Hierarchical structures of communication in a network organization

Achim Oberg[a,1], Peter Walgenbach[b,*]

[a]University of Mannheim, L 9, 1-2, 68161 Mannheim, Germany
[b]University of Erfurt, Nordhäuser Str. 63, 99089 Erfurt, Germany

Summary
We analyze the intranet communication behavior of members of a company that was deeply committed to the principles of non-hierarchical communication structures and of post-bureaucratic organization. We observe a split between the symbolic activities for creating a non-hierarchical network organization and the actual intranet communication behavior of the organization members. In their daily communication on the intranet, they persistently reproduced hierarchical structures and official channels—elements typically associated with bureaucratic organizations. Further, we find many signals in the content of the intranet messages, reflecting a social hierarchy that has evolved within the organization. Thus, despite rhetoric to the contrary, our findings regarding this communication behavior show that, to all intents and purposes, this particular organization displayed characteristics similar to those of a traditional bureaucratic organization.

The network organization

The concept of the network organization is presented in the popular management literature as a counter-model to the bureaucratic organization, and one that would increase the flexibility or adaptive capacity of organizations. In order to increase flexibility and adaptability, emphasis is placed in the network organization on the rapid and broad diffusion of information (Probst, Raub, & Romhardt, 2006). Free communication flows and shared access to information and knowledge are regarded as essential (Cairncross, 2001). Thus, contrary to classic theories of organization (March & Simon, 1958; Simon, 1945; Weber, 1968), information should be available to all members of the organization, irrespective of specialization and/or hierarchical position (Koehler, Dupper, Scaff, Reitberger, & Paxson, 1998; Levine, Locke, Searls, & Weinberger, 1999). The network organization is conceived as a group of linked experts (Sproull & Kiesler, 1991). These experts however, are not to be understood as pure specialists. On the contrary, it is argued that there should be an overlap in their respective areas of expertise, in order to promote mutual understanding and a recognition of the need for information and knowledge in order to carry out activities efficiently (Mendelson & Ziegler, 1999).

In the network organization, communication and exchange of information should be supported by modern information

*Corresponding author. Tel.: +49 361 737 4511;
fax: +49 361 737 4519.

E-mail addresses: oberg@ifm.uni-mannheim.de (A. Oberg),
peter.walgenbach@uni-erfurt.de (P. Walgenbach).
[1]Tel.: +49 621 181 2890; fax: +49 621 181 2892.

technologies, i.e., e-mail and document management systems integrated within an intranet. These modern information technologies are said to increase the speed of information exchange and to allow the automatic recording of communication and information without requiring any decision on what information should be formalized and what should not (Cairncross, 2001; Marchand & Davenport, 2000; Nonaka & Takeuchi, 1998). Proponents of the network organization argue—at least implicitly—that, due to recent developments in information technology, many of the effects of specific dimensions of the traditional organization, such as hierarchy and specialization, on communication and information exchange will vanish or, at least, diminish (Malone & Rockart, 1991; see also Ahuja & Carley, 1999).

In the popular literature on the network organization, several further measures are discussed, which are regarded as supportive in the creation of such organizations. Rather than relying on formal legitimacy, as in bureaucratic organizations, the source of power in the network organization should be the team (Baker, 1992; Beyerlein & Johnson, 1994; for a comparison of the bureaucratic and the network organization, see Table 1). Status differences should vanish and dysfunctional effects, induced by formal hierarchies, should be eliminated or, at least, reduced with respect to the rapid diffusion of information and know-how. In network organizations, formal rules should be replaced by a strong organizational culture, i.e., shared norms and values (Gallivan, 2001). One important norm is that of informality (Krackhardt, 1994). Informality is said to increase the adaptive capacity of an organization, since informality reduces the likelihood of peers (i.e., other organizational members) regarding each other simply as colleagues only.

Consequently, the likelihood increases that information and relevant knowledge will be passed on, even when a job description does not require it or a superior has instructed that it be so.

Although it can be argued that the assumptions about—as well as the descriptions of—the network organization may be regarded as a kind of rationalized myth (Meyer & Rowan, 1977), several attempts have been made to realize this organizational form in the real world. In an in-depth case study we analyze a company whose founders were deeply committed to the idea of the network organization and who sincerely tried to realize such an organization. We investigate whether or not a central aspect of non-bureaucratic behaviors, i.e., non-hierarchical communication in the coordination of work activities, was successfully achieved by this organization. The empirical question of our study is, thus, the question of whether the founders' attempt to deinstitutionalize hierarchical forms of communication was successful. More specifically, we ask: Does hierarchical communication vanish when it is de-legitimized?

The case company

In an in-depth case study (Eisenhardt, 1989; Yin, 1981), we observed a start-up company, which we will call Knowledge-Factory, over a 6-year period from its early pre-founding activities to the end of its second year as a registered company. KnowledgeFactory was financed with venture capital and operated in the knowledge-intensive industry of software development and consulting.

Founding conditions

KnowledgeFactory is a particularly good candidate for studying the effects of the adoption of the ideas of a network organization, since the mission of this company was to develop knowledge-management tools in order to help other organizations to operate in a post-bureaucratic and networked way. KnowledgeFactory also applied its own technologies and was extremely committed to the ideas of the network organization. In fact, the founders of KnowledgeFactory were strongly convinced that the network organization was an effective form of organizing knowledge-intensive firms and they explicitly rejected the idea that it might just be yet another management fad or fashion (see Abrahamson, 1996; Kieser, 1997).

The pre-founding activities of the company started in 1996 at a German university, where a group of students met regularly to discuss new management concepts (particularly post-bureaucratic organizational forms), knowledge management, and the importance of information technologies for supporting the new concept of a network organization. These discussions are reflected in the draft papers for the establishment of the organization. In these documents, we identified many explicit references to the popular literature on the post-bureaucratic and the network organization, such as the "cluetrain manifesto"[2] (Levine et al., 1999) as well as

Table 1 The bureaucratic and the network organization.

Dimension	Bureaucracy	Network organization
Specialization	High	Low
Configuration	Clearly defined, super- and subordination unambiguous	Undefined, ad hoc, depending on task/problem
Coordination	Based on (written) formalized rules, orders, along established official channels	Based on organizational culture and self-organization; Problem-solving based on the initiative of employees
Formality	Extensive written rules and records	Only a few written rules, storage of all information on the intranet, information as a free good which is to be used or can be used by all employees

---

[2]The cluetrain manifesto captures different principles of electronic collaboration established with the rapid growth of internet-