

## COMPANY MANAGEMENT IN THE KNOWLEDGE-BASED ECONOMY IN MALOPOLSKA

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**Summary:** This paper presents how knowledge-based management and most of all human capital management raise effectiveness and competitiveness of Polish enterprises of food industry, which was observed especially during our country's full accession to the European Union. Main aim of the study was to analyze how the knowledge resources and, above all, the quality of human capital in food businesses may affect their development, organization, and its usability in managing the enterprise, and whether management of resources is proper. Conclusions of the research has been recognized and supported by previously synthetically conducted: query in the literature sources, analysis of statistical data, a questionnaire survey in selected food companies, and the results presented here in tabular form. Conducted research allowed to draw the following conclusions: 1. Company management is still regarded as sufficient, both by management and employees, who say they see no need for changes in this area. 2. Current strategies and visions of enterprises are well known by the management and workers, what should lead to an increase in enterprise competitiveness, not only in local markets, but also international. 3. In food industry enterprises in the Malopolska province modernization of machinery, placing and management of new products and services are rare action. 4. The respondents, both the first and second stage of research, highly evaluated the level of quality of qualifications and skills of employees.

**Keywords:** knowledge management, innovation, competitiveness, food

### 1. INTRODUCTION

In the present article, the author will try to determine the extent to which knowledge management, and especially human capital, influence improvement in the competitiveness of Polish enterprises of food industry, which has been observed especially during our country's full accession to the European Union. During the study the hypothesis, assuming that this period contributed significantly to the competitiveness of the food industry, which at certain intervals move through the stages of development, drawing on its strengths and emerging opportunities was tested. The main purpose of the article is the identification of business management, assessment of workers' knowledge and the quality of human capital, which translates into an increase in the level of competitiveness of the food industry in Poland. The need to identify these dependencies is due to the permanent development of this industry and the recapitalization of enterprises by the growth and development of the key factors leading to the creation of a higher position on the local, national and international markets. The importance of knowledge is becoming increasingly popular in academic economics. It determines the essence of civilization development, and this translates into the development of enterprises. Macrostructures emerging in today's society (interchangeable terms: the network society, knowledge society, digital society, post-industrial society), and economic changes operating in a parallel sense, transformations put knowledge in a central location in contribution to the development of societies and their economies and companies operating (Firlej, 2012). According to the *Encyclopaedia of Management*, "knowledge management" can be defined as all activities aimed at identification, preservation, propagation, use of explicit and hidden knowledge of staff to improve the efficiency and effectiveness of

employees. Some economists believe that knowledge management can be regarded only instrumentally, as a set of procedures and technical means to ensure the transfer of personal experience and knowledge in an organization to the database and to provide storage, and distribution of needed information. But at a deeper consideration of what should be considered knowledge in the humanistic aspects, levels of motivation, and sociological aspects of social intelligence, communicative competence are to be included ([http://mfiles.pl/pl/index.php/Zarz%C4%85dzanie\\_wiedz%C4%85](http://mfiles.pl/pl/index.php/Zarz%C4%85dzanie_wiedz%C4%85)). The current form of the knowledge economy increasingly requires research into the social sciences, mainly to strengthen the activities of individual entrepreneurs. The idea of knowledge-based economy is the context of modern enterprises, indicates the basic source of their competitive advantages, and directs the strategic development activities (Cyrek, 2007). In reviewing the definition of the knowledge economy it is assumed that its development results from four pillars that form: the economic system - institutional, educated and competent people, efficient and productive innovation system manifesting itself in creating pro-innovative environment and the optimum use of ICT technology for mutual communication.

## **2. THE PURPOSE, METHODOLOGY AND RESEARCH AREA**

The proposed study was to demonstrate that knowledge, information and quality, are reinforcing success factors in companies and the use of modern techniques in their current performance in an organized manner helps to leverage their existing skills and develop the skills and capital. Conclusions of the study is entered synthetically and based on previously carried out: a query in literature sources, analysis of statistical data, survey questionnaire in selected enterprises of food industry, and the results presented in graphical (tabular) form. The main aim of the study was analysis of how knowledge resources, and especially the quality of human capital in food enterprises may affect their development, organization, and usability in managing the enterprise, and whether resource management is correct. Studies were to capture the role of knowledge as the main factor affecting the development of enterprises. Also other factors affecting the competitiveness and directly related with knowledge, such as: reduced cost, increased product and service innovation, growth efficiency, improved customer relations, human capital development, social responsibility of organizations and preservation of the ethical aspects of business have been determined. Empirical studies have been carried out for comparison in 2007 (289 companies) and 2011 (29 companies), in companies located in the Malopolska province, divided by selected branches of the agro – food industry. In order to identify the organizational status of food enterprises, most of agro-food industry branches were selected, and the choice was intentional. In the first stage of the study companies from the grain (30), confectionery (96), dairy (36), and the fruit –vegetable industry (78) and the meat industry (49) were selected. In the second stage, the number of the companies was reduced, but the percentage of their share in the total number of companies was remained. From the grain industry three companies were examined, confectionery 10, four from dairy industry, 8 from fruit – vegetable industry and 4 from meat industry. The number of companies studied was different because of the large span of their occurrence in the designated fields. Research respondents were business owners or managers. Critical determinants for the degree of development of enterprises in selected industries of agro - food industry were external, internal, system and organizational factors that to a greater or lesser extent, determine their functioning. Many of these factors are combined with each other and at the same time associated with the development of agro - food industry. The study of these factors provided information designating the relationship of existing and future businesses, the environmental constraints as exogenous variables. The study started in 2007 to present the current state and the determinants of functioning of enterprises in the three years period after

the Polish accession to European Union and the year 2011, in which eight years have passed since that event. The research results can provide evidence of competitiveness diagnosis of the agro - food industry in the European Union market.

### **3. HUMAN CAPITAL IN FOOD INDUSTRY COMPANIES - THE THEORETICAL BASICS AND RESEARCH RESULTS**

Food industry in Poland has a heterogeneous structure, which in the transition of our economy, was subjected to change under the influence of multi-way reform, restructuring and privatization. Extremely important was to capture in the study their impact on the knowledge and innovation. Earlier, in the centrally planned economy, agro - food industry was dominated by units of the socialized economy, when the state-owned enterprises have had the leadership and the monopoly. Apart from these, many small and medium enterprises operated on the principles of cooperative and they were associated in Dairy Cooperatives, Cooperative Associations in Gardening and Beekeeping, Agricultural Production Cooperatives, Communal Cooperatives "Peasant Self-Help," Consumers Cooperatives, Cooperative Work and Cooperative Invalids and Industry in the State Field. Many state-owned farms were involved in the agro - food processing, which was one of their primary duties.

Food business operators still are forced to adapt their activities in relation to the changing market situation. They can be marked as "learning enterprises" because they create change and manage it, and also acquire skills to adapt to change (Wyrzykowska, 2004). In order to implement positive changes, these companies are developing strategies that subordinate them. The concept of a strategy developed by Mintzberg (1975), in which the author presented in the form of "5P-mix" (it means that it enables the implementation of specific objectives (*plan*), the activity in a hostile, turbulent environment (*ploy*), aiming to consolidate the relevant values and standards (*pattern*), to deal in the vicinity of a specific location (*position*) and makes it possible to predict (*perspective*), what might happen in the environment). It is useful to implement in currently operating companies of this industry. These elements are partly independent of man, our skills and qualifications, but we cannot assume that they are *constant*, because we can influence them. Important factors are the area of knowledge, its management methods, skills, competencies and qualifications of an employee, which is a set of elements of the overall intellectual business capital and contributes to competitive advantage.

The strategy implemented by the enterprise organizes the tasks, outlines the resource use and sets the behaviour of the organization in the environment, use of opportunities and threats in order to effectively achieve results according to entrepreneurs' intentions (Machaczka, 1999). Business strategic competence as evidenced by resources held in intellectual capital have a significant relationship with the intensity of the development of entrepreneurship, which in agribusiness, and especially in the food industry, means strengthened ties between the various branches of food production (Firlej, 1999). In today's world, when we meet with the penetration element of globalization to the realm of agribusiness in the current functioning of companies knowledge management concept should be used, although it is connected with high cost, but may be necessary and prospectively profitable investment in the development of each entity in the economic (Firlej, 2008).

In the literature, a distinction deserves attention by Fiedor growth theory, which says that the long-term growth of both the world economy and the individual countries is determined by investments in human capital and innovation, and the use of technology and capital transfer (Klepacki, 2000). Particularly important roles to play in this area have knowledge and research, and also higher education and economic innovation, which strong promoters are

Nobel Prize laureates: G. Becker and T. Schultz. Economic integration of the whole sphere of agro-business is to prepare to compete in the single European market and fulfil all the conditions of European Law (Firlej, 2003).

The proper gain from the outside or to generate the necessary competencies by own strategic managers translates directly to competitiveness and growth (Firlej, 2005). The most important element of intellectual capital is human capital, which consists of fundamental values, such as knowledge, skills and qualifications, the mutual relations between them and its potential for development. Market success of the food industry is possible to achieve by the proper implementation of the strategy, which has become indispensable in the case of large companies. Please note that strategies are determined by environmental conditions and internal factors that directly influence the decisions made (Firlej, 2004).

In this study aspects of business management of food industry in the knowledge economy were presented, and to show the company management, the degree of knowledge of the vision by the management and staff, opportunities and progress in implementing the strategy, how to succeed, the participation of employees in problem solving, work on the search for new organizational, technical and technological level and trends in employment in recent months, using the services of the Labour Office and subsidized employment, the quality of the qualifications, method and effectiveness of recruitment employed were also presented. The literature shows the view that managers should trust their employees and encourage them to be more creative and to delegate more power to them rather than control them (Judge et al., 1997).

The study began by assessing company management (Table 1 and 2) and it was their subjective judgment by management. Most often, management was assessed as "very good" by 30.23% of companies, and as "good" by 59%. As an "average" it was rated by 10.09% and "poor only by 0.68% of managers. According to industry is difficult to say something about the best of them, because as "very good" the highest percentage received a company of grain industry (37.93%), and in the case of companies rated as "good" meat industry is faring the best (67, 35%). The weakest sector by far was the confectionery (2.11%) and the fruit - vegetable industry company (1.30%). In their statements, respondents poorly evaluated public *relations* run by their companies. This situation changed in favour in four years after the first study. Although company management was rated as "very good" by 3 percentage points less respondents, it was indicated "good" by 9 percentage points more respondents, which gave a total of more than 95% satisfied managers. As an "average" it was indicated by just 4.5% of respondents, and the "poor" has not been noticed. In cross-industry, the situation was like in the previous study period.

**Table 1. Subjective assessment of the management company by managers in 2007**

| Management company | Grain Industry |       | Confectionery Industry |       | Dairy Industry |       | Fruit and Vegetable Industry |       | Meat Industry |       | Total |
|--------------------|----------------|-------|------------------------|-------|----------------|-------|------------------------------|-------|---------------|-------|-------|
|                    | n              | %     | n                      | %     | n              | %     | n                            | %     | n             | %     |       |
| Very good          | 11             | 37.93 | 22                     | 23.41 | 11             | 30.56 | 23                           | 29.87 | 14            | 28.57 | 30.23 |
| Good               | 14             | 48.28 | 57                     | 60.65 | 21             | 58.33 | 47                           | 61.04 | 33            | 67.35 | 59    |
| Average            | 4              | 13.79 | 13                     | 13.83 | 4              | 11.11 | 6                            | 7.79  | 2             | 4.08  | 10.09 |
| Poor               | -              | -     | 2                      | 2.11  | -              | -     | 1                            | 1.3   | -             | -     | 0.68  |
| TOTAL:             | 29             | 100   | 94                     | 100   | 36             | 100   | 77                           | 100   | 49            | 100   | 100   |

Source: own study based on surveys.

**Table 2. Subjective assessment of the management company by managers in 2011**

| Management company | Grain Industry |       | Confectionery Industry |       | Dairy Industry |       | Fruit and Vegetable Industry |       | Meat Industry |       | Total |
|--------------------|----------------|-------|------------------------|-------|----------------|-------|------------------------------|-------|---------------|-------|-------|
|                    | n              | %     | n                      | %     | n              | %     | n                            | %     | n             | %     | %     |
| Very good          | 1              | 33.33 | 3                      | 30.00 | 1              | 25.00 | 2                            | 25.00 | 1             | 25.00 | 27.66 |
| Good               | 2              | 66.66 | 6                      | 60.00 | 3              | 75.00 | 5                            | 62.50 | 3             | 75.00 | 67.83 |
| Average            | -              | -     | 1                      | 10.00 | 0              | -     | 1                            | 12.50 | -             | -     | 4.50  |
| Poor               | -              | -     | -                      | -     | -              | -     | -                            | -     | -             | -     | -     |
| TOTAL:             | 3              | 100   | 10                     | 100   | 4              | 100   | 8                            | 100   | 4             | 100   | 100   |

Source: own study based on surveys.

Then the study was to assess the extent of knowledge of the company vision by employees. Knowledge was assessed in 2007 as “high” by 11.54% of respondents, while most of them found that the degree of their knowledge as “good” (59.87%) and “medium” (23.62%). Only 4.96% of employees were found to be those who know little about vision of the company. In cross-industry comparison, best-rated companies were from dairy industry (20.59%) and fruit – vegetable industry (35.14%), and the worst-rated were grain industry companies (13.33%). In this case, also the situation has changed in favour in 2011. Management in companies was rated as “very good” by 9.5% respondents and as “good” by 77%, which gave a total of 86.5%. The “average” was rated by only 13,5% of respondents, and the “poor” were not noticed. In cross-industry, the situation was very good in the fruit-vegetable industry and meat industry, and less good in the confectionery industry.

**Table 3. Subjective assessment of the degree of knowledge of the vision of the company by employees in 2007**

| Evaluation of the knowledge of vision | Grain Industry |       | Confectionery Industry |       | Dairy Industry |       | Fruit and Vegetable Industry |       | Meat Industry |       | Total |
|---------------------------------------|----------------|-------|------------------------|-------|----------------|-------|------------------------------|-------|---------------|-------|-------|
|                                       | n              | %     | n                      | %     | n              | %     | n                            | %     | n             | %     | %     |
| Very good                             | 1              | 3.33  | 10                     | 10.53 | 7              | 20.59 | 14                           | 18.92 | 2             | 4.35  | 11.54 |
| Good                                  | 16             | 53.33 | 56                     | 58.96 | 19             | 55.88 | 44                           | 59.46 | 33            | 71.74 | 59.87 |
| Average                               | 9              | 30    | 24                     | 25.25 | 8              | 23.53 | 13                           | 17.57 | 10            | 21.74 | 23.62 |
| Poor                                  | 4              | 13.33 | 5                      | 5.26  | -              | -     | 3                            | 4.05  | 1             | 2.17  | 4.96  |
| TOTAL:                                | 30             | 100   | 95                     | 100   | 34             | 100   | 74                           | 100   | 46            | 100   | 100   |

Source: own study based on surveys.

**Table 4. Subjective assessment of the knowledge vision of the company by employees in 2011.**

| Evaluation of the knowledge of vision | Grain Industry |     | Confectionery Industry |       | Dairy Industry |       | Fruit and Vegetable Industry |        | Meat Industry |       | Total |
|---------------------------------------|----------------|-----|------------------------|-------|----------------|-------|------------------------------|--------|---------------|-------|-------|
|                                       | n              | %   | n                      | %     | n              | %     | n                            | %      | n             | %     | %     |
| Very good                             |                |     | 1                      | 10.00 | 1              | 25.00 | 1                            | 12,50  | -             | -     | 9.5   |
| Good                                  | 3              | 100 | 6                      | 60.00 | 3              | 75.00 | 6                            | 75,0 0 | 3             | 75.00 | 77.00 |
| Average                               | -              | -   | 3                      | 30.00 | -              | -     | 1                            | 12.50  | 1             | 25.00 | 13.5  |
| Poor                                  | -              | -   | -                      | -     | -              | -     | -                            | -      | -             | -     | -     |
| TOTAL:                                | 3              | 100 | 10                     | 100   | 4              | 100   | 8                            | 100    | 4             | 100   | 100   |

Source: own study based on surveys.

Group of questions regarding issues shaping the quality of human capital in the surveyed companies was the next part of the study (Tables 5 and 6). In 2007, respondents mostly stated that they are largely at the level of “good” (69.92%) and “very good” (17.73%), by 11.61% of companies this level was assessed as “sufficient” and “insufficient by 0.74%. Best assessment of their employees was given by confectionery industry (25%) and meat industry (20.83%), and the worst fruit - vegetable industry (2.7%). In 2011, the percentage of “very good” companies increased to 28.16%, and the number of “good” companies decreased to 52.84%. The number of companies that has had a “sufficient” level increased to 19%. In terms of industry - best quality level of qualifications and skills of employees has been evaluated in the dairy industry, and the worst in the meat industry.

**Table 5. Assessment of the quality of qualifications and skills of employees in 2007**

| Evaluation of the possibility | Grain Industry |       | Confectionery Industry |       | Dairy Industry |       | Fruit and Vegetable Industry |       | Meat Industry |       | Total % |
|-------------------------------|----------------|-------|------------------------|-------|----------------|-------|------------------------------|-------|---------------|-------|---------|
|                               | n              | %     | n                      | %     | n              | %     | n                            | %     | n             | %     |         |
| Very good                     | 3              | 10.00 | 24                     | 25.00 | 5              | 13.89 | 14                           | 18.92 | 10            | 20.83 | 17.73   |
| Good                          | 23             | 76.67 | 61                     | 63.54 | 29             | 80.56 | 46                           | 62.16 | 32            | 66.67 | 69.92   |
| Sufficient                    | 4              | 13.33 | 10                     | 10.42 | 2              | 5.56  | 12                           | 16.22 | 6             | 12.50 | 11.61   |
| Unsatisfactory                | -              | -     | 1                      | 1.04  | -              | -     | 2                            | 2.70  | -             | -     | 0.74    |
| TOTAL:                        | 30             | 100   | 96                     | 100   | 36             | 100   | 74                           | 100   | 48            | 100   | 100     |

Source: own study based on surveys.

**Table 6. Assessment of the quality of qualifications and skills of employees in 2011**

| Evaluation of the possibility | Grain Industry |       | Confectionery Industry |       | Dairy Industry |       | Fruit and Vegetable Industry |       | Meat Industry |       | Total % |
|-------------------------------|----------------|-------|------------------------|-------|----------------|-------|------------------------------|-------|---------------|-------|---------|
|                               | n              | %     | n                      | %     | n              | %     | n                            | %     | n             | %     |         |
| Very good                     | 1              | 33.33 | 2                      | 20.00 | 2              | 50.00 | 1                            | 12.5  | 1             | 25.00 | 28.16   |
| Good                          | 2              | 66.66 | 6                      | 60.00 | 2              | 50.00 | 5                            | 62.50 | 1             | 25.00 | 52,8 4  |
| Sufficient                    | -              | -     | 2                      | 20.00 | -              | -     | 2                            | 25.00 | 2             | 50.00 | 19.00   |
| Unsatisfactory                | -              | -     | -                      | -     | -              | -     | -                            | -     | -             | -     | -       |
| TOTAL:                        | 3              | 100   | 10                     | 100   | 4              | 100   | 8                            | 100   | 4             | 100   | 100     |

Source: own study based on surveys.

Summing up the studies, it can be stated that the organizational conditions of functioning businesses, including management, the degree of knowledge of the company vision, capabilities and the level of implementation of the adopted strategy and the quality of qualifications and skills of employees are considered priorities. Businesses properly assessed production process by the use of their powers and abilities, and actually could properly use skills and abilities of employees to seek new solutions for organizational, technical and technological solutions.

#### 4. SUMMARY

Summarizing the above discussion of theoretical and empirical nature in the area of management and enterprises of food industry, in a knowledge-based economy, it is noted that they still need to adapt their business to the rapidly changing market situation, and are forced to acquire new skills and change management. Current position of Polish food companies in

the world markets shows their rightful place and meaning of market rules. Research hypothesis, assuming that the post-accession period contributed significantly to the competitiveness of the food industry was verified positively, because they found a steady increase in the level of management and the quality of human capital. On the other hand, presented study has helped to develop the following conclusions:

1. The management in company is still considered to be sufficient, by both managers and workers, who say they cannot see the needs for changes in this area. The respondents saw no need for strengthening of management methods in their enterprise, which means they have fulfilled their expectations;
2. Current strategies and visions of enterprises are well known to the managers and employees, what should lead to an increase in their competitiveness, not only in local markets, but also international;
3. In the enterprises of the agro - food in the Malopolska province, modernization of machinery, placing and management of new products and services are rare actions;
4. Respondents highly evaluated the level of quality of qualifications and skills of employees, which took place in both the first and second stage of the study. It is worth noting that the quality of human capital is a priority to entrepreneurs, believing that it determines the future structure of the company and the level of its development.

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