MANAGEMENT OF HUMAN RESOURCES AND KNOWLEDGE MANAGEMENT

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Abstract
Setting leadership as the primary factor affecting the management of knowledge shows that employees perceive their leaders driving force support for all kinds of changes, as well as in the application of activities in the field of knowledge management. If an educational organization exercises leadership in the management of knowledge in the organization, then individual and organizational performance will improve. In fact, it can be concluded that success in the implementation of knowledge management so called Leader of knowledge is necessary to be included(Knowledge leader). Knowledge leader is a leader who with its characteristics, skills, knowledge and energy will guide the organization and its employees to effective implementation-active management of knowledge. This leader should be focused to knowledge and sharing knowledge, teamwork, innovation and creativity, strengthening the trust between employees and their continuous improvement and development. What is particularly encouraging are the results of research in which the principals of educational organizations in the Republic Macedonia can be recognized previously mentioned leadership characteristics. If an educational organization practices leadership in managing knowledge and organization, then the individual and organizational performance will improve.

Keywords: tacit and explicit knowledge, knowledge management, knowledge leader, knowledge worker, process of knowledge management

INTRODUCTION
Did Frasis Bacon, noting that "knowledge is power", mean for today and society of knowledge? This thought could be a guide, a basic idea of the modern workings of any organization, in today's fast and dynamic environment.

The knowledge management, as a relatively young discipline, in successful organizations around the world occupies a significant position. They incorporate the principles of knowledge management into their business processes and build on their effectiveness and efficiency based on them.

The characteristics of the principals of the educational organization are needed for the efficient management of the processes of knowledge management in their organizations. If human resources and their knowledge are the most important capital of the organization, then the principal should show leadership abilities for developing an organizational climate and culture, an appropriate structure and information technology that will stimulate learning in order to realize the individual and organizational goals and achieve higher organizational performance of the educational organization.

1 Specialized paper
Through the definition of the knowledge management, the notion and concept of the knowledge management, its historical development, i.e. the phases through which the knowledge management has passed from its beginnings to the present, is explained. It also explains the meaning and essence of the process of knowledge management, as well as the benefits that modern organizations have from systemic knowledge management and generations of the knowledge management. It will also show similarities and differences between knowledge management and related concepts of radical change—organization that teaches the concept of lifelong learning and intellectual capital.

The Human Resources Management and the Knowledge Management reviews the human resource management, its significance and goals in the society of knowledge, and the processes in human resource management will be discussed in more detail in the context of the implementation of the knowledge management process.

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A CONCEPT OF HUMAN RESOURCE MANAGEMENT

Even Drucker said that today's, modern and professional workers are not labor, but capital, a capital that is productive and creates added value for its organization. The organization is as good and successful as its employees—if they are good and successful, the organization is good and successful too. As a creative and innovative part of any organization, people have a leading role in creating and maintaining its competitive edge. Only highly educated, properly motivated human resources, with continuous and continuous learning of new business skills, can respond to the challenges imposed by the new business environment and the knowledge economy.2

What characterizes the knowledge economy is the shift from production to service offering and understanding of knowledge as the ultimate driving force of the organization and the basis for its competitive advantage. "Knowledge is Power" is the main saying that describes this age, and workers become "workers of knowledge," a notion first introduced by Peter Drucker back in 1959. With the continuous development of technology, the labor market requires highly qualified human resources ready to adapt not only to changes in its environment, but also to changes in their own careers.3. The efficiency and effectiveness of the organization in the economy and in a knowledge-based society will depend on the skills to animate, to keep in the organization and to motivate the workers of knowledge. In regard of this is also finding ways how the knowledge of the knowledge workers to be acquired, stored and shared among other members of the organization in a way that will lead to the creation of additional values for the organization.4

In working conditions in the knowledge economy, there is a need to define and analyze the role of the human resource management (HRM) as a function aimed at attracting, retaining and appropriately motivating knowledge workers. In literature there is no single definition of human resource management. For the purposes of this master thesis, one can start from the definition that human resources management is defined as a strategic and coherent approach

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2Draker, 2005, p. 95
3Dorđević-Bojanović, 2009, p. 109
4Lončarević, Mašić, Dorđević-Bojanović, 2008, p. 236
of management to the most valuable resource of the organization - people who work in it, individually or collectively contribute to achieving its goals.\textsuperscript{5}

The organization is as successful as its employees are successful. Human resources are the most important component of any organization. Management of human resources means management activity that includes: provision, development, maintenance, adjustment, targeting and use of human potential in accordance with the goals of the organization, while respecting the individual needs and goals of the employees.\textsuperscript{6} Human resources include the overall knowledge, abilities, skills, creative opportunities, motivation and loyalty that an organization has at its disposal, which means that it is the overall intellectual and psychic energy that can engage the organization in achieving organizational goals and development.

Human Resource Management is a part of an organization that, by its action, contributes to achieving the strategic goals of the organization, by attracting, retaining quality staff and professionals and motivating them to work in an effective and efficient manner. The role of human resource management is to enable the organization to achieve success with the help of people, in this case with the help of knowledge workers.

**MEANING AND GOALS OF MANAGEMENT OF HUMAN RESOURCES IN THE SOCIETY OF KNOWLEDGE**

The relationship and interaction of the knowledge economy and human resource management must necessarily be considered in the light of the numerous changes occurring in the business environment, and which relate in particular to the following areas:\textsuperscript{7}

1. **Strengthening the links between the organization and the individuals.** The development of the knowledge economy gives the knowledge workers the power that emanates from their abilities to resolve the unpredictable events that occurred in the organization
2. **Communication.** Communication is evolving in a direction directed towards all employees to understand the wider context of their work.
3. **The role of management.** An effective manager in the environment of a knowledge economy should support the collection and sharing of knowledge by encouraging individuals to use their knowledge and skills, in a way that will inspire creativity and new ideas.
4. **Values and ethics.** The balance in human resources management policies and practices should be based on an ethical basis that is recognized and accepted by the employees.
5. **Managing changes and managing organizational culture.** It is necessary for the organizational culture, which corresponds to the knowledge economy and its requirements, to evaluate internal and external connectivity and contacts, respect for individuals, creativity and innovation, trust, information sharing and knowledge, continuous learning and development.

The success of modern organizations depends on the intellectual abilities of the employees. In order to develop the professional intellect in the organization, it is necessary to adhere to certain rules, some of which fall within the domain of human resources management. It is

\textsuperscript{5} Amstrong, 2006, p. 8
\textsuperscript{6} Lončarević, 2007, p. 153
\textsuperscript{7} Herman i Brelade, 2007, p. 113
very important to insist on the intensive development and advancement of employees. This confirms that it is necessary to pay special attention to the development of knowledge management in order to increase the efficiency and effectiveness of human resource management and the work of the organization.

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The understanding of the relationship between human resource management and knowledge management should be removed from theoretical consideration of these notions. In terms of human resources, knowledge management involves the collection and the usage of resources in order to create an environment that will enable the availability of information to individuals and in which individuals can acquire, share and access information to develop their knowledge and where they will be encouraged to apply this knowledge to the benefit of the organization as a whole. What is important to emphasize is that the two phenomena are related to a common denominator - the worker of knowledge. It should be noted that the management of knowledge and human resources management are socially conditioned. The notion of knowledge itself is related to interactions between people, especially those relating to communication, learning, knowledge sharing or knowledge creation. Today's human resources management aims to provide and support the competitive advantage of the organization by linking human resources management in the organization with knowledge management. The main focus of human resource management should be the development of human capital and knowledge management. In order to achieve a competitive advantage with the help of knowledge management, the organization needs to define its competencies and define the knowledge it possesses, which will distinguish it from the competition and will contribute to creating values for the users. One of the basic needs in the knowledge economy is the need for learning. Therefore, the role of human resource management is crucial in creating an environment that will support learning.

In order for human resources management to meet the needs of a changing and unpredictable environment in the knowledge economy, it is necessary to focus on the maximum utilization and care of the knowledge held by the employees in the organization and in that way to ensure the achievement of the strategic values for organization itself. This leads to linking human resource management with the concept of knowledge management, i.e. the ability to create, share, store and use knowledge.

Human Resource Management as a function should become a strategic working group that will enable and improve the communication among employees, mediate in the exchange and sharing of knowledge and the continuous improvement of employees. Also, human resources management needs to do everything in its power to train, develop and support its employees, i.e its knowledge workers.

Providing the right people at the right place at the right time, which is the role of human resources management, and linking them to the right knowledge at the right time and in the right place, which is the role of knowledge management, requires the creation of a new function of the management of knowledge that will put the workers in the center of their activities and interests. Further, management should ensure that the current and future needs of knowledge workers are met to meet the knowledge and skills necessary for the effective and effective execution of trusted tasks and the creation of additional values for the

8Dordžević-Bojanović, 2009, p. 116
organization. As indicated, the need for research is proven that it is necessary to pay particular attention to the development of knowledge management in order to increase the efficiency and effectiveness of human resource management and the work of the organization.

If the knowledge management program is successfully applied, the new heads of the organization will be referred to their tasks in a very short time, will be available and at a disposal at all times all the necessary information, which primarily relates to the description of their workplace and work assignments, working conditions, organizational expectations regarding the results, work priorities, the basic values of the organization, its mission, vision and goals that apply both to employees and to the organization in general.

In order to be successful, the organization must recruit talented people at all levels who have a right combination of skills and abilities which are accompanied by the right values and attitudes. Such skills and attitudes must be constantly developed and strengthened, and every employee must be motivated and his or her efforts directed at the goals and tasks of the organization.9

It is not enough to employ highly talented individual and to expect that the skills and abilities of employees will remain current while being employed. Therefore, training and development must be carried out at all levels of organization. The development of human capital implies: encouraging broad engagement (active engagement of the leader across the organization), transferring knowledge (transfer), monitoring and tracking progress and development of employees and valuing human capital. The organization must find ways to create "links" between its workers and knowledge.10

THE PROCESS OF MANAGEMENT OF HUMAN RESOURCES IN CONDITIONS OF IMPLEMENTATION OF KNOWLEDGE MANAGEMENT

Providing the right people at the right time at the right time, the role of human resources management, and linking them to the right knowledge at the right time and in the right place, which is the role of knowledge management, from knowledge management requires the creation of one a new function that will put the workers in the center of their activities and interests. Thus, the basic role of the human resources management process in the context of the implementation of the knowledge management program is through its processes to ensure the immediate and future needs of knowledge workers who possess the knowledge and skills necessary for efficient and effective execution the entrusted tasks and creating added value for the organization. In this direction, the phases of the human resource management process are also directed.

Planning Resources for Knowledge Workers

Considering the complexity of the function of human resource management in terms of applying a knowledge management program, it is necessary for its careful planning. Each human resources plan is based and must be aligned with the organization's strategy aimed at achieving and maintaining a competitive advantage. In this sense, it is envisaged not only the number of employees that the organization needs in the next period, but the

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9Dess, Lumpkin, Eisner, 2007, p. 127
10Dess, Lumpkin, Eisner, 2007, p. 140
determined skills, abilities and knowledge that the employees should possess in order to be able to respond in time to the assigned business tasks.11

What is specific to the planning of human resources in the stated conditions refers to the prediction of possible gaps that may occur with the departure of the employees of the organization (retirement, absence, firing, etc.) that brings with it the potential danger of disappearing knowledge from the organization. The careful resource planning of knowledge workers should ensure that such situations are minimized and appropriate steps are taken in the event of such situations, such as the transfer of knowledge possessed by the employees that are leaving the organization to their colleagues who remain in the organization. Here one of the basic roles of knowledge management comes to the fore, which is the transformation of individual knowledge into collective knowledge, accessible to all employees in the organization, which also ensures the staying of knowledge in the organization and in situations when some employees leave the organization.

The basic guidelines for successful planning of resource knowledge workers include:12

1. Collecting all necessary information and data from the top management needed for successful planning, awareness of the consequences of misdirected planning, existence of consent for the activities that reflect the planned investment in resources, and the existence of an idea for measuring the profit from the planned activities.
2. Determining the future needs for talents and knowledge workers in the context of organizational goals and strategy. Then, we develop a profile (knowledge, skills, abilities, behavior) for the most important activities and tasks that are most difficult to fill.
3. Assessment of employees in accordance with future talent needs in order to recognize possible job vacancies in the future, as well as employees who have the potential to fill the mentioned places.
4. Creation, implementation and measurement of the results that result from individual development plans. For each area of development, it is necessary to include: individual and group tasks, job rotation, training and training programs, courses programs.
5. Assessing the effectiveness of development plans throughout the organization.
6. To equate responsibility. To link the awards and rewards of managers and staff responsible for the implementation and development of plans.
7. Control and evaluate the efficiency or profit from a successful planning program.

Defining the skills needed for knowledge workers and recruiting staff

Recruitment in the changing environment of the knowledge economy aims to find as many potential qualified and capable candidates as possible to perform certain tasks in an adequate way. If we take into account the professionalism, expertise, innovation and creativity of the employees who are working in modern organizations that have introduced a knowledge management program, the conclusion is that the recruitment process should be conceptualized in a more flexible manner than is the case in the traditional recruitment process.

11Lončarević, Mašić, Đorđević-Bojanović, 2008, p. 241
In order to be successful in the recruitment process, it is necessary to identify areas of competence that could be a prerequisite for a potential candidate to be a successful knowledge worker. This would be the following areas of competence:\textsuperscript{13}

- Specific skills in the respective field.
- Commitment to learning and development (evident commitment to new tasks and projects, searching for new experiences, dedication to intellectual curiosity and a desire to understand and resolve issues and dilemmas, a commitment to learning new skills and a desire for new information).
- Existence of a cooperative approach - cooperation and will to share information and knowledge with others, knowledge environments.
- Creativity - the ability to connect different ideas and experiences.
- Ability to adapt to different cultures.

**Selection of workers of knowledge**

Selecting is the choice of a person who best suits the free job position. This means that in the selection process, in the various ways, those candidates who have the best qualifications to perform the appropriate work are selected and identified.

What is specific to the selection process in relation to the traditional understanding of this notion, and from the aspect of the knowledge management program in the organization, comes from the fact that priority is given to individuals who can contribute to the creation, storage, sharing and the application of knowledge. Another specificity that arises as a consequence of the nature of knowledge that the organization needs, which is diverse, specific and unique for each organization separately. In that sense, there is no best way of selection acceptable to any organization that would guarantee a good choice of a quality candidate who could successfully participate in the application of program knowledge.

The selection process in conditions of application of the knowledge management program should determine the existence of certain competences in the candidate that will enable successful engagement in the implementation of the program. In the literature, often these required competencies are grouped according to key activities for the purpose of knowledge:\textsuperscript{14}

1. **For activity - knowledge creation:** ability to learn and communicate. In the context of knowledge management, the ability to share knowledge, connect different ideas, and the ability to express ideas, which requires the existence of basic communication skills, is of great importance.

2. **For activity - storing knowledge:** structured and systematic storage and storage capability. This ability includes the ability to abstract thinking, focus on the essence and clear, expedient and concise expression.

3. **Application of knowledge:** requires openness and flexibility for the application of new knowledge, the ability to use the media, and the ability to assess the relevance of the new commitment for its realization.

\textsuperscript{13}Harman, Brelade, 2000, p. 29-30
\textsuperscript{14}Vorbeck, Finkle, 2001, p. 48-51
Socialization of Knowledge Workers

Organizational socialization is a process in which the newly employed knowledge worker adapts to the conditions in the working environment and the operating rules of the entire organization. The socialization of the newly employed has a strong impact on the satisfaction of the employees from the work, creating an atmosphere of trust and cooperation, fostering an innovative and creative spirit, and improving the results of the organization as a whole.

When it comes to the surrounding of knowledge and the organization that introduces a knowledge management program, then the role of socialization is even more important. Bearing in mind the specificity of the participants in the process of knowledge management, which in particular refers to creativity, the ability to create knowledge, establish relationships of trust with other employees, readiness to share their knowledge and make it accessible to all employees in the organization, socialization must be carefully thought out.

In the successful implementation of knowledge management programs, new members of the organization will be referred to their work assignments and activities in a very short period of time. They will be provided with all the necessary information, which primarily relate to the description of their work tasks, working conditions, expectations of the organization in relation to their results, work priorities, the core values of the organization, its mission, vision and goals, as well as other important issues related to other employees in the organization, but also with the organization as a whole.

Training and Improvement

The authors Garvey and Williamson\(^{15}\) believe that management in the organization has the ability to launch application and form a structure that will encourage, support, and develop a learning culture in the organization. In order for the organization to be productive with knowledge, a certain mindset is needed, which is the responsibility of the individuals. Therefore, the authors point out that the first step in creating an organization productive with knowledge is for employees to develop a sense of self-awareness. Of course, the importance of the organization in the creation of a corporate culture that supports the stated model of thinking, learning and work is great.

Speaking about the workers of knowledge, Peter Drucker expressed the view that "the existing knowledge before the raid of the new permanently outdates and the workers of knowledge have to return regularly to schools,"\(^{16}\) emphasizing the importance of continuous learning and improvement for the modern knowledge worker in the knowledge economy. On the other hand, personal progress and continuous improvement is one of the basic ways of motivating workers of knowledge, and how they can the need for continuous training and improvement of knowledge workers does not arise only from their own characteristics, but also from the need of the knowledge economy itself to hire highly trained human resources that will be able to effectively generate, store, share and apply knowledge in their own organizations. Therefore, organizations must establish programs for continuous improvement and training of their employees in order to maintain their competitive advantage based on knowledge.

\(^{15}\)Garvey iWilliamson, 2002, p. 125
\(^{16}\)Garvey iWilliamson, 2002, p. 188
A key role in the development and improvement of knowledge workers is that human resources managers who, together with top management of the organization, should implement the following guidelines when implementing the training and improvement program in the midst of knowledge management:

- Developing the capabilities of managers to support innovation and creativity.
- Empower employees to have the skills to manage their learning and development.
- Trainings for acquiring skills necessary for efficient use of information, generating new ideas and communication skills.
- Trainings for acquisition of skills for using information technology.
- Building skills for teamwork and cooperative models in the workplace environment.
- Development of effective continuing professional development programs. be retained in the organization.

**Motivation and Rewarding Knowledge Workers**

For the workers of knowledge, as well as for their motivation and reward, similar rules apply to all employees (motivation and rewards are implemented with tangible and intangible strategies), except that they need to be careful with the use of force and methods of control which include intimidation, because workers of knowledge react very stubbornly. Although money is usually not the most important motivator of knowledge workers, it is, of course, one of the most common and fundamental motivators. Intangible strategies in return, as a main goal, have to foster a sense of satisfaction and recognition within the organization, as well as awareness of the value one employee has for an organization.

When talking about motivating workers of knowledge, Drucker compares them with volunteers. Namely, as is known, volunteers must necessarily feel more satisfied with the performance of their work than employees who receive salary, only because they do not work for money. What they need to be motivated to work is the **challenge**. Also, volunteers must be familiar with their organization's mission and believe in it. They need to be constantly educated and need to see them and feel the results of their work. The same rules, in order to maximize motivation, apply to workers of knowledge, in which continuous education is more important and significantly more important than that of average volunteers.

Also, one of the most commonly mentioned factors that influence the motivation of knowledge workers is their **working space**. Although knowledge workers prefer closed workplaces, the fact is that they better communicate in open-type spaces. However, despite the clear link between work space and the efficiency of knowledge workers, too little research has been undertaken in this area to give an unambiguous direction. What can be said with certainty is that the work in a common space should be nurtured, with respect to the need for autonomy, which, in relation to office space, manifests itself in the way in which workers of knowledge often have desires and ideas as to how functional and aesthetic should be organized by their offices and in this regard their requirements should be met.

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17 Harman, Brelade, 2000, p. 59
18 Marcus i Watters, 2002, p. 91 i 92
19 Drucker, 2001, p. 21
20 Davenport i Prusak, 2000, p. xiv
O’Dell и Grayson\textsuperscript{21} as part of the US Center for Productivity and Quality have conducted several researches related to the rewarding of knowledge workers. Research has shown that organizations are more likely to use intangible rather than tangible ways of rewarding the transfer of knowledge among employees. In particular, they noticed how only a few companies use primarily formal financial awards.\textsuperscript{22}

Despres и Hiltrop\textsuperscript{23} identified three main features of the award system for knowledge workers:

1. The remuneration system must be competitive with respect to other companies to attract and retain competent staff and must be sensitive to the perceptions of internal equality among employees.
2. It must be rational in relation to the context of the organization, implemented consistently at any moment and contribute to an organizational strategic direction.
3. It must be conceptualized in such a way that it focuses primarily on cultural, socio-political and business challenges and focuses on the pay, bonuses and motivation systems in the background.

In particular, when a rewarding system for knowledge workers is created, there are several things to pay attention to, which will ensure that the employee is encouraged to exchange knowledge among employees, that is, to support knowledge management. According to the stated characteristics of knowledge workers, the following hierarchy of motivation factors and rewarding of skilled workers can be set:\textsuperscript{24}

1. autonomy, that is independence as the most important factor,
2. personal and professional progress
3. recognition, confirmation and confirmation of their contribution and
4. money and the equivalent of money as a factor that has an impact on the motivation of knowledge workers.

Finally, one of the important topics when it comes to motivating knowledge workers is the question of retaining knowledge workers. In addition to the fact that there is a risk that a knowledge worker is not satisfied with the work, organizational climate and culture, benefits and the like, a major problem is the fact that knowledge workers are often in their own career plans and they have set a change of several different jobs and organizations. In addition, knowledge workers are often targeted by the headhunters, and it is not unusual to leave the workplace that they are quite happy and satisfied to go to another organization on a job that they presume will be more interesting or more challenging.

\textbf{CONCLUSION}

When it comes to people and managing them as human resources, and knowledge management relies heavily on human resource management as the basic users of knowledge and often constitutes the highest quality source of tacit knowledge, there is still a fundamental obstacle in a kind of their motivation and their desire and willingness to invest their knowledge and skills, their energy and their commitment. In this way, the basis of knowledge management comes down to the problem of how to motivate people in the organization in order to enrich their organizational knowledge with their specific knowledge and skills. This

\textsuperscript{21}O’Dell и Grayson, 1998a, p. 168
\textsuperscript{22}O’Dell и Grayson, 1998b, p. 82 i 83, i vo O’Dell и Grayson, 1998a, p. 168
\textsuperscript{23}Despres и Hiltrop, 1996, p. 51
\textsuperscript{24}Despres и Hiltrop, 1996, p. 101
task seems simple, but in a society where knowledge represents power, it becomes the biggest obstacle to a systemic knowledge management at the level of an organization.

With the development of the field of knowledge management, the most common mistakes and the most important factors that influence the effectiveness and efficiency of knowledge management are identified. With the help of numerous theoretical and empirical studies, today's researchers and practitioners have knowledge and techniques that can relatively easily manage with knowledge. The key factors that influence the effectiveness of knowledge management are: a well-established and diversified knowledge management infrastructure, dedicated knowledge management holders who combine personal example and decision-making support and promote knowledge transfer, organizational culture that it is also called culture knowledge - which is the basic assumption for long-term knowledge management, information technology that tasks collecting, storing, searching and re-accessing knowledge makes it much simpler and faster, as well as measuring the usefulness of knowledge management which, through specific indicators or through the recording and transfer of experiences that confirm the importance of knowledge management, gives full meaning and motivation to continue the initiated management activities of knowledge and they are constantly upgraded and enriched.

Key factors that influence knowledge management in an educational organization are leadership, organizational culture, human resources management, information technology, and control, listed in order of priority to influence knowledge management. The leadership as the primary factor influencing knowledge management shows that employees in their leaders see driving force and support for all kinds of changes, as well as the application of knowledge management skills. Namely, it can be concluded that the success of the implementation of knowledge management requires the so-called knowledge leader or leader who, with its characteristics, skills, knowledge and energy, will direct the organization and its employees to the effective implementation of the management's activities. Such a leader should be focused on knowledge and sharing of knowledge, teamwork, innovation and creativity, the strengthening of trust among employees and their continuous improvement and development.

Since progress is not happening only in the organizations, but also in the society as a whole, the word "knowledge is power" is valid - it must become part of the Macedonian history, and the concept "knowledge is for giving, not for keeping" should become part of the Macedonian everyday life.

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