

# THE RELATIONSHIP BETWEEN PERFORMANCE AND KNOWLEDGE MANAGEMENT IN ROMANIAN SMEs

IONELA CARMEN PIRNEA<sup>1</sup>, ELENA ALEXANDRA CĂLDĂRARU<sup>2</sup>,

<sup>1</sup>CONTANTIN BRÂNCOVEANU UNIVERSITY, VALCEA, <sup>2</sup>BUCHAREST ACADEMY OF ECONOMIC STUDIES

pirneacarmen@gmail.com, lexxy\_elena@yahoo.com

## **Abstract:**

*The purpose of this paper is to identify if there is a relationship between performance and knowledge management in Romanian SMEs and which is the impact of knowledge management on SMEs performance. The study uses survey data from 1723 small and medium enterprises, which have been included in the study by the National Council of Private Small and Medium Enterprises in Romania in 2011. The results show that for most of the Romanian SMEs the concept of knowledge management is unknown. Also we observed that the performance of SMEs who know this concept are much better than those who do not know. This study allows managers and researchers to focus on main effects but leaves little room for understanding how particular resources relate to organizational performance.*

**Key words:** performance, knowledge management, new economy, SME

**JEL classification:** L3, L25, D8

## **1. Relationship between performance and knowledge management in SMEs**

Small to medium-sized enterprises (SMEs) are a vital part of any national economy. According to the Organization for Economic Cooperation and Development, SMEs comprise about 95 percent of enterprises in a nation, and are responsible for employing 60-70 percent of the workforce.

For many organizations achieving improved performance is not only dependent on the successful deployment of tangible assets and natural resources but also on the effective management of knowledge

As such, investments in knowledge management continue to increase dramatically from year to year. Much of the overall spending by firms on knowledge management initiatives is driven by strategic imperatives that depend on the effective management of the knowledge resource.

The performance and the survival of an enterprise are determined by the speed with which the company manages to develop knowledge-based skills. The knowledge and the intellectual capital are considered as the enterprise-based skills and knowledge according to the authors and Nonaka Bell, an enterprise's competitive advantage lies in its knowledge.

All management activities have become omnipresent knowledge management in the last decade. Independent researchers were not able to demonstrate that knowledge management activities create value.

Knowledge managements in SMEs have been discussed in many empirical studies. The enterprises need to assure their organizational knowledge is kept safely and accessed only by authorized personnel. Protection of knowledge asset is an essential task in the organization's KM implementation.

Gold et al. (2001) proposed a model of knowledge management capabilities that has since become one of the most widely cited in the knowledge management literature. In this model, Gold et al. theorized knowledge management capabilities as multidimensional concepts that incorporate: a process perspective which focuses on a

set of activities, that is, knowledge process capabilities and an infrastructure perspective which focuses on enablers, that is, knowledge infrastructure capabilities.

What is not well known is whether there are differential relationships (including null or cancelling effects) between the individual dimensions of knowledge process capability and knowledge infrastructure capability, and organizational performance and the nature of these relationships.

SMEs should all be able to improve their performance and competitive advantage through a more conscious and systematic knowledge.

Knowledge is perceived as one of the key drivers of creating and sustaining competitive advantage in the 21st century economy. Since the 1990s, research interest on the supremacy of knowledge as a major economic growth resource has flooded academic publications.

Knowledge management has been considered a critical strategy for firms to obtain competitive advantage in recent years. However, there is at present no conclusive research on the relationship between knowledge management strategy and firm performance.

A small number of studies indicate a negative relationship where knowledge management strategy did not support competitive strategy found a negative relationship between certain firm knowledge and product development performance.

On the other hand, the vast majority of studies in the literature of knowledge management suggest that knowledge management positively impacts firm performance.

## **2. Impact of knowledge management on Romanian SMEs performance**

A number of researchers have conducted empirical studies at the international level, to identify the relationship between knowledge management and organizational performance. One of these studies was to identify appropriate strategies to help businesses to invest and deploy resources as effectively as knowledge.

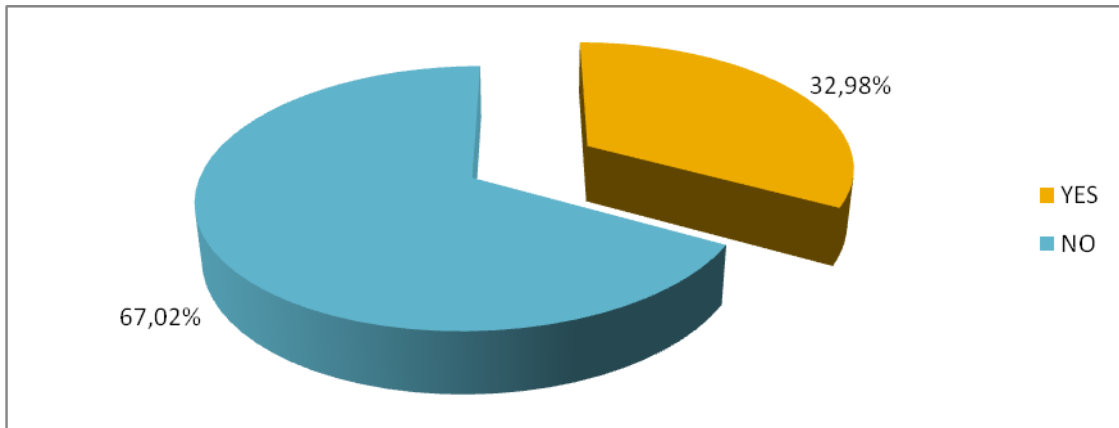
The results of this study showed that organizational structure, knowledge acquisition, application and protection of knowledge is significantly related to organizational performance, technology, organizational culture and knowledge conversion as having a significant impact.

Given that the company is moving rapidly towards knowledge-based economy and organization, it is important to consider the extent to which companies and/or decision makers of SMEs are familiar with such concepts.

In this regard, a study on SMEs in Romania, by CNIPMMR, in 2011, revealed that only 32.98% of SMEs knows the concept of knowledge-based business, percent particularly low, especially since one of the fundamental objectives set at the Lisbon summit the European Union for countries is to build knowledge based economy by 2010.

Therefore, it is essential that policy makers in Romania to realize that switching to the new type of economy is imminent and is involved in strategy and policy in its construction.

*Frequency of knowledge notions of economy and knowledge-based organization in Romanian SMEs*



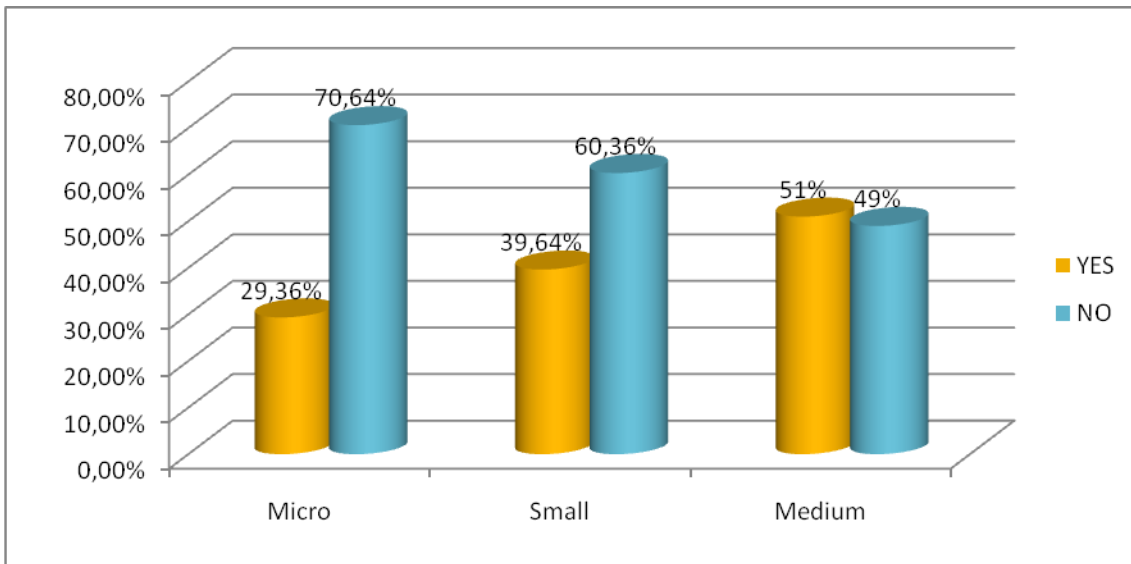
Grouping firms by age indicate that the rate the notions of economy and knowledge based organization are known, is higher in SMEs with over 15 years old (34.32%) and smaller on organizations with age between 5 and 10 years (32.10%).

*Frequency of knowledge notions of economy and knowledge-based organization in Romanian SMEs by age*

Firms in which:	Age of SMEs			
	0- 5 years	5-10 years	10-15 years	Over 15 years
<b>Is known the notions of economy and knowledge based organization</b>	32,57%	32,10%	33,04%	34,32%
<b>Is not known the notions of economy and knowledge based organization</b>	67,43%	67,90%	66,96%	65,68%

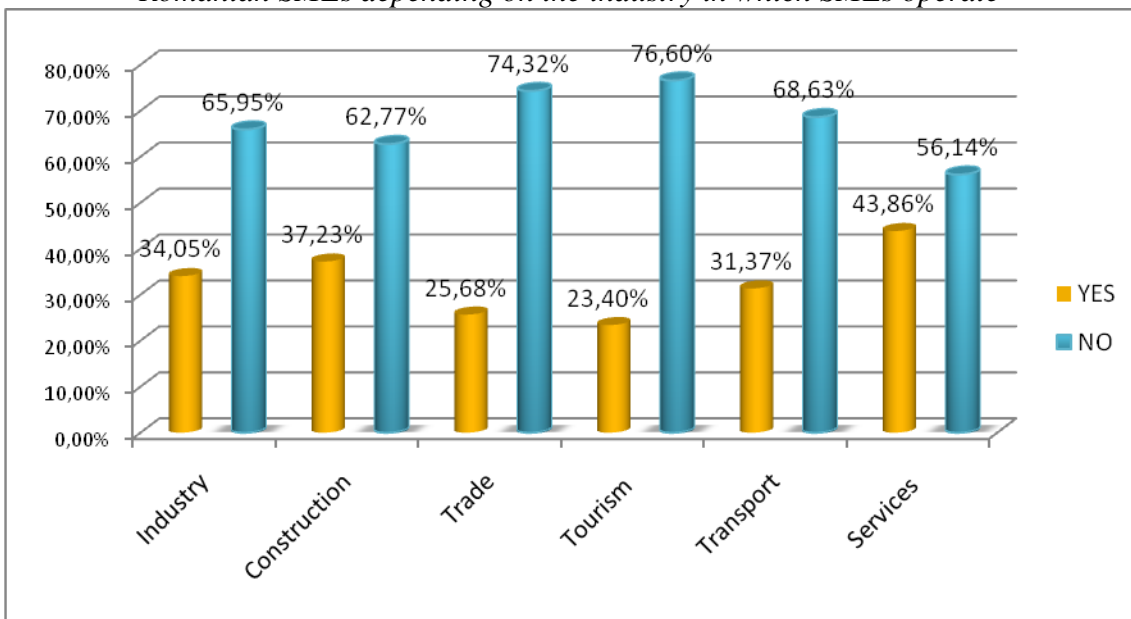
If we classify firms by size, we can observe that awareness of concepts of knowledge-based economy and organization increases with the size of SMEs (29.36% - micro, 39.64% - small companies and 51% - medium companies).

*Frequency of knowledge notions of economy and knowledge-based organization in Romanian SMEs by size*



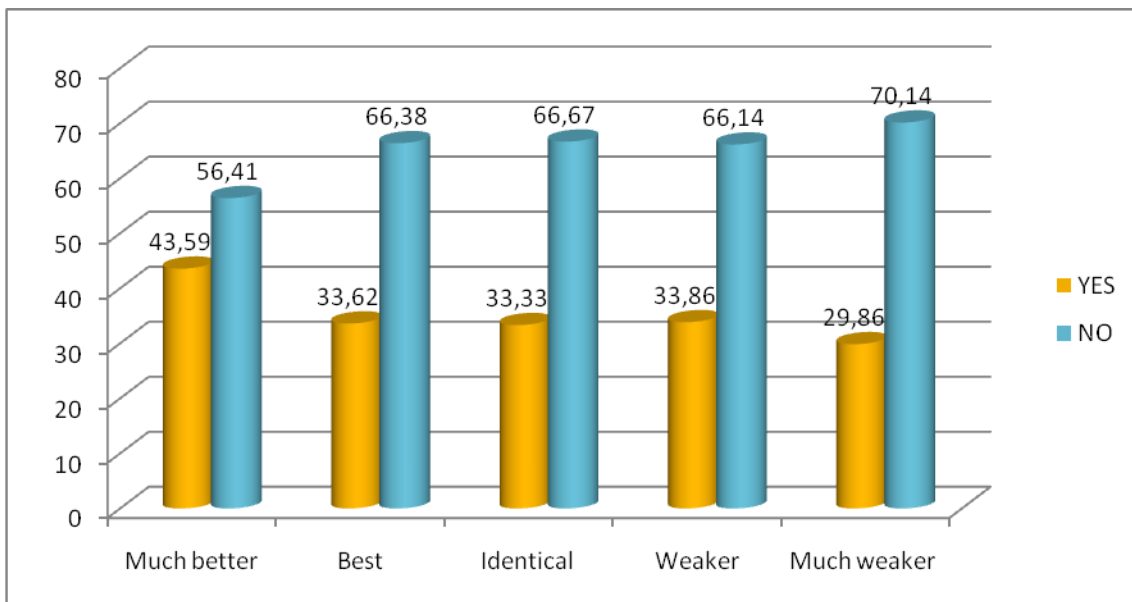
Dividing the business on fields, we find that the information on the concepts of knowledge-based economy is higher known in economic companies of services (43.86%) and lower known in tourism SMEs (23.40%).

*Frequency of knowledge notions of economy and knowledge-based organization in Romanian SMEs depending on the industry in which SMEs operate*



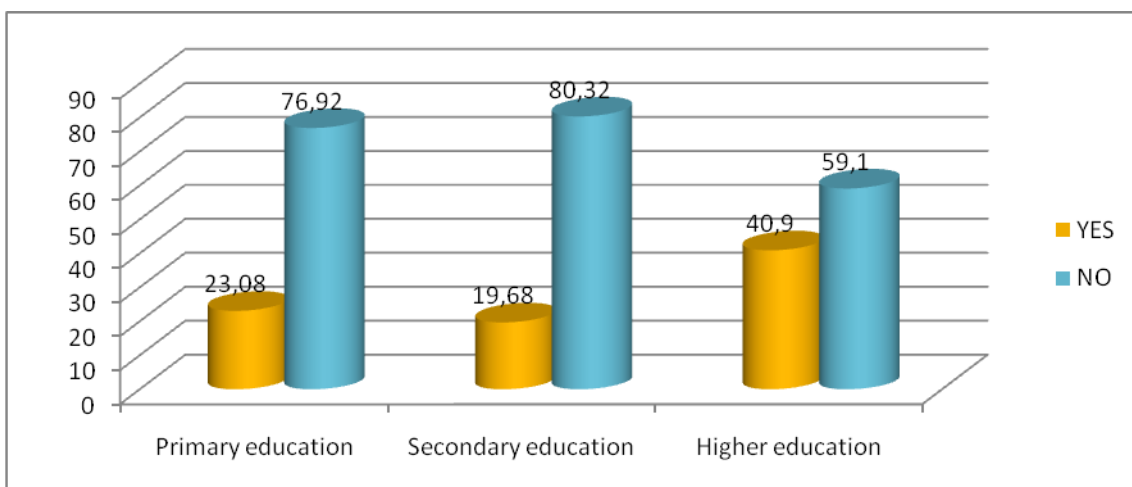
Analysis by the overall performance of firms from 2010 compared to 2009 and by the entrepreneurial studies point out that the notions of economics, management and knowledge based organization is known in higher proportions in SMEs achievements and best managed business people with university studies.

*Correlation of the concepts of knowledge economy and knowledge based organization and performance of SMEs in 2010 compared to 2009*



Regarding the knowledge intensity of economic concepts and organization of knowledge based level of training of entrepreneurs data are available in the next figure.

*Knowledge intensity of economic concepts and organization of knowledge based level of training of entrepreneurs*



It can be seen that there is a direct link between SMEs performance and getting the training of entrepreneurs.

### 3. Conclusions

The literature is replete with studies that suggest knowledge management impacts organizational performance. However, there has been little elaboration of the relationships at the dimensional level vis-a-vis organizational performance.

The aim of this paper was to provide insights into the relationships between particular knowledge resources and organizational performance that can help firms identify appropriate strategies for investing in and effectively deploying the knowledge resource.

The analysis of Romanian SMEs regarding the frequency of knowledge notions of economy and knowledge-based organization in Romanian SMEs and also regarding the impact of knowing this concepts on the performance have highlighted the following:

- The notion of economy /knowledge-based economy is known only in 32.98% of Romania SMEs;
- notion of economy /knowledge-based economy is commonly known among organizations that have over 15 years old (34.32%), business in North East (55.77%), medium sized enterprises (51%), led by entrepreneurs with university education (40.90%).

We hope this article has opened up avenues for future research, by stressing some of the unique issues involved with managing knowledge at SMEs.

#### **4. Acknowledgements**

This article is a result of the project POSDRU/88/1.5./S/55287 „Doctoral Programme in Economics at European Knowledge Standards (DOESEC)". This project is co-funded by the European Social Fund through The Sectoral Operational Programme for Human Resources Development 2007-2013, coordinated by The Bucharest Academy of Economic Studies in partnership with West University of Timisoara.

#### **BIBLIOGRAPHY**

1. Daundi, S., Yusoff, W. & Fadzilah, W., (2010). *Knowledge Management and Firm Performance in SMEs: The Role of Social Capital as a Mediating Variable*, Asian Academy of Management Journal, volume 15(2), pp.135-155.
2. Desouza K.C., Awazu Y., (2006). *Knowledge management at SMEs: five peculiarities*, Journal of Knowledge Management, volume 10(1), pp. 32-43.
3. Kogilah Narayanasamy and Dr.M.V.Shetty, (2008). *The Role of Centralized Knowledge Development Centre for Success of SME Sector*, Communications of the IBIMA, Volume 2, pp.201-216.
4. Lee Maria, Lan Yi-Chen, (2011). *Towards a unified knowledge management model for SMEs*, International Journal Expert Systems with Applications, volume 38, pp.729–735.
5. Lupu, A., (2009). *Modele de analiză managerială în societatea bazată pe cunostinte*, Revista Economica. Seria Management, Volumul 12, issue 1, pp. 68-79.
6. Mills, A. M. & Smith, A. T., (2011). *Knowledge Management and Organizational Performance: A Decomposed View*, Journal of Knowledge Management, volume 15(1), pp.156-171.
7. OECD, (2000). *Small and Medium-Sized Enterprises: Local Strength, Global Reach*, OECD Policy Review, June, 1-8
8. OECD, (2002). *Small and Medium Enterprise Outlook*, Paris, pp. 63-74.
9. Pirnea I.C. et al., (2011). *Current approaches regarding the knowledge management impact on SMEs performance*, Revista Economica. Seria Management, Volume 14, Issue 2, pp. 563-568.
10. Yang Jie, (2010). *The knowledge management strategy and its effect on firm performance. A contingency analysis*, International Journal Production Economics, volume 125, pp. 215–223.