

Supply Chain Strategy as the Instrument of Marketing on the Example of a Platform in the Global Information Space

Marat Rashitovich Safullin^{1,2}, Dinara Lenarovna Kurbangalieva¹, Leonid Alekseevich Elshin^{1,2,3},

¹Kazan Federal University

²Center of Advanced Economic Research in the Academy of Sciences. of the Republic of Tatarstan

³Kazan National University of Science and Technology

Abstract— Supply chain strategy of the company is an intangible factor and its evaluation is hard to be filed in physical sense. Meanwhile, in the epoch of digital revolution, when every individual can have duplicate in global information space, we can attempt to evaluate metrics characterizing supply chain strategy on the example of online platforms. Supply chain strategy within information space is studied narrowly, through the prism of marketing researches: exceptionally as the monitoring of feedbacks, searching from the scope of messages negative ones, that is to say feedback management. From another side, among SMM specialists you can find lots of recommendations on websites promotion, laying followers up and so on, but there are so limited researches on key indicator values of results of company supply chain strategy and its reputation on economy influence. In this article we'll attempt to evaluate supply chain strategy of company on the basis of open and available information on the example of on-line platform YouTube. On the example of successful company owners (YouTube channels), we'll find correlation between metrics characterizing supply chain strategy and influence on results of activity - product monetization (video clips) and will define the most valuable ones. Supply chain strategy in this article is shown in new not investigated before format: as the controlling mechanism on platform. Based on research we found that upon the change of metrics characterizing supply chain strategy company revenue varies.

Keywords— monetization, page views, followers, supply chain strategy in Internet, sales, regression equation, metrics, digital transformation.

1. Introduction

The problem of supply chain strategy study in national science is rather new and studied narrowly – through the prism of marketing researches in context with image notion with lack of attention to

the independent phenomenon [1-3]. From our point of view image is emotional coloring of object intussusception by the consumer, while supply chain strategy from one side is quantitative evaluation of platform by the participants of ecosystem, from another side it's a factor of construction and development of ecosystem in general. For example, platforms Uber, Airbnb create the system of market participants supply chain strategy evaluation so that new user could easily navigate in numerous sellers [4]. It should be noted that rapid development of Internet and appearing thereby new significant segments of economics related with capitalization of behavior and interrelations attracted attention of researchers to the problems of study of influence of supply chain strategy and reputational economics on the efficiency of not only business entity, but of the region in general [5-7]. Really, digital transformation breaks fixed models of functioning of business entities and forms the basis of prospective competitive development of economic systems in conditions of global business environment [8].

Foreign researches of supply chain strategy and reputational economics from one side are centered on influence of supply chain strategy indicators on trust to platforms and providers [9-13]. From the other side attention is paid to the study of online residents' behavior (motivations for stimulations for submitted reviews, trust, reliability of information), as well as parameters used for evaluation and aggregation of reviews [14]. In online trade and information systems literature big focus is made on quantitative evaluation of supply chain strategy system in context of expanded field of research on projecting and platform ecosystems management [15].

In this article we base on studies on investigation of supply chain strategy and trust to platforms [16]. We chose YouTube platform because video helps to promote Goods and services. As per to Tubular Insights [7], 64% users purchase after seeing branded video clip. Human's brain is arranged in such way that it processes and memorizes visual information much

quicker than a text. That's why it's easier to deliver any message with the help of clip. It's one thing to read a boring text about the company on the site, and the other – to see its stuff, to watch their process from inside [5].

Aim of the research – to describe model where example of competitive trade area is YouTube. Additionally, as the confirmation of our choice is the fact that YouTube platform is the most expensive space from the point of view of singular integration to social media that can reach several millions of rubbles. Owners of YouTube channels as any business operators register their activity as juridical entity aiming to get profit of their activity. Thus we have trade area and companies that run operations there, supply chain strategy is the main competitive advantage [17].

Object of the research are existing companies which are in trade relationships and are competitors for attracting clients to their products. Subject of research is product – video clips of entertaining and educative character (surveys of new arrivals of electronics, interviews with popular people, cooking recipes and so on).

2. Methods

In the article, we use the analysis of correlational interconnection and method of least square in order to define index of regression equation that will be presented in the article. Based on the previous researches on “supply chain strategy and reputational economics” [18, 19] this article highlights evaluation of influence of supply chain strategy in Internet in the part of reaction of influence of the third sides on the business actions on YouTube platform.

3. Results And Discussion

If to liken to researches on architecture of platform ecosystems [19], YouTube can be accepted as the private “licensing body”. Supply chain strategy in this aspect acts as the mechanism of control organization by means of:

- creation of «barrier to entry»;
- «process management»;
- monitoring of «metrics».

To clarify: creation of “barrier to entry” means grade defined in advance by the platform for definition of acceptance criteria in order to define who is capable to act in actions mediated by the platform and to gain profit in the end.

YouTube Platform states those requirements for monetization of its activity: more than 1000 subscribers for the last 12 months there should be more than 4000 hours of views [4]. Fixing the requirements index can be interpreted as the creation of “barrier to entry”.

«Process management» refers to the grade that Platform rewards or amercs companies on the basis of maintenance of its behavioral rules. Effective use of YouTube right to deactivate users' monetization if the number of subscribers and views descends lower than index can be interpreted in the proper way.

«Metrics» - is the most necessary quantity of views and number of subscribers that can be used for controlling.

It should be noted that in case of following and corresponding to the requirements, the owner of the channel (enterprise) gains income. The level of revenue depends on the total of metrics, or in the other words, supply chain strategy.

As we have already discovered, quantity of subscribers and views are key metrics of supply chain strategy and control mechanisms from the side of platform. By means of channel tracing online YouTube platform [6], we'll collect benchmark data for analysis in Table 1 (average per day, week or year).

Table 1 Summary data of analyzed companies.

Number of new subscribers	Number of new views	Average revenue (\$)
2 330	371 568	800
1 000	420 401	1 000
2 000	708 598	1 500
3 660	762 592	1 600
7 000	2 942 801	6 000
10 300	1 140 219	2 300

14 000	4 960 186	10 000
16 300	2 600 976	5 500
18 600	1 950 736	4 400
25 600	5 338 144	11 000
30 000	12 612 008	27 000
60 000	21 257 939	45 000
70 000	11 147 013	23 000
72 300	7 981 533	16 000
110 000	22 877 735	50 000
130 000	13 655 152	29 000
310 000	34 260 546	72 000
360 000	151 344 096	320 000
560 000	58 522 080	120 000
840 000	133 764 156	284 000
1 320 000	274 532 820	600 000
3 720 000	410 478 552	800 000
6 720 000	702 264 960	1 400 000

Further we check correlation between these data as shown in Table 2.

Table 2 Inter-factor correlation

	<i>Subscribers (x₁)</i>	<i>Views (x₂)</i>	<i>Revenue (\$) (y)</i>
<i>Subscribers (x₁)</i>	1,00		
<i>Views (x₂)</i>	0,98	1,00	
<i>Revenue (\$) (y)</i>	0,97	0,99	1,00

It's known that revenue depends on two factors – number of views and subscribers. Table 2 shows that correlation is 0.99 and 0.97 that according to Cheddok's scale corresponds to characteristic "very powerful connection".

Besides, according to Table 2, we see high inter-factor dependence (0,98>0,7). At this strong inter-factor dependence one of the parameters should be excluded. For regression equation we use parameter with more tight dependence (influence of change in number of view on profit).

So, the formula with data stated in Table 1, is the following:

$$y=3257.9 + 0.002 \cdot X_2, \quad (1)$$

Absolute term of the equations is 3257, formally should be understood as: revenue of channels' owners when there are no changes in data of subscribers and views factor, is \$3257 per day. But we assume that there are no similar examples in the

stated summary as Internet is the living sphere where it's impossible to imagine stagnation. That's why shift of factor equivalent to 3257 should be discussed as intermediate value.

Regression parameter helps to conclude that every new view rises revenue of channel on \$0,002 averagely. Upon the check of factors on significance, regression equation in formula 1 can be considered as important at the 95% credible level.

4. Conclusion

Researched presented in the article correspond to modern tendencies and react on actual challenges: new types of business models appear today and their remarkable part is financial stability based on trust [20]. Communicative compound of trust formation between participants is supply chain strategy.

In new segments of economy arising as result of modern transformations, supply chain strategy gets

new controlling function. Based on metrics characterizing supply chain strategy revenue side of companies varies. In case of low level of supply chain strategy platform has the right to exclude account from the market and clear the space for competitors with higher supply chain strategy.

Supply chain strategy in global information space is the aggregated unity of reactions that have been described in our previous works [9, 21].

In the following works, YouTube will be studied as one of communicative channels forming and capitalizing supply chain strategy of companies.

Supply chain strategy versus image of the company, has quantitative value. Supply chain strategy as quantitative value of reaction of consumers can be monetized and net a profit to company. In physical data, for every 1000 views company gains averagely 2\$.

In this article, we analyzed owners of business whose activity is totally connected with platform: they are not independent producers of Goods or services – they can be characterized as “appraisal by the third parties”. Therefore, we observe that video review about some product or service on some indirect page can have more than million views while official page – no more than 100 thousand.

Based on the above we consider it reasonable in the following researches of supply chain strategy in global information space to use criteria “views” both on the official page of producers as well as views at the “third parties” for complex quantitative evaluation of influence of supply chain strategy on efficiency of company’s activity.

ACKNOWLEDGEMENTS

The publication was prepared within the framework of the RFBR-supported scientific project no. 19-010-00211

References

- [1] Aisenegger M. Trust and supply chain strategy in the globalization // University of Zurich // Publishing House: Fund for the Promotion of the Formation of a Modern Expert Environment “Domestic Notes” – Moscow, 2014 - Vol.1, Is.58 - pp. 26-34.
- [2] Kurbangalieva D.L. Supply chain strategy on the Internet: an assessment of the impact on the level of sales of an enterprise (for example, the automotive industry) // Audit and Financial Analysis Magazine No. 1 – Moscow, 2019 - pp. 129-143.
- [3] Kurbangalieva D.L. Key performance indicators of the enterprise in the network // Kazan Economic Bulletin No. 4 (36), 2018 - Kazan University Press – Kazan, 2019 - p. 10-14.
- [4] Internet resources YouTube. <http://www.youtube.com/> EHlektronnyj resurs. Data obrashcheniya 21.10.2019.
- [5] Internet resources // <https://meduza.io/cards/hochu-snyat-video-ot-svoem-biznese-kak-eto-sdelat> EHlektronnyj resurs. Data obrashcheniya 17.10.2019.
- [6] Internet resources// <https://socialblade.com/youtube/> EHlektronnyj resurs. Data obrashcheniya 21.10.2019.
- [7] Internet resources. // <https://tubularinsights.com/> EHlektronnyj resurs. Data obrashcheniya 21.10.2019.
- [8] Safiullin M.R., Elshin L.A., Abdukaeva A.A. Evaluation of the efficiency of digital transformation of the economy of the regions of Russia // Economic Bulletin of the Republic of Tatarstan / Publishing House: Territorial Authority of the Federal State Statistics Service of the Russian Federation for the Republic of Tatarstan No. - Kazan, 2019 - pp. 5-12.
- [9] Safiullin M.R., Elshin L.A., Kurbangalieva D.L. How does supply chain strategy economy engagement work to develop financial and economic activity? // Opción, Oficina de Publicaciones Científicas de la Facultad Experimental de Ciencias, Universidad del Zulia. Maracaibo – Venezuela / No.23 (35) (2019) – p. 376-392.
- [10] Safiullin M.R., Elshin L.A., Kurbangalieva D.L. Market Integration Assessment a Block Chain of Technologies in Regional Economic Systems in Comparison to the Global Supply Chain Management (On the Example of Regions of the Volga Federal District) // International Journal of Supply Chain Management –London, UK - Vol.8, No.6, December 2019 – pp. 809-814.
- [11] Kharlamov A.V. Trust and supply chain strategy in branding // article in the proceedings of the conference "Modern management style". Ed: Chuvash State Pedagogical University. AND I. Yakovleva -Cheboksary, 2016 - pp. 541-548.
- [12] Chebykina M.V., Akulova A.Sh. Business image, its supply chain strategy in the system of marketing communications of the enterprise // Publisher: Vestnik OGU №4, Orenburg State University -

- 2007 - p. 83-85.
- [13] Bente G., Dratsch T., Kaspar K, Al-Issa A. Cultures of trust: Effects of avatar faces and supply chain strategy scores on German and Arab players in an online trust-game / PLoS One – vol. 9 - 2014.
- [14] Ert E, Fleischer A., Magen N. Trust and supply chain strategy in the sharing economy: The role of personal photos in Airbnb / Tour. Manag. – Vol. 55 - 2016 - pp. 62-73.
- [15] Grunichev, A.S., Safiullin, M.R. About economic agent supply chain strategy value and role in modern conditions of management (regional aspect) // Journal of Social Sciences Research – 2018 - Special Issue 5 - pp. 256-259.
- [16] Jøsang A., Ismail R., Boyd C. Overview of trust and supply chain strategy systems for the provision of online services // Decision Support Systems – Vol. 43 – 2007 - p. 618–644.
- [17] Kolesnikova, J.S., Grunichev, A.S., Salyahov, E.F., Zagidullina, V.M. Supply chain strategy as part of intangible property, intangible national wealth and intangible heritage // Asian Social Science – 2014 – Vol.10, Is. 13 - pp. 271-279.
- [18] Li X, Guo X, Wang C., Zhang S. Do buyers express their true assessment? Antecedents and consequences of customer praise feedback behaviour on Taobao / Internet Res. – Vol. 26 – 2016 - pp. 1112-1133.
- [19] Safiullin, M.R., Grunichev, A.S., Elshin, L.A. Educating the supply chain strategy capital impact of a region on the parameters of its investment activity: Methodical approaches // International Journal of Higher Education -2019 – Vol, 8. Is. 7 - pp. 146-152.
- [20] Sthapit, E My bad for wanting to try something unique: sources of value co-destruction in the Airbnb context \ Current Issues in Tourism. – 2019 - Vol. 22, Is.20 - pp. 2462-2465.
- [21] Tiwana A. Platform Ecosystems: Aligning Architecture, Governance, and Strategy Aligning Architecture, Governance, and Strategy, Platform Ecosystems / Imprint: MK – 2014 - p. 300.