

KNOWLEDGE-BASED ORGANIZATIONS – A CHANCE TO INCREASE THE COMPETITIVENESS OF THE ECONOMY OF BOSNIA AND HERZEGOVINA

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ABSTRACT

The paper deals with the competitiveness of the economy of Bosnia and Herzegovina, the key causes of non-competitiveness and measures for its increase. According to the competitiveness index, Bosnia and Herzegovina is ranked 107th out of 137 countries surveyed (World Economic Forum, 2017-18). Import coverage by export is 58%. Bosnia and Herzegovina has recorded a decline in competitiveness in all areas compared to previous reports. GDP per capita is 29% of the EU average 28, according to official statistics, other authors' research and our own research in Bosnia and Herzegovina. Among the most important weaknesses of the companies are the lack of entrepreneurial competencies and training programs, both employees and managers. In developed economies, knowledge is the main resource. It is a source of competitive advantage and a sine qua non survival on the market. This paper demonstrates the direct interdependence of learning in the organization and knowledge management and competitiveness of companies. Competitiveness can be significantly increased by defining and implementing training and education programs.

Key words: competitiveness; training and education; entrepreneurial competences; knowledge management.

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INTRODUCTION

With this research, we have tried to determine the status in the field of competences and competitiveness of business entities in Bosnia and Herzegovina. In that sense, we have tried to identify the position of the economy of Bosnia and Herzegovina in relation to other countries of the region and the EU. We have also tried to determine the situation regarding the key competencies at the level of the companies and their organizational units, the lack of competence and the training and education program needs, or learning in the organization.

The economy of Bosnia and Herzegovina is characterized by a long-standing non-competitive and negative external trade balance. Small and medium size enterprises account for 99% of the total number of companies. Most employ fewer than 10 staff (Čizmić, 2012). The economic environment is not incentive and there is no institutional framework that would support the rapid growth and development of small and medium-sized enterprises and encourage their exports. In all industrial sectors, except in the woodworking and metal industries, exports are significantly lower than imports.

According to the report of the Central Bank of Bosnia and Herzegovina (CBBH, 2018), in which she published data on blocked accounts of business entities in Bosnia and Herzegovina. on 03/05/2018, a total of 74,567 business entities were blocked, while at least 64,267 business entities had at least one account blocked.

The ability of the company to withstand competitive pressures and survival on the market is a prerequisite for Bosnia and Herzegovina's accession to the European Union. Institutions have the responsibility to create conditions for strengthening its competitive position.

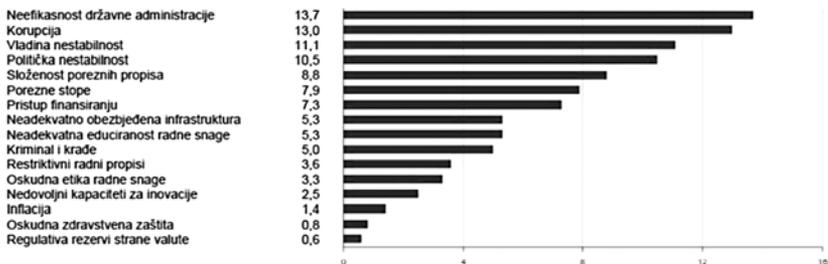
In line with the problems that this paper deals with, the following hypothesis is defined: "Bosnia and Herzegovina's economy would significantly increase competitiveness if programs of lifelong learning were introduced through the education and training system, and introduced institutional support for the affirmation of functional knowledge."

REVIEW OF LITERATURE

Since 2005, the World Economic Forum (WEF) has based its analysis of competitiveness on the Global Competitiveness Index (GCI), consisting of 114 indicators grouped into 12 pillars: 1) Institutions; 2) Infrastructure 3) Macroeconomic environment; 4) Health and basic education; 5) Higher education and vocational training; 6) Market efficiency of the goods; 7) Labor market efficiency; 8) Development of the financial market; 9) Technological readiness; 10) Market size; 11) Business sophistication; 12) Innovation.

As shown in Chart 1, Bosnia and Herzegovina's operations are mostly burdened by the inefficiency of the state administration, corruption, government and political instability, the lack of a stimulating tax system, access to finance, infrastructure, inadequate workforce.

Chart 1: Factors which most interrupt business in Bosnia and Herzegovina



Source: FEDERAL BUREAU OF PROGRAM DEVELOPMENT (2016)

Inefficiency of government administration
 Corruption
 Government instability
 Political instability
 Complexity of taxation regulations
 Taxation rates
 Access to financing
 Inadequately secured infrastructure
 Inadequately educated workforce

Criminals and theft
Restricting work regulations
Disputable ethics of the workforce
Inadequate capacity for innovation
Inflation
Restricting health coverage
Regulative reserves in foreign currencies

In terms of competitiveness, Bosnia and Herzegovina ranked 111th in 2015, and in 2016 it was ranked 107th out of a total of 138 ranked countries. It is competitively behind the neighboring countries. So, for example, Serbia is in 90th place, Albania 80th, Montenegro 82nd, Croatia 74th, while Slovenia is 56th.

Gross domestic product in Bosnia and Herzegovina per capita in 2015 amounts to 8107 KM (\$4,910.08), while in 2016 it amounts to 8,516 KM (\$5,158.71). For comparison, Germany has a GDP per capita of \$45,888, and Luxembourg a \$92,049.

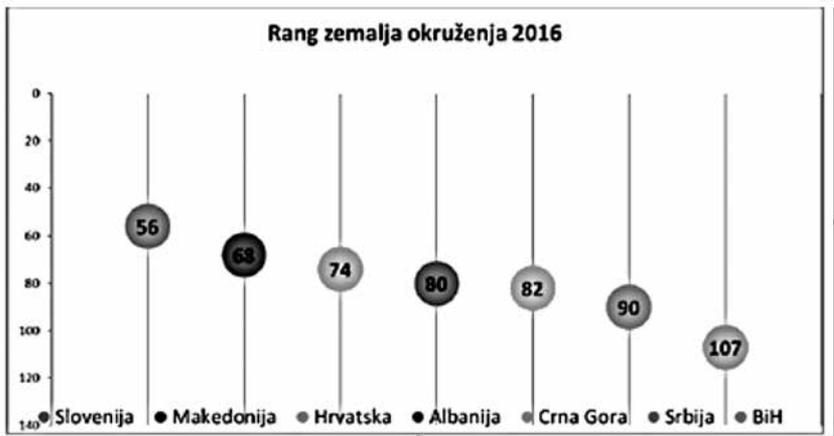
Bosnia and Herzegovina has a long-standing negative balance in foreign trade, which is the result of low productivity and, consequently, non-competitiveness. The participation of small and medium-sized enterprises in exports is not at a satisfactory level. Only 58.35% of imports were covered by export in 2016.

The European Union still remains as our main foreign trade partner, so that the total trade volume coverage with the EU is at 65,18%, which sends a clear message about the need to adapt to EU standards to increase the competitiveness of the Economy of Bosnia and Herzegovina.

The largest coverage of import by export is with: Austria 90.08%, Germany 74.72%, Slovenia 73.95%, Italy 59.97%, Turkey 56.65%, Croatia 54.22%, and Serbia 51.25 % (Bosnia and Herzegovina Chamber of Commerce, 2016).

The 2016 Report on Competitiveness of Bosnia and Herzegovina illustrates the weaknesses of the country that need further attention and the necessary work to eliminate them in order to create a favorable environment for investors. Of the 7 countries in the region, Bosnia and Herzegovina is still positioned in the last place (Chart 1).

Chart 2: Ranking of neighboring countries, by level of competitiveness



Source: FEDERAL BUREAU FOR PROGRAMMED DEVELOPMENT (2016)

Among the key weaknesses and problems encountered by companies is lack of competitiveness, caused by low productivity. Companies operate in conditions, on the one hand, of great labor market offers, while on the other hand, the labor market is characterized by a lack of entrepreneurial competencies. Studies by other authors, as well as research in this paper, show that most companies, for both objective and subjective reasons, do not devote adequate attention to the development of the competences of their employees. Surveys show that a large number of companies do not have a human resources management system or a developed methodology for determining training needs, and an assessment of the expected results of the trainings conducted (Foreign Trade Analysis of Bosnia and Herzegovina, 2016).

The low level of competence is caused primarily by the unsuitability of the education system to the needs of industry, as well as the lack of training and education programs in companies. The Bosnia and Herzegovina authorities have not created a favorable environment that would motivate employers to take on pupils and students for vocational practice work, nor do tax benefits and other types of subsidies for employers who accept practitioners. The consequence of this is the low level of outcome competencies of pupils and students, as well as new employees. Due to the lack of competencies, students are less likely to find

jobs. Employment offices are still not reformed in order to successfully connect employers and the unemployed.

Educational institutions have no sensitivity to the needs of the labor market. Still, emphasis is placed on reproductive knowledge, while not enough attention is paid to functional knowledge. Teaching programs do not follow market needs. Deficit occupations, both current and future, are not being adequately addressed. Given that it is not realistic to expect that the education system responds in the foreseeable future to the demands of the labor market, it is necessary for employers to devote more to the training and education of employees, in addition to the strengthening and development of their competences. It is necessary to create educational programs for lifelong learning, in line with changing labor market conditions, both for existing workplaces and for future work. Career and professional counseling services still have not been developed.

In domestic literature, there is little talk of specific competencies that should enable potential entrepreneurs to deal with the difficulties and challenges of the environment to efficiently run their entrepreneurial venture.

Knowledge management

In the last decade, the topic of knowledge management in companies is discussed. The concept of knowledge management includes a set of tools, techniques and methods that should enable its implementation. Knowledge becomes more important than financial flows. Employees have the most significant role in revenue generation. Managers are increasingly focusing on the career development of an employee, supporting lifelong learning, and innovation.

Knowledge is crucial in creating an organization's competencies. It can be defined as "the ability to maintain a coordinated allocation of assets and capabilities in a way that promises that they will help their companies achieve its goals" (Sancez, Heene, Thomas, 1996). The collection and distribution of information and knowledge are the main source of the company's assets (Burton-Jones, 1999). Knowledge management can be seen as a process of systematic and proactive management and knowledge development in the organization (Hansen, 1999).

There is still no single definition of knowledge management. In a wider sense, knowledge management is an organizational process through which values from their intellectual knowledge are generated (Santosus, Surmacz, 2003). Creating new values often involves the creation and sharing of knowledge among employees, sectors, and even with stakeholders in order to develop best practices and competitive advantages. In this process, they continually create new knowledge and gain new experiences.

Modern organizations have flexible, decentralized structures, characterized by a small number of hierarchical levels and horizontal cooperation (Ulrich, 1997). Organizations in which knowledge of experience and skills is continually evolving, are called learning organizations.

Learning organizations base their competitive advantage on knowledge and intellectual capital, which is the only economic source of a modern organization. At the time of virtual communication and networking, many companies follow the concepts of a learning organization, and virtual organizational structures are increasingly present.

The borders between organizations are becoming increasingly porous, and more and more partnerships are established for global competitiveness (Hasselbein, Goldsmith, Beckhard, 1997).

Knowledge management is based on sub-processes. In literature, the most frequently stated basic sub-processes of knowledge management are (Jovanović, 2009):

- Creating knowledge,
- Keeping knowledge,
- Transfer of knowledge,
- Using knowledge

Knowledge is transmitted through documents, direct contacts, workshops, training seminars, etc. Transfer of knowledge should be conducted at the right moment, in the right place. Obstacles to the transfer and use of knowledge can be routines and procedures. Transfer of knowledge can be done both internally and externally. Under the internal transfer of knowledge, the transfer of knowledge between

individuals and groups within companies is understood. External knowledge transfer can be done in two ways:

- different forms of joint activities (conferences, seminars, knowledge fairs etc.);
- selling knowledge on the market (sale of licenses, copyrights, development of manuals and methodologies, etc.).

Creating new knowledge is carried out at the personal and group level, through training, learning at work, problem solving in the team, brainstorming, etc. There are more classifications of knowledge.

Company practices have different approaches to knowledge management. The Business Processes Resource Center at Warwick University cites four basic approaches to knowledge management that occur in company practice (Azam, 2015):

- *Knowledge-worthy companies*. Knowledge is an intellectual capital for them.
- *Companies that intensively use intellectual property*. Such companies have R & D departments, have the ability to discover new, unconventional ways to exploit the existing knowledge base.
- *Companies that “do not forget” knowledge*. New information generated by the realization of individual projects is made available to all workers, including those who are not involved in the projects.
- *Companies that have recognized the importance of human resources management*. They advocate the need for experts, identify modern ways to manage them, support innovation and creativity.

The concept of knowledge management is not easy to implement. Knowledge is evolving through processes that are develop differently for individuals, as well as in organizations. There is still no consensus on how to transfer knowledge management into a unique science.

Organizations based on knowledge

With the transition from an industrial economy to the knowledge economy, there has been a change in organizational theory. New types of companies have emerged as “knowledge-based organizations” (Drucker, 1988).

Rich (1998) and Calabrese (2006) defined a knowledge-based organization as an economic entity, from a public or private environment, in which information and communication technologies are used to collect and process information that is needed in the decision-making process. Knowledge is the most important resource and its creation, expansion and use are the key to success (Mahesh and Suresh, 2009). In other words, employees are the most important resource, not the tools used to create and disseminate knowledge. Every employee carries their life experiences that can be transformed into knowledge, and which can contribute to improving the performance of the company.

Organizational knowledge is visible, both in documents and knowledge bases, as well as in norms, processes, practices and procedures. Knowledge comes from information, and information from data. Information is transformed into knowledge by the process of thinking, comparing, determining the links between causes and consequences, which reflects on the business activities of the organization and the anticipation of its future.

To understand knowledge, or the method of its successful application, one can start from the two most important divisions of knowledge (Lam, 2000):

- Knowledge from the point of epistemology: explicit and implicit (implicit - tacit) knowledge.
- Knowledge from the point of view of ontology: knowledge within an organization at the individual level (individual knowledge) and at the level of the organization as a whole (collective or organizational knowledge).

Explicit knowledge is also called expressible knowledge, and implicit is also called individual, unspoken or tacit knowledge. While on the one hand, explicit knowledge is relatively easy to transmit, implicit, or a thorough knowledge, is much more difficult to convey. Since it is in the minds of individuals, it can be transmitted only by the will of the individual, with direct and intense communication with the person to whom the knowledge is transmitted. Implicit or tacit knowledge is usually unclear, which makes their transfer difficult (Jovanović, 2009). Regardless of all difficulties, the transfer of implicit (tacit) knowledge is necessary. Tacit knowledge is most often transmitted to personal contacts, through group work, interviews, mentoring, a program of cooperation of officers with more experience and officials who do not have those experiences, and others.

In the minds of the employees, there is also explicit knowledge, that is knowledge that can be translated into some encoded form, unlike implicit or tacit knowledge, which are equally important. Japanese authors believe that explicit knowledge is just “the tip of the iceberg.” Explicit knowledge can be seen, heard or touched. The basic purpose of knowledge management is to establish explicit and implicit knowledge among all employees and to enable their accessibility to everyone in the organization. Unlike explicit knowledge, which can be made visible and stored with the help of computers, tacit knowledge cannot be transmitted in a systematic and logical way. In order to make a conversion from implicit to explicit knowledge and vice versa, it is necessary to create organizational knowledge.

Image 1. Structure of knowledge



Source: Lundvall, 1996

Tacit knowledge is needed to translate words and figures so that they are intelligible. It is always the property of an individual. To become organizational, externalization is needed. Both can take place on an individual or group level. When the created mental models are divided by the largest number of employees, “tacit knowledge becomes part of the organization’s culture” (Milisavljević, 2002).

Companies are faced with a choice between a large number of resource combinations and activities for the production of their products or services (Romer 1992). There is a need for sufficient knowledge of which combination works best in order to gain an advantage over competitors.

The key role of knowledge is that it “configures and integrates resources such as raw materials, machinery, energy, labor, etc.” Most of them are commonly available to everyone and are applied in ways that better serve consumers than they can to competitors “(Zack, 2003).

The sphere of knowledge management addresses two related processes: it efficiently applies existing knowledge and creates new knowledge (Zack 1999.). It is a challenge for the organization to apply what one part of the organization knows about activities that take place in the second part of the organization.

The problem for the organization can be the departure of workers who relate to themselves their tacit knowledge. This creates a void because new workers need time to do a good job. Therefore, it is necessary to work on preparing replacement for workers whose departure can be expected. Some companies place this as a compulsory practice. Work meetings, team work, rotations at work, etc. are organized. For those who carry tacit knowledge and share it with others, they provide incentives for the transfer of knowledge.

Learning organization

There is no single definition of learning. According to Bahtijarić's "Learning is acquiring the skills and knowledge that result in a relatively permanent change of behavior. Learning is a characteristic acquisition of knowledge, skills and habits through education and practice, but learning can be inferred from a change of behavior. Learning can be concluded when the behavior or effect of an individual changes." (Bahtijarević Šiber).

The learning process implies individual change during new activities. We can talk about learning as a state when an individual acquires new knowledge consciously, but also about the state of being spontaneous, or the result of unintentional actions. Kolb identified 4 different types of learning (Zimanji, 2005):

1. Adaptable form - dominated by experiences and experience.
2. Divergent form - in which specific experiences viewed from different perspectives are preferred.
3. Administrative form (comparative form) - which moves between reflection and conceptualization, and which is oriented towards the development of new theories.
4. Convergent form - preferring new ideas and testing them in practice.

The basic premise of developing key competencies is learning. It is a prerequisite for continuous improvement in the value chain in the organization. Learning is the process by which an organization is able to maintain or strengthen experience-based performance.

In a “learning organization”, employees acquire knowledge and skills while performing everyday tasks.

According to Garvin (Garvin, 1993), “an organization that is trained in crafting skills is creating, accepting and transferring new knowledge, as well as modifying its behavior to reflect new insights and knowledge, or to apply knowledge in their own business.”

Nonaka states that knowledge is the only lasting basis for the company’s competitive advantage. Market conditions are constantly changing, emerging and developing new technologies, the life span of products is constantly shrinking, which puts the company in a situation of continuous creation of new knowledge and transformation within the company. These activities are defined as “creators” of knowledge, “whose work is continually innovating” (Nonaka, 1991).

For organizations, the choice of adequate learning models is of particular importance. A learning organization responds to changes and anticipates them. In literature and the practice of learning and educating employees, two groups of adult learning models are differentiated, which are applicable in contemporary corporations that are on their way to becoming learning organizations (Alibabić, 2011):

- models based on group interaction and cooperation in the social/work context, and
- Information and Communication Technologies (ICT) models.

The first group consists of traditional school type models, a case study model, and a model-oriented learning model.

The second group is made up of ICT-based models.

Managing competences

Entrepreneurial education is a key indicator for boosting entrepreneurship. According to the European Key Competence Framework (EOK), “Entrepreneurship has an active and passive component: it includes both the ability of an individual to induce change and the ability to accept, support and adapt to the innovations brought by the external environment” (EUR lex, 2006). Entrepreneurship implies a positive attitude towards change, and the assumption of responsibility for their own actions, whether positive or negative, as well as determining the goals, their achievements and motivation for success.

According to the European Framework for Key Competences for Lifelong Learning and EQF, key competences for entrepreneurship include essential knowledge, skills and attitudes:

- 1) Needs knowledge - includes possibilities to identify potential opportunities for personal, professional and business activities, including the broader aspects that create the context in which people live and work.
- 2) Entrepreneurial competence skills - relate to proactive project management (including skills such as planning, organizing, managing, leading, transmitting, communicating, giving or receiving reports, assessing and recording) effective presentations and negotiations, and the ability to work both independently and in teams. This allows a successful assessment and identification of someone’s strengths and weaknesses, and assesses where to take risks when needed. These skills can be classified as follows:
 - a) planning, organizing, analyzing, communicating, conducting, reporting, evaluating and recording skills;
 - b) skills of designing and implementing projects;
 - c) ability of cooperative work and flexibility within the team;
 - d) ability to recognize their own strengths and weaknesses;
 - e) the ability of proactive action and positive response to change;
 - f) ability to assess and take risks when justified.
- 3) Entrepreneurial attitude characterizes innovation, proactivity, independence and innovation in personal and social life as well as in work. This includes motivation and determination to see goals, both personal and those that are

in common with people in the environment. We can classify them as:

- preference towards initiative;
- a positive attitude towards innovation and change;
- readiness to identify areas where a whole range of entrepreneurial skills can be demonstrated - eg at home, at work and in their surroundings.

As entrepreneurs represent initiators of change and development in the market economy, thus accelerating the creation, dissemination and application of new ideas, they are essential for the future of the European Union.

According to the OECD report (1998), “entrepreneurs not only invent and identify potentially profitable opportunities, but are also willing to take risks to make sure they are right.”

Entrepreneurship includes a positive attitude towards change, taking responsibility for their own actions (positively and negatively), identifying goals and achieving them, and motivating them for success.

In the widest sense, entrepreneurial competence can be defined as “the ability to turn ideas into concrete action”.

According to the European Competence Framework, the basic components of the definition of entrepreneurial competence are:

- introduce and support innovation;
- show initiative and take risk;
- take responsibility for their own actions;
- act proactively and positively to respond to change;
- set objectives and realize them;
- team-player;
- be motivated to succeed;
- feeling of competence and personal efficiency;
- self-reliance and self-esteem;
- creativity and originality;

- tolerance to uncertainty;
- respect for others, ability to understand others, empathy, social intelligence.

Competence management implies acquiring, exchanging, developing and renewing knowledge and skills. Competences should be available at the right time and in the right manner, at an acceptable cost.

Competence can be divided into human, professional and business. In accordance with the similarities of the competencies required in one organization, a group of competencies for a particular organization can be developed. Based on the identification of existing and required competences, a competency gap can be determined.

The competency gap points to guidance for the process of knowledge management, especially for the processes of acquisition and exchange of knowledge.

When creating a knowledge map, strategic key knowledge should be identified, which is relevant to business, both in the present and in the future.

INVESTIGATING ENTREPRENEUR'S ATTITUDES TO THE BUSINESS ENVIRONMENT

The authors of the paper conducted a survey of entrepreneurial attitudes related to the business environment in which they operate, the problems and challenges they face, which make it difficult to become competitive on the market. A profiling sample of the market was conducted of 142 companies.

The results of this research indicate the lack of competences and the need for professional assistance.

The legal form of the organization investigated the subjects.

A sample of 142 legal entities consists of: 85 Trade Firms (59.86), 6 Joint Ventures (4.23), 48 Limited Liability Companies (2.11) and 3 Joint Stock Companies.

Table 1: Structure of the companies researched

Type of company	Number of companies	Number of employees	Average per company
Trade firms	85	562	6,61
Joint Ventures	6	72	12,00
Limited Liability	48	1923	40,06
Joint stock	3	189	63,00

According to the number of employees, the sample is divided into four categories:

- Micro entities (micro enterprises) - have fewer than 10 employees;
- Small entities (small enterprises) - have between 10 and 49 employees;
- Medium enterprises have 50 to 249 employees;
- Trade firms (regardless of the number of employees).

The highest number of employees is aged between 31 and 40 (1003 persons), age 20 to 30 years (855 persons), and the smallest 50+ years (378 persons). Women are more numerous in the age group 20 to 30 years, and over 50 years, while in all other categories male and female are almost equally represented.

Table 2: Structure of employees according to age and sex

Age	20 - 30		31 - 40		41 - 50		51 and older		Total
	M	F	M	F	M	F	M	F	
Pol									
Level of qualifications	M	F	M	F	M	F	M	F	
Elementary School	10	3	37	10	49	13	70	39	231
High School	311	451	488	433	230	215	91	211	2430
College or Polytechnic	32	61		82	61	4	45	31	316
Total	343	512	488	515	291	219	136	242	2977

Far from the highest number of employed persons have high school education (88%). The number of employees with college, polytechnic and tertiary education is 11.51%. The number of workers with only elementary school education is below 8%.

The analysis shows that a relatively small number of subjects are interested in training employees. 24,53% of manufacturing companies are interested in training, whereas only 16,28% of service providers are interested in training. For implementing ISO standards, only a quarter of manufacturing companies and 3.5% of service providers showed interest. Manufacturing companies are more interested in market research (22, 64%) than service providers (18.60%).

These data point to the problem of lack of knowledge and awareness by business managers, and that they do not devote sufficient attention to the development of their employees.

Table 3: Training staff

Interest in development	Manufacturers	%	Service providers	%
Training staff	13	24,53	14	16,28
ISO standards	13	24,53	3	3,49
Market research	12	22,64	16	18,60

Research shows that a very small number of manufacturing businesses intend to invest in development (5.66%). For businesses that provide services, that percentage is 12.79%.

When it comes to the use of external services (Table 3), employers also use professional services to a considerable extent. The largest number of entities use external bookkeeping services (57%), market research services (20%), training of personnel (19,01% of respondents) and legal consulting (13.38%). Approximately 11% of the respondents use external services for implementing ISO standards.

On the other hand, a small number of companies use financial consulting services and IT services, as well as consultancy services (below 10%), which shows that companies do not invest on their own development much.

Table 4: External Contractor Services

External Contractor Service	Frequency	%
Accountancy	81	57,04
Consultants	12	8,45
Legal Consultants	19	13,38
Financial Consultants	13	9,15
Information Technology	14	9,86
Training of staff	27	19,01
ISO Standards	16	11,27
Market Research	29	20,42

Entrepreneurial activities require specific skills, skills and attitudes so that potential entrepreneurs can successfully deal with crises and difficulties, and achieve their entrepreneurial vision (Anderson, 2007). Research shows that lack of knowledge, skills and abilities are major obstacles to profiling the company and its success in the market. That lack of competencies can have long-term negative consequences that may jeopardize the work of the company.

EXPLORING THE ECONOMY NEEDS FOR KNOWLEDGE AND SKILLS

In the first half of 2017, the authors of this paper carried out research on the needs of the economy for education and training, with the aim of identifying the situation in companies in Bosnia and Herzegovina in terms of training and education of their employees.

Research sample

Half of the surveyed companies are in manufacturing. A quarter of respondents, in addition to manufacturing, are also providing services. Only 8% of them provide service activities or perform business activities exclusively. 4% of respondents are engaged in manufacturing services and trade of goods.

Table 5: Types of Business Activity

Type of Business Activity	Frequency	%
Manufacturing	24	50
Manufacturing and services	12	25
Services	4	8
Trade	4	8
Services and trade	2	4
Manufacturing, services and trade	2	4
Manufacturing and trade	0	0
TOTAL	48	100

29% of the companies have up to 10 employees, 38% of the companies have between 11 and 50 employees, and 33% of the companies have between 51 and 250 employees.

Table 6: Number of employees in the company

Number of employees in the company	Frequency	%
Up to 10	7	29
From 11 to 50	9	38
From 51 to 250	8	33
Over 250	0	0
TOTAL	24	100

Half of the respondents stated that they were using subsidies for further education and training.

Table 7: Using subsidies

Do you use subsidies for some form of free training?	Frequency	%
Yes	24	50
No	24	50
TOTAL	48	100

For additional training during the year, 67% of companies spend more than 10 days, 13% of companies spend up to five days of training, while 17% have no records.

Table 8: Time is spent on additional training subsidies

How many days a year do you spend on additional education?	Frequency	%
1-5 days	6	13
6-10 days	2	4
More than 10 days	32	67
No records kept	8	17
TOTAL	48	100

A fifth of the surveyed companies organize training mostly during working hours, while only 4% exclusively during working hours. The same percentage (4%) of companies organize training exclusively outside working hours. 67% of the companies organize training of their employees partially at the end of working hours, and partially outside working hours.

Table 9: Time when the training is organized

Time when the training is organized	Frequency	%
Mostly during the working hours	10	21
Exclusively during the working hours	2	4
Mostly outside working hours	2	4
Exclusively outside working hours	2	4
Partially at the end of working hours, and partially outside working hours	32	67
TOTAL	48	100

About a fifth of the respondents believe that their company requires training in business analysis and control, while 17% believe that they require managing resources training. 16% of respondents believe that communication skills training is required, are managing change training. There is also a need for business process management skills (13%) and procurement and logistics (11%).

Table 10: Forms of additional training needed in the company

Which form of additional training are needed in your company?	Frequency	%
Business analysis and control	12	25
Managing resources	11	23
Communication skills	10	21
Managing change	10	21
Managing business processes	8	17
Procurement and logistics	7	15
Strategic Management	3	6
Business Rules in the EU	2	4
Finance for employees who do not work	1	2

Statistical analysis shows very high arithmetic meanings, ie the respective attitudes and necessities of certain characteristics of employees. The most prominent needs are (above the average of 3.5) for: loyalty to the business community, focus on results, persistence, efficiency (to do things in the right way), taking risks for their own initiatives. Grades ranging from 3 to 3.5 received the following items: acceptance of innovation, mobility within the company, willingness and openness to improve the business process in the current circumstances.

Table 11: Necessity of certain characteristics of employees

Claim	Necessary (4)	Desired (3)	Less important (2)	Unnecessary (1)	μ	SD	σ/μ
Loyalty to the business community	30	18	0	0	3,63	0,48	0,06
Result oriented	40	8	0	0	3,83	0,37	0,04
Persistence	28	18	2	0	3,54	0,58	0,09
Efficiency (things to be done right way)	26	20	2	0	3,50	0,58	0,10
Taking initiatives to suggest new solutions	0	42	4	2	2,83	0,47	0,08
Accepting Innovation	24	22	2	0	3,46	0,58	0,10
Mobility within the company	4	40	4	0	3,00	0,41	0,06
Reaction to changes / innovations in the company	2	36	8	0	2,75	0,45	0,07
Readiness and openness to increase and / or change existing activities	18	20	10	0	3,17	0,75	0,18
Readiness for independent learning	8	34	4	2	3,00	0,65	0,14

continued Table 11.

Claim	Necessary (4)	Desired (3)	Less important (2)	Unnecessary (1)	μ	SD	σ/μ
Readiness for learning in the organization	8	36	4	0	3,08	0,49	0,08
Readiness and openness to improve the business process in the current circumstances	10	38	0	0	3,21	0,41	0,05
Lifelong learning	0	42	4	2	2,83	0,47	0,08
Taking risks for your own initiatives	28	18	2	0	3,54	0,58	0,09

RESEARCH METHODOLOGY

The purpose of this research is to identify the key factors of competitiveness and sustainability of companies in Bosnia and Herzegovina. In this regard, we wanted to determine the external and internal factors affecting the operations of companies, such as those with little impact, through factors that are responsible for the state and affecting the overall business environment, and the factors that the company may have to influence.

In order to accomplish the set tasks, we have performed an analysis of the available statistical data, the EU, neighboring countries and Bosnia and Herzegovina, we have reviewed the articles and studies in the field of organizational learning, knowledge management and employee development competencies. We have searched through Emerald Publishing, Science Direct and EBSCO, which have been published from January 2016 to November 2017. For the search we used the key words used in the title “Competitiveness”; “Training and education”, “entrepreneurial competences”, “knowledge management”.

Using available sources in Bosnia and Herzegovina and our own research, we tried to identify the situation in Bosnia and Herzegovina in the field of competences, education, training, qualifications and retraining.

In Bosnia and Herzegovina, we have conducted our own research of the situation regarding training, education and development of employees and needs in terms of the need for professional assistance. Employers' attitudes were gained in terms of improving the process of acquiring and developing employee competences. Most of the questions were "closed", so that statistical data processing could be performed.

DISCUSSION OF THE RESEARCH RESULTS

The research results give new insight into the impact of organizational learning on the company's competitive edge. The research can be divided into three components:

In the first part, an analysis of statistical informants of the Agency for Statistics of BiH was conducted, which shows that there is no attractive business environment in Bosnia and Herzegovina that would encourage the launch and development of business ventures. The education system does not follow the needs and trends of the economy and does not have adequate support measures to acquire functional knowledge. Tax burdens are too large and the grey economy creates unfair competition, which strangles companies that operate legally.

In order to improve the competences of employees, it is necessary to create and implement adult education programs, retraining, qualifications, specializations and other forms of professional training through the formal and informal education system. It is necessary that partner institutions, chambers of commerce, business subjects and others should participate in the development and upgrading of the Adult Education Act.

In order to improve the quality of the learning outcomes of graduates and students, it is necessary to speed up the reform of the education and training system. This requires a high degree of coordination between the public sector and the economy that has been lacking so far.

It would be useful to recognize knowledge gained through work experience, which would contribute to the effectiveness of a qualification program.

Companies need to provide a professional response to the establishment of a methodology for determining training needs, in line with key competencies of the company and the assessment of the effects of the training realized in the company, regardless of its size. Of particular importance is the training of managers, who are needed to train the management of the organization, to better manage their human resources.

According to the lack of competences, an annual training plan should be prepared for training staff. The training process should be monitored and, if necessary, corrected. After the training has been carried out, it is necessary to carry out an analysis of its effects and an assessment of the effects of the training. Training is done for all levels of organization. This would ensure equal opportunities for improvement, advancement, change of job position for each employee and positively affect the motivation of employees to work. In line with the needs of the labor market, curricula for retraining and adult training are required.

Using the model of successful countries, such as Austria, Germany and Switzerland, it is necessary to introduce subsidies for employers who engage pupils and students in practice. Likewise, the Government should co-finance employee training and education programs in companies.

In the second part, the authors' views and results of their research in the field of knowledge management have been considered.

The third section shows employers' attitudes, which show that business entities generally are lacking staff with the compatible skills and use *outsourcing* resources. They have the need for consulting services to increase competitiveness, to introduce ISO standards, to strengthen functions such as research and development, etc. Employers have clearly indicated that they need consultancy services for human resource management, analysis and control of business, communication skills etc.

The analysis of employers' attitudes also points to the lack of employee competencies, and suggests that they are making efforts to improve them.

It is stated that a lot of attention is devoted to acquiring new knowledge and skills. However, there is a lack of continuous organizational learning programs. Employers mostly value the character traits of loyalty to the business community, focus on results, persistence and efficiency (to do things the right way). It is evident that employers are poorly evaluating innovation and the readiness of employees' mobility.

In order to achieve a higher degree of objectivity, many statistical data processing techniques have been used, depending on the data type, scale type, and questionnaire dimension.

CONCLUSION

Companies in Bosnia and Herzegovina lack knowledge management concepts, which includes process management, storage, transfer and use of knowledge. Insufficient attention is devoted to implicit or tacit knowledge, which is largely present in the employees' head but there are no developed techniques and methods of sharing it.

In order for companies to become learning organizations, it is necessary to define the specific needs for new knowledge and skills, to define training goals and programs, to monitor the effects of these activities, and to control the realization of plans and programs.

The task of the organization is to monitor and evaluate the benefits of these concepts, in terms of knowledge, and its development and application.

All of these efforts should lead to increased productivity, comparative advantages, the introduction of innovation and continuous improvement of the organization's work.

Knowledge-based business becomes the ideal example of successful organizations. Investing in knowledge becomes the most profitable investment. Unfortunately, Bosnia and Herzegovina is still inert with regard to the implementation of lifelong learning concepts, which is reflected in its negative growth and development.

In order to build key competencies, it is necessary to develop interdisciplinary / cross-curricular programs, which implies the simultaneous application of knowledge, principles and values to more academic disciplines. This enables the development of core competencies. It is therefore necessary to harmonize curricula, objectives and learning outcomes between subjects to achieve interdisciplinary content. This requires intensive communication and co-ordination among educators and trainers in order to define common outcomes and competencies. Among the most important competencies can be counted: innovation, entrepreneurship, creativity, ability to take initiatives, adaptation to new situations, technologies and ideas.

In order to build skills and attitudes according to the needs of the employers, links between education and the labor market need to be strengthened. This includes professional practice, volunteer work, joint projects, etc.

The learning organization is the ideal to be sought. However, in spite of all the great efforts and successful organizations, the number of examples of organizations that teaches is negligible. The point of such organizations is as in classical learning: never learn all (it is impossible), but never stop learning.

Examination and analysis in this paper demonstrate the conditionality of high competitiveness with knowledge management, design and implementation of training and education programs, and constant strengthening of key competences, both for individuals and for organizations.

This paper demonstrates the direct interdependence of learning in organizations, knowledge management and company competitiveness. Competitiveness can be significantly increased by defining and realizing training and education programs. The research and the results of this paper confirm the hypothesis of work, which proves that the Economy of Bosnia and Herzegovina will significantly increase its competitiveness if a system of lifelong learning programs of education and training employees is introduced, and institutional support for the affirmation of functional knowledge.

The conducted research suggests the need for upgrading, ie collecting attitudes of different sectors and disciplines, including chambers of commerce, non-governmental sector, institutions etc. This would allow the stratification of the examined sample and an interdisciplinary approach, thereby contributing to a better

quality identification of the causes of Bosnia and Herzegovina's weak economic competitiveness and, to make a better set of measures for them to overcome their weaknesses.

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