Cross-Generational Knowledge Flows in Edge Organizations:
Research in Progress

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Some Pressing Issues in (Edge) Organizations

- Strategic human capital & succession planning issues
- Knowledge capture, sharing, application, and creation
- Knowledge flows and knowledge gaps for adaptability and agility
- “Age diversity”
Social Networking & Knowledge Flows

• 1 of every 8 couples married in the US last year met online
• MySpace has 106M registered users (as of Sept. 06)—if MySpace were a country, it would be 11th largest in the world, between Japan and Mexico
Assumptions

• We start with the premise that if knowledge enables action, then knowledge flows could be measured via the knowledge-based actions that they enable.

• We are thus interested in determining the goals and resulting actions that the edge-like teams hope to attain, and the knowledge that is sought to accomplish those goals.
Model for Cross-Generational Tacit Knowledge Flows in Edge Organizations

Cross-Generational Biases → Tacit Knowledge Transfer

Edge Organization

KNOWLEDGE FLOWS
Tacit Knowledge Transfer
(24 key recent references)

• Trust
• Organizational Culture
• Societal Cultural Issues
• Early Involvement
• Due Diligence
• Reciprocity
• Values
• Motivation to Share Knowledge
• Intrinsic Worth of the Knowledge to be Conveyed
Cross-Generational Biases
(25 key recent references)

• Loyalty
• Making a Contribution
• Work Values
• Communications Styles
• Gender
• Culture
• Ability to Deal with Ambiguity & Change
• Autonomy/Independence
• Family Values
Edge Organizations
(15 key recent references)

- Robustness
- Interoperability
- Competence
- Agility
- Shared Awareness
- Decentralized Knowledge & Command
- Situational Leadership
- Pull & Smart
- Network-Centric Focus
Ten Hypotheses

• H1: Cross-generational biases inhibit tacit knowledge transfer and decrease knowledge flows in edge organizations.
• H2: Strong work and family values will facilitate tacit knowledge transfer and increase knowledge flows in edge organizations.
• H3: Decreased communications will inhibit tacit knowledge transfer and decrease knowledge flows in edge organizations.
• H4: Females act in a more collaborative manner than males, thereby increasing trust and tacit knowledge transfer resulting in an increase of knowledge flows in edge organizations.
• H5: A lack of interpersonal trust will result in reduced tacit knowledge transfer and decreased knowledge flows in edge organizations.
Hypotheses

• H6: Informal networks will result in an increase in tacit knowledge transfer and increased knowledge flows in edge organizations.

• H7: Organizational and societal cultural barriers will decrease tacit knowledge transfer and decrease knowledge flows in edge organizations.

• H8: Motivation to share knowledge through being recognized and/or rewarded will increase tacit knowledge transfer and increase knowledge flows in edge organizations.

• H9: Reciprocity and the worthiness of the knowledge conveyed will stimulate tacit knowledge transfer and increase knowledge flows in edge organizations.

• H10: Increased loyalty will increase tacit knowledge transfer and increase knowledge flows in edge organizations.
Experiment

• MS-ITS Capstone Teams (Spring 2007)
  – Web-based Cross-Generational Knowledge Flow and Sharing Questionnaire (Pre and Post) (Statistical Analysis)
  – Observation/Ethnographic Analysis (Weekly Knowledge Flow Progress Reports, Weekly Meetings, Use of Blackboard for Client/Team Discussions & Posting of Documents, etc.)
  – Follow Up Interviews
  – Best Practices
UNI-GENERATIONAL TEAM KNOWLEDGE FLOWS

W1/W2: K1_{HHS} + G1_{HHS}

K2_{SOS/S04} + G2_{SOS/S04} → G4_{SOW}

K3_{MDOD} + G2_{MDOD}

W3: K4_{HHS IT/WEB DEPT} + G5_{WEB ARCH. ANALYSIS}

K5_{HHSODMDOD WEB ARCH.} - (CLIENT EXP SCOPE CREEP)

W4/W5/W7: K6_{BEST PRACTICES} + G6_{INT.COMM}

W6/W8: K7_{SECURITY} +
Multi-Generational Team Knowledge Flow

W1: K1 

+ G1 

K2 

+ (PM) 

(W2/W3) 

K3 

(QUALITY) 

UNITY 

+W4/W5 K5 

+ G2 

K6 

+ 

W6: K7 

W7/W8: K8 

G3 

SITE EVAL. 

+ G4 

DISAB: TAXONOMY 

G5 

XML SCHEMA 

+ G6 

DB
## Sample Questions

<table>
<thead>
<tr>
<th>Sample Questions</th>
<th>Hypothesis</th>
<th>Hypothesis True or False</th>
</tr>
</thead>
<tbody>
<tr>
<td>I believe that there may be generational gaps on our team resulting in different expectations.</td>
<td>H1: Cross-generational biases inhibit tacit knowledge transfer and decrease knowledge flows in edge organizations.</td>
<td>TRUE</td>
</tr>
<tr>
<td>I have dedicated work ethics.</td>
<td>H2: Strong work and family values will facilitate tacit knowledge transfer and increase knowledge flows in edge organizations.</td>
<td>TRUE</td>
</tr>
<tr>
<td>I have strong family values.</td>
<td>H2: Strong work and family values will facilitate tacit knowledge transfer and increase knowledge flows in edge organizations.</td>
<td>TRUE</td>
</tr>
<tr>
<td>I feel informal communications will foster trust and help better sharing of the knowledge in a group.</td>
<td>H3: Decreased communications will inhibit tacit knowledge transfer and decrease knowledge flows in edge organizations. H5: A lack of interpersonal trust will result in reduced tacit knowledge transfer and decreased knowledge flows in edge organizations. H6: Informal networks will result in an increase in tacit knowledge transfer and increased knowledge flows in edge organizations.</td>
<td>TRUE</td>
</tr>
<tr>
<td>I feel knowledge flows more easily when people of the same gender work as a team.</td>
<td>H4: Females act in a more collaborative manner than males, thereby increasing trust and tacit knowledge transfer resulting in an increase of knowledge flows in edge organizations.</td>
<td>TRUE</td>
</tr>
<tr>
<td>I have certain biases that my affect my performance on the team.</td>
<td>H7: Organizational and societal cultural barriers will decrease tacit knowledge transfer and decrease knowledge flows in edge organizations.</td>
<td>TRUE</td>
</tr>
<tr>
<td>Appreciation will motivate me to contribute better.</td>
<td>H8: Motivation to share knowledge through being recognized and/or rewarded will increase tacit knowledge transfer and increase knowledge flows in edge organizations.</td>
<td>TRUE</td>
</tr>
<tr>
<td>I am willing to share my knowledge with others because I feel they will reciprocate.</td>
<td>H9: Reciprocity and the worthiness of the knowledge conveyed will stimulate tacit knowledge transfer and increase knowledge flows in edge organizations.</td>
<td>TRUE</td>
</tr>
<tr>
<td>I am loyal to the team’s mission.</td>
<td>H10: Increased loyalty will increase tacit knowledge transfer and increase knowledge flows in edge organizations.</td>
<td>TRUE</td>
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</table>
### Other Capstone Teams

<table>
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<tr>
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| I feel informal communications will foster trust and help better sharing of the knowledge in a group. | H3: Decreased communications will inhibit tacit knowledge transfer and decrease knowledge flows in edge organizations.  
H5: A lack of interpersonal trust will result in reduced tacit knowledge transfer and decreased knowledge flows in edge organizations.  
H6: Informal networks will result in an increase in tacit knowledge transfer and increased knowledge flows in edge organizations. | TRUE                     |
| I feel knowledge flows more easily when people of the same gender work as a team. | H4: Females act in a more collaborative manner than males, thereby increasing trust and tacit knowledge transfer resulting in an increase of knowledge flows in edge organizations. | TRUE                     |
| I have certain biases that my affect my performance on the team.                 | H7: Organizational and societal cultural barriers will decrease tacit knowledge transfer and decrease knowledge flows in edge organizations. | TRUE                     |
| Appreciation will motivate me to contribute better.                              | H8: Motivation to share knowledge through being recognized and/or rewarded will increase tacit knowledge transfer and increase knowledge flows in edge organizations. | TRUE                     |
| I am willing to share my knowledge with others because I feel they will reciprocate. | H9: Reciprocity and the worthiness of the knowledge conveyed will stimulate tacit knowledge transfer and increase knowledge flows in edge organizations. | FALSE                    |
| I am loyal to the team’s mission.                                               | H10: Increased loyalty will increase tacit knowledge transfer and increase knowledge flows in edge organizations. | TRUE                     |
Summary & Future Work

• This research was novel in that the combination of inter-generational differences, tacit knowledge transfer, and edge organizations had never been studied.

• Study Limitations: Sample size, in-depth case studies.

• Follow-on Work: (1) How does the type of knowledge sought affect the influence of cross-generational biases on knowledge flows in edge-like teams? and (2) What are the CSFs that determine whether edge-like teams will be productive in terms of cross-generational knowledge flows?
Questions and Answers