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The Impact of Knowledge Competence on Company Performance of Small and Medium Enterprises in Kazakhstan

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#### **ABBREVIATION**

DIKW Data, information, knowledge and wisdom

GDP Gross domestic product

GEM Global Entrepreneurship Monitor

ICT Information and communication technology

IT Information technology

KAAS Knowledge asset accounting strategy
KACS Knowledge asset communication strategy
KAMS Knowledge asset measurement strategy
KDAS Knowledge domain assessment strategy

KM Knowledge management KPI Key performance indicators

OECD Organisation for Economic Cooperation and Development

R&D Research and Development

SECI Socialization, Externalization, Combination, Internalization

SMEs Small and medium-sized enterprises

#### INTRODUCTION

The Relevance of the Research. In the current economic situation knowledge is considered as the main source of competitive advantage. Especially, small and medium sized enterprises ability to develop and use knowledge affects its sustainability and further success in the marketplace.

The theory of knowledge management suggests different approaches towards understanding of knowledge as an organizational concept, although all of them are not studying knowledge competence independently. In this research we study knowledge competence as a company's capability to exploit knowledge and by that developing knowledge in other specific areas of organization.

Changes and shifts in the economy make organizational knowledge as a reliable resource which can be minimized from the external influence. Development of organization requires acquisition of needed skills and knowledge. Therefore, company's ability to exploit this knowledge creates knowledge competence. Moreover, the strategic role of knowledge makes it both important on individual and organizational levels. Employees are creators of knowledge in a company and their role is mainly on their ability to use knowledge in company's operations.

Economic development of the country highly depends on knowledge resources, the human capital that possess the knowledge. The President of the Republic of Kazahstan N.A. Nazarbayev in his Addresses had emphasized the importance of small and medium enterprises, its role and significance for economic development of Kazakhstan [1,2]. In the context of the current programmes supporting development of enterprises the Programme for Industrial Innovative development 2015-2019 is targeted to support companies in creating value added products to minimize dependence on natural resources. Moreover, this programme is focused on the development of small and medium enterprises. The company's ability to produce product which will be able to compete on a global market and in conditions of increased competition is ensured by company's ability to generate and use required knowledge.

Currently, there is gap in the area of knowledge development in SMEs in Kazakhstan and its impact on performance. Therefore, this study can contribute to SMEs organizational development and for further development of policies in this area. Government's active role in supporting SMEs creates positive results, which is already proven by our analysis of SMEs over the past 10 years based on the data from Statistical Agency, but still internally SMEs capabilities are very limited. Recommendations given by this research will positively affect internal changes of SMEs in terms of organizational knowledge base creation and use of knowledge.

## The level of the topic scientific development.

Approaches on knowledge competence in organizations are reflected in the theories of knowledge management (I. Nonaka, Wiig, Dalkir, Von Krogh), resource -based view of the firm, competence based-view of the firm (Sanchez, Heene, Thomas, Grant, Barney), and learning organization (I. Senge, Argyris). In

Kazakhstan, the issues of knowledge management were reflected in the papers of S.R. Yessimzhanova [3], T.S. Satkaliyeva [4], A.N. Sakhanova [5], B.L. Tatibekov [6], G.Zh. Tayauova, Z.K. Chulanova [7] and others.

Issues of knowledge development and SMEs development were presented in the studies of K. Moustaghfir, J.Schiuma, T. Andreeva, A. Kianto, H.Mintzberg, E. Ofek, M. Sarvary, A. Lerro, E.Wu and others.

It is important to state that research in the area of knowledge competence is limited, particularly related to SMEs in Kazakhstan

The purpose of the dissertation research is to develop theoretical – methodological aspects of knowledge competence development in SMEs in Kazakhstan with its influence on company performance.

In accordance with that, the following **objectives** were formulated:

- to define and clarify the theoretical content of the concept of "knowledge competence";
  - to identify and study main elements of knowledge competence;
- to investigate the influence of moderating factors such environment dynamism and uncertainty, size, industry and technologies on the relationship between knowledge competence and company performance;
- to study small and medium enterprises in order to identify the knowledge management development;
- to build a model of knowledge competence influence on company performance in small and medium enterprises;
- to define suggestions for knowledge competence management in small and medium enterprises.

Object of study is small and medium enterprises in Kazakhstan.

**Subject of study** is the set of theoretical, methodological and practical issues in managing knowledge competence in small and medium enterprises.

**Research methods.** We use the methods of theoretical modeling, logical, systematic, statistical analysis of the data with computer software SPSS Statistics (Statistical Package for the Social Sciences) for Windows 21.0.

Theoretical and methodological base of the research consisted of research studies of local and foreign scientists in the area of knowledge management.

The system and complex approaches were used as **the methodological basis of the research**. In the research methods of quantitative and qualitative analysis, economic-statistical information processing and modeling were used.

**The information base** for the research have constituted the data of the Committee of Statistics of the Republic of Kazakhstan, research materials on studied topic, data of World Bank, Global Entrepreneurship Monitor (GEM), internet resources and database created by the author during the research.

**Scientific novelty** of the dissertation research is the following:

- on the basis of theoretical and methodological research, the author's definition of "knowledge competence" is given;
  - the factors that create knowledge assets and capabilities are identified;

- the model for assessment of the relationship between knowledge competence and market and organizational performance in small and medium enterprises in Kazakhstan is developed;
- the analysis of knowledge competence influence on performance of small and medium enterprises is made;
- the recommendations for the knowledge competence development in small and medium enterprises, for its strategic development in the conditions of knowledge-based economy are proposed.

## The main scientific provisions for the defense are:

- the author's definition of "knowledge competence" which is defined through assets and knowledge capabilities in organization;
- the methodology for identification of knowledge assets and knowledge capabilities;
- the model of knowledge competence and its influence on performance in small and medium enterprises;
- the results of the analysis of small and medium enterprises through the model of knowledge competence influence on performance in small and medium enterprises;
- proposals for the development and improvement of knowledge competence in small and medium enterprises in the context of state programs and further development of small and medium enterprises in the Republic of Kazakhstan.

### Practical significance of the study.

The results of this study have practical importance and significance as a guide for small and medium enterprises, as well as program developers, in order to create favorable conditions for the development of knowledge at enterprises in Kazakhstan. The results of the research can be used in state programs as the Program of Industrial and Innovative Development for 2015-2019, the Business Roadmap - 2020. Small and medium-sized businesses can use the tool of this study to measure their own level of knowledge competence development. In the case of the creation and implementation of current state programs aimed for the development of small and medium businesses, this study assesses the current situation and proposes recommendations for improvement. In the future, it can be used by small and medium businesses for strategic planning purposes.

The results of the research were implemented in the project "Business Relations" of the National Chamber of Entrepreneurs "Atameken" to provide support to small and medium business entities operating in the priority sectors of the economy as part of the "Business Roadmap-2020" program. There is an act of implementation.

The main theoretical provisions of the thesis are introduced in the teaching of disciplines "Innovation Management", "Strategic Management", "Introduction to Management" and "Human Resources Management". There are acts of implementation.

**Approbation of work.** The main propositions and results of this study were reported at international scientific and practical conferences: 5th «World Conference

on Education Sciences», Sapienza University, Rome; 15th International Conference Global Business and Technology Association «Globalizing business for the next century: visualizing and developing contemporary approaches to harness future opportunities», Helsinki; 5th «International Congress on Entrepreneurship», Suleyman Demirel University, Kaskelen; 2th International Conference on «Innovation and Entrepreneurship», Bangkok University, Bangkok.

#### Publications.

There are 8 papers published on the dissertation topic, with total volume of 2.7 printed sheets, 3 of which are published in journals, recommended by the CCES MES RK.

## The structure and scope of the thesis.

The thesis consists of an introduction, three chapters, conclusion, references and appendix.