Features of Marketing Tools Application to Irrational Consumer Behavior during Social Upheavals

Alexey S. Kharlanov 1[ORCID 0000-0002-6427-8808],
Elena V. Zenkina 2[ORCID 0000-0003-2192-4715],
Valeriy M. Tumin 3*[ORCID 0000-0003-4651-0359],
Petr A. Kostromin 2[ORCID 0000-0003-4161-3244],
Vladimir A. Trifonov 4[ORCID 0000-0003-2815-3749]

1 Diplomatic Academy of the Ministry of Foreign Affairs of the Russian Federation, Moscow, Russia
2 Russian State University for the Humanities, Moscow, Russia
3 Moscow Polytechnic University, Moscow, Russia
4 Yaroslav-the-Wise Novgorod State University, Veliky Novgorod, Russia
vm@tumin.net

ABSTRACT
The paper explores the psychological and economic aspects of changing consumer behavior towards irrationality, as well as the emergence of new consumer habits during the pandemic of new coronavirus infection. A literary review of approaches to irrational consumer behavior against the backdrop of global social upheavals has been carried out. The reasons for uncertainty, fear, anxiety, and panic, when the disease is common, have been described. The influence of these emotions on impulsive purchases has been outlined and the reasons for the ineffectiveness of such actions from the standpoint of macro- and microeconomics have been explained. The authors refer to Daniel Goleman's theory of social intelligence as the most suitable for explaining the current trends in digital marketing and the prevalence of the unconscious factor in the shopping process. The authors provide examples of the no-failure operation of the loss aversion theory and, as a result, examples of the explosive growth in sales of certain groups of goods during the pandemic. The essence of the emerging global market for Industry 4.0, shaping the needs in the digital world, and the place of transnational corporations in these processes have been found based on the ideas of Greg Thane and John Bradley about modern store wars. The participants of this market and the depth of their influence on the positioning of a company and its profit have been assessed. The role of Big Data in the formation of consumer motives and behavior habits has been also assessed. The authors provide a step-by-step analysis of the consumers’ reaction to the transformation of the way society functions regarding the introduction of mass restrictions (before the restrictions, during, and after their removal). The paper describes the increasing volatility of the markets and the characteristics of the behavior of sellers and buyers there, behavioralistic tendencies influencing the supply and demand trends. The author's view of the post-COVID-19 world of global markets, resources, and new trends in their functioning, taking into account behavioral economics and social intelligence, is presented.

Keywords: social intelligence, transnational corporations, focus group, behavioral economics, store wars, irrational consumption, irrational consumer, Daniel Goleman

1. INTRODUCTION

Irrationality in the behavior of economic agents in the economy accompanies the entire history of mankind. Despite numerous theories, the specific economic behavior of an individual is almost impossible to accurately assess. Just like classical mathematics operates in the field of pure
abstractions, so classical economic theory considers ideally correct, rational behavior in conditions of completeness of information for all market participants [1].

However, in reality, this is not the case. The uneven distribution and availability of information among economic agents which, moreover, are exposed to mental and emotional impact, lead to panic actions, a sharp change in the motives of actions, and the adoption of ineffective decisions. The COVID-19 pandemic is the clearest example of a global negative event accompanied by high mortality and the lack of reliable information about the causes and treatment methods. All this is an ideal environment for the development of individual and collective psychoses and stresses which are transferred to both social and economic aspects of life [2].

Recent studies by L. Duan and G. Zhu have shown that uncertainty about the consequences of the pandemic led to significant changes in consumer behavior [3]. In the USA, the EU countries, Australia, Singapore, there were cases of mass panic purchases. In Russia, mass consumer hysteria was accompanied by purchases of buckwheat, canned meat, alcohol, and toilet paper. The reason for such actions lies in the opinion that these products would soon run out, and there would be a shortage. The irrationality of these actions is proved by the fact that a shortage, a temporary one, is not caused by an epidemic, but by simultaneous useless wholesale purchases. Moreover, consumers see that their “colleagues” also buy a lot, convince themselves that the situation is very bad, and start buying even more [4].

J. Sheth has shown that unpredictable situations like pandemics (natural disasters and others) and changes in institutional and contextual conditions can cause interruptions in the supply of goods and services, but in general, the logistics system recovers quickly, and the stocks of the largest manufacturers ensure uninterrupted delivery of food and other consumer goods to stores [5].

Globally, the introduction of massive restrictive measures has radically changed the picture of purchases both in offline and online stores. The main danger for a country's economy is a decrease in the purchasing power of the population (mass wholesale purchases are expensive), and the simultaneous release of funds into the market causes response inflation [6].

Sharp changes in the number of goods sold and purchased negatively affect manufacturers, distributors, and other participants in the supply chain. The creation of excess inventory reduces the level of sales in the future, which entails an overall long-term decline in profitability [7, 8].

In the pre-pandemic era, panic purchases also occurred, but they were caused mainly by political, natural, or legal factors, as shown in the study by Y. Kobayashi and V. Anbumozhi [9]. Social networks play a special role here, as information, often fake and unreliable, spreads much faster through social messengers, online blogs, and news feeds [10]. Moreover, N. Chung, H. G. Song, and H. Lee have demonstrated that social media often manipulate the consciousness of users and push them to unnecessary impulsive purchases [11]. This kind of shopping stimulates the pleasure centers in the brain, but the effect does not last long, since there is no real benefit from the goods.

Since the emergence and development of behavioral economics as a science, scientists regularly register negative psychological reactions (depression, guilt, anxiety, etc.) in response to infectious diseases [12]. According to F. Ngunjiri, panic buying is a subjective, emotional action, but at the same time, it is senseless, since it is primarily intended to eliminate the state of discomfort, and not to acquire additional comfort [13].

The state of discomfort is caused by uncertainty about the future. E. Anderson and co-authors have defined uncertainty as a mental state caused by “information hunger”. Awareness of their incompetence and ignorance on any issue regarding other people or the media create prerequisites for people to be more receptive to digital marketing and purpose-driven marketing [14]. Consumers are trying to overcome uncertainty by any means, and food stocks create a false illusion of stability [15].

2. MATERIALS AND METHODS

This study is based on the ideas of the concept of social intelligence by D. Goleman in order to find out which consumer behavior patterns have remained the same, and which ones have changed dramatically in the context of the pandemic and after the lifting of restrictive measures [16]. The authors analyze the irrationality of consumption, the state of anxiety, the stress of the buyer, and the processes of choosing a brand and a product in the context of three time periods: before, during, and after the lifting of mass restrictions associated with the coronavirus epidemic. To obtain reasonable
conclusions, the authors rely on the achievements of neoclassical economics, behavioral economics, classical and digital marketing, psychology.

The objectives of this study are the following:

- to identify the symptoms of consumer behavior (including their irrational behavior) from the viewpoint of psychology, economics, and marketing;
- to characterize the phenomenon of deviant economic behavior of consumers in the conditions of coronavirus;
- to identify the role of Big Data in the manipulation of consumer behavior by transnational corporations.

This study uses methods of qualitative analysis of primary and secondary information, methods of synthesis and induction in the formulation of conclusions, and the foresight method to predict the future of such marketing behavioral practices.

The key limitation of this study and its conclusions is the continuation of the trend of inefficient consumption and non-acceptance of the principles of sustainable development in the economic development of enterprises and regions.

3. RESULTS

Let us consider the individual’s consumer behavior from the viewpoint of psychology. Anxiety about issues of possible infection or any other outcome unfavorable for the person forms strong emotions that contribute to making an impulsive purchase. Thus, discomfort increases due to the introduction of restrictions, the person becomes more vulnerable and prone to cognitive distortions, which means the person is easier to manage.

Most unconscious processes are the focus of modern marketing concepts, one of which is purpose-driven marketing. The idea is the demonstrative positioning of a company as fulfilling a social mission. In the conditions of the pandemic, the success of a business depends not only on focusing consumers’ attention on the winning sides of a particular product or service but also on the interest in carrying out measures to combat COVID-19.

Let us consider the individual’s behavior from the viewpoint of neoclassical economics in which at the basic level it is accepted that a person as an actor of economic relations is rational in their actions, that is a person: reacts exclusively to material incentives which means an increase or decrease in the price of a particular product or service, ignoring any kind of nudge coming from a business.

The manifesting symptoms of the market choice of an individual and the limited possibility of applying a marketing participation strategy to the market itself already transfer consciousness into the field of social intelligence described by D. Goleman in the work of the same name, claiming to be a cross-section of several sciences of applied content: official statistics (mathematical analysis and search for a sample of relevant focus groups), high-speed data processing of consumers themselves (“neural Wi-Fi” named by the author as a key feedback tool between sellers and buyers) and calculations of parameters and criteria for using the most dynamic market model reflecting the complexity and transience of changing product lines and market conditions themselves.

As a result of the study “Consumer Insights & Intent”, conducted by the Out of Home Advertising Association of America (OAAA) and Harris Poll, it has been revealed that in January 2021, the percentage of those who noticed outdoor advertising increased from 14% to 19%. However, the importance of digital advertising decreased: 75% of respondents began to attach less importance to it due to information overload, which indicates a tendency to irrational consumer behavior [17].

This example confirms the irrational nature of a person, since, being under the influence of an overabundance of information flow, an individual begins to focus their attention again on those aspects that did not seem so significant before the pandemic. And since the effect of advertising increases, it cannot be argued that a person is solely under the influence of the law of demand.

Thus, during the COVID-19 pandemic, it is more reasonable to analyze consumer behavior within the framework of behavioral economics, which takes into account social, cognitive, and emotional factors and combines both the provisions of neoclassical economic theory and the achievements of psychology, especially during depression and aberrative, deviant behavior.

Let us consider the individual’s consumer behavior during the pandemic of new coronavirus infection from the perspective of behavioral economics, the purpose of which is to predict the actions of such an actor as a household.

The existing perspective theory proves the phenomenon of loss aversion: a person experiences
2.5 times stronger negative feelings from all kinds of losses (including deterioriation of their own health) than positive ones from a state of complete satisfaction [18]. The growth of aggregate demand for personal protective equipment during the coronavirus epidemic confirms this thesis. Additionally, it is worth considering the emergence of mass agitation due to a decrease in the level of consciousness in the first wave of coronavirus in relation to some goods from the average consumer basket. For example, in Japan, there was an acute shortage of hygiene products due to information hysteria [19].

The authors of this paper propose a step-by-step analysis of consumers’ behavior, consisting of three periods: before the introduction of mass restrictions, during, and after their removal. The first period (before the introduction of mass restrictions) is characterized by the following determinants:

1) the consumer's tendency to rationalize consumption, i.e. the desire to purchase goods which have special deals on them;
2) emotional involvement, i.e. the presence of a set of certain characteristics in a product or service, that cause an individual to have a favorable mood;
3) preference of small brands to mass market – this determinant indicates the importance of individualization when making a purchase decision.

The second period (during mass restrictions) should be considered taking into account its features which are the novelty of the perception of the social way of life (remote work format, distance-learning format, self-isolation). This period is characterized not only by market uncertainty but also by consumers’ sensitivity to prices. Thus, consumers were not ready for possible financial difficulties, and businesses were not ready for new realities: B2C digital interaction became especially relevant, but at the same time it was not always easy to implement for a particular company.

Additionally, it is noted that the price factor played a key role during the introduction of mass restrictions: individuals who lost their jobs or faced other problems were particularly sensitive to fluctuations in food prices.

The third period (after the lifting of mass restrictions) is a combination of the features of the first and second ones. Based on this, new consumer habits have been formed:

1) the desire to purchase goods online;
2) tracking the price-quality ratio;
3) formation of propensity to rational consumption;
4) focusing on the company's involvement in the process of combating the spread of COVID-19, etc.

Thus, the following key marketing concepts should be implemented by companies taking into account the acquired new consumer habits: the concept of improving goods and production, intensification of commercial efforts, the concept of socio-ethical marketing [20]. Moreover, their implementation in the context of the COVID-19 pandemic can serve as a strategy for manipulating mass consciousness, since this type of control is hidden, and in the case of the desire to maximize the company's profits, it will become a fundamental part of the development of marketing concepts.

These ideas have been previously described by G. Thain and J. Bradley in their bestseller “Store Wars: The Worldwide Battle for Mindspace and Shelfspace, Online and In-store”, but more limited to focusing the buyers themselves on their choice of goods on the shelves, diverse retail and marketing concepts (segmentation, natural proliferation of the number of brands (retail branding), the role of quality and the value of price) [21].

Summing up everything described above, companies can place significant emphasis on the emotional factor and create new problems and then provide ways to solve them in order to increase sales. Also, applying the achievements of behavioral economics, business units have the opportunity to control the demand for the products or services they provide due to greater awareness of people, namely about the systematic mistakes made, manipulation of the superego of buyers, and finally going into the irrational component of social intelligence, based on the increasing hunger for consumption or non-stop shopping.

At the same time, by integrating Big Data, global TNCs and manufacturers of goods bring the situation in the markets to the appearance of new and relevant focus groups formatted for each product, and through monitoring feedbacks and analyzing differentiating features of customer demand we can talk about point variants of customer activity, about the level of correction of the depth of consumer expectation, according to motivation:
either the sequence of desires of the Maslow pyramid or, indulging unconscious desires of compliance with external sources of irritation.

Proceeding from this, the global operating platforms of cash flows and exchange of goods enter into a certain resonance of the discrepancy between the real volumes of trade and the induced demand of behavioral economics which in the phase of consumer development from the stage of stagnation and deflation passes into the stage of unrestrained hype demand and to the polarization of the uniqueness of each product/service to the requests of each potential customer/buyer/manufacturer.

The post-industrial world of the “knowledge economy” and Industry 4.0. are aimed at the taste and mental preferences of the target audience differing according to various standard criteria of growing consumption and also forming a system of maximum effective use of both the resources themselves and the course on the image component of each participant in the process. And this feedback keeps the market in a state of quasi-stability and helps to apply a personally developed advertising and marketing challenge strategy for each focus group. The marketing challenge is manifested in the imposition of dominant market opportunities for the participation of each consumer and producer in the creation of chains of interdependence on market conditions and cycles of its development or compression.

The consequence of this alignment of tasks of mutually beneficial solutions for both consumers and trading platforms of global markets is a set of measures, resulting in the bubbles of virtual inflating of placed assets being less reflected in the prime cost of the real sector of goods or services. This leads to more adequate responses of the system to any external influence/irritation and makes it possible to skillfully manipulate the minds of all participants in the process, as well as reduces the choice of each consumer to the necessary minimum of needs met by manufacturers. In other words, the process of purchasing power becomes dependent on a finite number of tradable assets, goods and services, stretched over time and adjusting to a discrete flow of consumer priorities. And the blurring of priorities allows to make a short-term, but the most effective forecast for the model of unrestrained consumption, reflecting the cognitive ability of the consumer's mind to make incoherent purchases under the influence of increasing new shocks caused by hype flashes of market conditions and unconscious involvement in the process of endless shopping.

4. DISCUSSION

The problem of dehumanizing each potential consumer in behavioral economics translates purchases from reasonably restrained motivated and rationally conscious options into the process of uncontrolled saturation with useless goods, like when one tries to quench his thirst with Coca-Cola and cannot overcome the ever-increasing thirst. Unlike physical saturation, consumer mental hunger makes a person even more deeply dissatisfied, and, as a result, unhappy.

Any further localization of consumers on lockdowns or associated with the final stepping into e-commerce threatens to separate zones of trade and consciousness into parallel and non-contiguous worlds, which, unlike Euclidean geometry, where they intersect at infinity, will themselves subside with the disappearance of the force of the request for the reaction of the irritation of advertising and the final completion of effective demand from a potential consumer.

Effective demand itself can and will, in the future, correlate with loyalty to the state and involvement in market relations from the standpoint of readiness to manipulate not only one's own consciousness but also the barriers of health and mental stability achieved where the mental state is blocked by the paradigm of the increasing flow of advertising and the marketing concept of infinitely increasing consumption.

As a consequence of this process of unrestrained and unconscious translation into the classical formula “money – goods – money”, the approach to the consumer in behavioral economics will be replaced first by the formula “imposed need – money – goods – new virtual need”, and then, changing the criteria and capabilities of each player in the market, there will be a final transformation in the minds of buyers to the formula “information – goods – money – a new virtual need”, which will transfer a rational person who knows how to count their needs according to their wallet to the paradigm of a mindless stream of consciousness, uncontrolled shocks of marketing strategies of consumer behavior, read by ICT and Big Data technologies for each potential market participant and accumulating “hooks” for their consciousness, for their pressure points of irritation of consumer hunger and for algorithms to predict mental states of maximum information breakdown and bursts of consumer activity in their digital image. At the same time, the product itself is no longer important, the information
of the victim's readiness is being sold, the buyer, having saved some money, unconsciously invests in something that can be imposed on them remotely and with a high probability of acceptance of their readiness to purchase.

5. CONCLUSION

Based on the results of the study, the following conclusions have been made.

1) From the viewpoint of the resources themselves of the post-pandemic recovery of world markets and requests for new product lines and more comfortable and targeted services, it is necessary to understand that behavioral economics is not a spontaneous “brain drain” and more skillful manipulation of labor resources displaced from traditional artificial intelligence (AI) management zones, but it is also a more concentrated localization for each potential point of growth, both within national economies and in the process of recreating global value-added chains.

2) Resources cease to be an unambiguously measurable resource in the information society and, depending on approaches, for example, when extracting profits from outsourcing and insourcing services, they change not only the internal policy of companies but also the very model of working in offices or online. Thus, making the business model and the labor structure serving it more flexible and vulnerable, there is no longer an institution of mentoring, smoke breaks before meetings, or five minutes for coffee breaks, which leads to the loss of family localization of corporate behavior, blurs traditional relations between old-timers and interns, destroys creative initiative within the concentration of the office biofield of decisions creatively made by “brainstorming” and increasingly virtualizes the management of companies that become more Cerberus or “Big Brothers” than commanding fathers or professional cheerleaders.

3) These resources are qualitatively becoming more cosmopolitan because the Internet works all over the developed world and gives an employee the opportunity to become a “servant of two masters” or even more, which almost always affects the main job and accumulates resentment due to the lack of feedback and constant dialogue between the parties, which overnight turns into an offended or unheard monologue.

4) Therefore, the only reality of using labor resources is to be a parallel symbiosis of online and offline, contributing to the maximum concentration of process participants in the wake of the company's common goals and objectives, with the gradual replacement of the lower levels of office management with AI algorithms and Big Data base systems that allow finding solutions from the point of view of common sense, sometimes without taking into account the human factor, which today is the cementing element of the development of any office and business because as N.A. Berdyaev said, “economy cannot be thought automatically”.

5) A real and only plausible scenario for the development of Industry 4.0. may be a single-source challenge from machines, namely AI algorithms, to the decrepit humanity to replace its creative and sensual capabilities, which is not yet available to computers, and this is our insurance for survival in the world of rational mathematically calculated efforts for the human mind, which is increasingly moving away from problems, living by the ideology of consumerism and narcissism, justifying its existence by claims to the top of the evolutionary and food chains, which has been so elegantly and carelessly destroyed by the first artificial virus which has already killed millions and showed the degree of panic of the growing doom to the remaining billions.

6) Therefore, the only reasonable and efficient ecosystem, like any mathematical model or a branch of science itself, should proceed from the principles of reasonable and self-sufficient limitation, find a compromise between the division of labor within the symbiosis of “man – machine” and restore the consequences of the climate catastrophe not only through the carbon and “green economy”, which is controversial and still unlikely, but through a new ideology of survival and a system of criteria for assessing everyone's admission to the processes of restoring the Earth's biorhythms and saving not much that we have been destroying with
arrogance and so far with impunity for centuries.

AUTHORS’ CONTRIBUTIONS

The study has been prepared jointly by five authors. Alexey S. Kharlamov has examined the deviations of consumers’ behavior from the standpoint of psychology and neoclassical economic theory. Elena V. Zenkina has characterized the actions of TNCs in international markets and global operating platforms to track and direct consumer behavior in the relevant direction. Valeriy M. Tumin and Vladimir A. Trifonov have analyzed the place of Industry 4.0 in the new era of digital marketing. Petr A. Kostromin has conducted a literary review of approaches to irrational consumer behavior and its causes.

REFERENCES


and synthesis of contemporary models involving uncertainty”, Journal of Anxiety Disorders, 2016, vol. 39, pp. 30-43. DOI: 10.1016/j.janxdis.2016.02.007


