

***Generational Knowledge Flow  
in Edge Organizations***

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## **Introduction**

Much has been written about today's multigenerational workplace, and the inherent challenges posed by it. At the recent 2009 Knowledge Management Conference at Pepperdine University, I attended a proceeding by Dr. Jay Liebowitz where he presented recent research on Cross Generational Knowledge Flow, specifically in "edge" organizations. His presentation spurred my interest, and provided the impetus for the theme of this paper: to define the edge organization, and then look at some of the challenges and solutions to generational knowledge flow within these organizations.

## **Edge Organizations**

An edge organization encourages appropriate interactions between and among any and all members. Its approach to command and control breaks the traditional mold by uncoupling command from control (Alberts, 2003). Edge organizations allow individuals "at the edge" to be empowered. Edge organizations highlight a degree of independence of the units. They are flexible, allowing teams to be set up in response to new tasks. Edge organizations are particularly well suited to deal with uncertainty and unfamiliarity because they make more of their relevant knowledge, experience, and expertise available. As such, edge organizations can take many forms. Edge-like organizations may include work teams, open source development teams, small businesses, military units, and university research groups. Also, terrorist cells are a type of edge organization where cells operate fairly autonomously, yet have an encompassing vision in mind (Liebowitz, 2007). Edge organizations are of special interest to me, as many of the small and medium teams and virtual workgroups I consult with qualify as edge organizations. I profile one of these teams below.

### **Some Key Factors of an Edge Organization include: (Liebowitz, 2007)**

- Interoperability
- Agility
- Shared awareness
- Decentralized knowledge and command
- Situational leadership
- Pull and smart
- Competence
- Robustness
- Network centric focus

### **Generational Challenges**

Knowledge flow between generations in the workplace is critical to the success of any organization. Differences between the generations can significantly impact employee attitudes and outcomes. If firms are unable to modify their cultures and work environments to adequately meet the needs of their younger generation employees, they will continue to experience high levels of dissatisfaction and turnover. Bi directional learning must be fostered, especially as an aging workforce retires and takes with it valuable tacit knowledge. This can be especially detrimental to edge organizations, as they depend on agility, robustness and decentralized knowledge and command.

“Generational differences sometimes may cause clashes in the workplace, especially among workers on teams,” psychologist Constance Patterson, PhD notes (Dittman, 2005). For example, she says, boomers may believe gen Xers are too impatient and willing to throw out the tried-and-true strategies, while gen Xers may view boomers as always trying to say the right

thing to the right person and being inflexible to change. Traditionalists may view baby boomers as self-absorbed and prone to sharing too much information, and baby boomers may view traditionalists as dictatorial and rigid. And, gen Xers may consider millennials too spoiled and self-absorbed, while millennials may view gen Xers as too cynical and negative (Dittman, 2005).

Knowledge flow between Baby Boomers and Generation Xers is especially important, as they are currently most affected by succession, retirements and layoffs. However the current economic recession has left many organizations remiss to invest in KM initiatives. The irony is that these are the times when such initiatives are needed most.

According to McNichols in her thesis on *Intergenerational Knowledge Transfer Within an Aerospace Engineering Community* (2009), the data collected from Generation X engineers suggests there is a generation gap impeding the flow of knowledge from baby boomers to Generations X engineers. Insight gleaned from baby boomers suggests that there is a communication problem between the two generations impacting the level of trust and openness between the two groups. On the other hand, baby boomer engineers expressed a desire and willingness to share knowledge with Generation X engineers, on the condition the younger engineers display an attitude of respect and appreciation (McNichols, 2009).

## **Findings and Solutions**

In reviewing some of the literature on generational diversity as related to succession planning [Bedell, 2007], organizations must master the Baby Boomer/Generation X/Generation Y divide. In order to plan for the future, Bedell (2007) discusses some techniques in terms of ensuring better succession planning through involving the Generation Y'ers:

1. Onboarding: Take a cohort approach, connect their work, solicit their input, and have fun.

2. Training: Include Gen X and boomers with the Gen Y'ers in the training to heighten generational diversity awareness.
3. Mentoring/Reverse Mentoring: Match Gen Y'er with a boomer, and let Gen Y'er be a "technology mentor".
4. Coaching: coach the team at the beginning and beyond.
5. Give them a seat at the table: get the Gen Y'er involved so they can contribute to the team's decision making process. (Liebowitz, 2008, p11)

McNichols (2009) provides a series of recommendations that can be applied to the cross generational knowledge flow challenges in edge organizations. Based on the study's findings, the following implications and strategies reflect knowledge transfer initiatives that may effectively help to transfer knowledge from baby boomers to Generation X'ers:

- Pairing of junior and senior engineers
- Mentoring
- Teamwork
- Communication
- Technology
- Geographical proximity
- Mutual trust and respect between the sender and receiver
- Management involvement and support

Also related to edge organizations, McNichols found:

- Within the team environment, knowledge transfer and integration occurs between individuals. The result is a collective knowledge greater than any single individual could produce.

- Combining individuals with different and complementary skills and perspectives and achieving cooperation among them may result in the enhancement of optimal knowledge transfer if management recognizes the social or relationship aspect of team building.

"A team that allows choices and openly explores ideas, and whose members value learning, will better accommodate the needs and values of members of different generations," Patterson says. Furthermore, she says, effective teams should value different views, encourage active listening, decrease ambiguity among team members' roles, support the sharing of expertise, share recognition and appreciation, value hard work and build in humor and fun to their meetings. For example, effective messages from team members for traditionalists may be, "Your experience is respected," or "It is valuable to hear what has worked in the past," Patterson notes. Baby boomers may need to hear such messages as, "You are valuable, worthy," or "Your contribution is unique and important to our success." (Dittman, 2005).

### **Trust and Geographical Proximity**

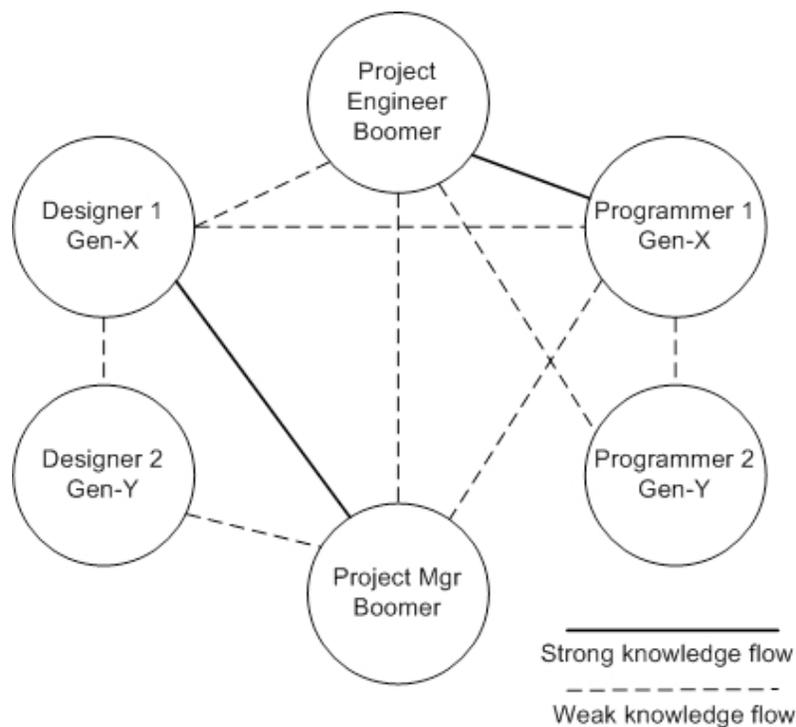
My experiences with edge organizations correspond with many of these findings. A key factor that commonly affects generational relationships is the issue of trust. Lack of trust between sender and receiver of any generations will result in barriers to knowledge transfer. As highlighted by the case described below, trust was reinforced only after the edge team met and began collaborating face-to-face.

I worked on a project in 2008 that involved both generational and proximity/location issues. The team was a small edge organization tasked with the design, development and

deployment of software and content for a new theme park attraction. This project was complex and risky, and relied on a number of new technologies and systems configured in novel ways.

The team started the project as a virtual workgroup with each member collaborating from disparate locations nationwide. Most members had never met face to face. Communication and collaboration for the first several weeks was via conference calls, email, file sharing and a few web conferences. During this initial phase of the project, the team's knowledge flow was lacking in both quantity and quality. The diagram below illustrates the knowledge flow. Also noticeable, but not shown in the diagram was an underlying lack of trust that was evident between certain members of the team.

**Figure 1: Edge team during Phase 1 (distance collaboration)**



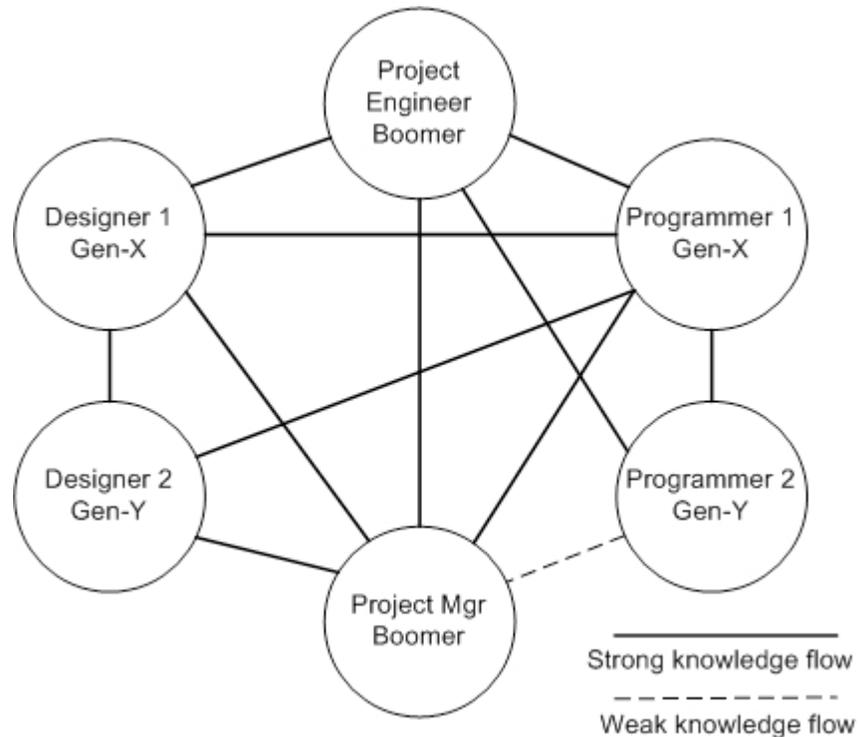
During Phase 2 shown in Figure 2 below, the team had convened on the job site for the remainder of the project. There was frequent, ongoing face-to-face collaboration. The knowledge

flow, as well as the perceived level of trust improved between team members. This in spite of some generational differences. These improvements increased the efficiency and effectiveness of this edge team, and are attributable to the trust that was built when the team was together, elbow-to-elbow “in the trenches.”

Nevertheless, there were a few generational issues with knowledge flow. The Project Engineer (a baby boomer) was over protective about knowledge sharing with the younger, less experienced Generation Y team members, preferring to keep his data siloed from the group. This highlights the importance of reciprocity, which refers to being willing to share one’s knowledge because given a similar situation, the knowledge recipient would share his/her knowledge back with the individual. Convenient knowledge transfer mechanisms need to exist for cross-generational knowledge flows so that “user adoption” will be enhanced (Liebowitz, 2007). The Gen Y Programmer 2 was able to bridge the knowledge sharing gap with the Sr. Engineer through knowledge transfer mechanisms, in this case by contributing file sharing and intuitive new workflow tools that had not been available to the Sr. Engineer. The Generation Y programmer was then given “a seat at the table,” and was thereby able to collaborate and have a more open flow of knowledge with his more senior team members.

Establishing trust and rapport among the team members in edge organizations is also critical due to situational leadership, whereby the leadership changes based on the task at hand and the team leader may rotate according to the necessary set of skills and competencies needed for a given mission (Liebowitz, 2007). The leadership in my edge team was fluid, depending on what functional area of the project required the most attention at any given moment.

**Figure 2: Edge team during Phase 2 (face-to-face collaboration)**



## Values

A final note regarding values, as they are a part of the generational discussion. Every generation is influenced by its period's economic, political and social events--from the Great Depression to the civil rights and women's movements to the advent of television and advanced computer technologies--so it follows that generational context also may affect the way they work (Dittman, 2005). A subset of overlapping values to reduce generational gaps is also important to lead to a common, shared understanding (Liebowitz, 2007).

However when it comes to values.... “the most striking result is how similar the generations are in their priorities. Although there are a few differences, overall we can’t say that the generations have different values” (Deal, 2007).

“The research shows that the generations’ values do not differ significantly – individuals of all generations differ much more from each other than any generation does from the others. That is, there are more differences within each generation than there are between generations. The conflicts are about differences in behavior rather than about a fundamental values difference” (Deal, 2007). The message to take away here is to be clear about your own values, and keenly sensitive to other’s values, regardless of their generational orientation.

## **Summary**

As Dr. Liebowitz stated in his presentation, there is more research to be done about generational knowledge flow within edge organizations. It will be interesting to see how this evolves, especially as social networking and media rich technologies continue to proliferate. The effects on distance learning could also be significant.

The research and my personal experience underscore the importance of factors that affect intergenerational knowledge flow in edge organizations, especially mutual trust, geographical proximity, technology, teamwork and mentoring.

## References

- Alberts, David S. (2003). *Power to the Edge: Command and Control in the Information Age* / David S. Alberts, Richard E. Hayes. Command and Control Research Program, Washington, D.C. Retrieved August 6, 2009 from: <http://www.dodccrp.org/>
- Deal, J. (2007). *Retiring the Generation Gap How Employees Young & Old Can Find Common Ground* (Chap. 1 and Chap. 9). New York, NY: John Wiley & Sons
- Dittman, Melissa. (2005). *Generational Differences at Work*, APA Online Monitor on psychology, Volume 36, No. 6 June 2005. Retrieved August 7, 2009 from: <http://www.apa.org/monitor/jun05/generational.html> Print version: page 54
- Liebowitz, Dr. Jay. (2009). Presented at the 3<sup>rd</sup> Annual National Conference on Knowledge Management. Pepperdine University, Aug 5-6, 2009. Information at: <http://bschool.pepperdine.edu/newsevents/kmforum/>
- Liebowitz, Dr. Jay, and Ivanov, Emil. (2008). *Extending Cross-Generational Knowledge Flow Research in Edge Organizations*. Retrieved August 7, 2009, from <http://unjobs.org/authors/jay-liebowitz>
- Liebowitz, Dr. Jay, Ayyavoo, Nirmala, and Nguyenm, Hang. (2007). *Cross-Generational Knowledge Flows in Edge Organizations*. Industrial Management & Data Systems, Volume 107 Issue 8. Retrieved August 7, 2009, from <http://www.emeraldinsight.com.libproxy.csun.edu:2048/Insight/>
- McNichols, Debby. (2009). *Tacit Knowledge: An Examination of Intergenerational Knowledge Transfer Within an Aerospace Engineering Community*. Retrieved Aug 8, 2009 from: <http://www.slideshare.net/cogdebby/>