

CORNELL HR REVIEW

HOW TO CONTINUE TO INNOVATE WITH FEWER “WATER COOLER” CONVERSATIONS

Nicole DeMarco Kuzdeba

Introduction

As companies continue to grow globally, learning how to innovate across geographic lines has become even more important as “water cooler” conversations become less of the norm. This challenge is even more pertinent for the tech industry, where innovation is at its core. I sought to answer the following question:

As tech companies continue to expand globally and open offices in more locations, the employee population becomes more decentralized, resulting in fewer organic, “water cooler” conversations. These “water cooler” conversations, or unintentional run-ins with one another which typically result in work conversation, can lead to innovative thinking or ideas. As companies expand globally, teams grow across various sites and more employees work at remote sites (not at the company’s headquarters), fewer of these organic conversations occur. So how can we continue to innovate without these “water cooler” conversations?

To examine this phenomenon, I first reviewed the academic literature on knowledge creation, social networks, and human resources (HR) practices/human resource management (HRM) capabilities. Next, I researched the current challenges to innovation within the tech industry that relate to location dispersion. Finally, I derived recommendations for how to overcome these challenges associated with trying to innovate as a global tech company spread across locations with remote working teams.

First, let’s review the current academic literature related to innovation, knowledge creation, social networks, and HR practices/HRM capabilities.

Knowledge Creation

Nonaka believed that “organizational knowledge is created through a continuous dialogue between tacit knowledge (knowledge that is hard to formalize, but is rooted in action, commitment, and involvement in a specific context) and explicit or codified knowledge (knowledge that is transmittable in formal, systematic language).”¹ There are four patterns of interaction in which tacit and explicit knowledge interact (also known as conversion modes of knowledge creation): socialization (from tacit to tacit), externalization (from tacit to explicit), internalization (from explicit to tacit), and combination (from explicit to explicit). All of these patterns of interaction continuously drive the knowledge creation process. Nonaka also stressed that organizations play a critical role in mobilizing tacit knowledge held by individuals and providing the forum for a “spiral of knowledge” creation through the four patterns of interaction.

Collins, Smith, and Stevens reviewed key HR practices (including employee-development, networking practices, and commitment-building) to see if they would affect the firm's knowledge-creation capability (measured by looking at three dimensions: human capital, employee motivation, and information combination/exchange) and eventually firm performance.² After examining 78 high tech firms, they found that the three dimensions of knowledge creation (human capital, employee motivation, and information combination/exchange) positively affected the firm's sales growth. Also, the HR practices were found to affect sales growth through their effect on the three dimensions of knowledge creation (HR practices were significantly related to the three dimensions of knowledge-creation, and the three dimensions of knowledge creation were related to the firm's growth). Collins, Smith, and Stevens explained that a firm's knowledge-creation capability could actually explain statistically significant variance in a high tech firm's performance.

Smith, Collins, and Clark studied top management teams and knowledge workers from 72 tech companies and found that the rate of new service and product introduction was a function of an organization's members' ability to combine and exchange knowledge.³ Knowledge creation capability was significantly related to the number of new products and services. Smith, Collins, and Clark stated that these findings suggested that a firm's knowledge creation capability helps to explain the relationship between a worker's years of education, number of contacts, strength of ties, a firm's climate for risk taking, and a firm's number of new products/services. Also, the organization's climate has a particularly influential role in knowledge creation capability and a climate that supports risk taking can increase knowledge creation capability.

Collins and Smith studied whether HR practices could impact "organizational social climate conditions that facilitate knowledge exchange and combination and resultant firm performance" specifically within high tech firms.⁴ They found that commitment based HR practices, "which focus on mutual, long-term exchange relationships" were positively related to an organization's social climates, which included trust, cooperation, and shared codes/language. These social climates were related to the firm's capability to exchange and combine knowledge. This relationship between social climates and the firm's capability to exchange and combine knowledge could predict the firm's revenue from new products/services, as well as sales growth.⁴ Collins and Smith go on to state that these findings suggest that high tech firms should carefully choose the HR practices used to manage their knowledge. This is because the practices may actually shape the firm's social contexts, which in turn could affect the firm's ability to create new knowledge necessary for high performance and growth.

Social Networks

Collins and Clark found that when HR practices were in place that encouraged networking between the firm's top management, it positively influenced the firm's performance.⁵ Network building HR practices lead to increased firm performance. Top manager social networks are therefore important for firm performance.

HR Practices & HRM Capabilities

Gupta and Singhal asserted that people, not products, are an innovative company's most important assets and innovative companies implement a four pronged HR management strategy: HR planning, performance appraisal, reward systems, and career management.⁶ HR planning analyzes and determines personnel needs in order to create effective innovation teams. Performance appraisals should review individual/team performance in a way that rewards employees for their "innovativeness," a word that's definition that can vary from company to company. This strategy also takes into account what tasks should be rewarded and who should assess employee performance. Reward systems use rewards to motivate personnel to achieve an organization's goals of productivity, innovation, and profitability. Lastly, career management matches an employee's long term career goals with the organization's goals through continuing education and training.

Ozbag, Esen, and Esen reviewed "the role of HRM in fostering knowledge capability which leads more innovation in enterprises."⁷ They examined "the impacts of the policies and practices of HRM in the relationship between knowledge management capability on innovation." They described knowledge as an important intangible asset that helps to prompt innovation within organizations and found that HRM capabilities are positively related to knowledge management capability, which turns into innovation. Furthermore, HRM capabilities have direct and indirect effects mediated by knowledge management capabilities on innovation. Ozbag, Esen, and Esen stated that improvements on HRM capabilities leads to innovation and HRM practices through knowledge management capabilities increase an organization's learning which is important for innovation.

From a divergent point of view, Laursen and Foss examined "new" or "modern" HRM practices (practices that imply high levels of delegation of decisions, extensive lateral and vertical communication channels, and the use of reward systems).⁸ They discussed possible mediators and moderators of the HRM and innovation link such as the type of knowledge (tacit or codified), knowledge sharing, social capital and network effects. They state that although progress has been made, the exact underlying causal mechanisms of the HRM and innovation link is still difficult to understand. They stated that research gaps included the need for more time series evidence, clustering of practices (little empirical work on which HRM practices bundle and why), specific practices (individual practices were negligible, but systems of HRM practices mattered to innovation performance), and the need for finer grained and richer causal stories.

In summary, most of the key outcomes examined from the research included firm performance, innovation, and the number of new products or services. These are all ways that knowledge creation, social networks, and HR practices/HRM capabilities could have an impact on the business.

Current Challenges

Next let's examine what challenges a global tech company faces in regards to innovation when they are expanding globally. Wilson and Doz state that "part of the challenge of dispersed

innovation becomes how to replicate the positive aspects of colocation while harnessing the unique benefits of a global initiative.”⁹

The first challenge is how to continuously generate knowledge creation across geographic locations. In the past, “water cooler” conversations, or unintentional run-ins with another co-worker which could result in knowledge creation, was one way that employees developed innovative thinking or ideas. This has been a pillar for innovation within the tech world, with many successful tech companies offering generous onsite benefits just for this reason: they want you to stay at work to have more of these spontaneous conversations that can lead to innovation.

Over the years, tech companies have become increasingly global. This means that companies not only have greater geographic spreads across the globe. Time zone differences become barriers to spontaneous communication as well, whether it is because communication needs to be planned in advance, or because the time differences are so great that people never really talk at all except over email. Language barriers can also arise as an issue across countries. As these tech companies continue to grow globally, figuring out how to innovate across geographic lines has emerged as a challenge. This challenge becomes even more important within the tech industry, where innovation is at its core and change is frequent. According to Wilson and Doz, “during periods of major organizational change, such as restructurings or acquisitions integration, the complexity of dispersed innovation escalates.”¹⁰ Top managers are likely to be focused elsewhere within the organization, leaving their global projects orphaned. Critical decisions are frequently left hanging, and problems often go unaddressed. In a climate of organizational uncertainty, turf battles can flare up, and project team members may become concerned about job security and lose focus.”

Because you can’t have spontaneous “water cooler” conversations across sites, employee interactions across geographic locations becomes planned and deliberate. This means that information is shared less spontaneously, which potentially slows the process for innovation. Meetings across sites take place either via phone or video conferencing, which is usually planned and not spontaneous. Instant messaging has helped with more spontaneous interaction, but is still less effective than in person because of the inability to see facial expression or hear voice intonation.

The second challenge is building social networks and collaborating across locations. It is easier to expand your network with people who work at the same site as you compared to people at other sites unless you’re working on a project that encourages collaboration across sites. But even in those situations, you’re not spontaneously meeting new people at other locations. Traveling to other sites can help with this, but travel is costly to the organization and requires a set of goals other than blind networking. Also, you’re likely to build your network across sites with people like you or within your function, whereas within your site you may spontaneously meet anyone from various functions (cross functional collaboration can be just as important to innovation).

Recommendations

Innovating across borders is complex, but possible. Going back to the original question about how we can continue to innovate across geographic sites in the absence of “water cooler” conversations, there are several things that we can do. First, to encourage building and supporting teams that are located across various sites. Wilson and Doz recommend taking the ten steps below to build successful non-located teams¹¹:

- First, start with small projects to help build collaboration and trust among the team.
- Second, ensure that the organization is stable or if not, think carefully about how to prevent organizational change from being a disruption to the project team.
- Third, make a senior manager responsible for support and oversight of projects across sites.
- Fourth, leverage project management and experienced project leaders to lead these projects across sites.
- Fifth, select a site that will hold the primary responsibility for the project being within budget and on time.
- Sixth, is take time to define what the innovation is going to be. This is often an advantage of projects teams all working at the same site because everyone can get on the same page quickly.
- Seventh, resources should be allocated based on site capabilities, not availability.⁹
- Eighth, ensure that there is enough knowledge overlap so that people have a desire to collaborate.
- Ninth, limit the number of subcontractors or external partners you work with on innovative projects.
- Tenth, technology can help us communicate across sites, but face to face time to build trust is important too.

Second, OECD recommends several things to keep in mind once you’re working with others across locations:

“OECD’s Key Recommendations:

- *Understand what the data show, but don’t wait for complete data to start collaborating.*
- *Only pursue the cross-border element when it makes sense.*
- *Allow a certain degree of flexibility in the area definition to avoid creating unhelpful new borders.*
- *Do not under-estimate the importance of other “hard” and “soft” factors beyond innovation.”*¹²

Lastly, I believe that a few things ring true that can really help tech companies innovate globally. First, create an environment where people feel safe to take risks. In order for innovation to happen, people need to believe that they are safely able to think outside of the box. This means creating an environment where smart risk taking is rewarded regardless of the outcomes. This could manifest in tangible rewards such as bonuses or non tangible rewards such as public recognition. Second, bringing people together to meet face to face and build trust is essential at

the beginning of forming a team or project. This helps to build a foundation of trust and mutual respect. Also, people who can find common ground are more likely to work smoothly on a project or team due to finding similarities. They are also more likely to spontaneously reach out to one another, which is ideal within a tech organization. Third, developing goals into which the team has input will help them feel more vested in the outcome. Developing goals at an event that is face to face, such as a summit, ensures that everyone is on the same page and has a common goal. Lastly, we need to build strong leaders at remote sites and give those sites the support/autonomy to act on their own “water cooler” conversations (not just the conversations between them and headquarters).

[Nicole DeMarco Kuzdeba](#) is a 1-year MILR student at Cornell University graduating in May 2016. She came into the program with 6 years of recruiting and Human Resources experience in the tech industry, has her MBA from Boston College and her B.A. in Psychology from the University of Rochester. She lives an hour northwest of Boston in the “boonies” with her husband and partner in crime Matt.

¹ Nonaka, I. A Dynamic Theory of Organizational Knowledge Creation. *Organization Science*, Vol. 5, No. 1 (Feb., 1994), pp. 14-37.
<http://www.jstor.org/stable/2635068>

² Collins, C., Smith, K. G. & Stevens, C. K. (2001). Human resource practices, knowledge -creation capability and performance in high technology firms (CAHRS Working Paper #01-02). Ithaca, NY: Cornell University, School of Industrial and Labor Relations, Center for Advanced Human Resource Studies. <http://digitalcommons.ilr.cornell.edu/cahrswp/65>.

³ Smith, K.G., Collins, C.J. & Clark K.D. 2005. Existing knowledge, knowledge creation capability, and the rate of new product introduction in high-tech technology firms. *Academy of Management Journal*, 48, 2: 346-357.

⁴ Collins, C.J. & Smith, K.G. 2006. Knowledge exchange and combination: The role of human resource practices in the performance of high -technology firms. *Academy of Management Journal*, 49, 3: 544-560.

⁵ Collins, C. J., & Clark, K. D. 2003. Strategic human resource practices, top management team social networks, and firm performance: The role of human resource practices in creating organizational competitive advantage. *Academy of Management Journal*, 46: 740-751.

⁶ Gupta, A.K. & Singhal, A. 1993. Managing human resources for innovation and creativity. *Research/Technology Management*: 41-48.
<http://utminers.utep.edu/asinghal/Reports/Gupta-Singhal-Managing%20Human%20Resources...%20%2012.12.06.pdf>.

⁷ Özbağ et al. 2013. The Impact of HRM Capabilities on Innovation Mediated by Knowledge Management Capability. *Procedia - Social and Behavioral Sciences* 99, 784 – 793. <http://www.sciencedirect.com/science/article/pii/S1877042813039955>.

⁸ Laursen, K., & Foss, N.J. Human resource management practices and innovation. Prepared for the Handbook of Innovation Management, edited by Mark Dodgson, David Gann and Nelson Phillips, Oxford University Press, 2013.
http://www.researchgate.net/publication/256035118_Human_Resource_Management_Practices_and_Innovation.

⁹ Wilson, K. & Doz, Y. 2012. 10 Rules for Managing Global Innovation. *Harvard Business Review*. Web. 10 November 2015.
<https://hbr.org/2012/10/10-rules-for-managing-global-innovation>.

¹⁰ Wilson, K. & Doz, Y. 2012. 10 Rules for Managing Global Innovation. *Harvard Business Review*. Web. 10 November 2015.
<https://hbr.org/2012/10/10-rules-for-managing-global-innovation>.

¹¹ Wilson, K. & Doz, Y. 2012. 10 Rules for Managing Global Innovation. *Harvard Business Review*. Web. 10 November 2015.
<https://hbr.org/2012/10/10-rules-for-managing-global-innovation>.

¹² OECD. 2013. Regions and Innovation: Collaborating across Borders, OECD Reviews of Regional Innovation, OECD Publishing, Paris. DOI: <http://dx.doi.org/10.1787/9789264205307-en>.