

The Effect of Supply Chain and Consumer Preferences on the Formation of Economic Model

Alexander Maloletko¹, Daniil Volkov², Victoria Vishnyakova³, Alexander Shatsky⁴

¹*alexander.maloletko@yandex.ru*

^{1,2,3,4}*Russian State Social University, 129226, Moscow, Russia*

Abstract – Technologies of marketing evolve over time. This phenomenon is due to the need to ensure the concept of marginal utility, called the mainstream, and the possible leveling of market failures in the classical sense. The development of the theoretical sections of the economy allows us to form a model of paradigm in thinking of the society. The complex of measures for the promotion of goods is transformed into a universal mechanism of the market, which forms consumer preferences, volume of consumer choice and supply chain, which is reflected in this research. The influence of behavioral Economic development in the key of innovative marketing technologies is also considered.

Keywords – Market failures, behavioral Economics, data, Consumer, supply chain, marketing.

1. Introduction

All systems of models of management and tools have been developed in a specific historical context. They arose from typical questions and problems that were relevant to managers and researchers at different times. Consequently, they implicitly predispose certain economic phenomena, such as the basis of competition or the rate of change in economic indicators. If these characteristics of the economic system change, the models do not necessarily lose the relevance of their functionality. However, they cannot contribute to decision-making as in their original historical context.

The free market model is a failure a priori. Existing market failures should be viewed through the prism of objective constraints that prevent business from developing. From 1945 to the mid-1970s, there was a fairly long period of fairly stable growth in production capacity [2]. Companies focused on revenue growth. The competition wasn't the problem. Consequently, the company basically went on expansion strategy. They have expanded into new products and new markets abroad. But all enterprises had a different history of development. In cases where the market mechanism cannot effectively allocate resources, economists call the phenomenon a market failure. In the first case, the market mechanism cannot initially provide similar conditions for several enterprises. Objective reasons prevent this from happening. The

state, in this situation, has an interest in the effective allocation of resources and must identify the extent of the necessary intervention. When the regulation of the economy in the country, the government needs to consider multiple ways of forming moderate paternalism [11].

Asymmetric information caused by a large flow of data that cannot be processed at the time is also an insurmountable barrier. In the modern information society, according to most economists, information is consumed much less than it is produced [5].

Environmental problems and the content of public goods are a market burden that cannot be excluded. In fact, all of the above market failures are conditions for its functioning. All but one is the asymmetry of information. At the age of galloping development of information technologies, there was an opportunity of micro-segmentation of users, which allows to obtain data about the target audience. But to implement a successful marketing campaign, you need effective information management. Information management is the organization of materials such as documents and records within a business or Corporation. Before choosing a management system, company executives must decide on a technology that will grow with the company, rather than change it after a few years. Cost-effective strategies should play a major role in information management decision-making. Effective it management strategies, also include weighing the risks before the adoption of the information system.

Using the structure of dynamic opportunities, the role of internal and external opportunities in ensuring the effectiveness of marketing strategies is studied. The key to creating a conceptual framework on the prospects of dynamic opportunities is to identify the building blocks that can form, maintain and improve competitive advantages. One such block is knowledge transfer or learning [17], [13].

Thus, the issue of market failures in modern conditions can be considered as part of these very conditions. And the need to get rid of the asymmetry of information comes to the fore. From the position of the company will consider the main ways to reduce the impact of this barrier in a turbulent business environment.

2. Methods

The reasons for the formation of economic imbalances caused by "market failures" A. Pigu first studied in the

book "Theory of welfare" [3]. His research rather focuses on the explanation of the need for state intervention in the economy of the business sector. It delineates the negative externalities that arise when private costs are lower than social costs and the positive externalities when social costs are, on the contrary, lower than private costs. Focusing exclusively on private gains from entrepreneurship and costs in a market economy leads to either overproduction of goods with negative externalities or a deficit of goods with positive externalities. This serves as a theoretical basis for state intervention in the economy, in his opinion, namely higher taxation of business activities, generating negative external effects, and subsidizing producers of goods with positive external effects. The position of A. Smith, as the founder of modern economic theory, is simple and unambiguous – the market is a meeting place of egoists. Smith directly points to this fact in his fundamental work "The Study of the nature and causes of the wealth of Nations." "It is not the benevolence of the butcher, the brewer, or Baker that we expect to get our dinner, but the respect of their own interests. We appeal not to their humanity but to their selfishness," writes Smith. Egoism creates a harmony of interests and forms a certain order in the economic system of the market, which Smith brought as a principle of "invisible hand": each individual, pursuing only their own selfish goals, as if directed by someone's invisible hand in order to achieve the greatest benefit for all.

The diametrically opposite position is taken by scientists and philosophers of the socialist and the Communist orientation of the study of the issue – T. More, [4], French socialists-utopians. Later they were joined by K. Marx, who also believed that "being defines consciousness", that is, gradually educating the society Communist thinking and behavior, you can abandon selfishness and the market [19].

Taking into account the given arguments by representatives of various schools of economic thought, it can be concluded that denoting the functionality and areas of market failure can be considered the phenomenon from the perspective of both the consumer and the supply chain of goods. In the context of the social economy of modern society and the information burden on consumers, it is important to emphasize the importance of the use of marketing technologies. The use of tools optimized by modern automated systems to influence consumer consciousness suggests that the "market failure" - asymmetry of information can be excluded from the list of "failures" due to the introduction of new technologies for managing supply chain and consumer preferences [8], [21].

In the research of Rostislav Kapelyushnikov about "Behavioral Economics and "new paternalism" the question of the need for "direction" of the consumer within the market economy to bring the economy to a new format [9]. Within the framework of the current model of management and significantly affecting obstacles, namely the asymmetry of the supply chain and consumer information and supply chain should be directed to avoid this market failure. However, in this

case, the market becomes mainly a seller, as so imposing the will of consumers, a society of exclusive consumption is formed.

The modern model of management predisposes to the introduction of new technologies of behavioral Economics, however, many economists of our time do not like this kind of "management" of consumers, supply chain, and some of them generally consider this concept not humane [16], [20], [22].

In accordance with the logic of the theme of the disclosure of the introduction of new marketing technologies in the established paradigm of economic relations used a set of methods of economic knowledge. The identification of qualitative indicators of the field that forms the supply of goods and services in the market will be carried out using the method of analysis and systematization of the data. This method will help to carry out the structuring of the materials obtained in the course of analytical actions.

Methods of analysis of problems and subproblems will be used in the study of the destructive impact of the market fiasco on business. The current business model should be changed in the light of marginal utility trends.

The hypothetical-deductive method will be used to propose certain claims as hypotheses and to test these hypotheses by inferring from them, together with other available knowledge, empirically verifiable consequences.

3. Data, Analysis, and Results

The study suggested that the use of marketing technologies using the analysis of macro-segments and micro-segments of user increases sales due to the formation of a specialized offer aimed at a potential consumer and supply chain of goods. Media coverage of the proposed products is considered to be an element of marketing strategy, as some companies do not invest in the advertising segment, but information resources somehow popularize the products of these enterprises [10]. The main significant tools in the formation of the proposal, with the exception of the possibility of an overproduction crisis, were:

- Pre-order;
- Advertising;
- Branding;
- Pricing.

These tools were effective without the use of modern techniques and technologies, and at this stage of development, they just reached a new level. Thus, for pre-order there is even a lack of original cost. By covering products in the media for certain users, you can increase sales. Exceptional pre-order-the opportunity to feel the consumer as a particularly important customer (VIP). Under this option, the vesting of the final product additional, exceptional characteristics, to make sense of the purchase was special.

The importance of creating an optimized advertising company in modern market conditions is due to the need to form such a marketing company, in which the product will be the most liquid. The tools used have

been highly effective in the past, and in the context of the development of information technology, there are opportunities to bring their use to a new level [18].

The study of the use of the pre-order option should be considered on specific examples, as in the designated market failures highlighted such item as the influence of monopolies. The initial conditions of all companies are different. **Made.com** -Made has a model by which you order a piece of furniture, knowing that it will take more time than if you went to a traditional furniture store. They give approximate time and use advertising for sale. They also advertise the idea that by buying from them, you "missed the middleman" by going through them directly to the producers - there's still the middleman, that is, yourself, but it's a much smaller mid-level chain.

Kick starter - almost all of the products that are sold on Kick starter are at the stage of preliminary proceedings. When a customer buys, they basically purchase the product in the future, i.e. pre-order the future product is shown in the Kick starter campaign. But this example fits the definition of an innovative product. Multiple prototypes presented on this platform, having a sufficient level of advertising on the platform, become ideologically popular.

Computer games - many computer games are available on request. This typically allows you to generate a hype in a given semantic field and capture an audience from adjacent information fields.

Drop shipping is a business, in a sense, pre-ordering business. This is a model of speculation business. Taking an order from the supplier of goods and services, place an order from the manufacturer, which sends directly to the consumer. Quite different from the examples above, but can still be seen within the same business category.

In all of these examples given, the possibility of pre-ordering goods emphasizes the importance of the consumer's interest. This fact characterizes the phenomenon as having a pronounced institutional character. Together with an effective advertising

company, this is an important element of attracting assets at the time of product development. Advertising in this way is a form of mass communication with the public [1]. This is usually a one-way flow of information, that is, from the company to the buyer or potential user of the product. It is a form of communication that usually tries to convince potential customers to buy or consume more of a certain brand of economic benefits or convince them to use it. Identifying needs at a new level, you can give advertising to those consumers for whom it will be useful.

Advertising using macro and micro-segmentation of users is most effective with products that can be differentiated from similar products based on consumer appreciation. The announced methods of research of the target audience became possible only with the development of the technological process and the organization of methods of work with big data [2], [15].

Companies choose the method according to cost, budget, target audiences and their response. However, word of mouth or personal recommendations are an unpaid form of advertising that can provide good exposure at minimal cost. So in modern society, there is a specific form of advertising-customer reviews.

Roeland Van Oostenbrugge from FietsPunt.nl used platform Visual Website Optimizer to run the test of supply chain and consumer preferences in the use of add-ons in the site architecture. In order to inspire confidence in customers, he decided to present social proof to the target audience. A Facebook widget showing how many users like the brand on the social network [10]. The choice of a specific widget that meets the requirements was obvious. Trust Pilot-widget showing the latest customer reviews. The version of the landing page with the widget increased the number of orders by a record 36.73%, having 99% of the statistical significance of the experiment, the test was conducted 15 days on a client base of 16,000 people.

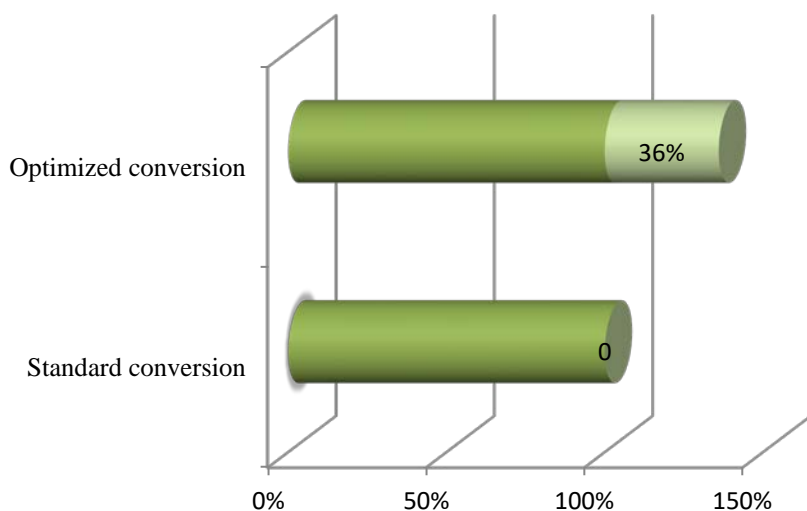


Figure 1. Optimized conversion result

The revealed indicators demonstrate a number of factors that affect society in the key of a new paradigm of information systems development:

1. The presence of positive experience of other users inspires confidence in the consumer

The widget displays reviews from the pages of social network users who have made a purchase, which removes the last barrier to the target action.

2. The dependence of the individual on the decision-making society

About 70% of customers of online stores in the United States say that they often look through reviews before buying, and 63% of buyers say that they are more willing to buy goods on a site with a rating system and reviews.

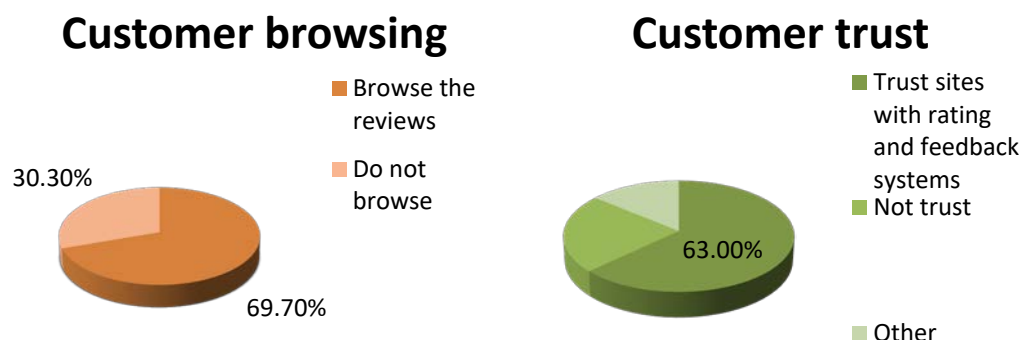


Figure 2. Browsing and trust of customers

Various new forms of advertising are growing rapidly. One of them is advertising in social networks and integration with social networking platforms of online stores. It is an online advertising with an emphasis on social networking websites to deliver marketing messages and attract customers. Consumers will respond to a sponsored post if they find it interesting, or if it somehow covers their needs. Customers who have already established contact with your brand will also respond to e-mails with offers and newsletters [4]. It's important to remember that social media is great for attracting a huge number of people, but that doesn't mean everyone who will be lured by your social media strategies will make a purchase. So, for a marketing strategy to be effective, it is necessary to focus on the target audience and the strategies that they will like.

4. Discussion

The results of the research and analysis of empirical data obtained in the framework of other studies have allowed to form a model of economic activity based on supply chain and consumer preferences. Differences in the results of research on related topics may be due to the peculiarities of the mentality of the target audience of the region under study. The results with crossed data are due to the openness of the question, which implies the creation of the most complete picture of the paradigmatic framework.

The knowledge obtained in the course of the study is not unexpected in the modern world. These data are mainly used to explain the current economic model. However, the applied side of the research with the reflection of the necessary tools for the promotion of goods is the practical significance of the phenomenon, which is the implementation of effective measures and techniques that affect public choice [12].

An effective marketing plan essentially implies realistic expectations that a company can achieve a certain level of sales, and find ways to achieve these goals. The

priority is to identify the target audience. With the development of search engine services, modern business has a number of opportunities to identify potential consumers by tagging its own brand. Most brands within a single product provide more or less the same functional benefits and meet the same needs of consumers. Since so many products in the market have the same function, the only way to position a product, service or company differently from the rest in the same category is to introduce the promotion of a particular brand product at all levels of Internet surfing by consumers. As part of this process, traditional advertising takes a back seat.

The success of the final product depends entirely on the empathy and the significance of the message that the producer of the economic good tries to convey to the consumer and the supply chain process. If you create a suitable environment for creative people with the right information, they can create great advertising. To create the right environment, people need to team up. This postulate of the advertising business, in principle, has not changed. Creative advertising, which is actually sold, is the result of "teamwork" [6].

Price perception has been one of the most important issues in consumer behavior research in recent years. In this regard, the concept of a reference point is very important and efforts have been made to define it. Consumers set their benchmark according to their personal understanding, annotations, existing knowledge of prices and their subjective interpretation. Control points depend on two factors: the type of information, i.e. external or internal, and the behavioral process of link formation. The elasticity of the product and the theory of classical economic theory are realized today more than ever.

The internal control point comes from the consumer price assessment in his mind. Two factors are involved in this formation - contextual and temporary. The first factor is the perception of different prices within the same product category when buying. The time factor depends on the customer's past buying experience. The importance of these factors varies depending on the

characteristics of the customer. For example, a consumer who has purchased one product more often will remember the price, and the result will be a more important time factor [4].

External information comes from marketing and internal forms from other sources. This means that any price consumer message is received through an external channel and is used to make comparisons. The seller can control external information through marketing efforts, and some internal factors may be beyond their control. But the information must be reliable, so that the consumer can use it in the evaluation of their products. The external control point can be the price offered by the seller on the product packaging, or the brand that is more often purchased, or the price of the dominant brand. The main purpose of the external control point is to increase the internal reference price, so that the customer perceives the existing price as an attractive and bought the product. According to the study, price perception is certainly a more important factor in making a purchase decision than a reality. Studies have been conducted in five countries to measure the extent to which price perception is important to retailers. Three factors responsible for price perception were identified. The first is the clarity with which the price is transmitted, the second is the connection of the price with the entry points, and the third is the General environment. The study found that retailers, which are perceived to be more expensive than others, cannot compete effectively in the market. The study on price differences at the entry level in Zara and H&M is a good example of price perception. According to the study, Zara was 31% more expensive than H&M, but the perception of customers of this difference is quite low compared to the actual figure. This shows Zara's ability to manage its perception through effective and clear price transfers. They managed to portray prices almost equal to competitors, but in reality, their prices are relatively high. The magic of perception, in this case, worked very well, which indicates the importance of consumer perception.

Another classic example is the price perception of value formation by Argos. They were able to reflect their price position in such a way that it led to a cheaper perception of the price than in reality. Their advertising strategy was focused on prices along with a notable offer of low-cost goods to create a cheap perception of the prices of their goods. Thus, they were able to present themselves as inexpensive compared to competitors, while in fact it is in some cases not so. However, the company must constantly work to maintain this perception [1], [7].

The company will start a good valuation with a full understanding of the cost and price of the products or services from the pricing to take into account the customers' perception of the cost and price. For example, if a customer decides to buy a product, but believes that the price that is set higher than the price received from the products, it will force him to make a decision not to buy that product. The company can decide on pricing based on two types of prices based on prices, which are valuable prices and value-added pricing policy.

Good price means that the company will establish a fair value by offering the right combination of quality and good service. In addition, value-added pricing means

that the company will set prices based on customers' perception of the value of the product, rather than the cost of production, which is well reflected in the formation of value in the speculative sectors of the economy [14]. Consumer perception of cost and price will set a price limit.

5. Conclusion

The introduction of even this incomplete list of tools, represented by advertising, pre-order, brand positioning and the formation of value based on supply chain and consumer preferences make the business much more successful. Market failures cannot be fully leveled, however, with the use of modern technologies and time-tested strategies and tactics of marketing companies; it is possible to reduce the risks of the information asymmetry fiasco.

In a competitive environment, industrialization is developing rapidly, and effective and well-organized marketing methods are expanding and applied using the latest developments in information technology. All this requires significant changes in the management of the company to reduce the risks to the business.

The scientific value of the study is mainly on the identification of stable relationships in the modern paradigm of economic knowledge between such determinants as supply chain and consumer preferences, semantic field, and micro-segmentation of network users. Previously disparate phenomena, such as micro-segmentation, used in the methods of processing of streaming data in modern conditions is designed to identify semantic fields for further implementation of marketing activities.

In conclusion, it should be noted that the organization of the model of management based on supply chain and consumer preferences in modern society is implemented within the concept of marginal utility. The study reflects the most pronounced manifestations of this phenomenon. Streaming micro-segmentation audience allows you to create a business model with virtually no subjective market failures, focusing and programming consumer targets and consumption [23].

6. Acknowledgment

In the framework of the agreement with the Ministry of education and science of the Russian Federation from 26.09.2017 No. 14.577.21.0251 on the topic: "Development of experimental prototype of a software complex of management of the organization's reputation, built using integrated data sources based on the technology of streaming micro-segmentation of the Internet audience, machine learning and data mining»

References

- [1] Andryushchenko, G.I., Andryushchenko, M.A., Maloletko A.N., Savina, M.V., and Solodukha, P.V. "Risks of developing the market pawnshops In the Russian federation". International Journal of

- Applied Business and Economic Research, Vol 15, No. 8, 117-125, 2017.
- [2] Becchetti, L., and Massimo, C. "Civil economy: definition and strategies for sustainable well-living", International Review of Economics, 1-29, 2018.
- [3] Bryzgalova, A.E. "market Failures as a reason for the state's participation in the provision of social services", Modern research and innovation, No. 6, 2015
- [4] Chaudhry, M.I., and Miranda, M.J. "Complex price dynamics in the cobweb vertically linked markets", Economic Modeling, Vol 72, 363-378, 2018.
- [5] Dzanku, F.M. "Rational But Poor? An Explanation for Rural Economic Livelihood Strategy", Journal of Agricultural Economics Vol 69, No. 2, 365-381, 2018.
- [6] Hughes, K., Vignjevic, R., Corcoran, F., Campbell, J., and Djordjevic, N. "Transferring momentum: Novel drop protection concept for mobile devices", International Journal of Impact Engineering Vol 117, 85-101, 2018.
- [7] Hysa, X., Zerba, E., Calabrese, M., Bassano, C. "Social business as a sustainable business model: making capitalism anti-fragile", Sustainability Science, Vol 1-12, 2018.
- [8] Jesmeen, M.Z. H., Hossen, J., Sayeed, M.S., Ho, C.K., Mohammed Tawsif, K., Rahman, M.A., Arif, E.M.H. "A survey on cleaning dirty data using machine learning paradigm for big data analytics", Indonesian Journal of Electrical Engineering and Computer Science, Vol 10, No. 3, 1234-1243, 2018.
- [9] Kapelyushnikov, R.I. "Behavioral Economics and new paternalism", Part II, Economic issue, No. 10, 28-46, 2013.
- [10] Krivosheya, E., and Korolev, A. "Benefits of the retail payments card market: Evidence from Russian merchants", Journal of Business Research, Vol 88, 466-473, 2018.
- [11] Marques, R.C., Simões, P., and Pinto, F.S. "Tariff regulation in the waste sector: An unavoidable future", Waste Management, Vol 78, No. 3, 292-300, 2018.
- [12] Nagpal, M. *Customer Review Widget Increased e Commerce Sales by 36%. VWO Blog, a Blog around Everything Conversion Optimization and Beyond*, 2014.
- [13] Nigmatullina, L.G. "The Theory of public choice about the innovative interaction of the market, power and society", Herald TISBI, No. 3, 2014.
- [14] Pochinok, N.B., Andryushchenko, G.I., Savina, M.V., Spirina, N.A., and Maloletko A.N. "Place of private pension funds in the financial market", Asian Social Science, Vol 11, No. 14, 161-168, 2015.
- [15] Salazar-Ordóñez, M., Rodríguez-Entrena, M., Cabrera, E.R., Henseler, J. "Understanding product differentiation failures: the role of product knowledge and brand credit in olive oil markets", Food Quality and Preference, Vol 68, 146-155, 2018.
- [16] Seidler, V. *Making Sense of Brexit: Democracy, Europe and Uncertain Futures*, Policy Press, 2018.
- [17] Singh, G. "A Macroeconomic Model with Price Flexibility", South Asian Journal of Macroeconomics and Public Finance, Vol 7, No. 1, 37-59, 2018.
- [18] Team, D.J. "Profit from innovation in the digital economy: Enabling technologies, standards, and licensing models in the wireless world", Research Policy, Vol 47, No. 8, 1367-1387, 2018.
- [19] Volkov, D.V. "Transformation of national monetary systems", Dashkov and K, Moscow, 2017.
- [20] Wang, H., and Qihai, H. "The dark side of feeling trusted for hospitality employees: An investigation in two service contexts", International Journal of Hospitality Management, Vol 76, 122-131, 2018.
- [21] Bask, A., Halme, M., Kallio, M., and Kuula, M. "Consumer preferences for sustainability and their impact on supply chain management: The case of mobile phones", International Journal of Physical Distribution & Logistics Management, Vol 43, No. 5, pp. 380-406, 2013.
- [22] Kumar, S., Luthra, S., and Haleem, A. "Critical success factors of customer involvement in greening the supply chain: an empirical study", International Journal of Logistics Systems and Management, Vol 19, No. 3, pp. 283-310, 2014.
- [23] Hendrianto, J., Setyawan, B., and Kusumawardhany, P. *Sustainability Supply Chain Management On Mobile Phone Features According To Consumer Preferences In Surabaya*, 2015.