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MASTER THESIS:

**ALKALOID AD – SKOPJE
AS A LEARNING ORGANIZATION**

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AUTHORSHIP STATEMENT

The undersigned Goran Sokolovski, a student at the University of Ljubljana, Faculty of Economics, (hereafter: FELU), author of this written final work of studies with the title Alkaloid AD Skopje as a Learning organization, prepared under supervision of Professor Vlado Dimovski.

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INTRODUCTION

Those employees who work in learning organizations are “completely awakened” people. They execute their work striving towards developing their potentials, sharing a vision of a worthy objective together with their team colleagues. Their mental models lead them towards personal development and their personal objectives are in accordance with the mission of the organization. Working for a learning organization doesn’t mean that one should be a slave of the work, because this will not satisfy the individual. On the other hand, someone’s work is monitored as part of the whole system in which the interrelations and processes are interdependent. Accordingly, aware workers undertake risks to learn and understand how to look for permanent, instead of easily solvable solutions.

The learning organizations’ employees serve in efficient manners as they are well prepared for the changes and work with the others. Organization’s learning includes individual learning. Those making progress from traditional to organizational thinking towards learning organizations have a developed capacity to think in a critical and creative manner. Those skills can be easily compared to the values and assumptions of the inherent organizational development.

Organizational development is a long-term effort of continuous improvement supported on all organizational levels that uses inter-disciplinary approaches and contemporary technologies. When we speak about organizational development, we speak about people and how they can work with others to achieve personal and organizational goals. Frequent achieving of objectives means making changes and this requires creative thinking and problem solving. The organizational development principles are one of the most important managerial activities which result into a successful organizational design – one of the most important managerial mechanisms for corporate management. Organizational designing is a complex cognitive process that requires understanding and knowledge of both the formal and informal part of the organization, the external and the internal constellation of the organization.

Precisely due to that fact, it’s important selected methodology to be applied in that process, since it’ll have deciding impact on the efficiency, results and solutions that’ll be offered by the organizational diagnosis. Organizational progress principles have the potential to enable and contribute towards the development of basic competences and organizational capacities as source of competitive advantage at the market. A unique combination of the design elements could result into a different organization, more superior as compared with the competition. Creating principles that will contribute towards a successful organizational development is one of the most important managerial roles.

Learning and knowledge increasingly become larger part of the organizational culture and organizational processes. Processes, products and services become intensive with knowledge. “Old” organizations, which do not manage well their knowledge, have become marginalized today and are under threat of downfall at the market. New economy principles are based on obtaining knowledge and learning how to use and deal with the knowledge. Strong global market competition “drives” organizations towards rejecting stereotypes and traditional working methods, creation of new positive climate and creation of creative working environment that encourages its employees to exchange ideas and knowledge and creation of learning-based organizational culture.

Contemporary organizations turn into knowledge factories, their employees into knowledge workers, and knowledge management becomes an essential organizational frame of the modern working. The organizational development theories and perspectives are closely related to organizational changes. The organizational changes predominantly have a descriptive function. They describe organizational development and reveal their causes, course and consequences. Models or programs of the organizational changes are of practical type. Their mission is of prescriptive and not of descriptive character as they strive towards prescribing, and not towards describing the organizational development. Models and programs contain practical knowledge in the form of recommendations, relating to what is to be done, so as to provide efficient realization of the organizational changes, Hayes (2002). Models and programs for knowledge change that aggregate in theories and concepts are used for the purposes of their transposing into good practices, which could be recommended to the managers in charge of changes. Besides the theoretical knowledge, model creation contains accumulated experience of the models’ authors who are experienced consultants. Best change models and programs combine the theoretical knowledge and practical experience.

Alkaloid AD - Skopje, with its seven decades of existence and continuous progress, is a good example of a learning organization. It is dedicated to continuous development and its objective is provision of consistency and business performances, improvement through maintenance and strengthening of the positions at the current markets and expansion to new markets. The management’s vision is to further proceed with the Alkaloid AD - Skopje development, as export-oriented pharmaceutical company with stable market position, open to new markets and new partnerships, a company that produces and places highest quality generic medicines, by applying the most up-to-date production technology and business standards. In order to achieve that, they strive towards superior quality of products and services, as well as professionalism and success of business operations.

Concurrently, their imperative is to protect the interests of the employees, consumers, shareholders and business partners, and their main motto is “Health above all”.

The nowadays CEO of Alkaloid AD - Skopje, Zhivko Mukaetov, has sad that the company has endured so many years due to the human capital that has been driving the company and which has always been ready to master new knowledge. Because of the continuous implementation of new knowledge, the company managed to persist in a world of strong competition and to keep up continuously with the top leading companies. Therefore, at the end, he expressed his gratitude to the several generations that spent most of their life in the pharmaceutical plants of Alkaloid AD – Skopje (Celebration of 75 years of Alkaloid AD –Skopje, held in Metropolis Arena in Skopje, on 21st of September 2011).

This thesis will first review the main characteristic of a learning organization and then, as an example of successful organizational learning implementation, will review the case of the company Alkaloid AD - Skopje. Throughout historical review of the company’s progress and development, implementation of new systems and technologies, opening of subsidiaries and capacities, both in and out of the Republic of Macedonia, an effort will be made to bring closer the successful transformation of Alkaloid AD - Skopje from a traditional organization into a learning organization, striving towards continuous development and progress. A qualitative analysis was done on the concept of learning organization in the case of Alkaloid AD - Skopje, by examining the company’s strategy, SAP system, social responsibilities, cooperation, education and improvement.

Then, the employees’ points of view will be investigated. For that purpose anonymous questionnaire, consisted of 11 questions was made. In a learning organization, individuals concentrate on persistent learning processes that are done collectively by all of the workers, instead on their own performance results. In such associations, individuals extend their own perspectives beyond formal role definitions and build up a system approach (Senge, 1996).

This methodology encourages organizational learning, so that the learning capacity of the association can support the citizenship behaviors inside the association (Somech & Drach-Zahavy, 2004). Learning in an organization is truly about enabling the workforce and coordinating work with learning in a continuous way (Bryson, Pajo, Ward & Mallon, 2006; Ortenblad, 2004). In such manner, numerous associations are attempting to recognize and adjust better approaches for figuring out, how to keep with the changing pace of work. Moreover, it has been found that providing learning opportunities to workers to complete their tasks is more successful with more self-governance.

Creative practices are procedures for connecting individuals to the associations psychologically (Agarwala, 2003; Krishna, 2008).

The purpose of the questionnaire was to examine how the employees of Alkaloid AD - Skopje, accept and perceive the concept of a learning organization in their company. Whereas the concept of learning organization can't be integrated and be effective without accepting and contribution by the employees, this research will give an insight into, how the employees in Alkaloid AD - Skopje, accept the organization's efforts to build a model of continuous learning, as well as, how they take part and contribute in the process of learning.

The questionnaire has examined several research areas – the employees' perceptions on the factors that affect the learning process, their contributions on this process and their opinions on what is needed to improve the key subjects that influence the learning in the organization.

The organizational learning can help a company to stay competitive within the highly-complex international business environment. Yet, for effective implementation, it is important to take a strategic, multi-pronged approach that evolves with changing corporate learning needs and internal/external challenges. It needs to be both a formally supported strategy and an integral part of the organization's corporate culture. In alignment with the overall corporate strategy, organizational learning always requires formal support from the top management, together with an adequate budget and proper direction. The education for executives or training for manager, that brings corporate training expertise and a global perspective, is typically responsible for the organizational learning strategy.

The employees from all departments and at all senior levels are stakeholders in the corporate learning. Their learning and development needs, should be specifically addressed in the organizational learning strategy and they should be kept up to date on what's available to them. The formal organizational learning strategy is a commitment to implementation of corporate training and enables measurement of returns through specific objectives. Having this on mind, the questionnaire was designed to provide answers to the following core research questions:

- The role of goal setting and strategy defining in positioning a suitable framework for organizational learning,
- Integrating the employees in the process of learning, and their contributions in creating the learning environment in the organization,
- Training and courses as tools to support and improve the concept of learning organization.

1 THE CONCEPT OF LEARNING ORGANIZATIONS

The concept of a learning organization was introduced by Sveiby (1997, p. 250) according to whom, they are enterprises adapted to buyers, characterized by creativity, intensive knowledge, high educational personnel, readiness and capacity for continuous learning of the management and the employees.

Dealing with problems which are hard to be solved in a standardized manner, is considered as progress in such an organization; therefore, the employees have to be very capable, highly educated and with significant working experience.

A learning organization should develop a strategy and applied system of values, so as to be able not only to maintain the existing, but also to attract new employees, which are sought after and who are professionals in their field. The learning organization does not consist only of the high and competitive personal incomes and benefits, but it should create an encouraging environment, in which individuals and the entire enterprise will continuously increase their creativity, innovativeness and knowledge. Up-to-date information technology, expert system and internet, directly enable better management and faster knowledge sharing.

Changes often reveal their importance in the course of their realization. Positive feedback between changes of the company and its environment encourages rational decisions that are often considered as irrational by the individual and rational by the organization and vice versa. Changes cannot be controlled, but they can be directed. Organizations are too often based on the position according to which humans are rational beings. The main task for any manager refers to the integration of rational and emotional, so as to achieve better results. Facts are rarely available and everything is often reduced to personal judgment. If people support their superiors, they are motivated, and they believe that they do the best possible way, and that their efforts are respected and rewarded. Then, it is more likely, that all employees will stand behind the decisions and will work in terms of making them realistic. This is what organizational learning and relevant changes pertain to, looking for reasons due to which people will support the organization.

So, it might be concluded that all companies possess certain knowledge and are theoretically aware of their current importance, and only few of them know how to manage that knowledge and use it as their competitive advantage. Passive and unused knowledge does not contribute to the creation of new values and development of the intellectual capital of the company. If it is used knowledge, it creates new values and raises the market price of the company far above the value presented in the standard financial reports.

The organizational development can be defined as “long-term effort towards continuous improvement support by all organizational levels, by using interdisciplinary approaches and modern technology (March, 1981, pp. 307-333).

Researchers claim that basic values of the organizational development practitioners are as follows: creation of changes, positive impact on employees within the organization, increase in the effectiveness and profitability of the organization where they work and possibility to impact the events.

Although values change in time, values of organizational development practitioners are harmonized with the features of the learning organization.

A knowledge-intensive organization, which acknowledges and knows its hidden knowledge, creates conditions and organizational culture and motivates employees to learn, for teamwork, exchange of knowledge and development of creativity and innovations. By doing so, it manages knowledge in a quality manner, with the ultimate objective of achieving competitive advantage at the globalized market, thereby making knowledge and intellectual capital its core economic resources. It can be said that a learning organization is developed through several phases.

First phase, describes the traditional hierarchy in which top managers maintain centralized control over the organization shares, control strategies and relations with clients and surroundings. In the second phase, top managers refer to authorization (making employees independent, giving them responsibilities for work-related decisions and actions). Third phase occurs when employees are included in the establishment of the strategic direction of operations. They work for the clients, make choices related to the company’s strategy and tactics which have to provide success in the surrounding.

In certain terms, creation of the learning organization increases the scope of company’s knowledge. This distorts the previous vertical structure by separating the managers from the employees. The new organizational structures represent a revolution in the way of thinking and place the individual in the front.

The tasks in the process of changes can be done by the employees on their job positions and within the frames of their regular working obligations or the specially formed structures – teams. Team members should undertake responsibility and adopt work-related decisions. Four team types can be established for the purposes of conducting changes in the organization.

The first is the leading committee, which is the highest body participating the process of organizational changes. Its main task is to lead the overall process of organizational changes at strategic level. The composition of the leading committee also depends on the type and covering of the organizational changes, but in each case it is consisted of the highest managers of an organizational whole, where the changes take place.

Then, it's the expert team whose main task is to deal with problems and to execute complex tasks during the change process. The composition of the expert teams is very clear: it should include those experts whose knowledge can contribute towards problem solving.

The third is the team for encouraging changes and its main task is to encourage changes. It does that through encouraging ideas and initiatives, collecting opinions, solving problems, encouraging changes. The team for encouraging changes should be consisted of four (4) to seven (7) people, with capacity to work directly with people, that are high interpersonal skills in the field of communication, conflict solving, motivations, impact and political processes, as well a leadership skills.

At the end it's the support team that executes certain tasks which provide support to the participants in the change process. There are several support teams and the same depend on the specific situation. They are established only on a needed basis. As an example, the most frequently established support teams are communication team, training team and financial team.

Nevertheless, the growth of the learning organization does not have to stop at this point. There is a set of measures which could contribute towards increasing the capacity of the learning organization. Some of the proposals refer to creation of conditions for which people are ready to apply their knowledge, to share it as active exchange and establishment of an organizational structure.

So, people will have plenty of space and possibility to think, allowing the employees to think about the balance between their own ambitions and the joint aspirations of the organization, for creation of improved teams characterized by harmony of personality, capacities and manners of learning.

For an organization to become a successful learning organization is necessary to commence by learning of the organization teams.

Team learning represents equalization and development of the capacity of that team, in terms of realizing the results towards which the team members strive. It is based on own “mastering”, for talented teams consisting of talented individuals. There are several team learning components, and the first (and probably the most important one) is the dialogue.

Conversion of traditional organizations into a learning organization means change of its attitude towards the future. As long as the traditional organization is focused on adapting to the future and doesn't make efforts to truly understanding why some changes are necessary, nor it takes into account the human resources potential, the same reduces its value, thereby reducing its “duration”.

The learning organization creates a future because the information, knowledge and human resources are raised to a pedestal. That is the future of a contemporary business.

1.1 Defining Learning Organizations

The concept of a learning organization originates from 1950s and 1960s. The concept of Revans (1978), **action learning** and systems thinking had special impact on the development of the learning organization idea. According to Revans (2011, p. 102), action learning connects managerial activities and learning as social and organizational process. The foundation for undertaking actions by the management for the purposes of organizational development is their personal development, which makes the individual and organizational learning to be interconnected and appealing.

The systems thinking concept was applied in practice in 1950s. The systems approach defines organizations as systems under direct impact of changes in the surroundings and the capacity for their persistence depends on the capacity to perceive them and adapt to those changes. Apart from depending on the surroundings, this approach also perceives and expresses the connection of actions in the most remote parts of the system inside and their interdependency (Bertalanffy, 2003, p. 221).

The systems approach of the organization anthropomorphizes and accompanies, inter alia, the capacity to learn. Senge (1990) has identified the systems thinking as integrating force for creation of a learning organization.

The other disciplines which according to Senge (1990) are relevant for the learning organization are: joint vision, mental models, in particular specialization and team learning, which will be elaborated in more details further in the thesis.

Senge believes, that the precondition for implementation of the learning organization concept is the development of systems thinking of each individual, because systems thinking enables the individual to understand the structures acting in the background and having impact on the human behavior (both jointly and towards the organization in which they work). According to Senge (1990, p.75), it is precisely the systems thinking which is "...cornerstone of the manners in which learning organizations think of the world".

According to his interpretation, the change is an inevitable means for increasing efficiency and effectiveness and it requires open communication channels, strengthening of the community members and culture of cooperation. The learning organization concept requires active changes creation, open communication of members, strong persons who openly use the delegated power and are willing to cooperate with the colleagues at all hierarchical levels.

Systems thinking also have an impact on the transformation of the organizational employees' perception, as helpless entities which only respond in active associates in the shaping of their reality. Argyris (2003) analyses the activities in the enterprise, which encourage establishment of learning organizations and the barriers of organizational learning. He deals with conflicts that cause uncertainty in the organization, and which are faced by the individuals on a daily basis.

In the middle of 1980's, the practical acceptance of the learning organization concept commenced. Geus (1998) said that the single sustainable competitive advantage of the enterprise is its ability to learn faster than its competitors and adds that if learning brings competitive advantage at the market, then the issue of identification of methods and manners for acceleration of the organizational learning is of crucial value of the practitioners in the field of management.

According to Senge, learning organizations are those where people continuously build their capacity to create the results they actually want to achieve, where they nurture their forms of thinking and people continuously learn how to learn together.

A learning organization is an organization that facilitates learning for all its members and continuously undergoes transformations (Pedler, Burgoyne & Boydell, 1997, p. 198). The learning organization represents a type of an organizational culture, where through encouraging the employees for individual development and learning, it tries to engage and maximize the contribution of each employee, in order to achieve the organizational objectives.

A learning organization is an ideal model towards which, organizations with their actions should strive, unlike the organizational learning concept that represents the path to walk on.

Foot and Hook (2005), indicate that it is important to maintain the idea of a learning organization as a movement direction, whereas the organizational learning process should be perceived as a descriptive or heuristic means for explanation and quantification of the learning activities and events:

- accumulation of knowledge and results of empirical researches in the field of organizational development,
- reaction and resistance of individuals against bureaucracy and institutions which were considered not to act for the benefit of the employees by them,
- striving towards the outstanding – a concept first introduced by Peters and Waterman (1982, pp. 235–278), which speaks of the necessity of radical changes in the organization.

Senge developed a learning organization concept based on the following five features. The first is that systems thinking, so it understands that each member understands their work and the manner in which their work impacts the overall result of the organizational work in terms of providing satisfaction with the final results used by the consumers.

The clear organizational vision means that each member of the organization has a unique position of the organization's objective and their impact in the realization of that objective.

Then the mental models are changed, this means changing of the routine approach to the work and in the thinking process used by people, with a purpose to solve the problems during working. As well the team learning is when members of the organization work together; they jointly develop solutions to the problem and jointly apply them. By working as a team and not separately on individual basis, a collective organizational force is developed, which enables faster and easier accomplishment of the organizational goals.

Finally is the personal impact where all organization members are oriented towards the deep and profound understanding of their work. That understanding assists during the realization of important changes and in terms of avoiding resistance and confrontation with those changes.

The **learning organization** concept is applicable to various structures and to many different sizes of organizations. Organizational development is a scientific area which, inter alia, covers the learning organization concept. It deals with the problems with people

in the organization, their work and interaction for the purposes of achieving personal and organizational objectives. Achieving of objectives almost always means changes that require creative thinking and problem solving. According to most analysts, the following are the main values of the organizational development practitioners: creation of changes, positive impact on people and the organization, than increasing in efficiency and profitability of the organization in which they act, learning and development and possibility to have an impact on the events.

Although values change in time, the values of the organizational development practitioners are harmonized with the specifics of the learning organization. Strong organizational structure is a sum of key values, beliefs, understanding and norms divided among the members of the organization and represent the learning organization foundation including the values in the following three areas.

The first are those that the people are aware of the enterprise entirety and of the fact how parts of the enterprise fit in together. Organization without limits is created, which denotes a reduction of barriers among the parts of the enterprise. The free flow of people, idea and information, allows a coordinated action for acting in an uncertain and changeable environment. Everything is open and people have access to all information they need.

The culture is equal since it creates a feeling of unity. Each employee represents a value for the enterprise; therefore, employees are treated with respect, thus being able to contribute to their enterprise in the best possible manner.

The last, the culture values are promoted and adapted. In a learning organization, a question is always asked whether the work could be better, that is, why things are done the way they are.

Employees analyze in an organized manner, the work of other enterprises and compare with the best ones, which enable the organization to learn how to work faster and how to promote the current processes.

All this significantly changes the role of the manager, whose career development, as mentioned, in a learning organization, is realized horizontally, and not vertically. This trend will create more possibilities and more exciting obligations.

Future managers must be able to change their career and not to wait for sort of certainty to climb the hierarchical tables. A great number of scientists who dealt with management studying, in their desire to encourage people to be more productive (which results into

greater benefits for the capital owner and greater reward for the job done) must always be perceived as a complex structure, with certain levels of time flow of science development, and the development level of the social-political arrangement of the society and the state.

A learning organization is the one in which people according to all differences, individually and collectively; continuously increase their capacity to produce results, which they want to achieve.

The learning organization concept increasingly becomes a wide-spread philosophy in the contemporary organizations, from the large multinational companies to the smallest organizations. The reason for the great emphasis placed on organizational learning, is the faster and more frequent changes. In the traditional organizations, the work was considered in a conservative manner and as something which is difficult to change. Learning was separated from work and innovations were reviewed as necessary, but not disturbing manner of changes. An organization capable to learn fast and to bring innovations to its work, will be more capable to change its working practice (in order to achieve better results) in a surrounding, which continuously changes. The changes occur in an accelerated pace; therefore, it is necessary to work smarter and to learn unremittingly. Larger researches in the field of “art of learning” commenced in 1900. The systems thinking concept was presented in 1950, but was not applied in practice.

Systems thinking pointed to the value of perceiving the whole: organizations as whole and individuals in the organization. Before this concept was presented, organizations focused on their own needs and not on their employees’ needs.

System thinking was an attempt to influence the management position and that it contains not only the working goals, but also the employees’ individual ambitions. During the 1980s, discussions began on the ability-based competences, which also included the ability to learn. The information about the learning organization was forwarded to different organizations. They now try to become learning organizations. If all organizations would instantly become learning organizations, the employees’ surrounding would be complex and dynamic. Confusion would occur, and that would disable learning, because of the occurred chaos.

Therefore, the learning organization concept might be presented and conducted in the organizations that are ready to achieve balance between changes and stability, that is, between the new and the old. The organization must perform interaction with its environment, but the environment itself must be suitable for that interaction.

In a learning organization, people continuously strengthen their abilities to create results, which they sincerely want to achieve, new and developed thinking forms are nurtured, individual and collective aspirations are freely placed and people continuously learn how to learn together.

A learning organization continuously develops its capacities to create its future. The essence of the learning organization lies in the change of awareness (from seeing itself as a separate world towards changing with the world, from perceiving the problems caused by something towards perceiving how our own actions create the problems we have to face) and in the change of interaction (from individual towards joint learning).

1.2 The Process of Organizational Learning

The organizational learning process in the literature is reviewed in terms of knowledge and information processing. In most of the concepts, the organizational learning process is consisted of collection, distribution and using the knowledge in the organization (Dibella, Nevis & Gould, 1995, pp. 73-85). The organizational learning process is consisted of five main phases (Pawlowsky, Forslin & Reinhardt, 2003, pp. 775-794).

First is identification of existing knowledge, so the knowledge important for the organization is recognized and identified in this phase. The main criterion in the assessment of the knowledge relevance for the organizations is its contribution in terms of promoting the key competences of the company.

Identification relates to internal knowledge, that is, the knowledge which exists within the frames of the organization and external knowledge, the one existing outside of the organization. The identification of internal knowledge is consisted of articulation, systematization and formalization of that knowledge, thus recognizing it as valid company resource.

The external knowledge identification relates to collection of all knowledge, which could be beneficial for the company and is located outside of the company, such as the market data, new technologies data.

The phase of creation and generation of new knowledge in the organization is consisted of generation of new ideas, creation of innovations in the processes or products which promote the core of company's competence. In this process, the basis is previously identified existing knowledge.

Then it's diffusion of existing and new knowledge in the organization and means that knowledge will be useless if it remains in the place of its creation or does not move through the organization or if it remains unavailable for those who need it.

The fourth phase for integration and modification of knowledge is when organizational knowledge is memorized, maintained, structured and made available to all members of the organization, which will find it beneficial. In this process knowledge can be modified and improved.

The last phase uses the knowledge for the purposes of changing the attitude of the organization members, that is, for their actions or without changes in terms of conduct, new knowledge will be pointless. The behavioral aspects of this process are emphasized in this organizational learning phase.

One of the most interesting and most original organizational learning concepts, which offer classification of the organizational knowledge types as well as the process of its creation is a result of the research of the Japanese author Nonaka (2003, pp. 491-518). Organizational learning is always perceived in interaction with organizational knowledge. Organizational learning is a process, through which, the organization obtains uses and manipulates knowledge. According to Nonaka, main forms of knowledge are objective, open, tangible and explicit and subjective, hidden, intangible or implicit knowledge.

Explicit knowledge is the one expressed with the formal and systemic language and can be used in the form of data, scientific forms, specifications, manuals. It does not depend on the context it is created and used; therefore, it is easily transferred, memorized and transformed.

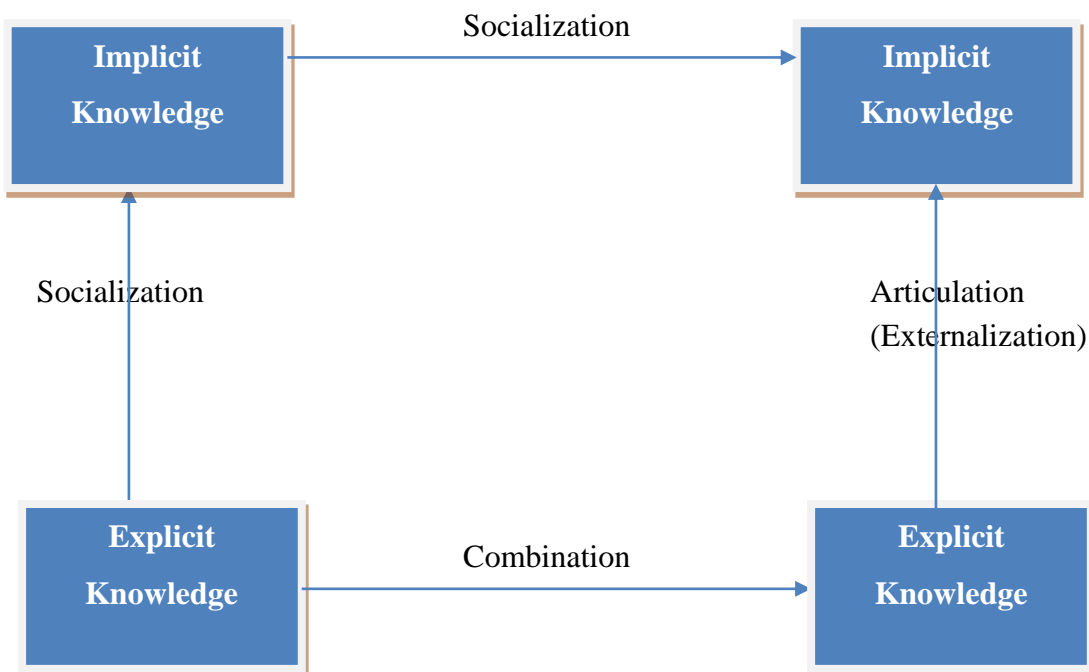
Implicit or hidden knowledge is deeply personalized and difficult to formalize. It is contained of intuition, assumptions, idea and knowledge which could be applied, but cannot be expressed. All this knowledge is deeply embedded in our activities, routines, ideas and values. The implicit knowledge always depends on the context of its occurrence and is difficult to transfer and memorize.

Hidden knowledge includes both cognitive and technical elements. The technical elements of the implicit knowledge include informal and intangible skills of knowledge. The cognitive implicit knowledge elements include mental models, that are individual-specific and which provide them with certain understanding of the world.

Those models result into skills which relates to the technical part of implicit knowledge. Implicit knowledge articulation is precisely the key manner of creation of new knowledge in the organization.

Knowledge is always present, regardless the fact whether it is explicit or implicit. In order to create organizational knowledge, conversion of one form of knowledge into another has to take place. That conversion process of one form of knowledge into another, a path in which individual knowledge becomes organizational, is the organizational learning process. Therefore, organizational learning is a social process and it always includes more people.

Table 1 - Knowledge Conversion Form



Source: I. Nonaka, R. Toyama and P. Byosiere, *Knowledge conversation forms*, 2003, p. 491.

The first form of organizational knowledge creation is socialization. During this process, the implicit, hidden or subjective knowledge is transferred from one organization member to another. Each sharing of experience in the social interaction process is in fact a process of transfer of implicit knowledge from one individual to another.

Therefore, the example pertaining to socialization and situations is used when the corporate manager discusses the market situations with the sales managers in the process of dealing with certain problems.

Articulation represents conversion of implicit, subjective and objective, explicit knowledge. In this manner, knowledge owned only by certain people, becomes common good for the organization.

This process is not always easy, since there is no guarantee that one specialist with significant implicit knowledge, will be willing and capable to articulate it into explicit knowledge. Articulation includes different competences than those required for obtaining knowledge. Efficient implicit knowledge articulation means are models, metaphors and analogies. The articulation process, or, as it is also called, knowledge externalization, occurs when, for example, a group of experienced industrial designers through dialogue and using of models, metaphors and analogies write guidelines or rules for successful industrial design (Nonaka, Toyama & Byosiere, 2003).

Combination is a form of conversion of individual knowledge and creation of organizational knowledge in which elements of explicit, objective knowledge are integrated into entirities which are more developed, more systematic and more complex than their parts. Reconfiguration of existing knowledge through its combinations, sorting, categorizing and systemizing, can create new knowledge.

When the strategic plan of the company is operative, through adoption of operational plans of particular divisions or sectors, a form of explicit knowledge combination is realized. Following the combination process, explicit knowledge becomes, as a rule, more spread throughout the organization, thus becoming more available to the employees, clearer and more systemic and more practical in terms of its use.

Internalization is a form of conversion of the knowledge in which the explicit knowledge turns into implicit. Explicit knowledge becomes implicit since the employees and the managers apply elements of explicitly formulated knowledge in their daily activities.

Learning through practice is the main form of internalization. Through practical application of explicit knowledge, employees and managers adopt it as their own and embed it in their mental schemes and routines. So, this knowledge gradually becomes part of the implicit knowledge of the employees and passes into their conscience.

It must be emphasized that internalization can be performed not only by applying explicit knowledge in actual job situations, but also through experimenting and practice of the employees.

Training and practice of the employees can present a context in which explicit knowledge is adopted and afterwards turned into implicit. In this process, it is enriched and spread and results into new implicit knowledge which is once more articulated into explicit, thus closing the circle of conversion of knowledge and organizational learning.

1.3 Steps Towards Building a Learning Organization and its Features

Organizational learning is supported by management performances, management competences and knowledge management. They are considered as main processes of intelligent organization and can be either basic or built one in another. Intelligent organization is an organization, which learns better than the competition.

“Management of performances is an act of communication which encourages people for a mission greater than them, and not a tool of dictators. It is a continuous process of planning, education, valuation and rewarding which inspires people to achieve objectives as high, as the man stepping on the Moon”(McClelland, 1988, p. 539).

The four elements of the management performances process (whose objective is continuous improvement of performances and includes combining of efforts and objectives of the organization and the individuals), are as follows: setting goals, education, feedback systems and development.

Managerial performances transfer the focus from the past to the present and the future and from the development assessment, which is an important change taking place at the level of an individual, a team or the entire organization. Since management performances objective is continuous improvement of the individual, team and organizational levels in dimensions of present, the dimension of the future, can be related to the customer satisfaction development, the operational efficiency, the overall complexity and the common good.

The management competences process has an objective to improve continuously the competences, so that the organization will permanently have high performances. The process commences with defining of the vision, strategies and objectives of the organization, and the organization can be defined as integration of the competence center.

Management focuses three levels of competence: organizational, situational and contents related. In addition, the concepts of individual competences, work competences, team competences, department competences or organizational competences, are completely different. The main difference between the learning organization and the traditional organization is the ruling of the so-called main disciplines or key technologies.

However, in order for the traditional organization to become a learning organization, several main tasks have to be realized and it is necessary to provide the main elements, of which the following are the most important: systematic thinking, self-management, generation of mental patterns, creation of joint vision and team learning. Only after these elements are provided, than the organization will have a potential to become a learning organization.

However, learning organizations require a completely new approach in management and leadership. According to the learning organization concept, a leader is responsible to create an organization, in which people continuously expand their capacity to understand complex issues, crystallize their vision and promote the joint “mental patterns”, so, the leader is responsible for the learning process.

The work of the leader mainly covers issues that are important, but not urgent. A leader required for movement of the organization with high performances is a democrat. The effective leader has developed intelligence and empathic capacities, and he understands the differences between people as constants and draws value from that. Dynamic changes of the marketing environment of the enterprise have increasingly more dramatic effects on the operational results.

A persisting organization is an organization that on the basis of philosophy, functions and forms of leadership, as well as on the basis of visions and values, changes the strategy, structures and systems of the organization. The leader’s success relates to the achieving of high performances, that is, simultaneous production of quality products and services, additional values for the consumers and the good financial performances.

There are three types of leaders in a learning organization: leader-designer, leader steward and leader-teacher and definitely their role changes depending on the type they belong. Accordingly, the priority is to nurture knowledge and the objectives that people perceive as their own (Senge, 1990, p. 340).

1.4 Organizational Learning and the Consequent Changes–Similarities and Differences

The positioning of the organizational learning concept in the organizational changes theory requires, first of all, clear differentiation and placing relations between the two concepts. In order to determine the concept of organizational learning and organizational changes, it is firstly necessary to determine the similarities and differences between these two terms at definition level. To do that, it is necessary to analyze the concepts of organizational learning and organizational changes regarding three issues: the concept contents, concept analysis level and normative aspect of concept (Senge, 1990).

Organizational learning is an organizational change, but each organizational change is not organizational learning. The organizational learning is only one of the various types of organizational changes; the type of change of organization occurring after the collection, creation and usage of the new knowledge in the organization.

If we want to differentiate the terms of change and learning, one will start from the conclusion that, organizational changes are wide term of organizational learning and besides of it, they include other types of changes that do not cover learning.

Organizational change is a difference in the situation of the organization between two successive time periods, whereas the organizational changes process is a process occurring in that difference. Organizational learning is a type of organizational changes process in which, the difference in the organization's situation occurs during the generation and usage of the new knowledge. The difference in the organization's situation can occur also as a consequence of a forced reaction, adjustment, external imposing, and automatic action of the organization.

However, only the change in the organization's situation occurs due to newly created and used knowledge in the organization can be called organizational learning. Therefore, similarities of organizational learning and changes refer to the fact that both processes create difference in the successive organization's situations. The difference between the organizational learning and changes lies in the manner of creation of that difference.

The first process creates the change as a consequence of knowledge creation and usage, whereas the other process does not have to include that. By this, it isn't said that organizational changes do not include creation and usage of knowledge, but only that knowledge does not have to exist for that process to be called organizational change.

Organizational learning is a process through which specific, certain types of organizational changes are created.

Organizational learning, as well as the organizational changes, has cognitive and behavioral component of contents. Organizational changes and organizational learning implies change of cognitive structures, as well as of the conduct of the organization members. In practice, the cognitive structure change is not directly visible, but it can be revealed through changes in the conduct of individuals or groups it challenges.

On the other hand, the change of conduct of individuals or groups in the organization is clearly expressed through changes of decisions, actions or routines of the organization. The relations between changes of cognitive structures and conduct of the organization members are not always easily visible. Changes can occur in both cognitive structures and people's awareness, but without appropriate changes in the conduct of people deriving from the changes of awareness. The cause can have external limitations, which do not allow people to behave in accordance with their altered mental schemes. In addition, changes of people's conduct can occur without previous change of their cognitive structures.

In that case, people are forced to act in a certain manner without knowing the reasons for that conduct. So, some changes in the conduct occur significantly later, as compared with the changes in cognitive structures. Moreover, although it is natural for the change in awareness of the people, to also cause change in their conduct, sometimes the opposite happens – change of conduct causes change of mental patterns and awareness of people. This process occurs as a consequence of a cognitive dissonance. Organizational change requires change of the behavioral and not of the cognitive component of the organization (Bartunek & Moch, 1987).

In order to be able to confirm the occurrence of organizational changes, it will suffice if a change of organizational action has occurred, a decision, a routine, or an organizational structure change. It is not necessary to change the individual cognitive structures of the organization members or the collective awareness, that is, the cognitive structure of the organization members. When a company changes its organizational structure, because of a new law or because of the example of another successful company, it makes a change of conduct, but not a change of the individual cognitive structures of the employees. On the other hand, organizational learning implies obligatory change of both the cognitive structure and the collective action or conducts deriving from that change of structure.

Change in the conduct of individuals or groups in the organizations will suffice for the organizational changes, whereas for the organizational learning it is a required, but not a sufficient condition.

Organizational learning represents, only those organizational changes that have occurred as a result of the previous changes of individual and collective cognitive structures of the organization members. This change of cognitive structures of the organization members occurs with creation, diffusion and usage of new knowledge in the organization.

The normative aspect is a particular importance in terms of understanding the relations of the organizational changes and organizational learning. A normative aspect in a concept exists when the concept shows and provides recommendations on how to improve the object of research, how to promote it, raise it to a higher level and according to certain criteria and in some manners to make it better (Miller, 1996, pp. 485-505). Therefore, the normative aspect of organizational changes would mean pursuing explanations for the changes and model it in a way which leads towards “higher” and “better” situation in the organization. Most contemporary organizational theories avoid the normative aspect, especially with the creation of theories of organizational transformation, as well as with the theories of crisis, downfall and upturn in the organization. Organizational changes can lead to capacity improvement of the organizations (for example competitive advantage of the company), but also to their dissolution and termination. The processes of downfall and reduction of the organization show this in practice.

On the other hand, organizational learning has got a strong normative aspect in itself. Most authors perceive organizational learning as a change, which somehow improves the situation of the organization, through collection and usage of new knowledge. In fact, the organizational learning objective is to make the organization better, to bring more quality, with increased capacities and better performances.

Organizations, as well as people, are capable of learning negative things, which do not increase their capacities, but, on the contrary, reduce them. For example, one might say that, the company learns even when finding a method how to avoid the payment of taxes. The previous analysis shows the actual nature of similarities and differences between the organizational changes and organizational learning.

Organizational learning is a special type of organizational changes, in particular are those occurring on the basis of creation, collection and usage of new knowledge, than including changes of the individual and collective cognitive structures of the organization members

and of their conduct and finally those with normative aspects, that is, leading towards promotion of the capacities of the organization and its performances.

Accordingly, organizational changes are wider term of the organizational learning and they include changes in the situation of the organization regardless of the fact whether the changes have occurred because of the use of new knowledge or not, whether a change of cognitive structures of the organization members was carried out and whether those changes have normative effects, that is, promotion of competences and performances of the organization.

1.5 Learning, Education and Training as the Basis of the Learning Organization

The learning organization development represents a complex and long-term process during which different problems and adverse implications might occur. In order to avoid those problems it is necessary to comply with certain rules.

The maintenance of changes lies in the fact that for the purposes of achieving and maintaining a learning organization, many changes have to be introduced. Undoubtedly, the organization approaching towards drastic changes, will not implement them successfully unless full objective dedication exists.

Consequently, the limits must be continuously moved, to be solved problems must be perceived differently and they must be the source of defining new challenges, the old skills must be developed and new ones must be mastered.

To summarize, nothing should be static in a learning organization and the employees must be able to continuously adapt to the newly-created conditions. Moreover, the process of introducing changes must be strongly supported by the highest management levels. Top managers must be leaders of changes and must encourage them with their attitudes, and they must have a clear vision of their objective (Senge, 1996, pp. 36-40).

The experimenting encouraging means that, each change requires a certain period of experimenting, so as to verify the various concepts for successful implementation of changes.

Accordingly, it is difficult to assume how important it is for an organization to have suitable climate that will encourage the employees' experimenting.

In order to make such a climate, it is necessary for the employees to be assigned certain responsibility since regardless the risks it bears and the potential damages that could be caused by that, one should take into account the final benefit of the organization from these experiments. It is necessary for the employees to be enabled to ask questions, to state theories and own opinions on the problem solving, to enable them to test the concepts and to obtain results from the tests which will promote their future work. This will most definitely provide them with an opportunity to obtain new knowledge and to avoid the potential future mistakes.

So, the discussion about success and fall, since mistakes follow each effort, even learning, it is necessary to have a suitable treatment for these occurrences. Due to that, all successes and failures must be followed by adequate discussions in the team which should result into appropriate conclusions and plans for future actions. In addition, each individual in the team should be encouraged to review and state conclusions on their own performances. Clearly, learning should not stop with the teams; horizontal and vertical transfer of knowledge and experience should be encouraged, which will reduce the role of hierarchy and overall static situation of the organization.

Numerous mechanisms are used for knowledge transfer, and some of them are: verbal and written transfer of information, visual presentations, rotation of employees and training programs in the organization (Senge, 1996). In order for error-based learning to succeed, there must be a will to recognize the error and then to start analyzing the causes for failure and planning future actions. To enable this, the true learning organization must develop the awareness of the people in the organization to accept mistakes as best opportunities to study cases to be discussed, so as to reach conclusions, from which, one can learn and which will ensure same mistakes not to be repeated again in the near future.

One of the methods for avoiding the feeling of guilt in employees due to mistakes made is the existence of neutral mentors – trainers who will lead the learning process. These persons can be from the organization or external consultants, who should not have great authority over the employees he or she assists. It will be useful for the organization if a list of mentors is made, so that they will know who to count on at any time.

1.6 The Organizational Learning in the Organizational Changes Theory

It is necessary to establish relations between the organizational learning concept and the organizational change theories. As it is said previously, organizational learning is a special type of organizational changes; the relation between learning and changes can be

established with locating the organizational learning concept in the referential frames of the organizational changes theory. Starting from the previous conclusion, that the organizational learning is a special type of organizational changes, the relation between learning and changes can be established with locating the organizational learning concept in the referential frames of the organizational changes theory. In order to enable this, it is necessary to place a referential frame for the organizational changes theory.

The management paradigm represented by the learning organization, systemic problem solution is preferred, as well as experimenting with new ideas, continuous learning, deepening and modifying the knowledge through experience. We learn from our own history, we learn from the experiences of others and the currents of fast transfer of knowledge shared by the organization with its environment.

The management designated for building a learning organization, must have communication skills to create a context it supports and to encourage learning and sharing of information and knowledge among all the employees in the organization, but also with the partners and clients within the environment.

Today, special emphasis is placed on the digital focus of management. Contemporary management is defined as a process, in which managers work with other people and with their resources, including other organizational objectives for realization of the four primary process functions – planning, organizing, influence, that is, realization of influence (through understanding and acceptance) and controlling. The significant development support of that management theory is contemporary; it emphasizes that the “management in practice must include digital dimensions, that support and strengthen complementarily the process functions of planning, organizing, realizing the influence and controlling the situation.”

We realize that, as regards the traditional concept which uses the term “management” or “leading”, the contemporary management concept uses the term “influence through understanding” and “realizing the influence”. Special emphasis is placed on the word understanding, since it represents a possibility to achieve a coherent situation, between the managers and the other organization members. Learning organizations will remain a ‘good idea’... until people take a stand for building such organizations (Senge, 1990, p. 340).

The term digital clearly supports the implementation of information technologies and communication networks, points to the internet, as well as to all internet technologies. Digital dimensions pertain to the contemporary management segments, which focus the management changes through application of internet and realization of information-

communication technological possibilities. In the creation of digital dimensions, which is also called “digital dimensioning”, managers apply specific combinations of Internet and electronic technological support, as the best assistance in the realization of organizational objectives. Digital dimensioning of the management is with an objective to build a high performance organization, with high self-respect of its members. That means, that all members with their attitude will realize organizational doctrine, according to which, each employee must be inspired to feel excited for coming to work or because they participate in the spiral dynamics of the organization. This can happen only if the management, through the digital dimensioning, succeeds in the implementation of such organizational features, which enable the achieving of high performances of the employees, and actual, authentic and consistent respect of the employees.

The contemporary management concept includes organizational learning, in other words processes which create necessary and sufficient basis for origination of the product, enabling services for generation, diffusion and adoption of innovations. For the learning effects, the experience in the learning process, the conduct in the learning process and the attitude following the learning of something specific are important.

Organizational learning takes place and individual and group intra-organizational and inter-organizational levels. Therefore, it is necessary to learn individually, to learn in the organization and to learn in inter-organizational interactions, that one organization realizes with the other organizations (with which it has got different network connections). This type of all employees’ conduction, including the managers, leads towards a safe building of an intelligent organization. The communication of single-meaning or clarity is an important feature of the intelligent organization. People should know that they are responsible for their work and their organization (Bryson, Pajo, Ward & Mallon, 2006).

They, naturally, do not approve of ambiguity and confusing sources. Clarity is the basis for the organizational readiness for changes and adaptation whose main actors are the teams of people. Teams of people, as main integration forms of organizational structures, create the organizational design and organizational learning. Learning, as the most important strategic activity within the frames of the organization, develops in each process, a learning organization is established and integrity is achieved of differences of the individuals and their systems of value. Learning exists on various organizational levels. Values are deeply embedded, knowledge is difficult to realize and even more difficult to change. Norms and practices are highly visible and easier to identify by the employees. The most direct way to change the conduct is the change of practice that generates that conduct. Creativity relates to the occurrence of creation of something new, which has a certain value for the organization and its culture (product, solution, work of art).

What is considered as new can be related to the creator or to the society or the field in which innovation is created and what is considered as valuable is defined in various manners. New creative attitudes result from the new practices and they change the norms, from time to time, which enable long-term support for more efficient usage of knowledge (De Long, 1997).

Science is increasingly becoming an intermediate production social force and the production process is increasingly becoming a scientific process. A learning organization is not a sum of what was learned by its members. Learning must be more common and used in the changes within the organization, which have an impact on the environment changes. There are different views on the learning organization concept, which indicate that this type of view of the working organization, although highly innovative and directed towards the future, is not that simple. Namely, there are still different views on the theoretical concept problems related to it and on the implementation, or non-implementation problems of this concept. The following are advantages of the organizational learning:

- is a rich, multidimensional approach including and impacting the numerous aspects of the organizational conduct,
- is an innovative learning approach, that is, management of knowledge and investments in the intellectual capital of the organization,
- is a challenging concept that directs the attention towards achieving new knowledge and development and towards the individual knowledge and the knowledge of the entire organization,
- is an innovative approach towards organizing, management and development of the employees,
- is a concept that points to creative usage of the modern information technologies for organizational knowledge management with the assistance of databases and Internet

The following are the shortcomings of the organizational learning:

- the organizational learning concept consists of complex, difficult to understand principles which are difficult in terms of systemic implementation,
- organizational learning is an attempt to use the old concepts for management with the assessments and learning theory, tailored into a consulting project,
- organizational learning is an innovative principle to create the control by the management,
- organizational learning is based on the technologically based approach which ignores the fact that people really develop in an organization and how they improve their knowledge.

2 THE HISTORY OF ALKALOID AD – SKOPJE

2.1 The Company's Background

Alkaloid AD - Skopje is one of the oldest industrial capacities in Republic of Macedonia and the wider region. The factory represents the beginning of a new business branch, not only in Macedonia, but also beyond. At the beginning, alkaloids were produced from opium, that is an extraction of morphine base and its synthesizing into codeine was performed (Official web page of Alkaloid AD – Skopje and Monography “75 Years of Alkaloid”).

The high quality of the Macedonian “black gold” together with a long tradition was crucial in the opening of manufacturing capacity of this type. Following the Second World War, in 1945, with a decision of the government of the former FНРY and NRM, on 22nd of June, Alkaloid was nationalized. This is when the continuous growth of the factory started.

2.2 Its Beginnings

1936 – 1956

Alkaloid factory originates from 1936 and its first production plants were privately owned by the Ognjanovik family. About fifteen people were initially working in only two plants that produced about 350 kilograms pharmaceutical raw materials.

Alkaloid was the beginning of a new business branch, not only in Macedonia, but in the wider region as well. At the beginning, the primary activity of the factory was the production of opium alkaloids that is an extraction of a morphine base and its synthesizing to codeine. It is believed that the quality of Macedonian poppy was crucial for the opening of this manufacturing capacity.

Following the Second World War, in the summer of 1945, the Government of the former FНРY and NRM adopted a decision which nationalized the factory, and this is when the continuous growth of the factory Alkaloid started. In the first years after the war, the factory was treated as a capacity of special importance and was under direct jurisdiction of the MDMP in Belgrade.

On 31st of October 1946, Alkaloid was registered as a state factory for production of alkaloids in the former Yugoslavian state. The General Directorate for chemical industry of Macedonia undertook the competences in 1950.

That period was marked by the first steps of Alkaloid aimed towards increasing the production, modernizing the technology, expanding the production activity and improving the qualification structure of the employees, which was great importance for the future factory progress.

In 1947, the number of employees was increased from 17 to 38 and a record production of 1.544 kilograms alkaloids was realized. The working conditions were improved, the existing capacities were expanded and new ones were built, whilst the number of employees continued to increase.

In 1949, with a total of 53 employees, Alkaloid managed to realize 2.135 kilograms alkaloids, whereas the realized incomes were by one third higher than the income in 1947. These results provided this capacity with a federal recognition for the best factory in the country.

In addition, in the period of the so-called self-management, which was introduced in the factory on 29th August 1950, Alkaloid continued its work and continuous development. Following the performed reconstruction of the capacities, the factory production was eight times increased.

1956 – 1966

The period from 1956 to 1966 was a new development phase of Alkaloid. During this period, new production activities were introduced as a tendency to complete the technical-technological process. In 1957, Galenic plant was put into operation – a new capacity for production of medicines, which is used for production of on shelf medicines in form of tablets and fluids, and later creams and vials, among which Codeine, Caffetin, Kodafen and Noskapin – tablets and syrup. The opening of the new plant resulted due to the need to improve and increase the qualification structure of the employees (pharmacists, technologists and chemists).

The Galenic plant opening proved as a good and well-thought investment – at the beginning, the plant participated with seven percent of the realized income of Alkaloid, and only a few years later, it was responsible for 70 percent of the total incomes of the factory.

The Galenic plant opening, contributed towards the affirmation and breakthrough of the Macedonian pharmaceutical industry with Alkaloid outside of the borders of the former state. By initiating a business-technical cooperation with renewed world pharmacists and chemical corporations, the factory has made an effort to keep up with the contemporary pharmaceutical and medical science, as well as with the latest technological achievements.

The first business-technical cooperation was established in 1961 with Theraplix from Paris, France; the cooperation further continued with the renowned Pfizer from New York, Schering AG from Berlin, Specia from Paris, Laboratories Delagrange from Pars, Chemie from Linz, Solco AG and Hoffman La Roche from Basel and Merck Sharp and Dohme from the USA. Initially, this cooperation consisted of taking over of licenses, but later it developed into a cooperation relating to further processing and manufacturing of substances intended for specific pharmaceutical products. Alkaloid's range was enriched because of the new products for many medical areas. Great numbers of those products were significant achievements in the field of pharmacotherapy.

1966 – 1976

In May 1966 the enterprise for purchasing medicinal herbs, Bilka from Skopje, was integrated with Alkaloid, thus uniting three basic activities:

- production of alkaloids,
- on shelf drugs production,
- production of herbs

In 1968 new plant for poppy extraction was put into operation, thereby introduction a new technology of water extraction of poppy capsules without any cutting.

In this manner, the former process of work was simplified and extraction of double morphine base quantity was enabled. The increase in the extraction production capacities, contributed towards the requests for more poppy raw materials quantities, which imposed a long-term poppy production planning and the need for provision of their own raw materials base. These efforts strengthened the positions of Alkaloid as well as its economic performance.

In the period from 1968 to 1971, the results accomplished by Alkaloid increased enormously. The number of employees also increased, and the qualification structure was changed.

In 1969 Alkaloid had 515 employees, and two years later, the number of employees was increased to 671. Out of the total number of employees, 120 were with higher education. As a result of the progress, Alkaloid commenced to allocate significant funds in the investment and other development funds in this period. At the same time, the managing structure took care of the employees' standard.

In 1972 a new factory for on shelf drugs production was opened, thereby continuing the vision for creation of a modern pharmaceutical industry. The modernization process made Alkaloid a contemporary capacity with working area of 7.000 square meters, which housed all Galenic departments and which functioned as a complete technical-technological production entity. The production promotion was completed with the introduction of the most up-to-date poppy extraction machines and expansion of the on shelf drugs production program. The herb field also undergoes a technological process of modernization. As a result, the range of products was increased as well as the quality of tea and dried products.

In 1972 Alkaloid commenced the production of veterinary preparations, and it was also introduced in the cosmetic industry field.

For the purposes of achieving more economic and more profitable operations, in 1973 Alkaloid was integrated with the factory for production of lacquers and photo-materials, Lafoma as well as with the factory for soaps and cosmetics, Cvetan Dimov.

2.3 Further Development

1976 – 1986

In 1979 the factory for processing of herbs was put into operations, and the production of x-ray and graphic films and other photo-materials also commenced.

In 1978 Alkaloid was integrated with the factory for paints and coatings, Proleter. Preparations started for construction of a factory for cosmetics and soaps. This development, positioned Alkaloid among the five largest companies of this type in the former Yugoslav federation. Alkaloid employed over 2.800 employees, of which 560 with higher education.

The Tablet Department went under a complete reconstruction in the late seventies, whereas the modernization of the Department for ampoules and confectioning commenced at the same period and plans were made for the new factory for veterinary products.

The on shelf drugs range was expanded and the business and technical cooperation with the world renowned pharmaceutical companies was further developed.

Long-term cooperation was established with the factory “Merck” from Darmstadt-Germany in the domain of production of chemicals. Long-standing professional and business contacts with the British company, Admel from Weybridge contributed to the extension of the product range in the diazo and photo-materials segment, whereas in cooperation with the Japanese company, Fuji, the newly-built factory for production of x-ray films started operating.

Simultaneously with the development, Alkaloid paid great attention to the promotion of the working surrounding and environment, as well as the standard of employees.

In the period from 1986 to 1996, Alkaloid’s success was marked by the beginning of the biggest investment in the company’s history and the ownership transformation was made within the frames of the systems reforms in the state. Alkaloid successfully endured in the transition period.

Alkaloid’s privatization was made in accordance with the Law on Transformation of Enterprises with Social Capital in Republic of Macedonia. In 1990 Alkaloid became a shareholding company with mixed ownership, and five years later, the company was transformed into a company with private ownership.

Notwithstanding the radical changes in the ownership structure of the companies during the privatization period, Alkaloid remains to be one of the rare companies in the state, which managed to maintain the positive trend of growth and development and even to improve its working performances. The following was considered as priority in the privatization process:

- achieving great results,
- encouraging the employees and continuously caring for them,
- profitability growth,
- modernization investments,
- maintaining the company’s unity,
- regular payment of dividends to the shareholders

Alkaloid's management made efforts to intensify the company's growth in this period through the created concept – investments in facilities and technical-technological modernization of production.

The emphasized export-orientation of the company resulted into successful positioning at the foreign markets. At the end of this decade, export arrangements were concluded, which were of great importance. In doing so, Alkaloid was the first company in this region to establish a new type of business cooperation with internationally renowned pharmaceutical companies, which resulted into realization of export, which exceeded the former maximum production capacities of Alkaloid. In this period, the company continued to invest in purchasing of modern equipment, strengthening of the machine stocks and the construction of a new drug factory was outlined as the single true perspective of the company. Major investment amount to about 400 thousands Euros was realized in the factory for organic and inorganic chemicals.

The principle that the selective world markets consider investments as a necessity and not a choice continues to remain the firm determination in the business agenda of Alkaloid. In strategic terms, the most significant move of the company was realized – transfer of a contemporary marketing system, export-oriented, by opening subsidiaries outside of the state borders which provides for continuous expansion towards new markets. On the Yugoslav market at the time, Alkaloid placed a wide range of preparatory and decorative cosmetic products, some of the most famous being “Becutan”, “Black up” which remain to be among the most prestigious brands in this region, as well as an array of products resulting from the cooperation with the renowned “Alberto Culver” from the USA and the German brand - Scherk.

2.4 Alkaloid in the 20th Century

1996 – 2006

The biggest investment cycle of Alkaloid commenced in 1996 with the construction of a new factory for solid tablet forms, covering an area of about 12.000 square meters.

During this period, Alkaloid commenced the cooperation with the EBRD and the IFC fund. The signed contracts with these institutions secured a financial support for Alkaloid in amount of approximately 17.4 million Euros in convertible loan form. It is important to emphasize that through this type of cooperation, realized for the first time in Republic of Macedonia, Alkaloid implements the most up-to-date principles of corporative management.

In the pharmaceutical field, implementation started of the strict norms for good manufacturing practice, the so-called GMP standards, which created conditions for this pharmaceutical brand to keep up with the world renowned drug manufacturers.

Following its foreseen objective, Alkaloid makes a breakthrough at the world market. The new factory for solid dosage forms and the factory for semi-synthetic cephalosporin were launched in 2002, unique in the region, with fully implemented GMP standards, thus contributing to the further intensification of investments. It was equipped with the most modern drug packaging department with value of 4.5 million Euros and two new lines: solid forms packaging (tablets, drogues and capsules) with capacity of 200 thousands packages per minute and packing of ampoules with capacity of 30 thousands ampoules per minute.

The general determination of the management team for continuous investments, as a condition for enduring at the world market still remains, but according to the new agenda, the investments are mainly focused on equipment and technologies. In the year 2000, Alkaloid-Pharmaceuticals, became a member of the European Generics Association of Drug Producers.

Within the frames of the investment cycle, investments were made in a modern microbiological laboratory worth 1.2 million Euros and in the new chemical laboratory worth 500.000 Euros. Thus it was provided, that the overall production process, from raw materials to final products is carried out in accordance with the highest European standards for drugs production. It was also verified by several inspection services from the EU countries, as well as by the American multinational company Pfizer, for which Alkaloid has been the partner of choice for several decades.

In the year 2002 Alkaloid sold the first license to the Russian market, for the drug Caffetin. The preparation of Nova morph was patented in the USA in 2003. The product array of Alkaloid is placed at the markets of 29 countries and the Company, along with its subsidiaries covers Russia, Switzerland, Slovenia, Croatia, Serbia, Montenegro, Bosnia and Herzegovina, Bulgaria and Albania and a new subsidiary was opened in the USA.

At the foreign markets, Alkaloid places more than 70 percent of its production, thereby confirming the export orientation as dominant determination of the company. Meanwhile, Alkaloid became recognizable with the new proactive marketing concept and the corporative European image. The following remain to be among the priorities: caring for the employees, shareholders, environment, business partners, health system and above all – people's health.

The realized investments changes also the increased volume of work, especially in the last few years the need of upgrading the existing and installing a modern information system and integration and consolidation of the overall software network has imposed.

For that purpose, SAP, data software system, is implemented; an investment worth more than two million Euros, which with its modules fully integrates all business segments of the company. This positioned Alkaloid among the leaders in this area, having in mind that it was among the first companies that installed SAP system in Republic of Macedonia.

Since November 2002 the company was listed at the official market of the Macedonian stock-exchange of long-term securities. Alkaloid was the first company in Macedonia to open and confirm its legitimacy in front of the public and to transparently present the balance sheets and the financial operations in front of all potential investors. In the year 2003 Alkaloid was proclaimed as the most transparently quoted company at the Stock Exchange. During the same period, Alkaloid's shares were most liquid and most traded at the Macedonian long-term securities market.

On 31st December 2009, Alkaloid was reorganized and the company was organized in two main business segments:

- pharmaceuticals – covers the production and sale of drugs and pharmaceutical raw materials and
- chemistry, cosmetics, herbs – covers the production and sale of chemicals, photo-materials and x-ray films, cosmetics and soaps, production of tea, additional medical means and industrial herbal products

During the last 20 years Alkaloid has invested in its modernization approximately 70 to 80 million Euros and simultaneously with the introduction of new technologies, the structure of employees was changed in favor of the highly specialized personnel.

Even today, seven decades after its establishment, Alkaloid's products are synonym for top quality. Alkaloid works on the production of medicines, processing of herbal raw materials, production of cosmetics and chemical products. During the last years, one can more frequently notice the increased operational efficiency, as well as the restructuring of processes and the production programs. There are continuous investments in new highly sophisticated equipment in all operational segments, and the continuous improvement of the product quality is one of the company's priorities. During the last two decades, within the frames of the greatest intensive investment cycle of the Company, several very important projects were realized, among which the new factories for solid dosage forms and semi-synthetic cephalosporin's – a project with value of 35.4 Million Euros.

By strengthening the positions in the region, better positioning at the markets of the European Union member states, CIS and the USA, the company remains to be open for building new synergies and partnerships, specialization in certain groups of products and general strengthening of the Alkaloid brand outside of the borders of Macedonia. Alkaloid and Macedonia are part of that global functioning system. In long-term aspects, the Company's management sees Alkaloid as part of a major pharmaceutical system, through which it will, by using its name, conquer new markets.

Many renowned persons of the Republic of Macedonia, which were present on the celebration of 75 years of Alkaloid AD –Skopje (Metropolis Arena in Skopje, September 21, 2011), have positive opinions on the future and perspectives of Alkaloid and are stated below:

- The director of the Macedonian Health Insurance Fund, Maja Parnadzieva-Zmejkova, believes that Alkaloid will soon conquer new markets: *“Alkaloid has got drugs which were proven both in Macedonia and beyond to have the same level of quality with those of the renowned producers. I believe that they also have a very successful and active PR. I expect their marketing activity to generate results in the future period in terms of market expansion“*
- The director of the private clinic Remedika in Skopje, Andreja Arsovski, says that there are no obstacles to prevent Alkaloid from going further: *“Not many companies have such a jubilee. Alkaloid is one of the few national successful companies. It satisfies all conditions for becoming recognizable in world frames”,* said Arsovski.
- The dean of the Faculty of Medicine in Skopje, Nikola Jankuloski, believes that the company walks the path that guarantees it's recognizing, not only in the region, but also beyond: *“It keeps upgrading, following the most up-to-date trends in the pharmaceutical industry. I believe that it will be one of the leading drug companies in Europe.”*
- The director of the Toxicology Clinic in Skopje, Andon Chibishev, said that Macedonia is recognized in the world by Alkaloid: *“When I communicate with my colleagues from the countries of the region, even in the scientific area, they all, without any exceptions, think highly of this brand. Alkaloid is a company originating from a small country. If it was in the USA, it would have been the greatest pharmaceutical company in the world”.*
- Alkaloid does not withdraw from the temptations it continuously faces nor it fears the competition; these are actually the challenges for the further struggle for prestige: *“We continue with the serious work on our development. We plan to expand the array of products and to make new brands which will be successfully placed at the international market”,* said CEO of Alkaloid AD - Skopje, Zhivko Mukaetov.

3 ALKALOID AD – SKOPJE AS A LEARNING ORGANIZATION

Alkaloid AD - Skopje, in its vision, remains firm in the determination, that the highest investment for a company is the one in own employees and their education for management with new technologies, which is certainly important for the development and existence of the company (Official web page of Alkaloid AD – Skopje and Monography “75 Years of Alkaloid”).

In global terms, Alkaloid as a pharmaceutical company is becoming increasingly attractive. The company has got several advantages, such as the presence and standing at several markets in the region, the increasingly modern and powerful product portfolio, professional and trained personnel and operational standards compatible with the most rigorous world regulations. As an independent company, it is flexible and much faster in terms of information flows and decision-making processes, which, at the same time, provides competitive advantage for the company. That is the determination of Alkaloid’s management for the next three to five years.

3.1 The Strategy of Alkaloid AD - Skopje

Alkaloid’s motto is “Health above all” and it is the motive for the overall working organization, in terms of realizing the mission for healthier world and superior quality of products and services. The firm objective of the management, as well as of the employees, is to care for the health of each individual, the quality of life of each person, the health system and the environment.

Alkaloid’s operational success is mainly due to the quality of products, as well as to the educated personnel working in the company. In addition, the brand Alkaloid itself must be mentioned; it was built by many generations during the past years. The key points of Alkaloid’s corporative strategy are as follows:

- successful export orientation,
- stable market position,
- being open to new partnerships,
- top business practice standards

Still, the main management imperative is to protect the employees’ interests, as well as to protect the consumers, shareholders, business partners.

3.2 SAP - Integrated Information System

SAP is an information system for processing and monitoring the processes and data necessary for smooth and efficient company's operations. This system was put into operation on 2nd of July 2007 and it represents an investment worth about two million Euros. In the Republic of Macedonia, Alkaloid is the first company to independently, that is, with own funds, introduce the SAP system as main ERP solution. The following are the benefits from the SAP system introduction:

- improved operational efficiency,
- optimization and unification of business processes,
- introduction of new functions and new knowledge ,
- operational quality increase,
- compliance with the GxP/FDA standards, through verified software

The project was branded under the name Alka SAP and it covered six modules. About 200 employees of Alkaloid AD – Skopje were engaged for the modules, 16^{teen} from the Croatian company B4B – specialized for SAP implementation and four from the British company Compliance Control.

3.2.1 Implementation of project BCDR

In February 2011, in the information technology and telecommunications segment of Alkaloid, the strategic project for BCDR was implemented. The objective of the Project was to enable archiving and restoring, that is, data protection, which on the other side will enable smooth functioning of the business processes in case of disasters, damages or destruction of the overall information technology equipment. Foreign and Macedonian experts for the specific actions were involved in the implementation.

3.3 Institute for Development and Quality Control and Information Technology Center “Trajche Mukaetov”

The main characteristic of Trajche Mukaetov, following his positioning at the top of Alkaloid in 1985, is the growth intensification and the company development, which resulted into its becoming a leading pharmaceutical company in the region. In Monography “75 Years of Alkaloid” is stated that, Trajche Mukaetov was an electrical engineer who started his career in Alkaloid in 1973 by establishing Electronic Centre of the Company. According to him, an important parameter for company progress was the increased level of investments in scientific, research and developing activities, investments, which he believed were necessary for the purposes of achieving the desired prosperity.

He made direct investments in factory capacities and production processes and invested maximal efforts in terms of defining the business strategy and the long-term policy for development of the company.

By doing so, he achieved great contribution for Alkaloid and generally for the economic development in the Republic of Macedonia. In the year 1993 Trajche Mukaetov was presented with the award Manager of the Decade of the Republic of Macedonia. He invested significant efforts towards intensifying the cooperation between Macedonia and the Kingdom of Denmark. Because of that, Trajche Mukaetov was presented with the medal Knight of the Order of the Danish Flag, awarded by the queen Margrethe II of Denmark, for exceptional achievements. Trajche Mukaetov was a person with high level of professionalism and selfless support for its colleagues and all employees of Alkaloid. Alkaloid's employees remember him as a dedicated, effective, meticulous and honest manager and strong leader.

The foundation named Trajche Mukaetov, was established in his honor. The foundation was established with the main objective to support projects in the field of pharmacy, medicine and science, as well as to encourage and stimulate young employees dealing with these activities. An expert committee selects students for awarding scholarships for pharmacy and medicine in an unbiased manner. The committee consists of representatives of the Foundation, representatives of the Faculty of Pharmacy and Medicine, and representatives of the students; according to previously defined and publicly announced criteria the committee makes the selection according to maximally regular and transparent procedures. Scholarships are with an amount of 6500 Macedonian denars (105.7 Euros) per month, throughout the calendar year.

The objective of the Foundation is to increase the number of highly educated employees, who would strengthen the company's work of. Until now, Alkaloid has employed eleven graduated fellows of the Foundation, in the department for research and development and drug quality control. In order to encourage the students to achieve better results, in 2010, the Foundation introduced a single pecuniary award with an amount of 1000 Euros in Macedonian denars counter-value for the top students from the generation at the Faculties of Medicine and Pharmacy at the University Sts Cyril and Methodius from Skopje, Macedonia. In June 2010, according to the highest standards for these types of facilities, the fully reconstructed Information Technology Center of Alkaloid, "Trajche Mukaetov", started its operations. The investment for this center was approximately 550 thousand Euros.

3.4 Alkaloid's Production Facility Abroad

The defining of new frames of international working and international exchange has significantly strengthened the need and possibility for wider and more complex inclusion of Alkaloid and its full economic integration in the international flows. The following are some of Alkaloid's objectives: profit maximizing, market participation increase, sale increase, securing new segments for the buyers, conquering new markets, strengthening the achieved positions and finally undertaking the leading market positions. Based on this information, the company plans its objectives and develops special strategies for probable either defensive or offensive position.

Alkaloid's management following the lengthy studying of the most successful world companies' strategies has imposed and reached a conclusion that export orientation is the path towards continuous growth and development of the company. Therefore, Alkaloid makes continuous investments towards strengthening the sales teams at the markets on which Alkaloid's products are present. For that purpose, the management makes increasing efforts to open new representative companies and production plants outside of Republic of Macedonia. (See Appendix B, Tables: B 1.4, B 2.4, B 3.4, B 4.4 & B 5.4)

Alkaloid was assessed as 6th pharmaceutical industry in Southeast Europe, with 14^{teen} representation companies outside of Macedonia and products present at the markets of about 30 countries throughout the world.

Alkaloid has 11 subsidiaries in Sofia, Tirana, Belgrade, Zagreb, Sarajevo, Ljubljana, Pristine, Bucharest, Moscow and Freiburg and a new subsidiary of Alkaloid was opened in Ohio, USA in 2005 (Official company website, 2016).

In May 2007 the twelfth subsidiary of Alkaloid was opened in Podgorica, Montenegro. During this period, main specifics of the company have been the positive trends in the business practice, placing of the cost-accessible and quality drugs produced in accordance with the strict world standards (Official company website, 2016).

The putting into operation of the office in Kiev, Ukraine in 2009 was an important segment towards which Alkaloid's efforts towards the former USSR countries are directed. The preparations for the first production capacity of Alkaloid outside of Macedonia lasted nearly 10 months.

In September, 2010 by authorization of the Ministry of Health of the Republic of Serbia, Alkaloid Ltd. Belgrade started the production activities related to a wide spectrum of pharmacy-therapeutic groups, as follows:

- anti-infective drugs,
- drugs for treatment of the cardiovascular and nervous system,
- drugs for treatment of the gastrointestinal tract (Official company website, 2016).

The capacities covered an area of 916 square meters and the value of this investment was 750 thousand Euros. This investment resulted into a total of 34 pharmaceutical products, made in compliance with the strict Good Manufacturing Practice standards (Official company website, 2016).

The subsidiary Alkaloid – Pharm Ltd. Ljubljana in complete ownership of Alkaloid AD – Skopje, was registered in December 2010 in Republic of Slovenia. The main objective of this subsidiary is to cover the local business operations on the Slovenian market, with the main focus placed on the distribution of Alkaloid’s products on the European Union markets. Thus, Alkaloid continued its activities aimed at strengthening the export positions of the company, as its major strategic commitment. This subsidiary was opened to intensify the export operations of the company towards the European Union countries (Official company website, 2016).

By investing in Alkaloid Pharm, Alkaloid provided more efficient local operations at the Slovenian market and appropriate distribution of its products on the markets. Alkaloid’s subsidiary in the USA is a mixed company whose primary and main activity is based on drugs. The US Food and Drugs Administration (FDA), one of the most rigorous agencies in the world with the highest authority, made a pre-inspection which resulted into a positive assessment. It is estimated that Alkaloid is compatible according to the quality of production for distribution at the USA market (Official company website, 2016).

The CEO of Alkaloid AD – Skopje, Zhivko Mukaetov, at the opening of this subsidiary was aware of the size of the market towards which Alkaloid was striving, but was still honored to show that Macedonia has got potential for development, progress and even better results. *“We discussed that we are currently still undergoing the phase of recording the situation, since we are talking about a complex market, where each city is more than a million inhabitants and there are hundreds of them, has its own philosophy of functioning and economic operations”*, said Mukaetov (Ljubljana, December 2010).

3.5 Social Responsibility

The key to reach a successful organization design is the professional and quality organizational analysis, which will enable the establishment of a proper diagnosis of the organization's situation. Organizational diagnosis is an important issue of the contemporary organizational theory and the consultancy profession. This activity, which precedes each planned serious organizational change, should offer quality and positive answers to all relevant issues related to the situation in the organization of a certain entity. Social responsibility is part of the long-standing Alkaloid tradition.

“We believe that through our social responsibility we could contribute to the improvement, promotion and development of the community in which we act”, said CEO of Alkaloid AD - Skopje, Zhivko Mukaetov (Official company website, 2016).

The dedication of the company to the social responsibility is of a great importance for both the employees and the Alkaloid's management. For that purpose, in 2010 the two strategically important documents were promoted: “Social Responsibility Policy of Alkaloid AD” and “Code of Ethnical and Business Conduct”.

Alkaloid's management is responsible for the preparation and objective presentation of financial reports in accordance with the accounting standards applied in Republic of Macedonia. These activities include designing, implementation and maintaining of internal control, which is relevant for the preparation and objective presentation of financial reports. Tables from B 1.1 to Tables B 5.5 in Appendix B, provide financial reports of Alkaloid on Alkaloid's payment obligations, Alkaloid's investments in securities, on the risks and profit and loss accounts of Alkaloid for the period from 2010 until 2014. Alkaloid's management ensures the company's liquidity provision. In certain cases, the management and the managerial structure use short-term and long-term credits for operational financing.

The management manages the risk of liquidity through maintaining a certain amount of free funds and monetary equivalents, daily monitoring of the situation with the funds and projections on the future cash flow. The company has access to bank funds with relatively low interest rate, which provides additional liquidity management possibilities. The company uses credits, so as to provide continuous operations and return of the investments of the investors and shareholders through optimization of the credit and capital liabilities. The management performs regular analysis of the credit indebtedness.

The amount of “Defined uses”, covered with the management’s obligation to take care of its employees, is calculated at on an annual basis by an independent actuary by applying the Credit method of projected units. Alkaloid has got a legal obligation for payment of the pension insurance in state and private funds. Contributions are recorded as benefits of the employees in the Profit and loss account at the moment of their maturity.

The redundant employee or the employees, whose relations with the company were terminated at a voluntary basis, are paid a monetary compensation which is recorded on the basis of the occurred voluntary termination of the working relation. The obtained right to payment is recorded as a short-term obligation and it is expected to be paid.

By a decision of the Management Board, employees can be recognized the right to participate in the gain. The obtained right is recorded as a short-term obligation and it is expected to be paid. Alkaloid’s internal communication plays an important role which is clearly seen from the reorganization examples that are successfully precise due to the efficient communication strategies, whereas the others are behind in terms of optimum achievements.

Business world authors perceive the internal communication as a key process in organizations and in practice they consider it an important area, which has an impact on the ability of the organization to attract the employees. Some of the general positive aspects of efficient communications are improved efficiently, the personnel is familiar with the situation and is more motivated and included in the work of the organization, improved relations and better understanding among the personnel and better understanding of the need for change by the personnel. The strategic process of communication planning and management is similar to the strategic work planning process, which is realized through: environment research, identification of objectives, defining the public, preparation of strategy, choice of techniques and tools for implementation of strategies and tactics, as well as evaluation. The income is objective value of the received compensation or the receivables for sold goods and services and it is presented, reduced by the value added tax, estimated return, discounts and deductions. After a certain period, the company performs an analysis of the funds value. In case of existence of sufficient indicators, that the funds value is irreversibly reduced below their actual value, they are considered as impaired. The difference between the impairment amount and the restatement reserve in the capital is recorded in the Profit and Loss Account.

Supplies are indicated according to their price or according to the net expected sale value, depending on which is lower. The prices of supplies of ongoing production, semi-products and finished products, covers all direct production costs and production general costs.

If the receivables from buyers cannot be settled, the value of receivables is corrected. Indicators used in the assessment of receivables that cannot be settled are insolvency, possibility for liquidation and bankruptcy and late payment of receivables. The amount of the correction of the value is the difference between the invoice value of the receivables and the amount which is expected to be compensated.

Shareholding capital consists of shares whose buying-off is presented as reduction in the shareholding capital increased by the total costs for its buying-off or alienation. The alienation of own shares is presented as increase in the shareholding capital and it equals the cash flow reduced by all transaction costs. Shareholding activism denotes influence of the investors over the overall company's operations. Investors can be individual and institutional. They are active because they own shares, participate in the voting and the decision-making process, present proposals and participate at the annual shareholders' assembly. The most famous institutional capital investors are as follows: banks, insurance companies and investment and pension funds.

The financial reports of Alkaloid AD Skopje, Tables from B.1.1 to Tables B.5.5 in Appendix B, for period from 2010 to 2014, are prepared in accordance with the Company internal accounting standards and the Rulebook on Accounting Keeping. This Rulebook on Accounting Keeping is accounting standards applied in the Republic of Macedonia, which are the same as the International Accounting Standards from 2003, determined by the International Accounting Standards Board (IASB).

3.6 Further Education and Improvement

The age of information we live in, provides us with a great number of available sources of information and various technologies through which we could upgrade our knowledge and to further learn. Modern times continuously create the need throughout the entire life for a person to be trained and further educated. This is an obligation if we want to be successful in our work and, at the same time, to build ourselves as a complete person.

Still, continuous learning and progress requires continuous working and it is not always easy to choose the appropriate direction for development, or the proper training.

What remains within the national frames must have a good reason to stay on the market, and then such sales receive a form of export, whilst having the permanent task to promote their export competitiveness by raising its own productiveness and the quality of its products in compliance with the global criteria and standards.

Changed conditions and the world market profiles require from Alkaloid, as an up-to-date company to be able to develop its market and competitive position according to the stronger international orientations and not by relying on the classical forms of operations and state support (incentives, course) since its possibilities in the new conditions are limited.

The reputation and profile are the key elements for the success of the company within the working environment. Company's standing and image which are closely related to the good corporative management represent an integral, although immaterial part for its assets. The good corporative management practice contributes to the reputation of Alkaloid and improves it. By improving the corporative management practice of the company, the system of responsibility is improved, thus reducing the risk of machinations or working for own benefits. Responsible conduct together with the effective management with risks and internal controls can make the potential problems visible before complete crisis occurs. Employees take care of the shareholders' importance. Alkaloid, in particular, accentuates the creators of new ideas, products and work processes.

These characteristics assist the company in terms of achieving continuity in learning at individual and organizational levels, which is the key towards achieving competitive promotion. Alkaloid is a learning organization where the progress philosophy is achieved within the organization.

Abiding by the good corporative management standards also assists the decision-making process improvement. Quality corporative management rationalizes all work processes of the company, which results into more successful operations and lower capital expenses, which could in turn contribute to the profit increase. The new trend among the investors is of particular importance and the one relates to the inclusion of the corporative management practice, as a key criterion in the decision-making.

The objectives of the organizational communication in Alkaloid are based on the development of the awareness regarding the meaning of the communication for the operational economic results with precise and clear defining of the working mission, vision and strategy of the organization and the continuous improvement of the stimulating factors.

In addition, the employees are continuously and timely informed of the current and planned changes and through various courses and training programs, education is realized on the latest methods for transfer of information.

The communication system promotion means defining of the existing system situation, identification of the obstacles, points of delay and deformation of the communication process during analysis of the key barriers. Alkaloid continuously reconsiders the role of individual managerial levels, as well as the positions and roles of individuals in the communication system. The internal communication promotion is realized by changes in the organizational structure plan in terms of combining the existing or establishment of new communication channels.

The company follows and implements the latest techniques and technologies, which is of great importance, because it is a condition for efficiency and effectiveness of the communication system.

3.6.1 Marketing strategies

According to Kotler (2003, p. 126) world expert in marketing strategy and planning, in the world of business – average entities fail. He says: *“It is fatal for the company to position its products as products of average quality and average prices. Ideally, one should have a unique product, but a product different than the other is also good. Marketing commenced with the idea for sale, but marketing is actually homework to be done before the sale itself”*.

Marketing should also study the competitors’ weaknesses in order to define the strategies for conquering the unconquered positions. One should have in mind that on the markets where competitors are present and who are with approximately same power and strength, competition is severe. In this part of the analysis, special attention should be paid to the analysis of the competition objectives.

The strategic marketing planning is a managing process for development and maintenance of the possible concord between objectives and organization’s potentials and the possibilities offered by the environment. The strategic planning objective is to create a merging of activities which will make the company’s operations real and secure. While defining the marketing objectives, it is necessary to define:

- market position of the company,
- company productivity,
- company competitiveness,
- technological capacity of the company,
- financial capacity of the company,
- social responsibility of the company,

- product profitability,
- market and customers,
- achieved image of the company,
- identity of the company

Marketing communications which are promotions have got a key role in the modern management. Well designed products and services must enable a functional and emotional benefit with the customer. They act in a synergic manner and represent a recognizable presence of the particular product brand at the market.

The following activities are frequently carried out in the pharmaceutical products marketing departments: advertising standards (compliance with the regulations, manner of advertising and announcing, choice of media), market research (own country market research, closer and wider surrounding, what is in and what is out), creative services (different types of suggestions and ideas, especially on the relation generics – brand, what to choose, choosing packaging) and advertising material production (in accordance with the advertising standards, different types of advertising materials are selected – selecting brochures, leaflets, printing the company name).

In order to adapt successfully the modern enterprise with the numerous internal and external changes, the company must improve the quality of its products by transforming into the so-called quality managed enterprise, by accepting the need from radical changes, eliminating activities that do not create added value, so as to respond to the needs of the buyers, by applying new concepts and opinions, the company must become a knowledge-lead organization.

All changes in the modern enterprise have an impact on the corporate structure through reduction of the management levels. Enterprises in these conditions must find ways how to promote their future capacities for action and problem solving. In order for the company to endure in such conditions, one must develop the ability to react, the ability to learn and the ability to act.

The potential solution for the afore-mentioned problem is usually sought through the various mechanisms which could mitigate it.

These mechanisms are based on the managers' striving to obtain and keep their own work reputation, than harmonization between the interests of the management and the interest of the corporation and their owners through encouraging the manager reward scheme, delegating control over the managing to the management board, as a representative of the

owner who should adopt strategic decisions and control the management and clear defining of the fiduciary obligation of the manager towards the corporation, the lodged claims to the courts when the manager breaches them.

In Alkaloid, as a learning organization, each individual is engaged in the problem identification and solving. The main idea is to solve the problem against the traditional organization, which is directed towards efficiency. In a learning organization all employees have to look for a joint solution to the problem which would satisfy the needs of the customer. The focus is directed towards the quality and customer satisfaction.

3.6.2 Institute for development and quality control

On 11th March 2009 the Institute for Development and Quality Control was put into operation covering a useful area of 1540 square meters. It is equipped with cutting-edge laboratory and manufacturing equipment, which enables the development of new, modern forms of generic drugs, implementing the latest advances in the field of pharmaceuticals. About nine million Euros were invested in this institute, and most of the funds were provided from Alkaloid's own resources (Official company website, 2016).

According to the planned, the capacity should represent a highly sophisticated technological and analytical unit. The activities to be carried out in it were complementary to the process of development of generic drugs and their introduction in the industrial production. This Institute had a task to monitor the quality of Alkaloid's drugs, as well as their stability.

The implementation of the Institute actually added value to the development and introduction of new technologies and methods, product quality maintenance, improvement and meeting of the strictest referential requirements of the European and American regulatory bodies.

The most modern instrumental techniques and technologies were implemented in this technological and analytical unit with its state-of-the-art laboratory equipment. This area where this technological development is situated was furnished and verified in compliance with the cleanliness class standards ISO 8.

By doing so, Alkaloid keeps up with the increasingly strict requirements of the regulatory bodies, as well as in terms of developing products, that will implement the latest advances in the field of pharmaceuticals.

3.7 Cooperation, Practical Training and Scholarships

At the beginning, Alkaloid's cooperation with foreign companies consisted of taking over of licenses, and later, the further processing and production of substances foreseen for specific pharmaceutical products has started.

Alkaloid's range of products was enriched by new preparations for a great number of medical fields, and most of them present top achievements in the pharmacotherapy. During its seven decades of existence, Alkaloid was presented with a great number of certificates and awards for its successful operations.

3.7.1 Certificate of GMP compliance of a manufacturer by the medicines and healthcare products, Agency of Great Britain

The Pharmaceuticals Center of Alkaloid in 2005 applied for registration of pharmaceutical products in Great Britain. Having completed the extensive research, MHRA adopted a positive decision for registration.

Two years later, the Medicines Agency of Great Britain performed an inspection, UK Medicines and Healthcare products Regulatory Agency, MHRA and it issued the Certificate of GMP Compliance of a Manufacturer. Thus, Alkaloid obtained the right to market its drugs throughout Europe and beyond.

3.7.2. Plaque for the safest employer in the Republic of Macedonia for 2009

In April 2010 Alkaloid AD – Skopje was awarded with a plaque, by the Macedonian Occupational Safety and Health Association for being the safest employer for 2009. This recognition was awarded by the Macedonian Association for Safety at Work within the framework of the events marking the World Day for Safety at Work. Being awarded with this prestigious recognition, Alkaloid was also given the additional obligation to continue to observe the maxim, that safety at work is one of the fundamental human rights and to maintain the employees' safety at the highest possible level.

During the same year, in May on the occasion of the Europe Day and the 60th anniversary of the Schumann declaration, Alkaloid was also presented with the European contribution award. This award was presented to the CEO and President of the Management Board of Alkaloid, Zhivko Mukaetov for his special contribution in the promotion of the Republic of Macedonia, its economy and culture in Europe, as well as for the promotion of the European ideas and values.

3.7.3 Social responsibility recognitions

Within the project: “Corporate Social Responsibility in the Republic of Macedonia”, conducted by the Ministry of Economy in October 2010, Alkaloid was awarded the National Award for Ethical Management for the project: Code of Ethical and Business Conduct. In addition, Alkaloid was presented with the National award for ethical management of the project: Code of Ethical and Business Conduct. Alkaloid was also presented with recognitions for the projects: Human Resources Management 2009-2011, in the category – Relationship with the employees and in the Community category for the project: Social Responsibility Policy of Alkaloid AD – Symbiosis for Healthier Life and Future.

3.7.4 Alkaloid as a member of AESGP

The Association of the European Self - Medication Industry (AESGP) is the official body representing the European manufacturers of OTC drugs (drugs issued without prescription) and food supplements. Alkaloid became a member of this Association in February 2011.

3.8 Investments

The huge success of Alkaloid so far is due to the continuous investments in new highly-sophisticated equipment (only in the last 5 years, Alkaloid invested more than 7.5 million Euros in new production equipment) as well as to the continuous implementation of the highest world standards in all operational segments of the company.

In order to continue that development, to follow the pharmacy trends and to comply with the strict regulatory requirements, Alkaloid, in 2009, invested 9 million Euros for construction and equipping of the new Institute for Development and Quality Control, and an additional 700 thousand Euros for additional laboratory equipment. This investment is in fact added value for the drugs in terms of development and introduction of new technologies and instrumental methods, maintenance of the superior quality, continuous improvement and compliance with the European and American regulations for this type of products. One of the top priorities from the Alkaloid’s development strategy is the care for the environment. The company has been making continuous efforts to contribute to the healthier and cleaner environment; therefore, the latest achievements in this field are continuously implemented. Due to that, in 2008, Alkaloid invested 500 thousand Euros, with which it replaced the manner of operation of the old equipment and the old energy sources were replaced with new environmentally friendly and more secure one.

4 EMPIRICAL PART

With the purpose of investigating the employees' perceptions on the concept of learning organization in Alkaloid AD Skopje and to answer the research questions stated above, a questionnaire was developed.

The questionnaire was structured and consisted of 11 questions. The questionnaire incorporated a six point Likert scale (Likert, 1932 - 1 = Strongly Agree to 6 = Strongly Disagree). Likert scaling is a bipolar scaling method, measuring either positive or negative response to a statement.

The questionnaire was constructed according to the set hypothetical research questions and on the other hand, taking into consideration the management philosophy, the organizational hierarchy, the organizational culture, the internal documents and processes of Alkaloid AD – Skopje.

The questionnaire was created with the purpose of investigating the research questions, so the questions are divided in three main problem areas.

Questions 1, 3, 4, 6 and 7 are related to research question 1 - The role of goal setting and strategy defining in positioning a suitable framework for organizational learning.

Questions 2, 8, 9 and 10 answer the research question 2 - Integrating the employees in the process of learning and their contributions in creating the learning environment in the organization, and the remaining questions (5 and 11) are related to the last research question - training and courses as tools to support and improve the concept of learning organization. Example of the questionnaire is given in the appendix.

The questionnaire was anonymously answered by 20 middle management employees of Alkaloid AD – Skopje. After collecting and classifying the data, data processing started. Statistical analysis is performed by using statistical processing program – SPSS 19.

The answers were processed by applying descriptive statistics – statistical procedures used for summarizing, organizing, graphing and describing data. During this process frequency (percentages), means, standard deviations and inter-quartile range are used.

The frequency shows the number of times an answer occurred, while the percentage shows the rate or proportion the answer takes from the whole. The mean is the average of the numbers: calculated "central" value of a set of numbers.

Standard deviation is a quantity calculated to indicate the extent of deviation for a group as a whole. The inter-quartile range (IQR) is a measure of variability, based on dividing a data set into quartiles. For a better review of the results, a graphic representation is given.

The analysis of the results is divided according to the research questions stated above. Each of the research questions is examined separately and the results are shown graphically. After the statistical processing, a conclusion is drawn and the research questions are answered. Complete overview of the employees' answers is given in the appendix.

4.1 The Role of Goal Setting and Strategy Defining in Positioning a Suitable Framework for Organizational Learning

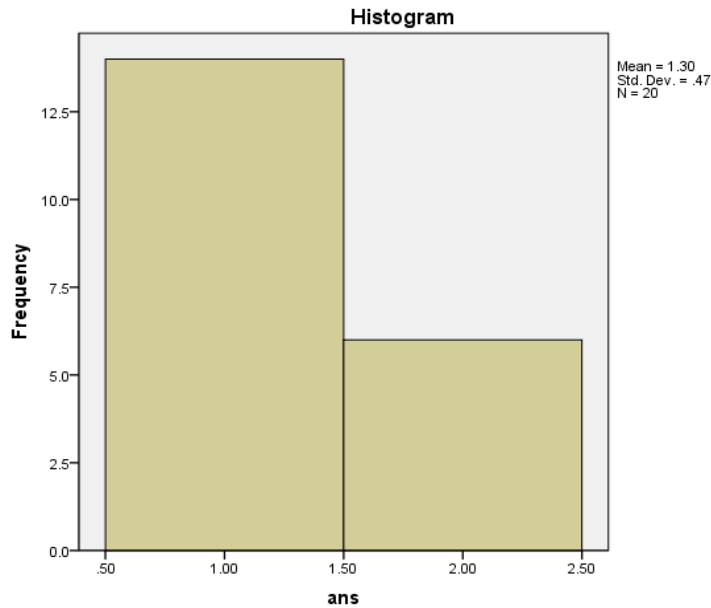
The first research question examines the role of strategies and goal setting in creating a supportive environment for organizational learning. The setting of appropriate goals and objectives, as well as developing a strategy (a separate one or as a part of already integrated one) can have positive impact on the openness of the organization to progress, can motivate the employees for innovation and experimentation and can create a favorable environment, in which they can learn and develop.

For the purpose of answering this problem area, the questions 1, 3, 4, 6 and 7 are examined. The following tables and figures show the descriptive statistics of the questions.

Table 2 - Descriptive Statistics for Question 1

Question No. 1 – Market research helps in the creating of successful learning organization					
	Frequency	Percentage (%)	Std. deviation	Mean	IQR
Strongly agree (1)	14	70			
Agree (2)	6	30			
Neutral (3)	0	0	0.47	1.3	1
Disagree (4)	0	0			
Strongly disagree (5)	0	0			

Figure 1 Histogram for Question 1



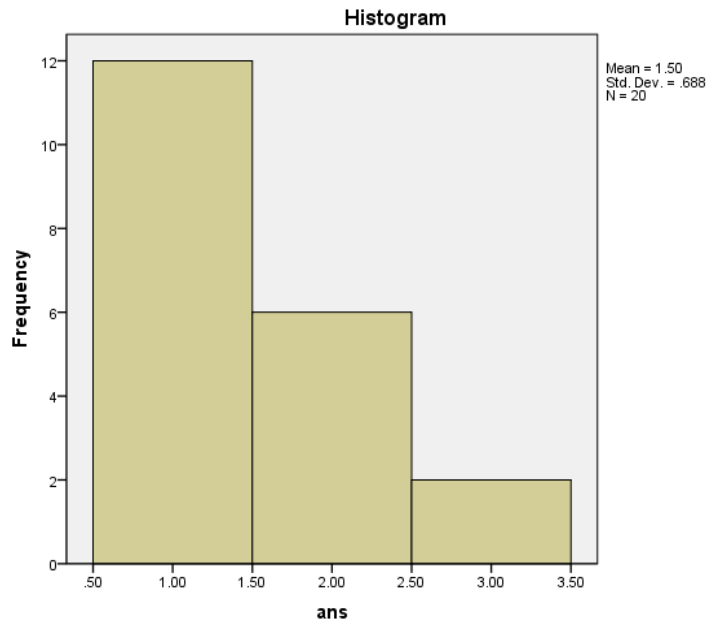
The descriptive statistics show similar responses. All of the respondents think that the market analysis is an important tool for creating a successful learning organization. Most of the employees strongly agree with this statement.

This means that Alkaloid’s employees devote enough time and attention to market and competition analysis, in order to follow and implement modern methods and techniques, to improve Alkaloids’ market position and to set a leadership approach in the industry. The learning concepts sometimes can arise from the external environment – so frequent and thorough analysis can surely help in the companys’ learning process.

Table 3 - Descriptive Statistics for Question 3

Question No. 3 – To be a successful manager you should reconcile your goals with the organizational ones					
	Frequency	Percentage (%)	Std. deviation	Mean	IQR
Strongly agree (1)	12	60			
Agree (2)	6	30			
Neutral (3)	2	10	0.688	1.5	1
Disagree (4)	0	0			
Strongly disagree (5)	0	0			

Figure 2 - Histogram for Question 3



The review of question 3 demonstrates that one of the managers' key tasks is to align their personal goals with the goals of the organization. So, 90% of the respondents agree, that this process is necessary for successful organizational management (mean score is 1.5).

Goal alignment is a powerful management tool, which not only clarifies job roles for individual employees, but one that also demonstrates to workers their ongoing value to the organization. When the employees are engaged with their work through goal alignment, they become more committed to the company and achieve higher levels of job performance.

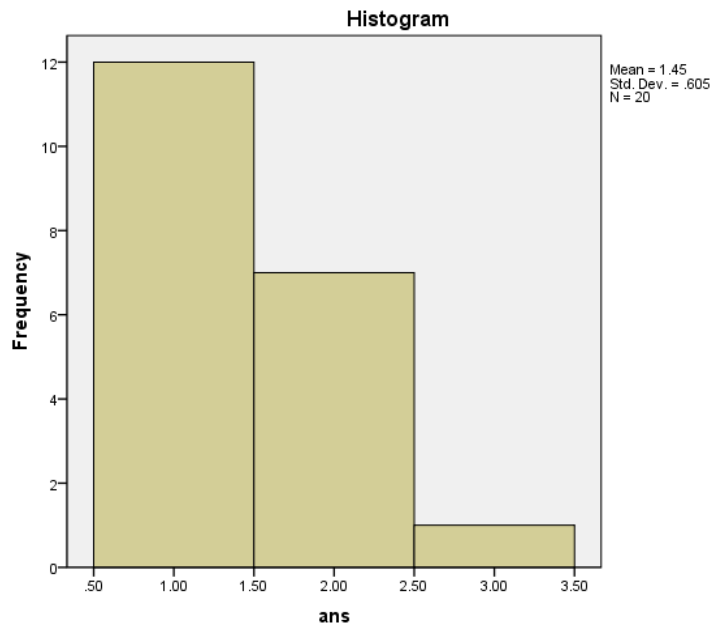
Managers can make a positive difference in an employees' performance, but only if they are crystal clear on organizational needs or else their well-intentioned coaching, may miss the mark.

Clearly communicating aligned goals ensures that valuable time is dedicated to learning and improving, if there is an established consensus, which the organization strives to grow and develop.

Table 4 - Descriptive Statistics for Question 4

Question No. 4 – It is necessary to analyze the market position of the company in the process of defining the business goals					
	Frequency	Percentage (%)	Std. deviation	Mean	IQR
Strongly agree (1)	12	60	0.605	1.45	1
Agree (2)	7	35			
Neutral (3)	1	5			
Disagree (4)	0	0			
Strongly disagree (5)	0	0			

Figure 3 - Histogram for Question 4

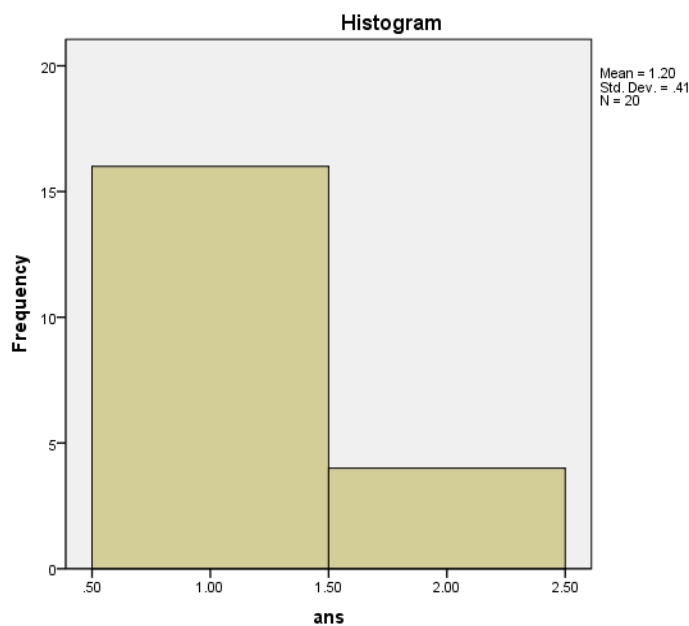


Not only the market research can help the learning process in the organization, but it also should be used in the process of defining the business goals. Market information builds a more accurate picture of the target market and it's useful for the business. Most of the goals depend on the position of the company on the market. If the companys' goals and objectives are not established according to the market position, they won't be sufficiently effective and will not serve the purpose they are designed for. Similary, the goals for organization learning should match the companys' market status and a market research should be done prior to developing the learning goals and strategies. In this case, as in the other, the respondents answered mainly positively. So, 60% of them strongly agree that the goals should correspond to the market position of the company and 35% stated that they agree with the statement. Only one respondent was neutral. The mean score is 1.45 and the interquartile range points out that the answers are pretty consistent.

Table 5 - Descriptive Statistics for Question 6

Question No. 6 – A good strategy is crucial for the success of the organization which learns					
	Frequency	Percentage (%)	Std. deviation	Mean	IQR
Strongly agree (1)	16	80	0.41	1.2	1
Agree (2)	4	20			
Neutral (3)	0	0			
Disagree (4)	0	0			
Strongly disagree (5)	0	0			

Figure 4 - Histogram for Question 6



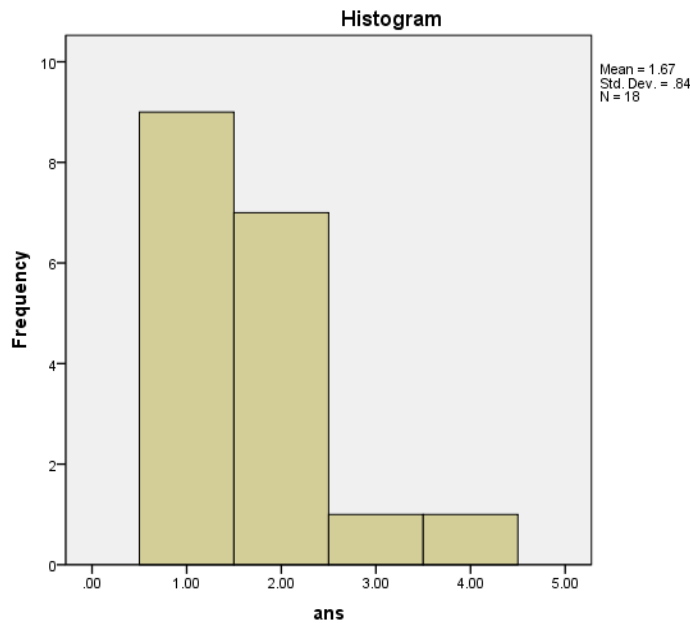
All of the respondents agree that the learning relies on the defining of solid strategy (80% strongly agree with the statement, mean score – 1.2). Strategy development is a critical component of building an organizational learning infrastructure, since the strategy ultimately ensures that a capacity to learn is developed and nurtured among staff.

The learning activities tend to have only limited impact on the rest of the organization if they are not accompanied by explicit strategies for transferring learning. According to the results, Alkaloid’s employees understand the importance of integrating the learning concept in the companys’ strategies, and try to develop strategies that promote learning and development.

Table 6 - Descriptive Statistics for Question 7

Question No.7 – Organizational learning is just one of the various types of organizational change					
	Frequency	Percentage (%)	Std. deviation	Mean	IQR
Strongly agree (1)	9	45	0.84	1.67	1
Agree (2)	7	35			
Neutral (3)	1	5			
Disagree (4)	1	5			
Strongly disagree (5)	0	0			

Figure 5 - Histogram for Question 7



From an organizational change perspective, it is critical to ensure that executives, managers and key staff have the opportunity to be engaged in a process of exploration and development. The process of learning and development in the organization can lead to changes in the cognition, routines, and behaviors of an organization and its individuals. Most of the respondents – 80% agree that the learning can promote change in the organization. One respondent was neutral and one disagreed with this statement.

It is important also to notice that two respondents chose not to answer this question. Although the results show predominant positive attitudes, there is a room for improvement, and employees should be informed and educated on how organizational learning can lead to a change in the organization.

4.2 Integrating the Employees in the Process of Learning and their Contributions in Creating the Learning Environment in the Organization

Organizations learn only through the learning individuals. Individual learning does not guarantee organizational learning. But without it, there is no organizational learning as well. The drivers of the organization, the employees must be knowledgeable, skilled and deliver results. Employees' skills, knowledge and motivation determine an organization's future. The success of both the employer and the employee lies in an appreciation for and commitment to continuous learning.

Knowledge transfer and teamwork will not be successful without good relations and understanding between the employees. Also, part of the company's success will depend on the educational background, knowledge, skills and the willingness to learn of the employees.

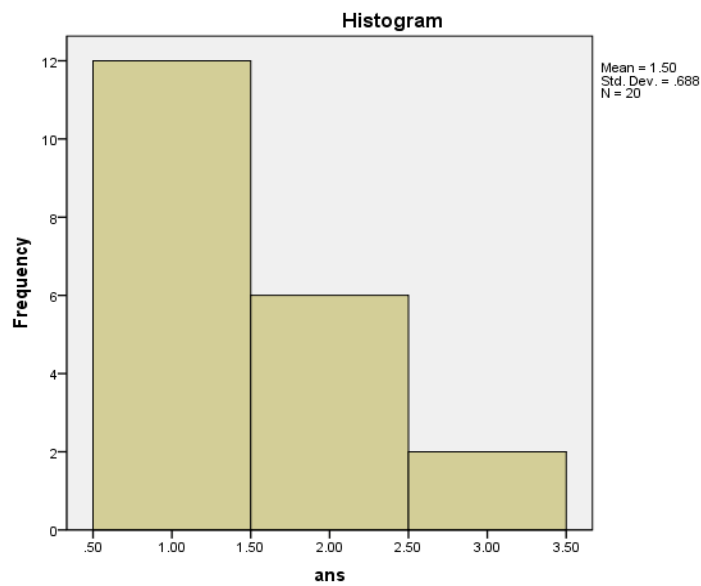
While workers should be encouraged to learn, managers need to learn how to communicate the goals and strategies to the subordinates. Resistance among employees may lead to failure to accomplish the duties and can reduce the motivation and ultimately, can lower the productivity of the company.

In order to engage the employees in the decision making process and thus the process of learning and development, they should be informed about the changes that occur in the company, so they can contribute to the adaptation to the new environment and can identify themselves with the company's goals and strategies. In this part, questions 2, 8, 9 and 10 are investigated.

Table 7 - Descriptive Statistics for Question 2

Question No.2 – Good relations and understanding between the employees are benefits from the organizational learning about them					
	Frequency	Percentage (%)	Std. deviation	Mean	IQR
Strongly agree (1)	12	60			
Agree (2)	6	30			
Neutral (3)	2	10	0.688	1.5	1
Disagree (4)	0	0			
Strongly disagree (5)	0	0			

Figure 6 - Histogram for Question 2



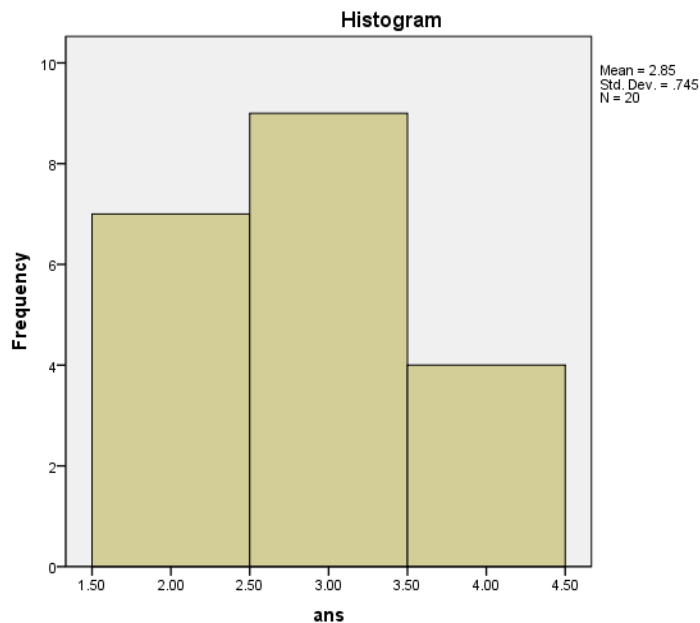
Although good relations for effective knowledge transfer, organizational learning are needed, also it can contribute in improving the communication and understanding among the employees. That what potentially makes the communication in learning organizations different from that in other organizations is the dissemination and shared interpretation of information.

The amount, timing and kinds of communication used are paramount to learning. In the case of Alkaloid AD – Skopje, 90% agree that the communication and the understanding among the employees are improved by the process of learning (60% strongly agree). The mean value is 1.5 and only two respondents remain neutral. This means that the process of collaborative learning and knowledge and skill sharing strengthens the relationships among the employees, improves the communication and enhances the interpersonal skills.

Table 8 - Descriptive Statistics for Question 8

Question No.8 – If you make a decision it will be accepted by the subordinates					
	Frequency	Percentage (%)	Std. deviation	Mean	IQR
Strongly agree (1)	0	0			
Agree (2)	7	35			
Neutral (3)	9	45	0.745	2.85	1
Disagree (4)	4	20			
Strongly disagree (5)	0	0			

Figure 7 - Histogram for Question 8



Poor decisions, or decisions that have adverse effects for employees will have a negative impact on the employees' engagement levels. However, poor communications about taken decisions can also have a negative impact. It is important, when key decisions are communicated, the criteria used to make the decisions are, whenever possible, to be made clear to all involved.

Also, employees should be involved in the process of decision making and must be given opportunities to voice their opinions. Employees need to have access to good quality information that explains not only what decisions are taken, but why and how they will be implemented.

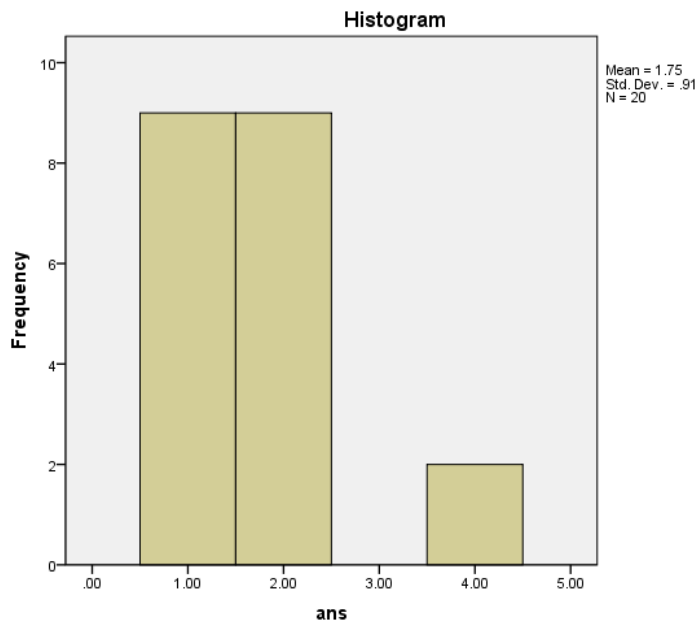
According to the results only 35% of the managers agree that their decisions are accepted by the employees. Almost half of the respondents are neutral and 20% disagree with this statement (mean value 2.85). This indicated a possible problem in terms of delegation of tasks and duties.

This could be solved by implementing the above mentioned practices – engaging the employees in the process of decision making, hearing their opinions and explaining the reasons for conducting certain activities.

Table 9 - Descriptive Statistics for Question 9

Question No. 9 – The work success depends primarily on the quality of the products as well as educated professionals who work in the company					
	Frequency	Percentage (%)	Std. deviation	Mean	IQR
Strongly agree (1)	9	45	0.91	1.75	1
Agree (2)	9	45			
Neutral (3)	0	0			
Disagree (4)	2	10			
Strongly disagree (5)	0	0			

Figure 8 - Histogram for Question 9



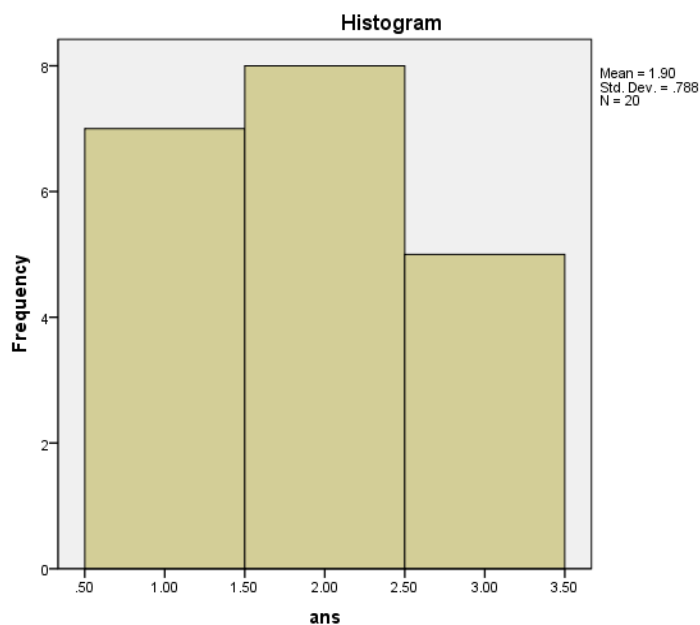
The results show that 90% of the respondents agree, and that the success of the company depends primarily on the quality of the products and the educated professionals who work in the company (45% strongly agree). 10%, two managers disagree with this statement, which means that the success depends on other factors as well (both internal and external).

This doesn't mean that these managers are not aware of the impact the product quality and professionals have, but consider other factors equally important in this process. Having in mind the review of the company, this results confirm that the company is constantly working on improving the quality of the products, as well as on hiring educated professionals and further developing the skills of the workers, knowing that the success depends on their knowledg and skills.

Table 10 - Descriptive Statistics for Question 10

Question No.10 – Employees should be informed on the events and planned changes in the company					
	Frequency	Percentage (%)	Std. deviation	Mean	IQR
Strongly agree (1)	7	35	0.788	1.9	1.75
Agree (2)	8	40			
Neutral (3)	5	25			
Disagree (4)	0	0			
Strongly disagree (5)	0	0			

Figure 9 - Histogram for Question 10



According to the questionnaire, 75% of the respondents agree with this statement (35% strongly agree). This means that most of the managers agree (mean value – 1.9) that they should inform the employees on the events in the company and on the planned changes and activities. 25% of the managers are neutral regarding this question. Unlike the responses in the previous questions, the answers in this case are divided. The inter-quartile range is 1.75 (q1=1, q3=2.75). Employees' engagement is a shared understanding of the issues that affect the business and that understanding leads to changes in employees' attitudes and behaviors. Unless employees truly understand the issues and make a meaningful connection between their jobs and those issues, their attitudes and behaviors will not change.

This means that there should be an agreement to inform on any important developments that could affect the people who work for the organization. Employers should tell staff what's planned - informing - and listen and take into account the views expressed by employees when deciding what to do.

Although the majority of the managers of Alkaloid AD Skopje are aware that they should dedicate time to inform the employees on the important events and decisions, there is still room for improvement. A quarter of the respondents are neutral – this may imply that the communication between the managers and subordinates should be improved. Since similar results were obtained regards decision accepting – managers should understand the importance of both informing and engaging the employees.

4.3. Training and Courses as Tools to Support and Improve the Concept of Learning Organization

An engaged workforce who possess the necessary skills, knowledge and expertise is crucial for any organization, which wants to achieve high levels of business success. Good employee engagement training, focuses on teaching the skills, which are needed to do this effectively.

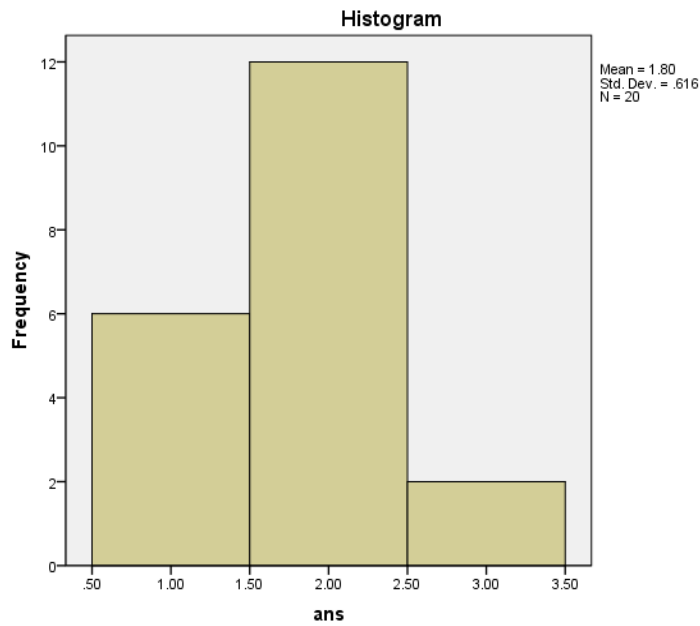
The right training and development can greatly enhance employees’ engagement by nurturing talent and helping people to learn new things and improve their performance. Most people want to feel that they do a good job and that they are valued by their organization for the part they play.

However, if training and development are to make a significant impact on employees’ engagement, employees must see the benefits for themselves by undertaking training activities. To provide answers to research question 3, questions 5 and 11 are examined.

Table 11 - Descriptive Statistics for Question 5

Question No.5 – Training of the employees in your company should be done more frequently					
	Frequency	Percentage (%)	Std. deviation	Mean	IQR
Strongly agree (1)	6	30			
Agree (2)	12	60			
Neutral (3)	2	10	0.616	1.8	1
Disagree (4)	0	0			
Strongly disagree (5)	0	0			

Figure 10 - Histogram for Question 5

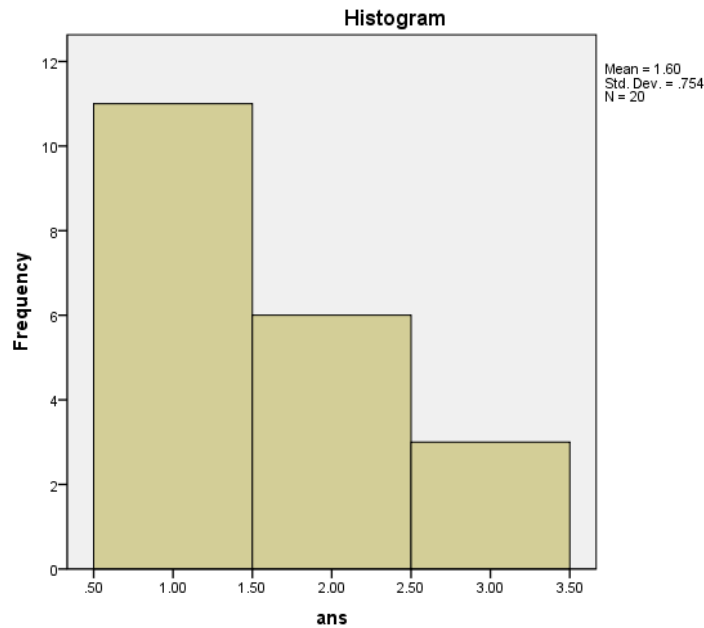


Most of the respondents (90%, mean value – 1.8) agree that there isn't sufficient training of the employees in the company. Only two respondents are neutral, but what is more surprising is that none of the managers answered that the training in place is adequate and is done as often as needed. Consistent and ongoing training for the employees is paramount to the success of any business. The continuous training and development for the employees has a significant role in the development of individual and organizational performance. Alkaloid AD - Skopje with well integrated concept of learning organization, as a leader in the industry and as a company which takes pride in constant improving and development, should integrate training for the employees whenever it's possible. Training for the employees will enhance the learning process, will increase the knowledge and expertise of the employees and will encourage further improvement and progress.

Table 12 - Descriptive Statistics for Question 11

Question No.11 – Courses and training programs are necessary to educate about the latest ways of information transfer to the employees					
	Frequency	Percentage (%)	Std. deviation	Mean	IQR
Strongly agree (1)	11	55			
Agree (2)	6	30			
Neutral (3)	3	15	0.754	1.6	1
Disagree (4)	0	0			
Strongly disagree (5)	0	0			

Figure 11- Histogram for Question 11



So, 11 respondents (55%) strongly agree that courses and training programs should be used for education on the latest ways to transfer information to the employees. 30%, also agree with this statement.

On the other hand, 15% (3 managers) are neutral. Overall, most of the managers have similar views regarding this question (mean value – 1.6) and want to be informed how to improve the process of knowledge transfer through adequate training and courses.

Overall, additional to the need of implementing more frequent training programs, they should be used for educating on the means and ways to transfer and share information.

5 CONCLUSIONS

Adapted to the various environments in the current world, where competition lurks behind every corner, represents one of the basic needs of the companies. Regardless whether the adaptation is slow or fast, one thing is clear: in the world today, if a company wants to be successful, it has to pass a certain path to develop important skills and knowledge. It must be emphasized that decision-making is probably the most important skill that a company and its managers have to know or possess, if they want to be successful. If we go through the entire process of opening and developing the business, we will understand that the entire process lies in the decision. The main key is to be decisive and to learn from one's own mistakes, although there is a saying that always it is better to learn from someone else's mistakes. In addition, it is always better to reach a decision, even if it is the wrong one, instead of not making it all.

One of the main specifics of the industrial period was the formal education importance, which, unfortunately, currently undergoes a slow change and is not in accordance with the needs of the modern society. Such education often ends early in life and does not provide us with knowledge which could enable us to adapt to the continuous progress of technology and science. Therefore, the position that learning and continuous development become a necessity is becoming increasingly widespread.

A learning organization is an organization which simplifies the learning process for all its members and it constantly transforms itself in order to achieve the superior performances. The process and the learning capacity is an own specific of each human being, but organizations and structures where people function, do not possess that capacity by themselves. This could result into having members of such an organization because of the lack of an idea to lead them, to be placed into a situation not to understand and not to be able to confront the occurred change or situation. Therefore, the organization which keeps striving towards the expansion of its capacities in order to achieve superior performances has to make efforts to achieve fundamental changes in the manner of thinking and perception, and that is the mind-setting of its members.

Alkaloid during its long-standing existence and successful operations has confirmed that it has always supported and that it will support projects it believes in. Alkaloid was the only company in Republic of Macedonia that made a Rollout in a related entity of SAP ERP, as the best and most complex world solution for an integrated system for data management.

The implementation of this system was realized by a project team consisting of 40 experts in different fields, employed in Alkaloid CONS, Alkaloid AD and the Croatian software

company “B4B”. In January 2011 Alkaloid CONS started operating with the SAP information system.

Alkaloid’s development strategy is directed towards the main activity of the company, which predominantly refers to the pharmacy and to the related activities. The pharmaceutical activity is an activity of common and special social interest and is directly included in the promotion, preservation and protection of human health. Due to that, it is particularly important to know the legislation in this domain, since the mere application of regulations and the compliance with them provides for a quality, safe and efficient drug and medicine for all fields. The production and trade with drugs and medicines, the pharmaceutical activity in the health institutions, as well as the pharmaceutical products advertising is regulated by special regulations.

Alkaloid Skopje has introduced the SAP system to enable further growth and to monitor the company’s development, to obtain solution for the future, to optimize the work processes, to introduce new functions, to integrate all companies in the Alkaloid group and to achieve quality operational leaps.

During the past decade, the company has realized and ever surpassed, the foreseen work plans. This achievements result from the increased operational efficiency, as well as from the process and production programs restructuring. The previous period was in the spirit of investing new highly sophisticated equipment in all operating segments, which will most definitely assist the efforts for continuous improvement of the product quality that is one of Alkaloid’s priorities.

The total value of the investments realized in the last two decades is higher than 60 million Euros, of which more than six million Euros were invested only in 2005, mainly in PC pharmacy.

Recognized as a partner of trust, Alkaloid was given representation, consignment and license for production by world pharmaceutical companies. According to all analyses, Alkaloid is ranked among the first five-six companies, which are leaders in the region, having in mind the market share of Alkaloid.

According to the official data, Alkaloid is a market leader in Macedonia and Kosovo region, with over 4% at the market in Bosnia and Herzegovina, 2-3% at the market in Serbia, over 3% at the market in Albania, whereas according to the sales volume in Croatia and Slovenia, it is among the top 20 ranked companies.

The market competitiveness, the proper investments, in particular the investments in the production technology and software, that integrates the production processes and marketing activities, as well as the obligation and necessity of each successful company. The Alkaloid brand is recognizable and confirmed, as its motto "Health above all" is recognizable. This is also a motive for Alkaloid employees, in terms of achieving its mission for a healthier world, superior quality of products and services. Alkaloid's objective is to care for the health of each human being, for the health system and for the environment.

In order to take into account the view of the employees of Alkaloid AD Skopje, a survey was performed with 20 middle management employees. For that purpose a questionnaire with 11 questions was developed, divided into three main problem areas (research questions).

According to the results, employees are aware of the importance of market analysis in the process of creating a learning organization and the market should be researched prior to defining the goals and missions. In this way, the goals and objectives of Alkaloid AD - Skopje are established according to its market position and can be accomplished most effectively and efficiently.

Also, the goal alignment is a powerful management tool which helps the organization to grow and develop. All of the respondents agree that the learning relies on the defining of solid strategy, which proves that the management of Alkaloid AD - Skopje constantly tries to integrate the learning concept in all areas of work. Organizational learning can lead to changes in cognition, routines and behaviors of the organization and its individuals. Alkaloid AD - Skopje embraces organizational learning as a change, thus making the environment even more susceptible to learning and development.

Managers know the benefits from the organizational learning, one of them being improving the relations and communication among the employees. As the further analysis shows the success primarily depends on the product quality and the educated professions, so human assets and interpersonal relations are the key factors for the organizational prosperity.

One minor problem area that was discovered was the delegation of task or employees' acceptance of the decisions made by the managers. Reasons for this problem may be linked to the non-informing of the employees on the events and planned changes in the organization.

This means there should be an agreement to inform on any important developments that could affect the people who work for the organization and managers should understand the importance of both informing and engaging the employees.

Further improvements may be done by implementing more frequent courses and training programs. Consistent and ongoing employee training is paramount to the success of any business.

Training, also can be used for educating on how to improve the process of knowledge transfer, learning, cooperating and growing as a company.

A significant limitation of the survey was the limited number of respondents. Another drawback is that all of the respondents were from the middle-management. Significant improvements can be achieved if the number of participants is increased and if employees from all levels at the company are engaged in future investigations.

The quality drugs, competitive products and the recognizable image which are on the level of world brands, continue to move Alkaloid towards the development and towards new markets. By having the vision to launch new products and to extend the brands, Alkaloid's management continues to win world markets.

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Appendix A: List of Abbreviations

ALKASAP - Alkaloid SAP

BC/DR - Business Continuity & Disaster Recovery

B4B - Business for Business

CEO - Chief Executive Officer

CIS - The Commonwealth of Independent States

EU - European Union

ERP - Enterprise Resource Planning

FNRY - Federative National Republic of Yugoslavia

FDA - Food and Drug Administration

GxP/FDA - Good Practice/ Food and Drug Administration

GMP - Good Manufacturing Practices

NRM - National Republic of Macedonia

MDMP - Main Directorate for Medical Production

MKD – Macedonian denars

EBRD - European Bank for Reconstruction and Development

IFC - International Finance Corporation

IQR - Inter Quartile Range

MHRA - Medicines and Healthcare Products Regulatory Agency

OTC drugs - Over-the-counter drugs, medicines sold directly to a consumer without a prescription **PR** - Public Relations

SAP - Systems, Applications and Products

SAP ERP - Systems, Applications and Products for Enterprise Resource Planning

SPSS 19 - Software Package used for Statistical Analysis

USSR - United Soviet Socialist Republics

USA - United States of America

Appendix B: General Economic and Financial Data for Alkaloid AD – Skopje

Appendix B1. Financial Statements for 2010

Table B1.1. Statement of Financial Position, 2010 (In thousands of MKD)

	2010	2009
Assets		
Non-current assets		
Property, plant and equipment (PP&E)	3,680,282	3,844,203
Intangible assets	346,613	243,332
Deferred tax assets	10,557	11,288
Available for sale financial assets	5,695	6,394
Investments in subsidiaries	72,488	31,433
Other non-current assets	37,660	19,493
	4,153,295	4,156,143
Current assets		
Inventories	1,190,257	1,050,798
Trade receivables	2,242,649	1,901,510
Other receivables	203,218	182,462
Cash and cash equivalents	63,858	123,123
	3,699,982	3,257,893
Total assets	7,853,277	7,414,036
Equity and liabilities		
Capital and reserves		
Share capital	2,206,548	2,206,548
Share premiums	734	734
Legal reserves	596,146	596,146
Other reserves	1,278,359	1,369,508
Retained earnings	2,337,168	1,924,380
	6,418,955	6,097,316
Non-current liabilities		
Borrowings	223	811
Retirement benefit obligations	15,567	12,875
Deferred tax liabilities	27,521	13,488
	43,311	27,174

(table continues)

(continued)

Current liabilities		
Trade and other payables	999,113	872,726
Income taxes	7	4,480
Borrowings	291,891	412,340
	1,391,011	1,289,546
Total liabilities	1,434,322	1,316,720
Total equity and liabilities	7,853,277	7,414,036

Table B1.2. Capital Risk Management and Foreign Currency risk, 2010

	2010		2009	
Debt	392,114		413,151	
Cash and cash equivalents	(63,858)		(123,123)	
Net debt	328,256		290,028	
Equity	6,418,955		6,097,316	
Net debt to equity ratio	5.11%		4.76%	
	Liabilities		Assets	
	2010	2009	2010	2009
EUR	406,342	235,564	1,897,342	1,564,401
USD	187,610	162,808	45,034	49,031
CHF	25,774	6,556	504	507
Other currencies	267	195	353	764

Table B1.3. Liquidity Risk, 2010

31 December 2010	Less than 1 month	1-3 months	3-12 months	12-60 months	Total
Trade payables	695,754	143,759	7,655	-	847,168
Borrowings	8,364	16,727	366,800	223	392,114
	704,118	160,486	374,455	223	1,239,282
31 December 2009	Less than 1 month	1-3 months	3-12 months	12-60 months	Total
Trade payables	444,768	133,631	115,368	-	693,767
Borrowings	25,049	356,852	30,439	811	413,151
31 December 2010	Less than 1 month	1-3 months	3-12 months	12-60 months	Total
Trade receivables	1,290,202	762,249	190,198	-	2,242,649
Available for sale financial assets	-	-	-	5,695	5,695
	1,290,202	762,249	190,198	5,695	2,248,344

(table continues)

(continued)

31 December 2009	Less than 1 month	1-3 months	3-12 months	12-60 months	Total
Trade receivables	1,043,808	707,199	150,503	-	1,901,510
Available for sale financial assets	-	-	-	6,394	6,394
	1,043,808	707,199	150,503	6,394	1,907,904

Table B1.4. Investments in Subsidiaries, 2010

	2010	2009
Alkaloid INT DOO Ljubljana, Slovenia	557	557
Alkaloid DOO Zagreb, Croatia	14,822	14,822
Alkaloid Doo Sarajevo, Bosnia and Herzegovina	39	49
Alkaloid DOO Beograd, Serbia	43,131	2,537
ALK&KOS Shpk Prishtina, Kosovo	307	307
Alkaloid EOOD Sofia, Bulgaria	2,748	2,748
Alkaloidpharm SA Fribourg, Switzerland	4,285	4,285
Alkaloid Kons DOOEL Skopje, Macedonia	154	154
Alkaloid USA LLC Columbus, Ohio USA	2,365	2,365
Fund "Trajce Mukaetov" Skopje, Macedonia	3,000	3,000
OOO Alkaloid RUS, Moscow, Russia	619	619
Alkaloid DOO Podgorica, Montenegro	-	-
Alkaloid FARM DOO Ljubljana, Slovenia	461	-
	72,488	31,433

Table B1.5. Borrowings, 2010

	2010	2009
EUR	41,574	11,470
MKD	350,540	401,681
	392,114	413,151

Appendix B2 Financial statements for 2011

Table B2.1. Statement of Financial Position, 2011 (In thousands of MKD)

	2011	2010
Assets		
Non-current assets		
Property, plant and equipment (PP&E)	3,781,827	3,680,282
Intangible assets	497,821	346,613
Deferred tax assets	8,828	10,557
Available for sale financial assets	4,442	5,695
Investments in subsidiaries	72,519	72,488
Other non-current assets	35,323	37,660
	4,400,760	4,153,295
Current assets		
Inventories	1,220,112	1,190,257
Trade receivables	2,230,732	2,242,649
Other receivables	300,220	203,218
Cash and cash equivalents	92,556	63,858
	3,843,620	3,699,982
Total assets	8,244,380	7,853,277
Equity and liabilities		
Capital and reserves		
Share capital	2,206,391	2,206,548
Share premiums	493	734
Legal reserves	596,146	596,146
Other reserves	1,304,934	1,278,359
Retained earnings	2,670,470	2,337,168
	6,778,434	6,418,955
Non-current liabilities		
Borrowings	29,541	223
Retirement benefit obligations	16,560	15,567
Deferred tax liabilities	7,868	27,521
	53,969	43,311
Current liabilities		
Trade and other payables	974,059	999,113

(table continues)

(continued)

Income taxes	2,495	7
Borrowings	435,423	291,891
	1,411,977	1,391,011
Total liabilities	1,465,946	1,434,322
Total equity and liabilities	8,244,380	7,853,277

Table B2.2. Capital Risk Management and Foreign Currency risk, 2011

	2011		2010	
Debt	464,964		392,114	
Cash and cash equivalents	(92,556)		(63,858)	
Net debt	372,408		328,256	
Equity	6,778,434		6,418,955	
Net debt to equity ratio	5,50%		5.11%	
	Liabilities		Assets	
	2011	2010	2011	2010
EUR	437,397	406,342	1,970,299	1,897,342
USD	158,493	187,610	42,385	45,034
CHF	22,342	25,774	1,082	504
Other currencies	241	267	533	353

Table B2.3. Liquidity Risk, 2011

31 December 2011	Less than 1 month	1-3 months	3-12 months	12-60 months	Total
Trade payables	696,010	117,736	1,286	22	815,054
Borrowings	675	43,036	391,712	29,541	464,964
	696,685	160,772	392,998	29,563	1,280,018
31 December 2010	Less than 1 month	1-3 months	3-12 months	12-60 months	Total
Trade payables	695,754	143,759	7,655	-	847,168
Borrowings	8,364	16,727	366,800	223	392,114
	704,118	160,486	374,455	223	1,239,282
31 December 2011	Less than 1 month	1-3 months	3-12 months	12-60 months	Total
Trade receivables	1,320,075	698,139	212,518	-	2,230,732
Available for sale financial assets	-	-	-	4,442	4,442
Cash and cash equivalents	92,556	-	-	-	92,556
	1,412,631	698,139	212,518	4,442	2,327,730

Table B2.4. Investments in Subsidiaries, 2011

	2011	2010
Alkaloid INT DOO Ljubljana, Slovenia	557	557
Alkaloid DOO Zagreb, Croatia	14,822	14,822
Alkaloid Doo Sarajevo, Bosnia and Herzegovina	39	39
Alkaloid DOO Beograd, Serbia	43,131	43,131
ALK&KOS Shpk Pristine, Kosovo	307	307
Alkaloid EOOD Sofia, Bulgaria	2,748	2,748
Alkaloidpharm SA Fribourg, Switzerland	4,285	4,285
Alkaloid Kons DOOEL Skopje, Macedonia	154	154
Alkaloid USA LLC Columbus, Ohio USA	2,365	2,365
Fund "Trajce Mukaetov" Skopje, Macedonia	3,000	3,000
OOO Alkaloid RUS, Moscow, Russia	619	619
Alkaloid DOO Podgorica, Montenegro	-	-
Alkaloid FARM DOO Ljubljana, Slovenia	461	461
	72,488	72,488

Table B2.5. Borrowings, 2011

	2011	2010
EUR	123,406	41,574
MKD	341,558	350,540
	464,964	392,114

Appendix B3. Financial statements for 2012

Table B3.1. Statement of Financial Position, 2012 (In thousands of MKD)

	2012	2011
Assets		
Non-current assets	3,770,236	3,781,827
Property, plant and equipment (PP&E)	624,108	497,821
Intangible assets	15,728	8,828
Deferred tax assets	4,784	4,442
Available for sale financial assets	99,643	72,519
Investments in subsidiaries	29,728	35,323
Other non-current assets	4,544,227	4,400,760
Current assets	1,309,708	1,220,112
Inventories	2,528,826	2,230,732
Trade receivables	235,814	300,220
Other receivables	62,656	92,556
Cash and cash equivalents	4,137,004	3,843,620
Total assets	8,681,231	8,244,380
Equity and liabilities		
Capital and reserves	2,205,348	2,206,391
Share capital	(1,127)	493
Share premiums	596,146	596,146
Legal reserves	1,305,585	1,304,934
Other reserves	2,996,621	2,670,470
Retained earnings	7,102,573	6,778,434
Non-current liabilities	168,888	29,541
Borrowings	20,090	16,560
Retirement benefit obligations	7,772	7,868
Deferred tax liabilities	196,750	53,969
Current liabilities		
Trade and other payables	992,770	974,059

(table continues)

(continued)

Income taxes	11,972	2,495
Borrowings	377,166	435,423
	1,381,908	1,411,977
Total liabilities	1,578,658	1,465,946
Total equity and liabilities	8,681,231	8,244,380

Table B3.2. Capital Risk Management and Foreign Currency Risk, 2012

	2012		2011	
Debt	546,054		464,964	
Cash and cash equivalents	(62,656)		(92,556)	
Net debt	483,398		372,408	
Equity	7,102,573		6,778,434	
Net debt to equity ration	6,81%		5,50%	
	Liabilities		Assets	
	2012	2011	2012	2011
EUR	412,989	437,397	2,040,871	1,970,299
USD	134,875	158,493	49,184	42,385
CHF	25,172	22,342	164	1,082
Other currencies	942	241	446	533

Table B3.3. Liquidity risk, 2012

31 December 2012	Less than 1 month	1-3 months	3-12 months	12-60 months	Total
Trade payables	673,240	180,179	8,076	1,431	862,926
Borrowings	30,737	1,473	344,956	168,888	546,054
	703,977	181,652	353,032	170,319	1,408,980
31 December 2011	Less than 1 month	1-3 months	3-12 months	12-60 months	Total
Trade payables	696,010	117,736	1,286	22	815,054
Borrowings	675	43,036	391,712	29,541	464,964
	696,685	160,772	392,998	29,563	1,280,018
31 December 2012	Less than 1 month	1-3 months	3-12 months	12-60 months	Total
Trade receivables	1,512,436	513,736	502,654	-	2,528,826
Available for sale financial assets	-	-	-	4,784	4,784
Cash and cash equivalents	62,656	-	-	-	62,656
	1,575,092	513,736	502,654	4,784	2,596,266

Table B3.4. Investments in subsidiaries, 2012

	2012	2011
Alkaloid INT DOO Ljubljana, Slovenia	557	557
Alkaloid DOO Zagreb, Croatia	14,822	14,822
Alkaloid Doo Sarajevo, Bosnia and Herzegovina	39	39
Alkaloid DOO Beograd, Serbia	62,566	43,131
ALK&KOS Shpk Pristine, Kosovo	307	307
Alkaloid EOOD Sofia, Bulgaria	2,748	2,748
Alkaloidpharm SA Fribourg, Switzerland	4,285	4,285
Alkaloid Kons DOOEL Skopje, Macedonia	154	154
Alkaloid USA LLC Columbus, Ohio USA	2,365	2,365
Fund "Trajce Mukaetov" Skopje, Macedonia	3,000	3,000
OOO Alkaloid RUS, Moscow, Russia	619	619
Alkaloid DOO Podgorica, Montenegro	-	-
Alkaloid FARM DOO Ljubljana, Slovenia	461	461
	99,643	72,488

Table B3.5. Borrowings, 2012

	2012	2011
EUR	95,110	123,406
MKD	450,944	341,558
	546,054	464,964

Appendix B4 Financial Statements for 2013

Table B4.1. Statement of Financial Position, 2013 (In thousands of MKD)

	2013	2012
Assets		
Non-current assets	3,759,478	3,770,236
Property, plant and equipment (PP&E)	742,325	624,108
Intangible assets	17,548	15,728
Deferred tax assets	3,191	4,784
Available for sale financial assets	102,259	99,643
Investments in subsidiaries	20,499	29,728
Other non-current assets	4,645,300	4,544,227
Current assets	1,421,548	1,309,708
Inventories	2,558,556	2,528,826
Trade receivables	131,322	235,814
Other receivables	91,869	62,656
Cash and cash equivalents	4,203,295	4,137,004
Total assets	8,848,595	8,681,231
Equity and liabilities		
Capital and reserves	2,205,348	2,205,348
Share capital	-	(1,127)
Share premiums	596,146	596,146
Legal reserves	1,303,910	1,305,585
Other reserves	3,327,349	2,996,621
Retained earnings	7,432,753	7,102,573
Non-current liabilities	51,498	168,888
Borrowings	19,215	20,090
Retirement benefit obligations	6,913	7,772
Deferred tax liabilities	77,626	196,750
Current liabilities	944,670	992,770
Trade and other payables	2,801	11,972

(table continues)

(continued)

Income taxes	390,745	377,166
Borrowings	1,338,216	1,381,908
Total liabilities	1,415,842	1,578,658
Total equity and liabilities	8,848,595	8,681,231

Table B4.2. Capital Risk Management and Foreign Currency Risk, 2013

	2013	2012
Debt	442,243	546,054
Cash and cash equivalents	(91,869)	(62,656)
Net debt	350,374	483,398
Equity	7,432,753	7,102,573
Net debt to equity ration	4,71%	6,81%

	Liabilities		Assets	
	2013	2012	2013	2012
EUR	422,261	412,989	2,198	2,040,871
USD	75,699	134,875	53,541	49,184
CHF	33,694	25,172	205	164
Other currencies	986	942	1,130	446

Table B4.3. Liquidity Risk, 2013

31 December 2013	Less than 1 month	1-3 months	3-12 months	12-60 months	Total
Trade payables	618,568	158,071	16,613	-	793,252
Borrowings	-	-	390,745	51,498	442,243
	618,568	158,071	407,358	51,498	1,235,495
31 December 2012	Less than 1 month	1-3 months	3-12 months	12-60 months	Total
Trade payables	673,240	180,179	8,076	1,431	862,926
Borrowings	30,737	1,473	344,956	168,888	546,054
	703,977	181,652	353,032	170,319	1,408,980
31 December 2013	Less than 1 month	1-3 months	3-12 months	12-60 months	Total
Trade receivables	1,529,289	526,471	502,796	-	2,558,556
Available for sale financial assets	-	-	-	3,191	3,191
Cash and cash equivalents	91,869	-	-	-	91,869
	1,621,158	526,471	501,796	3,191	2,653,616

Table B4.4. Investments in Subsidiaries, 2013

	2013	2012
Alkaloid INT DOO Ljubljana, Slovenia	557	557
Alkaloid DOO Zagreb, Croatia	14,822	14,822
Alkaloid Doo Sarajevo, Bosnia and Herzegovina	39	39
Alkaloid DOO Beograd, Serbia	62,566	62,566
ALK&KOS Shpk Pristine, Kosovo	307	307
Alkaloid EOOD Sofia, Bulgaria	2,748	2,748
Alkaloidpharm SA Fribourg, Switzerland	4,285	4,285
Alkaloid Kons DOOEL Skopje, Macedonia	154	154
Alkaloid USA LLC Columbus, Ohio USA	2,365	2,365
Fund "Trajce Mukaetov" Skopje, Macedonia	3,000	3,000
OOO Alkaloid RUS, Moscow, Russia	619	619
Alkaloid DOO Podgorica, Montenegro	-	-
Alkaloid FARM DOO Ljubljana, Slovenia	461	461
Alkaloid LLAC TLS Istanbul, Turkey	2,626	-
	102,259	99,643

Table B4.5. Borrowings, 2013

	2013	2012
EUR	103,926	95,110
MKD	338,317	450,944
	442,243	546,054

Appendix B5 Financial Statements for 2014

Table B5.1. Statement of Financial Position, 2014 (In thousands of MKD)

	2014	2013
Assets		
Non-current assets	3,532,675	3,759,478
Property, plant and equipment (PP&E)	886,800	742,325
Intangible assets	17,548	17,548
Deferred tax assets	3,721	3,191
Available for sale financial assets	163,615	102,259
Investments in subsidiaries	16,472	20,499
Other non-current assets	4,620,831	4,645,300
Current assets	1,574,759	1,421,548
Inventories	2,444,840	2,558,556
Trade receivables	138,436	131,322
Other receivables	124,922	91,869
Cash and cash equivalents	4,282,957	4,203,295
Total assets	8,903,788	8,848,595
Equity and liabilities		
Capital and reserves		
Share capital	2,197,095	2,205,348
Share premiums	596,146	596,146
Legal reserves	1,120,315	1,303,910
Other reserves	3,640,491	3,327,349
Retained earnings	7,554,047	7,432,753
Non-current liabilities	1,648	51,498
Borrowings	24,598	19,215
Retirement benefit obligations	-	6,913
Deferred tax liabilities	26,246	77,626
Current liabilities		
Trade and other payables	951,387	944,670

(table counties)

(continue)

Income taxes	67,287	2,801
Borrowings	304,821	390,745
	1,323,495	1,338,216
Total liabilities	1,349,741	1,415,842
Total equity and liabilities	8,903,788	8,848,595

Table B5.2. Capital Risk Management and Foreign Currency Risk, 2014

	2014		2013	
Debt	306,469		442,243	
Cash and cash equivalents	(124,922)		(91,869)	
Net debt	181,547		350,374	
Equity	7,554,047		7,432,753	
Net debt to equity ration	2,40%		4,71%	
	Liabilities		Assets	
	2014	2013	2014	2013
EUR	351,989	422,261	2,070,540	2,198
USD	146,660	75,699	68,396	53,541
CHF	37,620	33,694	-	205
Other currencies	146	986	345	1,130

Table B5.3. Liquidity Risk, 2014

31 December 2014	Less than 1 month	1-3 months	3-12 months	12-60 months	Total
Trade payables	502,507	233,058	67,153	12,357	815,075
Borrowings	-	-	304,821	1,648	306,469
	502,507	233,058	371,974	14,005	1,121,544
31 December 2013	Less than 1 month	1-3 months	3-12 months	12-60 months	Total
Trade payables	618,568	158,071	16,613	-	793,252
Borrowings	-	-	390,745	51,498	442,243
	618,568	158,071	407,358	51,498	1,235,495
31 December 2014	Less than 1 month	1-3 months	3-12 months	12-60 months	Total
Trade receivables	1,271,985	627,847	545,008	-	2,444,840
Available for sale financial assets	-	-	-	3,721	3,721
Cash and cash equivalents	124,922	-	-	-	124,922
	1,396,907	627,847	545,008	3,721	2,573,483

Table B5.4. Investments in Subsidiaries, 2014

	2014	2013
Alkaloid INT DOO Ljubljana, Slovenia	866	557
Alkaloid DOO Zagreb, Croatia	14,822	14,822
Alkaloid Doo Sarajevo, Bosnia and Herzegovina	39	39
Alkaloid DOO Beograd, Serbia	62,566	62,566
ALK&KOS Shpk Pristine, Kosovo	307	307
Alkaloid EOOD Sofia, Bulgaria	2,748	2,748
Alkaloidpharm SA Fribourg, Switzerland	4,285	4,285
Alkaloid Kons DOOEL Skopje, Macedonia	50,154	154
Alkaloid USA LLC Columbus, Ohio USA	3,873	2,365
Fund "Trajce Mukaetov" Skopje, Macedonia	3,000	3,000
OOO Alkaloid RUS, Moscow, Russia	619	619
Alkaloid DOO Podgorica, Montenegro	-	-
Alkaloid FARM DOO Ljubljana, Slovenia	461	461
Alkaloid LLAC TLS Istanbul, Turkey	2616	2,626
ALKA-LAB DOO Ljubljana, Slovenia	9,231	-
	163,615	102,259

Table B5.5. Borrowings, 2014

	2014	2013
EUR	50,285	103,926
MKD	256,184	338,317
	306,469	442,243

Note: The tables are taken from: <http://www.alkaloid.com.mk>, Annual Financial Reports

Appendix C: Questionnaire

The purpose of this survey is to examine how employees of Alkaloid AD - Skopje, accept and see the concept of a learning organization in their company.

The questionnaire was prepared in accordance with Likert scale and is treated like rock views with particular categories. Such categories is ranking from fully positive attitude, through neutral, to fully negative. The questionnaire is voluntary and thus collected data are strictly confidential. Participants will not be identified and have the option not to answer a particular question. By filling out the questionnaire below, you agree to participate in this survey. Please select only one answer for each of these 11 questions.

This survey will take you 10 minutes of your time.

1. Market research helps in the creating of successful learning organization

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

2. Good relations and understanding between the employees are benefits from the organizational learning about them

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

3. To be a successful manager you should reconcile your goals with the organizational ones

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

4. It is necessary to analyze the market position of the company in the process of defining the business goals

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

5. Training of the employees in your company should be done more frequently

- Strongly agree
- Agree
- Neutral

- Disagree
- Strongly disagree

6. A good strategy is crucial for the success of the organization which learns

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

7. Organizational learning is just one of the various types of organizational change

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

8. If you make a decision it will be accepted by the subordinates

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

9. The work success depends primarily on the quality of the products as well as educated professionals who work in the company

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

10. Employees should be informed on the events and planned changes in the company

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

11. Courses and training programs are necessary to educate about the latest ways of information transfer to the employees

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

Appendix D: Questionnaire Analysis for Each Question Individually

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1. Market research helps in the creating of successful learning organization	14	6	/	/	/
2. Good relations and understanding between the employees are benefits from the organizational learning about them	12	6	2	/	/
3. To be a successful manager you should reconcile your goals with the organizational ones	12	6	2	/	/
4. It is necessary to analyse the market position of the company in the process of defining the business goals	12	7	1	/	/
5. Training of the employees in your company should be done more frequently	6	12	2	/	/
6. A good strategy is crucial for the success of the organization which learns	16	4	/	/	/
7. Organizational learning is just one of the various types of organizational change	9	7	1	1	/
8. If you make a decision it will be accepted by the subordinates	/	7	9	4	/
9. The work success depends primarily on the quality of the products as well as educated professionals who work in the company	9	9	/	2	/
10. Employees should be informed on the events and planned changes in the company	7	8	5	/	/
11. Courses and training programs are necessary to educate about the latest ways of information transfer to the employees	11	6	3	/	/