HIGH-TECH ENVIRONMENTS: TO BOLDLY GO

The high-tech work environments of work, and of the new knowledge workers (Alvesson, 2004; Jemielniak, 2012; Marks & Baldry, 2009), have been a topic of growing interest from researchers in management and organization science. These environments are in many ways different from the traditional organizational settings.

For example, software engineers and other professionals in high-tech industries seem to enact their identities differently from their counterparts in the traditional professions (English-Lueck, Darrah, & Saveri, 2002; Jemielniak, 2008; Marks & Scholarios, 2007; Marks & Thompson, 2010; Westenholz, 2006). High tech environments and career perceptions are also strongly gendered (Bourne & Özbilgin, 2008; English-Lueck, 2011).

High-tech professionals’ work-life balance is seriously affected by the organizational pressure and normative control, and knowledge workers are often in strong opposition to management (Jemielniak, 2007; Kunda, 1992; Scholarios & Marks, 2004). In addition, time spent at work plays a symbolic, ritualistic role in negotiating social position and status in knowledge-intensive organizations (Jemielniak, 2009; Perlow, 1997; Sharone, 2004). Workers in high-tech environments are often subject to burnout and excessive managerial pressure. The high-tech environment is also unpredictable, and is often a venue of distrust among key actors (Baba, 1999; English-Lueck, et al., 2002; Latussek & Jemielniak, 2007).

At the same time, high tech professionals often perceive work as a “serious game” (Strannegård & Friberg, 2001), and not drudgery: they involve in playful behaviors at work (Hunter, Jemielniak, & Postula, 2010). Software engineers often participate in non-paid, open collaboration production (Lakhani & Von Hippel, 2003).

Modes of collaboration established in virtual and high-tech communities are similarly transforming workplace relations in the brick-and-mortar organizations (Benkler, 2006). They precede and foreshadow more general trends in organizational designs (Argyris, 1973; Beck, 2000; Castells, 2004). Understanding the high-tech workplace, and learning about the management practices and routines in knowledge intensive companies is, thus, of utmost importance for contemporary management scholars and practitioners. This volume addresses all of these urgent issues and more.

Gerbasi and Latussek present results of a qualitative study on a high-tech start-up from Silicon Valley. The chapter explores the problem of trust in joint ventures, between Polish and American partners. Cultural differences, determining varied reliance on knowledge-based and social capital-based kinds of trust are explored. The advantages and disadvantages of building trust in relation to teams, peers, and organizations are considered.

Ciesielska and Iskoujina analyze trust, open innovation, and software development modes. The study of the GNOME and Nokia collaboration shows how trust can be perceived as a strategic resource,
which is actually the crucial ingredient of successful collaboration. In particular, they distinguish the professional (expert) trust and the political trust. This dichotomy is proposed as an interpretive key to understanding trust enactment in open source communities.

Juntunen brings the focus to management of virtual teams. Through a qualitative analysis of virtual teams in a commercial ICT environment in Finland, he describes their success factors, balancing internal and external knowledge. Like Ciesielska, he emphasizes the importance of trust in the IT environment, and especially in fostering long-term strategic relationships.

Roofe-Sattlethight and Armagan’s chapter continues the explorations of virtual work processes. It analyzes the relations and alliances among leaders, members, and teams in a virtual environment. Their quantitative study indicates that such a three-way alliance indeed emerges, but the role of the leader is smaller than in non-virtual settings. Members tend to develop their relationship with the group by building rapport with other members, rather than through the leader.

Lorentzen Hepsø and Hepsø’s study offers insight into ERP systems, on the example of performance indicators used in an oil and gas company. The aggregated performance measurement algorithms are often used in knowledge-intensive companies, and yet their development, as well as actual implementation, is rarely studied from within the organization, in particular with the use of actor-network theory.

Legault and Ouellet have a look at the video game industry. They focus on the issue of time management and long hours spent at work, in the accounts of 53 game designers from Canada. The system of normative control, as well as work evaluation and reputation building, enforced through organizational expectations of “professionalism” are described and offered as a possible explanation of overtime unpaid work that is regularly expected, even when it is prohibited under the law.

Russell’s contribution, relying on a long-term, ethnographic study, describes a case of high tech gadgets negotiated by employees. Through an analysis of engineers bargaining for smartphones, he shows how organizations can increase their control over the employees through new technologies, and how the employees make a rod for their own backs.

Trux’s piece, similarly to Russell’s, pertains to the topic of normative control. She describes the new forms of organizational resistance, emerging in knowledge-intensive organizations. She recognizes the contemporary methods of managerial propaganda and coercion, yet suggests that the new organizational configurations and bifurcation of identities also benefit the counter-managerial employee movement.

Kippist, Hayes, and Fitzgerald delve into the topic of language used between managers and professionals. They research it by comparing two contexts: researchers discussing with managers in Australian hybrid industry-research and health care organizations. Interestingly, several modes of dissent and distinctive patterns of communication were noted. This study indicates that successful management in knowledge-intensive organizations depends on proper argumentative strategies.

Henriksen’s chapter departs from the traditional academic discourse by introducing a narrative approach to technology studies. By introducing storytelling, as well as antenarrative analysis, he offers an alternative perspective on software project development. He brings interesting insights into a story of a failed project, which is particularly interesting given that success stories are much more likely to be shared.

Jørgensen and Strand follow the narrative analysis, and propose a new material-discursive understanding of technology in a form of “material storytelling.” They show the usage of technology in organizations in terms of story performance. Consequently, they resituate the relationship of discourse and technology, and shift the focus of organization studies from human agents to everyday routines, and human-nonhuman actants.

Sköld and Olaison’s piece delves into Lacanian and Deleuzian interpretations of late capitalism’s dynamics. In an unusual analysis of a heavy-duty industry (trucks), incorporating storytelling, they describe different stakeholders and narratives at play, negotiating perceptions of the product, imaginary scenarios, and desires. They show the marketing background and enacted fantasies, linking customers and suppliers.
Karube, Kato, and Numagami’s chapter presents the results of a project on relations between an organization’s features and its likelihood of deteriorating. Their study relies on a large sample of questionnaires from 16 Japanese corporations. It shows that both an organization’s size and its hierarchical structure contribute to its deterioration; participative planning, vertical communication channels, and strict and precise strategy building process prevent it.

Ertürk’s study is a timely application of Hofstede’s organizational culture framework. His findings indicate that power distance is negatively associated with both empowerment and with innovation capability. Uncertainty avoidance, however, is also negatively related to innovation capability, but positively related to empowerment. Collectivism is positively related only to empowerment. These results support the thesis that knowledge work is particularly compatible with participative management techniques.

Finally, Tran explores the “glass cliff” in high tech environments. He studies women in positions of leadership, who are put on the glass cliff of more precarious and riskier posts than their male counterparts. Following an analysis of empirical data, Tran proposes the possible paradigm shift needed to recognize the glass cliff, and why it is still taboo.

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REFERENCES


