

UDC 65.012.4:658.3

Review

Received: 15.04.2009

MANAGING ORGANIZATIONAL KNOWLEDGE WHILE DOWNSIZING ORGANIZATIONS*

Mirjana Petkovic

Ana Aleksic Miric

University of Belgrade, Serbia¹

Abstract: In this paper we investigate potential influence of organizational downsizing on organizational knowledge and learning. We discuss organizational downsizing in order to show that in large it is an issue of organizational design, and as such, managerial activity that must be coordinated with another - managing organizational knowledge. From this standpoint, we theorize that if these two managerial activities are not coordinated, organizational downsizing can lead to uncontrolled knowledge leakages, which can show to have unforeseen effects on organizational well-being in long term.

Key words: knowledge management, downsizing, organizational design, organizational learning.

INTRODUCTION

Downsizing is the program of radical organizational changes initiated by management with the intention to improve organizational efficiency, productivity and/or competitiveness (Cameron et al., 1993: 24). Companies have traditionally decided to downsize when facing laggings in the development, decrease in productivity, and low level of innovation, together with the lost of competitive edge. Downsizing was than implemented as a managerial response to declining performances, operationalized by reduction in workforce (number of employees) as well as by reduction in work processes (reduction of certain non core-activities and businesses). Although downsizing was initially interpreted as a synonym for organizational decline, layoffs and firings of the employees, important differences between these strategies have emerged, making them separate strategies of organizational change (Cameron et al., 1993; Fisher, White, 2000). Downsizing is also defined as an intentional reduction in the size of a workforce at all hierarchical levels with an intention to improve efficiency (Freeman, Cameron, 1993), or become a more attractive candidate for acquisition or merger (Kozlowski, 1991).

* This article is the result of the scientific project "Management of Knowledge and Personnel in Tourism as a Feature of Croatian Identity" (116-000000-0758), financed by Croatian Ministry of Science, Education and Sports.

¹ **Mirjana Petkovic**, PhD, Full Professor, **Ana Aleksic Miric**, MSc, Assistant, University of Belgrade, Faculty of Economics, Belgrade, Serbia.

In this paper we explore potential negative side effects downsizing might have on organizational knowledge potentials of a company. We discuss both organizational downsizing and knowledge management from organizational design standpoint. As we see it, reduction in workforce and business activities that stand for downsizing, eventually result in changes in organizational structure, organizational systems and processes. Moreover, modern management literature recognizes knowledge management as an organizational design issue intended to *“improve the efficiency and effectiveness of an organization and its people by sharing knowledge and information.”* (Burton and Obel, 2004: 10). Therefore, in this paper we investigate potential influence organizational downsizing has on organizational knowledge and organizational learning. The basic idea of our paper is to show that if not coordinated with knowledge management activities, organizational downsizing can lead to uncontrolled knowledge leakages which can in long term have unforeseen effects on organizational welfare.

1. DOWNSIZING AS A STRATEGY ORGANIZATIONAL CHANGE

Cameron et al. (1993: 25) define downsizing by highlighting its four distinctive attributes: (1) downsizing is an intentional activity, (2) downsizing involves reduction of the employees, (3) downsizing is intended to result in the increase of efficiency, and (4) downsizing affects work processes. Downsizing is an intentional strategic reaction initiated by top managers or owners, with the aim to reconsider the way business is done, work-processes are carried out, organizational units structured and people engaged. Downsizing as a process is mostly initiated by the influences from external environment, but might also come as a result of change in strategy (when company enters strategic partnership, merger or acquisitions, for instance).

This restructuring strategy was extensively applied by US organizations from the late 1980s and during 1990s. In Europe, companies showed different behavior in pursuing downsizing strategy, depending on whether they were driven by market or transition forces. Companies coming from Western Europe have started downsizing in order to fight against bureaucracies within organizations, massive administrative structures which developed over time, systems filled with procedures which suppressed personal creativity, initiative and changes, and procedures that became important per se and not for their purpose. Companies undergoing transition have faced true triggers for applying downsizing logics since they were in real need to decrease organizational hierarchy, number of employees on all organizational levels, restructure organizations, recognize core and non-core activities, reconsider strategic approach to market, increase organizational flexibility and change organizational cultures and habits.

The basic logic of downsizing is that through the decrease and concentration of organizational resources a company can fight crisis with higher chances for a success. The question is whether this logic proved to be correct in practice? The answer is quite expected: not always and not in all situations. In fact, annual surveys of American Management Association show that only about 40% of companies that downsized increased their productivity at the same time, while only 37% achieved long-term increase in value (Koretz, 1998 prema Fisher, White, 2000), which, in fact,

does not represent encouraging result. The finding of another longitudinal, long-scale survey, report inadequate and unexpected results of the downsizing as well: only 46% of the companies that downsized reduced expenses, 32% increased profits, 22% increased productivity, and 17% reduced bureaucracy (Cameron, Freeman, 1994). However, despite these not-promising results, companies keep announcing new downsizings. Not long ago Siemens announced a restructuring plan that cut around 3,800 jobs, which came as a consequence of strategic decision of Siemens to move from being a hardware supplier to a software and solutions provider'. As company's officials explained: "...market's flux has made the transformation absolutely essential" (Deffree, 2008).

In two papers of Cameron et al (1987a, 1987b) we can find a thorough investigation of negative effects of organizational decline, with respect to their potential similarities with negative effects of organizational downsizing. Cameron et al have found 12 negative attributes of organizations that emerge in conjunction with decline: centralization, short-term (crisis) mentality, loss of innovativeness, resistance to change, decreasing morale, politicized special-interest groups, non-prioritized cutback, loss of trust, increasing conflict, restricted communication, lack of teamwork, and lack of leadership. When analyzed from the perspective of enterprises in transition, eleven of these twelve negative attributes can be clearly recognized that have occurred.

2. ORGANIZATIONAL KNOWLEDGE

Knowledge is defined as "*information that corresponds to a particular context*" (Burton et al, 2006: 92). This point of view is particularly important because it addresses the difference between information and knowledge. Knowledge as a construct is unavoidably related to information: knowledge of any kind is structured and consisted of mutually related and logically connected groups of information. On the other hand, not every piece of information can be considered as knowledge, but only those that contribute to increase in overall level of organizational knowledge.

There are numerous typologies of knowledge. Winter (1987), for instance suggests a typology which differentiates knowledge as (1) simple and complex, (2) teachable and not teachable, and (3) observable and not observable. Anderson (1983), on the other hand considers knowledge as declarative and procedural. Cummings (2001), as well as some other authors, states that the basic characteristic of knowledge, upon which we can classify different kinds of knowledge into different categories, is knowledge transferability. For long time knowledge transfer has predominantly been understood as the movement of existing technology or management practice, into an organizational settings for which such transfer represents a new knowledge input (Lindholm, 1997). Nowadays, it is more common to define knowledge transfer as sharing ideas across boundaries both within and outside of an organization (Yeung et al., 1999), which points to understanding of knowledge from a different perspective. In that sense, knowledge is understood not only as technology, but as a wider concept. Among all classifications of knowledge, the most influential is the one of Polanyi (1966). Polanyi defines two basic forms of knowledge within organization: tacit and explicit. Explicit knowledge is the one that can be easily transferred through

communication, while tacit knowledge can be transferred only through application and acquired through practice (Grant, 1996:111). The implicit logic that underlies previously stated is that people usually know more than they can show, explain or say (Polanyi, 1966; Cummings, 2001: 18). Tacit knowledge is embedded within a specific context whereas explicit knowledge is opened and achievable more easily. Knowledge can be embedded within an individual, group or organizational context, and accordingly knowledge can be analyzed and traced on these three different levels – individual, group and organizational.

At the same time, knowledge as a concept should be discriminated from the concept of learning. Learning is the process of knowledge accumulation through modification of existing and acceptance of new knowledge (Burton, Obel, 2004). Knowledge is the result of the process of learning and, at the same time, prerequisite for further learning. Later authors recognized the importance of including not only behavioral, but a cognitive dimension of learning as well. From the behavioral standpoint, learning occurs when there is a change in response of the subject prior and after learning process. From the cognitive standpoint, changes in behavior do not necessarily imply that learning process took place. This approach emphasizes the learning occurs if cognitive understanding and pre-existing level of knowledge increased after learning process (Wong, 2002: 8). Today, the dominant approach without any doubts recognizes both cognitive and behavioral aspects of learning, pointing to the fact that learning occurs on the cognitive as well as on the behavior level. Argiris and Schön (1996) propose a very specific point of view on how organizations learn, including both behavioral and cognitive aspect of learning. Their approach showed to be very influential on the further development of thought on how learning within organizations is understood and analyzed. Argiris and Schön recognize two types of learning: single loop and double loop learning. They define single loop learning “as instrumental learning that changes strategies of action or assumptions underlying strategies in ways that leave the values of a theory of action unchanged.” Therefore, single loop learning assumes behavioral changes within organization, while cognitive changes are not included implying that people change their behavior in everyday organizational life, but do not change the way they look at organization, its role in business world, and the basic assumptions they have about its functioning. Mode of single loop learning has been recognized before by Cyert and March (1963), as well as March and Olsen (1976). Double loop learning, on the other hand, produces not only change in behavior, but “change in the values of theory-in-use, as well as in its strategies and assumptions”. Therefore, double loop learning assumes both cognitive and behavioral changes within organization; i.e. people’s change in behavior in everyday organizational life is followed by the corresponding changes in the way they look at organization, its role in the business world and the basic assumptions of its functioning (Argiris, Schön, 1996: 21).

The works published lately place emphasis on the group level of learning within organizations, so organizational learning in groups becomes an important segment of analysis. These research are based on the previous knowledge of a group as “a social systems that has the following properties: it is perceived as an entity by its members and nonmembers familiar with it; its members have a degree of interdependency; and a differentiation of roles and duties takes place in the group”

(Guzzo, Shea, 1992) which learn differently than individuals or large organizations do. The first perspective of group learning starts from the classical functional organizational perspective, pointing to the well known silo effect, when organizational units are limited by their functional perspectives and for that reason do not have at the disposal the knowledge available to other organizational units. Dixon (1994), however, warns about another danger of functional approach to learning; that of alienation and the lack of exchange of knowledge between organizational units, which results with the problems in understanding their own information and their appropriate interpretation simply because they cannot see a total picture. The second perspective points to the difference between learning that occurs within group from learning occurring within teams. This perspective in fact makes a distinction between groups and teams as social systems. According to Marquardt (2002: 42) there are three prerequisites for team learning: (1) a complex issue has to be addressed through collective insight, (2) innovative action is coordinated within a team and (3) team learning has an ability to encourage and stimulate learning in other teams. The research done by Wong (2005) indicates that teams can learn both in explorative and in exploitative way. Exploitative learning implies that in the process of problems solving team members use their previous knowledge and experience extensively. In approaching a problem, they primarily start from the question whether a team member was previously involved with a similar situation and whether that knowledge could be exploited for the purpose of solving a specific problem in question. On the other hand, explorative or research approach to solving problems is based on facing new and creative problems, while at the same time the team is trying to come to a new, totally unexplored approach and generate a new solution to a specific problem.

3. THE IMPACT OF DOWNSIZING ON ORGANIZATIONAL LEARNING

In their extensive study on downsizing and organizational redesign Cameron et al. (1993) found three strategies that are used in the process of organizational downsizing: (1) workforce reduction, (2) organizational redesign and (3) systematic strategy focused on changing values, attitudes and organizational culture. We find the first two strategies essential from the organization design point of view.

The first strategy, workforce reduction, is very important for the analysis of relationship between knowledge potentials held within individuals and implications on organizational knowledge if these individuals leave organization. In this way, during the process of downsizing organization decreases number of people it employs. This means that downsizing process can lead to removal of those individuals who are in fact not supposed to be eliminated. One of the examples is that in the process of downsizing a company willingly or unwillingly loses an employee who possesses some specific knowledge that a company in fact needs heavily, so as it comes into a situation to re-hire ex-employee, but now in a form of outsourcing, and therefore probably to pay much higher fees for these services than the cost of salaries of that employee were. Both domestic and foreign business cases report unexpected financial results of the downsizing alike. Cascio, for instance, reports an example of one of the Fortune 100 companies which downsized a bookkeeper paid 9\$ per hour, to rehire it again but in a

form of external consultant with a market fee of 42\$ per hour (Cascio, 1993). It is very important to note that *“the loss of an individual in downsizing is directly related to the quantity and value of the information held in that individual’s memory and not retained elsewhere in the organization”* (Fisher, White, 2000:245). If we include the value of individual’s social network and contacts, the price of downsizing wrong individual is even higher. The observation of one automotive product team manager who says *“I can’t remember exactly what percentage of the total cost direct labor is, but it’s about 5.6.7 percent. It’s peanuts. You know 85 percent is material costs. We concentrate like hell on the 7 percent, when there is more opportunity for cost savings in other places...”* (cited after Cameron et al., 1993: 19) is in that context highly illustrative. On the other hand, the experience of the Serbian market also shows the tendencies of organizations to decrease the number of employees, but to withhold the same level and scope of activities. To pursue this in practice, organizations mostly apply strategy of job enlargement and job enrichment of those who survived downsizing. The effects of a restructuring alike are numerous. First, it is probable that the survivors will face increase in work loadings and work stress connected with new calls and job-requirements. Furthermore, this can result in systematic disregarding of certain business activities.

The other way to downsize is to reduce the number of businesses organization is in, so in that sense the reduction in the number of employees comes as a logical result of a decrease in organizational activities. One of the examples of companies pursuing this strategy is the case of Serbian Railways. Serbian Railways started the restructuring in 2001. At that time Serbian Railways had 33,741 employees. Financial support for the restructuring was provided by the EBRD resources in the form of loan. It is worth noting that the company started the restructuring process by applying the strategy of separating core from non-core business areas, and consequently four new entities as separated companies have been created. Reducing the number of employees in the Serbian Railways has been mostly directed by the following criteria: (1) the priority has been given to the employees that fulfil one of two conditions needed to retire and (2) the priority has been given to the employees that have two more years to satisfy one of the two conditions needed to retire. In order to control for individual and organizational effects of this restructuring, the Company created a team which worked together with the National employment service. This team of experts was obliged to observe the effects of restructuring and to resolve the problems that arose. Basically, the duty of that team was to meet once a month and to discuss the latest activities and their effects on the Company, as well as on the labor market in order to show care and control for the effect of *“the victims of downsizing”*. From the standpoint of our research, the downsizing in a situation alike is focused on organizational and group, and only afterwards on individual level. The first target of downsizing was an organization and its business activities – core and non-core, and only than individuals. This is a regularly practice in transition economies, especially when downsizing public companies. The public companies in Serbia, for instance, have been led by the principles *“everything under one roof”* which resulted in massive organisational structure, with large number of managing positions as well as the number of employees and centralised management. The diversification of these companies was forced during the period of sanctions and economic crises in 1990-is. From that period we have inherited the practice to find other possible sources of revenues and to employ more

people together with employing free capacities, and it resulted with the situation that we can find publishing business in Serbian Railways, tourism in Oil Industry of Serbia, mushrooms in the mines of the Electric Power of Serbia. When non-core activities are downsized as entities that become independent units, the company has higher level of control over knowledge base it loses. On the other hand, if the company offers to the employees the option to leave, as in a case of the Serbian Railways, it might happen that those individuals who have important knowledge and are highly attractive candidates on a labour market can take the money refund for being "downsized" and simply leave, while their know-how remains essential for their former organization. In order to prevent organization from losing important knowledge while downsizing, companies today use different criteria when decreasing number of employees. The case of National Bank of Serbia is illustrative for that purpose. This important national institution combined the following criteria in estimating positions and individuals to be downsized: percentage of utilized working hours, level of personal motivation, and level of competency, absence from work, work-load, and finally, importance of the employee for the work unit. Each employee was evaluated upon these criteria by his manager. The practice alike helped organization downsize while controlling for organizational knowledge.

Effective downsizing from the perspective of knowledge management should show care for the downsizing survivors. Management is suggested to show a high level of competency with handling behavior of those employees that stay within a company after the process of downsizing. Kozlowski et al. (1993) note the effect that employees who remain with the organization will also be affected by downsizing strategies intended to improve organizational flexibility, increase employee responsibility, and streamline operations. If management does not show care for those who have "survived" the kind of antagonistic relationship within organization can occur, disturbing organizational trust and climate, which will negatively effect knowledge base and learning within organization. This notion is very important if we know that organizational learning cannot if individuals within an organization are not ready to apply their knowledge.

Another problem, quite typical for companies pursuing downsizing in transition countries, is freeze on hiring. In that situation, organizational knowledge base is exposed to double pressures. From one side, companies are forced to decrease their knowledge base by downsizing employees, but at the same time they cannot replenish this knowledge base since not allowed to replace individuals who have left. This dualism regarding employment was especially the case in downsizing public companies, which simultaneously had the need to reduce the number of employees (usually elder, less qualified workforce) and to employ highly qualified, skillful candidates; but they were not allowed to.

Furthermore, downsizing can have negative effects on group and organizational equilibrium. Very important implications of downsizing can be seen if analyzed from the perspective of social network analysis. This methodological approach can be of great help when analyzing the effects of downsizing on organization because it enables us to trace what happens if we eliminate certain organizational positions, organizational groups (units) or organizational connections.

The application of network analysis methods allows for deeper understanding and measuring the effects of elimination of certain positions, groups and linkages. From the network perspective, downsizing affects various network properties, such as network density, connectedness, reachability, reciprocity, properties of ego-networks and structural holes within existing network. Downsizing which leads to the increase in network density, connectedness, reachability, reciprocity, and size of individual ego-networks has positive effects on organizational potentials for learning and organizational knowledge base. Positive influence of downsizing in this way is that it makes tacit knowledge stronger and more embedded into organization

CONCLUSION AND IMPLICATIONS FOR MANAGERS

During previous decades, organizations focused on material resources as the main source of their competitive advantage in the market. New economy brought new challenges, introducing the assumption that knowledge and the ability of an organization to implement that knowledge are the most important source of maintaining competitive advantage of a company in the market. Simultaneously, time dominant preoccupation with resource organizational perspective underwent a transformation so that instead of focusing on material resources of an organization, it started to focus more intensively on non-material resources, skills and competences of the employees and the in-built abilities of organizational units and an organization as a whole. Consequently, knowledge in general became a key issue, regardless of the fact whether it is individual, group or organizational knowledge. During the 1990s, intensive globalization of the markets, development of information technology, and other environmental changes forced companies worldwide to reconsider their strategies and organization designs. Expansion of the Internet economy set realistic foundations for the development of new organization forms, which are based upon smaller and flatter organizations. Numerous companies used the strategy of downsizing in order to improve their business.

In this paper we investigated the influence organizational downsizing has on organizational learning and knowledge. Perspectives derived from literature on organizational change and development emphasize various organizational benefits of downsizing. As previous analysis shows, downsizing is a program of radical organizational changes intended to improve efficiency, productivity and competitiveness of an organization. In that sense, downsizing can be a good opportunity for company to achieve double-loop learning. By reducing number of employees and radically changing organizational context, downsizing can prepare organization to change the dominant system of values, as well as its strategies and assumptions. At the same time, the scope and depth of organizational changes caused by downsizing can be very powerful mechanism for changing employees' behavior in everyday organizational life, together with changing the way they perceive organization, its role in the business world and the basic assumptions of its functioning. Nevertheless, empirical results and practice point to the need of coordinated downsizing and knowledge management activities, because downsizing can lead to uncontrolled knowledge leakages which can in long term show to be a strategy with unforeseen effects on organizational welfare.

REFERENCES

- Argote, L. (1999) *Organizational learning: creating, retaining and transferring knowledge*. Norwell, MA: Kluwer.
- Argyris C., Schön D. (1996). *Organizational Learning II: Theory, Method and Practice*. Addison-Westley Publishing Company.
- Burton, M.R., Obel, B. (2004). *Strategic Organizational Diagnosis and Design: The Dynamics of Fit*. Springer.
- Burton, M.R., DeSanctis, G., Obel, B. (2006). *Organizational Design: A Step by Step Approach*. Cambridge.
- Cameron, K., Freeman, S., Mishra, A. (1993). Downsizing and Redesigning Organizations, *Organizational Change and Redesign*. Huber, G., Glick, h., (eds), *Organizational Change and Redesign*, Oxford University Press.
- Cameron, K., Kim, M. U., Whetten, D. A. (1987). Organizational Effectiveness of Decline and Turbulence. *Administrative Science Quarterly*, 32, pp. 222-240.
- Child, J., Czeglédý, A. (1996). Managerial Learning in the Transformation of Eastern Europe: Some Key Issues. *Organization Studies*, 17/2, pp. 167-179.
- Cummings, J. (2001). *Knowledge Transfer Across R&D Units: An Empirical Investigation Of The Factors Affecting Successful Knowledge Transfer Across Intra And Inter Organizational Units*. Unpublished PhD thesis, George Washington University, Washington DC.
- Dierkes, M., Bethoin A. A., Child, J., Nonaka, I. (2001). *Handbook of Organizational Learning*. Oxford University Press.
- Deffree, S., Electronic News (10616624); 3/3/2008, Vol. 53 Issue 62, p12-12, p. 1.
- Fiol, C. M., Lyles, M. A. (1985). Organizational learning. *Academy of Management Review*, 10 (4), pp. 803-813.
- Fisher, S., White, M. (2000). Downsizing in a Learning Organization: are there hidden Costs. *Academy of Management Review*, Vol.25, No1, pp. 244-251.
- Freeman, S. R., Cameron, K. S. (1993). Organizational Downsizing: a Convergency and Reorientation Perspective. *Organization Science*.
- Freeman, L. C. (2004). *The Development of Social Network Analysis*. Empirical Press Vancouver, BC Canada.
- Grant, R. M. (1996). Toward a knowledge based theory of the firm. *Strategic Management Journal*, Vol. 17, pp. 109-122.
- Guthrie, J. P., Datta, D. K. (2008). Dumb and Dumber: The Impact of Downsizing on Firm Performance as Moderated by Industry Conditions. *Organization Science*, Jan/Feb, Vol. 19, Issue 1, pp. 108-123, p. 16.
- March, J.G. (1991). Exploration and Exploitation in Organizational Learning. *Organization Science*, Vol. 2, No.1.
- Miles, R. E., Snow, C. C., Coleman, H. J. (1992). Managing 21st Century Network Organizations. *Organization Dynamics*, Winter92, Vol. 20, Issue 3, pp. 4-20.
- Miller, D. (1996). A Preliminary Typology of Organizational Learning: Synthesizing the Literature. *Journal of Management*, 22 (3), pp. 485-505.
- Polanyi, M. (1962). *Personal Knowledge: Towards a post critical philosophy*. Harper Torchbooks, New York.
- Wong, S. (2002). *Investing Collective Learning in Teams: The Context In Which It Occurs and The Collective Knowledge That Emerges From It*. Doctoral dissertation, Fuqua School of Business, Duke University.