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Features of Polish Companies. Results of the Company Competitiveness Barometer 2014

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Abstract: *In the paper there are results of the research on competitiveness of Polish companies which was conducted within the Company Competitiveness Barometer in 2014. The paper includes a short description of the integrated company competitiveness model, their integral elements and methodology of the research. Then there are results of a competitive potential, a strategy of competition, a competitive advantage, a competitive position of examined companies. 252 companies took part in the Company Competitiveness Barometer 2014. Answers to the survey placed on www.konkurencyjniprzetrwaja.pl allow to get knowledge about a sample of Polish companies in different sectors of economy. The data was also a founda-*

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tion to verify some theoretical assumptions of the relations between the elements of competitiveness.

Introduction

A lot of companies on 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 (Wilkinson, 2005, pp. 74-75). Only those companies that have mastered the art of competing for customers stay in the market (Strużycki (Ed.), 2002, p. 61). Attempts to define the notion of competitiveness of the company appears frequently in scientific publications and in the research conducted by various institutions in different countries (Cetindamar & Kilitcioglu, 2013). The concept of competitiveness is used to determine the ratio of enterprise characteristics to those of its competitors, resulting from many internal features and the ability to deal with an external environment (Lombana, 2011).

The purpose of this article is to present some results of the Company Competitiveness Barometer, conducted in 2014 on a group of 252 Polish companies. The analysis includes several aspects of a competitive potential, a competitive advantage, a platform of competition and competitive positioning. The competitiveness integrated model (Flak & Głód, 2009) is a theoretical foundation for the Barometer.

The specific objectives of this article are:

- to provide an overview of the research methodology,
- to indicate the selected approaches to the competitiveness of the company and the competitiveness integrated model of the company,
- to present the results of empirical studies of 252 Polish companies,
- to create an outline of the future direction of the research on competitiveness of enterprises by means of the Company Competitiveness Barometer.

Method of the Research

Basing on the above assumptions and effects of the conceptualization of existing approaches of the phenomenon of company competitiveness and the ways of its research, the authors of this article developed two test methods for the company competitiveness – ALL2USE and NEXT2USE (Flak & Głód, 2012, pp. 219-230). One of them – ALL2USE – was the basis for

the creation of an annual Company Competitiveness Barometer, a research tool for assessing the competitiveness of companies that take part in the study.

In the Company Competitiveness Barometer the questionnaire method was used in 5 areas of the company competitiveness research. In addition, questions of the Barometer were chosen in such a way that the knowledge of the components of these areas of the company's competitiveness is widespread among employees. Most of the research questions do not require detailed financial, personal or technical information.

The questionnaire used in the Company Competitiveness Barometer contains 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.barometry-gospodarki.pl website and on www.konkurencyjniprzetrwaja.pl.

The fact of using the research method of the questionnaire and the need to aggregate the respondents, also influenced the choice of closed questions for the questionnaire.

The web-based tool that supports the questionnaire, has a built-in algorithm for the evaluation of companies participating in the study. The method for calculating the results of the competitiveness' assessment of a particular company is based on the following assumptions:

- there is no theoretical model of an absolutely correct answer for any sector of the economy (the platform of competition) valid for a longer period of time, defining the features of the most competitive company (Flak & Głód, 2012, p. 44),
- the comparison of the company's competitiveness can only be relative (Olszewska & Piwoni-Krzeszowska, 2004, p. 507),
- the characteristics of the most competitive companies in the sector are focused on some of the values of these features, but there is a low probability that companies with extreme characteristics were among the most competitive in the industry (Bień *et al.*, 1997, pp. 143-144).

The assumptions presented in the bullet points a, b, c above, and the fact that the respondents, especially filling the questionnaire online, expect an immediate result of their actions, led the authors to develop an algorithm for an online calculation of the results, with the procedure being as follows.

- The $n+1$ answer for every question is assessed by an incidence of answers coming from previous n respondents.
- By the means of a pilot study, a minimum amount n of the answers for the m questions is created. In this case, n was 50 respondents who were invited to the pilot study.

- N+1 respondent submits m answers (m – the number of questions) about their company.
- The answer to each question of m possible ones is assessed in terms of matching the frequency of responses of n respondents, who answered them earlier.

An example of such assessment is shown in Table 1.

Table 1. An example of assessing the answers of n+1 respondent

Variable	Question of the questionnaire	How often in teams or departments of the company constructive conclusions are drawn from projects or activities that were successful?				
		never	rarely	sometimes	often	always
a	Number of particular answers of the n respondents	4	6	5	13	8
b	Contractual value for the number of answers	3,076923	4,615385	3,846154	10	6,153846
c	Number of points given for an answer for the question	0	4,62	0	0	0
x	Answer of the n+1 respondent		x			

Source: own research.

The example in Table 1 shows the question whose number of answers of the n respondents in particular categories, is indicated by a variable a. N+1 respondent replied under the sign "x". The maximum number of points that the respondent would receive, if his answer were compatible with the most common response ("often"), would be 10 (variable b). The variable b indicates how many points you could get for a different answer, proportionally to the maximum number of points (10) and the response rate (variable a). Since the n+1 respondent answered "rarely", they received 4.62 points out of the possible 10.

The algorithm, after each new entry into the database of the Company Competitiveness Barometer, updates for each question the contractual value of the points, searching first for the maximum frequency response, and giving that answer 10 points. This way the computer "learns" how the successive respondents answer and on this basis establishes the criteria for awarding the points to the next respondent.

Theoretical Basis of the Company Competitiveness Barometer

Competitiveness is of particular importance for scientists, policy makers and economic businessmen in small and open economies (Stojcic, 2014, p. 194). In the current state of art, there are different approaches to study the competitiveness of companies. The starting point for the analyses is a classic, but still developed concept of M. Porter (Ketels, 2006). However, positive competitive outcomes can only be obtained by matching competitive strategy is the available resources (Block *et al.*, 2015, p. 39).

A popular approach is also the use of benchmarking as a tool to carry out specific rankings of competitiveness (Attiany, 2014). The studies conducted often refer to international comparisons (Abel-Koch & Gerstenberger, 2014) and aspects of internationalization of enterprises affecting their competitiveness (Pereira *et al.*, 2009).

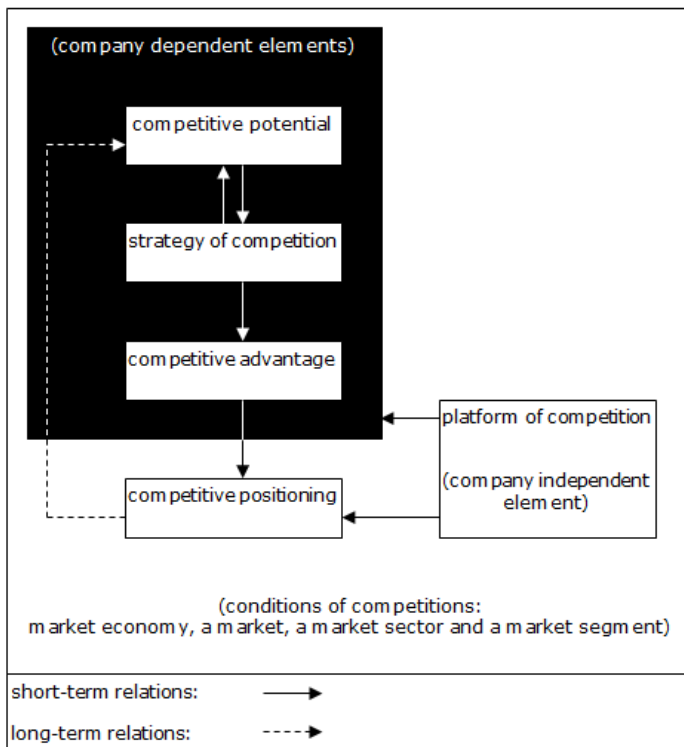
In the state of art, one can find an integrated approach, which was also used by the authors, and its description can be found below. The inspiration for its creation was, among all, the Integrated Model Of Destination Competitiveness (Armenski *et al.*, 2012, p. 488). The Integrated Model defines six main categories of competitiveness: inherited resources, created resources, supporting factors and resources, destination management, demand conditions and situational conditions. In the literature, one can find the view that the main competitive factors in competitiveness models created from small be very different individual competitiveness indicators (Gomezjelja & Mihalic, 2008, p. 306).

It is worth noting that most of the definitions of competitiveness, in the current state of art, indicates that it is a multi-dimensional characteristic of a company (Iarossi, 2013). The subject of the competitiveness's evaluation should be all areas of the company that decide on the attractiveness of the offer, economic condition of the company, its organizational and technical effectiveness (Donno, 2013).

The authors of this article have attempted to systematize the concepts, definitions and models related to the subject of the company's competitiveness. The authors' model of competitiveness of the company has been improved and operationalized, and by the means of the research tools, it was adapted for practical use in the evaluation of various aspects of the company's competitiveness (Flak & Głód, 2012, p. 44). The authors focused on competition as the motive for repositioning, whereas most of the existing strategy literature focuses on opportunity as the motive (Wang & Shaver, 2014, p. 1586).

The creation of the competitiveness integrated model was aimed at generalizing most companies and identifying key relationships between different aspects of competitiveness. Competitiveness integrated model, and the situational context, conditioning competing companies, is shown in Figure 1.

Figure 1. The Competitiveness Integrated Model



Source: Flak & Głód (2012, p. 44).

The competitiveness integrated model is based on 7 assumptions. Firstly, the competition between companies takes place within the sector. Secondly, the competitiveness of companies is affected by dependent and independent factors. Thirdly, the platform of competition comprises the features proximal and distal environment; the characteristics of the distal environment are fixed at the time and the same for all competitors; the characteristics of the proximal environment may be different for each of them.

Fourthly, the characteristics of the platform of competition do not depend on a single company. Fifthly, the characteristics of companies included in the concepts of the potential, strategy, advantage and competitive positioning, are different for each of them. Sixthly, the characteristics of the company, included in the concepts of the potential, strategy and competitive advantage, are dependent on the company. Seventhly, the characteristics of the company included in the concept of the competitive positioning, are independent of the company (Flak & Głód, 2014, pp. 12-16).

Table 2 shows the definitions of the terms used in the competitiveness integrated model. Components of the competitiveness integrated model are linked temporally and causally. Their relationship has been verified in previous publications of the authors (Flak & Głód, 2014, pp. 12-16).

Table 2. 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 macro environment 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, (2014, pp. 12-16).

Research Results

Characteristics of the research sample

The Company Competitiveness Barometer 2014 was attended by 252 companies. The survey was carried out from March 1st to September 30th,

2014. This was the third edition of the Barometer. In 2013, 173 companies participated in the Barometer and, in 2012, it was 109 companies. The results of the Company Competitiveness Barometer from all past editions can be found on the website www.konkurencyjniprzetrywaja.pl. The structure of the research sample which took part in the Company Competitiveness Barometer 2014 are shown in Table 3.

Table 3. Structure of the research sample in 2014

Number and percentage of the companies with a different time of operation in the market	
Up to 5 years	43 companies (17,06%)
From 6 to 10 years	55 companies (21,82%)
From 11 to 20 years	90 companies (35,91%)
From 21 to 40 years	44 companies (17,46%)
More than 40 years	20 companies (7,93%)
Number and percentage of the companies with a different numer of employees	
Up to 9 employees	76 companies - 30,15%
From 10 to 49 employees	72 companies – 28,57%
From 50 to 249 employees	44 companies – 17,46%
250 employees and more	60 companies – 23,80%

Source: own research.

Selected Aspects Influencing the Competitiveness of a Company

Due to the editing limitations of this article, the analytical part presents the results of empirical studies which were 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.

In the assessment of the competitive potential, the question about obtaining profit on the core business was raised. Nearly three-quarters of the surveyed companies achieved profit on their core business, and only approx. 8% of companies indicated a negative situation, meaning incurring losses. In contrast, more than 18% of the companies did not indicate a clear statement in this regard. Analysis of the responses by the company's headcount shows that negative results were recorded by the smallest companies (up to 9 employees) and the largest ones (over 249 employees). The analysis, according to the criterion of the company's existence, indicates that the greatest difficulty in achieving a profit on the core business activities have the youngest ones (up to 5 years of existence).

Table 5 continued

N=252		In which way is knowledge collected in the company?								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	
electronic complete descriptions	n	21	19	21	42	14	72	10	7	103
	%	27,6	26,4	47,7	70,0	31,8	40,9	47,6	63,6	40,9
electronic unrelated documents	n	14	15	12	6	8	33	4	2	47
	%	18,4	20,8	27,3	10,0	18,2	18,8	19,0	18,2	18,7
in the heads of employees	n	20	20	5	3	11	34	2	1	48
	%	26,3	27,8	11,4	5,0	25,0	19,3	9,5	9,1	19,0
altogether	n	76	72	44	60	44	176	21	11	252
	%	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0

Source: own research.

Another element of the assessment of the competitive potential, are the innovation resources, which have been assessed from the perspective of, inter alia, the possibility of minor improvements by a single employee in their work. The analysis shows that 36% of the companies this option exists to a certain extent, and only 4% of companies indicated that such a possibility does not exist at all. Together with the development of the organization and longer functioning period, the autonomy of employees is gradually reduced (analysis of answers "in most cases alone"). Complete freedom in this area is declared only by 7% of companies and it is the largest in the youngest and smallest companies.

Table 6. Introduction of facilitation at work

N=252		To what extent can a particular employee introduce small facilitation in doing their work?								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	
cannot	n	3	2	0	5	1	7	2	0	10
	%	3,9	2,8	0,0	8,3	2,3	4,0	9,5	0,0	4,0
to a small extent, only after discussing it with a supervisor	n	17	14	8	22	10	40	6	5	61
	%	22,4	19,4	18,2	36,7	22,7	22,7	28,6	45,5	24,2

Table 6 continued

N=252		To what extent can a particular employee introduce small facilitation in doing their work?								
		Size of the company (number of employees)				Number of years of existence in the market				Altogether
		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 a certain, limited extent	n	20	31	20	20	7	73	8	3	91
	%	26,3	43,1	45,5	33,3	15,9	41,5	38,1	27,3	36,1
in most cases alone	n	27	21	12	12	21	45	4	2	72
	%	35,5	29,2	27,3	20,0	47,7	25,6	19,0	18,2	28,6
can do all tasks alone	n	9	4	4	1	5	11	1	1	18
	%	11,8	5,6	9,1	1,7	11,4	6,3	4,8	9,1	7,1
altogether	n	76	72	44	60	44	176	21	11	252
	%	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0

Source: own research.

Another aspect that was evaluated was the creativity of key employees of the surveyed companies. It was assessed mainly at a moderate (36%) and high (41%) level. Top assessment was given to the companies employing between 50 and 249 employees, and the largest companies. According to the company's age criterion, the most creative key personnel works in the youngest and oldest companies.

Table 7. Creativity of the key employees

N=252		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				Altogether
		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	n	4	1	0	1	2	3	1	0	6
	%	5,3	1,4	0,0	1,7	4,5	1,7	4,8	0,0	2,4
low	n	7	11	6	4	2	23	3	0	28
	%	9,2	15,3	13,6	6,7	4,5	13,1	14,3	0,0	11,1
moderate	n	27	20	17	27	14	64	9	4	91
	%	35,5	27,8	38,6	45,0	31,8	36,4	42,9	36,4	36,1
high	n	31	33	18	24	22	72	6	6	106
	%	40,8	45,8	40,9	40,0	50,0	40,9	28,6	54,5	42,1
very high	n	7	7	3	4	4	14	2	1	21
	%	9,2	9,7	6,8	6,7	9,1	8,0	9,5	9,1	8,3
altogether	n	76	72	44	60	44	176	21	11	252
	%	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0

Source: own research.

Another interesting aspect in the area of innovation was the issue of documenting the ongoing projects, operations and production processes. Documentation is present in a moderate (34.5%) and high (31.3%) level. Almost 18% of companies declare that all these aspects are subject to documentation. In the largest companies this trend is particularly evident. Also, an increase in the degree of documentation is associated with the length of existence of the surveyed companies.

Table 8. Documenting the projects in the company

N=252		To which extent are the ongoing projects, operations and production processes documented in the company?								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	
not at all	n	8	4	1	0	3	10	0	0	13
	%	10,5	5,6	2,3	0,0	6,8	5,7	0,0	0,0	5,2
low	n	11	13	3	1	5	20	3	0	28
	%	14,5	18,1	6,8	1,7	11,4	11,4	14,3	0,0	11,1
moderate	n	33	21	15	18	21	55	9	2	87
	%	43,4	29,2	34,1	30,0	47,7	31,3	42,9	18,2	34,5
high	n	19	21	14	25	11	60	5	3	79
	%	25,0	29,2	31,8	41,7	25,0	34,1	23,8	27,3	31,3
always and every	n	5	13	11	16	4	31	4	6	45
	%	6,6	18,1	25,0	26,7	9,1	17,6	19,0	54,5	17,9
altogether	n	76	72	44	60	44	176	21	11	252
	%	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0

Source: own research.

An element evaluated in terms of the competitive potential were as well organizational resources, including the aspect of how the employees are informed of the company's strategy. In half of the surveyed companies, a declaration was made, that such information is transmitted during regular meetings with supervisors. The other most common forms in the studied area are: prepared materials (20.6%) and regular meetings (16.7%). Only in 4% of companies that possibility does not exist, mainly in the smallest businesses.

Table 9. Awareness of the company’s strategy

N=252		In which way can the employees get to know the strategy of the company?								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	
they can't, it's secret	n	5	3	1	1	2	7	1	0	10
	%	6,6	4,2	2,3	1,7	4,5	4,0	4,8	0,0	4,0
during meetings with the super- visors	n	36	40	25	25	21	91	10	4	126
	%	47,4	55,6	56,8	41,7	47,7	51,7	47,6	36,4	50,0
from the prepa- red materials	n	22	7	9	14	10	38	3	1	52
	%	28,9	9,7	20,5	23,3	22,7	21,6	14,3	9,1	20,6
from the external www service	n	3	8	2	9	2	16	3	1	22
	%	3,9	11,1	4,5	15,0	4,5	9,1	14,3	9,1	8,7
from the cycli- cal information actions	n	10	14	7	11	9	24	4	5	42
	%	13,2	19,4	15,9	18,3	20,5	13,6	19,0	45,5	16,7
altogether	n	76	72	44	60	44	176	21	11	252
	%	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0

Source: own research.

In terms of competitive advantage, an assessed element was the main objective of the pricing strategy used. Almost 35% of companies use a strategy of maximizing profits over a long period of time. In contrast, almost 31% of companies use a strategy of maximizing participation in the sector or market segment. Passive behavior focusing on surviving the difficult times is declared by only 12% of the surveyed companies. The increase in the use of strategies to maximize participation in the sector or market segment occurs with an increase in the size and length of existence of the surveyed companies.

Table 10. The aim of the pricing strategy

N=252		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				Altogether
		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	
surviving the difficult Times in the market	n	11	12	3	4	6	19	5	0	30
	%	14,5	16,7	6,8	6,7	13,6	10,8	23,8	0,0	11,9
maximizing profits over a short period of time	n	19	14	9	15	11	37	6	3	57
	%	25,0	19,4	20,5	25,0	25,0	21,0	28,6	27,3	22,6
maximizing profits over a long period of time	n	28	24	19	17	18	61	5	4	88
	%	36,8	33,3	43,2	28,3	40,9	34,7	23,8	36,4	34,9
maximizing the participation in the sector or market segment	n	18	22	13	24	9	59	5	4	77
	%	23,7	30,6	29,5	40,0	20,5	33,5	23,8	36,4	30,6
altogether	n	76	72	44	60	44	176	21	11	252
	%	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0

Source: own research.

Assessment of the competitive positioning of the surveyed companies happened, inter alia, by the means of an assessment of their liquidity. The ratings in this area are relatively high (40.9%) or moderate (26.6%). The best results are recorded by companies employing from 10 to 49 employees and existing 5 years and more.

Table 11. Liquidity of the company

N=252		What is a financial liquidity in your company (can the company timely pay off their obligations)?								
		Size of the company (number of employees)				Number of years of existence in the market				Altogether
		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	n	2	0	1	1	2	1	1	0	4
	%	2,6	0,0	2,3	1,7	4,5	0,6	4,8	0,0	1,6
low	n	10	11	1	0	6	13	3	0	22
	%	13,2	15,3	2,3	0,0	13,6	7,4	14,3	0,0	8,7

Table 11 continued

N=252		What is a financial liquidity in your company (can the company timely pay off their obligations)?								
		Size of the company (number of employees)				Number of years of existence in the market				Altogether
		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	
moderate	n	28	15	8	16	15	47	3	2	67
	%	36,8	20,8	18,2	26,7	34,1	26,7	14,3	18,2	26,6
high	n	20	35	23	25	11	78	9	5	103
	%	26,3	48,6	52,3	41,7	25,0	44,3	42,9	45,5	40,9
very high	n	16	11	11	18	10	37	5	4	56
	%	21,1	15,3	25,0	30,0	22,7	21,0	23,8	36,4	22,2
altogether	n	76	72	44	60	44	176	21	11	252
	%	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0

Source: own research.

The platform of competition was judged by the legal environment in which the surveyed companies operate. The aspect selected in the presented analysis was the question of the possibility of using flexible forms of employment. In this area, high (32.1%) and moderate (28.2%) assessments dominated. Only 7.5% of the surveyed companies indicated that such a possibility does not exist. These opportunities increase with the increase in the number of employees.

Table 12. Flexible forms of employment in the company

N=252		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				Altogether
		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	
there is no such a possibility	n	4	8	2	5	1	17	1	0	19
	%	5,3	11,1	4,5	8,3	2,3	9,7	4,8	0,0	7,5
low	n	16	17	11	11	7	36	9	3	55
	%	21,1	23,6	25,0	18,3	15,9	20,5	42,9	27,3	21,8
moderate	n	20	25	10	16	9	52	7	3	71
	%	26,3	34,7	22,7	26,7	20,5	29,5	33,3	27,3	28,2
high	n	22	17	18	24	18	54	4	5	81
	%	28,9	23,6	40,9	40,0	40,9	30,7	19,0	45,5	32,1

Table 12 continued

N=252		To which extent can your company use the flexible forms of employment?								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	
fully	n	14	5	3	4	9	17	0	0	26
	%	18,4	6,9	6,8	6,7	20,5	9,7	0,0	0,0	10,3
altogether	n	76	72	44	60	44	176	21	11	252
	%	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0

Source: own research.

The platform of competition was also evaluated and assessed by the technological environment and, inter alia, the aspect of change of the technology used in the past 5 years. In 42.5% of the surveyed companies, significant changes in this area were introduced, extreme responses (no change or a complete change) accounted for a total of 6%. Together with an increase in the size of the surveyed companies declared changes had a greater range.

Table 13. Extent of preserving the technology in the company

N=252		To which extent in the last 5 years was the technology that you use in your company preserved?								Altogether
		Size of the company (number of employees)				Number of years of exist- ence 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 change	n	3	2	0	2	2	5	0	0	7
	%	3,9	2,8	0,0	3,3	4,5	2,8	0,0	0,0	2,8
changed a bit	n	25	25	9	10	11	51	6	1	69
	%	32,9	34,7	20,5	16,7	25,0	29,0	28,6	9,1	27,4
significant changes were introduced	n	22	31	21	33	14	78	9	6	107
	%	28,9	43,1	47,7	55,0	31,8	44,3	42,9	54,5	42,5
it changed a lot	n	21	12	13	15	14	38	5	4	61
	%	27,6	16,7	29,5	25,0	31,8	21,6	23,8	36,4	24,2
a complete change	n	5	2	1	0	3	4	1	0	8
	%	6,6	2,8	2,3	0,0	6,8	2,3	4,8	0,0	3,2
altogether	n	76	72	44	60	44	176	21	11	252
	%	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0

Source: own research.

Conclusions

In this study, the "landscape" of competitiveness of the surveyed companies seems to be interesting, and at the same time allows to draw some conclusions. The criteria of the age of the surveyed companies and their headcount used in the analysis allow to look at the existing trends from the perspective of the growth and maturation of companies. Normal phenomena in terms of increasing the formalization and standardization appear. In turn, creativity as a natural feature of young companies decreases with increasing age of the organization, and at some point, it revives again as an indispensable source of creating a sustainable competitive advantage. The possibilities of using certain forms of employment and introducing new technologies increases with the increase in the number of employees in surveyed companies. Certainly, most of the surveyed companies care about their development in the long term or want to favorably position their company in the market space, because as we all know only competitive ones can survive.

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. In the future, in addition to maintaining the current form of research, other studies based on the specific industries can be done.

To capture the value dynamic approach to the conducted research, an effective solution would be to do the research for several years on the same closed test sample, in order to meet the conditions of the formula of a longitudinal research study. In parallel, the authors are developing an international research topic (through the platform barometer24.org). The results of the Barometer which were carried out in Czech Republic and Slovakia in 2014 were described in other publications of the authors (Flak & Głód, 2015, pp. 111-135; Flak & Głód, 2015, pp. 608-631).

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