Company Competitiveness Profiles on the example of Polish enterprises in the Silesian Region in 2020

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Abstract

Motivation: The concept of competitiveness is used to define the ratio of enterprises to competitors and results from many internal features and the ability to deal with an external environment. However, comparing main elements of company competitiveness to each other does not give detailed position in the market sector, which is the main area of competition. Therefore it is necessary to look for a different method of companies comparison in the field of their competitiveness.

Aim: The purpose of this paper is to present a assessment method of company competitiveness based on the Company Competitiveness Profile in a market sector. The Company Competitive Profile consists of different variables of a competitive potential, a strategy of competition and a competitive advantage. This method is verified based on results of the Company Competitiveness Barometer conducted in 2021 in 177 Polish companies in the Silesian Region. The Company Competitiveness Barometer is an online research tool for assessing company competitiveness which has been used by the authors since 2012.
Results: 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 http://sensorium24.com. There were 2 hypotheses which were verified in the paper: H1: The configuration of the components of the Company Competitiveness Profile is different in different sectors of the economy. H2: Each company can be characterized in a sector by its individual Company Competitive Profile. The paper presents verification of two hypothesis which concern the Company Competitive Profiles and their use in assessment of company competitiveness in an economic sector. This is also an added value and an original contribution to company research methodology.

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

JEL: M21; L10; L20

1. Introduction

Competitiveness in the literature and in the colloquial language of business means many different phenomena in the functioning of an enterprise, a sector or the whole economy. For many years, many efforts have been made to organize the terms related to the broad conception of enterprise competitiveness and to use theoretical approaches, models and methods in a way that serves business practice.

It can be pointed out that competitiveness is often associated with the price of the product, its quality, sources of productivity of the company, production costs or directly with competitive advantage (Lombana, 2011, p. 35). Competitiveness is also understood as a set of capabilities to compete in the market; when an enterprise has high competitiveness, it can survive and function in the market in the long run (Trąpczyński & Gorynia, 2017, p. 698).

The above definition implies the fact that competitiveness is related to the evaluation of the company’s performance and its ability to obtain positive results in the future (Wagner & Schaltegger, 2003, p. 5).

Despite many theoretical approaches to measuring firm competitiveness, there is no clear method in the literature for comparing firm competitiveness within or across sectors (Giuliano et al., 2017, p. 421).

Therefore, the purpose of this paper is to present a method for determining the Company Competitiveness Profile based on data on enterprise’s competitive potential, competitive strategy and competitive advantage. In the literature, these three conceptions dominate as a component of company competitiveness models (Gorynia, 2004, p. 178) and are considered to be a dependent element of managerial decisions made within the enterprise (Piccoli & Ives, 2005, p. 748).

The following hypotheses were formulated to develop a method for calculating competitiveness profiles:

– H1. The configuration of the components of the Company Competitiveness Profile is different in different sectors of the economy.
– H2. Each company can be characterized in a sector by its individual Company Competitive Profile.

The research method used in the conceptualization of the Company Competitiveness Profile is the survey method of the Company Competitiveness Barometer, an annual survey of business competitiveness conducted by the authors since 2012. Since then, more than 2200 companies from Poland, the Czech Republic and Slovakia have participated in the Company Competitiveness Barometer (Flak & Głód, 2015a). The paper uses the results of the survey of companies’ competitiveness in the Silesian Region in the year 2020, which was conducted in January 2021.

This paper presents (1) a review of the literature on competitiveness and the creation of competitive profiles of companies, (2) the research method that was used to create the conception of Company Competitive Profile and the procedure for its calculation, (3) results of research verifying the hypotheses H1 and H2, (4) a discussion of solutions for creating company competitive profiles, and (5) conclusions and future research plans.

2. Literature review

The 21st century business world is in a state of constant change as waves of globalization, technological advances, deregulation and many other forces shape the nature of doing business. Achieving sustainable competitive advantage has become critical for any business organization. Diagnosing external forces remains one of the key tasks for any organization, conditioning its survival. Organizations must give sufficient attention to strategy formulation, strategy selection and strategy implementation (Bhattacharjee & Dey, 2015, p. 61).

Competitive profiling applies to economies (Carayannis & Popescu, 2005), regions (Strumsky & Thill, 2013), cities (Goes et al., 2016), municipalities (Medilo & Aniga, 2018), and businesses (Anderson et al., 2002).

The typical approach in management science is to identify a list of characteristics that an organization should meet in order to be effective. In marketing and strategic analysis, the method of benchmarking is used, which, on the basis of observation, allows you to select the best one in its industry or features to imitate their methods of operation. Representatives of this approach seek to build a list of key factors for the success of the organization. Within the framework of this approach, there is a group of researchers who focus on studying organizations with above-average performance and looking for common features in this group of objects. This approach provides guidance for diagnosing excellence in one’s own business. It is enough to use one of the lists of characteristics that define an excellent organization and assess to what extent the studied business will meet the requirements of excellence (Romanowska, 2012 p. 9).

The search for appropriate competitive profiles should take place in both hostile and friendly environments (Covin & Slevin, 1989, p. 75). Choices on how to develop the company in the face of conditionally complex changes in the en-
vironment are those that determine its future. The assumption of determination of strategic choices by the environment determines the main scope of research and analysis. Adaptation of enterprises to the operating conditions takes place in a differentiated way. In addition to strongly innovative, entrepreneurial activities, the continuation of previous activities with corrections for strict adaptation to methods of operation and market behavior (Urbanowska-Sojkin, 2017, pp. 53–61).

Regardless of the size of the company, each in the industry has its competitors. Competitors use different strategies, which consequently affects the process of formulating strategic plans by managers. Competitors are indicators of successes and failures in a particular industry or market sector (Sohel et al., 2014, p. 40). The problem of patterns of behavior is not new, it has accompanied strategic management for many years. Each successive change has been continuous, and the impermanence of previous ways of doing things has been exposed (Lis, 2020, p. 375).

Competitive profile analysis allows a company to assess its competitive position relative to its major competitors in the context of critical industry success factors (Capps & Glissmeyer, 2012, p. 1060). When a company is treated as a bundle of resources, their value, imperfect mobility, rarity and non-substitutability, makes some resources a source of competitive advantage, while other resources cannot give this advantage. Attributes of strategic resources are known only at the moment when competitive advantage is revealed, it is much more difficult to perceive them ex ante (Rousseau, 2019, p. 1836).

Key success factors are important resources and skills that create competitive advantage of companies in the market today and may determine their ability to succeed in the future (Mahdi et al., 2019, p. 321). Identification of key success factors enables proper selection of planning priorities, such as: selection of the right operating segment, proper allocation of resources and building competencies relevant to the area of operation, selection of the most effective competitive tools. It is necessary to choose at least one factor in which the company already has or wants to gain an advantage over its competitors. This factor is considered the main competitive tool (Aschemann-Witzel et al., 2017, p. 34). The problem is to determine which parameter from each excellence criteria is desirable in a specific industry, in a specific market and at a specific historical moment. Due to the complexity and intangibility of the company’s relationship with the environment and the alternative nature of resources and methods of operation, it is impossible to define an ideal company profile. One can try to create ideal profiles of companies in a given industry, in a given market and at a given time, but even such detailed and market-specific profiles will not unambiguously indicate the best company, because there are so many models of operation and so many unexpected opportunities and threats that often successful companies do not have profiles of excellence, but about average or even weak (Romanowska, 2012, p. 10).
Once a list of key success factors has been compiled, the selected company is evaluated. It is recommended that the researched company is evaluated and compared simultaneously with a selected competitor, a sector leader or a given market segment. Additional graphical illustration of the list of key success factors allows to create so-called competitive profiles of the company (Romanowska, 2009, p. 73). In the processes of strategy implementation in a company, it is important to choose such criteria that will determine the advantage over rivals in the context of adequate satisfaction of customer needs. The key success factors are the result of interactions between different groups of actors in the sector. Consequently, sets of factors vary from sector to sector, change over time, and often vary by geographic market due to differences in competitive conditions and macro-environmental considerations (Gołębiowski, 2001, p. 171).

However, a comprehensive recognition of the essence, including the most important potentials (sources) and determinants (manifestations), of competitive advantage is a difficult undertaking, primarily because of the significant diversity of approaches and concepts explaining the process of creating and maintaining this advantage (Sirmon et al., 2011, p. 1391). Forming a competitive profile also requires innovation (Jenssen, 2003, p. 91). Creating competitiveness profiles is not only a practical tool for determining the competitive position of an enterprise, but also a very good instrument for improving its competitiveness (Liu, 2017, p. 13).

Taking into account the above considerations on the competitiveness of the company, to be able to measure the competitiveness of the company should strive to maximize the operationalization of this conception. Based on the literature, the competitiveness of a company can be defined as a multidimensional characteristic of a company, resulting from both internal characteristics and the ability to cope with external conditions in the market. Competitiveness is relative in nature and can be used to describe the interrelationship of enterprises in the sector (Flak & Głód, 2012, p. 43; Urbanowska-Sojkin et al., 2004, pp. 271–272).

Since the competitiveness of a company is a highly abstract and general conception, it is necessary to distinguish the component concepts.

The first of them — the competitive potential — is the resources that the enterprise has or should have in order to be able to use them for building, maintaining and strengthening its competitiveness (Stankiewicz, 2002, p. 103). These are broadly defined capabilities of the enterprise resulting from its tangible and intangible capital. It can be assumed that the competitive potential of the enterprise is at the same time a relative multidimensional concept. The second — strategy of competition — is the adopted program of activities aimed at achieving competitive advantage in relation to the entities of the competitive environment (micro-environment), serving to achieve the basic objectives of the enterprise (Ritchie & Crouch, 2010, p. 1050). The third — competitive advantage — the authors define as the ability of the enterprise to provide tangible and intangible values to the buyer through the market (Flak & Głód, 2012,
It can also be assumed that the competitive advantage of the enterprise is a relative multidimensional concept.

These three elements can be found in the Integrated Model of Company Competitiveness, defined by the authors in 2012 (Flak & Głód, 2012, p. 43) and used since then in the study of the competitiveness of companies in Poland, Slovakia and Czech Republic (Flak & Głód, 2015a). According to the definition of Integrated Model of Company Competitiveness, competitive potential, competitive strategy and competitive advantage are fully dependent on the company (Flak & Głód, 2015b, p. 614) and therefore can be a part of its competitiveness profile.

However, in the Integrated Model of Company Competitiveness there are two more elements. The fourth concept of this Model is the competitive position, understood as the synthetic market and economic performance of the enterprise, resulting from the degree of use of the enterprise’s capabilities to compete now and in the future (Flak & Głód, 2015b, p. 614). The fifth element if of the model is the environment of the enterprise. In the Model the environment is called the competition platform. It means a set of features of macro- and micro-environment in which the enterprise of a given sector operates. The characteristics of the macro-environment are the same for each enterprise operating in a sector, while the characteristics of the micro-environment may be different for each enterprise in that sector.

In order to measure and compare competitiveness of a company, referring only to its characteristics that are influenced by this company itself, the Company Competitiveness Profile will therefore include the competitive potential, the strategy of competition and the competitive advantage. The Research methodology Section presents a nominal definition of the Company Competitiveness Profile and an operational definition of the assessment of profile’s elements, as well as the conditions of the empirical research conducted together with the Company Competitiveness Barometer.

3. Methods

Continuing the discussion of competitiveness profiles, the nominal definition of Company Competitiveness Profile was established as follows: the Company Competitiveness Profile is a unique combination of assessments of three elements of the profile — a competitive potential, a strategy of competition, and a competitive advantage — relative to all other companies studied in a given sector.

The operational definition of the evaluation of each element of the Company Competitiveness Profile implies the following steps:

- assessing a given aspect of such an element against all other companies in the sector according to the algorithm described with an example in Table 1;
- summing up the scores of the aspects of each element of the competitiveness profile;
standardising the sum of the aspect scores to a scale from 0 to 100;
- Presenting the results as a triad of numbers showing the evaluation of the company’s competitive potential, strategy of competition and competitive advantage relative to other companies in the sector.

In the example in Table 1, a question is asked to which the number of answer of respondents in the given aspect is indicated by the variable a. The respondent answered according to the “x” sign (variable x). The maximum number of points that this respondent could have received if his response had been consistent with the most common response (“D”) would have been 10 (variable b). Variable b indicates how many points he could have received for indicating another answer in proportion to the maximum number of points (10) and the frequency of the answer (described by variable a, in this case 13 indications). Since the respondent answered “B”, he received 4,62 points out of a possible 10 points (variable c).

However, the verification of hypotheses H1 and H2, concerning the Company Competitiveness Profile, required empirical data. They came from the annual survey of company competitiveness, conducted by the authors with the help of the Company Competitiveness Barometer since 2012. Details of this method and the tool have been described in the authors’ previous publications (Flak & Głód, 2015a; 2015b; Głód & Flak, 2017). The authors of this paper developed two research methods of enterprise competitiveness — ALL2USE and NEX-T2USE (Flak & Głód, 2012, pp. 219–230). One of them — ALL2USE — became the basis for the annual Company Competitiveness Barometer, a research tool used to assess the competitiveness of participating companies.

The Company Competitiveness Barometer uses a survey method in 5 areas of business competitiveness research. In addition, the Barometer’s questions were chosen so that knowledge of the aspects of these areas of enterprise competitiveness was common knowledge among employees. Most of the survey questions do not require detailed financial, personal or technical information. The Barometer contains 48 questions. 45 of them are about the characteristics of the enterprise that affect its competitiveness, and 3 questions are metric questions. The questionnaire can be found at http://sensorium24.com. Table 2 presents the thematic scope of questions in the Company Competitiveness Barometer.

4. Results

The research was conducted in January 2021 in the Silesian Region. 177 companies, mostly (83%) small and medium ones, took part in the research and responded to the Company Competitiveness Barometer. From the group of 177 surveyed enterprises, 102 service companies were selected and they represented 7 sectors of the economy (in brackets the number of entities): culture and arts (10), catering (17), IT services (10), construction services (10), audiovisual services (21), commerce (22), medical services (12).
The remaining companies represented completely different sectors of the economy, including manufacturing. However, due to their fragmentation, it was not possible to assess their competitiveness using the Company Competitiveness Profile.

According to the nominal definition and the operational definition of Company Competitiveness Profiles, defined in the Research methodology Section, such Profiles were calculated for 102 companies in 7 selected economic sectors. For ease of interpretation of the results and verification of hypotheses H1 and H2, these results are presented as Chart 1–7. In every chart symbols: A, B, C, etc. mean the Company Competitiveness Profile of each company in the certain sector.

As can be read from Chart 1–7 for each of the selected sectors of economy, the element with the highest rating and dominating of the surveyed companies was the strategy of competition. This situation was in the following number of companies (in brackets percentage of companies with dominating role of strategy of competition): culture and arts (80%), catering (88%), IT services (100%), construction services (70%), audiovisual services (67%), commerce (73%), medical services (75%). The competitive potential was dominant in the following number of enterprises: culture and arts (10%), catering (0%), IT services (0%), construction services (10%), audiovisual services (19%), commerce (18%), medical services (17%). Next, the competitive advantage was dominant in the following number of enterprises: culture and arts (10%), catering (12%), IT services (0%), construction services (20%), audiovisual services (14%), commerce (9%), medical services (8%).

Firstly, based on the data presented above, the hypothesis H1 should be considered false. This means that the configuration of the components of the Company Competitiveness Profile is not significantly different in different sectors of the economy. In all of the examined sectors, the strategy of competition dominated as the most important element of company competitiveness on the market.

Secondly, the hypothesis H1 should be considered true. Each of the 102 surveyed companies has an unique combination of assessments of the three elements of the profile — the competitive potential, the strategy of competition, and the competitive advantage — relative to all other firms studied in a given sector. Detailed analysis of the figures obtained in the step (d) of the operational definition of the Company Competitiveness Profile (described in Research methodology Section) showed that none of the companies have the same combination of Company Competitive Profile element scores, assessed in a 0–100 scale. It can therefore be concluded that each company can be characterized in a sector by its individual Company Competitive Profile.

5. Conclusion

As far as the empirical research in a similar scope is concerned, first of all we can point to the research on factors influencing the competitive position of SME
companies (Anderson et al., 2002; Piątkowski, 2012) or companies from one particular industry using the case study method (Chrobocińska, 2020). Another research concerns determinants of sustainable competitive advantage (Mahdi et al., 2019; Tan and Sousa, 2015), which is often based on the search for key success elements in the competitive potential of enterprises (Fahy & Hooley, 2002). There are also postulates that such analysis help a company to identify strengths and weaknesses in those significant areas (Sohel et al., 2014, p. 43). Necessity of such research is presented in the context of changes in the organization of modern industry (Horvat at al., 2018). It is similar in use of the conception of a strategic group map in the study of sources of competitive advantage (Schimmer, 2012) which is an analytical tool that provides necessary knowledge on competitive advantages based on key success factors and serves as a basis for an organization’s strategy (Bhattacharjee & Dey, 2015, p. 61). This issue is also used in the research on family business profiles (Stanley at al., 2017).

The concept of competitiveness is used to determine a company’s relationship to its competitors and is derived from a number of internal characteristics and its ability to cope with the external environment. However, comparing the main elements of a company’s competitiveness with each other does not give a detailed position in the market sector, which is the main area of competition. Therefore, it is necessary to look for another method of comparing companies in terms of their competitiveness.

The answer to this challenge is the Company Competitive Profile which can describe every company by the triad of numbers showing the evaluation of the company’s competitive potential, strategy of competition and competitive advantage relative to other companies in the sector.

As it was verified in the paper, firstly, the configuration of the components of the Company Competitiveness Profile is not significantly different in different sectors of the economy. Therefore, even though the literature review supposed the opposite situation, the hypothesis H1 appeared false.

Secondly, each of surveyed companies has unique combination of assessments of the three elements of the profile — the competitive potential, the strategy of competition and the competitive advantage — relative to all other firms studied in a given sector. It was possible to draw a conclusion that the hypothesis H2 was true.

Despite the fact that the authors are aware of the limitation of the empirical research which was a little number of companies in all sectors, the conception of the Company Competitiveness Profile seems to be a promising tool in assessment company competitiveness in the market sector.

In the future it is planned to conduct wide empirical research together with the Company Competitiveness Barometer in order to examine more conditions of using the Company Competitiveness Profile in scientific and practical assessment.
References


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Appendix

Table 1. Algorithm for evaluating the competitiveness profile element relative to other companies in the sector: example

<table>
<thead>
<tr>
<th>Variables</th>
<th>Answers in the question on an certain aspect of the element of the Company Competitiveness Profile</th>
<th>Definitions of variables</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>number of individual responses among respondents</td>
<td></td>
<td>4</td>
<td>6</td>
<td>5</td>
<td>13</td>
<td>8</td>
</tr>
<tr>
<td>b</td>
<td>conventional value for the number of responses</td>
<td></td>
<td>3.076923</td>
<td>4.615385</td>
<td>3.846154</td>
<td>10</td>
<td>6.153846</td>
</tr>
<tr>
<td>c</td>
<td>number of points awarded for answering the question</td>
<td></td>
<td>0</td>
<td>4.62</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>x</td>
<td>answer by the respondent</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Own preparation.

Table 2. Thematic scope of questions in the Company Competitiveness Barometer

<table>
<thead>
<tr>
<th>Model element</th>
<th>Question thematic scope</th>
</tr>
</thead>
</table>
| competitive potential | level of available funds held  
debt capacity of the company  
profit on core business  
way of cumulating the knowledge in the company  
extent to which a single employee can introduce small improvements in his work  
frequency of drawing meaningful conclusions from projects or activities that have been successful  
creativity of employees who are the most critical to the activities of the company  
extent to which the company documents its projects, initiatives, production processes  
work experience of the employees who are the most critical to the activities of the company  
extent to which the employee is free to choose how to perform tasks  
way to learn about the company’s strategy by employees  
moral (economic) obsolescence of the existing capital assets |
| competitive strategy | occurrence in the company of dynamic growth of the marketing skills  
care of high reputation and undertaken actions in the field of public relations  
application of methods aimed at “slimming” the organization, including lean management  
measures aimed at maintaining a strong position of the company’s commercial brand  
customization of the trade offer to the individual needs of each client  
Attempts to independently create market niches  
use of modern methods of marketing research in order to reach the right target group of customers  
Search of more competitive cooperators by the means of outsourcing  
use of benchmarking aimed at the search of the ways to decrease production costs or offered services  
use of the economies of scale and experience |
<table>
<thead>
<tr>
<th>Model element</th>
<th>Question thematic scope</th>
</tr>
</thead>
</table>
| competitive advantage | main objective of the currently applied pricing strategy for all products and services  
frequency of price negotiation by the purchaser of products or services  
extent to which the distribution system provides timely supply of products or services  
possibility of testing a product or service by the customer before the purchase  
quantity of products or services covered by the warranty (e.g. a free service, repair or replacement)  
extent to which the products or services of the company meet generally accepted criteria of being environmentally friendly  
frequency of planning of the product or service’s lifetime before its introduction to sale  
percentage of company’s clients covered by the loyalty program |

Source: Own preparation.

Chart 1.
Company Competitiveness Profiles for the culture and arts sector

![Chart 1](image)

Source: Own preparation.
Chart 2.
Company Competitiveness Profiles for the catering sector

Source: Own preparation.

Chart 3.
Company Competitiveness Profiles for the IT services sector

Source: Own preparation.
Chart 4.
Company Competitiveness Profiles for the construction services sector

Source: Own preparation.

Chart 5.
Company Competitiveness Profiles for the audiovisual services sector

Source: Own preparation.
Chart 6.
Company Competitiveness Profiles for the commerce sector

Source: Own preparation.

Chart 7.
Company Competitiveness Profiles for the medical services sector

Source: Own preparation.