

# Operation conditions of Malopolska Region food businesses in the knowledge-based economy

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**Summary:** The article presents the extent to which knowledge management, and most of all human capital, has raising effect on the competitiveness of Polish enterprises of food industry, which was observed especially during our country's full accession to the European Union. The main aim of the study was to analyze how knowledge resources and especially the quality of human capital in food enterprises can affect their development, organization, how it is used in the management unit, and whether the management of resources is proper. Also the issue of external conditions constraining influence on the functioning of these enterprises in the Malopolska province in the last three years was raised. Conclusions of the research have been recognized and supported by previously synthetically conducted: query of literature sources, analysis of statistical data, a questionnaire survey in selected enterprises of food industry, and the results were presented in graphical form and tables. Research conducted and presented results have helped to develop the following conclusions: Company management is still considered to be sufficient, by both managers and workers who say they see no need for changes in this area; Current strategies and visions of enterprises are well known to the managers and employees, what should lead to an increase in companies competitiveness, not only in local markets, but also international; In food enterprises of the Malopolska province, modernization of machinery, placing and management of new products and services are rare actions.

**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 K., 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>]. 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 M., 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. Rapidly developing, after Polish accession, agriculture and food industry enables development of small and medium companies in malopolskie province which often has influence on solving complicated socio-economic problems within the region. Many factors which are the stimulants of business activity of the companies functioning in the region contribute to that. To the most important of them should be included the fact that small and medium companies decide about the development of the region to the greatest extent: they dynamically affect the

development of the regional economy, they are flexible when it comes to adaptation to the changing conditions of the environment, they have influence on innovations and creativity in obtaining new solutions, they have influence on development of the local and regional market and they contribute to the increase of the local level of employment [Firlej K., 2012].

Previously, in the centrally planned economy, agricultural and food processing was dominated by socialized enterprises and the leading and monopoly position was occupied by the state-owned corporations. Apart from these, numerous small and medium companies operated as cooperatives which were associated in Dairy Cooperatives, Associations of Gardening and Beekeeping Cooperatives, Agricultural Production Cooperatives, Peasants Self-Help Cooperatives (“Samopomoc Chłopska”), Consumers Cooperatives, Labour Cooperatives and Disabled Workers Cooperatives as well as in the Local State Industry (Państwowy Przemysł Terenowy). Numerous State Agricultural Farms were involved in agricultural and food processing which was one of the basic objects of their activity. Each company is a collection of unique resources which constitute different types of assets enabling the implementation of the strategy leading to the increase of efficiency, effectiveness and competitiveness [Firlej K., 2012]. 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 multiway 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 B., 2004]. In order to implement positive changes, these companies are developing strategies that subordinate them. The concept of a strategy developed by H. Mintzberg, which the author presented in the form of "5P-mix" (which 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 [Mintzberg H., 1975], is useful to implement in currently operating companies of this industry. These are the elements that are partly independent of man, of 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 J., 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 K., 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 K., 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 B., 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 K., 2003].

The proper gain from the outside or to generate the necessary competencies by own strategic managers translates directly to competitiveness and growth [Firlej K., 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 K., 2004].

In all agribusiness companies, and therefore also in the food industry, the impact of multiple elements of intellectual capital can be traced, whose characteristics and value is currently influencing their operation. In order to illustrate the place of the intellectual capital in the total market value of agribusiness enterprises we used Figure 1.

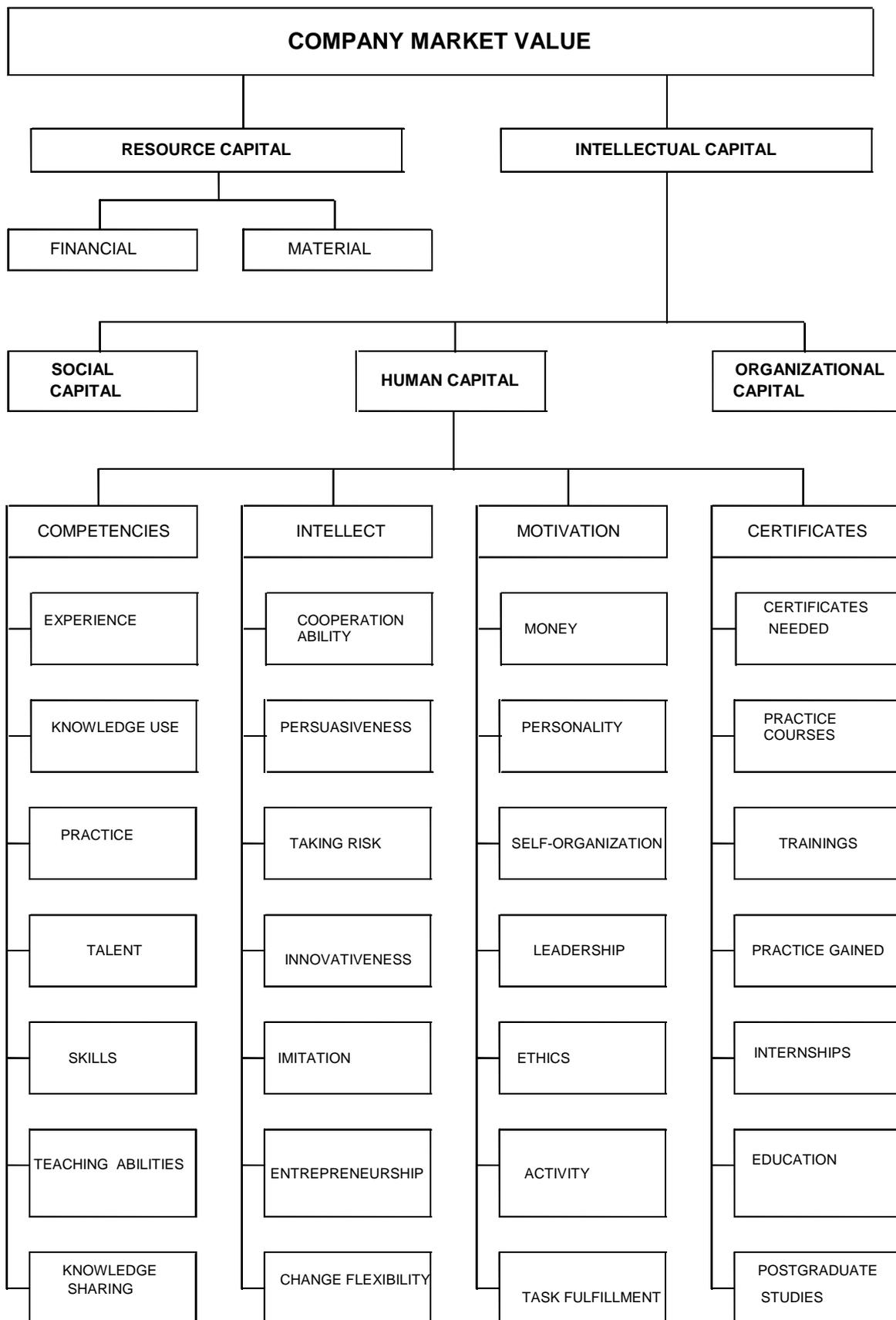


Figure 1. A place of intellectual capital in the overall market value of agribusiness firms  
 Source: own elaboration based on: [M. Bratnicki, J. Struzyna, [red.], 2001]; M. Rybak, [red.], 2003].

The whole sphere of economic integration is the preparation of agribusiness enterprises to compete in the single European market and meet all the conditions of European Law [Firlej K., 2003]. The proper gain of competencies from the outside or to generate the necessary competencies within own strategic managers translates directly into competitiveness and growth [Firlej K., 2005]. On the basis of the division of the market value into the book value and intellectual capital - constructed diagram is showing the market value of the sphere of agribusiness companies. In these considerations the element for human capital, which contains the basic knowledge, skills and workers' qualifications, relations between them and their potential for development, is the most important.

Free-market economy forces companies to constantly seek for new sources of competitive advantage, which can be a strategic congruence of intellectual capital. Now, for the proper functioning of the enterprise, it is necessary to use modern management methods, and entrepreneurs are forced to provide high quality strategic management [Firlej K., 2008]. Market success is achieved by the use of competitive strategy and marketing, which has become indispensable in the case of the great Polish agribusiness companies. Each strategy is determined by environmental conditions and internal factors that directly influence the decisions concerning quality and production volume in the enterprise [Firlej K., 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 W.Q., Fryzell G.E., Dooley R.S., 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**

The 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**

The 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 (Table 3 and 4). 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.**

The 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.**

The 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	Grain Industry	Confectionery Industry	Dairy Industry	Fruit and Vegetable Industry	Meat Industry	Total
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the possibility	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	66.67	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.

In studies conducted again in 2011, we examined these activities which, in the period considered, significantly and adversely affected both the creation as well as the prosperity of the company. Of the factors considered, the negative were adopted to investigate, as in 2008: foreign competition, a national competition, complex commercial law, necessary to adjust to EU requirements, the functioning of local administration, adverse tax system, long distance to the markets, lack of sufficient market, poor access to finance, high energy cost, high labour cost, price competition, old machinery, insufficient production area, the high cost of materials, difficulty in obtaining capital, poorly qualified staff, lack of suitable candidates for employment, lack of knowledge about the organization and management of the company by the candidates in the labour market, high labour cost, communication problems, corruption and other [Firlej K., 2008]. In respect to the methodology of research previously used, the selected negative external factors were divided into three groups - strong, medium and weak, which also resulted in differences in branches. Among “strong factors” were (in order): lack of sufficient knowledge about the organization and management of the company by the candidates in the labour market, poorly qualified personnel, high cost of basic materials, corruption and communication problems. It showed that in contrast to the previous study less impact on the functioning of businesses had related to communication problems and corruption has been markedly reduced. The factors that were included in the so-called “medium group” respondents enlisted: foreign competition and pricing, still a long distance to markets and lack of sufficient market, poor access to finance, the functioning of local administration and the increasing cost of energy. The question of foreign competition and price competition prevails, what certainly was caused by the polarization of commodity prices in the world markets and increasing production cost. Third group contains the less significant and negative factors, among them were such as: adverse tax system, competition in the domestic market and complex commercial law. In this group adaptation to EU requirements is one of forgotten matters, and complicated and unfavourable tax provisions prevail. In the dairy industry and grain industry the most important factor was the high cost of basic materials; in confectionery industry, just like before - communication problems; in the fruit –

vegetable industry lack of suitable candidates for employment (especially in season), and in the meat industry - foreign competition and a lack of domestic raw materials. The results of the least important factors, in cereal industry - complicated business law, and among other domestic competition, did not change.

In 2001 the levels of competition occurring in the markets were also studied. In present study respondents considered it to be very significant, but it should be noted here that there were significant differences in ratings given by the representatives of different industries/branches. The overall result this time undoubtedly was influenced by dairy and fruit-vegetable industries, in which 50% of respondents considered the impact of competition “very high/ very significant”, what in other industries usually was assessed as "large." It should also be noted that in 100% of the answers respondents considered the level of competition in the sales markets as “very large” and “large” (table 7).

**Table 7. Assessment of the level of competition occurring in markets in 2011**

The level of competition on sales markets	Grain industry		Confectionery industry		Dairy industry		Fruit and Vegetable industry		Meat industry		In total
	n	%	n	%	n	%	n	%	n	%	
Very large	1	33.33	4	40	2	50	4	50	1	25	34.26
Large	2	66,67	6	60	2	50	4	50	3	75	65.74
Average	-	-	-	-	-	-	-	-	-	-	-
Weak	-	-	-	-	-	-	-	-	-	-	-
IN TOTAL:	3	100	10	100	4	100	8	100	4	100	100

Source: own study based on surveys.

The re-survey asked about the impact that our country joining the European Union has had on the activities of the company, and respondents could evaluate it as: positive, negative, positive and negative at the same time and “does not matter”. Respondents clearly answered that Polish accession to the European Union had a positive influence on their business (50%), both positive and negative (25%) and without significant influence (25%). The impact of the Polish economy restructuring processes on improvement of the market situation, which would promote the development of their businesses, was also examined. Similar results were obtained, since respondents clearly recognized the answer "hard to say" (50%) for the most accurately reflecting their business situation. They also largely agreed that transformations of the national economy do not affect (25%) or affected (25%) the operation of their businesses. The quality of public services offered in the area of their business activities, including: support for small and medium enterprises, the offer of land and buildings for businesses, waste disposal, public transport, security, maintenance of roads and streets, licensing authorities and promotion of the city or area were also evaluated. All industries for the best services evaluated promotion of the city and area and garbage disposal, with which almost all the companies struggled before accession. Well perceived were also safety and approval administration by the city and the organization of public transport. As the weakest of organized services were still evaluated: support for small and medium enterprises, the offer of land and buildings and maintenance of roads and streets. Evaluation also raised issues of

personal contacts with individuals of state administration and government, where respondents felt that the best personal contact occurs with District Employment Office and the Office of Municipal and District Authorities. The contact with the Inland Revenue Office (Tax Office), the Department of Trade and Services, Municipal Security Service (City Guards) and the Mayor were evaluated as “fair”. Personal contact in relationship with the Faculty of Engineering, the City Council and City Architect was “weak”. Next question concerned the activity of the public authorities in removal of barriers to the functioning of companies. Respondents could choose one of five answers. They considered most of the public authorities “limited to a declaration of need to remove them” (50%) and shall take a “limited range of operation” (25%), and in 25% were claimed to be active. This time there was no response that public authorities are not interested in removal of these barriers, or did not showed any activity in this area.

The survey also requested an assessment by the management of the local climate for business in the area. It was considered “very good” by 25% of companies, a “good” by 50%, and by 25% as “poor”. No answers were received concerning the climate bad or from people with any opinion. In all industries the climate was assessed as good or very good, and the only dairy industry considered it a bad climate, which is likely associated with poor cooperation with local authorities.

External factors refer to different ways of support, which companies can currently use, and a significant majority of it comes from the EU structural funds. This was the next question in which respondents indicated whether their companies are going to make use of this support within next 12 months to improve their market position. Only 25% of the surveyed companies answered positively and "no" as much as 75%. Based on the responses can be concluded that every fourth company will want to use this kind of support. When it comes to the inclusion of industry branch, the largest number of companies benefited from the support available in the meat industry (50%) and dairy industry, and the least in the confectionery industry (25%). Unfortunately, we did not observed a clear improvement in the planning of opportunities to benefit from financial support.

It should be noted that some of them in the next period were of significant help in business development, and part of the group was only to support these activities. Following the results of study carried out in 2011, it can be concluded that the most support was from the development of such factors as: competition in the market, Polish accession to the European Union, which has been recognized as a significant element of strengthening and transformation of Polish economy, as a target for improvement in the situation of the enterprise. Among factors considered to support the ongoing operation of enterprises were included: care for the quality of public services, cooperation with institutions, activity of public authorities in removing barriers to the functioning of companies, the composition of the local climate for business growth and benefit from forms of EU financial support.

In the post-accession period a continuous development of agriculture and food companies has been observed and recapitalization of companies resulting in reduction of the influence of the basic factors limiting their functioning leads to systematic improvement of their position on the local, domestic and international market. Based on the interviews carried out at the examined companies it was found that:

- knowledge, information and their quality and timeliness are for a company the factors enhancing success which is expressed in the increase of their competitiveness and better position on the market,
- the use of modern techniques in current functioning of companies helps in an organized way to rationally manage possessed qualifications and skills and the possessed capital,
- intellectual capital and actions of corporate governance should be highly positioned in the value of a company,
- management of organizational climate and culture and important role of social responsibility of an organization are necessary in building companies' competitiveness [Firlej K., 2012].

Numerous economists emphasise that the weakness of our economy lies not in the causes of material nature but in the sphere of consciousness. Innovativeness is not perceived as a way to achieve success and intellectual potential of employees and their creativity are often underestimated [Firlej K., 2012].

#### **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;
5. In the surveyed companies, since the moment of accession, there are hazards which adversely affect their development, such as: rising cost of production and labour, strengthening the national currency, foreign competition, the abolition of quota system and a low degree of horizontal and vertical integration;

6. It is important to test and adjust the level and structure of prices of food, as the derivative of mean prices in the European Union;
7. Strengthening the food industry by state institutions, local self governmental authorities and business organizations is not always judged as positive.

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