CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

FACULTY OF ECONOMICS AND MANAGEMENT

DEPARTMENT OF MANAGEMENT

DIPLOMA THESIS

LIFELONG LEARNING & EMPLOYEE DEVELOPMENT: LEARNING PREFERENCES IN THE WORKPLACE

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DIPLOMA THESIS ASSIGNMENT

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Academic year: 2014 / 2015

Study programme: Economics and Management

Field of study: Economics and Management

Thesis title:

Lifelong Learning & Employee Development: Learning Preferences in the Workplace

Aim:

The aim is to analyze and evaluate a system of employee knowledge and skills development in the company SAP SE. The analysis is based on study of internal materials and detailed description of the development and training system in the subject company. The practical part includes a questionnaire-based survey in order to obtain feedback from employees on their preferences regarding means for gaining new knowledge and skills.

The proposed extent of the thesis: 60 - 80 pages

Methodology:

For the purpose of this diploma thesis, following methodology will be used:

- Review of relevant literature

- Observing

- Use of questionnaires

- Data analysis

Selected bibliography:

1.   HARTL P., HARTLOVÁ H. (2004). Psychologický slovník (1. Opravené vydání). Praha: Portál.

2.   J. FIELD (2010). Lifelong Learning, In P. Peterson, E. Baker, B. McGaw - International Encyclopedia of Education, 3rd edition

3.   KOLB D. A. (1984). Experiential Learning experience as a source of learning and development, New Jersey: Prentice Hall.

4.   NULTY, D.D. and M.A. BARRETT (1996): Transitions in students' learning styles.Studies in Higher Education

5.   PALÁN Z. (2006): Celoživotní učení. [Lifelong learning.] In: Kalous, J. Veselý, A.: Vybrané problémy vzdělávací politiky. [Selected aspects of educational policy.] Praha, Karolinum

6.   PLAMÍNEK, J. (2010) - Vzdělávání dospělých. 1. vydání, Praha - Grada Publishing

7.   R. EDWARDS, P. RAGGATT, R. HARRISON, A. McCOLLUM, J. CALDER. (1998): Recent Thinking In Lifelong Learning.

Keywords: lifelong learning, employee development, learning stages, means of learning, knowledge development

The Diploma Thesis Supervisor: Selby Richard, Ph.D.

Last date for the submission: November 2014

Declaration

I declare that I have worked on my diploma thesis titled "Lifelong Learning & Employee Development: Learning Preferences in the Workplace" by myself and I have used only the sources mentioned at the end of this thesis.

In Prague on 20.11.2014   ---------------------

                                                                                                     Josef Kučera

Acknowledgement

Souhrn

Diplomová práce se ve své teoretické části zaměřuje na vymezení pojmu celoživotního učení, stejně tak jako na shrnutí poznatků příslušné literatury zabývající se tímto tématem – od motivačních faktorů stojících za sílící potřebou ve společnosti se dále vzdělávat, až po členění celoživotního vzdělávání a forem učení, které jsou v této oblasti využívány. Dále se tato práce věnuje také přehledu základních dokumentů upravujících tuto oblast jak v České republice, tak v rámci celé EU.

V rámci praktické části diplomové práce pak je analyzován systém vzdělávání a rozvoje zaměstnanců, jakožto jedné ze součástí systému celoživotního učení. V této analýze bude figurovat organizace SAP SE, nadnárodní společnost zabývající se vývojem softwarových řešení zejména pro korporátní klientelu. Součástí této analýzy bude nejen detailní přehled a hodnocení struktury vzdělávacích programů ve jmenované společnosti, ale rovněž dotazníkové šetření s účelem zjištění zpětné vazby zaměstnanců této společnosti, kteří jsou účastníky těchto vzdělávacích programů.

V závěru práce se dostávají na řadu výsledky a poznatky vyplývající z tohoto šetření, které mají za účel poskytnout pohled na preference zaměstnanců ohledně firemních vzdělávacích programů zaměřených na kvalifikační rozvoj.

Klíčová slova:

Celoživotní vzdělávání, rozvoj zaměstnanců, fáze vzdělávání, vzdělávací prostředky, knowledge management

<u>Summary</u>

In its theoretical part, diploma thesis is focused on the specification of the term "lifelong learning", as well as on the review of the relevant literature concerned with the given topic – from the motivational factors behind an increasing need of the society to self-educating to division of the lifelong learning and the means of learning used within this field. This diploma thesis is also dedicated to the overview of basic framework documents concerning this area in the Czech Republic, as well as the EU.

The practical part of the diploma thesis contains the analysis of system of education and employee development, as one of the parts of lifelong learning system. Organization that will take part in this analysis is multinational corporation SAP SE, the company providing software solutions mainly for corporate clients. This analysis will not consist only of the detailed overview and evaluation of the structures of educational programmes in the organization, but also surveying of employees for the purpose of getting their feedback on these programmes.

At the end of the diploma thesis, the results and findings are suggested. These are supposed to provide an insight to employees´ preferences regarding intra-organizational programmes focused on qualification development.

Keywords:

I.   <u>Introduction</u>

In today´s modern, fast-changing world, the need for adaptation and improvement of our own knowledge and capabilities seems to be more up-to-date than ever. With a time passing by, we are exposed to loads of new challenges at every stage of our life. Add to that the pace of development in the area of IT technologies, and then you realize that continuous learning and self-educating is the only way, how to stay updated.

As the paragraph above indicates, the topic of diploma thesis is related to lifelong learning, and the topic is "Lifelong Learning and Employee Development" I chose this topic of diploma thesis simply because it is a phenomenon which is surrounding each of us these days. To prove this statement, I can mention one everyday example - if you take a look to job offerings, you can see very often the quote of a following style in the job description: *"we are looking for candidates, who have a willingness to learn new things."*

This example well refers to the focus of the practical part of my diploma thesis – acquiring new knowledge and capabilities within employee development systems or programmes inside organizations. This area is one of the parts of lifelong learning, and it should be also in employers´ interest to make sure that these intra-organizational systems or programmes of knowledge management are as effective as possible to make the most of their workforce.

In the diploma thesis, I would like to point out some of the best practices used in observed organization and to outline which of the learning procedures and means of sharing and developing knowledge and skills are preferred and seen as valuable and therefore should be employed.

II. Aims / Objectives & Methodology

2.1 Aims

The aim of the practical part of the diploma thesis is to analyze and evaluate system of employee knowledge and skills development in a real organization. The analysis is based on detailed study and description of the structure of knowledge development systems in subject organization. Then, the research among employees takes place on the basis of a questionnaire survey, in order to obtain their feedback on what are desirable and the most effective means of acquiring new knowledge in their eyes. Based on survey results, the practical part will reveal the employees´ preferences regarding means of learning in the workplace and which techniques do they perceive as most useful to their job performance.

In its theoretical part, the diploma thesis contains a literature review, in order to specify the term "lifelong learning", "workplace learning" and "knowledge management", and to clarify the theoretical background of the whole area, including the concept of lifelong learning, reasons for continuous education, stages and means of learning, legislative framework and essential strategic documents concerned with lifelong learning in both Czech Republic and the EU.

2.2 Methodology

This diploma thesis consists of two parts – theoretical and practical (own) part. In order to obtain the goals mentioned above, the following methodology will be used: theoretical part will include literature review, which requires study of adequate literature and other sources. This literature review contains chapters related to learning theory in general, motivation behind lifelong learning, concept of lifelong learning and finally workplace learning and development, which will introduce be smoothly followed by practical part, which is focused on classification of learning and development system in subject organization, quantitative research, questionnaire-based surveying and data analysis.

To classify the system of learning and development in the subject organization, study of relevant corporate materials and observation is needed in order to obtain a comprehensive overview of such learning and development system. The last section of practical part includes research among employees on the basis of a questionnaire survey. The sample questionnaire is included in the "supplements" section.

III. <u>Review of the Literature</u>

3.1 Lifelong Learning

Lifelong learning is very broad and complex term and it can be understood in many ways. Before discussing the term "Lifelong Learning", I would like to take a look at what "learning" in general does mean. It is appropriate to mention the term "learning", since it is substantial to understand that in relation to a topic of this diploma thesis.

3.1.1 Learning as an Activity in General

If you ask people what comes to their minds when asked about learning, their usual answer will typically contain some matters related to school or university education. The truth is, that the learning at school / university represents only one (small) part of the whole. For instance, if you ask some successful manager, where did he / she acquire much needed skills, knowledge or capabilities that allowed them to be where they are, they will surely tell you that education at the university provided them with solid basics, but most of their skill sets have been formed through other experiences. Thus, learning is not just about school education, but it is much broader field.

Learning is something that each of us does from the first days of our lives and this process continues until our death, and it is an important means of our personal adaptation. It allows us to adapt to the changing environment. Without the ability to adapt, the mankind would not be able to survive in a long-term. There are many definitions of what learning is. According to a book written by Mr. Atkinson and his colleagues, we can define learning as "a relatively permanent change in behaviour that results from practice." (Atkinson et al, 1993) This definition is rather universal, in fact you can substitute the word "practice" in this definition by "knowledge" or "experience", depending on the specific case. Many psychologists and theorists emphasize the link between thought and actual action. According to them, learning takes place only when new knowledge is translated into a change in behaviour. (Argyris, Schön, 1978) As D. Kolb puts it, "learning

is the process whereby knowledge s created through the transformation of experience." (Kolb, Fry, 1975) Studies and researches made by these theorists show us, that experience plays very important part in the process of learning, and this forms the basic concept of "Experiential Learning Model", which is mentioned next.

3.1.2 Experiential Learning Model

Experiential learning is one of the leading theories explaining the learning process. As suggested earlier, the central idea of this theory is that experience matters. In fact, it is commonly believed by many educators and field theorists, that there can be no true learning or real understanding of some concepts or situations without an experience involved in the process. The origins or foundations of experiential learning can be dated back to 1950´s and 1960´s. From these times, it has evolved from being a laboratory experimental technique into something widely accepted and recognized. It is mainly due to a fact, that active involvement of students through the experience proved to be effective way of teaching, with students better understanding the topic as a result.

According to D. Kolb, the experiential learning is different from cognitive and behavioral theories in that, it emphasizes central role of experience, instead of acquisition and further manipulation with knowledge (cognitive theories), and it also differs from behavioral theories because of accepting the role of consciousness and subjective experience in the learning process. However, experiential learning model is not intended to be another alternative to cognitive and behavioral theories, but rather "a holistic integrative perspective on learning that combines experience, perception, cognition and behaviour." (Kolb, 1984)

The foundations of experiential learning were built on the theories and scientific works made especially by K. Lewin, J. Dewey and J. Piaget. Each of these psychologists came up with their own models of experiential learning process, however all these models have many common characteristics defining the nature of experiential learning. I am going to briefly mention all the three models, since they form basics of the David Kolb´s learning theory and hence the Kolb´s learning cycle. I would like to concentrate mainly on the work of D. Kolb, because he is the one, who contributed perhaps the most to popularize the

concept of experiential learning and his works is one of the most cited in educational research publications.

3.1.2.1 Kolb´s Learning Theory

The central element of Kolb´s conception is a four-staged model of learning cycle. This cycle simply explains the whole process of learning, where experience is transformed through reflection into concepts, which are then used for guidance within active experimentation and for subsequent choice of new experience later on. It is possible to enter this cycle at any point, however individual stages should be followed in the sequence. This principle ensures the feedback mechanism in the learning process, so individuals can repeat this learning cycle several times to get the best results. (Kolb, 1984)

Figure 1: Kolb´s Experiential Learning Cycle
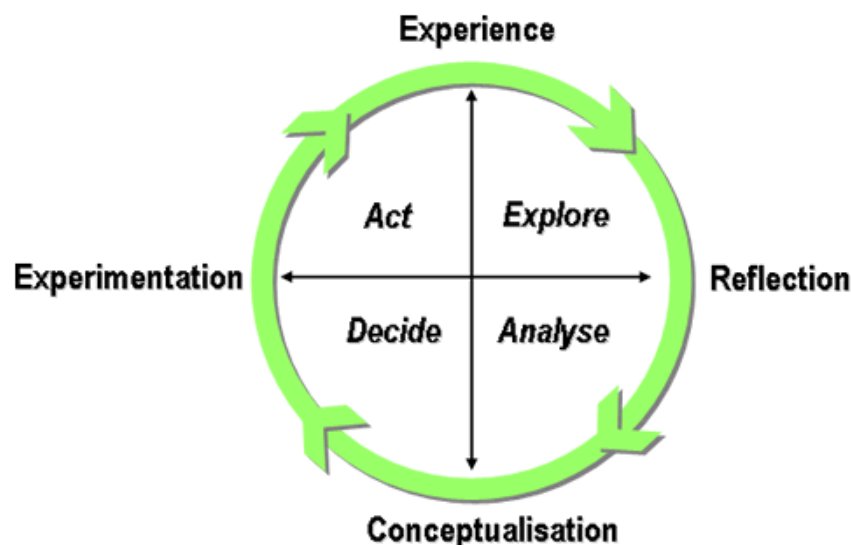
Source: WageningenUR resource portal, available online from: http://portals.wi.wur.nl/ppme/?Experiential%20Learning%20Cycle

The figure above shows the whole process graphically. To specify its stages, let us get little closer to each of them – experience (1) refers to the concrete learner´s experience of some kind of activity or situation, reflection (2) means the stage where the learner

reflectively observe that experience back, conceptualization (3) is the stage of the learner trying to conceptualize a theory or model of what is observed, and finally experimentation (4) refers to stage where the learner is planning how to test a theory, or is planning for a forthcoming experience. The learner then may repeat the same process again and again in the same manner.

Based on this model, we can define four distinct styles of learning (as showed inside the circle picture). We can then divide people into four groups, depending on which styles do they prefer. Most people tend prefer two styles more than the other two. Kolb (1984) suggests, that preferred learning reflects more of a tendency rather than an absolute choice and learners may adopt different styles in different situations. The particular choice of learning style reflects the individual's abilities, environment and learning history. (Nulty and Barrett, 1996) As suggested in the figure, the learning styles are as follows:

a) **Exploring (also called diverging style)**

Experience-based approach to learning, people using diverging learning style are used to look at situations or things from different perspectives and rely on their feelings while judging them, as well as on brainstorm techniques. They perform better in tasks requiring ideas generation and open-minded approach.

b) **Analyzing (also called assimilating style)**

This refers to reflective and rather logical approach to learning. People with assimilating learning style are seeking for clear explanation rather than application in practice, focusing on abstract concepts. They are strong at understanding broad-range issues and organizing them into logical structures.

c) **Decision making (also called converging style)**

Analytical and very logic-oriented approach to learning, people preferring converging style of learning tend to be better performers when it comes to technical tasks. These people are perhaps the best at finding practical uses for ideas and theories.

d) **Acting (also called accommodating style)**

Acting refers to the approach, which relies heavily on practical applications, experimentation and learning from practical projects. People with accommodating learning style tend to act upon their intuition rather than logical thinking. These people are usually proactive individuals seeking for new challenges.

As mentioned earlier, this learning cycle developed by D. Kolb is based on 3 models created by psychologists K. Lewin, J. Dewey and J. Piaget. Each one of these models is going to be just briefly introduced, in order to discuss the roots and the background of D. Kolb´s learning theory.

3.1.2.2 Lewinian Learning Model

According to the laboratory techniques and researches, the whole process of learning is facilitated best by an integrated process starting with a real-time experience, which is then followed by collection of data and observations about that new experience. These newly obtained data are then analyzed, and the results / conclusions of this analysis are sent back to the subject in the experience, for the purpose of modification in their behaviour and subsequent selection of new experiences. (Kolb, 1984) The learning cycle developed by K. Lewin is pictured below:

Figure 2: Lewinian Eexperiential Learning Model
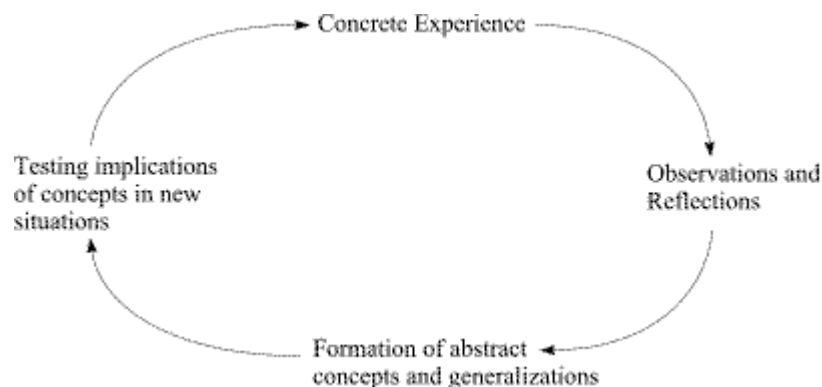
Source: A handbook for student affairs, available online from http://reflectionforstudentaffairs.wordpress.com/models/experiential-learning-models/

There are two main specific features of this model, which are emphasized by K. Lewin in his theoretical work – first one is the central role of immediate personal experience in the learning process, and the second one is the involvement of the concept of feedback process, which enables continuous assessment of results against desired goals.

3.1.2.3 Dewey´s Model of Learning

Dewey´s model is very similar to the previous one discussed above, however it is distinct from Lewinian model in that it focuses more on "how learning transforms impulses, feelings and desires of concrete experience into high-order, purposeful action" (Dewey, 1938) This learning model is graphically portrayed in the figure below:

Figure 3: Dewey´s model of learning

As mentioned, Dewey puts an emphasis on impulses in the process of learning. In this continuous diagram, we can see that the cycle always begins with an impulse, which leads to the idea, which in turn gives direction to further impulse, and this chain may continue until the individual gets to the desirable goal.

3.1.2.4 Piaget´s Learning Model

The last of three learning models, on which D. Kolb based his learning cycle, is model of learning and cognitive development introduced by J. Piaget. He built his theory on already mentioned concepts presented by K. Lewin and J. Dewey. As Piaget (1980) puts it, "the key to learning lies in the mutual interaction of the process of accommodation of concepts or schemas to experience in the world and the process of assimilation of events and experiences from the world into existing concepts and schemas". Piaget views the

learning as an intelligent adaptation, and it results from balanced tension between these two processes.

Piaget identified 4 stages of learning within his theory and all of them take place between the birth and 14th – 16th year of human life. The first stage (at the age of 0-2) is sensory-motor stage, where learning is executed mostly through feeling, touching or handling. The second stage (2-6 years) is called representational stage, where children develop reflective orientation, they start to learn more through the observation. The third one (age of 7-11) is called the stage of concrete operations. The child in this stage has got more assimilative learning style, which relies more on the logic of classes and relations. The last fourth stage (12-15 years) is stage of formal operations. At this stage, humans have more active approach to learning, using orientation developed through the previous three stages. They are now capable of more complicated thinking sequences like deductions, or developing of possible implications of their theories. (Kolb, 1984)

Figure 4: Piaget´s learning model
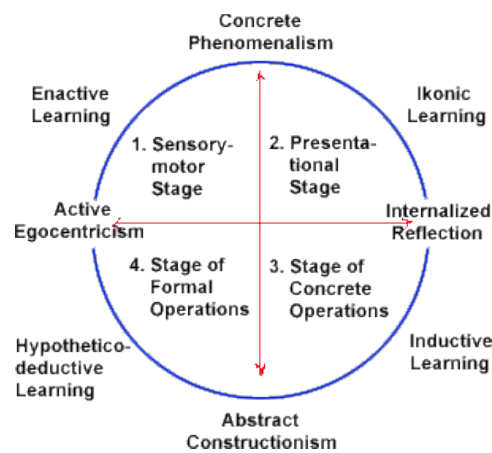
Source: Danielle´s blog, available online at: http://daniniven.blogspot.cz/2007/02/piagets-theory.html

3.1.3 Specification of the Term "Lifelong Learning"

We can define the term "Lifelong Learning" in number of ways, since it always depends on the angle and context. It is a broad term, which can refer to a process of ongoing learning, as well as it can be understood in the broader sense as some kind of systematic approach to education throughout the whole period of human life.

As referring to a learning process, we can define lifelong learning as "a process of acquiring and developing memory, whole behaviour including knowledge, skills, understanding, values and wisdom." (Hartl & Hartlová 2004, own translation) Lifelong learning is thus a process of forming a human himself throughout his / her whole lifetime. According to Fischer (2000), lifelong learning (unlike traditional learning concept) enables the integration of the most effective features of school, community, home and workplace learning.

When we take a look at the lifelong learning through a lens of broader perspective, we can see it as "the conceptual change in the approach to education and its organizational principles, where all the potential for learning is seen as a single interconnected unit, that facilitates diverse and numerous transitions between education and employment and that permits obtaining of the same qualifications and competence in various ways and at any time during one's lifetime." (Palán, 2006)

There has always been the need for lifelong learning in the society, and our view of lifelong learning has evolved over time. However, the purpose of it remains the same – to support individuals by providing them with opportunities to promote their personal and social autonomy through educational forms of development. (Edwards et al, 1998)

As it was already mentioned, lifelong learning is very complex area, and it can be divided in terms of occurrence into initial learning (which includes primary, secondary and tertiary school education), and further learning, which occurs after achievement of a certain level of education, or takes place after the first entrance of the learner into the employment relationship. Lifelong learning is the lifetime process, and thus it includes different forms of education, depending on the stage of our life – it includes formal education provided by formal educational institutions, non-formal education which can be provided by employers, NGO´s, or private educational organizations, informal learning, which refers to gaining knowledge or skills by our own experience. Sometimes, the fourth form of lifelong learning is being mentioned, and that is self-directed learning. All these stages and categories of lifelong learning are going to be discussed more into detail later in the thesis.

3.1.4 Basic Principles of Lifelong Learning

In this section, I would like to discuss some of basic principles or characteristics, which are shaping lifelong learning as one of the main pillars of our culture and society. Availability of educational opportunities is substantial to our society, as well as national health or welfare systems are, and nowadays it is being considered as the main source of national economy competitiveness. Therefore, lifelong learning is subject to planning on both national and international levels – it is being discussed by wide range of international policy organizations, like OECD, European Commission, or UNESCO. Over past decades, it has evolved into the integral part of today´s democratic society, and it plays important role in the quality of our lives. "Studying how to face the problems of economic growth, social inclusiveness and personal development will empower people to work out ways of improvement their own life and that of their community and hand it on better to their successors." (D. Aspin, J. Chapman, 2001) Lifelong learning should be perceived as more than adult education or training, it should be understood as a habit or mindset to be adopted by people. It is a necessity for us in the 21st century to adopt this approach, because it is the only way how to deal with a wide range of socio-economic problems, like economic growth, demographic issues, such as population ageing, or rapid technological change which is going on. Simply put – lifelong learning has become the way how to survive as a mankind, no matter how dramatically it can sound. Walters & Cooper (2010) claims: "Our planet will not survive, if it is not a learning planet, and sustainable development will be achieved by learning through life."

As already mentioned, lifelong learning is characterized by that it encompasses both formal and informal or non-formal types of education and training, while the formal type of learning, represented by school systems, is intended to provide young people with a platform for learning at the later stages of their life. That means it should provide them with ability and also the right motivation to learn later in life. Many sociological studies confirm the importance of first years of education at primary schools for the individual approach to further learning in later stages of life. According to Gorard et al., (1999), most of the factors that affected the probabilities of participation in adult life were present by the time that the child entered primary school for the first time.

However, the other side of lifelong learning is self-directed learning. Obviously, everyone engaged in the lifelong learning must have the desire to self-educate himself/herself. Nowadays, there is an emphasis on the need for self-directed learning – most common opinion is, that individuals should take at least partial responsibility for their own learning, in order to ensure their own employability and to maintain their labour-market value. (J. Field, 2010) People who are engaged in lifelong learning, can be described by few common characteristics: they continually seek opportunities to learn or to explore new knowledge and skills, they don´t just simply take in the information, but they analyse, synthesize and try to apply what they have learned. They never consider themselves as the ultimate experts in any field – instead, they try to socialize and to build social networks with those, who possess better knowledge than they have, and they are often teachers themselves.

Lifelong learning can be characterized as highly complex area for policy making. One of the main reasons for that is the range of different stakeholders involved. This fact makes lifelong learning quite complicated to coordinate, as there are many parties playing their part in the lifelong learning system – individuals, governments, international policy bodies, enterprises, but also trade unions and other NGO´s, while non-governmental organizations usually play the most important role in the whole lifelong learning system.

3.2 Motivation Behind Lifelong Learning

There are many factors potentially influencing an approach of individuals to learning through their life. The range of these factors includes economic-related ones, other reasons can be related to personal or social background of the individual. I would like to discuss these reasons or motivation factors further in the following section.

3.2.1 Trends in the Society

As it was already suggested earlier, the role of lifelong learning in our society has changed and evolved over time. Many books and other publications related to the topic of

lifelong learning refer to our society as to "learning society" or "knowledge society". This phenomenon shows well how important and integral role lifelong learning has these times.

However, we can say that our society is still at the beginning in terms of having clear vision of how exactly should the system of lifelong learning and our learning society work, and there is still plenty work to be done in this area. As Coffield (2000) puts it, "We do not possess even the outlines of an adequate social theory (or theories) of lifelong learning, which is a necessary precondition for the creation of a learning society."

Lifelong learning has somehow shifted from something with "to be considered" status towards something that is necessary in order to keep the quality of our lives. Lifelong learning has become more and more emphasized as a concept by international governmental bodies since 1970s. In 1996, European Commission officially declared this year to be the European Year of Lifelong Learning, which contributed even more to the popularization of lifelong learning in the society worldwide. Nowadays, lifelong learning is viewed as some kind of universal solution of society´s problems and a means that can bring a better future and ensure a continuous success. (Martin, 2011)

Lifelong learning is generally being discussed in two mainstream dimensions – the first one can be called humanistic, and it is focused on non-economic benefits of the lifelong learning. Through this lens, lifelong learning is viewed as a means for pursuing human development and growth of the democratic society. As already mentioned, it also helps us to cope with fast-pace changes in the modern world. According to Schon (1971), the change is inevitable yet the scope and pace of change can produce crises through uncertainty, which can significantly affect the functioning of society.

The second context of discussions regarding lifelong learning is obviously economically oriented, and it seems that this is the dominating one – lifelong learning is understood as a tool for ensuring economic competitiveness, and that is perhaps the main reason why lifelong learning has gained considerable attention in governmental organizations. Only well educated individual can effectively adapt to uncertainty and compete in an aggressive labour market, which is more and more globalized these days.

3.2.2 Reasons / Motivation for Lifelong Learning

In this part, I would like to discuss various reasons of individuals which make them actively participating in lifelong learning. Obviously, motivation plays an integral role in lifelong learning, because it keeps individuals committed to learning. Without desire to learn, we can´t expect individuals to reach their full potential. B. McCombs (1991) describes it well in one of her articles by stating, that "motivated person is a lifelong learner, and the lifelong learner is a motivated person."

Each individual is motivated in different ways, and his/her motivation is influenced by many factors, like feelings, thoughts or believes. Moreover, several studies confirm that these factors of motivation are changing over the lifespan. It means that reasons or purposes why individuals participate in the lifelong learning vary due to different stage of individual´s life. We have to take these stages into consideration, since for example adult unemployed individual has got totally different reasons to learn, than a retired adult – the unemployed one would be clearly motivated by economic/welfare factors, while the retired individual could be motivated by personal or social reasons, such as avoiding boredom and finding some activity to fill in the spare time of his/her. This example well shows that there is a wide range of factors affecting the individual´s motivation to participate in the lifelong learning, and I would like to discuss these factors more into detail in the following paragraph.

There is plenty of literature concerned with motivation towards lifelong learning, and based on the findings in this literature, we can say that the motivation to learning can be distinguished according to many criteria. Perhaps the most general division of motivation distinguish between intrinsic and extrinsic motivation. Intrinsic motivation is that one, which comes "from the inside" of individual, and he/she finds it pleasant or enjoyable. We can say that this kind of motivation makes individuals learn on a true voluntary basis. Such intrinsic motivation could be for example learning foreign language on your own, in order to be able to visit your relatives in foreign country and enjoy conversation with them. On the contrary, extrinsic motivation can be understood as a result of external influences, and it is usually the case, when individual participates in the learning, even though it is not his/her personal voluntarily made decision. An example of extrinsic motivation to learn could be some dramatic change in the national economic

climate, where deep industry restructuring takes place, resulting in the mass dismissal and the need for those dismissed workers to change their qualification in order to be employable in different sector of economy. (Rabušicová & Rabušic 2008)

Another one of the most common and generally used breakdown of motivational factors divides them into 3 categories, and these are usually called work/economic related factors, social factors and personal factors. The first group, work/economic factors, is clearly related to the need for work retention, professional advancement or increase of earning potential. Personal factors may refer to cognitive interests of individual and learning for the sake of learning itself, and social factors include elements motivating individuals by giving them sense of belonging to certain groups or communities.

Plenty of researches have been conducted in order to uncover a range of complex motivational factors in this area. We can say that´s a correct approach, given the fact that humans are rarely motivated only by a single motive. In fact, we are always motivated by a complex of different motives, which can evolve, change and often are interconnected. I would like to mention here some conclusions of the researches focused on complex motivational factors in the lifelong learning, published by Merriam and Caffarella (1991). In their book called "Learning in Adulthood", there are suggested six motivational factors based on the work of R. Boshier, B. Morstain and J. Smart. According to them, motivational factors can be divided into following categories:

- **Social Relationships**: make friends and meet others;
- **External Expectations**: complying with the wishes of someone else with authority;
- **Social Welfare**: desire to serve others and/or community;
- **Professional Advancement**: desire for job enhancement and professional enhancement;
- **Escape/Stimulation**: to alleviate boredom and/or to escape home or work routine;
- **Cognitive Interest:** learning for the sake of learning itself.

All of these categories are mentioned more or less by almost every author concerned with given topic, and we can say that these reasons for learning are widely received and acknowledged across the literature.

3.2.3 Possible Motivational and Other Barriers/Problems

Barriers associated with lifelong learning are becoming important topic nowadays, since they are seen as a critical factor influencing the success of implementations of lifelong learning strategies. Many believe, that identifying and overcoming these barriers is the key to success. "In order to stimulate Lifelong Learning, one has to analyze barriers to it and to develop measures to overcome these barriers where possible." (Koper & Tattersall, 2004) Also, identifying and analyzing the types of barriers enables us to choose the most suitable methods of training or forms of education, depending on particular individual´s situation.

Motivational barriers to lifelong learning belong to the most widespread ones. However, there are also other types of barriers, which are not depending on individuals. From this general point of view, we can divide the barriers into those which can be influenced by individual, like their "drive" to learning, and those which cannot be manipulated by individual, for instance their financial possibilities. This division of barriers is rather general, so I would like to discuss other approaches to the barriers classification in the following lines.

Many studies on non-participation in lifelong learning have been done during past decades. However, there is one outstanding among them – the study made by K. P. Cross in 1981. Cross (1981) proposed the framework classifying three sets of barriers to participation in the lifelong learning. These categories are as follows:

- **Dispositional barriers** are based on personal attitudes of individuals. They are often related to attitudes and self-perception as an adult learner
- **Institutional barriers** (often called structural barriers) – these are barriers resulting from the way institutions design, deliver and manage learning activities, often related to the availability of information about learning opportunities. We can say institutional barriers are those practices of institutions, which in a way discourage adults from taking part in further education by selecting inappropriate settings of lifelong learning systems.
- **Situational barriers** (also known as "life factors") – these barriers arise from the adult´s situation at a given point of time. These are external factors influencing individual, which

are out of his/her control. These barriers are represented e.g. by family and work related circumstances of individual.

Despite the fact that above mentioned framework is currently over three decades old, it is still considered and widely accepted as a leading study of barriers to the participation in lifelong learning. It is due to the fact, that all these barriers are still present and have not changed much. Sargant (2000) claims, that "there has been no fundamental work on barriers to access which causes researches to move from the framework identified by K. P. Cross."

As noted, the framework proposed by Cross still remains the main theory concerning barriers to participation in adult learning. Both situational and institutional barriers can be seen as structural in the nature, while dispositional barriers are clearly individual. However, this study has been extended by Potter & Alderman (1992). They expanded the original framework by adding the fourth set of barriers – called "Academic factors." These factors are affecting individuals during learning activities. They occur because while having the necessary entry qualification, the level of skill or knowledge can then decline in time. These academic factors however didn´t receive so much attention as the original framework.

Another addition to Cross framework was made by Rubenson and Desjardins quite recently, in 2009. They developed study called "Bounded Agency". According to this model, individual participation is affected by structural and institutional factors, as originally outlined by Cross, but in their study they propose that targeted policy measures are influencing participation as well. In their study, they suggest that e.g. different types of welfare regimes have a different impact on participatory barriers, especially institutional and structural ones. (Rubenson, Desjardins 2009)

3.3 Concept of Lifelong Learning

As already noted, lifelong learning is very broad area, and despite it was first articulated decades ago, there is still plenty of work to be done in terms of its conceptualization. There have been already formulated several approaches to the conceptualization of lifelong learning (according to Aspin and Chapman, 2001):

- **Lifelong learning for employability and national economic growth** – this is perhaps the most obvious context of lifelong learning – economic related issues around us. We can see it clearly every day in real world surrounding us. Phenomena such as unemployment, stagnation of national GDP, question of national competitiveness – these are just some of the issues which immediately come to my mind in relation to lifelong learning, and these are the areas which are supposed to be resolved by development and promotion of lifelong learning systems and programmes.

- **Lifelong learning for personal growth –** while economical justification of the lifelong learning is primarily emphasized and valued by both national and international governmental institutions as the main element or dimension of lifelong learning, at the individual level it may be seen in a different way. Many individuals see lifelong learning as opportunities to become personally better, to expand their intellectual horizons or just to get new enriching experiences.

- **Lifelong learning as a pre-requisite for participation in socially inclusive and just democracy** – lifelong learning is also viewed as a means of promoting equity and social inclusion (although it is again associated with employability) and a way to develop more democratic society. To achieve these goals, the availability of educational opportunities is crucial, since individuals can only develop if they have possibility to participate in these educational events/programmes/communities etc. Therefore, national governments around the world try their best to find solutions how to provide public society with these opportunities. However, since the provision of education is not cost-free (as other public goods, such as welfare, health system etc.), it is always a matter of trade-off and involvement of other stakeholders, such as private or non-governmental organizations.

Hence lifelong learning is very complex area for policy, it is subject to policy making at both national and international levels, in order to shape lifelong learning on the global

scale. Intergovernmental bodies try to come up with suitable lifelong learning strategies and to successfully implement them, which seem to be even greater challenge. I would like to discuss basic legislative framework, policy making processes and lifelong learning strategies in the following sections.

3.3.1 Basic Documents Shaping the Conception of Lifelong Learning

As already noted, the topic of lifelong learning became increasingly popular as a subject to policy making at the highest level in 60s and 70s of 20th century. In those times, first concepts of lifelong learning came through as results of effort made by organizations of the likes of OECD, UNSECO or Council of Europe. These concepts were focused primarily on social and cultural goals, whereas economically oriented goals were given just a little attention. Among influential documents published within these decades, we can mention "Lifelong Education" published by UNESCO in 1970 – document, which established the ground for further lifelong learning strategies development. Two years later the same organization published "Learning to be", which is well known document including several recommendations for adult learning area.

However, lifelong learning strategies as we know them nowadays began to form little bit later, in the 90s of 20th century. The major changes occurred in priorities and goals of these strategies, as there has been a significant shift in terms of economic and political climate. Based on this shift, the goals have been changed from now on, and they are focused on more real issues of the global world, such as development of human resources in relation to economic needs and competitiveness.

To discuss the most substantial documents forming lifelong learning conception from 1990s and further, we can mention declaration adopted on World Conference on EFA (Education For All) held in Jomtien in 1990. The main outcome of this conference was the message that universal access to learning opportunities is the necessary pre-condition for lifelong learning promotion, and the participants of this conference committed themselves to strengthen their partnerships by the year 2000. (World Conference on EFA, Jomtien,

1990, UNESCO) Another important step in conceptualizing lifelong learning was made in Paris in 1996. There was a meeting held by OECD, which was attended by ministers of education of all member countries, and based on this meeting, a consensus was made across all of these countries regarding the strategy of lifelong learning. These procedures agreed by all ministers are published in the book "Lifelong Learning for All". Moreover, year 1996 was officially declared as European Day of Lifelong Learning. In the same year, the "White Paper on Education and Training" was published by EU – this document reveals factors influencing education in Europe, and outlines the changes and actions needed towards establishment of so-called "learning society", which has been already discussed earlier in the thesis.

3.3.2 Legislative Framework of Lifelong Learning

The main intention and goals of the development of an adult learning are included in several documents at both EU and Czech nation-wide level. I would like to discuss them more in following sections.

3.3.2.1 Legislative Documents in the EU

We can consider Lisbon Strategy, also known as "Lisbon Process", adopted in 2000, as one of the most significant legislative documents concerning adult learning strategies. European Commission itself views it as "a decisive moment for direction of policy and action in the European Union." The document is primarily the action and development plan for the European economy. However, the lifelong learning plays an integral part throughout the whole document. According to Lisbon European Council 23 and 24 March Presidency Conclusions (2000), the main aim is to make the EU "the most competitive and dynamic knowledge-based economy in the world capable of the sustainable economic growth with more and better jobs and greater social cohesion." (Presidency Conclusions, Lisbon European Council, 2000) This target was supposed to be achieved by 2010. However, we can say that this was too much to be achieved in such a short span of one decade, as we can hardly see Europe as a leading knowledge-based

economy these days. Based on this document, in 2002 ministers of member countries responsible for education (including Czech Minister of Education) adopted policies and goals in the area of education and professional training.

Moreover, the Lisbon Process lead to formation of the European Commission Staff Working Paper called "A Memorandum on Lifelong Learning" in 2003. It is document based on the goals declared at Lisbon Process, and it includes 6 key messages:

- **New basic Skills for all** – to provide possibility of gaining and renewing the skills needed for sustained participation in the knowledge society;
- **More investment in human resources** – to raise level of investment in human resources;
- **Innovation in teaching and learning** – to develop new effective teaching and learning methods;
- **Valuing learning** – to improve the ways in which learning participation and outcomes are understood and appreciated;
- **Re-thinking guidance and counselling** – to make sure that everyone can easily access the information and advice about learning opportunities;
- **Bringing learning closer to home** – to provide lifelong learning opportunities as close to learners as possible.

These key messages are intended to offer a structured framework for debate over putting lifelong learning into practice, and they are based on experience gathering during various community programmes at the European level.

3.3.2.2 Legislative Documents in the Czech Republic

As noted, Czech representatives were part of Lisbon Process, as the Czech Republic already was a member country of the European Union by that time. Therefore, our lifelong learning policies are in compliance with the European strategic goals, and we adopted and integrated these goals into our own strategic documents. Legislative framework in the Czech Republic is specific in terms of not having a special law dedicated just to the adult learning. Instead, this area is being legislated in various legislative acts, which are not entirely dedicated to lifelong learning, but their main subject is different, so lifelong learning plays only marginal role in them. (Vychová, 2008) Policy making in the area of adult learning, and the learning in general, is responsibility of the Czech Ministry of

Education. The majority of legislative actions made in relation to adult learning in the Czech Republic is concerned with the formulation of strategic directions and goals, rather than with the specific steps to be taken in this area. Following, I would like to mention chronologically some of the most important and significant strategic documents in the Czech Republic.

National Programme for Development of Education in Czech Republic − this document is perhaps better known as so-called "White Book" or "White Paper". This is the document was published in 2001, and it is based on the Lisbon summit. The White Paper includes formulation of the basic strategic intentions and goals, which have been agreed in Lisbon by members of the EU. The purpose of this document is to provide our domestic legislation with a general framework for policy making in the area of adult learning. The Czech government itself describes the White Paper as "a fundamental strategic document for the whole education system of the Czech Republic in the coming years." (National Strategic Reference Framework of the Czech Republic, 2007)

Strategy of the Human Resources Development in the Czech Republic is a document published in 2003, viewing adult learning as a crucial area for employability of people throughout their lifespan. This document provides an insight into changing climate of global economy and interconnected labour markets with the purpose of raising awareness of the need for putting an emphasis on a role of the workplace learning and desirable changes to be done in the systems of education.

The Long-term Plan of Education and Czech Education System Development published in 2005 is a strategic document designed to make adult learning strategy more clear and to outline some more detailed strategic steps for the next couple of years, by stating basic principles of making lifelong learning in the Czech Republic a reality. It includes the analysis of the situation of adult learning in the Czech Republic, as well as set of recommended approaches to be taken towards adult learning policy making processes. This strategic document has evolved over years and nowadays the most recent version of this document is for the period of 2011 – 2015. The main focus of the latest version is to unify the education policies of all 14 Czech NUTS III regions and the Czech Republic as a whole in order to increase our overall quality and efficiency of education and the competitiveness.

National Strategic Reference Framework for the Czech Republic 2007 - 2013 is a document published by the Czech Ministry of Education in 2007, and it is supposed to be a very basic program document for years 2007 – 2015. It is essential for further strategy formulating and policy making in the area of lifelong learning. The purpose of this document is to gradually formulate and introduce strategic goals on a more detailed level, which can be linked to finance from European funds for the planned period of 2007 – 2013. Similarly to the document described above, it includes an analysis of the lifelong learning situation in the Czech Republic, as well as an analysis of both Czech and European documents related to this area. This document is actually a reaction of the Czech government to an appeal made by European Union in 2004 in order to urge member countries to perform much needed reforms in their respective education systems and to formulate their own lifelong learning strategies with the purpose of underpinning individualized strategic directions and goals. (National Strategic Reference Framework of the Czech Republic, 2007).

3.3.3 Implementation of Lifelong Learning Strategies

As suggested earlier, legislative and conceptual strategic documents concerned with the lifelong learning create necessary presumptions for successful formulation lifelong learning strategies and policy-making in this area. However, formulation of strategy and setting of strategic goals is just the beginning of "making lifelong learning a reality". What seems to be even more difficult and important, is successful implementation of these lifelong learning strategies. You can have the best concept of lifelong learning strategy ever, but it is wasteful unless you know how to make it work effectively. Therefore, governments and other policy-making institutions responsible for lifelong learning development should pay at least the same attention to implementation matters as to formulation and shaping of strategies and goals.

To make sure that European countries take a common approach to implementation efforts, the European Commission support them by promotion of the Strategic Framework for European Cooperation in Education and Training, called "ET 2020". As the implementation of lifelong learning strategies still remains a great challenge to many

member countries, there is a report created on demand of European Commission by external consulting company (GHK Consulting), which identifies six broad factors and good practices critical for successful implementation of these strategies:

- **Tackling the interests of relevant stakeholders through cooperation and consensus building** – lifelong learning is very broad area with many different stakeholders, who have different interests. Therefore, it is essential to support their cooperation and build consensus among them. Developing different forms of partnerships proved to be successful practice in this matter.

- **Designing and implementing adequate financing mechanisms** – financing is absolute bottom line of any project, and lifelong learning area is not an exception. The issues related to financing are not only insufficient funds, but it is mainly about finding the right mix of public, private and individual contributions to the system. One of the major issues is also ensuring sustainable financing, which is in a way related to the appropriate financing mix setting.

- **Developing adequate infrastructure of lifelong learning and building the capacity of education and training institutions** – central idea of lifelong learning concept is to provide as many learning opportunities to as many individuals as possible. To make this happen, countries have to develop and maintain reasonable lifelong learning infrastructure – not just in urban locations, but especially in rural areas, where it tends to be more difficult and costly. It can be done through financial support of non-profit organizations, communities or other stakeholders by government and/or local authorities, or by development of aforementioned partnerships with other institutions.

- **Attracting people to learning activities** – people who are most involved in different forms of lifelong learning tend to be those who are already well educated. Therefore, attention has to be paid especially to those individuals who are the least likely to take part in these learning activities. This broad factor is significantly linked with the previous one, since it is a lot about bringing the learning activities closer to potential learners, in order to raise their awareness and catch their interest. To ensure that, it is necessary to support these efforts by developing of adequate information and guidance infrastructure.

- **Promoting the adapted design of learning practices** – learners often find the learning programme / session unattractive, and that is the reason they do not take part in such activities. Therefore, stakeholders providing learning opportunities need to make sure, that

the learning context, pedagogic methods and learning content are fully in line with the learner´s expectations. To ensure this, it is necessary to design learning approaches in accordance with continuously improving scientific findings about the process of acquiring knowledge.

- **Guaranteeing the existence of feedback loops for continuous improvement** – in general, the existence of feedback loops is critically important in almost every policy-making process. Within lifelong learning area, it is particularly important because of decentralized implementation process, local character of problem solutions, and possibility that different stakeholders may interpret policies according to their own understanding and interests. Also, it is important to realize "the lessons learned" from previously made policies, which should accommodate constant improvements in policy-making processes. (D. Ulicna et al., 2010)

3.3.4 Different Forms of (Lifelong) Learning

Adult learning (or lifelong learning) can be defined as "a single interconnected unit, that facilitates diverse and numerous transitions between education and employment and that permits obtaining of the same qualification and competence in various ways and at any point of time during one´s lifetime." (Palán, 2006) The word "interconnected" is very important here, since the lifelong learning is not about separated learning opportunities. Instead, it includes several different forms of learning, which are interdependent and are forming lifelong learning concept together. These different forms of the lifelong learning will be discussed further in the thesis. Before that, it will be relevant to mention, that generally we can divide lifelong learning into initial and further education. Initial education is basically the participation in the official national education system, including basic education (basic schools), secondary education (high schools) and tertiary education (universities and higher education institutions). Essentially, initial education occurs at young age, and can be terminated after finishing obligatory education, if one decides not to participate in a national education system anymore. Further education instead takes part after completing certain level of education followed by entering a labour market. This breakdown of education into initial and further is the most general one. The further division of adult learning is going to be discussed in the following sections.

3.3.4.1 Formal Learning

According to the National Strategic Reference Framework of the Czech Republic (2007), formal learning is a kind of learning, which "is performed in educational institutions, usually schools, and its functions, targets, contents, organizational forms and methods of assessment are defined by legal regulations." In the Czech Republic, formal learning takes place in the system of primary, secondary and tertiary schools, including both public and private schools. This division is clearly shown in the following scheme:

Figure 5: Educational System of the Czech Republic
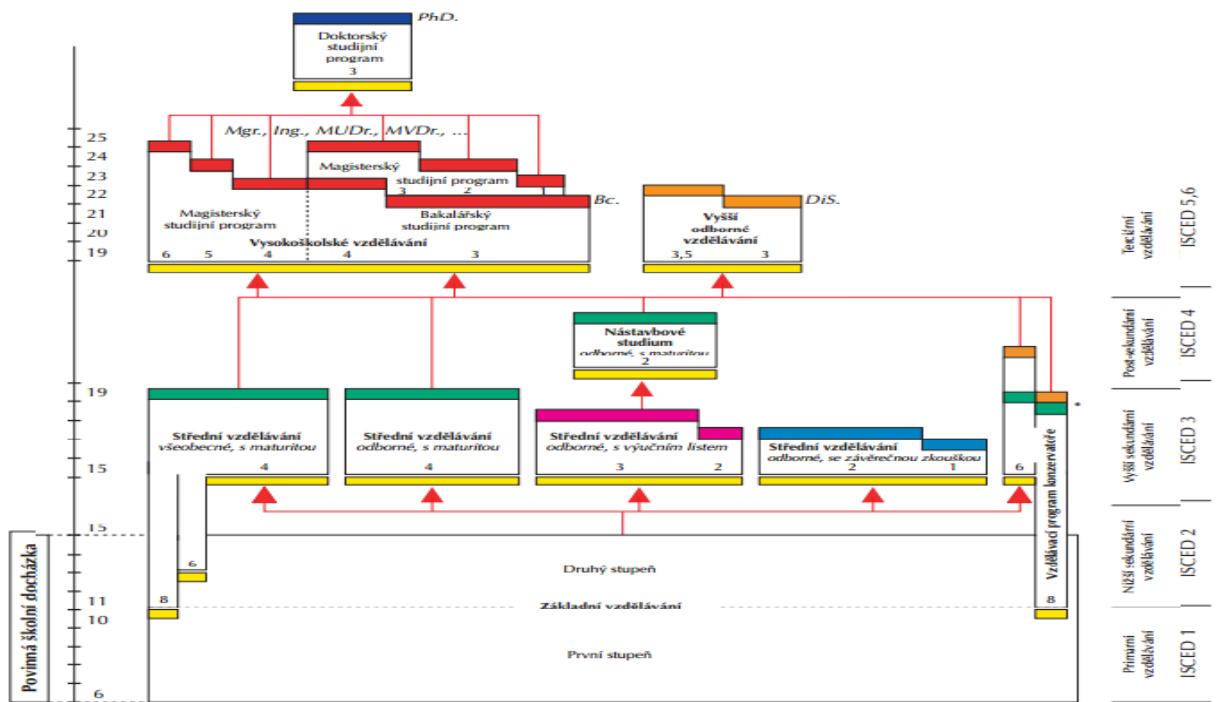
Source: Educational System of the Czech Republic (leaflet), 2nd edition, ISBN 80-86728-29-3

The administration of the whole education system in the Czech Republic is the responsibility of the Czech Ministry of Education, as well as the control function in the form of supervision being conducted by the Czech School Inspection body, and in case of supervision of higher education programmes and universities, overseeing function is a responsibility of special accreditation committees.

3.3.4.2 Informal Learning

Contrary to the formal learning, we can say that informal learning is exactly the opposite. Whilst formal learning is always organized, structured and with predetermined objectives, informal learning occurs more or less by random chance. Also, in the case of the former one, learning is always intentional from the learner´s point of view, whereas informal learning is not the matter of any intention. These differences between formal and informal learning can be seen on the following diagram:

Figure 6: Formal vs. Informal Learning:

Source: http://marciaconner.com/resources/informal-learning/#research
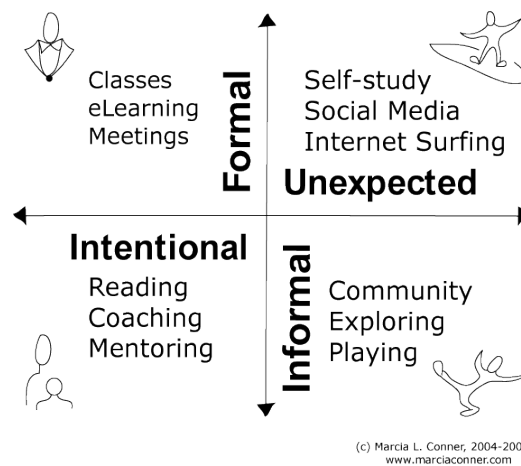
Informal learning is often called "learning by experience", because it occurs in our everyday lives, through different situations at home, at the workplace or in a public space. As P. Werquin (2008) puts it, "informal learning results from daily life and takes place everywhere, all the time, often without people realizing it. It results from experience, does not have learning objectives and is not intentional." Many researchers are convinced, that experience is the most influential form of learning, with bigger impact than formal learning. "Learning is usually synonymous with the formal, structured processes that involve teachers, lecturers or trainers. Yet it is experience that is by far the most influential teacher that any of us will have, from the very first moment we are born." (L. Davies, 2008) It is due to a fact, that learning from experience is significantly different to the formal learning – while learning from experience, everyone can decide what lesson he/she

have learned from particular experience, and it depends entirely on him/her how to use these lessons further. Also, I would like to add something relevant to this topic from my own life – from what I heard, majority of my friends who recently made successful transition from their studies to regular working life, they told me that those many years spent by formal studies cannot match even the first couple of months at their workplace.

Informal learning is the most important source of information and knowledge in terms of workplace education – there are some researches, such as the "Formal and Informal Training: Evidence from the NLSY" conducted in 1998 by the Bureau of Labour Statistics in the USA, which prove that employees learn over 70% of what they know about their jobs informally, e.g. by interactions with their peer employees or managers. I would like to discuss workplace learning as a standalone topic later on in the thesis.

3.3.4.3 Non-formal Learning

Non-formal learning is the form of learning, where there is perhaps the least consensus about how to define this concept. At the international level, there is still plenty of disagreement regarding definition and recognition of the term "non-formal learning". Definitions of what is non-formal learning may vary in different countries, and moreover, they constantly evolve over time. For example, in northern European countries, a notion "non-formal learning" is often replaced by terms like "community learning" or "social pedagogy". Generally, we can say that non-formal learning is something between formal and informal learning, carrying some of the characteristics from both of them.

Majority of authors seem to agree that non-formal learning takes place outside the official schooling systems, is more or less organized, and can be based on predetermined learning objectives. According to M. Tight (1996), non-formal learning is about "acknowledging the importance of education, learning and training which takes place outside recognized educational institutions."One of the most cited and widely accepted definitions of non-formal learning, which was also adopted and often used by UNESCO in its documents, is included in the work of Coombs, Prosser and Ahmed – according to them non-formal learning is "any organized educational activity outside the established formal

system, that is intended to serve identifiable learning clienteles and learning objectives." (Coombs et al, 1973)

Non-formal learning has become increasingly important part of lifelong learning strategies, since many thinkers and writers in 1960s and 1970s recognized an urgency of the need for recognition and support of this form of education. It was due to a fact, that many realized too slow adaptation of formal education systems to fast-paced socio-economic changes around them. (P. Coombs, 1985) High level of bureaucracy in formal educational systems simply prevents them from being able to respond promptly to these changes – that is the big barrier which still remains in the national education systems even these days. On the other hand, this is (besides the other reasons) why non-formal learning plays important role in the whole lifelong learning concept. The significant advantage of non-formal learning is that such a form of learning is focused on a specific topic, which is up-to-date, and it may occur from the initiative of the individual, but still can be conducted in an organized and structured manner, just as formal learning.

As already suggested above, non-formal learning fills the huge gap between formal and informal learning. It is so vital within the whole concept of lifelong learning due to its high flexibility - non-formal learning may take many different forms, can be provided by many different stakeholders and may occur in many different ways. Non-formal education can be provided by employers, non-governmental organizations, private educational institutions, government agencies, or even by schools. The success of non-formal learning programmes or events depends (as in the case of formal learning) on the quality of teachers, trainers or mentors. These skilled professionals however, cost certain amount of financial resources, and therefore they may or may not be provided for free. That is why non-formal learning should be subject to policy making at both national and international levels, in order to establish appropriate system with sufficient range of non-formal learning opportunities.

3.3.4.4 Self-directed Learning

As the last piece of puzzle to complete an overview of the lifelong learning concept, I would like to discuss self-directed learning. As the term "self-directed" suggests,

it is an activity where individuals take initiative and responsibility for learning on their own. However, defining the self-directed learning is not that simple as it may seem at first glance. As in the previous case of non-formal learning, we can find plenty of different definitions in the literature. I would like to mention one definition, which is in my opinion complex enough and encompasses all the aspects of self-directed learning. It is definition by M. Knowles (1975), who describes self-directed learning as "a process by which individuals take initiative, with or without the assistance of others, in diagnosing their learning needs, formulating learning goals, identify human and material resources for learning, choosing and implement appropriate learning strategies, and evaluating learning outcomes."

Self-directed learning has a long history and exists from the ancient era, where it was the important source of knowledge for the likes of Socrates, Aristoteles and other well known ancient Greek philosophers. Self-studying has always been part of our lives, and always will be – the basic idea is still the same, just the means of learning are still changing and evolving. Today, in the world of ICT technologies, we can say that self-studying has never been so simple as nowadays, thanks to immense sources of information available to us. We always knew that self-directed learning is part of lifelong learning. However, it is mainly during the past few decades that it has become a standalone research field.

As self-directed learning became subject to research, many concepts and approaches to it have emerged. There has been confusion about the meaning of the notion "self-directed learning" itself – many similar terms like "self-planned learning", "self-teaching", "independent learning" or "open learning" have been used interchangeably or in similar ways as "self directed learning". (Hiemstra, 1994) Despite there is no real coherent theory available for self-directed learning, there are identified certain common tenets which seem to be widely accepted by majority of researchers and authors:

- Self-directed learners are responsible for owning and managing of their own learning programme or process. Therefore, self-directed learning integrates self-management and self monitoring
- Motivation of learners plays a crucial role in initiating and maintaining learner´s efforts. Motivation to learning has been already discussed earlier in the thesis

- In self-directed learning, a control is shifted from teachers to learners, which makes learner independent in terms of setting goals, learning methods and approach to learning
- Thanks to self-directed learning, learners develop domain-specific knowledge, as well as ability to transfer conceptual knowledge into new situations (Bolhuis, 1996; Temple & Rodero, 1995; Garrison, 1997)

Although formal learning still remains the most valued form of learning by vast majority of society around the world, self-directed learning has become increasingly recognized as a relevant source of knowledge over the course of last decades. Disciplined and successful adult learners are showing that self-directed learning efforts can match formal or non-formal learning programmes in terms of learning outcomes quality. We can perceive this fact as an evidence of that if one really wants to acquire certain knowledge, there exist also other alternative ways than to participate in learning programmes led by skilled teaching professionals.

If the self-directed learning is undertaken correctly and responsibly, it provides many advantages to learners in comparison to other forms of learning. This form of learning enables learners to focus only on their desired subject of learning. That means, for instance, they don't have to attend 3 day intensive learning course in order to gain 3 hours of learning on the topic they actually need. Self-directed learning is very cost effective – all you need is the access to information, whether in form of internet connection or access to library. During self-studies, learners can develop their own learning systems and methods which they feel suit them the best, and they can apply these patterns in various situations in their further life. Last but not least, there are observations suggesting that successfully developed self-directed learners are more motivated and persistent, self-disciplined, independent, self-confident and goal oriented. (B. Taylor, 1995)

It is clear, that development of modern ICT technologies has got a big influence on increasing importance of self-directed learning over the past decades. Self-directed learning is integral part of lifelong learning as a whole, and we can expect its necessity to be even greater in the future, given constantly increasing volume of information around us in the modern world of technologies.

3.4 Workplace Learning & Employee Development

Since practical part of this diploma thesis is focused on learning processes within professional organization, I would like to dedicate one section of theoretical part to this topic. We can say that after completion of educational programmes in formal schooling system and transition to the working stage of life, it is a workplace that tends to be at least one of the main sources of knowledge and both professional and personal development, if not the most important one. Therefore, workplace learning represents a substantial part of the lifelong learning as a whole.

In recent years, workplace learning as an autonomous area has gained considerable attention among wide range of stakeholders, involving researchers, policy makers and of course employers, as there seems to be consensus that human capital is the only source of potential competitive advantage in this modern world of so-called knowledge society or knowledge economy. Nature of work has changed, and it is forcing both organizations and working individuals to adopt different working patterns, working roles rotation etc. The work is becoming more complex than ever, and organizations need to be able to adapt quickly in this age of uncertainty. Having said that, there is clear intention of every employer to have workforce as skilled as possible, and obviously learning, training, couching or whatever form of acquiring skills or knowledge at the workplace plays the important role in achieving their long-term success and more importantly, their long-term sustainability. "The way an entire organization learns can be instrumental in its innovation and profitability." (K. Vaughan, 2008)

Therefore, employers in recent years have been concentrating on the development of their employees, in order to develop high-performance workplace, or more importantly, high-performance culture. This phenomenon is universally beneficial for the whole society – it has got benefits for employees (professional and personal development), employers (knowledge and skill of employees as a competitive advantage, increased performance of organization) and even state (enhanced national economic competitiveness). Following I would like to discuss the definition of "workplace learning" and what this area encompasses.

3.4.1 Workplace Learning Definition

The term "workplace learning" has gained a wide variety of meanings over time, and has no single universally followed definition of what it means. In general, we can describe the workplace learning in analogy to the definition of "learning" discussed earlier in the thesis as "any educational activity organized by given company/organization, including both in-house educational/training activities and off-site training provided by external companies. It is a systematic process of changing the working behaviours, the levels of knowledge and skills." (H. Bartoňková, 2010)   The important part of the workplace learning is also the informal learning, which is represented by on-the-job learning through working experience or observation of the patterns of behaviour and actions of colleagues in the workplace. Interdisciplinarity of the scientific approach to the workplace learning often results in the situation of writers across different disciplines using the same term for different phenomena, or using different terms to describe the same phenomenon. As Boud and Garrick (1999) suggest, there is an issue of competing interests and the workplace learning can be approached from two quite different angles. "The first is the development of the enterprise through contributing to production, effectiveness and innovation; the second is the development of individuals through contributing to knowledge, skills and the capacity to further their own learning both as employees and citizens in the wider society." This distinction of individual and organizational dimension of workplace learning and development is widely acknowledged in the relevant literature, since organization learns through its individual members. However, organizational learning is much more complex phenomenon than just magnification of individual learning, despite the meaning of learning as activity remains the same at both individual and organizational level, although it is characterized by different factors, which will be discussed in the following paragraph.

As suggested, the workplace learning is understood not only as a learning activity itself, but it is rather a complex phenomenon which can be broken down in more detail into 3 levels – individual level, team level and organization level of the workplace learning. These dimensions are shown in the following figure and will be further discussed into detail.

Figure 7: Key Aspects of Workplace Learning
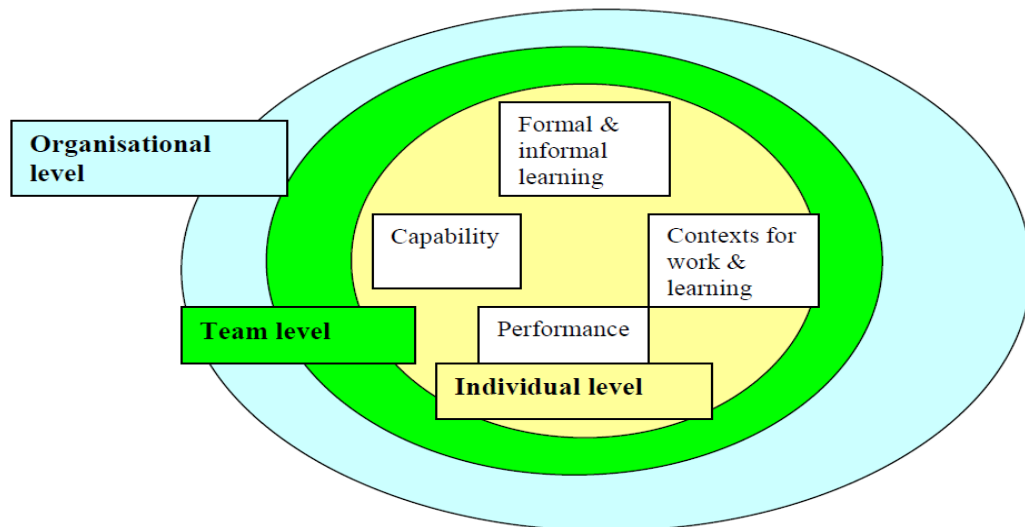
3.4.1.1 Individual Level of Workplace Learning

As it is shown in the figure 7, individual workplace learning comprises a set of aspects, which influence the efficiency of learning process and the learning outcomes. These aspects are highly interrelated and greatly affect each other. These aspects include following:

- Capabilities – these include individual´s knowledge, skills, personal attributes, and experience relevant for performing of given job; capabilities are affected by the ability of learning and vice versa
- Formal & informal learning – of course, the workplace learning is greatly influenced by the quality and effectiveness of formal and informal learning processes at the workplace
- Context for work & learning – individual workplace learning also depends on the given job position and its wider context within a company, as well as a company culture and overall climate of social interactions
- Performance – work performance is heavily interrelated with each of the previous aspects; it includes the self-perception as well as how others perceive the individual performance (M. Eraut, W. Hirsch, 2007)

3.4.1.2 Team Level of Workplace Learning

Since an individual learning can be defined as a change in the individual´s knowledge, skills or capabilities, we can also similarly define team learning as a change in these attributes of a whole group, but it is not that simple. Firstly, let us take a look at the definition of "team". Generally, we can say that the team is a group of two or more people working together in order to achieve their joint goal.

More in-depth definition is provided by Salas et al. (1992) who describe a team as "a distinguishable set of two or more people who interact, dynamically, independently and adaptively toward a common and valued goal/objective/mission, who have each been assigned specific roles or functions to perform, and who have a limited lifespan of membership." Majority of people work within some kind of working groups/teams at their workplace, and this group/team itself greatly influences the context of learning. In order to be able to successfully accomplish given tasks, a team itself must meet a certain set of requirements. Apart from the individual qualities, members of such a team have to learn especially some principles of efficient communication, co-ordination of activities and sharing their knowledge with each other – these aspects can be learnt only trough working experience in particular team. Of course, there needs to be adequate climate of mutual trust and encouragement to sharing knowledge and practices in a team. Without these capabilities, a team would be underperforming, and that is not desirable – a combined performance of good working team should be always better than a sum of individual performances of all its members.

3.4.1.3 Organizational Level of Workplace Learning

This highest level of workplace learning is more of organizational behaviour related. The term "organizational learning" was coined during 1970s to describe the development and continual changes in the behaviour of the organization as a whole, in relation to both internal and external environment. It is concerned with corporate identity, "the way we do things here". Organizational learning is characterized by Dale, 1994 as "an intricate three-staged process consisting of knowledge acquisition, dissemination and shared implementation." It includes the learning of company´s values, culture and overall

approaches to both internal and external environment of such organization. The organizational learning usually leads to establishment of "common sense" in given organization and develops the climate where members of such organization know exactly what is expected and desirable, and what is not. The company´s level of organizational learning also affects the extent to which a company is able to explore and adopt innovative practices / approaches.

3.4.2 Workplace Learning in Relation to Lifelong Learning

As already mentioned, lifelong learning is a very broad concept, encompassing various forms of learning, and learning as an activity is no longer being linked just with the formal educational school systems – there is now strong recognition among society of workplace being another environment facilitating the opportunities to learn.   However, the workplace learning is still often separated and not included in the discussions about lifelong learning, although there seems to be stronger linkage than ever before, thanks to the growth of inter-disciplinary projects, which bring together researchers from different fields like education, human resources or labour process. (L. Unwin, 2009)

We can say that workplace learning is the important part of the lifelong learning, and as such it should not be separated. Instead, it should be more integrated with other means of lifelong learning. However, it seems problematic to integrate and embed workplace leaning activities into the policies, because of its specific nature – there exists a lack of recognition of learning that takes place in the workplace as "learning", since it can take a number of forms, and often times it has a form of gaining experience while performing job tasks, so it is difficult to define and measure the outcomes of such learning, or amount of acquired meaningful knowledge applicable at the workplace.

Workplace learning forms an integral part of the lifelong learning because of the fact that the big part of learning activities within workplace learning is assigned to informal learning, which is generally recognized as most influential type of learning by many learners. There are increasing efforts to create a stronger linkage between the formal learning within school systems and the workplace learning, in order to facilitate the conditions for a smooth transition between the end of schooling period of life and the

beginning of professional career – the goal should be to bring together the needs of industry and schooling, which would promote further the idea of lifelong learning.

However, connecting the two worlds of school and workplace in terms of learning is not a simple task. The problem with linking of academic and vocational learning is that "each is typically set in opposition to each other in the most commonly understood educational contexts." (K. Waughan, 2008) This means that formal school knowledge is based more on theoretical, discipline-based way of thinking, whereas vocational knowledge gained in the workplace is based rather on practical, experiential principles.

3.4.3 Approach to Workplace Learning and Workforce Development

Means of learning and development of employees at the workplace always varies, since companies tend to have their own models of workplace learning and development, based on many factors. Especially in global companies, the workforce development is taken very seriously and the skills and knowledge of individuals are subjects to continual process of improvement and evaluation. Development of workforce is not viewed as a separate area in these companies – in fact it is heavily interconnected with performance review, reward management and other areas of human resource management. Training of workforce is nowadays being considered as an investment of company´s resources with the purpose of company goals accomplishment. Many researches and studies in this field have proved that investments into training and development of employees can directly contribute to the productivity and efficiency of the business, which in turn affects its profitability. The great example of such a research is that of Collins & Holton (2004) – they have evaluated 83 studies between the years 1982 – 2001on this topic, and came to the conclusion that investing to the training and development of workforce has got a direct impact on overall business performance.

Designing of the workforce learning and development system is very complex and long-term process. It has to reflect the overall strategic direction of the company and its business needs. Of course, it also has to take various factors into account – every industry has its specifics, and even within the industry businesses should have perfectly suitable system of workforce development which will help them to pursue their strategic goals. The

first step of setting up the learning and development system is to analyse and identify the training needs at all organizational levels – from individual level to team and organizational levels. At this stage, it is very important to identify the key skills, responsibilities and competencies and assign these attributes to correct individuals, teams or departments.

Then the next step is to design appropriate training / development programs and learning materials suitable for the given situation. There are many factors influencing the design of these programs, such as budget constraints, the complexity of needed knowledge or skills needed, or various specifics of given organization. The important aspect of training and development program is also the way of its delivery. You can have perfectly designed training programs with precisely prepared learning materials, but if you cannot effectively deliver it to the right stakeholders in simple and intuitive manner, the results will not be as satisfactory as they could possibly be. In other words, the company needs to decide on the appropriate media for delivery of the training. Today there are plenty of possibilities, from the traditional ways of training delivery by the trainers or by e-learning, to more innovative ways which are usually computer-based, interactive and make a use of the most up-to-date information technologies. Once the complex system of training and development of employees is deployed, it needs to be subject to continual improvement. This means that there should be feedback loops to ensure permanent evaluation and re-evaluation of the whole system, which enables the improvements to be made. (Pont et al, 2003)

3.4.4 Means of Workplace Learning

There are several ways of how to learn in the workplace. According to Armstrong (2010), learning activities in the workplace can be generally divided into four groups to formal learning, informal learning, e-learning and self-directed learning. Although there are four of these groups, one of them is particularly outstanding in terms of its significance for overall learning experience. It is being acknowledged across the relevant literature that the informal learning accounts for more than 70% of all the learning activities, not only in the workplace but in general as well. (Carliner, 2012) However, it seems that

organizations still have not realized the benefits of informal learning. According to Kapp & OʹDriscoll (2010), "the biggest loss in opportunity for the learning function lies in the fact that it has rejected informal learning." Nevertheless, all the mentioned forms of learning have their importance in forming the overall learning experience, so I would like to discuss all of them briefly in the light of workplace learning.

Formal learning practices in the workplace

Despite already discussing formal learning earlier, I would like to outline which activities can be assigned to formal learning when it comes to the workplace. As noted, formal learning represents generally some planned, systematic and intentional way of learning, for example at school. If we take a look at professional organization, the formal learning activities include participation in some structured training programmes developed within the company or off-site educational seminars provided by external training companies. These structured sessions have usually specified goals and their completion is formally recognized.

Informal learning practices in the workplace

As already noted informal learning forms over 70% of all learning activities and is said to be the most common form of learning. Unlike formal learning, this form of learning does not take place in a structured learning or training programs, does not have specified goals and its completion is not defined. Instead, informal learning takes place in incidental or casual manner. When looking at the workplace, informal learning is represented by any activity, where employees are "learning by working" or in other words, learning by experience. Practices of informal learning in the workplace may involve peer-to-peer discussions between co-workers, observing of more experienced colleagues "in action", job rotation or job shadowing sessions.

E-learning in the workplace

In the literature, e-learning is sometimes considered as a sub-type of formal learning by some of the authors. However, for the purpose of the diploma thesis, I would like to mention it separately. E-learning can be defined as "the delivery and administration of learning opportunities and support via computer, networked and web based technology to help individual performance and development." (Pollard & Hillage, 2001) E-learning courses can be focused on various topics, with different degree of interactivity. Not every topic can be covered solely by e-learning - some topics are more complex and require utilization of different learning techniques or their combinations. E-learning is nowadays well established form of education and training not only in the global corporations, because it has got number of undoubted advantages. It is highly standardized form of learning, which ensures consistent learning outcomes. Also, e-learning is less time consuming and more cost-effective option than off-site trainings for instance. There are also possible drawbacks of e-learning related mainly to the issue of learners´ self-motivation or organization´s IT infrastructure.

Self-directed learning in the workplace

According to Armstrong (2010), self-directed learning "involves encouraging individuals to take responsibility for their own learning needs, either to improve performance in their present job or to develop their potential." This means that learners are allowed to make their own decisions about the trainings or development programmes in which they will participate. Self-directed learning is often connected with career development planning, where employees firstly agree on their development goals with their managers (they have coaching / mentoring role) and then their progress and achievements are tracked and compared against these goals. Development goals have usually the form of new skills or knowledge acquisition, and often these attributes are set as requirements for promotion or gaining the new role.

3.4.5 HR Practices Related to Workforce Development / Training

In addition to various types of learning mentioned, I would like to discuss also some of the most widely used mechanisms in professional organizations, which are not exactly learning activities, however these are integral parts of the training process in the workplace and contribute greatly to the development of the employees. These practices are complementing the learning activities of an employee and together they form the complex process of worker´s development. Below I would like to briefly discuss the most common practices in human resource development.

Individual development / career plan

In today´s professional organizations, career planning at individual level is a standard part of HR practices. It takes no research that companies failing to offer this possibility to their employees have serious problems with attracting the top talent in the labour market. There is not any official definition for individual career planning, but generally we can say that it is an ongoing process of setting and pursuing career goals within a single company or between more organizations which is "carried out by individuals with guidance, encouragement and help from their manager as required." (Armstrong, 2010) This continual process consists of more steps – the majority of authors agree on 4 stages. At the first stage, employee usually discusses his/her current situation and their career desires with their manager. Considering career expectations, possible future career directions of employee are discussed, and then based on the knowledge and/or skills gaps identified between current state and possible future career direction, the action plan is developed and discussed on periodic basis to ensure that the employee has satisfying career progress and fulfils his/her potential. The process of individual career planning is pictured in the following figure.

Figure 8: Individual Career Planning Process

Source: Own Processing

Annual performance review

Performance review, whether annual, semi-annual or quarterly, is closely linked with the development planning. In fact, we can consider it as a part of development planning process (step no. 4 in the figure 8), since it is not only about evaluation of employee´s performance itself, but it´s more about discussing overall development of an employee in terms of his/her career goals achievement. With that being said, it is clear that performance reviews will not work without the development planning. As Stockley (2014) suggests, "the performance review system documents and formalises the planning process. It is a part of the process, but it does not stand alone." Technically, performance review has got a form of formal discussion of an employee with his/her line manager, in some organizations HR representatives are used to participate in these discussions as well. The subject of discussion usually includes employee´s performance (based on measures such as various internal KPIs or 360° feedback process, which will be discussed shortly) and development in terms of possible career paths of an employee in the future. Performance review represents a great opportunity for both parties to express their opinions and concerns about their job, however, "There should be no surprises. A formal discussion should review what both parties have been discussing informally." (Stockley, 2014)

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Key Performance Indicators (KPIs)

In order to be able to conduct performance review, the organizations have to establish some objectively measurable and quantifiable metrics to evaluate employee´s performance – in other words, KPIs. To successfully measure individual or team performance in given business, KPIs should be precisely defined in a way that employees have clear idea of what is expected from them and based on what are they going to be measured. KPIs must be derived from the vision of the company and should be aligned with its strategic goals in order to be beneficial for the organization.

360° feedback process

Another method how to evaluate employee´s performance and /or development is the utilisation of 360° feedback system. Whereas KPIs represent the quantifiable way of measurement, 360° feedback is more of qualitative evaluation of the individual. Essentially, it is multi-assessor platform which is usually software-based or online, where individual is getting assessed by co-workers, managers or possibly clients. The assessment can go also the upward direction, providing employees with the opportunity to rate their superiors.

The important aspect of the whole process is to decide whether it will be anonymous or not. I´ve worked in the company where the 360° feedback system guaranteed the anonymity of assessors, which should encourage them and make them more comfortable to provide the honest feedback on the assessed person. On the other hand, anonymity can have a negative impact when assessor puts subjective emotions towards the assessed person into the feedback and it makes the feedback less objective. In the end, it is a choice of every organization and it depends on the organizational culture and social climate in the workplace.

Again, as in the case of performance review or development planning, this mechanism is not intended as a standalone module in human resources management – it will not work if it is not linked with career development and performance review. If the 360° feedback process is conducted properly, it provides assessed person with the honest

feedback on their strengths, weaknesses and other areas of their overall organizational behaviour, so they can see where are their areas for improvement and use it as a valuable input for their individual development planning, and also it serves well as the input for their managers for the review of their performance.

However, the big challenge for the HR departments across all the companies is to "sell" this process to their employees in the right way, so they find it meaningful and know the benefits it can bring to their career. If the company fails to successfully introduce and implement this process, employees may be reluctant to participate in it, which is the better scenario. In worse case, it can seriously damage the working morale and climate inside the company.

Coaching / mentoring

Although coaching and mentoring are two techniques which are different in many ways, people tend to think these are just two expressions with the same meaning and often interchange one for another. Indeed, these two methods share the same common elements, and even the format of these techniques is the same – it usually has a form of one-to-one session, where employee discusses his/her performance or development issues with a person who is specialist in such areas. However the focus and outcomes of these sessions are different. Both coaching and mentoring are basically tools intended to help employees with their performance or development. Coaching is more about skills and knowledge acquisition and is rather short term, whereas mentoring is more transformational and is always long term activity. Another significant difference is that coaching is more performance oriented, while the mentoring is driven more by long term development of the employee. (Management Mentors, 2013)

Activities such as coaching or mentoring can be utilized as a next step after identification of knowledge / skill gaps based on performance review and development planning process, as a way how to pursue or improve employee´s outlook of career development in the long term and also to boost his/her job performance if needed. In these cases, the role of coach or mentor is often taken by respective line manager, sometimes organizations assign some specialist inside a company who is dedicated just to mentoring

or coaching, or if organization does not have these kind of specialists within, it can hire professional coach or mentor from external service provider.

Job rotation / job shadowing opportunities

Both job rotation and job shadowing are methods how to help employees with developing of their knowledge or skills and also effective tool for career development. We can consider these techniques as forms of on-the-job training, which means that employees are "learning by doing". Job rotation can be defined as "the process of switching a person from job to job, which increases an employee´s capability and value to an organization." (Edwards, 2005) This activity is most often conducted on temporary basis, with employees switching back to their original positions. This technique is great for employees in terms of getting to know other processes in the organization, which gives them the better sense of understanding "the big picture" and also improves their job satisfaction by reducing the boredom of everyday routine.

Job shadowing generally refers to a technique of on-the-job training, in which one employee, whether the new hire or already established one, follows and observes the everyday working activities and routines of another, usually senior, more experienced and professional employee. This way, inexperienced individual can effectively gain relevant up-to-date knowledge of what does it take to actually perform in such job position, as well as absorb some behavioural norms and values applied in the working environment, in other words getting the sense of "how the business is done over here."

Job shadowing is often very useful method while introducing new hires into their job roles in their on-boarding stage. Besides gaining essential knowledge and /or skills effectively for new hires, job shadowing is also broadly used as a tool for career development – employees already established in their job roles might think at some point in their career that they would like to change their business role within the same company, and that is another situation where job shadowing may take place. Employee can put himself/herself into different job role, try it out and then decide about possible career change. Companies offering the possibility of job shadowing for established employees also take advantage of this mechanism – instead of employees potentially leaving, they can

retain their talent by enabling them to develop their career and change their business role within the company.

3.5 Knowledge Management

When discussing the learning in a workplace, the topic of knowledge management should not be left out of discussion. It is a topic which has not been mentioned in the thesis so far. However this topic is closely related to workplace learning, since the knowledge management has got substantial impact on the way how effectively the entire organization learns and reflects its approach and overall philosophy of learning in the workplace. As already noted, knowledge and skills of individuals are nowadays being considered as the only ultimate source of competitive advantage for organizations, and the knowledge management is a system within organizations with purpose of making it more competitive based on its knowledge, skills and expertise. Organizations have already recognized especially over the course of past few decades the importance of knowledge management in today´s knowledge-based economy.

Every company that is already well-established in the business has accumulated certain amount of information, knowledge and expertise, and these gathered resources have to be treated somehow in order to maximize the value for the company, and the goal of the knowledge management is to make the maximum of these resource. According to Blake (1988), the purpose of the knowledge management is to retain the company´s knowledge and expertise and disseminate it to "wherever it can achieve the biggest payoff."

3.5.1 Definition of Knowledge Management

Although some suggestions on what the knowledge management is about have been mentioned, I would like to provide some formal definition of this notion. Knowledge management can be defined in many ways, but I would like to use the following definition for the purpose of this thesis. We can describe knowledge management as "any process or practise of creating, acquiring, capturing, sharing and using knowledge, wherever it resides, to enhance learning and performance in organizations." (Scarborough et al, 1999)

The system of knowledge management uses the interdisciplinary approach - it is not concerned only with knowledge creation, sharing and other practices related to these resources as per definition, but such a system is also strongly focused on people in the organization and the way how do they learn, and last, but not least the technology used to support and develop knowledge management practices. These inter-related elements together form the knowledge management system, as it is showed in the figure below.

Figure 9: Knowledge management as the inter-relationship between knowledge, technology and people
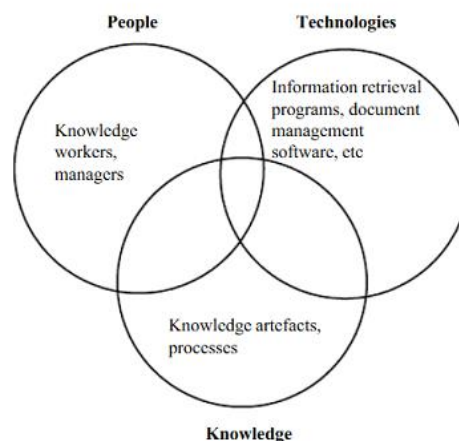
Knowledge management is field which has emerged just couple of decades ago and is quite a new area of research, which still does not have a stable framework of core concepts. However, according to Sanchez (2005), there are some common essential processes in knowledge management:

- Maintenance of learning loops in all organizational processes;
- Systematic dissemination of new and existing knowledge throughout the organization;
- Application of knowledge wherever possible.

3.5.2 Knowledge Management in Relation to Workplace Learning

As already outlined, there is strong linkage between workplace learning and knowledge management. If there is quality knowledge management system in place, it enables enhanced learning within entire organization. The implementation of appropriate policies and guidelines focused on sharing knowledge, IT infrastructure supporting these efforts and creating the climate and culture within organization that encourage employees to learning will lead into something we can call "learning organization" – the environment which is facilitating various learning and/or development opportunities, where employees can truly grow and develop themselves as professionals, which in turn will make the organization developing itself as a whole. In such organization, employees are encouraged to share their knowledge, skills, best practices, experiences and ideas with each other in order to foster innovations and creative thinking, which is very important for overall long-term success of a company.

IV. <u>Own Part</u>

As already stated, the practical part of the thesis is focused on case study of learning and development system in organization SAP SE, the company I am already being part of about year and half as a part time employee. Firstly I am going to introduce company as such, its core values and overall approach to learning and development. As the next part, I would like to compile my findings from studying the internal materials into comprehensive overview of learning and development system structure of a company. In order to find out employees´ perspective on the means of learning and training, the questionnaire-based survey of employees is included to provide an insight into employees´ preferences of and opinions on different means of learning utilized within this company.

4.1 Introduction of SAP SE

SAP was founded in 1972 in Germany by five engineers who left IBM to start their own business – Systems, Applications and Products in Data Processing (SAP). Having nowadays over 261000 customers in 190 different countries (as of July 2014) and total revenue in FY2013 of € 16.9 billion, SAP became worldwide leader in providing enterprise application software (across 25 different industries). SAP is market leader not only in applications for enterprises, but also in business data analytics and mobility solutions. Majority of SAP clients, over 80% are small or middle sized enterprises, however SAP customers also include 98% of world´s top 100 most valued brands (SAP itself is currently being ranked as #21 most valued global brand according to the most recent version of "The World´s Most Valuable Brands" list by Forbes).

With that being said, it is no overstatement that SAP has got truly global impact on each of us all over the world. Essentially, we can say that virtually any product we can purchase in the market today is produced by company which is running software by SAP. According to the analysis conducted by McKinsey, one of the leading global consulting companies, approximately 74% of the world´s transaction revenue touches an SAP system in some way (McKinsey/SAP analysis update 4/2013) The reason why almost all the of

world´s largest corporations and many other run SAP software is because it helps them in running their own businesses better.

Despite the global financial recession, SAP has achieved double-digit revenue growth in the last 4 consecutive fiscal years, and is considered as the fastest growing cloud company. Success of SAP is based on its core values which will be mentioned shortly, but there is also one significant aspect of SAP business strategy, which is playing an important role in its growth – strategic acquisitions. Over the years, SAP has acquired nearly 60 carefully targeted, technology-oriented companies which strategically fit the scope of company´s operations, which adds to SAP broad solution offerings and improve its coverage in key strategic markets. The most recent acquisition of Concur, the world leader in travel and expense management software has been completed in September 2014 – this deal only demonstrates the proactive approach of SAP on M&A field.

The philosophy which stands behind success of SAP is built around the set of core values, which are driven by the vision of business in SAP. These values are called "SAP Passions" and are being shared and encouraged throughout the whole company. SAP Passions are following:

- **Success** – at SAP, the success is being measured by its customers´ success;
- **Accountability** – "always make good on our promises" is one of the rules embraced by the corporate culture at SAP;
- **Professionalism** – there is a strong emphasis on consistent delivery of quality work, pursuing personal expertise and continuous self-development;
- **Integrity –** being honest, fair and taking responsibility for own actions is integral part of SAP core principles of doing business**;**
- **Teamwork –** teamwork is valued at SAP because it enables individuals to exceed their individual limits and share greater success. Individuals are encouraged to take personal initiative in collaborating;
- **Trust** – at SAP, individuals work for each other´s success and take personal responsibility for all relationships, whether internal or external.

4.2 Approach of SAP to Learning, Training & Development of Workforce

In the age of so-called "knowledge society" or "knowledge economy", organizations have started to consider a skilled workforce as the only genuine and sustainable source of their competitive advantage. As a result, we can observe these organizations focusing more on learning and development of their employees. In this aspect, SAP is not an exception – in fact, learning and development of employees is anchored as one of the core pillars of culture at SAP, which has been already mentioned. Continuous learning is viewed here as crucial part, since it enables individuals and organization as a whole to perform in a fast changing environment and to succeed.

SAP is promoting so called 70-20-10 reference model of learning and development. This approach was developed in 1996 by M. McCall, R. W. Eichinger and M. M. Lombardo in the Center for Creative Leadership, North Carolina. Based on the results of their survey, which revealed how do people learn in the workplace, their research suggests, that 70% of learning in the workplace occurs while actually performing the job, in other words it takes some form of on-the-job learning or learning through working experience. 20% of learning in the workplace accounts for social learning, or in other words learning through others – in the workplace, this type of learning is usually represented by coaching or mentoring practices. The rest, it means 10% of total learning activities in the workplace, consists of formal learning methods, such as structured learning or training courses. (Lombardo & Eichinger, 1996)

On-the-job learning at SAP is indeed the most utilized form of learning. It all starts with onboarding of the new hired employee – every newcomer is given a "buddy", who is essentially a more experienced colleague usually from the same department or team, who is guiding the new hire through his first couple of weeks or months, showing him/her how it works in the office and introducing him into his/her job role, and basically   is the first point of contact for the novice in any occasion. We can consider this activity as a form of on-the-job and/or experiential learning. Employees are also encouraged to take initiative and share the knowledge and best practices and to teach each other, which makes on-the job learning so efficient and useful. This is a part of organizational culture, which creates

facilitating environment for learning and development. Experiential learning is the second most frequently used form of learning at SAP, and is represented by coaching and mentoring methods, job shadowing opportunities or networking lunches. Formal learning is the last group of learning activities, which includes structured learning and/or training sessions, virtual learning and self-directed learning through on-demand courses. The whole system of learning and development and its components are going to be discussed more into detail in the following chapters.

4.3 Learning & Development System at SAP

In this chapter, I would like to describe learning & development system at SAP. Although these two areas are very closely interconnected, I would like to discuss both of them separately for the purpose of the thesis. Both learning and development at SAP are focused on developing a set of core competencies, which helps with driving the culture and core values of the company. These competencies are essential for employees regardless of their business role. Core competencies at SAP are following:

- Customer Focus
- Business Acumen
- Innovative Thinking
- Challenge Complexity
- Change Agility
- Communication
- Intercultural Sensitivity

- IT Principles & Data Security
- Partner & Third Party Engagement
- Quality Focus
- Results – Driven
- Self Development
- Teamwork & Collaboration

4.3.1 Learning at SAP

As already noted, learning at SAP is following the 70-20-10 reference model of learning and development, described earlier. The whole system of learning at SAP includes a number of various components, which are designed to form together a complex learning experience based on business needs of company. Following I would like to introduce the figure representing the system of learning at SAP, and to shortly describe its particular components and how do they fit together.

Figure 10: System of learning at SAP

Learning at SAP

Employee Competencies

How to develop them?

Formal learning activities

Peer-to-Peer Learning

On-the-Job Learning

Skills-on-Demand

Instructor-led Training

SAP Learning Center

Knowledge Centers

Smarties

Self-directed learning

Networking

Coaching/Mentoring

Job Shadowing

Collaborative Learning

Approx. 70% of learning activities occur while doing the job…
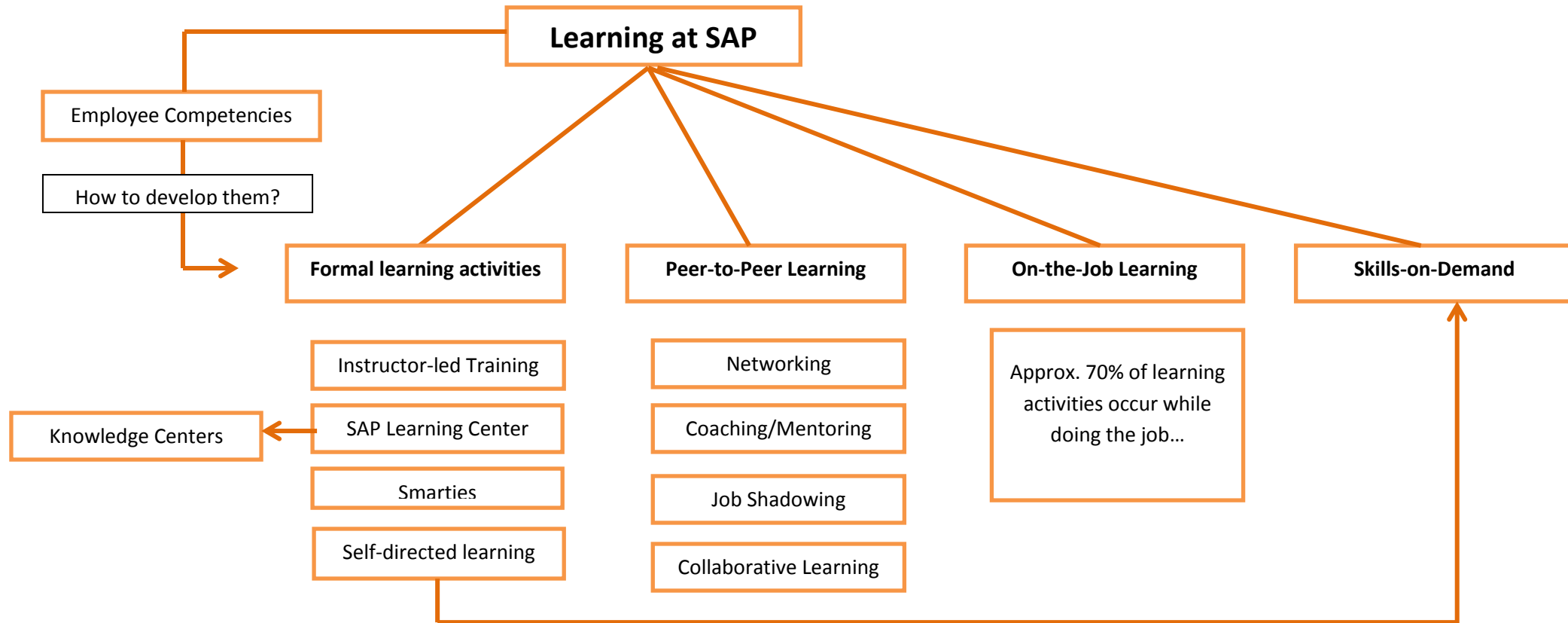
Source: own processing

4.3.1.1 Formal Learning Activities at SAP

As we can see from the figure above, learning at SAP can be divided into 3 main categories (plus one extra category, for the purpose of this thesis). In this chapter, I would like to discuss the first category – formal learning activities. Formal learning forms the minority of learning activities in the company – around 10%, according the reference model. Formal learning at SAP is represented by instructor-led trainings, SAP Learning Center, Smarties and self-directed learning. However, for the purpose of the thesis, self-directed learning is classified as separate form of learning despite being considered as part of formal learning activities by the company. I would like to briefly describe formal learning activities at SAP below.

- **Instructor-led Trainings**

These are typical structured trainings or learning courses with formal curriculum, including predetermined goals, which are delivered and led by instructors or trainers. These training sessions cover broad variety of different topics, and their attendance by employees is usually decided by their respective manager.

- **SAP Learning Center**

SAP Learning Center is the global learning management system at SAP. This on-line solution is based on own software platform developed by SAP itself. Therefore it is tailored to perfectly fit the learning needs of SAP and is used by all SAP employees worldwide. Since it is used by all employees with different roles and scope of business, it contains not only the content relevant to given employee, but also the content for other target audiences.

This learning tool is self-service based, which means that all employees are able to access and control it by themselves – actions like booking or cancelling the training courses or printing the certificates of completion can be done on their own. Every employee has got his profile, where he can see his/her learning history and can plan further learning activities. The SAP Learning Center has got a catalogue structure, which means that employees can browse through available trainings based on their category, such as

mandatory trainings, by key topic, or by job profile, which is very useful feature since the tool is making suggestions to employee about the most relevant training for their respective job positions.

At the same time, employees are able to rate the courses, so the tool also offers the view of top popular courses among learners, which allows learner to choose a training course also according to its popularity among other employees. This makes the decision making of learner easier and also makes the learning more attractive to employees. Majority of courses are free of charge, however some of them are charged, usually to employee´s cost centre.

- **Smarties**

Smarties are half-day workshops to help employees develop their key skills and competencies related mainly to soft skills – topics such as communication skills, working techniques, intercultural awareness or instructional skills are the main topics covered by Smarties workshops. These workshops are provided by external company Berlitz, the global leader in providing leaderships training and education. The Smarties sessions are very intensive, with only 6-12 people attending the single session, and approximately 70% of the time is always spent on solving and discussing practical exercises. Since these workshops are facilitated by external professional vendor, the participations consumes company´s 3rd party budget, so the attendance of these sessions is to be discussed with managers and the costs are covered by respective cost centers.

- **Self-directed learning**

As already noted, company is used to involve self-directed learning into formal learning activities. However, since self-directed learning has been classified as a separate form of learning on the same level as formal (or informal) learning is, I am going to fully discuss this form of learning separately later on.

4.3.1.2 Peer-to-Peer Learning

The second group of learning activities at SAP is the Peer-to-Peer learning, or in the other words, learning through others. This experiential-based learning accounts approximately for 20% of total learning activities at SAP, and it is based around socializing and interacting with others in the workplace. At SAP, it is believed that engaging in social activities, partnering up with senior colleagues and other social activities represent one of the most effective ways to learn. Particular components of such learning are briefly discussed below.

- **Networking**

Networking is the basic socializing activity which anyone can do on his own. However, in order to promote the networking at SAP even more, employees are encouraged to network with each other by using the "Networking Lunch" feature, which facilitates networking through a possibility of scheduling a friendly lunch together. Such an event is great opportunity to share work-related information, broaden the view of world or to stay current on trends in the industry as well as potential future career options.

- **Coaching / Mentoring**

As discussed earlier, coaching and mentoring are the most common ways how to learn through others in the workplace – at SAP, coaching and mentoring are used mainly to provide employees with guidance on technical and/or soft skills from someone more experienced. To facilitate the coaching and mentoring practices, SAP utilizes online coaching and mentoring tool, which enable employees to find a mentor within his workplace, and to identify the certified internal coach or an external coach. To ensure the quality of the coaching process and the consistency with the external coaching industry standards, all internal coaches within SAP have to be accredited with International Coach Federation certificate.

The process of coaching and mentoring is roughly following: at first, the employee needs to identify his/her goals and match them with the right mentor or coach (can be found in database). Then the employee selects the coach or mentor, connect with him

through the coaching/mentoring tool, in order to find out his availability. Once the coaching/mentoring relationship is initiated, the coach/mentor and a client firstly need to design the coaching/mentoring program and officially make an agreement. Next stage is setting of the goals – again, the goals need to be agreed by both parties. During the period of coaching or mentoring, the program can be redesigned and client´s progress is being subject to review.

- **Job Shadowing**

    Another form of peer-to-peer learning used at SAP is job shadowing (already described as a technique earlier). As all other forms of learning in the company, it can be accessed through an online tool, where interested individuals (called "shadows") can connect with potential trainers (called "hosts"). Job shadowing allows employees to have a clear vision what does it take to work in different positions or departments of the company – it is viewed as a career exploration activity, and one of the most effective method of learning and career development.

    At SAP, job shadowing usually takes 1 to 6 sessions, each 4-8 hours long, depending on the circumstances. The process job shadowing process at SAP is following: once employees have an approval to participate in job shadowing program based on discussion with respective manager, the first step is to match their shadowing goals with the right host. The next step is to select the host, and to connect with him through the online tool. After these steps, job shadowing sessions can be facilitated. The goals of these sessions can have a different aim – for example, an employee wants to have a broader perspective about the scope of operations in the company, or he/she might use job shadowing as a preliminary stage of their transfer to a different job role.

- **Collaborative Learning**

    Employees of SAP are encouraged to leverage the use of knowledge sharing sessions, social events and social media tools in order to promote the collaborative learning throughout the company. SAP is utilizing the variety of tools which are enabling the

collaborative learning experience, such as the corporate social network called SAP Jam, or the corporate clone of Wikipedia, which allows employees to create, edit and share their own work-related content.

4.3.1.3 On-the-job Learning

Learning on-the-job, in other words learning while doing, forms around 70% of all the learning activities at SAP. Employees are encouraged to put into practice what they have learned through formal or social activities, to solve new problems and do special assignments and expand their daily activities. The important part is also to seek for either formal feedback by managers and mentors or the informal feedback by proactively asking other colleagues, which helps employees to reflect on their areas for improvement.

Employees are also encouraged to take on new initiatives / projects, and to stretch themselves into new areas, by participating in job rotation or job shadowing programs. For example, re-engineering of the potentially out-dated or inefficient processes is the part of these efforts, which also allows the whole company to move forward. Last, but not least, employees are encouraged to teach others and share the best practices to enable others to deliver the highest performance possible.

4.3.1.4 Self-directed Learning (Skills-on-demand)

As already outlined, self-directed learning as SAP is considered as part of formal learning activities. However, I would like to mention it separately as another distinguishable form of learning, since it has been identified by number of authors as a distinctive category of learning, and this categorization has also been used in the literature review earlier in the thesis.

Many learning activities at SAP have a nature of self-directed learning to some extent. However, there is one particular learning component which cannot be classified other than self-directed learning instrument – Skills-on-demand tool. This platform was developed by Skillsoft, and SAP is one of Skillsoft´s customers using their solution. Skills-
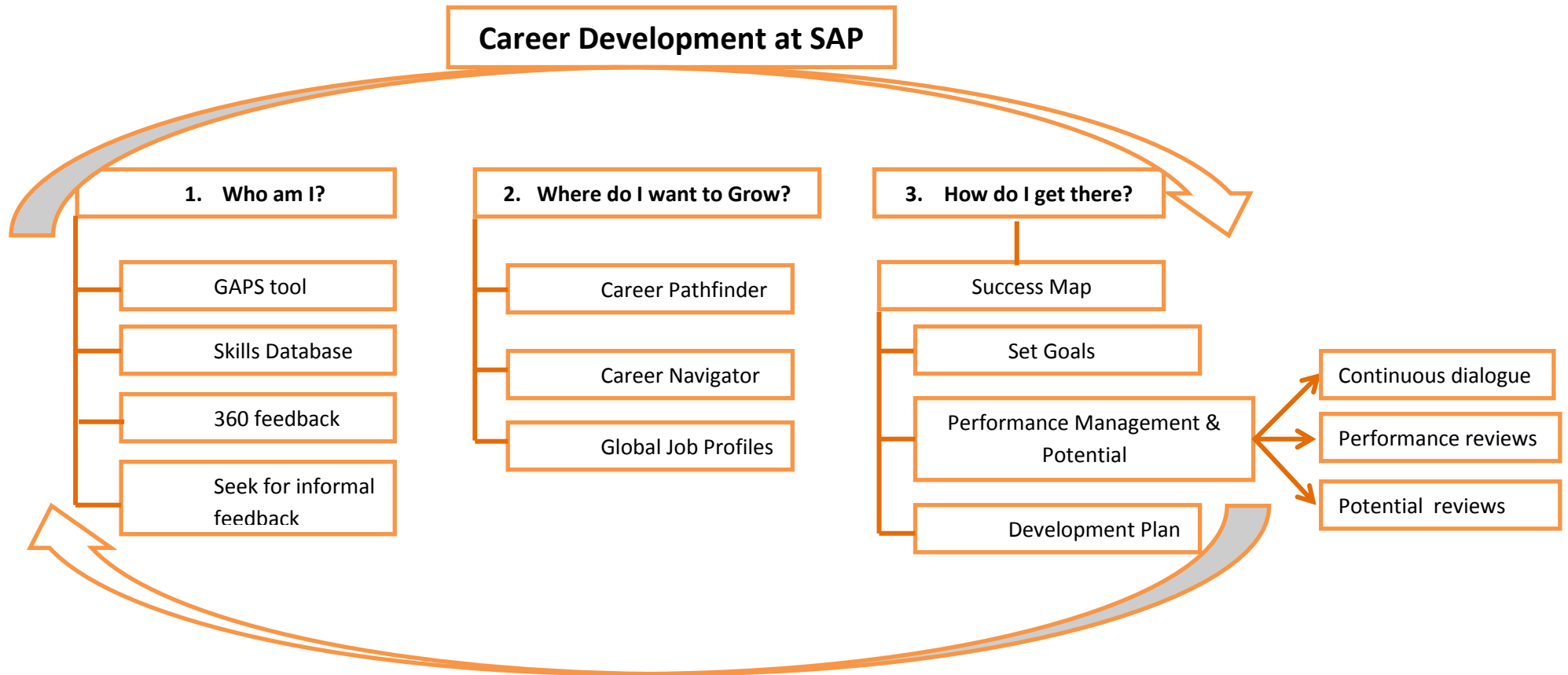
on-demand is essentially a learning portal, which contains over 34 000 learning assets such as e-learning courses, books, videos, job aids and simulations on wide range of topics in the business, IT and others. This platform is incorporated and integrated with SAP learning center, where employees can access these learning assets on their own. The important feature is, that learners can take the courses whenever they want, they can stop the course in the middle and can get back to finish it later, or even to download the course into laptop, finish it off-line and then synchronize it when connected to the network. These advantages make Skills-on-demand very flexible tool for learning – it brings the learning to learners.

4.3.2 Career Development at SAP

In this chapter, I would like to discuss the system of career development at SAP in the same way as the system of learning was discussed in the previous part. As it was already mentioned, the discussion of SAP L&D system in the thesis is divided into system of learning and career development system, in order to keep the description non-chaotic and to avoid potential confusion. At first, the structure of career development system is showed in the figure, which is followed by a brief description of the components involved it the career development system of SAP.

Career development is the integral part of the culture at SAP, which is focused on realizing the full potential of each employee through meaningful personal and professional development opportunities. The structure of career development system at SAP can be seen in the figure below. The process of career development in the company consists of three main stages, which are showed in the figure. Firstly, the individual needs to understand his/her strengths, potential, values and areas for improvement, which need to be subject of either formal and/or informal assessment. Once employees are familiar with their status and future potential within the company, there is a second stage of career development which takes place – making decisions about the future career steps. When employees are clear about their career aspirations and ambitions, there is the third stage – setting of career goals, measuring the job performance and creating the career development plan. In the next chapters, I would like to discuss these development stages and tools used at SAP for career development more into detail.

Figure 11: System of Career Development at SAP

Career Development at SAP

1. Who am I?
   - GAPS tool
   - Skills Database
   - 360 feedback
   - Seek for informal feedback

2. Where do I want to Grow?
   - Career Pathfinder
   - Career Navigator
   - Global Job Profiles

3. How do I get there?
   - Success Map
   - Set Goals
   - Performance Management & Potential
   - Development Plan
     - Continuous dialogue
     - Performance reviews
     - Potential reviews

Source: Own processing

4.3.2.1 "Who Am I?" – The first stage of career development at SAP

As already outlined, the first stage of career development is focused on identifying skills, potential and areas for improvement of the individual. This stage is very important for employees in order to understand themselves better, to allow them to focus on learning activities which really matter for their professional grow and to keep them motivated and committed to their own development. There are different components used at SAP to support the first stage of career development, which I would like to briefly describe below.

- **GAPS tool**

GAPS tool looks similarly to the SWOT analysis method. This tool is designed to identify individual´s abilities, goals, perceptions and success factors. As in the case of SWOT analysis, GAPS tool also makes use of the grid with 4 quadrants, which can be seen below in the figure.

Figure 12: GAPS tool grid

	Where I am now?	What matters?
My view	Abilities	Goals & Values
View from others	Perceptions	Success Factors

Source: Own Processing

This tool provides employees with an understandable way how to start with shaping their individual development plan. The important input to this tool is either formal or informal feedback provided by manager, colleagues, or customers, which helps individual to reflect on his/her abilities and values. By comparing individual´s own view against the feedback from individual´s working environment, competence gaps can be identified, which

provides the direction for further individual development and reveals the areas for improvement.

- **Skills Database**

    Once an individual identifies his/her skill gaps and other areas for improvement, the next step is to work on these areas. Skills Database is online tool designed to help employees with identifying and reviewing of the skills and competencies which are relevant to their job roles. It has got a form of catalogue containing all relevant skills, defined in four proficiency levels – from basic level, to expert level.

    Employees can create and maintain their qualification profile, and based on their job role, Skills Database serves as a foundation for a detailed planning for training and development measures. It also provides individuals with a clear picture of the skills and levels they need to qualify for and to be successful in their future jobs. Based on skills proficiency requirements indicated in Skills Database, employees can work together with their managers further to evaluate the development of an employee during the performance reviews.

- **360° Feedback system**

    Receiving feedback in general is the most important assessment technique. Both formal and informal feedback serves as input for the development planning. 360° feedback is a tool for providing a forma type of feedback. At SAP, 360° feedback system is utilized for managerial positions only in order to provide an insight for leaders, so they can learn more about their leadership effectiveness. The participation as a rater in this program is voluntary, and managers are expected to participate once in every one or two years. This process is not over after respondents submit their feedback on their superiors – manager and the relevant respondents who have submitted the feedback in the system should block a time in their calendar to reading and analysing feedback reports and looking for a key messages in the feedback, in order to identify the areas for improvement of respective manager who is subject to rating.

- **Seek for informal feedback**

    Apart from the formal feedback represented by mentioned 360° Feedback system, employees are encouraged to seek and provide each other with the informal feedback on day-to-day basis. Although there is no specified procedure of giving the informal feedback, it has got an important influence on shaping of the individual´s behaviour and actions in the workplace, and it occurs naturally, by co-operating and interacting with each other.

4.3.2.2 "Where Do I Want to Grow?"–The second stage of career development at SAP

    The second stage of career development is related to the decision making about possible career directions. When employees already realize where they are standing in terms of their current abilities and potential towards future, it is time to consider next possible career steps. I would like to briefly discuss the most essential tools used at SAP to support this decision making in the text below.

- **Career Pathfinder & Career Navigator**

    These online tools enable employees to review their current career progress up to date, and to assess the possible options or directions available to their job roles. There are basically three general career paths which can be selected: Functional Contributor Expert, through which employees can become functional or technical experts in their roles, Project Manager Expert, through which they can become project management experts who are leading the projects, or Management Career Path, which prepares individuals to become a manager.

    Career Pathfinder supporting tool is not standalone instrument and it needs to be used together with other component described in this part (Global Job Architecture). It allows employees to graphically display their job position (based on Global Job Title) within the hierarchy of related job positions at SAP. This tool is integrated with already described Skills Database, so employees can clearly see the requirements in terms of needed skills for other job positions. When employee for example decides to pursue another job role, he/she can see which skills are essential for that position and can start working on development of those needed skills through Skills Database in the SAP Learning Center.

- **Global Job Architecture**

    Global Job Architecture provides standardized and transparent job landscape across the SAP worldwide, which supports effective people management. It is a foundation for integrated career and rewards solution which links together global career levels, grade levels, career paths and job profiles. Global Job Architecture allows employees to see a bigger picture of themselves within the SAP as a global company, and compare their job positions to comparable jobs at SAP around the world. Last, but not least, it enables cross-regional, cross-functional and cross-career path movement for employees who decide to switch their career to different direction.

    Global Job Architecture accommodates all the job positions at SAP worldwide, so every employee is able to see his/her position in the global scale. These positions are classified according to 5 aspects:

- **Functional Area** – cluster of several job families based on generic job content (examples: Finance, HR, Development)
- **Job Family** – Groups jobs in a more specific occupational area within a functional area (example: "Purchasing" within the functional area "Finance")
- **Career Level** – describes contribution base on business results, accountability, complexity, experience and communication (e.g. Associate, Specialist, Senior, etc.)
- **Career Path** – describes individual progression of employee, along career levels or between jobs, job families or job functions; career paths have been already outlined earlier (People Management, Project Management, Functional Expert)
- **Global Job Titles** – categorization of similar positions in an organization. Each job is defined by four criteria: Functional Area, Job Family, Career Level and Career Path (e.g. Associate, Purchasing)

4.3.2.3 "How Do I Get There?" – The third stage of career development at SAP

    The third and final stage of career development at SAP is focused on actual development planning. Once employees have an idea of their possible future career path, they need to start developing the action plan in order to drive their career progress towards

their career ambitions. There is one particularly substantial instrument at SAP which helps employees with driving their careers – Success Map tool.

- **Success Map**

"Success Map" is the internal branding for SuccessFactor´s BizX platform. This cloud-based HR tool was developed in 2012 by a company SuccessFactors, which is one of the SAP´s recent acquisitions, so it can be considered as a tool developed "in-house". As a platform it covers goal definition, performance review, development plans, and by the time of writing this thesis, it also starts to cover the learning and internal job opportunities modules.

This ultimate tool integrates all the mentioned areas together to create one complex platform to help employees with taking control of their career development. From the company´s perspective, this platform is very useful tool for managing workforce to deliver on company strategy, which helps with driving of business execution and with leading people in sustainable, scalable and measurable way. Essentially, this HR platform helps to close the gap between business strategy and business results of the company. As already noted, this platform consists of different modules, which are following:

- **People profile** – individuals can develop their own personal brand, with highlighting their career aspirations, achievements, goals and skill sets to share it with their managers and HR;
- **My goals** – this module is one common and consistent practice across SAP worldwide , which gives an employee better visibility of company goals, which are further streamlined into individual goals – this helps employees to align their goals with company strategic direction, and it also provides employee with an opportunity to schedule meetings with their manager to discuss and track their progress;;
- **My Development** – this is the module which serves as a tool designed for employees to create their individual development plans based on their career aspirations, goals and skill sets, it facilitates a continual dialogue with a manager even further;

- **My Performance** – includes the feedback on employee´s performance, it allows to summarize employee performance against goals during formal interim or annual performance reviews;

- **My Learning** – this module has been implemented just recently, and it should take over all the learning tools and integrate them into a single central location for all SAP employees to access available learning;

- **My Rewards** – allows employees to understand how their performance affects their compensation, bonus and other rewards;

- **My Internal Job Opportunities** – employees can pursue new career opportunities and job positions based on their aspirations, goals and skill sets published in their profiles.

4.4 Employees´ Preferences of Learning in the Workplace

In this part, I would like to introduce my research regarding the preferences of learning in the workplace from the viewpoint of the learners themselves – employees of SAP. The system of L&D at SAP has been already discussed into detail in the previous part, so this part is focused on the research which components of this learning system are seen as the most important and most preferred among employees who are participating in such system.

As already suggested earlier in the methodology chapter, the employee´s preferences are obtained through a questionnaire-based survey (attached in supplements). This survey has been conducted fully online through the use of SurveyMonkey tool (available at www.surveymonkey.com). The questionnaire is rather brief in order to avoid low response rate – it includes only three questions (apart from demographical data of respondents). It was designed to identify employees´ preferred way of learning something new and to determine their thoughts regarding the importance and attractiveness of particular learning processes utilized in the company, which have been all described earlier. Employees were asked the following three questions:

1) What is their preferred way of learning something new at SAP?
2) How do they rate particular learning methods in terms of impact on their job performance on the scale from 0 to 10?
3) How do they rate particular learning methods in terms of the attractiveness on the scale from 0 to 10?

All questions were designed as multiple-choice with only one possible option to be chosen. The options available are the same for all the answers, and these are as follows:
- Instructor-led training course (e.g. Smarties)
- E-learning/Virtual training (SAP Learning Center/Success Map,...)
- Learning by interacting with others (Networking/Coaching/Mentoring/Job Shadowing,...)
- On-the-job Learning ("Learning-while-doing")
- Learning on your own (Skills-on-demand tool, reading through materials,...)

Based on their answers, it will be possible to identify whether employees prefer formal, informal or self-directed learning to learn new skills in their jobs, which is the goal of practical part of the thesis.

The questionnaire was distributed to individuals in 3 different departments (HRdirect, Recruiting and Procure-to-Pay) plus a small number of individuals across various departments, which makes together 75 potential respondents in total. However, not all respondents have taken the survey – out of those 75 who were asked to fill in the questionnaire, only 48 respondents actually submitted the survey. Therefore, the response rate is equal approximately to 64%, which can be considered as representative sample of the total audience. The fact that the participants are working in different departments is not an issue, since the learning practices are consistent throughout the company, regardless the department. Therefore, all these respondents have a good knowledge of learning opportunities and mechanisms in the company, so they can be considered as fully adequate respondents for the purpose of this research. Submission of the questionnaire was completely anonymous – this measure was also taken in order to achieve highest response rate possible.

Structure of respondents according to gender, age, marital status and education level

The first set of questions included in the survey was focused on determining a demographical structure of participants. The purpose of these questions is to identify the demographical data of the respondents without compromising their anonymity. Based on these data, the research can provide an insight whether there exist any relationship between gender, age, marital status or education level on the one hand and the learning preferences on the other hand. The demographical structure of participants can be seen in the following figures. Each figure provides a demographical structure according to a single criterion: gender, age, marital status, and highest education level obtained.

Figure 13: The Structure of participants according the gender (%)

What is your gender?

Answered: 48   Skipped: 0
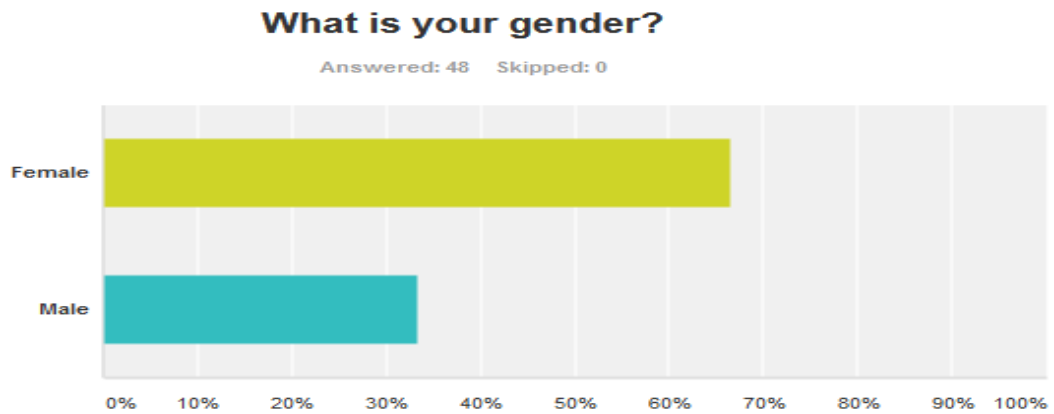
The majority of respondents were women – out of 48 respondents, women form nearly 67% (32 participants) of the total number of the respondents. The number of participating men is equal exactly to the 1/2 of the number of women respondents – approximately 33% (16 participants).

Figure 14: The structure of participants according to the age (%)

What is your age?

Answered: 48   Skipped: 0
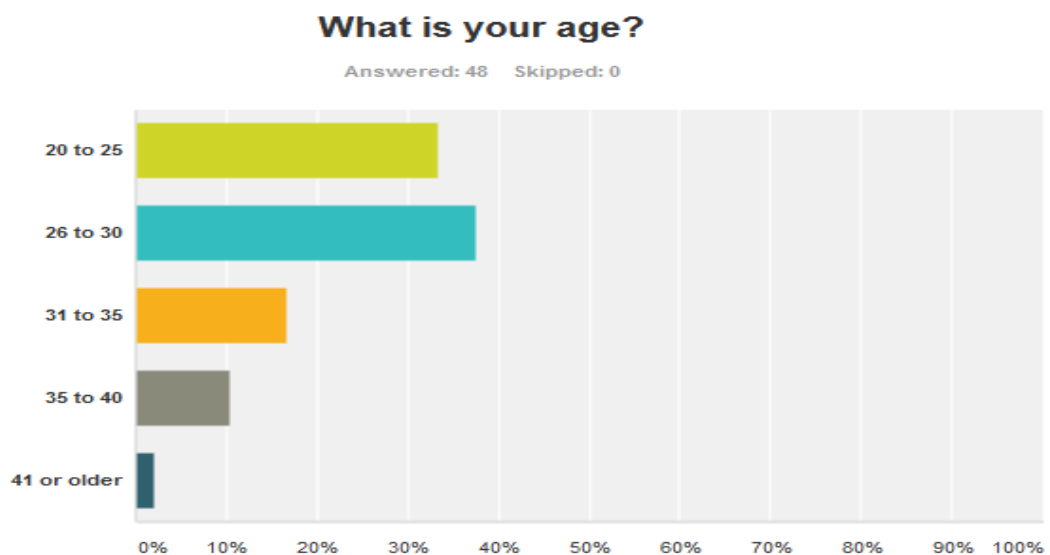
The second question is focused on identifying the age structure of the audience. As we can see from the figure 14, the most frequent age group of respondents is 26 – 30 years (37.5%), followed by 20 – 25 years (33.3%). This only documents the young spirit of the company – over 70% of employees participating in this survey are 30 years old or younger. Approximately 16.7% of respondents are aged between 31 - 35 years, 10.5%   of   them belong to the age category of 36 – 40 years, and only one respondent was older than 41 years.
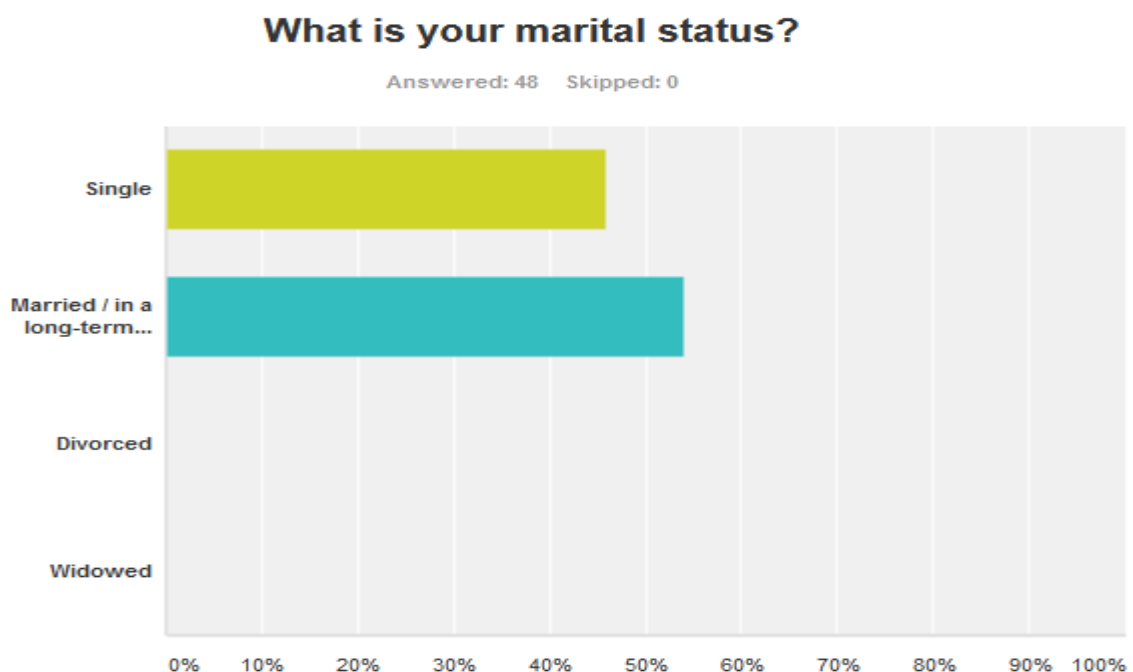
Figure 15: The structure of participants according to marital status (%)

Source: Own processing

The structure of respondents according to marital status is corresponding with their age structure. The majority of respondents is younger than 30 years, and we can say they become to the generation which is often called "Singles Generation". With that being said, it is no surprise that almost half of the respondents (approx. 46%) are living without a partner, while the slight majority of them (approx. 54%) is married or have a long-term relationship.

Figure 16: The structure of participants according to their education level (%)

What is your highest completed education level?

Answered: 48   Skipped: 0
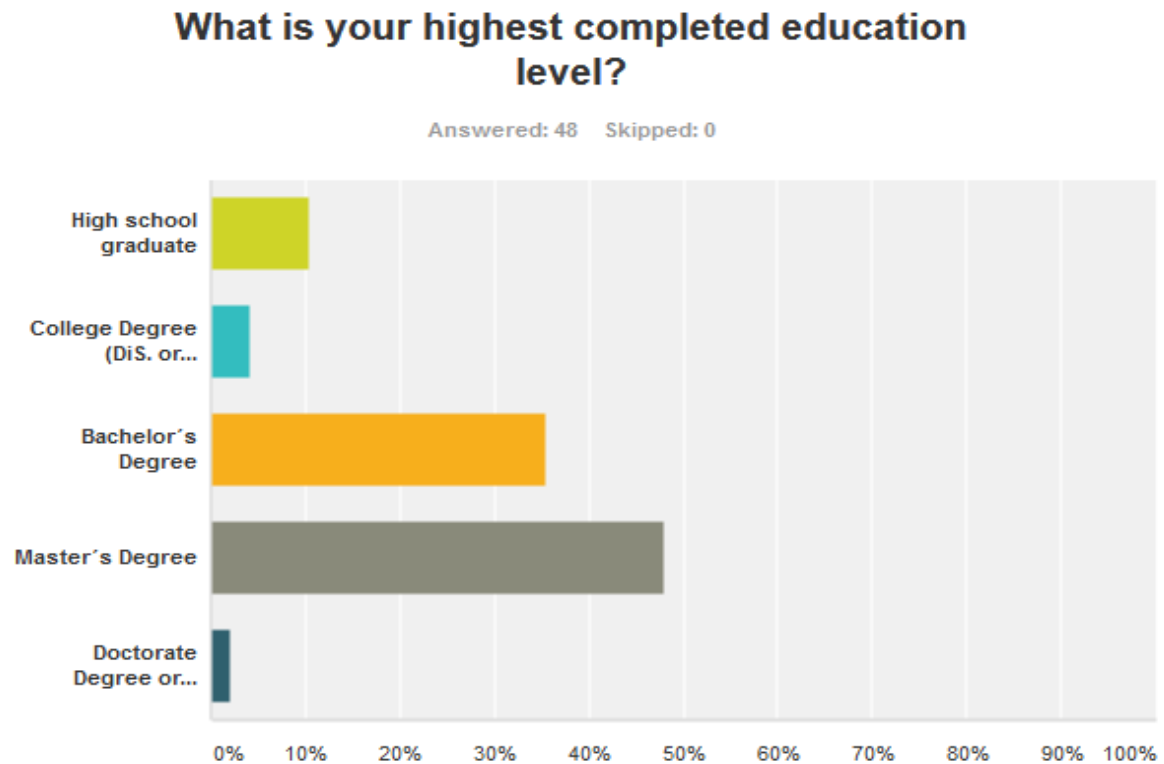
As for the structure of participants according education, we can observe that the vast majority of respondents (approx. 85%) have university degree, whether Bachelor´s, Master´s or Doctorate. The most frequent level of education is Master´s degree (47.9%) followed by Bachelor´s degree (35.4%). 10.4% of participants are high school graduates, 4.2% of them have finished the college and only one respondent has achieved the Doctorate degree or higher.

Learning preferences of employees

The second set of questions was designed to fulfil the aim of the thesis – these are focusing on determination of employee´s preferences regarding the ways of learning in the workplace, and evaluation of different ways of learning which were discussed earlier in the own part of the thesis. These questions are elaborated below in the following figures.

Figure 17: Employees´ preferred way of learning at SAP (%)

What is your preferred way of learning something new at SAP?

Answered: 48   Skipped: 0
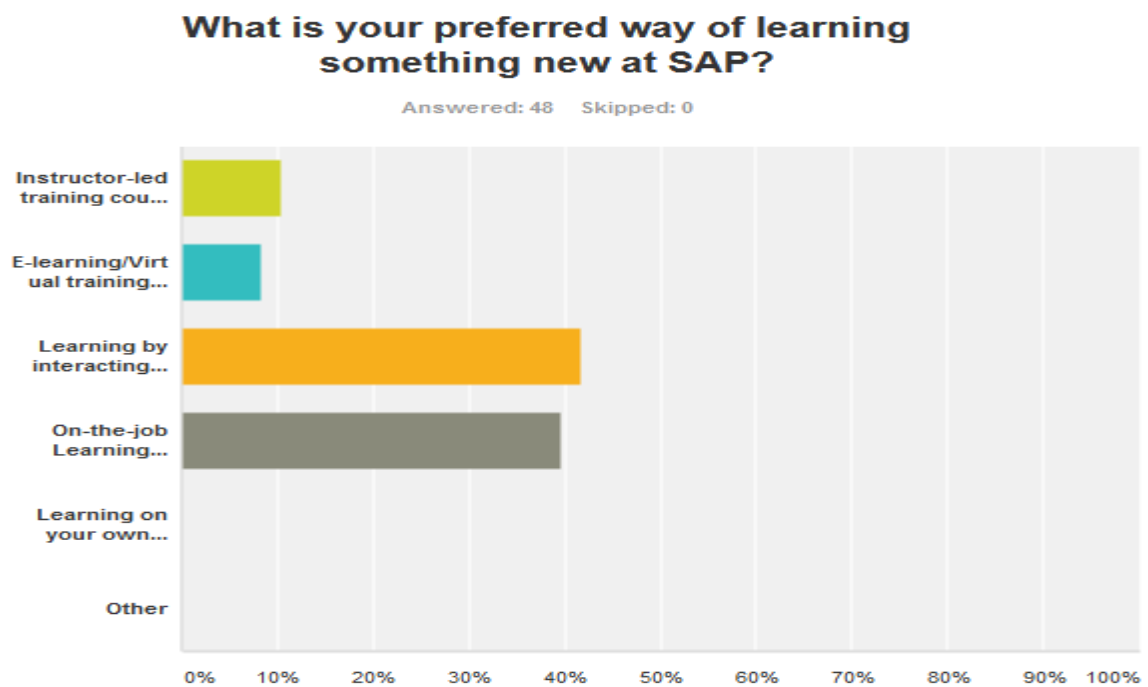
Source: Own Processing

This figure shows the results for question asking employees directly which way they prefer to learn new things at SAP. As already noted earlier, respondents could have chosen out of these options (plus extra "Other" option):

- Instructor-led training course (e.g. Smarties)
- E-learning/Virtual training (SAP Learning Center/Success Map,...)
- Learning by interacting with others (Networking/Coaching/Mentoring/Job Shadowing,...)
- On-the-job Learning ("Learning-while-doing")
- Learning on your own (Skills-on-demand tool, reading through materials,...)

Despite having six possible options to choose from, respondents have spread their answers only across 4 of them. With none of the respondents selecting "Other" option, the selection of possible answers can be considered as fully comprehensive and non-ignoring any other significant option. What may be little surprising is the fact, that none of the respondents have selected "Learning on your own initiative" option, which indicates that instead of self-directed learning, respondents rely more on other forms of learning. The most preferred ways of learning indicated by respondents are "Learning by interacting with

others" (41.7%) and "On-the-job learning" (39.6%). Minority of respondents has selected "Instructor-led training courses" (10.5%) and "E-learning/Virtual training" (8.3%) as their preferred way of learning.

Figure 18: Learning preferences according to a gender (%)
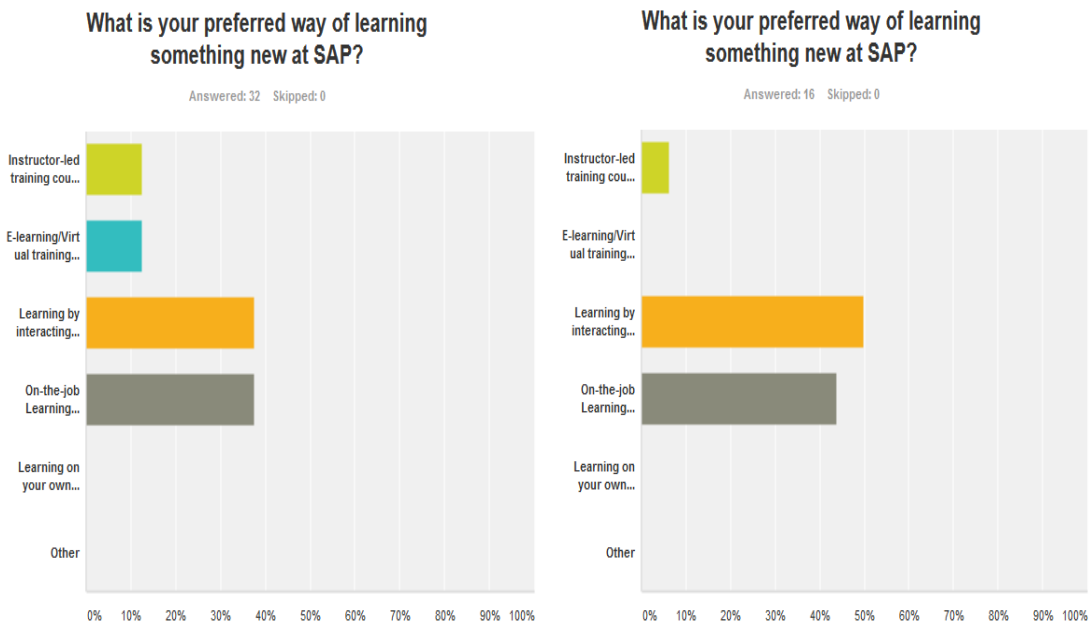
Source: Own processing

This figure shows how the preferences differ between genders. Preferences of female respondents are on the left, compared to preferences of male audience on the right. We can observe that the two favourites are the same for both gender groups - "Learning by interacting with others" and "On-the-job learning". However, these two options are more dominant among male respondents – 50% of them prefer "Learning by interacting with others" and 43.8% prefer "On-the-job learning" while these levels among female respondents are 37.5% for both options. Besides this fact, in general we cannot observe any significant difference of preferences between men and women participating in the survey.

Figure 19: Learning preferences according to age (%)
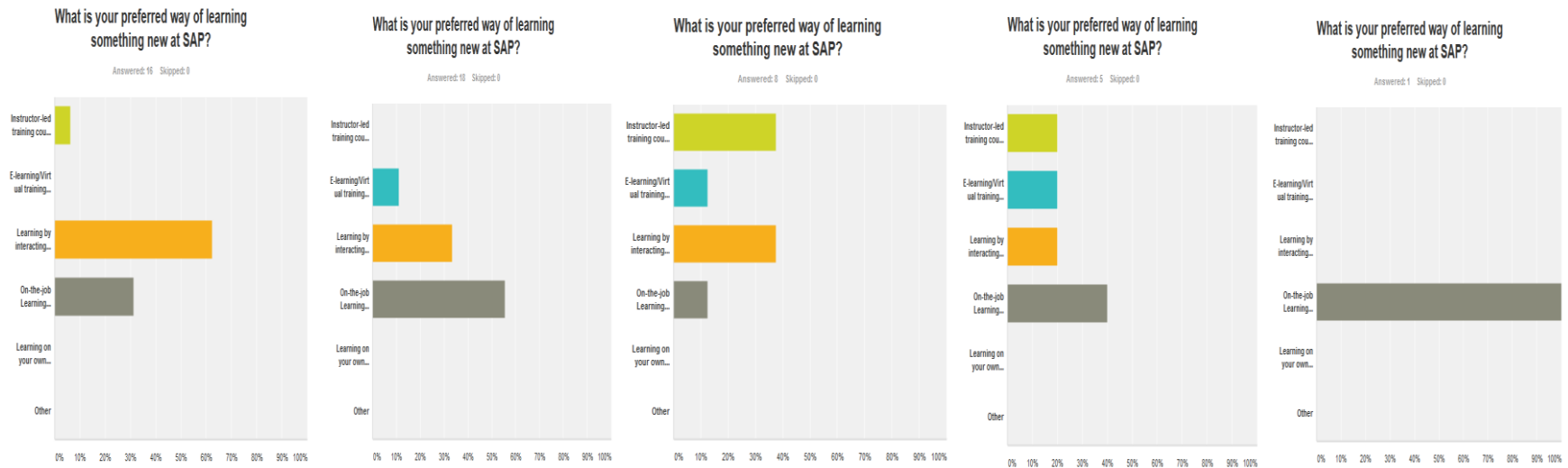
When we take a look at how age of respondents influences their learning preferences at SAP, we can identify more significant differences than we could observe in terms of male versus female point of view. The figure 19 above contains learning preferences broken down for each age category separately – starting from the left side, there are learning preferences for age categories 20-25, 26-30, 31-35, 36-40 and 41+. Respondents of the first two age groups prefer the usual two favourites – for the age group of 20-25, 62.50% of respondents prefer "Learning by interacting with others" and 31.25% prefer "On-the-job learning", while in the age group of 26-30, majority of 55.56% prefers "On-the-job learning" and 33.33% of respondents have identified "Learning by interacting with others" as their preferred option. In the categories of 31-35 and 36-40, preferences are significantly different. Respondents aged between 31 and 35 have identified both

"Instructor-led training course" and "Learning by interacting with others" as their preferred way of learning in the company, with both options identified by equal share of 37.5% of respondents. Another age group of respondents, aged 36–40, identified "On-the-job learning" as their preferred form of learning (40%), with other options being equally preferred (20% each). The last age group of respondents aged 41 years or older is represented by just one individual at SAP, who prefers "On-the-job learning".

Figure 20: Learning preferences according to marital status (%)
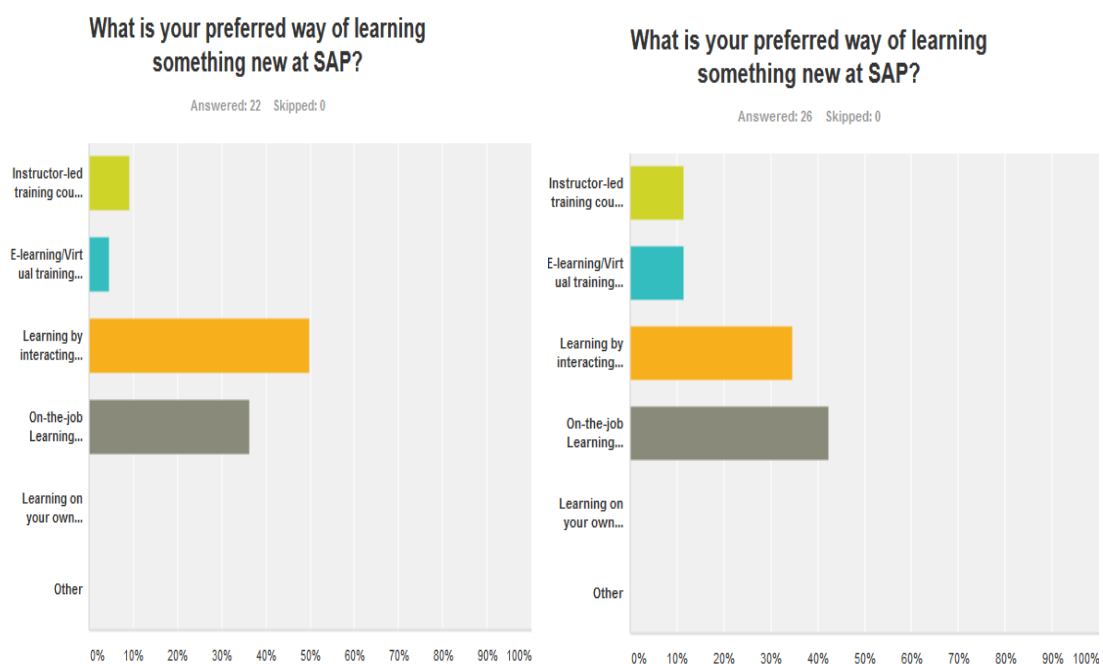
Source: Own processing

The figure no. 20 shows the learning preferences of respondents based on their marital status – the first figure on the left represents the preferences of respondents who are single, and the figure on the shows the preferences of respondents who live with their partners. In both categories, we can observe similar structure of preferences - the only difference is that singles prefer more "Learning by interacting with others" (50%) and "On-the-job learning" is the second most preferred with 36.36%, while respondents in long-term relationship prefer "On-the-job learning" (42.31%) over the "Learning by interacting with others". We can observe that other options are not too significant for either group of respondents.

Figure 21: Learning preferences according to education level of respondents
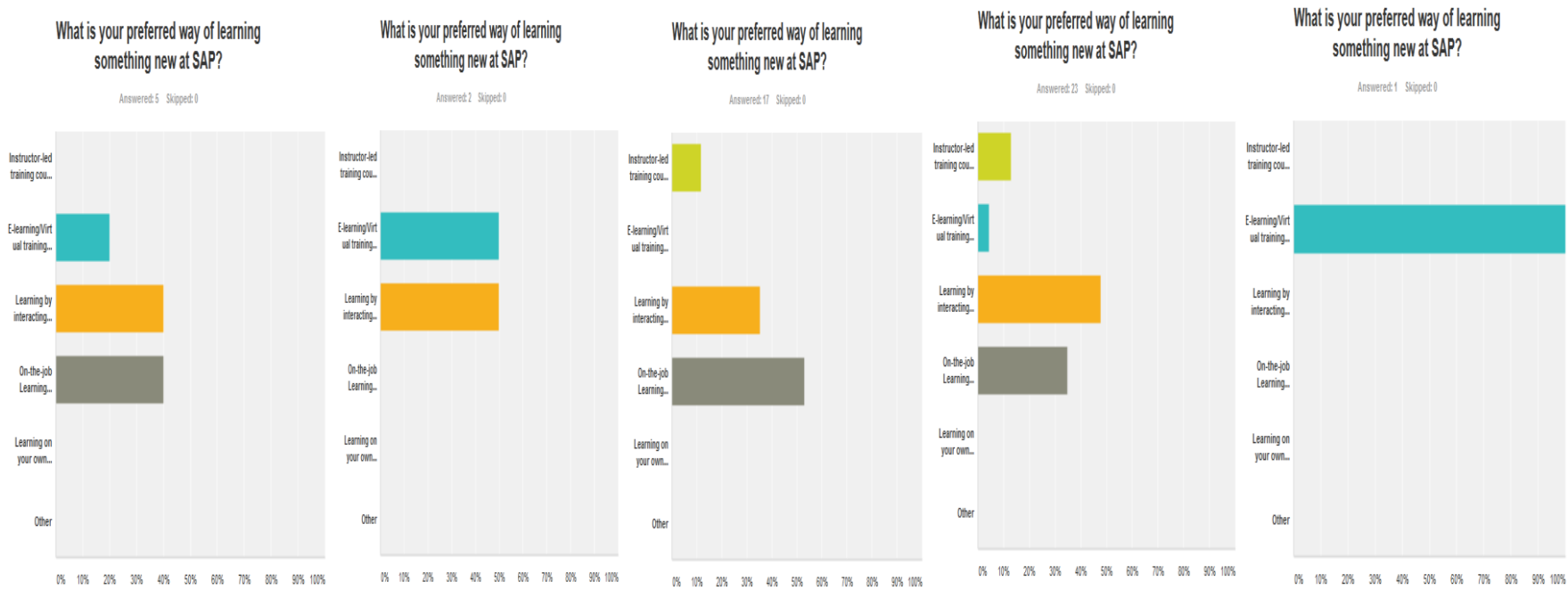
Source: Own processing

The figure above shows how learning preferences change with the different level of respondents´ school education. Results are broken down into separate categories, the first chart on the left represents learning preferences of high school graduates, followed by learning preferences of respondents who finished the college, then respondents with Bachelor´s degree, Master´s degree and the last chart shows the results for respondent who achieved Doctorate degree. Since the most respondents have Master´s degree or Bachelor´s degree, the distribution of respondents is very unbalanced and thus other categories contain just few respondents, which makes those categories rather

non-representative. That is also the reason why results don't show any patterns or trends which could be recognized. However, when we take a look at the most numerous groups of respondents with Bachelor´s or Master´s degree, we can observe again that the most preferred ways of learning among these respondents are "Learning by interacting with others" (35.29% and 47.83% respectively) and "On-the-job learning"(52.94% and 34.78% respectively).

Figure 22: Employees´ rating of learning methods in terms of importance to their job performance
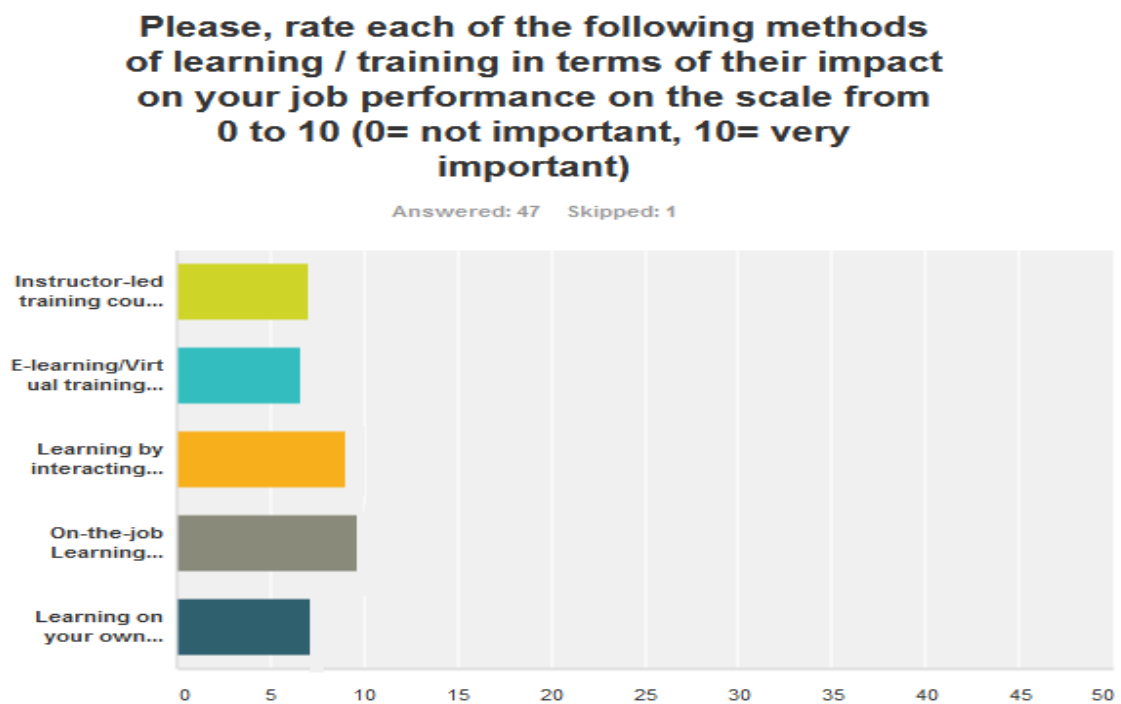
Source: Own processing

In the next question, respondents were asked to rate each option within the mentioned set in terms of impact on their job performance on the scale from 0 to 10. The figure 18 above shows the resulting scores, which are equal to average score assigned by the audience (obtained by summing up all the scores given to particular option divided by the number of respondents). This way, respondents have identified the importance of each learning method as follows: the form of learning with the biggest impact on the job performance is "On-the-job Learning" (9.4), followed by "Learning by interacting with others" (8.79). The

third highest ranked option is "Learning on your own initiative" (6.83), the option with fourth highest score is "Instructor-led training course" (6.77), and the least important way of learning out of all options according to respondents is "E-learning/Virtual training" (6.15).

Figure 23: Employees´ rating of learning methods in terms of the attractiveness
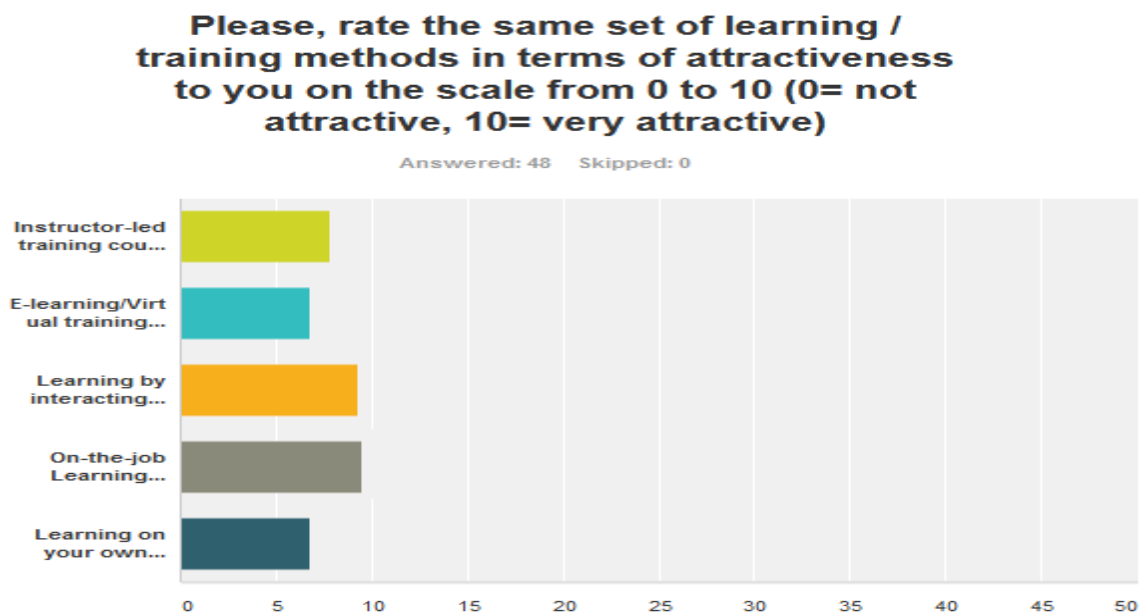
Source: Own processing

The final question is aimed to reveal how attractive these forms of learning are in the eyes of respondents. They were asked to evaluate the same set of learning methods in terms of their attractiveness on the same scale from 0 to 10. As in the case of previous question, the results represent the average values based on the scoring provided by respondents. The results are as follows: according to the respondents, the most attractive form of learning is "On-the-job learning" (9.15), followed by "Learning by interacting with others" (9.04). The third highest ranked form of learning in terms of attractiveness is "Instructor-led training course" (7.52), the fourth rated is "Learning on your own initiative" (6.49), and despite just 0.01 point gap, the least attractive form of learning according to respondents is "E-learning/Virtual learning" (6.48)

V. Results & Conclusion

The aim of practical part of the thesis was to discuss the L&D system at SAP, to find out the preferences of employees regarding ways of learning in the company, and how these preferences differ based on different demographical criteria. Based on the statistics revealed in the previous chapter, I would like to sum up the results and key findings. As already mentioned in the theoretical part of the thesis, formal learning activities (such as school education or participation in other formal learning programs) represent just a small fraction of the learning as a whole, while informal learning activities form a major part of lifelong learning process. When we take a look in particular at learning in the workplace, many authors across a literature and number of studies suggest that informal learning accounts for over 70% of all learning activities (which applies also for what we learn during our lifetime). This fact highlights the significant importance of informal learning activities, and the results of survey in this thesis are in general compliant and support these findings – participants of the survey perceive informal learning methods as the most preferred ways of learning in their jobs.

First of all, figure no. 17 clearly shows, that out of all the learning methods, majority of respondents have identified "Learning by interacting with others" as the most preferred way of learning at SAP, followed closely by "On-the-job learning". The former category of learning can be also labelled as "social learning", while the latter is often called "experiential learning". Regardless of how we call these forms of learning, they clearly cannot be considered as a formal learning. Instead we can say they belong under a big group of informal forms of learning, and these two are also highest ranked forms of learning among respondents both in terms of importance to their jobs, and in terms of attractiveness to them as learners and participants of such learning practices. These findings are supported by the figures no. 22 and 23, where we can observe that both "Learning by interacting with others" and "On-the-job learning" received the highest scores, and therefore are considered by respondents as more vital than for example structured training courses delivered by instructor, or e-learning, which are rather formal learning practices.

These results were further analyzed to identify whether there is any potential relationship between gender, age, marital status or level of education and the learning preferences. As for gender and marital status, we cannot observe any significant influence

on the results of survey – as we can see from the figures no. 18 and 20, the results are more or less consistent regardless gender or marital status of the respondents, just the numbers are slightly different – the common aspect of both stats is the dominance of "Learning by interacting with others" and "On-the-job learning", which is compliant with the general outcome of the research. When we take a look at the different age groups, the results are not as consistent as in a case of gender or marital status comparison – while the preferences of male and female respondents (or single and married respondents) were generally the same in terms of favourite methods of learning, we cannot observe the same phenomenon among different age groups. The figure no. 19 reveals there might be some difference in learning preferences base on the age of respondents – in age categories 31-35 and 36-40, the two usually preferred ways of learning are disrupted. In the age group 31-35, "Instructor-led training course" is equally preferred as "Learning by interacting with others", which leaves the usual co-favourite of "On-the-job learning" behind. Among the respondents in the age group 36-40, the most preferred way of learning is "On-the-job learning". However, it is not possible to identify the second strongest option since the rest of options have the same amount of preferences. When we take a look at the level of respondents´ education and possible relationship with their learning preferences, the figure no. 21 suggests that learning preferences could differ also based on the level of respondents´ school education – for some of categories, namely respondents who finished the college and Doctorate degree, we can observe these respondents have identified "E-learning/Virtual training" as a preferred way of learning (along with "Learning by interacting with others" in case of college graduates). However, since vast majority of employees at SAP are university graduates with Bachelor´s or Master´s degree, these two categories (college graduate, Doctorate degree) consist of only 3 out of total 48 respondents, so the informative value is not high in case of these two categories. Results for all other groups based on education level are consistent with the general finding – respondents in these groups have identified the usual most preferred ways of learning at SAP – "Learning by interacting with others" and "On-the-job learning".

VI. <u>References</u>

ATKINSON, R.L., ATKINSON, R.C., SMITH, E.E., BEM D. J. *Introduction to Psychology.* Harcourt Brace Jovanovich, Fort Worth, TX, 11th edition, 1993. ISBN 0155002899.

ARGYRIS, C., SCHÖN, D.A. *Organizational Learning: a Theory of Action Perspective.* Reading, Mass.: Addison-Wesley, 1978. ISBN 0-201-00174-8.

KOLB, D.A., Fry, R. *Toward an applied theory of experiential learning.* in C. Cooper (ed.), *Theories of Group Process*, London, UK: John Wiley, 1975.

Kolb, D.A. *Experiential learning: Experience as the Source of Learning and Development.* New Jersey: Prentice-Hall Inc., 1984. ISBN 0132952610.

NULTY, D.D., BARRETT, M.A. *Transitions in students' learning styles.Studies in Higher Education* 21(3), 1996.

DEWEY, J. *Experience & Education.* New York, NY: Kappa Delta Pi, 1938. ISBN 0-684-83828-1.

PIAGET, J. *Adaptation and Intelligence.* London: University of Chicago Press, 1980.

HARTL, P., HARTLOVÁ, H. *Psychologický slovník* (1. Opravené vydání). Praha: Portál, 2004. ISBN 978-80-7367-569-1.

FISCHER, G. "*Lifelong Learning - More Than Training,"* Journal of Interactive Learning Research, Special Issue on Intelligent Systems/Tools In Training and Life-Long Learning (eds.: Riichiro Mizoguchi and Piet A.M. Kommers), 2000.

PALÁN, Z.: *Celoživotní učení.* [Lifelong learning.] In: KALOUS, J., VESELÝ, A., *Vybrané problémy vzdělávací politiky.* [Selected aspects of educational policy.] Praha, Karolinum 2006. ISBN 8024612593.

EDWARDS, R., RAGGAT, P., HARRISON, R., McCOLLUM, A., CALDER, J. *Recent Thinking In Lifelong Learning.* Research Report no. 80, The Open University, 1998. ISBN 0 85522 858 X.

ASPIN, D., CHAPMAN, J. *Lifelong learning: concepts, theories and values*. Paper presented at SCUTREA, 31st Annual Conference, University of East London, 2001.

COOPER, L., WALTERS, S. *Learning / Work: Turning Work and Lifelong Learning Inside Out.* Human Sciences Research Council, 2009. ISBN 0796922837.

GORARD, S., REES, G., FEVRE, R. *Two dimensions of time: the changing social context of lifelong learning*. Studies in the Education of Adults, 1999. ISBN 1-872330-24-X.

FIELD, J. *Lifelong Learning*, In PETERSON, P., BAKER, E., McGAW, B. *International Encyclopedia of Education*, 3rd edition, 2010. ISBN 9780080448930.

COFFIELD, F. *A critical analysis of the concept of a learning society*. In *DifferingVisions of a Learning Society*. Research Findings Volume 1, Bristol: The Policy Press, 2000. ISBN 1 86134 230 6.

MARTIN, G. *Understanding motivation for lifelong education, through biografy, complexity and control.* College of Social sciences, University of Birmingham, 2011.

SCHÖN, D.A. *Beyond the stable state: Public and Private Learning in a Changing Society*. 1971, ISBN: 9780394472935.

McCOMBS, B.L. *Motivation and lifelong learning*. Educational Psychologist vol. 26, Official Journal of Division 15 - Educational Psychology, a Division of the APA, 1991. ISSN 0046-1520.

RABUŠICOVÁ, M., RABUŠIC, L. (ed.). *Učíme se po celý život? O vzdělávání dospělých v České republice*. Brno: Masarykova Univerzita, 2008. ISBN 978-80-210-4779-2.

MERRIAM, S., CAFFARELLA, R. *Learning in Adulthood: A Comprehensive Guide* . San Francisco: Jossey-Bass, 1991.

KOPER, E.J.R., TATTERSALL, C. *New directions for lifelong learning using network technologies*. British Journal of Educational Technology, 35(6), 2004.

CROSS, K.P. *Adults as Learners: Increasing Participation and Facilitating Learning* (1st Ed). San Francisco, USA, Jossey-Bass publishing, 1981.

SARGANT, N. *Motivation for and barriers to participation in adult learning – a study across norway, spain and GB*. National report, The National Institute of Adult Continuing Education, GB, 2000.

POTTER, J., ALDERMAN, T.E. *A profile of adult learners at the University of New Brunswick.* Fredericton, NB: University of New Brunswick, Department of Extension and Summer Session, 1992.

RUBENSON, K., DESJARDINS, R. *The impact of welfare state regimes on barriers to participation in adult education: A bounded agency model*. Adult Education Quarterly, 59, 2009.

VYCHOVÁ, H. *Vzdělávání dospělých ve vybraných zemích EU*. VÚPSV Praha, 2008. ISBN 978-80-7416-017-2.

ULICNA, D., URE, O.B., WERQUIN, P. (2010). *Lifelong Learning Strategies: Critical factors and good practice in implementation*. A final report submitted by GHK Consulting, 2010.

DAVIES, L. *Informal Learning: A New Model for Making Sense of Experience*, 2008. ISBN 978-0-566-08857-5.

TIGHT, M. *Key Concepts in Adult Education and Training*, London: Routledge, 1996. ISBN: 9780415128339.

COOMBS, P. with PROSSER, C. and AHMED, M. *New Paths to Learning for Rural Children and Youth*. New York: International Council for Educational Development, 1973.

COOMBS, P. *The World Crisis in Education*. New York: Oxford University Press, 1985. ISSN 00208566.

KNOWLES, M. *Self-directed Learning: A Guide for Learners and Teachers.* Association Press, 1975. ISBN 978-0695811167.

HIEMSTRA, R. *Self-directed learning.* In HUSEN, T. & POSLETHWAITE, T. N. (Eds.), *The International Encyclopedia of Education* (second edition), Oxford: Pergamon Press, 1994. ISBN 0080410464.

BOLHUIS, S. *Towards Active and Selfdirected Learning. Preparing for Lifelong Learning, with Reference to Dutch Secondary Education*. Paper presented at the Annual Meeting of the American Educational Research Association, New York, 1996.

GARRISON, D.R. *Self-directed learning: Toward a comprehensive model*. In *Adult Education Quarterly (48)*, 1997.

TEMPLE, C., RODERO, M.L. *Active Learning in a Democratic Classroom: The "Pedagogical Invariants"* of Celestin Freinet (Reading around the World). Reading Teacher, 1995.

TAYLOR, B. *Self-Directed Learning: Revisiting an Idea Most Appropriate for Middle School Students*. Paper presented at the Combined Meeting of the Great Lakes and Southeast International Reading Association, Nashville, 1995.

VAUGHAN, K. *Workplace Learning: a literature review*, Report prepared for Competenz, the New Zealand Engineering Food & Manufacturing Industry Training Organization Inc., 2008.

BARTOŇKOVÁ, H. *Firemní vzdělávání*. Grada Publishing, 2010. ISBN 8024729148

BOUD, D., GARRICK, J. *Understanding Learning at Work*. Routledge, 1999. ISBN 978-0415182294.

ERAUT, M., HIRSCH, W. *The Significance of Workplace Learning for Individuals, Groups and Organizations*, Monograph published by SKOPE, Oxford & Cardiff Universities, 2007.

SALAS, E., DICKINSON, T.L., CONVERSE, S.A., TANNENBAUM S.I. *'Toward an understanding of team performance and training"*, in SWEZEY, R., SALAS, E. (eds), *Teams: Their Thinking and Performance*, Norwood NJ: Ablex, 1992.

DALE, M. *Learning organizations, in Managing Learning*, ed. MABEY, C., ILES, P., Routledge, London, 1994. ISBN 978-1861521989.

COLLINS, D., HOLTON, E. *Human Resource Development Quarterly*, Vol. 15, Issue 2, 2004.

PONT, T., TAYLOR, S., CHAPPELOW, C., *Developing effective training skills: basics of modern HRM*, 3rd edition, London: Chartered Institute of Personnel and Development, 2003. ISBN 1-84398-027-4.

ARMSTRONG, M. *Armstrong's essential human resource management practice: a guide to people management*, 8th edition, Philadelphia, 2010. ISBN 07-494-5990-5.

KAPP, K., OʹDRISCOLL, T. *Learning in 3D: Adding a New Dimension to Enterprise Learning and Collaboration*, 2010. ISBN: 9780470504734.

POLLARD, E., HILLAGE, J. *Exploring E-learning, IES Report*, Issue 376, Institute for Employment Studies, 2001. ISBN: 1851843051.

EDWARDS, S.T. *Fire Service Personnel Management* (2nd edition). Upper Saddle River, NJ: Pearson Prentice Hall, 2005. ISBN: 0131177664.

BLAKE, P. *The knowledge management explosion*, Information Today,15,(1), 1988.

SCARBOROUGH, H., SWAN, J., PRESTON, J. *Knowledge Management: A literature review*. Institute of Personnel Development, London, 1999.

SANCHEZ, R. *Knowledge Management and Organizational Learning: Fundamental Concepts for Theory and Practice*, Working Paper Series, Lund Institute of Economic Research, 2005. ISSN 1103-3010.

LOMBARDO, M., EICHINGER, R. *The Career Architect Development Planner*, 1st Edition, Lominger Limited, 1996. ISBN 0965571211.

Internet Resources:

World Conference on EFA, Jomtien, 1990, UNESCO [cited 2014-05-13]. Available online at: http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/education-for-all/the-efa-movement/jomtien-1990/

Presidency Conclusions, Lisbon European Council, 2000 [cited 2014-05-13]. Available online at: http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/00100-r1.en0.htm

Strategie celoživotního učení ČR [National Strategic Reference Framework of the Czech Republic], Ministerstvo školství, mládeže a tělovýchovy, Praha, 2007, (PDF), [cited 2014-05-15]. Available online at: www.msmt.cz/file/9911_1_1/

WERQUIN, P. *Recognition of non-formal and informal learning in OECD countries: A very good idea in leopardy?* OECD, Directorate for Education, 2008, (PDF), [cited 2014-05-15]. Available online at: http://www.oecd.org/education/skills-beyond-school/41851819.pdf

LOEWENSTEIN, M.A., SPLETZER, J.R. *Formal and Informal Learning: Evidence from the NLSY.* 2000, (PDF) [cited 2014-05-18]. Available online at: http://www.emeraldinsight.com/doi/abs/10.1016/S0147-9121%2899%2918030-0

UNWIN, L. *Connecting Workplace Learning and VET to Lifelong Learning,* Institute of Education, Dept. of Lifelong and Comparative Education, UK, 2009. [cited 2014-06-22]. Available online at: http://www.beyondcurrenthorizons.org.uk/connecting-workplace-learning-and-vet-to-lifelong-learning

STOCKLEY, D. *How does the annual performance review assist in employee development?* (Article), [cited 2014-07-01], available online at: http://www.derekstockley.com.au/newsletters-05/037-annual-performance-review.html

Management Mentors, *Coaching vs. Mentoring: 25 Way They´re Different,* 2nd Edition. White Paper by Management Mentors, 2013 (PDF), [cited 2014-07-01], available online at:http://www.management-mentors.com/Portals/41809/docs/Coaching%20vs%20Mentoring%20-%2025%20Ways%20They%27re%20Different%20-%202nd%20Edition.pdf

VII. <u>Supplements</u>

7.1 Questionnaire

Introduction:

Dear colleagues, firstly let me thank you for filling this questionnaire. Without you, I would not be able to finish the diploma thesis for my master degree. Completion of this mini-survey is completely anonymous and its purpose is to find out your preferences and thoughts about the ways of learning in your jobs at SAP.

The first few questions will help me to determine whether there is any relationship between gender, age-group, education and/or marital status and your preferred way of learning a new skill:

Your gender: F / M

Your age range: a) 20 – 25   b) 26 – 30   c) 31 – 35   d) 36 - 40   e) 40+

Marital Status: a) Single   b) Married / in long-term relationship   c) Divorced

d) Widowed

The highest completed education level: a) high school graduate   b) College degree (DiS. or similar) c) Bachelor´s degree   d) Master´s degree   e) Doctorate degree or higher

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The next set of questions is focused on your opinion & preferences regarding ways of learning at SAP:

What is your preferred way of learning something new at SAP?

- a) Instructor-led training course (on-site/off-site)
- b) E-learning/Virtual training (SAP Learning Center/Success Map,...)
- c) Learning by interacting with others (Networking/Coaching/Mentoring/Job Shadowing,...)
- d) On-the-job Learning ("Learning-while-doing")
- e) Learning on your own initiative (Skills-on-demand, reading through materials,…)
- f) Other

Please, rate each of the following methods of learning / training in terms of their impact on your job performance on the scale from 0 to 10 (0= not important, 10= very important)

- Instructor-led training course (on-site/off-site)
- E-learning/Virtual training (SAP Learning Center/Success Map,...)
- Learning by interacting with others (Networking/Coaching/Mentoring/Job Shadowing,...)
- On-the-job Learning ("Learning-while-doing")
- Learning on your own initiative (Skills-on-demand,…)

Please, rate the same set of methods of learning / training in terms of attractiveness to you on the scale from 0 to 10 (0= I don´t find this way attractive at all, 10= I like this way very much)

- Instructor-led training course (on-site/off-site)
- E-learning/Virtual training (SAP Learning Center/Success Map,...)
- Learning by interacting with others (Networking/Coaching/Mentoring/Job Shadowing,...)
- On-the-job Learning ("Learning-while-doing")
- Learning on your own initiative (Skills-on-demand, reading through materials,…)

... Thank you!