

Development of Managers Competence Model in Dynamic Environment

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ABSTRACT

Last decade of high economic turbulence and significant fluctuations has tested managers' ability to adapt and apply the relevant skillset and competences to ensure success of their companies in various market conditions. The aim of the research is to clarify the set of managerial competencies required in a dynamic environment. Based on the review of the literature, the competencies and competence model of small and medium enterprise (SME) managers are discussed. A comparison of this theoretical base with the competence needed in specific real-life situations was conducted by organizing focus groups with SME managers. Based on the results of the research, we have developed a set of competencies or competence model and customized list of competencies. The research has limitations: it only explores the managers' competence and capabilities needs in SMEs; research scope is limited geographically. The results of the research explain the importance of linking management theory and practice, and help managers recognize the competences required in various market conditions.

Keywords: Competence, Competencies, Competence model, Managers' competence, Dynamic environment, Small and medium enterprises.

1. INTRODUCTION

Latvia being a small, open-economy country, its economic growth and increase of social welfare depends significantly on the entrepreneurs' ability to create, produce and sell competitive goods and services in the world market. Recent experience, gained during the transition period, can form a solid base for future modelling of manager's competences.

In light of economic cycles it is important for companies and their managers to be prepared for the next wave by drawing the appropriate conclusions from the recent experience. Economic downturn undoubtedly focuses the attention of companies on how to survive the crisis. Yet, we would like to pinpoint that a downturn is not an ending point; in fact, every downturn leads to another rise and, most likely – to a following crisis again. However, while the need is evident, there is a clear lack of empirical research to provide companies and managers with understanding and tools to adapt to expected changes. We found only few research-based explanations on appropriate competences that managers should employ during specific economic cycles.

There is ample research indicating existence of significant competence gaps between the competences required and those actually applied in management. Analysis of the research available led us to categorize it in following groups:

- research that is focused on changes in job contents and related competence gaps [4], [16], [29], [30];
- research around the set of managerial competencies [37];

- research on content of study programs and ways of improving their fit with industry requirements for specific competences [9], [18], [28].

With this research paper we attempt to draw the attention of the scientific world to this gap.

Interviews with applicants (managers with at least 2 years managerial experience), conducted as part of admissions procedure for Master of Business Administration studies at Riga Technical University, revealed discrepancies between managers' existing skill-sets and those required to handle severe market conditions, such as rapid growth or decline. Hence, these interviews served as the basis for starting the research. Since 2003, a total of 480 managers, aged between 24 and 49 and with management experience of 2 to 23 years, have been interviewed. Each interview was performed by 2 or 3 expert interviewers, with at least one of the authors of this research present at each interview.

During the interviews around 69 % of the respondents indicated that knowledge, skills and competencies they had developed previously do not fit the needs of the fast-changing market and expressed a distinct need for a different set of capabilities to ensure successful management process in the present market situation. This led us to the assumption that the managerial competencies required to successfully lead a company differ in various market conditions. To confirm this assumption, the research was initiated, with focus group method being the core means of obtaining research data.

The above-mentioned observations have led us to the following research question: *Does dynamic environment require different competences? If so, then – which competence groups are the most important ones* in adverse economic conditions and is there any difference in the perception of managers regarding the importance of competence groups in a competence model?

In this paper we are investigating managers' competencies and changes of their importance in different development stages of economic cycles. Alongside the more global economic changes, each company is also passing through its own lifecycle not bound to economic cycles, thus adding extra complexity to the research. However, for purposes of this research the impact of individual company lifecycles will be omitted. Considering the importance of having appropriate managerial competence to successfully navigate dynamic market conditions, we have made research and opened this field for deeper research. Whilst this research is limited to small and medium-sized enterprises (SMEs) in Latvia, this is a one of papers in a series of studies to explore managers' competencies.

The paper is organized in three parts: introduction of the key concepts and conceptual background to competencies and competence models; description of the research methodology and SME managers' competence model or set of competencies in relation to the research findings and the dynamic environment context in Latvia; description of the main findings and conclusions.

2. CONCEPTUAL BACKGROUND OF MANAGERS' COMPETENCE MODEL IN DYNAMIC ENVIRONMENT

Competence and competencies

The linguistic roots of the word *competence* come from Latin "competens" – as being able and allowed by law/regulation, and "competentia" as (cap-)ability and permission. The use of the Western European words "competence" and "competency" dates back to the early 16th century. The same word *competence* can be found also in ancient Greek – "ikanotis". It is translated as the quality of being "ikanos" (capable), having the ability to achieve something; a skill. "Eangelmatikes ikanotita" stands for professional/vocational *capability* or *competence*. [27]

General definition of *competence* is often cited from David McClelland as the founder of the modern competences movement. In his paper "Testing for competence rather than for intelligence" [25] McClelland introduced the concept of "competency" to replace the more limited concept of "skill" and include additional behavioural aspects and technical capabilities. Furthermore, the methodology of behavioural event interviewing and criterion-referenced assessment is McClelland's contribution to the development of the competence approach [19]. McClelland's theoretical base originated in the improvements of the educational system, and his approach was then transferred to entrepreneurship. Albanese [2] adds that competencies are personal characteristics that contribute to effective managerial performance.

The concept of *competence* has been developed further by many well-known scientists and researchers, entrepreneurs and representatives of public organisations. Mulder [27], for example, analysed competence development in organisations and compared over 40 definitions of the concept of competence, distinguishing differences on the following dimensions: job focus versus role focus, context freedom versus context specificity; knowledge versus capability, behaviour versus ability, specificity versus generality; learnability versus unchangeability, performance versus development orientation; core versus peripheral capabilities, and the person versus the system as carrier.

The discussion continues on whether the term "competency" (plural – competencies) and "competence" (plural – competences) bear the same or a different meaning. According to some dictionaries, both concepts have the same meaning while others highlight certain differences. Supporters of the latter approach claim that "competency" concentrates on how people behave while "competence" focuses on what people do. In addition, "competency" corresponds to behaviour-based aspects whereas "competence" – to skill-based ones [30]. Boyatzis [8] defined competency as a capability or ability. We may say that competency is the scope of related yet different sets of behaviour, organized around an underlying principle, which we call "intent". Behaviours are alternative manifestations of the intent, as appropriate in various situations or times.

Mulder [27] is one of the authors who focused extensively on explaining the difference between competence and competency. According to Mulder, in an educational context *competence* is the general capability of persons (or organisations) to perform (an activity, a task, solve a problem) that is being developed during the study process. A *competency* is a part of competence. Mulder thus sees the relationship between competence and competency as a whole-part relationship.

No single opinion exists about what is a *competency* or *competence* neither in general definitions, nor in managing a company or organisation, or in performing job responsibilities.

Klemp [20] defined the job competency as "qualities of a person that manifest as effective or outstanding performance". He also indicated that "competencies are features which are causally related to effective or outstanding work performance" [12], [20]. Spencer and Spencer [32] defined that competencies include "motives, traits, self-concepts, attitudes or values, content knowledge, and cognitive or behavioural skills – any individual characteristic that can be measured or counted reliably and that can be shown to differentiate significantly between superior and average performers or between effective and ineffective performers".

The meaning of competence is linked to an individual's ability to learn, communicate and cooperate in a changing environment. It is still complicated to define the concept of competence for scientific and practical purposes and to show its practical importance and construction. According to the studies done, we conclude that, when speaking of *competence* in Latvia, three elements are implied – abilities, knowledge and skills, which are then further split into several groups of elaborately defined competencies.

Summarising the research of the more well-known authors, it can be concluded that various definitions of the term "competence" and also various classifications of competencies are used. **For the purposes of this research series we define the following concepts:** *capability* is the ability to use the competence; *competence* (plural – *competences*) is a set of skills, knowledge and attitude or set of competencies (singular – *competency*) that include also personal behaviour or intent.

Competence model

The development of the competence concept reveals a new research direction – *competence models*, which are based on the competence theory that emerged in the 1980s.

The link between competencies and performance is identified as highly important. In Anglo-Saxon countries the competence models are focused on management competences. In France, the spotlight falls on employees in technical positions [6]. The widely accepted definition of the competence model used by managers of Anglo-Saxon countries is the set of desired competencies – skills, knowledge, attitudes, underlying characteristics or behaviour – that differentiate effective performers from ineffective ones [7], [8], [26].

Delamare le Deist and Winterton [11] stressed that every country employs an individual approach to evaluation of the competencies and development of the competence models. According to them, the behavioural approach is the USA tradition, the functional approach is the UK tradition, while France, Germany and Austria belong to countries with a multi-dimensional and holistic approach to evaluation of competencies. We believe the multi-dimensional holistic approach to be the most relevant for Latvia, yet the overwhelming dominance of SMEs in our economy combined with the small internal market results in having some specific features of the competence models used here.

Each competence group consists of numerous competencies (individual skills and abilities), and the model consists of multiple competence groups. For example, Lapiņa and Aramina [21] have organized competencies into four basic groups, each encompassing qualities defined in greater detail: Professional competencies; Social and communication competencies; Personal and responsibility competencies; Innovative, learning and leadership competencies.

Competencies and competence groups are considered in the context of various sciences. Competence models are widely used in strategic management, human resource management, education etc. In the field of education, competencies are

grouped according to three criteria [33]: to know and understand (theoretical knowledge, the ability to understand); to know how to behave (practical skills and behaviour skills and their use in practice); to know how to live (values, attitudes, responsibility).

Another widely used competence model was developed by *UNIDO* [35]. *UNIDO* concept suggests that all competencies can be grouped into 3 categories: managerial, generic, and technical and functional.

Various sources and studies show different groupings of competencies, forming various competence models suitable for any particular case and situation. Sometimes authors, especially in the field of management sciences, talk about competence models in the aspect of talent management, leadership and other management areas. For instance, Adizes [1] has developed an approach which describes the major management functions based on four "management roles": a producer, an administrator, an entrepreneur, and an integrator. Each of these roles has its own specifics, entails different activities and (requires) different competencies. These roles are closely tied to managers' behaviour and accordingly different types of decisions made. All management decisions may be classified in programmable and non-programmable. The programmable ones are those that can be made according to existing rules and using standard tools. They require little time and effort and are usually related to performing the producer's or administrator's roles. The entrepreneur's and integrator's roles in the majority of cases are linked to non-programmable decisions.

Since managerial decision making is to a large extent based on managerial competences, we believe that this division can also be applied to competencies – grouping them into programmable competencies – the ones that can be acquired and developed over time and through learning, and the non-programmable competencies – those that are hereditary or genetically inherited.

Dynamic environment

As we already mentioned, within this research we refer to *capability* as a manager's ability to use competences and apply competence models in dynamic situations. Various definitions of dynamic environment or of cycle concepts are found in both economic theory and studies of cyclical developments of companies. However, mostly the authors are speaking only about the concept of *crisis*.

In a study of the origins of the word *crisis*, Asmonti [5] finds that "the noun *crisis* has the same stem as the verb κρινω, whose original meaning is "to divide", "to separate"; hence it acquires that of "to choose" or "to prefer". *Krisis* is the process through which decisions are made and preferences are expressed".

Definitions of *crisis* given in the Longman Dictionary of Contemporary English [22] are: "a time when a difficult or important decision must be made" or "the turning point of a disease when an important change takes place". This means that a crisis is a critical event or point of decision which, if not handled in an appropriate and timely manner (or if not handled at all), may lead to adverse consequences.

Winter [38] points out that such stream of newly created activities and spontaneous adaptations cannot be understood as exercising capabilities; rather they represent a completely different mode of acting and practicing.

Smith and Dominic [31] suggest that the best way to understand the term *crisis* is not to perceive it as the particular calamity moments themselves, but rather how the event relates to an organization's capacity to respond to the specific situation.

Any system being influenced from the outside tries to balance itself and return to the regular (equilibrium) conditions. The same can be said about companies. After experiencing extreme market conditions, a period of stabilization follows.

We analysed manager's competencies in dynamic environment, focusing on extreme market conditions. Crisis and rapid growth are considered the extreme phases of a cyclical development. Over the past few years, companies in Latvia have experienced both situations: the steep economic growth of the mid-2000s followed by the rapidly evolving global crisis in 2008~2010. Adaptability has been crucial in both situations – the crisis and rapid growth. Yet the question which managerial competencies are necessary to ensure successful company management during each of these periods is still left unanswered, especially for SMEs.

3. METHODOLOGY OF EMPIRICAL STUDY OF MANAGERS' COMPETENCIES IN SMEs IN LATVIA

Reviewing the competence models mentioned in the conceptual background part of the paper, we conclude that they are generally based on a theoretical approach and attempt to group competencies by listing all possible competencies and then grouping them according to certain criteria. We decided to pursue a more pragmatic approach by exploring the actual experience of SME owners and managers in order to build a custom list of competencies needed in the business environment of Latvia.

Small and medium-sized enterprises are the engine of the European economy. They are an essential source of jobs, entrepreneurial spirit and innovation in the EU and are thus crucial to fostering competitiveness and employment [36].

Statistics illuminate the dominance of medium, small and even micro companies in Latvian economy: according to Eurostat Statistical database in 2013 [15], 99.8% of all enterprises in Latvia were SMEs. Since SMEs form such a significant part of the economy in Latvia, we limited the scope of our research to small and micro enterprises.

The research methodology is based on case study approach, applying research design and methods as developed by Eisenhardt [14] and further described by Yin [39], Dryer and Wilkins [13]. Research was based on eight main steps: defining research question(s), selecting cases, combining qualitative and quantitative data, entering the field, analysing data, extending existing theory, comparing emerging theory with existing literature and closing the research.

According to Ulrich and Eppinger's [34] philosophy of creating high-quality information channel, three methods are commonly used: interviews, focus groups and observing the product in use.

We used focus group method in our research as it is more interactive and dynamic; and diversity of opinions present in a focus group leads to a more creative and productive discussion, when compared to individual interviews. Also, research by Griffin and Hauser [17] shows that one two-hour focus group reveals about the same number of results as two one-hour interviews while Carson *et al.* [10] indicate that "focus groups concentrate clearly on a specific topic and involve interactive discussion among its participants".

Using focus groups helped us develop new insights into managerial competencies and generated input for conducting further, more quantitative research. In this research, interviews were not conducted as deliberate part of the research, but served more indirectly – to prove the topicality of research before it was undertaken, as we already mentioned earlier.

The total number of respondents was 34, aged 24 to 63, both sexes and representing 34 different SMEs from both – service

and manufacturing. The industries represented were accounting services, advertising, credit and banking, information technology, plastic manufacturing, printing, road construction, software development, and waste management.

In total, 3 focus groups were conducted. The size of each focus group was 8–14 persons, determined according to the methodology described by Griffin and Hauser [17]. Focus groups were composed in such a way as to ensure maximum diversity of participants from both academic and business environment, and several methods and procedures were applied and tested in order to achieve the planned results of the focus groups.

We used the following procedure in conducting focus group discussions: at the beginning, focus group participants were asked to individually name 4–5 managerial competencies of a successful SME manager in each of the competence groups defined by Lapiņa and Aramina [21] – Professional competencies, Social and communication competencies, Personal and responsibility competencies and Innovative, learning and leadership competencies. These were then combined in a common list, creating certain sets of competencies within each group. Then, participants spent 15–25 minutes individually ranking the competence groups and competencies within the groups according to their importance for Latvian SMEs in regular market conditions.

Customer need identification and analysis methodology of Quality Function Deployment method [3] was used to gather the results of the focus groups. Afterwards, the participants ranked the competence groups according to their importance in various market conditions – regular environment, crisis and rapid growth. The weight of competence group is depicted in the findings part of this research paper (see Figure 2). These results were then discussed in the focus groups, with the goal of improving data accuracy. The results of these focus groups are described in detail below.

4. RESULTS AND FINDINGS

Realising that the research balances between management science, education science, and psychology, we still believe it is possible to develop a unique, environment-specific competence model tailored for certain roles and functions. The actual environmental conditions that a manager faces affect his/her ability to use competencies. This ability to use specific competencies determines the set of capabilities a manager possesses. Thus, the set of capabilities a manager applies in everyday life is much narrower than the set of competencies this same manager actually holds.

Focus group discussions among business professionals in Latvia revealed a set of challenges that the SME managers face regarding the competence needed to survive and succeed in a dynamic environment.

As a result of the focus group discussions, 30 competencies that a manager should have to successfully manage an SME in crisis or rapid growth conditions were identified. All competencies were divided into 4 groups using the competence model developed by Lapiņa and Aramina [21].

Having spilt the competencies, we realized that the competence model applied is generic and universal and needs to be adapted to fit specifics of SME managers' competencies. To do this, we renamed some of the groups and reassigned some of the competencies to different groups. As a result, a modified competence model for an "ideal" SME manager was developed, combining all managerial competencies into four competence groups (see Figure 1 and Table 1).

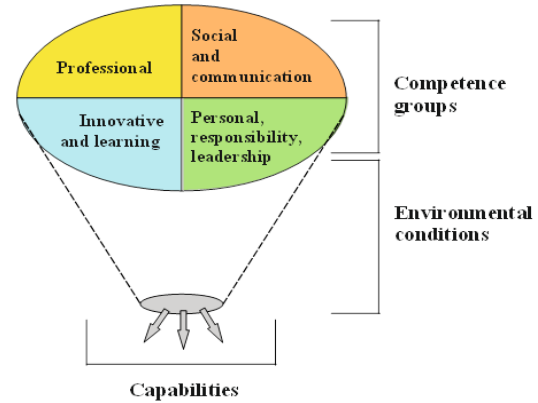


Figure 1. Managers' Competence Model [created by authors]

Table 1. Managers' Competence Groups [created by authors]

Competence groups	Competencies
Professional competencies	<ol style="list-style-type: none"> 1. Ability to analyse and evaluate 2. Ability to plan 3. Ability to manage 4. Ability to motivate 5. Ability to react, delegate, and divide risks 6. Ability to present
Personal and responsibility, leadership competencies	<ol style="list-style-type: none"> 1. Leadership 2. Self-organisation and self-development 3. Responsibility 4. Collaboration 5. Erudition 6. Respect 7. Trustworthiness, loyalty 8. Intelligence 9. Intuition 10. Self-criticism (reasonable)
Social and communication competencies	<ol style="list-style-type: none"> 1. Ability to form relationships within the company 2. Ability to form relationships outside the company 3. Ability to persuade and motivate 4. Ability to form and organize teamwork 5. Ability to compromise, diplomacy 6. Ability to communicate in a foreign language
Innovative and learning competencies	<ol style="list-style-type: none"> 1. Ability to create (creativity) 2. Ability to spot and cease opportunities 3. Ability to generate ideas 4. Ability to take risk 5. Willingness to learn 6. Ability to promote employee development 7. Ability to pass on knowledge and skills 8. Ability to notice illogical issues

The reasoning behind introducing this division lies in the assumption that only part of managerial competencies can be changed or learned in order to respond to certain conditions (such as crisis or rapid growth). This then has further implications, for example, for providers of management education in adjusting their management programs and events to focus on the development of "changeable" competencies in their programs and activities.

The review of the theoretical aspects of competence reinforced our initial assumption that different managerial competencies are required to successfully handle dynamic environment – crisis or growth. In order to verify this assumption, we analysed

the intensity of usage of various competencies under changing or dynamic market conditions.

As part of the research, the existence of the link between the competence model discussed above and the dynamic environment was identified. The developed competence model clearly indicates that the rapid growth and crisis situations emphasise different entrepreneurial skills and competencies, and the importance of competence groups varies when compared to regular market conditions.

When arranging competence groups in the order of their importance in regular conditions, the participants of the focus groups agreed on the following statements:

- the most important are the Professional competencies, without which the daily work of the company's manager is impossible (opinion supported by 98 % of all respondents).
- the second come Social and communication competencies (supported by 96 %).
- next are Personal and responsibility, leadership competencies (supported by 95 %).
- Innovative and learning competences were placed fourth in the rank of importance (supported by 93 %).

The analysis of responses shows certain trends regarding the importance (intensity of usage) that the respondents assigned to major groups of competence in this competence model (see Figure 2).



Figure 2. Importance of competence groups [created by authors]

Figure 2 shows that respondents consider the professional set of competencies to be the most important in periods of both crisis and rapid growth, with the other competence groups being seen as slightly less important. At the same time, significance of the other three competence groups in time of rapid growth exceeds that in the periods of crisis. This is especially outspoken with the Innovative and learning competencies (+0.37 points). This means that in times of crisis managers' priorities are more focused on ensuring continuity of company work (short term focus), which requires great deal of professional competencies. In times of growth and development, however, managers' focus tends to include other competences as well (long term perspective).

5. CONCLUSIONS

The main impact of the research is raising the awareness of appropriate sets of competencies in various environments – educated application of the relevant competence model will allow organizations to function more effectively even in adverse market conditions, and thus ensure sustainable development in all aspects, including business performance indicators, social attributes and responsibilities.

First, we tried to find out what managerial competencies are actually necessary to successfully manage an SME in Latvia. A

list of 30 competencies was developed during the focus group discussions. Since this list of crucial managerial competencies was based on specific experience and conditions managers face in Latvia, it differs from those already available in published sources.

From the list developed we can see that competencies actually required to successfully manage an SME in Latvia is narrower than the theoretical assumptions of what an "ideal" manager needs. There can be numerous reasons behind this, and that would require further investigation, yet this is beyond the scope of this research. Research results lead us to the assumption that due to the smaller size of SME some of the competencies might not be relevant or very rarely used. Another assumption related to the size of the company is that an SME manager's activities are more focused on operational, everyday issues with managerial aspects remaining rather limited. We feel these assumptions need further analysis.

We concluded that most of the actual competencies that managers consider relevant are, in fact, embodied in the personality of a manager as an integral part of his/her individual character, with the Professional competencies being the only ones that are not part of a personality and can be learned.

And finally, we investigated if there is any difference in the perception of managers regarding the importance of various competences in the competence model and if they feel that economic downturn and growth require different competences.

The results show that there is difference in perception of importance regarding the competence groups, with respondents placing Professional competencies as the most important (98%) and marking Innovative and learning competencies as the least important group of competences, supported by (93%) of respondents. We conclude that this measure of importance shows the practical nature of perception of how a small or medium company has to be managed. When analysing the varying importance of competencies in light of different economic conditions, we concluded that importance of competencies does vary along with economic changes – in times of economic crisis professional competence group plays a more crucial role than the other competence groups, while during periods of growth importance of non-professional competence groups increases more significantly.

Apart from developing a competence model for SME managers in Latvia and establishing the difference in usage of various competencies under adverse market conditions, the research raised several additional questions that we feel require further exploration:

- The research was limited to Latvia, thus raising the question whether a similar competence model can be applied in different geographic regions or if the competence models are geography-specific.
- The analysis of individual responses revealed polarities of opinions, thus, we believe a further research involving greater respondent base needs to be conducted so as to analyse the use and importance of various competencies in regard to specific industries and positions of particular respondents.
- The analysis of individual responses showed that importance of certain competences varies depending on the size of the company – even within the same statistical group of SMEs. The research revealed that managers of relatively larger companies – the medium sized enterprises within the SME group – were less involved in performing daily functional activities and had more space for the actual management function.

We believe a strong connection and cooperation between all the stakeholders – the State, academia and business, and timely and

adequate reaction of both the state and the higher education institutions to changes in business environment would significantly boost development and success of Latvian SMEs. Academic education is based on gaining theoretical knowledge and skills which oftentimes does not facilitate development of the practical competencies needed by successful managers. Considering the role of SMEs in Latvia's economy, the competence model we developed provides ground for higher education institutions to revise and improve their study programmes so as to place more focus on developing competencies crucial for the managers. This way, the development of managerial capabilities in SMEs in Latvia would be encouraged.

6. REFERENCES

- [1] I. Adizes, **The Ideal Executive: why you cannot be one and what to do about it**, Santa Barbara: The Adizes Institute Publishing, 2004.
- [2] R. Albanese, "Competency-based management education", **Journal of Management Development**, Vol. 8, No. 2, 1989, pp. 66–76.
- [3] American Supplier Institute (ASI), **Quality Function Deployment (QFD)**, Kvalitetin for 2000 – talet. Norway: ASI Scandinavia, 1992.
- [4] M. Armstrong, **A Handbook of Human Resource Management Practice** 10th ed., London/Philadelphia: Kogan Page Ltd, 2006.
- [5] L. Asmonti, "What do we mean by crisis? The culture of confrontation in the Greek city", **Annali della Facoltà di Lettere e Filosofia (ACME)** dell' Università di Milano, Vol. LXIII - fasc. I, Edizioni Universitarie di Lettere Economia Diritto, Milano, Italy, 2010, pp. 279–293.
- [6] J. Aubret, P. Gilbert, F. Pigeyre, **Management des Compétences. Réalisations. Concepts, Analyses**, 2-e ed., Dunod, 2005.
- [7] R.E. Boyatzis, **The Competent Manager: A Model for Effective Performance**, New York: J. Wiley, 1982.
- [8] R.E. Boyatzis, "Competencies in the 21st century", **Journal of Management Development**, Vol. 27, No. 1, 2007, pp. 5–12.
- [9] A. Camuffo, F. Gerli, S. Borgo, T. Somià, "The effects of management education on careers and compensation: A competency-based study of an Italian MBA programme", **Journal of Management Development**, Vol. 28 No. 9, 2009, pp. 839-858.
- [10] D. Carson, A. Glimore, C. Perry, K. Gronhauigh, **Qualitative Marketing Research**, London: Sage, 2001.
- [11] F. Delamare Le Deist, J. Winterton, "What Is Competence?", **Human Resource Development International**, Vol. 8, No. 1, 2005, pp. 27-46.
- [12] D.D. Dubois, W.J. Rothwell, **Competency-Based Human Resource Management**, CA: Davies-Black, Palo Alto, 2004.
- [13] W.G. Dyer, A.L. Wilkins, "Better Stories, Not Better Constructs, To Generate Better Theory: A Rejoinder to Eisenhardt", **Academy of Management Review**, Vol. 16, No. 3, 1991, pp. 613-619.
- [14] K.M. Eisenhardt, "Building theory from case study research", **Academy of Management Review**, Vol. 14, No. 4, 1989, pp. 532-550.
- [15] **Eurostat Statistical database**, Small and medium-sized enterprises, 2013, http://epp.eurostat.ec.europa.eu/portal/page/portal/european_business/special_sbs_topics/small_medium_sized_enterprises_SMEs [electronic source]
- [16] P. Galagan, "Bridging the Skills Gap - Part I", **Public Manager**, Vol. 38, No. 4, 2010, pp. 61-67.
- [17] A. Griffin, J.R. Hauser, "The Voice of the Customer", **Marketing Science**, Vol. 12, No. 1, 1993, pp. 1-27.
- [18] A. Ho, "Emerging-market firms scramble for 'right' talent", **Enterprise Innovation**, Vol. 4, Issue 3, June, 2008, p. 11.
- [19] S. Horton, **The Competency Movement. Competency Management in the Public Sector**. Eds. Sylvia Horton et al., Amsterdam: IOS Press, 2002.
- [20] G.O. Klemp, **The assessment of occupational competence**, Washington, DC: National Institute of Education, 1980.
- [21] I. Lapiņa, D. Aramina, "Changing of Topicality of Human Competencies within Companies' Life Cycle", **The 15th World Multi-Conference on Systemics, Cybernetics and Informatics**, Proceedings, Vol. I, USA, Florida, Orlando, 2011, pp. 106–111.
- [22] **Longman Dictionary of Contemporary English**, 3rd ed., England: Longman Dictionaries, 1995, p. 322.
- [23] B. Mansfield, L. Mitchell, **Towards a Competent Workforce**, London: Gower, 1996.
- [24] J. Mathewman, "Trends and developments in the use of competency frameworks", **Competency**, Vol. 1995/1, No. 4, 1995, pp. 23-34.
- [25] D.C. McClelland, **A Guide to Job Competency Assessment**, Boston: McBer, 1976.
- [26] P. McLagan, **Great Ideas Revisited. Training and Development**, Vol. 50, No. 1, 1996, pp. 60–66.
- [27] M. Mulder, "Competence – the essence and use of the concept in ICVT", **European journal of vocational training**, Vol. 40, No. 1, 2007, pp. 5-21.
- [28] S.H. Munkeby, **Middle manager competencies required for success in the 21st century**, Dissertation, Arizona: University on Phoenix, 2007.
- [29] C. Rappe, T. Zwick, "Developing leadership competence of production unit managers", **Journal of Management Development**, Vol. 26, No. 4, 2007, pp. 312-330.
- [30] S. Sanghi, **The Handbook of Competency Mapping**, California, London, Singapore: SAGE Publications, 2007.
- [31] D. Smith, E. Dominic, **Key Readings in Crisis Management: Systems and Structures for Prevention and Recovery**, NY: Routledge, 2006.
- [32] L.M. Spencer, S.M. Spencer, **Competence at work: Models for Superior Performance**, New York: John Wiley & Sons, 1993.
- [33] Tuning Educational Structure in Europe. Pilot Project Final Report, Phase 2, **TUNING Educational Structures in Europe**, 2005, <http://www.tuning.unideusto.org/tuningeu/> [electronic source]
- [34] K.T. Ulrich and S.D. Eppinger, **Product Design and Development**, 4th ed., New York: McGraw-Hill, 2008.
- [35] UNIDO competencies, **United Nations Industrial Development Organization (UNIDO)** (2012), www.unido.org [electronic source]
- [36] G. Verheugen, **The new SME definition User guide and model declaration**, Brussels: European Commission, 2011.
- [37] V. Wickramasinghe, N. De Zoyza, "A comparative analysis of managerial competency needs across areas of functional specialization", **Journal of Management Development**, Vol. 28, No. 4, 2009, pp. 344-360.
- [38] S.G. Winter, "Understanding dynamic capabilities", **Strategic Management Journal**, Vol. 24, No. 10, 2003, pp. 991–995.
- [39] R.K. Yin, **Case Study Research: Design and Methods**. London: SAGE Publications, 2009.