Changing to stay itself

Position Paper for the CSCW '96 Workshop 3: CSCW and Organizational Learning

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Diffusion & Integration

In the recent years there has been a vivid discussion about new organizational ideas and concepts that were driven to a considerable extent by technological changes and were meant to help organizations survive and be successful in the dynamic and complex environment of the global market. The suggestions include "reengineering the corporation" and building "virtual", "fractal", or "object oriented" organizations. The main idea of all of those approaches was to stress the importance of the process of designing, manufacturing, or providing a service. In order to reach the desired efficiency the new concepts for organization rely on the shift from a tayloristic approach to building teams or "fractals" that are responsible for a process.

While less tayloristic and less hierarchic organizational structures promise to support financial success they also foster the tendency for "organizational diffusion". People working in outsourced parts of an organization or in project-related teams tend to have strong relations to their organizational subunits rather than to "the whole thing" - so keeping the organization together becomes harder and harder. However, while on one hand small autonomous teams tend to "drift away" from the organization that their members belong to, on the other hand they are also part of it and thus can contribute to "organizational integration". Such integration aspects keeping the organization together strongly depend on an organization's culture and identity. Thus, organizational learning does not only mean learning to have commercial success but also learning to change and not fall apart, still have coherent goals and an identity that distinguishes the organization from others.

Furthermore the question arises whether CSCW technology strengthens the diffusion effects and how to develop this technology in order to support cooperation and integration. The following chapters discuss the approach of *learning organization* as a concept of permanent structural change, theories of organizational culture and identity, and an approach of integrated organization and technology development.

Learning

Organizational learning is the key characteristic of a "learning organization", (cf. Sattelberger (1992)). The concept of learning organization means more than learning in organizations, and it means more than the organization of learning. "Learning organization tries to bridge and integrate the different worlds of strategy-, structure-, and culture-development - intuition and ratio, chaos and order, mind and action,

development and stability, personnel and personality, individual and organization, vision and reality. Learning organization is an innovative concept" (Sattelberger 1992: 53; translation by the authors). Daily teamwork is the precondition for organizational learning in this sense. Learning organizations are not only able to survive in a complex and dynamic environment but are characterized by continuous progress and capability of self-transformation.

Learning organizations with their capability of self-transformation are not only learning to change their own goals and objectives collectively, or to survive in a dynamic and mostly hostile environment (surface structure), but they are learning in order to change and develop strategies, structure, general organizational rules and norms for decision making, and therefore, organizational culture and "maps" (depth structure). Main principle of these processes of organizational transformation is not adjustment or adaption but anticipation of environmental dynamics and permanent development of a new organizational culture, which is capable to handle the unknown (cf. Sattelberger 1992: 56).

In this concept participation of all organizational members in processes of collective learning are necessary. Individual learning is complemented and replaced by collective learning more and more. Learning is part of the process of daily work and becomes a central organizational task. This collective learning is supported by social coalitions, work- and learngroups. Organizational learning should include "significant others", like customers and suppliers. Furthermore, organizational learning is a process of development itself, because it always includes "learning about learning", that means how we learn and how we can improve and optimize collective learning.

Culture & Identity

Organizational learning does affect organizational strategies and structures as well as the *organizational culture*. The concept is based on the assumption that regulation of organizational processes works better by means of collective values and models than by means of formal structure. Hein (1990) defines organizational culture as "the specific structure of values, norms, and attitudes, which developed in an organization over time. It offers help for orientation concerning the members' behavior regardless of whether they follow the cultural meanings consciously or unconsciously" (Hein 1990: 34; translation by the authors). The central features of organizational culture are artifacts (like symbols, rituals, patterns of behavior), values and norms (shared beliefs, attitudes, and rules for behavior), and a common ideology (basic assumptions concerning the organizational reality, organizational philosophy, implicit theories about human nature and how the world works).

Organizational identity as a terminus was introduced during the late fourties and has influenced mainly the sales promotion and advertising departments under the label of "corporate identity." The equation of organizational identity with corporate identity is, however, misleading insofar, as corporate identity can mainly be considered to be a means for external representation invented by management while

organizational identity is closely related to organizational culture and relates to the internal identification promoting solidarity of the organizational members with "their company", its goals and products.

Theis (1994) criticizes that most approaches of organizational culture are based on the assumption of only one single shared structure of beliefs, which very often is designed or could be designed by the management. This strategy of culture being used by management is called "management by symbols". This top-down implemented culture ignores the autonomous/ growth as a basic aspect of cultural symbols, rituals, and meanings (cf. Theis 1994: 159). Another critical objection to organizational culture approaches is the often observed heterogeneity of organization members and their beliefs and attitudes. Most concepts of organizational culture and corporate identity are not suitable to explain the existence of organizational subcultures.

Finally, the organizational culture concept is based on the assumption that shared beliefs and attitudes are determining individual and collective behavior. In contrast to this assumption, social psychological findings show that reported attitudes and observed behavior often differ considerably.

Following these lines of argument ways of organizational learning must be sought that take into account a diversity of partly contradictory beliefs and attitudes to allow integration in processes of diffusion.

Organization & Technology

Learning and changing processes within organizations can be influenced by measures of *organization development* (cf. e.g. French and Bell 1973). Management science has developed methods to promote organizational change under this label. It merely means a bundle of intervention strategies, which could be successful in reaching the promised aim of democratization and promotion of personal growth. Organization development is based on participation and process-orientation. Nevertheless, these approaches do not offer any criteria for the evaluation of these process characteristics. Organization development suffers from the lack of theoretical assumptions about why changes occur and how they can be guided by interventions in a certain way. Therefore, it is not possible to evaluate the normative demands of organization development.

Methods of organization development - if they deal with technological aspects at all - take software rather as a static artifact which might be introduced within the framework of an intervention. Nevertheless, what makes the organization development attractive to consider it for an integrated approach is the big repertoire of practical experiences with its methods and its strong emphasis on a cyclic approach.

Different experiences and approaches are remarkable in the discussion about learning organizations and computer supported cooperative work. Orlikowski (1995) describes an organizational change around groupware that moves along as an evolutionary process where planned and emergent changes alternate and argues that organizational evolution can be provided by adequate planned measures resulting from previous emergent changes and influencing upcoming changes. This requires organizational as well as technical

flexibility. While much of the current literature on organization predicts that middle management is going to become less important or even vanish Nonaka (1991) considers middle management to be an important catalyst between upper management representing explicit knowledge and "entrepreneurial individuals" having tacit knowledge. According to Nonaka middle management can be able to synthesize both types of knowledge and thus be of extreme importance in an organization's information creation process which is the basis for organizational evolution.

Among different approaches for organizational development the *Integrated Organization and Technology Development* (OTE) of Wulf and Rohde (1995) seems promising because it includes evolutionary technical development as well as qualification for participation for organizational members. This pays tribute to the fact that organizational development and organizational learning must not ignore the co-development of organizational identity that cannot be imposed by top management but must evolve in the teams that constitute an organization. OTE takes into account the good experiences made with the Scandinavian approach of software development that uses cyclic system development and has a strong focus on user participation for system design. Based on the demand that groupware must be tailorable, ways to have a team tailor their software are suggested. The organization and technology development process is characterized by a parallel development of workplace, organizational and technical systems, the management of (existing) conflicts by discursive and negotiative means, and is based on immediate participation of the organization members affected. To put this into practise Wulf and Rohde (1995) suggest the following steps partly performed synchronously:

- **Establishing the process** start with the perception of a problem in the daily work of an organizational unit / discuss the need for an integrated process of change
- Analysis of the actual state with respect to organizational structure, technology and qualification
- Creation of alternative options including different combinations of organization, technology or qualification measures / evaluation with work psychological methods
- **Planning of the interventions** in organizational, technological, and qualificatory dimensions (if necessary including the establishment of the software development project)
- Interventions with change of formal and informal aspects of an organization as the main issue
- Qualification for participation to enable individuals involved in organization and technology development to participate in the process adequately / training e. g. by encounter group method, team development, training laboratories, transaction analysis, or group intervention

Such an approach may help to support adequate organizational learning that contributes to the enhancement of organizational culture and an organization's self-perception of still "being one with itself" - otherwise the organization will inevitably fall apart.

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