OeconomiA
copernicana

2017 Volume 8 Issue 4, December

p-ISSN 2083-1277, e-ISSN 2353-1827
www.oeconomia.pl

ORIGINAL PAPER

Citation: Głód, G., & Flak, O. (2017). Factors of competitiveness in Polish companies in the Silesian Region in 2014–2016. *Oeconomia Copernicana*, *8*(4), 601–619. doi: 10.24136/oc.v8i4.37

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Received: 13 May 2017; Revised: 27 July 2017; Accepted: 15 August 2017

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Factors of competitiveness in Polish companies in the Silesian Region in 2014–2016

JEL Classification: *M21; L10; L20*

Keywords: *company competitiveness; competitive potential; competitive advantage; strategy of competition*

Abstract
Research background: A lot of companies in the market create a variety of situations in which they compete with one another. At the same time companies crave for the same pool of demand, and in fact the money held by the buyers. Attempts to define the notion of competitiveness of the company appear frequently in scientific publications and in the research conducted by various institutions in different countries. The concept of competitiveness is used to determine the ratio of enterprise characteristics to these of its competitors, resulting from many internal features and the ability to deal with an external environment.
Purpose of the article: The purpose of this article is to present results of the Company Competitiveness Barometer, conducted in 2014, 2015 and 2016 on a group of more than 600 Polish companies. The Barometer is a theoretical basis for the integrated model of competitiveness designed by the authors of the article. The specific objectives of this article are: to provide an overview of the research methodology, to present the results of empirical studies of more than 600 Polish companies, to create an outline of the future direction of the research on competitiveness of enterprises by means of the Company Competitiveness Barometer.

Methods: The questionnaire used in the Company Competitiveness Barometer is built of 48 questions. 45 of them are related to the characteristics of the company that are affecting its competitiveness, and 3 questions are metric questions. The questionnaire can be found on the www.sensorium24.com website.
Findings & Value added: The research carried out from the point of view of the company's employees, offer an opportunity to reflect and think about the competitiveness of their own organization and factors that are shaping it. The IT tool used makes it possible to compare own results with other companies participating in the survey.

Introduction

In the beginning of XXI century the concept of competitiveness has become particularly important for companies and also quite popular among entrepreneurs, managers and business organizations (Ambastha & Momaya, 2004). It is widely believed that in the market economy the improvement of the competitiveness of enterprises in a given region of the country in the long term effects in raising the level of competitiveness of the national economy as a whole (Blair, 2004).

The concept of competitiveness is used to determine the ratio of the enterprise characteristics to those of its competitors, resulting from many internal features and the ability to deal with the external environment (Lombana, 2011). An assessment of competitiveness should be done in all areas of the company's activity which determine: the attractiveness of the offer, the economic condition of the company, its organizational and technical efficiency (Donno, 2013). The ability to compete defined in such a way may be relative, which means you can compare companies in pairs.

Therefore, the purpose of this paper is to present the analysis of the competitiveness of companies in Poland in the period of 2014–2016. The data comes from the annual Company Competitiveness Barometer, conducted in that period on a group of several hundred Polish companies. The analysis includes aspects of a competitive potential, a competitive advantage, a platform of competition and competitive positioning.

The specific objectives of this article are:
- to provide an overview of the research methodology,
- to present the results of empirical studies of Polish companies in chosen areas of competitiveness,
- to create an outline of the future direction of the research on competitiveness of enterprises by means of the Company Competitiveness Barometer.

This paper consists of a short literature review focused on the main trends in company competitiveness research, a description of the original research methodology, characteristics of the research sample, a presentation of chosen aspects of examined companies competitiveness and closing conclusions on the next research in the future.

Related works

There are several trends related to the research subject and conducting the research itself that are possible to be distinguished in the research into the competitiveness of the enterprise.

Three main areas of research can be identified in the subject area of the study. Firstly, in recent years, attempts are made to assess the international competitiveness of enterprises (Peña-Vinces *et al*., 2014) and in the case of the countries from the European Union, attempts to assess the impact of the EU aid on increasing the competitiveness of enterprises (Martinez & Potluka, 2015). Secondly, from the point of view of the competitiveness of enterprises or regions, the analysis of the competitiveness of clusters is becoming more and more popular (Aguiar *et al*., 2017). Thirdly, studies on the research results discuss the impact of the implementation of corporate social responsibility on competitiveness (Marin *et al*., 2017; Patrisia & Dastgir, 2017) and on the competitive potential of family businesses (Mikolas, 2016).

As far as the methods of conducting the research on business competitiveness are concerned, the importance of assessing the competitiveness of the company from the perspective of its managers and owners is evident (Borowiecki & Siuta-Tokarska, 2016). This is mainly the case for cyclical study into the competitiveness of small and medium-sized enterprises in different countries (Setyawan *et al.*, 2015) and in selected branches of the industry (Koroteeva *et al.*, 2016).

It is worth mentioning an increasing role of competitive advantage as a dominating element of company competitiveness in the last years, especially in family enterprises (Bednarz *et al.*, 2017) and multinational enterprises (Bugador, 2016). On the contrary, the competitive advantage is less important in smaller companies (Aripin, 2017).

Another approach distinguished a special relation between competitive potential and competitive position (Trapczynski *et al.*, 2016). There are also some traits of focusing the company competitiveness in the environment in which the company operates (Kuznetsova *et al.*, 2017).

Within this trend, the authors of the article have been conducting annual surveys on the competitiveness of enterprises in Poland, the Czech Republic and Slovakia since 2012. Longer time perspective and a uniform methodology of research allow for some analyses in the cross-sections of the years in which the research was conducted.

Research methodology

In order to remind the essence of the cyclically conducted research within the framework of the Barometer of Business Competitiveness, the main assumptions of the presented approach will be synthesized. Detailed methodological solutions are provided in previous publications of the authors (Flak, 2014; Flak & Głód, 2015; Flak & Głód, 2015).

The authors have attempted to systematize concepts, definitions and models related to the subject of enterprise competitiveness in their previous publications (Flak & Głód, 2009). The original the Competitiveness Integrated Model has been refined and operationalized, and with the use of research tools, also tailored for practical use in evaluating individual aspects of the company's competitiveness (Flak & Głód, 2012). The development of an integrated model of enterprise competitiveness was aimed at generalizing most of the business cases and identifying the most important links between the different aspects of competitiveness. The integrated model of enterprise competitiveness and its situational context, which determines the competitiveness of enterprises, are presented in Figure 1.

The integrated competitiveness model has 7 assumptions. First of all, competition between companies is carried out within the sector. Secondly, the competitiveness of the company is influenced by factors that are dependent and independent of the company. Thirdly, the platform of competition includes the features of the closer and the further environment; the features of the further environment are fixed at a moment and are the same for all competing businesses; the characteristics of the close environment may vary for each one. Fourthly, the features of the platform of competition do not depend on an individual company. Fifthly, the characteristics of the companies included in the concept of competitive potential, strategy, advantage and a competitive position are different for each company. Sixthly, the characteristics of an enterprise, embodied in the concepts of the competitive potential, strategy, and a competitive advantage, depend on the company. Seventh, the characteristics of an enterprise included in the concept of competitive position are independent of the enterprise.

Table 1 provides definitions of concepts used in The Competitiveness Integrated Model. Components of the Competitiveness Integrated Model are temporally and causally interrelated. Their relationships have been verified in previous publications of the authors.

Based on the above assumptions and effects of the conceptualization of existing approaches to the phenomenon of company competitiveness and the methods of its research, the authors of the article developed 2 methods of testing the competitiveness of enterprises — ALL2USE and NEXT2USE (Flak & Głód, 2012, pp. 219–230). One of them — ALL2USE — was the basis for creating the annual Company Competitiveness Barometer, namely a research tool for assessing the competitiveness of the surveyed companies.

The ALL2USE method assumes the measurement of all components of the competitiveness model, shown in Figure 1, in one short period of time. Because of the shifting in time the effects of, for example, the elements of competitive potential in the competition strategies, this method is appropriate for the static measurement of enterprise competitiveness.

The Company Competitiveness Barometer uses the method of questionnaire in all 5 areas of the research on competitiveness shown in Figure 1. The questionnaire used in the Company Competitiveness Barometer contains 45 questions, 12 of which concern competitive potential, 10 competition strategies, 8 competitive advantage, 6 competitive position and 9 platform of competition. The questionnaire includes 3 demographic questions. The survey can be found on the website konkurencyjniprzetrwaja.pl or sensorium24.com.

The Company Competitiveness Barometer has two independent algorithms for calculating results. The first one is used for statistical calculations using the collected data — respondents' answers. It was used to verify the Competitiveness Integrated Model. The second algorithm is used to indicate to the respondent, after filling in the questionnaire, the degree of competitiveness of the company they represent (Flak, 2014).

Characteristics of the research sample

During 2014–2016 The Company Competitiveness Barometer was attended by 708 companies which were located in the Silesian Region. The survey was always carried out from March 1st to September 30th. In 2014 252 companies took part in the Barometer, in 2015 there were 178 companies and in 2016 even more 278 companies. In the previous editions of the Barometer there were 173 companies in 2013 and 109 companies in 2012. The results of the Company Competitiveness Barometer from all past editions can be found on the website konkurencyjniprzetrwaja.pl or sensorium24.com. The structure of the research sample, which took part in the Company Competitiveness Barometer 2014–2016 are shown in Table 2.

The companies belonged to a wide industry and IT sector. There were changes in the participated companies in every year, however, about 80% of companies attended the Barometer year by year.

Chosen aspects influencing the competitiveness of the company

Due to the editing limitations of this article, the analytical part presents the results of empirical studies which are the most important and interesting according to the authors. The analysis shows different aspects of the functioning of the companies, which include the following elements of the competitiveness model: competitive potential, competitive advantage, platform of competition and competitive positioning.

Table 3 shows the responses of the respondents about the returns from the company's core business. First of all, it can be seen that in microcompanies, a significant proportion of companies responded that they were profitable (48.7%, 70.4% and 67% in subsequent years). Second, as time went by, more and more small-business companies responded "definitely yes". Third, regardless of the size of the company in 2016, in comparison to 2015, the percentage of companies that responded "definitely yes" increased significantly. Fourth, among companies operating for more than 50 years, the crisis year was 2015. There is a smaller share of companies with the answer "definitely yes" in 2015 (10%) than in 2014 (23.1%) and 2016 (26.7%).

Table 4 shows the answers on how enterprises document their business activities. One can read that in 3 years microcompanies did not change the degree to which knowledge of the functioning of the company is "kept" in employees' heads (22.2 to 26.3% of answers). Secondly, over the years, both in the companies functioning for 6 to 25 years and 26 to 50 years in the market, the importance of storing employees' knowledge increased. Thirdly, in large enterprises there was an opposite trend: the share of unrelated electronic documents about the functioning of the company increased (from 10% to 25% over 3 years). Fourthly, it is very puzzling that in 2016, compared to 2015, all business groups decreased the use of complete electronic files due to operating time.

Over the past 3 years, it has been hard to see significant changes in the extent to which an employee is allowed to implement small improvements at work. Table 5 shows no prevailing trends in this area, although one can notice a certain phenomenon. Firstly, mid-size companies limit the opportunity to introduce changes — from 0% in 2014 to 7.4% in 2016 for "low" responses and from 9.1% to 0% for "high" responses in the same period.

Secondly, employees' initiative was also limited to companies with a market placement of 26 to 50 years - 28.6% in 2014 to 50% in 2016 for responses of "quite low".

Table 6 shows the assessment of the creativity of employees by the respondents taking part in the survey of the company competitiveness in the period of 2014-2016. As can be read from the data in Table 6, firstly, regardless of the company's size the creativity of the employees in the period 2014-2016 has grown or remained unchanged. Secondly, during this period, creativity decreased significantly in microcompanies — from 93% in 2014 to 20.9% in 2016. Thirdly, proportionally to the growth of the employees' creativity in all companies in these years, the number of "low" responses for microcompanies fell drastically — from 9.2% in 2014 to 1.1% in 2016. This may mean a real increase in the importance of the creativity of employees in the operation ,especially of this type of entities.

As for documenting the ongoing projects, operations and production processes, some persistent tendencies may be observed. As shown in Table 7, the degree of documentation of a company's operations is increasing in particular in microcompanies and the youngest companies. This trend supports the following arguments. Firstly, the number of micro-businesses that do not document activity decreased from 10.5% in 2014 to 3.2% in 2016. Secondly, only 9.3% of startups documented their activity in 2014, and in 2016 it was already 20.9%. Thirdly, there is a stabilization over the period between 2014-2016 with regard to the number of micro and small companies, in which such activities are commonplace.

The company strategy seems to be an important area of expertise, necessary for work even for the company's regular employees. However, Table 8 does not confirm this stereotyped view. Firstly, it can be said that the number of "cannot" responses increased in 2016 compared to 2015, regardless of the history on the market of the company. This may suggest that strategy becomes a key element of market competition. Secondly, however, if the strategy is already announced, the role of the internal electronic website decreases for the benefit of attending periodical informative events. Thirdly, there is a stable role of the meetings with managers, which shows that communicating the strategy still requires the involvement of direct managers and their contact with employees.

In terms of competitive advantage, an assessed element was the main objective of the pricing strategy used. As can be seen in Table 9, companies of all sizes decisively put priority on increased profits in a long period in 2016, especially as compared to 2015. For example, the growth of this attitude was 9.8% higher in microcompanies and 18.6% bigger in large companies. This trend is confirmed by the results of companies with a market history from 6 to 25 years — on the one hand, the desire to increase profits in a short period decreased, and on the other, to increase profits in a long period increased. In addition, in all groups of companies, the attitude to get a maximum market share have fallen a few percentage points in 2016 compared to 2015. However, one can notice the opposite phenomenon in medium-sized companies — in 2016 as much as 25.9% of companies strived for surviving difficulties, which was a significant increase of this attitude compared to 2014 (6.8% of companies).

Respondents answering questions in the Company Competitiveness Barometer highly appreciated the capabilities of their distribution systems. Every year these ratings were higher. In Table 10 you can find the following arguments behind this thesis. First of all, all types of companies divided by their size, apart from large ones, rated the distribution system to be able to keep the supply of goods or services supply timely as better in 2016 than in 2015. Secondly, more companies, except of the microcompanies, responded “quite high” in 2016 than in 2015. Thirdly, regardless of the length of the market existence of companies, the percentage of companies expressing their opinion that their ability of distribution system is quite high has increased over the two years.

In terms of competitive positioning, it is worth to consider the responses of respondents to the level of a cash flow. As seen in Table 11, the financial liquidity of the surveyed companies in 2016 was significantly higher than in 2015. However, comparing 2015 and 2014, the trend was reversed. It is worth noting that this phenomenon took place regardless of the size of the company and their length of market existence. This may indicate some temporary breakdown in running a business in 2015.

Two phenomena are worth mentioning in terms of the impact of platform of competition on companies. The first is the use of flexible forms of employment. Table 12 shows the following trends over the period 2014-2016. Firstly, in all types of companies in terms of size, there was a slow increase in the importance of flexible forms of employment. It was not a significant and sudden growth, but slow and steady. Secondly, there were two exceptions to this rule. The first one — this growth was much faster than in other companies among the oldest companies in the market — 23.1% of companies rated flexible forms of employment as the average in 2014 and in 2016 it was already 44.2%. The second exception was for micro- and small companies. In such entities, the importance of flexible forms of employment was higher in 2014 than in subsequent years.

The second factor in the platform of competition and affecting the functioning of the surveyed companies was a technological change. In Table 13 you can find the answers of the respondents to the question to which extent in the last 5 years the technology that they use in their company was preserved. It can be concluded that 2015 was the exceptional year. This year most companies, regardless of the number of employees, declared that their technology was not much changed. The changes were registered in 2014 and 2016. Although the Company Competitiveness Barometer does not gather hard data, such as investment in new technologies, respondents' responses may point to some cyclicality of technological change in their companies.

Conclusions

The research carried out in Company Competitiveness Barometer offers an opportunity to reflect and think about the competitiveness of their own organization and factors that are shaping it in a long period of time. The IT tool used on the websites konkurencyjniprzetrwaja.pl and sensorium24.com makes it possible to compare own results with other companies that have participated in the survey in several years of study.

The most important conclusions from the analysis of the data collected in 2014–2016 are as follows. First of all, from the point of view of the competitive potential of a company in those years, the companies recorded fairly stable returns from their core business. The process of documenting processes, tasks and projects was quite varied, and although the importance of electronic data carriers could be expected, the importance of "heads" of the staff continued to be quite large. Alongside this, a rather strange phenomenon occurred. On the one hand, employees were limited the opportunity to introduce small innovations at work and, on the other hand, the creativity of the staff was assessed positively. Secondly, from the perspective of the competition strategy, its role in the functioning of the company has increased. However, more and more often, the strategy remained secret and unknown to the employees.

Thirdly, from the standpoint of a competitive advantage, the companies focused more on generating long-term than short-term gains. At the same time, less importance was attached to increasing the share of the market. Fourthly, in terms of competitive position, one will notice an increase in financial liquidity of companies in 2016 compared to 2015. Fifthly, the platform of competition has not forced companies to rapidly change the way they employ employees, but the role of flexible employment has gradually increased. At the same time companies changed their technology, but 2015 was a year of stabilization in this matter.

The methodology used to test the competitiveness of the company allows longitudinal studies, quite rare in management sciences. Therefore, the authors of the article aim to continue the research into the competitiveness of companies by the means of the Company Competitiveness Barometer in the years to come. The Barometer has been used to measure company competitiveness from 2014 in Slovakia and the Czech Republic (Flak & Głód, 2015; Flak & Głód, 2016). However, cooperation within a research platform called sensorium24.com with other partners in Finland, Germany, Cyprus and Spain is planned as well.

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Annex

Table 1. Definitions of the terms used in the Competitiveness Integrated Model

Element on the Model	Definition
Competitive potential	Resources, which the company has or should have to be able to use them to build, maintain and strengthen its competitiveness. These are, in a broad sense, business opportunities arising from owned tangible and intangible capital. Competitive potential of the company is at the same time a relative, multidimensional concept.
Strategy of competition	Adopted program of action aiming to achieve a competitive advantage against other subjects of the competitive environment (microenvironment), serving the basic objectives of the company.
Competitive advantage	The company's ability to deliver tangible and intangible assets to the buyer through the market. The competitive advantage of the company is a relative, multidimensional concept.
Competitive positioning	Synthetic market and economic results of the company, resulting from the degree of the use of capacity of the enterprise to compete now and in the future. The competitive positioning of the company is a relative, multidimensional concept.
Platform of competition	Group of macro- and microenvironment's features in which the company operates. Features of the macroenvironment are the same for each company operating in the sector, while the microenvironment characteristics may be different for each company in the sector.

Source: Flak & Głód (2015, p. 123).

Table 2. Structure of the research sample in 2014-2016

Number and percentage of the companies with a different time of operation in the market			
	2014	2015	2016
Up to 5 years	43 (15,41%)	43 (24,16%)	86 (30,82%)
From 6 to 25 years	175 (62,72%)	106 (59,55%)	79 (28,32%)
From 26 to 50 years	21 (7,53%)	19 (10,67%)	28 (10,04%)
More than 50	13 (4,66%)	10 (5,62%)	86 (30,82%)
Number and percentage of the companies with a different number of employees			
	2014	2015	2016
Up to 9 employees	76 (30,15%)	54 (30,34%)	94 (33,69%)
From 10 to 49 employees	72 (28,57%)	46 (25,84%)	150 (53,76%)
From 50 to 249 employees	44 (17,46%)	27 (15,17%)	27 (9,68%)
250 employees and more	60 (23,80%)	51 (23,65%)	8 (2,87%)

Table 3. Profit from the core business

Are you obtaining profit from your core business?		Size of the company (number of employees)				Number of years of existence in the market			
		up to 9	**from 10 to 49**	**from 50 to 249**	**more than 249**	**up to 5**	**from 6 to 25**	**from 26 to 50**	**more than 50**
Definitely not	2014	2,6	0,0	0,0	1,7	0,0	1,7	0,0	0,0
	2015	0,00	0,0	3,7	0,0	0,0	0,0	5,3	0,0
	2016	1,1	0,7	3,7	0,0	1,2	0,0	0,0	2,3
No	2014	14,5	4,2	2,3	5,0	14,0	5,7	4,8	7,7
	2015	5,6	8,7	14,8	25,5	7,0	13,2	26,3	20,0
	2016	6,4	3,3	3,7	25,0	3,5	5,1	7,1	5,8
It's hard to say	2014	22,4	16,7	18,2	15,0	27,9	17,1	14,3	7,7
	2015	18,5	26,1	25,9	13,7	32,6	18,9	10,5	0,0
	2016	7,4	12,7	29,6	0,0	5,8	10,1	21,4	17,4
Yes	2014	**48,7**	58,3	43,2	56,7	53,5	50,9	57,1	61,5
	2015	**70,4**	50,0	48,1	43,1	48,8	55,7	47,4	70,0
	2016	**67,0**	66,0	33,3	50,0	75,6	64,6	64,3	47,7
Definitely yes	2014	11,8	20,8	36,4	21,7	**4,7**	24,6	23,8	**23,1**
	2015	**5,6**	**15,2**	**7,4**	**17,6**	**11,6**	12,3	10,5	**10,0**
	2016	**18,1**	**17,3**	**29,6**	**25,0**	**14,0**	20,3	7,1	**26,7**

Table 4. Collection of knowledge in the company

In which way is knowledge collected in the company?		Size of the company (number of employees)				Number of years of existence in the market			
		up to 9	**from 10 to 49**	**from 50 to 249**	**more than 249**	**up to 5**	**from 6 to 25**	**from 26 to 50**	**more than 50**
complete paper files	2014	17,1	20,8	11,4	13,3	20,9	14,9	23,8	7,7
	2015	20,4	21,7	14,8	5,9	18,6	14,2	26,3	0,0
	2016	17,0	22,7	14,8	12,5	18,6	24,1	35,7	11,6
unrelated paper files	2014	10,5	4,2	2,3	1,7	4,7	6,3	0,0	0,0
	2015	11,1	2,2	7,4	3,9	7,0	5,7	10,5	0,0
	2016	11,7	4,0	7,4	0,0	12,8	5,1	7,1	2,3
complete electronic files	2014	27,6	26,4	47,7	70,0	32,6	40,6	47,6	61,5
	2015	33,3	47,8	48,1	66,7	**44,2**	**49,1**	**42,1**	**80,0**
	2016	34,0	31,3	55,6	37,5	**30,2**	**26,6**	**14,3**	**53,5**
unrelated electronic files	2014	18,4	20,8	27,3	**10,0**	18,6	18,9	19,0	15,4
	2015	13,0	6,5	7,4	**13,7**	9,3	10,4	15,8	10,0
	2016	11,7	15,3	7,4	**25,0**	10,5	11,4	25,0	15,1
in employees' heads	2014	**26,3**	27,8	11,4	5,0	23,3	**19,4**	**9,5**	15,4
	2015	**22,2**	21,7	22,2	9,8	20,9	**20,8**	**5,3**	10,0
	2016	**25,5**	26,7	14,8	25,0	27,9	**32,9**	**17,9**	17,4

Table 5. Introduction of facilitation at work

To what extend is an employee allowed to implement small improvements at work?		Size of the company (number of employees)				Number of years of existence in the market			
		up to 9	from 10 to 49	from 50 to 249	more than 249	up to 5	from 6 to 25	from 26 to 50	more than 50
low	2014	3,9	2,8	**0,0**	8,3	2,3	4,0	9,5	0,0
	2015	3,7	4,3	**3,7**	3,9	0,0	5,7	0,0	10,0
	2016	1,1	1,3	**7,4**	0,0	1,2	0,0	0,0	4,7
quite low	2014	22,4	19,4	18,2	36,7	23,3	22,9	**28,6**	38,5
	2015	9,3	10,9	29,6	31,4	4,7	23,6	**31,6**	10,0
	2016	16,0	27,3	37,0	25,0	17,4	22,8	**50,0**	24,4
average	2014	26,3	43,1	45,5	33,3	16,3	41,1	38,1	30,8
	2015	40,7	43,5	29,6	43,1	39,5	39,6	31,6	70,0
	2016	27,7	35,3	37,0	37,5	23,3	31,6	25,0	46,5
quite high	2014	35,5	29,2	27,3	20,0	48,8	25,7	19,0	15,4
	2015	40,7	39,1	33,3	15,7	48,8	27,4	31,6	10,0
	2016	43,6	30,0	18,5	37,5	45,3	41,8	17,9	19,8
high	2014	11,8	5,6	**9,1**	1,7	9,3	6,3	4,8	15,4
	2015	5,6	2,2	**3,7**	5,9	7,0	3,8	5,3	0,0
	2016	11,7	6,0	**0,0**	0,0	12,8	3,8	7,1	4,7

Table 6. Creativity of the key employees

How do you assess the creativity of the company's key employees?		Size of the company (number of employees)				Number of years of existence in the market			
		up to 9	from 10 to 49	from 50 to 249	more than 249	up to 5	from 6 to 25	from 26 to 50	more than 50
very low	2014	5,3	1,4	0,0	1,7	4,7	1,7	4,8	0,0
	2015	0,0	2,2	3,7	0,0	0,0	1,9	0,0	0,0
	2016	0,0	1,3	3,7	12,5	1,2	1,3	0,0	2,3
low	2014	**9,2**	15,3	13,6	6,7	4,7	12,6	14,3	7,7
	2015	**5,6**	2,2	14,8	5,9	4,7	7,5	5,3	0,0
	2016	**1,1**	8,7	14,8	25,0	3,5	6,3	3,6	12,8
average	2014	35,5	27,8	38,6	45,0	32,6	36,6	42,9	30,8
	2015	37,0	37,0	44,4	45,1	30,2	43,4	42,1	50,0
	2016	33,0	36,0	33,3	12,5	34,9	29,1	50,0	32,6
high	2014	40,8	45,8	40,9	40,0	48,8	41,1	28,6	53,8
	2015	42,6	50,0	29,6	35,3	46,5	37,7	47,4	30,0
	2016	46,8	44,7	37,0	37,5	39,5	51,9	39,3	44,2
very high	2014	**9,2**	**9,7**	**6,8**	**6,7**	**9,3**	8,0	9,5	7,7
	2015	**14,8**	**8,7**	**7,4**	**13,7**	**18,6**	9,4	5,3	20,0
	2016	**19,1**	**9,3**	**11,1**	**12,5**	**20,9**	11,4	7,1	8,1

Table 7. Documenting the projects in the company

To which extent are the ongoing projects, operations and production processes documented in the company?		Size of the company (number of employees)				Number of years of existence in the market			
		up to 9	**from 10 to 49**	**from 50 to 249**	**more than 249**	**up to 5**	**from 6 to 25**	**from 26 to 50**	**more than 50**
none	2014	**10,5**	5,6	2,3	0,0	7,0	5,7	0,0	0,0
	2015	**7,4**	0,0	0,0	0,0	0,0	3,8	0,0	0,0
	2016	**3,2**	4,7	0,0	0,0	4,7	6,3	0,0	1,2
quite few	2014	14,5	18,1	6,8	1,7	11,6	11,4	14,3	0,0
	2015	20,4	10,9	7,4	7,8	16,3	12,3	5,3	10,0
	2016	12,8	11,3	3,7	0,0	12,8	13,9	14,3	4,7
a few	2014	**43,4**	**29,2**	34,1	30,0	46,5	31,4	42,9	23,1
	2015	**31,5**	**30,4**	48,1	31,4	37,2	33,0	36,8	20,0
	2016	**35,1**	**33,3**	33,3	37,5	41,9	24,1	42,9	32,6
quite many	2014	25,0	29,2	31,8	41,7	25,6	33,7	23,8	30,8
	2015	20,4	50,0	37,0	49,0	27,9	41,5	36,8	60,0
	2016	31,9	34,7	51,9	37,5	19,8	44,3	28,6	45,3
all of them	2014	6,6	18,1	25,0	26,7	**9,3**	17,7	19,0	46,2
	2015	20,4	8,7	7,4	11,8	**18,6**	9,4	21,1	10,0
	2016	17,0	16,0	11,1	25,0	**20,9**	11,4	14,3	16,3

Table 8. Awareness of the company's strategy

In which way can the employees get to know the strategy of the company?		Size of the company (number of employees)				Number of years of existence in the market			
		up to 9	**from 10 to 49**	**from 50 to 249**	**more than 249**	**up to 5**	**from 6 to 25**	**from 26 to 50**	**more than 50**
they cannot	2014	6,6	4,2	2,3	1,7	4,7	4,0	4,8	0,0
	2015	1,85	2,2	7,4	5,9	**4,7**	**3,8**	**5,3**	**0,0**
	2016	5,3	2,7	3,7	0,0	**2,3**	**2,5**	**10,7**	**3,5**
during meetings with managers	2014	47,4	55,6	56,8	41,7	**46,5**	**52,0**	**47,6**	**38,5**
	2015	66,7	56,5	59,3	35,3	**51,2**	**56,6**	**57,9**	**30,0**
	2016	56,4	60,0	37,0	62,5	**65,1**	**65,8**	**57,1**	**39,5**
reading special documents	2014	28,9	9,7	20,5	23,3	23,3	21,7	14,3	7,7
	2015	18,5	21,7	11,1	15,7	20,9	19,8	0,0	10,0
	2016	21,3	11,3	29,6	12,5	14,0	15,2	7,1	23,3
using internal electronic website	2014	3,9	11,1	4,5	15,0	4,7	8,6	14,3	15,4
	2015	**5,6**	**6,5**	**11,1**	**21,6**	4,7	10,4	21,1	30,0
	2016	**3,2**	**8,7**	**7,4**	**12,5**	2,3	5,1	3,6	14,0
attending periodical informative events	2014	13,2	19,4	15,9	18,3	20,9	13,7	19,0	38,5
	2015	**7,4**	**13,0**	**11,1**	**21,6**	18,6	9,4	15,8	30,0
	2016	**13,8**	**17,3**	**22,2**	**12,5**	16,3	11,4	21,4	19,8

Table 9. The aim of the pricing strategy

What is the main objective of the currently used pricing strategy for all the products or services altogether?		Size of the company (number of employees)				Number of years of existence in the market			
		up to 9	**from 10 to 49**	**from 50 to 249**	**more than 249**	**up to 5**	**from 6 to 25**	**from 26 to 50**	**more than 50**
to survive difficulties	2014	14,5	16,7	**6,8**	6,7	11,6	10,9	23,8	7,7
	2015	18,5	19,6	**18,5**	5,9	11,6	17,9	15,8	0,0
	2016	10,6	16,7	**25,9**	12,5	16,3	16,5	14,3	14,0
to increase profits in a short period	2014	25,0	19,4	20,5	25,0	25,6	**21,1**	28,6	23,1
	2015	16,7	17,4	25,9	15,7	23,3	**16,0**	21,1	10,0
	2016	19,1	16,7	14,8	0,0	17,4	**15,2**	17,9	17,4
to increase profits in a long period	2014	36,8	33,3	43,2	28,3	41,9	**34,9**	23,8	30,8
	2015	**25,9**	**39,1**	**22,2**	**31,4**	27,9	**34,0**	10,5	40,0
	2016	**45,7**	**40,7**	**25,9**	**50,0**	38,4	**49,4**	46,4	34,9
to get a maximum market share	2014	23,7	30,6	29,5	40,0	20,9	33,1	23,8	38,5
	2015	**38,9**	**23,9**	**33,3**	**47,1**	37,2	32,1	52,6	50,0
	2016	**24,5**	**26,0**	**33,3**	**37,5**	27,9	19,0	21,4	33,7

Table 10. Ability of distribution system

To what extent does your distribution system keep the goods' or service's supply timely?		Size of the company (number of employees)				Number of years of existence in the market			
		up to 9	**from 10 to 49**	**from 50 to 249**	**more than 249**	**up to 5**	**from 6 to 25**	**from 26 to 50**	**more than 50**
low	2014	1,3	0,0	2,3	1,7	2,3	0,6	0,0	7,7
	2015	1,8	2,2	0,0	3,9	2,3	2,8	0,0	0,0
	2016	1,1	0,0	0,0	0,0	1,2	0,0	0,0	0,0
quite low	2014	2,6	4,2	2,3	5,0	2,3	4,6	0,0	0,0
	2015	1,8	2,2	11,1	3,9	9,3	1,9	5,3	0,0
	2016	2,1	2,7	3,7	0,0	1,2	2,5	7,1	2,3
average	2014	21,1	26,4	13,6	21,7	23,3	21,7	19,0	15,4
	2015	27,8	41,3	29,6	27,5	23,3	32,1	36,8	50,0
	2016	23,4	16,7	18,5	25,0	17,4	21,5	17,9	19,8
quite high	2014	44,7	45,8	47,7	40,0	48,8	45,1	42,9	23,1
	2015	40,7	**34,8**	**29,6**	**35,3**	**32,6**	**39,6**	**31,6**	**20,0**
	2016	33,0	**54,0**	**40,7**	**75,0**	**39,5**	**44,3**	**50,0**	**53,5**
high	2014	30,3	23,6	34,1	31,7	23,3	28,0	38,1	53,8
	2015	**27,8**	**19,6**	**29,6**	29,4	32,6	23,6	26,3	30,0
	2016	**40,4**	**26,7**	**37,0**	0,0	40,7	31,6	25,0	24,4

Table 11. Level of a cash flow

What is the level of a cash flow in your company (is your company able to pay short-term obligations)?		Size of the company (number of employees)				Number of years of existence in the market			
		up to 9	**from 10 to 49**	**from 50 to 249**	**more than 249**	**up to 5**	**from 6 to 25**	**from 26 to 50**	**more than 50**
very low	2014	2,6	0,0	2,3	1,7	4,7	0,6	4,8	0,0
	2015	3,7	0,0	0,0	3,9	2,3	1,9	5,3	0,0
	2016	3,2	2,7	7,4	0,0	2,3	1,3	7,1	4,7
low	2014	13,2	15,3	2,3	0,0	14,0	7,4	14,3	0,0
	2015	0,00	8,7	11,1	3,9	7,0	4,7	5,3	0,0
	2016	6,4	3,3	0,0	0,0	4,7	2,5	7,1	3,5
average	2014	36,8	20,8	18,2	26,7	34,9	26,3	14,3	23,1
	2015	37,0	39,1	33,3	11,8	48,8	26,4	10,5	20,0
	2016	31,9	27,3	25,9	37,5	34,9	32,9	39,3	16,3
high	2014	26,3	48,6	52,3	41,7	25,6	44,6	42,9	38,5
	2015	46,3	34,8	44,4	54,9	30,2	48,1	63,2	50,0
	2016	37,2	44,0	37,0	37,5	37,2	44,3	32,1	44,2
very high	2014	21,1	15,3	25,0	30,0	20,9	21,1	23,8	38,5
	2015	**13,0**	**17,4**	**11,1**	**25,5**	**11,6**	**18,9**	**15,8**	**30,0**
	2016	**21,3**	**22,7**	**29,6**	**25,0**	**20,9**	**19,0**	**14,3**	**31,4**

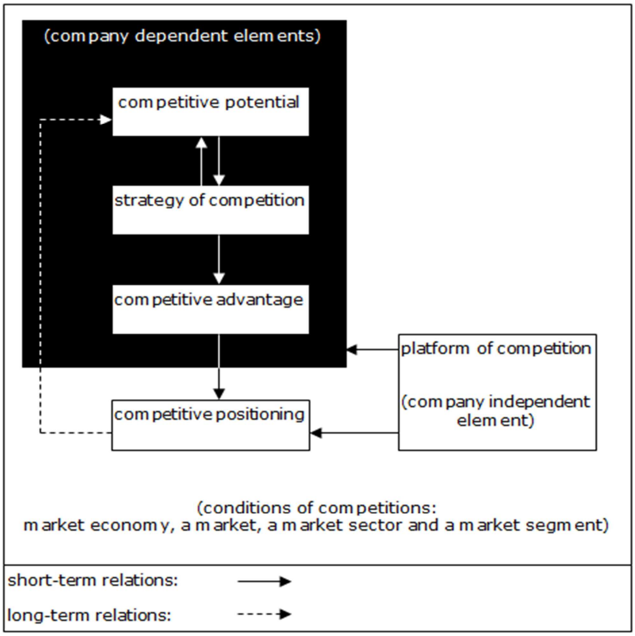
Table 12. Flexible forms of employment in the company

To which extent can your company use the flexible forms of employment?		Size of the company (number of employees)				Number of years of existence in the market			
		up to 9	**from 10 to 49**	**from 50 to 249**	**more than 249**	**up to 5**	**from 6 to 25**	**from 26 to 50**	**more than 50**
no possibility	2014	5,3	11,1	4,5	8,3	2,3	9,7	4,8	0,0
	2015	3,7	6,5	7,4	19,6	4,7	12,3	5,3	10,0
	2016	2,1	5,3	11,1	0,0	3,5	2,5	0,0	9,3
low	2014	21,1	23,6	25,0	18,3	16,3	20,6	42,9	23,1
	2015	25,9	21,7	29,6	15,7	20,9	24,5	26,3	0,0
	2016	12,8	18,0	22,2	12,5	17,4	19,0	14,3	14,0
average	2014	**26,3**	**34,7**	**22,7**	**26,7**	20,9	29,7	33,3	**23,1**
	2015	**29,6**	**39,1**	**29,6**	**29,4**	27,9	34,9	26,3	**30,0**
	2016	**39,4**	**42,0**	**37,0**	**37,5**	33,7	41,8	46,4	**44,2**
high	2014	28,9	23,6	40,9	40,0	**39,5**	**30,3**	19,0	53,8
	2015	25,9	23,9	33,3	21,6	**30,2**	**20,8**	26,3	50,0
	2016	29,8	25,3	18,5	50,0	**31,4**	**21,5**	28,6	26,7
no limits	2014	18,4	6,9	6,8	6,7	20,9	9,7	0,0	0,0
	2015	25,9	23,9	33,3	21,6	30,2	20,8	26,3	50,0
	2016	16,0	9,3	11,1	0,0	14,0	15,2	10,7	5,8

Table 13. Extent of preserving the technology in the company

To which extent in the last 5 years was the technology that you use in your company preserved?		Size of the company (number of employees)				Number of years of existence in the market			
		up to 9	from 10 to 49	from 50 to 249	more than 249	up to 5	from 6 to 25	from 26 to 50	more than 50
no changes	2014	3,9	2,8	0,0	3,3	4,7	2,9	**0,0**	0,0
	2015	**24,1**	**15,2**	**25,9**	**31,4**	11,6	25,5	**47,4**	20,0
	2016	**9,6**	**4,7**	**0,0**	**0,0**	8,1	10,1	**0,0**	1,2
little changes	2014	32,9	34,7	20,5	16,7	25,6	28,6	28,6	15,4
	2015	35,2	28,3	22,2	9,8	39,5	20,8	15,8	10,0
	2016	30,9	32,0	29,6	12,5	40,7	25,3	46,4	20,9
average changes	2014	28,9	43,1	47,7	55,0	32,6	44,6	42,9	46,2
	2015	18,5	34,8	25,9	13,7	18,6	25,5	21,1	10,0
	2016	34,0	43,3	40,7	62,5	32,6	43,0	35,7	47,7
big changes	2014	**27,6**	**16,7**	**29,5**	25,0	30,2	21,7	23,8	38,5
	2015	**13,0**	**10,9**	**18,5**	37,3	14,0	21,7	10,5	50,0
	2016	**18,1**	**19,3**	**22,2**	25,0	14,0	17,7	17,9	26,7
radical changes	2014	6,6	2,8	2,3	0,0	7,0	2,3	4,8	0,0
	2015	9,3	10,9	7,4	7,8	16,3	6,6	5,3	10,0
	2016	7,4	0,7	7,4	0,0	4,7	3,8	0,0	3,5

Figure 1. Integrated model of competitiveness of the company



Source: Flak & Głód (2012, p. 57).