work.
4. I read the comments provided on my design.
5. I use the “collaborate” feature to share and store information among team members.
6. I use the “history” feature to learn about other similar work done in the past.
7. I use the system to get product specifications and customer interests from the marketing unit.
8. I customize the features and menu structure for each project.
9. Whenever necessary, I use the “protection” or “freeze” features to commit design aspects or design changes.
10. I use the “development” feature for our interactions with the “product development” unit.
11. I use the “integrate” and “test” features as the design moves into the development phase.
12. After the completion of a design, I use the “summarize” feature to leave notes for future users.
13. I use the “versioning” feature to provide the detailed history and evolution of the design.
14. I use the “costing” feature to interact with manufacturing to get price data related to my design.

Job Performance (1 = needs much improvement, 7 = excellent)

1. Quantity of work output.
2. Quality of work output.
3. Accuracy of work.
4. Liaising well with suppliers.

Behavioral Intention (7-point Likert agreement scale)

1. I intend to use the system in the next <n> months.
2. I predict I would use the system in the next <n> months.
3. I plan to use the system in the next <n> months.

Facilitating Conditions (7-point Likert agreement scale)

1. I have the resources necessary to use the system.
2. I have the knowledge necessary to use the system.
3. The system is not compatible with other systems I use.
4. A specific person (or group) is available for assistance with system difficulties.

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