HUMAN RESOURCE DEVELOPMENT
AND ORGANIZATIONAL LEARNING IN
OCCUPATIONAL AND ENVIRONMENTAL SAFETY

Abstract: The presence and continuous generation of various risks and hazards in working and living environment have made safety and crisis management a strategic goal of modern organizations. Modern organizations are facing a great challenge - how to make organizations safe despite their increasing complexity, uncertainty and interdependence of risks in working and living environment. In this regard, starting from the elaboration of safety as a strategic goal of modern organizations, through the analysis of management and human resource development in the discourse of safety management, we paid special attention to organizational learning and basic assumptions of the development of an organization which learns in the modern business and safety environment.

Key words: human resource development, organizational learning, occupational and environmental safety.

INSTEAD OF INTRODUCTION AND OCCUPATIONAL & ENVIRONMENTAL SAFETY AS A STRATEGIC GOAL OF MODERN ORGANIZATIONS

The diversity of safety risks, challenges and threats increased the interest in safety issues in contemporary business organizations. The success of business and the competitiveness of organizations are considered through their connection with occupational and environmental safety. Issues such as adverse environmental impacts, natural and other disasters and the like require new ways of anticipating risks and threats in a timely manner, appropriate measures to prevent them or to minimize and eliminate the consequences of possible accidents and emergencies. Thus, there is a number of concepts dealing with possible solutions in this field [1].

There is a growing number of authors who discuss safety management as a concept that involves a variety of activities aimed at eliminating various safety threats. The content of safety management involves the management of risks and hazards, crisis and emergency situations [2]. Safety and crisis management are increasingly becoming a strategic goal of contemporary organizations. Safety management brings both benefits and conflicts as organizations tend to observe safety activities as an unnecessary investment. Such views are closely related to organizations’ tendency to view safety as a purely technically driven activity [3]. Occupational and environmental safety does not depend solely on technical or legal solutions. Legal regulations are necessary but not sufficient activity in an organization. Complying with legal regulations in an organization can give a false sense of the overall effectiveness of its safety program. Safety management that is limited to implementing technical or legal solutions can divert an organization from its strategy and practice that is best suited to a unique organizational context [3].

Many organizations have adopted a risk-based approach to safety. Risk management is a core business function [3]. Organizations must continually adapt to existing and potential risks in the working and living environment, i.e. they need to observe safety in the context of the bigger picture - either organizational or corporate sustainability [3, 4]. A resilient approach (sustainability) transforms the basic premise of safety - from the one that stops the accident so that it causes no damage - to the one that positions safety as a contributing factor to enhancing an organization’s ability to adapt to new environmental risks and fulfill its mission.

A comprehensive human resource development strategy leads organizations to learning as a factor that can help them develop a safety culture and address safety and other issues. Many organizations choose to invest in individual and collective learning. The concept of a "learning organization" gained popularity with large organizations with their attempt to develop structures and systems that are much more adaptable to changes in the environment. Changes in the environment increase safety risks and business uncertainty by forcing companies to learn how to do things differently. Learning has a broad analytical value [5]. The concept of learning is extremely dynamic and its main objective is a continuous change of the nature of the organization and its preparation to address safety risks and opportunities from the environment through increasing organizational knowledge.
FROM TRADITIONAL TO LEARNING ORGANIZATION

In the business world, knowledge is an essential strategic resource for the development of individuals, organizations and society as a whole. Organizations are faced with rapid change and the need to adapt to changing circumstances. In this situation, the concept of organizational learning occupies an important place. This concept shows all the features of insufficiently developed and researched concepts in social sciences - the authors' inconsistency in defining the term, and the nature and process of organizational learning, fewer empirical papers, etc. [6].

In the literature, there are critical observations of the concept of organizational learning which indicate that the organization itself cannot learn, but the employees/people in that organization. Some authors argue that only individuals can learn and that knowledge cannot exist outside of individuals and their minds. Others argue that organizational learning is a social process that exists in an organization regardless of whether it exists in the individual minds of the members of the organization [7]. Organizational and individual learning are interrelated phenomena - even when an organization learns as a whole, that learning occurs through the individual activities of the organization members. The learning organization expects employees to learn, and it is its responsibility to make its members more independent and more willing to define actions that will contribute to creating added value for it [8]. Certainly, a learning organization is not the sum of what its individuals have learned. Learning needs to be shared and leveraged through organizational changes that respond to environmental changes. An organization does not exist to learn, but learns to exist. It is a constellation of people, means, methods and principles of work, values and norms of behaviour, whose main purpose is a unique and coherent action in the realization of its goals (occupational and environmental safety).

ORGANIZATIONAL LEARNING - CONCEPT, IMPORTANCE, CYCLE AND MODELS

Authors often observe organizational learning as a key process within an organization that should provide flexibility and better organizational performance [9]. Organizational learning exists when members of the organization act as agents of learning for the organization, responding to changes in the internal and external environment of the organization, and detecting and correcting errors in organizational theory applied within the organization [8]. Organizational learning can be seen as a change in the cognitive structures and behaviors of members of an organization that provides an uplift in the organization's ability to adapt to its environment [10]. The learning process leads to a change in employee knowledge that implies a change in their behavior. Behavioral change inevitably results from the change in cognitive structures in individuals as well as in collective cognitive structures in an organization [11]. The cognitive component of learning is a necessary but not sufficient condition to achieve organizational learning. It is necessary that the change of consciousness in people also causes a change in their individual behavior as well as in collective action, in order for it to have consequences for the organization [1, 11].

By analyzing the nature of the organizational learning process, some authors emphasize its technical side - information processing, while others emphasize the social character of the process itself [7]. Organizational learning always involves some kind of social interaction of the members of the organization. It should be seen as a process that expands the scope of potential behaviours of the members of the organization as individuals but also of the organization as a whole is [12].

The purpose of organizational learning is for the organization to develop new competencies, especially those that enable it to gain a competitive advantage in the market, and which are based on modern standards of occupational and environmental safety. Learning new behaviours often entails prior “unlearning” of the existing behaviour, and this view of organizational learning is close to the perspective of organizational routines [13], as organizational learning can also be seen as a process of developing and applying new rules and routines in an organization. Routines accumulate the knowledge gained by members of an organization over time [11], and competitive advantage in the market is gained by developing superior routines over other market participants.

The importance of learning can be observed from various aspects. The managerial aspect is especially important for organizations, and learning has the following implications for managers:

1) it is a powerful process that can lead to both positive and negative results,
2) individuals who love learning become more flexible in a time of constant change and therefore better suited to accept organizational change,
3) there is an increasing awareness that a learning culture can affect the effectiveness of an organization [6].

According to Daft and Marcic, the learning process takes four stages. First, the person encounters a specific experience. This is followed by reflection and reflective observation, which further leads to the abstract conceptualization and ultimately to active experimentation. The experimentation results in new experiences and then the cycle repeats [14]. An individual, as a member of an organization in contact with existing organizational knowledge, conducts his/her critical review and testing. If it does not meet the current needs of the organization and the environment, its redefinition is performed. Knowledge
upgraded by the process of cognitive thinking is tested in practice and transformed into concrete experience.

In numerous concepts of organizational learning, this process consists of acquiring, disseminating and using knowledge in the organization. According to one of these concepts, the process of organizational learning consists of five basic phases - identification of existing knowledge important for improving the competence of the organization, creation or generation of new knowledge in the organization, diffusion of existing and new knowledge in the organization, integration and modification of knowledge and its use [15].

Organizational learning has to be examined in close relation to organizational knowledge. It is a process by which an organization acquires, manipulates and uses knowledge. According to Nonaka, the two basic forms of knowledge are objective, and subjective knowledge [15]. In order to create organizational knowledge, it is necessary to convert one form of knowledge to another. The process of conversion through which individual knowledge is transformed into organizational is the process of organizational learning.

Agyris and Schon developed two models of organizational learning [8]. "Single-loop" learning addresses the changes that occur in the internal and external environment of organizations. It is a method of correcting errors with the aim of strengthening the elements of the existing system in the organization. The "double-loop" learning model is the acquisition of knowledge that examines and changes the basic assumptions on which existing routines are built. In the "double-loop" learning, new, different innovative solutions to problems are created and values, norms, goals and strategies are modified at an individual level. According to Agyris and Schon, an ideal organization is capable of learning on the model of "double-loop learning" - that is, it does not adhere rigidly to previously set goals, norms, value systems, worldviews and its activities are not restrained by outdated rules, schemes and working methods [8]. Organizations with "double-loop learning" capabilities are also capable of "single-loop learning". Similarly, Edmonson and Moingeon classify organizational learning as "learning why" and "learning how" [16].

**A LEARNING ORGANIZATION AS A CONDITION AND CONSEQUENCE OF ORGANIZATIONAL LEARNING**

A learning organization can be considered an organization where people have the capacity to permanently develop their abilities in order to create the desired performance, where contemporary thinking patterns are applied, and where people are constantly taught how to learn together. Unlike organizational learning, the learning organization is at the same time a condition and consequence of that process [10]. The learning organization has the ability to refine and change its routines relatively easily and quickly, thereby building new competencies that will enable it to survive in a changing environment. Therefore, organizations must learn how to become learning organizations [17, 18]. Achieving a 'learning organization' requires a holistic and integrative approach to workplace learning due to the fact that organizational learning involves the integration of all factors of successful learning and all participants in learning and development [19].

Modern companies have recognized the strategic importance of organizational learning for enabling occupational and environmental safety [4]. Corporate environmental learning is becoming standard practice in many companies. They align their day-to-day activities with the corporate values of sustainability and environmental protection, so that environmental knowledge can expand instead of being isolated within the management. This creates green jobs that promote environmental protection and energy efficiency. Training for employees whose work can have a negative impact on the environment focuses on actual work processes and procedures in crisis situations [4].

**CONCLUSION**

In modern conditions many organizations seek to develop organizational learning and become learning organizations. The aspiration of organizations to become learning organizations represents a new approach in the management and development of human resources. For a traditional enterprise, changing to a learning organization is a major challenge [7]. The organization needs to create a climate where learning is accessible to all managers and in which senior managers have understood the need and importance of continuous training at all levels in the organization. Managers should encourage employees' 'openness' to new ideas, the honesty of dialogue and communication, team learning and teamwork, understanding of business operations and creating a collective vision of organizational development.

It would be utopian to overlook the constraints that exist in the creation of learning organizations [1]. These constraints relate to the purpose and structure of the organization itself, to individuals, especially with regard to self-directed learning, to the organization's decision-making about learning. Learning in organizations focuses on productivity. The balance between learning time and production time must be maintained. Some workers are satisfied with the jobs that are clearly defined and are not ready for constant consideration. Some jobs require hierarchy and centralized decision-making and this is in conflict with the initiative and participation of individuals. The organization is not an isolated entity but reflects the conditions and culture that aids or impedes learning. People cannot be expected to have autonomy and independence overnight.

Training and learning in occupational and environmental safety should adopt learning forms that are different from the conventional scholastic model.
Those are the forms that more closely match the ways in which knowledge is mobilized and shared. Programs based on active learning, interaction and employee participation can be used in this regard. New procedures need to be devised to share knowledge about occupational and environmental safety within and outside the organization. Understanding the overall cycle of occupational and environmental safety within an organization can help legislatures to formulate rules that are easier and more effective to implement. Legal requirements and rules are often viewed as coercion, even if they are intended to protect employees’ rights. A better understanding of the deeply practical nature of the knowledge on occupational and environmental safety may result in greater critical awareness in the formation or adoption of appropriate regulations.

REFERENCES

ACKNOWLEDGEMENTS
This research was funded by the Ministry of Education, Science and Technological Development of the Republic of Serbia.

BIOGRAPHY of the first author
Vesna Nikolić is a full professor of the Faculty of Occupational Safety in Niš, Republic of Serbia. She is the author or co-author of several monographs, textbooks and over 350 scientific papers published in scientific journals and proceedings of scientific conferences.

RAZVOJ LJUDSKIH RESURA I ORGANIZACIONO UČENJE U FUNKCIJI BEZBEDNOSTI RADNE I ŽIVOTNE SREDINE
Vesna Nikolić, Aleksandra Ilić Petković, Mirjana Galjak

rezime: Prisustvo i permanentno generisanje rizika i opasnosti različite prirode i karaktera u radnoj i životnoj sredini uticali su da se bezbednost i upravljanje kriznim situacijama, određuju i sve više postavlja kao strateški cilj savremenih organizacija. Savremene organizacije se nalaze pred velikim izazovom — kako da organizaciju učine bezbednom uprkos povećanju kompleksnosti, nezvanesnosti i međuzavisnosti rizika u radnoj i životnoj sredini. S tim u vezi, u radu je polazeći od elaboriranja bezbednosti kao strateškog cilja savremenih organizacija, preko promišljanja menadžmena i razvoja ljudskih resursa iz diskursa upravljanja bezbednošću posebno posmatrano organizaciono učenje i razmatrane osnovne pretpostavke razvoja organizacije koja uči u savremenom poslovnom i bezbednosnom ambijentu.

Ključne reči: razvoj ljudskih resursa, organizaciono učenje, bezbednost radne i životne sredine.