Russian Exhibition Market: Digital Turn in New Realities of National Economy

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Abstract. Russia is among the countries actively involved in the process of the digital transformation of exhibition activities. However, on the way of digital reform of the national trade fair sector, there are several constraints and circumstances, the main of which are limited resources, lack of readiness for concerted action, personnel insecurity, conservatism, underdeveloped digital infrastructure. Despite a number of features and differences, the content of the exhibition markets of Russia and Europe is mostly similar. However, if the European exhibition market is thematically stable and is characterized by sustainable development, in Russia in recent years there has been a redistribution of dominant themes of trade fairs and weakening the position of most of them. Moreover, during the last 5 years, the Russian exhibition market has been moving towards a thematic divergence with the European one.

Keywords: trade fair; trade show; exhibition market; digitalization

Introduction

Annually more than 31 thousand trade fairs (which size is over 500 sqm) takes place in the world. Their total net area² is 124 million sqm, the number of exhibitors – 4.4 million companies, the number of visitors – 260 million people (UFI, 2014). About a third of these expo-events take place in Europe. As for the Russian trade fair sector, it is ten times smaller than the European one. Now it is about 800 trade fairs per year with a total net area of about 2 million sqm. About 80 thousand exhibitors participate in these fairs. The number of visitors exceeds 6 million (RUEF, 2018).

Literature review

The role of trade fairs in the market economy

Trade fairs are of great importance for the modern economy, namely:

- provide mobility for commodity markets, form information fields, generate financial flows, create jobs (Tafesse & Korneliussen, 2011; Bathelt, Golfetto, & Rinallo, 2014);
- contribute to economic development and accelerate innovation processes (Solberg, 2010);
- allow to get acquainted with new developments, to follow technological achievements and to track promising trends (Hlee, Lee, Moon, & Yoo, 2017);
- give real chances to organize effective interaction between industry and trade (Siemieniako, & Gebarowski, 2016);
- form one of the most powerful business-communication channel, which greatly simplifies and accelerates trade transactions and agreements (Gopalakrishna & Lilien, 2012);
- assist with business contacts finding and help to start cooperation (Sarmento, Simoes & Farhangmehr, 2015).

Trade fairs serve as:

- working platforms for marketing, promotion, and sale, and also as powerful sources of special and commercial information (Rodriguez, Reina, & Sevilla, 2014);
- a reliable mechanism for filling consumer markets with goods and services (Ahola, 2012);
- proven means for providing industrial markets growth and direct investment attracting (Dawson, Young, Tu, & Chongyi, 2014);

² the entire area rented by exhibitors plus the area used by trade fair organizers for special expositions

- workplaces for business partners meetings and negotiations (Menon & Edward, 2014);
- indicators of supply and demand, mechanism of economic activity self-regulation (Tafesse & Skallerud, 2015);
- effective toolkit to increase the economic role of the country (region, city) and to provide budget revenues (Rinallo, Bathelt, & Golfetto, 2017).

Exhibition market as a mirror of the economy: European vs Russian specifics

The combination of marketing activities and economic relations associated with the offer, selection, and implementation of opportunities to participate in expo-events forms the exhibition market. Exhibition markets are the direct reflection of the most specific features of the national economic systems they belong to. That is why their study is very important (Solberg, 2013).

At first glance, despite multiple differences in size, the content-themed spectra of Russian and European exhibition markets are the same, both in width and content range. However, in spite of the apparent similarity in both cases, there are significant features. Their discovery gave an impetus to the detailed study.

Digitalization of exhibition activities

Trade shows are increasingly influenced by technological progress and innovative achievements (Royle & Laing, 2014; Leeflang, Verhoef, Dahsltröm, & Freundt, 2014). From year to year, new technical solutions and toolkits such as the Internet, IT-systems, computer, video and audio equipment, cellular telephony, mobile devices are increasingly used in their operation (Ling-Yee, 2010; Wang, 2011; Wu & Wang, 2016; Singh, Shukla, & Kalafatis, 2017).

A notable phenomenon in recent years has been the gradual penetration into the exhibition sector of achievements and tools from digital technology areas (Geigenmuller, 2010; Gottlieb & Bianchi, 2017; Wiedmann & Kassubek, 2017). Therefore, today we can speak with confidence about the digitalization of trade fairs, which should be understood as the gradual implementation by their organizers and participants of digital technologies for business information creation, processing, transmission, and receipt, as well as a systematic step-by-step translation into digital form and integration into united digital complex of all forms of business, production and socio-cultural relations associated with exhibition activities (Skyline Exhibitions, 2016).

The context of trade shows digitalization is quite wide. It is not only electronic services, broadcasting of information through social networks, hybrid exhibitions combining live demonstrations with an interactive component, electronic trading platforms on the basis of large exhibitions, digital format of internal business processes of trade fairs organizers, etc. (CEIR, 2016). These are also digital tools and technologies of the near future, including virtual layout of exhibition halls, automatic identification of objects, robotic exchange of information, digital exhibition platforms, etc., i.e. everything that brings to the exhibition activity the accelerating progress of digital innovations (Sharda, Sikolia, Thomas, & Sambasivan, 2012; GES, 2018).

Actively engaged in efforts to transfer the national economy in a digital way, the Russian exhibition community strives to create expo-events that focus on digital upgrades and stimulating business activity on the development of digital business projects and business programs (Kapustin & Simonov, 2018).

Objectives, data, and methodology

Purposes and framework of research

The main goals of the study are the following.

- 1. To track the dynamics of the digital transformation impact on trade fairs in Russia. To specify the place and degree of Russian participation in the global process of exhibition activities digital transformation.
- 2. To explore correlations between digitalization level and trade fair topics.
- 3. To identify specific differences in the thematic and content of trade fairs held in Russia and Europe.
- 4. To track how the thematic palette of the Russian exhibition market has changed over the last 5 years. To identify existing tendencies & trends against the background of the European exhibition market.

5. To link content and thematic features of the exhibition sector of Russia with current specifics of the domestic market and with the modern vector of its economy as a whole.

Data collection: sources and preparation

Since the exhibition market is huge and no researcher is able to visit personally and to measure statistics even of the most significant trade fairs neither in Russia nor in Europe, the above goals were achieved through the collection, processing and comprehension of secondary data, i.e. through "Desk" analysis. Required data was "bit by bit" extracted from information sources of several types:

- periodicals on trade fairs (for example, Skyline Exhibits, 2016, CEIR, 2016, GES, 2018)
- official reports of trade fairs audit (UFI, 2013, UFI, 2014b, UFI, 2015, UFI, 2016, UFI, 2017);
- surveys and reports by event-associations and exhibition unions (for example, FKM, 2017);
- Russian trade fair statistics reviews (RUEF, 2013, RUEF, 2014, RUEF, 2015, RUEF, 2016, RUEF, 2017a);
- websites, online databases, online calendars and Russian catalogs of trade fairs (for example, InformEXPO, 2017, RUEF, 2017b).

Achievements related to the development and application at trade fairs of tools and methods from digital technology areas were identified and evaluated by processing and analyzing the results of survey studies carried out by the Global Association of the Exhibition Industry (UFI) in 2016 - 2018 (16th GEB, 2016, 17th GEB, 2016, 18th GEB, 2017, 19th GEB, 2017, 20th GEB, 2018, 21st GEB, 2018). In addition, some materials from the Russian Union of Exhibitions and Fairs (RUEF) were used (RUEF, 2017c, RUEF, 2018).

Data analysis method

25 independent exhibition market segments have been formed, which, without overlapping with each other, completely cover the entire thematic spectrum and reflect all facets of the exhibition markets of Russia and Europe without exception. In the section "other" secondary thematic areas represented by a small number of relatively small-scale trade fairs were placed.

Results of data summarization and processing

Digitalization of trade fairs in Russia and in Europe

<u>Digitalization of exhibition activities in Russia and in Europe</u>. Summarization and processing of the actual data extracted from the above-mentioned sources allowed, in particular, to show dynamics of the impact of digital transformation on the Russian trade fair sector against the background of European one (Fig. 1), which found a gradual growth.



Figure 1. Dynamics of digital transformation influence on Russian and European exhibition markets (GEB, 2016a; GEB, 2016b; GEB, 2017a; GEB, 2017b; GEB, 2018a; GEB, 2018b)

In the implementation of digital technologies in exhibition activities Russia strives to keep pace with leading countries of Europe. Russian exhibition sector is responding vividly to the accelerating process of digitalization of the economy. Digital transformation is among the top five most pressing topics of concern to it today (Figure 2).

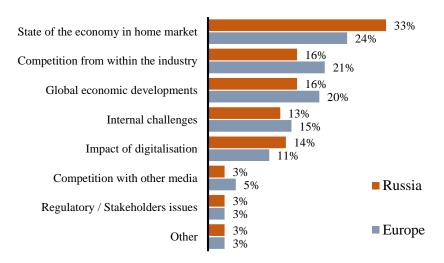


Figure 2. Digital transformation against the background of other factors influencing exhibition markets of Russia and Europe (2017)

(GEB, 2016a; GEB, 2016b; GEB, 2017a; GEB, 2017b; GEB, 2018a; GEB, 2018b)

<u>Correlation between the level of digitalization and thematic of trade shows</u>. It was found that the demand for digital technologies and devices significantly depends on trade fair thematic (Fig. 3). For example, at trade fairs of food and beverages, it is only 50%, while at the exhibitions of high technology it is almost 90%. The demand for digital technologies at trade fairs on "Sports & Recreation" is a record high. The use of digital technologies in educational expo-events is also much higher than average.

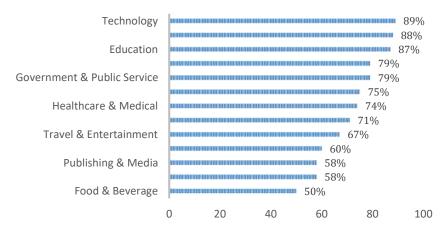


Figure 3. Digital technologies and digital content at trade fairs of various thematic (2018)(CEIR, 2016; Skyline Exhibits, 2016; GES, 2018; RUEF, 2018)

Russian and European exhibition markets: structure and content

The results of the analysis of thematic palette of exhibition markets are presented in tables and figures below, namely:

- comparison of thematic segments of Russian and European exhibition markets (Figure 4 and Table 1);
- ranking of Russian and European exhibition markets segments by total net area of trade fairs (Figures 5 and 6);
- thematic priorities of European exhibition market in 2017 vs 2013 (Figure 7, Table 2);
- thematic dominants of the Russian exhibition market in 2017 vs 2013 (Figure 8, Table 3).

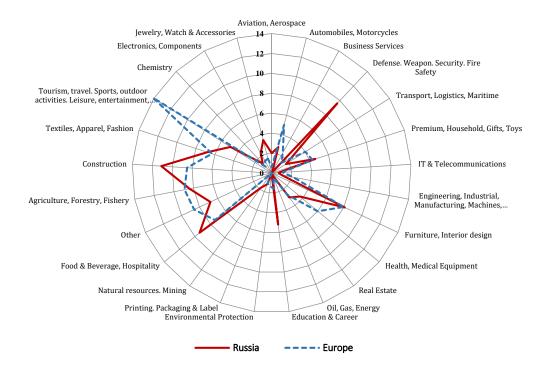


Figure 4. Segments of Russian and European exhibition markets (averaged data, 2013 – 2017 period), %. (RUEF, 2013; RUEF, 2014; RUEF, 2015; RUEF, 2016; RUEF, 2017a; RUEF, 2017b; RUEF, 2017c; InformEXPO, 2017; UFI, 2013; UFI, 2014a; UFI, 2014b; UFI, 2015; UFI, 2016; UFI, 2017; FKM, 2017)

Table 1. Ranking of Russian and European exhibition markets segments (averaged data, 2013 – 2017 period)

(470. 1901. 4404) 2010 2011 por 104)	RUSSIA		EUROPE	
Segment	Expo area, %	Rank	Expo area, %	Rank
Construction	11,1	1	8,5	4
Defense. Weapon. Security. Fire Safety	9,6	2	1,4	17
Food & Beverage, Hospitality	9,4	3	7,4	6
Agriculture, Forestry, Fishery	8,4	4	8,9	2
Engineering, Industrial, Manufacturing, Machines, Instruments, Hardware	8,1	5	8,0	5
Other	6,8	6	8,6	3
Textiles, Apparel, Fashion	6,8	7	6,3	7
Oil, Gas, Energy	5,2	8	1,6	15
Tourism, travel. Sports, outdoor activities. Leisure, entertainment, hobby	4,9	9	14,1	1
Premium, Household, Gifts, Toys	4,6	10	4,3	10
Furniture, Interior design	3,7	11	6,0	8
Jewelry, Watch & Accessories	3,4	12	1,5	16
Health, Medical Equipment	3,0	13	2,7	12
Automobiles, Motorcycles	2,7	14	5,0	9
Electronics, Components	2,3	15	1,4	18
Aviation, Aerospace	2,0	16	< 0,7	23
Natural resources. Mining	1,8	17	<< 0,1	-
Transport, Logistics, Maritime	1,7	18	4,0	11
Chemistry	1,3	19	0,9	22

Printing. Packaging & Label	1,2	20	1,1	20
IT & Telecommunications	1,0	21	2,2	14
Environmental Protection	0,7	22	1,1	21
Real Estate (sales / leases)	0,2	23	< 0,6	24
Business Services, retail	< 0,1	24	2,3	13
Education & Career	< 0,1	25	1,3	19

(RUEF, 2013; RUEF, 2014; RUEF, 2015; RUEF, 2016; RUEF, 2017a; RUEF, 2017b; RUEF, 2017c; InformEXPO, 2017; UFI, 2013; UFI, 2014a; UFI, 2014b; UFI, 2015; UFI, 2016; UFI, 2017; FKM, 2017)

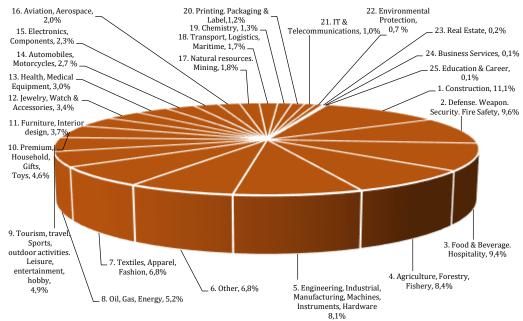


Figure 5. Ranking of Russian exhibition market segments (averaged data, 2013 – 2017 period) (RUEF, 2013; RUEF, 2014; RUEF, 2015; RUEF, 2016; RUEF, 2017a; RUEF, 2017b; RUEF, 2017c; InformEXPO, 2017)

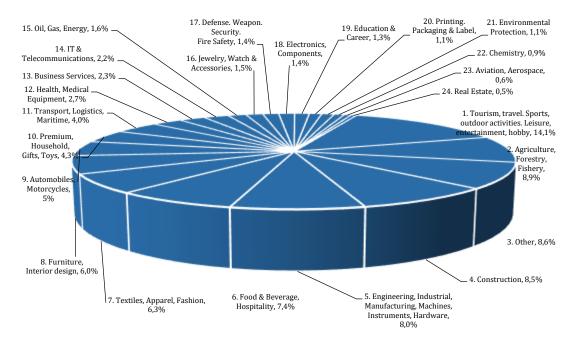


Figure 6. Ranking of European exhibition market segments (averaged data, 2013 – 2017 period) (UFI, 2013; UFI, 2014a; UFI, 2014b; UFI, 2015; UFI, 2016; UFI, 2017; FKM, 2017)

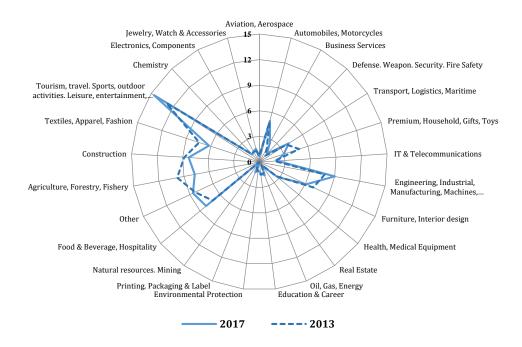


Figure 7. European exhibition market segments in 2017 vs in 2013, % (UFI, 2013; UFI, 2017; FKM, 2017)

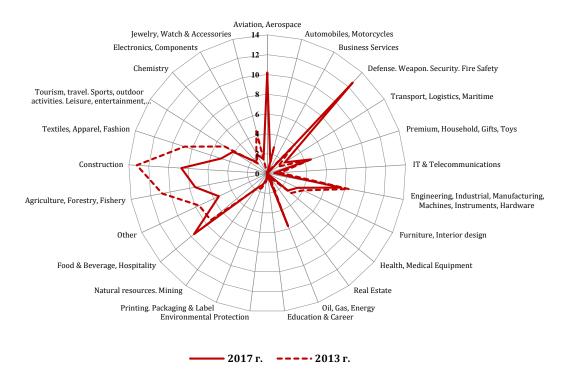


Figure 8. Russian exhibition market segments in 2017 vs in 2013, % (RUEF, 2013; 2017a; RUEF, 2017b; RUEF, 2017c; InformEXPO, 2017)

Table 2. Ranking of European exhibition market segments in 2017 vs in 2013

able 2. Ranking of European exhibition market segme	2017		2013		
Segment	Expo area, %	Rank	Expo area, %	Rank	
Tourism, travel. Sports, outdoor activities. Leisure, entertainment, hobby	14,6	1	12,9	1	
Engineering, Industrial, Manufacturing, Machines, Instruments, Hardware	9,0	2	7,8	5	
Other	8,6	3	8,3	4	
Construction	8,3	4	8,8	3	
Food & Beverage, Hospitality	8,1	5	7,1	7	
Agriculture, Forestry, Fishery	7,7	6	9,8	2	
Textiles, Apparel, Fashion	6,2	7	7,4	6	
Furniture, Interior design	6,1	8	7,0	8	
Automobiles, Motorcycles	5,0	9	4,8	10	
Transport, Logistics, Maritime	4,1	10	3,8	11	
Premium, Household, Gifts, Toys	3,0	11	4,9	9	
Health, Medical Equipment	2,8	12	2,6	12	
Business Services, retail	2,6	13	1,8	14	
IT & Telecommunications	2,1	14	1,8	13	
Oil, Gas, Energy	1,7	15	1,4	16	
Jewelry, Watch & Accessories	1,6	16	1,3	19	
Electronics, Components	1,4	17	1,4	17	
Printing. Packaging & Label	1,3	18	0,8	22	
Education & Career	1,3	19	1,5	15	
Defense. Weapon. Security. Fire Safety	1,3	20	1,0	21	
Chemistry	1,2	21	1,3	18	
Environmental Protection	1,0	22	1,2	20	
Aviation, Aerospace	< 0,7	23	< 0,8	23	
Real Estate (sales / leases)	< 0,5	24	< 0,5	24	
Natural resources. Mining	<< 0,1	25	<< 0,1	25	

(UFI, 2013; UFI, 2017; FKM, 2017)

 Table 3. Ranking of Russian exhibition market segments in 2017 vs in 2013

2017		7	2013		
Segment	Expo area, %	Rank	Expo area, %	Rank	
Defense. Weapon. Security. Fire Safety	12,6	1	3,7	12	
Aviation, Aerospace	10,2	2	0	-	
Food & Beverage, Hospitality	9,6	3	7,4	6	
Construction	8,7	4	13,2	1	
Engineering, Industrial, Manufacturing, Machines, Instruments, Hardware	7,6	5	8,4	4	
Agriculture, Forestry, Fishery	7,4	6	10,8	2	
Oil, Gas, Energy	5,7	7	4,5	9	

Other	5,4	8	7,6	5
Textiles, Apparel, Fashion	4,9	9	8,8	3
Premium, Household, Gifts, Toys	4,6	10	4,7	8
Tourism, travel. Sports, outdoor activities. Leisure, entertainment, hobby	4,1	11	5,1	7
Мебель. Оформление интерьера Furniture, Interior design	3,4	12	4,0	11
Health, Medical Equipment	2,7	13	3,1	13
Electronics, Components	2,2	14	2,3	15
Transport, Logistics, Maritime	2,1	15	1,3	19
Natural resources. Mining	1,9	16	2,0	16
Chemistry	1,6	17	1,4	18
Jewelry, Watch & Accessories	1,5	18	4,4	10
Automobiles, Motorcycles	1,2	19	2,8	14
Printing. Packaging & Label	1,2	20	1,6	17
IT & Telecommunications	0,7	21	1,3	20
Environmental Protection	0,6	22	0,8	21
Business Services, retail	<< 0,1	23	0,2	23
Real Estate (sales / leases)	<< 0,1	24	0,5	22
Education & Career	<< 0,1	25	< 0,2	24

(RUEF, 2013; RUEF, 2017a; RUEF, 2017b; RUEF, 2017c; InformEXPO, 2017)

Discussion of findings

Russian exhibition market and global digital transformation

There are several constraints and circumstances on the way of digital reform of Russian exhibition market, namely:

- limited resources for implementation and maintenance of digital systems;
- lack of readiness for coordinated actions and mutually agreed to initiatives to create integrated technology platforms and synchronous transition to operating with them by organizers and participants of trade fairs;
- lack of digital cadres and skills, the incompleteness of digital competences;
- ignoring customers-digital leaders, rejection of requests for digitalization coming from technologically advanced trade fair participants;
- conservatism and desire to work "in the old way", avoiding digital innovation;
- undeveloped digital infrastructure (low bandwidth of web channels, lack of access to mobile Internet, poor cellular coverage, etc.).

Russian vs European exhibition markets in 2013 - 2017

The comparative analysis of thematic and content coverage of exhibition markets of Russia and Europe fulfilled during the research allowed to establish the following:

1. Among the segments that were at the top of the Russian list in the past five years are: "Construction", "Defense. Weapon. Security. Fire Safety", "Food & Beverage, Hospitality", "Agriculture, Forestry, Fishery", "Engineering, Industrial, Manufacturing, Machines, Instruments, Hardware".

European list begins with the following sections-leaders: "Tourism, travel. Sports, outdoor activities. Leisure, entertainment, hobby", "Agriculture, Forestry, Fishery", "Construction", " Engineering, Industrial, Manufacturing, Machines, Instruments, Hardware", "Food & Beverage, Hospitality". It is obvious that the coincidence does not take place in all positions, not to mention their sequence.

2. In 2013 - 2017 the largest Russian exhibition market segment was "Construction", while in Europe - the section "Tourism, travel. Sports, outdoor activities. Leisure, entertainment, hobby".

3. In Russian ranking for 2017 exhibition projects on "Defense. Weapon" and "Aviation" are especially noticeable. They occupy the 1st and the 2nd positions and are characterized by advanced growth and development. On the contrary, in the European list military and aerospace topics are located at the bottom.

- 4. Russian oil and gas exhibitions are in the first third of national rating (the 8th position), while European are located near the end of their list (the 15th line).
- 5. In contrast to Russian European TOP-25 does not include expo-events on "Natural resources. Mining".
- 6. There is a gap between Russia and Europe in such expo directions as "IT & Telecommunications" (the 21st position in Russian rating against the 14th in European one), "Business services" (the 24th position in Russian rating vs the 13th in European one), "Transport, Logistics, Maritime" (the 18th position in the Russian rating against the 11th in European one), "Education & career" (the 25th position in Russian rating against the 19th in European one).
- 7. In both rankings positions of several segments are identical, for example: "Engineering, Industrial, Manufacturing, Machines, Instruments, Hardware" (the 5th), "Textiles, Apparel, Fashion" (the 7th), "Premium, Household, Gifts, Toys" (the 10th), "Printing. Packaging & Label" (the 20th) or similar: "Health, Medical Equipment" (the 13th vs the 12th), "Environmental Protection" (the 22nd vs the 21st), "Real Estate" (the 23rd vs the 24th).
- 8. In general, there is a slow but steady growth of trade fairs in Europe. While the performance of several Russian exhibition sectors in comparison with 2013 are significantly subsided. Although there has been some recovery in the country's exhibition market in 2018. However, in key thematic, it has not yet reached the level of five years ago.

European exhibition market in 2017 vs 2013

In 2017 vs 2013 on the European exhibition market there was no noticeable redistribution in the ranking of thematic segments. Except for the fact that the section "Engineering, Industrial, Manufacturing, Machines, Instruments, Hardware" rose from the 5th to the 2nd position and the section "Education & career" fell from the 15th to the 19th line. The rest of the exhibition market in Europe is thematically stable and characterized by sustainable development.

Russian exhibition market in 2017 vs 2013

The comparison of the Russian exhibition market in 2017 and 2013 evidence about the following facts:

- 1. Segment "Defense. Weapon. Security. Fire Safety" from the 12^{th} position in 2013 goes to the top of the rating in 2017. In the list for 2013, there are no expo-events "Aviation, Aerospace" and in 2017 they are already on the 2nd line.
- 2. Section "Food & Beverage, Hospitality" from the 6th in 2013 rises to the 3rd line in 2017, which, apparently, is due to redistribution associated with trade sanctions and anti-sanctions in the food market of Russia, which has generated increased interest in trade fairs of relevant topics.
- 3. Compared to 2013 the following segments rose in 2017: "Oil, Gas, Energy" (from the 9th to the 7th line) and "Transport, Logistics, Maritime" (from the 19th to the 15th position).
- 4. In 2017 sections "Engineering, Industrial, Manufacturing, Machines, Instruments, Hardware", "Natural resources. Mining", "Chemistry", "Electronics, Components", "IT & Telecommunications" were almost at the same levels as in 2013.
- 5. In 2017 "Construction" goes from the top of the list to the 4^{th} position, "Agriculture, Forestry, Fishery" moves from the 2^{nd} to the 6th place, "Printing. Packaging & Label" from the 17^{th} to the 20^{th} line.
- 6. Even stronger in 2017 than in 2013 sags all that is associated with individual consumption and all that in Russia is not acceptable to refer to the "essentials": "Textiles, Apparel, Fashion" (from the 3^{rd} to the 9^{th}

place), "Tourism, travel. Sports, outdoor activities. Leisure, entertainment, hobby" (from the 7^{th} to the 11^{th} line), "Premium, Household, Gifts, Toys" (from the 8^{th} to the 10^{th} position), "Jewelry, Watch & Accessories" (from the 10^{th} to the 18^{th} row), "Automobiles, Motorcycles" (from the 14^{th} to the 19^{th} level).

7. In 2017 compared to the 2013 section "Health, Medical Equipment" maintains its' position in the rating and "Furniture, Interior design" section is only one point down.

8. As for sections at the bottom of the list - "Environmental Protection", "Business Services", "Real Estate", "Education & Career " - their already fragile positions in 2013 by 2017 has become further weaken.

Thus, in contrast to European rating, in the Russian one, there is redistribution of trade fair thematic on the background of weakening position of the most of them (primarily addressed to households and to personal consumer sector). Moreover, the Russian exhibitions market today is moving towards a sectoral shift of emphasis and differences in their thematic priorities.

Conclusions

Russian exhibition market is a direct reflection of the most specific features of the national economic system it serves, namely:

- *small in size*, but thematically integral and content-completed due to involvement of a wide range of imported products represents almost the same industries and sectors of the economy as European market:
- *competitive, moderately lobbying* there are several trade fairs in the most thematic segments, but their development is increasingly determined by the availability of administrative resources, government support, etc.;
- *internal* judging by the content of the most segments it is mainly focused on the domestic audience;
- raw materials Russian oil & gas and mining exhibitions have a much greater relative "weight" than European ones as evidenced by their location in national ranking;
- *transforming* the turn of Russia to military technologies and industries, including aviation, while the other innovative areas are poorly represented, and consumer segments are clearly sagging;
- *stagnating* after the sharp fall in 2014 Russian exhibition market in 2015 2018 is characterized by stabilization, while not detecting significant trends of expansion and growth;
- *digitalization-oriented* Russia today is among the countries most actively involved in the process of the digital transformation of the exhibition market and activity.

Further research avenues

To continue and to develop this research the following has to be done:

- to continue the comparative analysis of the fine structure of the thematic spectrum of exhibition markets as relevant data for 2018 and subsequent years will become available;
- in addition to Europe, to compare Russian situation with the priority distribution of thematic segments of exhibition sector at the main economic-geographical regions of the world, as well as with rapidly developing exhibition markets of such countries as China and India;
- to study opinions and feedback of participants on the use of different types of digital technologies and digital content at trade shows of different thematic and scope;
- to make predictions of risks and threats that may arise for trade fairs in foreseeable future with progress of digital technologies and spread of new digital devices;
- to assess the consequences of exhibition sector digital transformation will trade fairs be in demand in the future and will they find a worthy place in the new digital world?

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