

## INTELLECTUAL CAPITAL IN COMPETITIVENESS DEVELOPMENT: QUALITATIVE RESEARCH OF RETAIL COMPANIES

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### Abstract

The modern development of emerging markets makes organizations find the ways of enhancing their competitiveness. While the issues of sources of attaining competitive advantages and competitiveness assessment have been widely discussed by numerous researchers, there is a paucity of studies pertaining to the impact of different factors on developing retail company competitiveness under conditions of emerging markets. Therefore, this paper aims to investigate the main factors affecting the retail company competitiveness and examine the impact of intellectual capital and intangible assets on it.

**Keywords:** intellectual capital, competitive advantage, competitiveness, retail companies, multiple-case study

**JEL code:** M21

### Introduction

The retail sector is one of the essential sector for the Russian economy. It has an important role to play in stimulating growth and job creation in the internal market, and enhancing the standard of living. The efficiency of this sector has implications for innovation, price trends and regional competitiveness.

The year 2013 was relatively successful for FMCG retail trade, new stores were opened, chains continued their expansion, having entered the regions that were new for them. However the economic situation began to deteriorate and in 2014 political risks of the industry increased. Retail sales in Russia decreased 9.20 percent in July of 2015 over the same month in the previous year reported by the Federal State Statistics Service.

There is ample evidence that the situation in the retail sector was improved in 2017. The Federal State Statistics Service shows, that in the first quarter, the rate of decline in retail trade turnover slowed significantly (-1.6% year over year), and in the second quarter was replaced by an upward trend (+ 0.7% YOY).

According to the National Rating Agency, the main trends of the retail sector are the consolidation of the market, the growth of discounters, retail outlets and specialty stores, the continuing decline in the share of sales at fairs and market-places in favor of trade organizations.

However, in recent years the nature of competition and shifting economic conditions have given rise to achieve the retail company competitiveness by developing not only tangible assets but also intangible including intellectual capital. In this paper we try to examine the factors affecting the competitiveness of companies engaged in retail trade. An exploratory field study utilizing an inductive methodology involving a multiple-case study approach was undertaken by conducting in-depth interviews with 10 key top-managers of retail companies in

Saint Petersburg in the period of April-June 2017. As the present and also future success of a company is largely predetermined by the conditions in which the company exists, the interview included open questions concerning factors of both internal and external environment. We utilized content analysis techniques to identify these factors with their associated variables and further developed a research model. This study offers a comprehensive model for future competitiveness research and provides managerial implications for organizations to enhance their competitiveness.

### **Literature review**

The theory of intellectual capital originated from the theory of human capital (1962) and has been considered in the papers of such foreign economists as A. Brooking, L. Edvinsson, M. Malone, T. Stewart, and many others. In Russia, the development of intellectual capital theory can be seen in the publications of such scholars as B. Leontiev, S. Kurgansky, V. Inosemzev, A. Pankruhin, I. Prosvirina, etc.

Every economist gives his vision for a particular problem. As a result, the intellectual capital theory doesn't have unified concepts: there is no single notion of its definition or structure, etc. Moreover, despite the fact that the concept of "intellectual capital" has long existed, it has still not become customary in the world, especially in Russia. Very often, the concept of «intellectual capital» is used along with the concepts of «knowledge», «human capital», «cognitive capital», using as synonyms by the absence of unambiguous interpretations (Afonin, 2009).

All definitions of intellectual capital can be classified into three approaches: knowledge-based approach, value approach, and resource-based approach. According to the knowledge-based approach, the IC is a set of knowledge in the form of skills and competences of employees (Galbraith J.K., Inozemtsev V.L.). According to the value approach, the IC is the excess of the company's market value over the book value of its assets (P. Strassman, D. Tobin). The resource-based approach defines IC as a key resource in the development of the company (E. Brooking, T. Stewart, C. Bradley, J. Roos). The authors adhere to the resource-based approach in this study.

There is a large number of opinions on the structure of intellectual capital and its constituent elements. The most frequently used is the classification of intellectual capital into three components. According to J. Roos, intellectual capital contains human capital, structural and relational capital.

Despite the theoretical importance of research in the field of intellectual capital, which deals with issues of identification, classification, reporting and evaluation, empirical researches have become more relevant. However, the studies vary in the directions of analysis (the relationship between IC and various parameters), industries, size of the company, geographical area of the study, etc.

For example, some recent empirical studies examine relationship between IC and business performance (K.Y. Wong, I. Herremans, G.B. Kamath). The positive relationship between IC and financial efficiency indicates the effectiveness of corporate strategy.

Other studies are devoted to the relationship between IC and business innovation. For example, D. Wang, S. Chen found that intellectual capital is the link between high-performance systems (some human resource practices including recruitment, large-scale trainings, knowledge and skills compensation systems, team-working, participation of employees in company management) and innovative opportunities.

C. Fernández-Jardón, R.V. Costa, P.F. Dorrego examined the relationship between structural capital and innovative development of the company. As a result, it was revealed that not all elements of structural capital have a significant impact on innovation. The most

significant element affecting the effectiveness of innovative products is "product innovation management".

Others define the role and structure of IC for enterprises of different sizes. S.Cohen, V.-C.Naoum, O.Vlismas studied the relationship between intellectual capital and the strategies of small and medium-sized enterprises, as well as their decisions on the IC portfolio under conditions of financial crisis. They conclude that, firstly, managers must take into account that the IC is a strategic resource even in times of financial crisis and, thus, it is not worth reducing investments in its development. Secondly, companies are not likely to follow the recommendations on the strategic management of the IC portfolio. Thus, even realizing the importance and implementing the management of the IC, companies do not manage it consistently and effectively.

The influence of intellectual capital on competitive advantages and firm performance was studied by N. Chahal, P.Bakshi. The authors investigated the role of innovation and self-learning in the relationship between intellectual capital and the competitive advantage of the company.

Building on this theoretical perspective, we hereafter develop more detailed model of retail firm competitiveness. Our findings provide new insights regarding the process by which IC is connected with firm competitiveness and indicated elements of intellectual capital among all the factors of retail company competitiveness.

## **Research method**

### **Sample selection**

To conduct the survey available subjects from retail companies in Saint Petersburg were chosen. The main criterion for respondents was that they must be aware about the company concepts, corporate strategy, personnel, motivation, relationships with partners, financial results. They are the representatives of top-management such as CEO, owner of business, head of retail department and so on. All companies belong to the retail trade, and they differ by the type of product.

All interviews were conducted on a voluntary basis of participants.

### **Data collection**

The data were collected by using in-depth interviews approach.

The main aim of the survey was to identify factors and variables affecting the company competitiveness in the conditions of development of intellectual competition.

The questionnaire included questions focused on the following areas (Appendix 1):

- understanding the significance of being competitive;
- competitive factors of foreign and domestic retail companies;
- external factors that determine the company competitiveness on macro level;
- external factors that determine the company competitiveness on micro level;
- internal factors that determine the company competitiveness.

Before conducting all interviews, the questionnaire was pre-tested on the first respondent's answers. Received feedback from the first respondents proved that the questionnaire was working well for purposes of the survey. Finally, 10 interviews were conducted. The interviews were audio taped and then transcribed. All texts were reviewed for errors by the principal researcher in order not to miss mistakes for further content analysis.

### **Data analysis**

Data analysis was conducted with the program of content-analysis. As Patton (1990) reported, 'Content analysis is the process of identifying, coding, and categorizing the primary patterns in the data. This means analyzing the content of interviews and observations'.

The procedure of content analysis was divided into two stages.

The first stage dealt with identification of mentioned variables and included the following steps:

- check the content of interviews with correspondence with the program;
- download the data into the program;
- identify the words with the function “analysis” in the program;
- correct groups of similar words formed by the program considering peculiarities of the Russian language (different endings of the same word);
- sort words by the absolute value of the frequency of mentioning;
- sum frequencies of mentioning words in all interviews.

The second stage of content analysis dealt with the identification of factors with their associated variables influencing the retail companies competitiveness in order to develop a research model. This stage included the following steps:

- study the variables;
- divide variables into systematic categories of factors;
- name factors;
- check the names of the factors with the literature and give new names if necessary;
- sort variables by the factors, combining variables with different wording, but with one meaning;
- establish the tables of integrated factors and variables.

## Results

### Background information

Table 1 shows the background information about the retail companies involved in this survey.

The interviewees take in the retail companies positions such as CEO, Director of marketing and Commercial director. And their competences afford to gather necessary information for the purpose of the research.

The number of employees in the retail companies varies from 100 to over 4000.

The retail companies differ by the type of product – from clothes and jewelry to products for home and building materials (DIY).

**Table 1. Background information of the interviews**

Company	A	B	C	D	E	F	G	H	I	J
Age	40	43	38	47	42	32	41	45	35	53
Position of interviewee	CEO	Director of marketing	Director of the retail network	CEO	CEO	CEO	Commercial director	Head of Sales Department	Top manager of the store	CEO
Tenure of interviewee in the enterprise, years	5	10	8	10	7	11	15	16	9	20
Type of product	products for home and garden	building materials (DIY)	electric tools, tools for home appliances, auto products	luxury items, jewelry	products for home	bikes and bike accessories	clothes	shoes, clothes	shoes, clothes, accessories	building materials (DIY)
Education	higher education	two higher education	two higher education	two higher education	higher education	higher education	higher education	higher education	higher education	higher education
Gender of interviewee	male	female	male	male	male	male	female	male	female	male

### **Procedure 1. Frequency of mentioning**

According to the step-by-step procedure described above, 158 significant words were identified. The words with the number of mentioning not less than 5 are presented in the table.

The table includes words with frequency of mentioning not less than 5. Further number of words with frequency of mentioning less than 5 greatly increases. For example, there are 13 words with frequency 4, 23 words with frequency 3, 35 words with frequency 2 and 41 words with frequency 1.

Analysis of mentioned words lets distinguish main spheres that managers put attention to.

As you can see the first places take words in the sphere of marketing like ‘price’, ‘goods’, ‘client’, ‘cost’, ‘service’, ‘quality’, ‘assortment’, ‘brand’.

Another sphere is dedicated to innovation and include words like ‘technologies’, ‘innovation’, ‘information’, ‘informative’.

Sphere of characteristics of personnel is also important and includes words like ‘personnel’, ‘qualification’, ‘education’, ‘training’.

**Table 2. List of frequently mentioned significant words**

Word	Sum of mentioning	Word	Sum of mentioning	Word	Sum of mentioning
level	22	effectiveness	11	relationship	7
price	22	company	10	rate	7
goods	21	condition	10	qualification	6
personnel	20	product	9	tax	6
technologies	20	process	9	education	6
client	15	development	9	training	6
politics	15	market	9	resources	6
speed	14	availability	8	strategy	6
finance	14	innovation	8	brand	5
business	13	credit	8	currency	5
quality	13	service	8	informative	5
assortment	12	power	8	competitiveness	5
ability	12	attendance	8	delivery	5
cost	12	information	7	sanctions	5
loyalty	11	marketing	7	demand	5
production	11				

Some retail companies talked about production as they produce their own goods under private labels. That is why there are words like ‘production’, ‘standard’, ‘R&D’, ‘equipment’, ‘patents’, ‘raw materials’. These words are not presented in the table because they have frequency of mentioning less than 5.

It is important to notice, that there are the words connected with the economic crisis in 2014-2015 such as ‘crisis’, ‘sanctions’, ‘currency’, ‘politics’. Crisis worsened activity of companies that bought goods and equipment abroad.

Moreover, identified spheres correlate with the factors that were identified in the Procedure No 2.

### **Procedure 2. Identification of factors and variables**

Identification of factors and variables was conducted separately for internal and external environment.

As for internal environment, 7 factors and 35 variables were identified. 7 variables were stated by more than 5 enterprises: ability of leaders to recruit talented staff, level and availability of technologies, speed of reaction and decision-making, providing managers with up-to-date

information, staff motivation and KPI, training and staff development, terms of cooperation with partners.

As for external environment, 10 factors and 80 variables were identified. Factors and variables of external environment include aspects of activity of competitors. External factor ‘Environments’ includes political, economical, social and technological factors that influence company’s activity and cannot be changed by the company. 13 variables were mentioned by more than 5 respondents. Moreover, one variable ‘level and availability of technologies, IT’ was mentioned by all 10 respondents.

Both internal and external factors and variables include elements of intellectual capital. There are many opinions according to the structure of intellectual capital and its consisting elements. The most popular and most often used for practical purposes is classification of intellectual capital into 3 elements. According to Ruus, intellectual capital includes human capital, relational and structural capital (Ruus, 2010). We revealed typical elements of intellectual capital from internal and external environment (table 3).

**Table 3. Elements of Intellectual capital affecting company competitiveness**

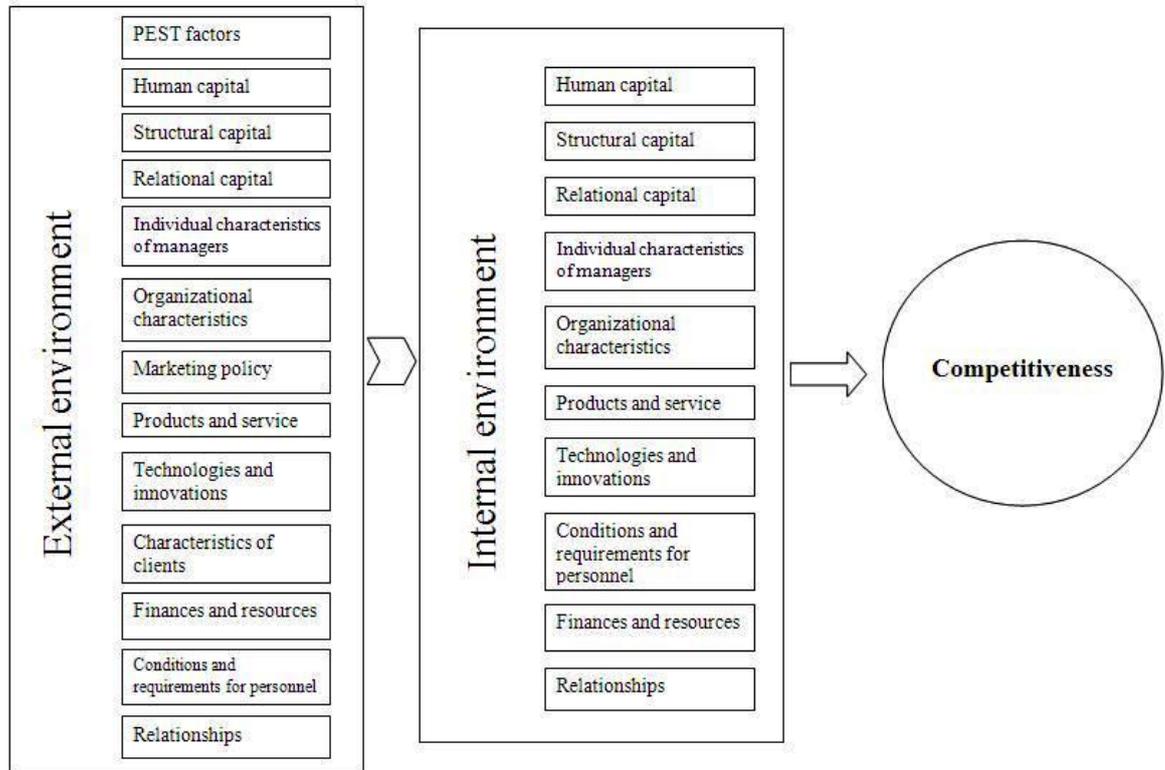
Internal environment	External environment
Human capital	
<ul style="list-style-type: none"> <li>● sanity</li> <li>● staff qualifications</li> <li>● staff motivation and KPI</li> <li>● training and staff development</li> </ul>	<ul style="list-style-type: none"> <li>● speed of decision-making</li> <li>● level of thinking</li> <li>● creative approach</li> <li>● training and staff development</li> </ul>
Structural capital	
<ul style="list-style-type: none"> <li>● corporate culture</li> <li>● level and availability of technologies, IT</li> </ul>	<ul style="list-style-type: none"> <li>● brand strength</li> <li>● level and availability of technologies, IT</li> </ul>
Relational capital	
<ul style="list-style-type: none"> <li>● communication with customers</li> </ul>	<ul style="list-style-type: none"> <li>● reputation</li> <li>● style of working with clients</li> <li>● relationship between managers of wholesale and retail</li> </ul>

Most of the elements refer to human capital. It supports the idea that human capital is the main element of intellectual capital that influences and form relational and structural capital. Human capital is a link between company and partners and form the level and conditions of collaboration.

The importance of human capital can be proved with the frequency of mentioning of keywords. Thus, the word ‘personnel’ was mentioned 20 times, words connected with structural capital such as ‘technologies’, ‘innovation’, ‘brand’ were mentioned from 20 to 5 times, and elements of relational capital such as ‘loyalty’, ‘relationships’ have frequency of mentioning from 11 to 4.

### Comprehensive model

Figure 1 shows a comprehensive model that describes relationships between the factors affecting the company competitiveness.



**Figure 1. Factors affecting company competitiveness**

#### 4. Limitations

This study identified the list of significant factors and elements of intellectual capital that influence a retail company competitiveness. Nevertheless, the research has some limitations and assumptions. So the most important limitation is related with disadvantages of in-depth interviews like influence of interviewer. Moreover, we faced mistrust and disclosing information by companies because of features of Russian culture or commercial secrets.

The further study includes quantitative research conducted by online-questionnaire to identify the significance of factors and relation with company performance.

#### Conclusion

This study presents an approach utilizing multiple-case method to identify the main factors and variables affecting retail companies competitiveness in Russia. Content analysis techniques allowed the researchers to create a comprehensive model that can be utilized for future studies in examining the influence of factors on retail companies competitiveness.

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## **Appendix 1**

### **Project of questionnaire to conduct in-depth interviews**

#### Details about experts

1. Age
2. Position of interviewee
3. Tenure of interviewee in the enterprise, years
4. Type of product
5. Education

#### **Part 1. General questions about the concept of competitiveness and its factors**

- 1.1. What is competitiveness in your opinion?
- 1.2. List the factors that determine competitiveness of Russian companies in your industry
- 1.3. List the factors that determine competitiveness of foreign companies in your industry

#### **Part 2. External factors that determine the company competitiveness**

##### ***Macrolevel***

- 2.1 What political factors affect the company competitiveness?
- 2.2 What economic factors affect the company competitiveness?
- 2.3 What social factors affect the company competitiveness?
- 2.4 What technological factors affect the company competitiveness?

##### ***Microlevel***

- 2.5 What actions of competitors affect the company competitiveness?

- 2.6 What parameters of relationships with intermediaries affect the company competitiveness?
- 2.7 What parameters of relationships with suppliers affect the company competitiveness?
- 2.8 What parameters of relationships with financial institutions affect the company competitiveness?
- 2.9 What parameters of relationships with clients affect the company competitiveness?
- 2.10 What other stakeholders affect the company competitiveness and how?

**Part 3. Internal factors that determine the company competitiveness**

- 3.1. What factors related to the production affect the company competitiveness?
- 3.2. What parameters of financial management affect the company competitiveness?
- 3.3. What key parameters of the HR strategy affect the company competitiveness?
- 3.4. What benefits do information technologies give to improve competitiveness?
- 3.5. In what areas does your company use information technologies?