

A Study of Innovations in E-Commerce during Covid-19 Pandemic

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Abstract: *In the days leading up to the COVID-19 pandemic, open innovations in the form of the deployment of digital marketing tools in the management portfolio were an option; Analysis of Customer Interactions During the Pandemic They suddenly became necessary at a time when economies were forced to close. The present study's comprehensive research goal is to describe the market-wide shifts in e-consumer behavior that occurred during the COVID-19 pandemic. The introduced study looks at the occasional and local points of interest that describe the business sectors of Focal and Eastern Europe. In an example of very nearly 14,000,000 Facebook clients, the client collaborations with ten chose delegates of the web based business area were recorded day to day during the 2020/2021 Christmas season enduring 49 days. Based on comparison with the first half of 2020 as the reference period, it was possible to identify the geographical specifics of e-consumer behavior as well as basic seasonality indicators by analyzing the nature and timing of interactions. The combination of the discoveries gave an information base to incorporating a fundamental variant of the model of the Coronavirus pandemic effect on e-customer conduct. It is possible to say that the pandemic-induced step change in e-behavior patterns merges with pre-pandemic behavior patterns in terms of changes in e-consumer behavior. By and large, it very well may be expressed that the transformative course of the progress from disconnected to online the Coronavirus pandemic seems, by all accounts, to be a huge speed increase component of unavoidable changes.*

Keywords: innovation; management; e-shop; interpersonal organization; facebook; pandemic; e-consumer behavior; The Czech Republic Latvia; provincial turn of events

I. INTRODUCTION

Two assumptions underlie this research. The first presumption, or rather the foundation of the board sciences, is an explanation that development is one of the basic functions of business. The second assumption is that the market will continue to change. Businesses are exposed to a significant amount of business risk as a result of the constant change in the global market. Market success is not automatically ensured by having the right product. Only in a few specific production areas is it possible to gain a price advantage over competitors. The physical limitations of traditional communication channels are real. The changes brought about by the COVID-19 pandemic also pose a threat to the final aspect of standard marketing, which is proximity to the customer in the sense that brick-and-mortar stores were the primary locations where business transactions were carried out.

Information technologies provided e-business pioneers with a significant competitive advantage when they first emerged. Organizations benefited both from shortening correspondence channels and streamlining business processes. A by-product of conveying e-business devices in business was data, which addressed a significant upper hand for organizations. Information helps to optimize production on the inside, and it also helps to optimize a wide range of tools used to build relationships with customers on the outside. The situation on the global market as well as the local markets has stabilized with the start of the new millennium, according to the key representatives from the ranks of businesses. The need to send IT instruments has been soaked. Only a small number of businesses, almost exclusively small and medium-sized businesses, were affected by the absence of information technologies' direct integration into business. Technology alone does not guarantee market success, which is an objective fact. Powerful utilization of data and correspondence innovations is a key factor in deciding seriousness, everything being equal, no matter what their size.

The market strife brought about by the unforeseen beginning of a new Covid pandemic in the first long periods of 2020 has generally tried the whole computerized framework, and the fact that it was the entire computerized foundation best depicts the intricacy of the circumstance. Only a handful of European nations did not, at least temporarily, shut down their traditional infrastructure. Nonetheless, it was not just about Europe, but the examples of emergency conduct were dominantly worldwide in nature. The consumer response was immediate, manifesting itself immediately in the form of a sudden increase in stock. Hence, by immersing fundamental necessities and initially eliminating saw dangers emerging from a potential lack of items, consumers have moved toward the digitization of cycles to obtain the majority of their requirements, including food. Because of the shortfall of customary framework, the predominant pace of interactions has been digitized.

II. THEORETICAL FRAMEWORK

We will gradually describe the current state of knowledge in the issue within the theoretical overview. This was both the digitization of most key processes ensuring the functioning of the consumer society and the digitization of simple interactions that replaced the physical interactions of people. In terms of utilizing technology to generate competitive advantage, the fundamental determinants of the issue will be discussed in the first section of the overview. In the second part, the outline will zero in on depicting the broke down market as far as its regional specifics. The third piece of the section will manage the portrayal of purchaser behaviors specifics in the climate of informal organizations.

The impact of open innovation on business competitiveness is unprecedented. Information technology as a source of competitive advantage. Whether it's the use of technology as a business by multiple entities or the direct application of information and communication technologies in business. Kristapsone and Bruna state that innovation organizations are at the very front of the present most significant organizations. In any case, profit isn't simply a space of innovation arrangement suppliers. Clients of these solutions likewise gain a significant upper hand.

According to Bumanis, Vitols, and Arhipova, the market offers a wide range of solutions, allowing businesses to actively combine their services with those of their suppliers to gain a competitive advantage. For instance, we can make reference to shopping objects, which are protests naturally generated or made by the client based on a past exchange. Examples of this include payment for travel insurance, a concert ticket, or a bus ticket. Data advances are likewise one of the potential determinants of provincial creation. Meijere and Tambovceva highlight the effective execution of technological solutions that empower the advancement of country regions. The authors rely on a comprehensive literature review, case studies, and their own empirical research in their study.

According to their research, technological advancements significantly facilitate rural development, particularly in e-commerce, healthcare, public services, and, finally, distance education. Digitization, as one part of technological innovation, can likewise be a significant gas pedal of improvement. Small and medium-sized businesses are also affected by this. Mokhtar et al., the authors in their review, point to this part of the use of innovation in business practice. Naturally, it is difficult to implement technological innovation, particularly in an emerging market. E-governance is yet another significant area in which innovation can be put to good use to generate benefits. Szopinski and Staniewski looked into people's willingness to use e-government services in European Union post-communist nations. The authors analyzed the signs of the utilization of electronic organization in an example of 7984 respondents from Bulgaria, the Czech Republic, Estonia, Lithuania, Latvia, Hungary, Poland, Romania, and Slovakia. Specifically, these included perusing sites worked by public authorities, laying out contacts with public specialists, downloading structures necessary to get a public help, sending finished electronic structures to public administration offices, and reaching public specialists to examine an important plan. In their research, the creators confirmed the presence of a genuinely significant connection between the respondents' place of home and their propensity to utilize specific types of e-government. Van de Walle et al. looked at the reasons why people don't use eGovernment services.

They conclude, based on the findings, that e-government services are not accepted because hardware and the Internet are unavailable. This is not surprising. However, they also point out that, in terms of soft factors like the comfort factor, its significance is significantly higher than initially anticipated. The final determinant is also connected to this; According to the authors, a sufficient supply of non-electronic alternatives is an additional significant determinant of rejection. As of now, we come to one of the critical findings in the hypothetical audit of the point. In particular, the fact that both physical proximity and a sufficient supply of alternatives in the form of traditional practices play a significant

role in consumer decision-making—or, to put it another way, these factors can be included in the primary determinants of e-consumer behavior. The onset of the COVID-19 pandemic eliminated both of these factors significantly.

E-Purchaser Conduct With regards to Virtual Social NetworksThe peculiarity of informal organizations and their steady joining into the traditionalmarketing blend have been noticed for over 10 years. There has likewise been a relativelysignificant interest of the scientific local area in examination into the utilization of social networksto support business venture. The authors who take into account the geographical aspect mentioned in our study are the focus of the subsequent literary research. Sceulovs and Gaile-Sarkane [30]state that informal communities address the most well known electronic device of correspondence. Despite the fact that this assertion was hypothesized decade prior, its topicality and its validityremain forward-thinking. In addition, despite the market's apparent saturation prior to the global pandemic, the increasingly better prospect has not changed significantly over the past ten years. The topic is becoming more important, particularly in relation to retail. According to Linina, Bruksle, and Zvirgzdina , retail plays a significant role in the state economy because it is where customers and businesses form relationships. This relationship benefits both parties. Companies strive to maximize benefits in the form of increased revenue and profit, naturally. The goals of customers are much more varied. The intelligence of interpersonal organizations makes an ideal preconditionfor arriving at the objectives of the two partners.

Starting Points for Research on e-Consumer Behavior in the COVID-19 Pandemic

As previously mentioned, stakeholders get the most out of their interactions in digital ecosystem environments like Facebook virtual communities. Companies can increase their competitive advantage over their online passive competitors through their online activities . Customers maximize their benefits by actively searching for products that best meet their needs . These requirements can be met in either a quantitative or qualitative manner. In the case of maximizing the benefits of online shopping, time is the primary cost to the customer, naturally, in addition to the direct expenditure of financial resources. The constraints of a structured workday frequently limit the effective use of this resource. We have reached the core of our research efforts over the past 15 months at this point . We see the advancement of cycles connected with the powerful timingof promoting exercises of business substances with regards to our examination into the effect ofthe Coronavirus pandemic on e-purchaser conduct as key, as the requirements connected with theattempts to dial back the pandemic in 2020 (as abrupt conclusion of economies)have caused significant changes in conventional examples of buyer conduct. It is currently impossible to provide an answer to the question of how long-lasting these changes are. As a result, the research challenge lies in determining the specific behavioral shifts in e-consumers brought on by the new coronavirus pandemic. Materials and MethodsAs mentioned in previous chapters, the market has undergone a significant transformation under pressure of measures applied to slow down the pandemic of a new coronavirus. This research problem was deconstructed from the point of view of the feasibility of its solution both in the context of the specific market of selected Central and Eastern European countries and in the context of the time context of the effects of the pandemicC. Most aspects of life have been affected by these measures. Our study's objective is to provide the empirical data needed to build a model of how the COVID-19 pandemic affects e-consumer behavior.

The interaction of a significant portion of e-commerce representatives with their customers via official Facebook fan profiles is the focus of the study. Facebook was chosen as a platform to represent the place where consumer interactions were implemented. These interactions were moved from the offline environment to the online environment as a result of pandemic measures. In the worldwide market, the interpersonal organization Facebook isthe predominant stage with very nearly three billion dynamic clients, so for the reasons for ourresearch it addresses a normal decision.

III. LIMITATIONS

As expressed in the presentation of the review, organizations are presented to significantbusiness risk under the strain of persistent changes in the worldwide market. Product,price, or advancement as the foundations of a showcasing portfolio, have been confined by thelimitations of the actual world for quite a while. However, there were still products that benefited from consumer behavior patterns that were established and relatively stable. But this too has come to an end. Consumers have been forced to significantly reduce their physical activity as a result of the pressures of measures

taken to slow the spread of the new coronavirus pandemic. It was feasible to look as the market went from offline to on the web. Being near the client at this point not implied being close to him actually, which, obviously, doesn't imply that the component of vicinity has lost its significance. Clients have moved quite a bit of their exercises to the digital world. In this age of social distance, virtual communities have emerged as a venue for socialization. Management professionals, both academics and practitioners, are constantly looking for novel approaches to process optimization in order to gain a competitive advantage as science advances. The optimization also took place in real time in this instance, and the supply side of the market quickly adapted to the new conditions. Both sides of the market were looking for more ways to get the most out of their advantages. The supply side primarily focused on increasing turnover and aggregated a relatively large volume of user data. The demand side sought higher rates of value and satisfaction to maximize its benefits. The time that this procedure required was the price to pay for maximizing the benefits.

IV. CONCLUSION

Notwithstanding, during the conclusion of the economy, time was generally an accessible variable. The study presents a summary of the knowledge that has been accumulated over nearly fifteen months. Due to ongoing in-depth analysis of some of the research parameters, it is not yet the final product of the research, despite significant efforts. As a result, the interpretations are primarily based on descriptive processing, which, in our opinion, does not diminish the findings' significance or value; In contrast, it highlights the topic's current relevance while also providing insight into the topic's evolution over time (in addition to providing information that can be used in subsequent research). With this assertion, we additionally close the conversation of the outcomes, and go on with the synopsis of findings by answering both the fundamental exploration question and the five decayed research sub-inquiries in the conclusion of the introduced study.

By answering the research question in its component parts, the present study aims to remove the major limitations of the comprehensive research. Multinational corporations meet many of the digital requirements of its users. These offer a less expensive alternative to the domestic market, which is always changing. Thus, Latvian users' e-consumer behavior is largely global, whereas the Czech market remains primarily regional, demonstrating strong domestic supply and strong domestic demand. With this assertion, we show up at the response to the primary research question in its perplexing structure. According to the findings, e-customer behavior is influenced by the geographical specificity of the region. E-commerce research must therefore take into account the national characteristics of consumers for various geographical units. Albeit the Web is a worldwide medium, its users maintain a specific level of local specificity, no matter what the end of a significant number of actual hindrances. Additionally, this fact emphasizes the significance of ongoing subject matter analysis. As a result, the primary goal of our research is to generate knowledge that can be applied in both science and business.

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