

Regional E-Commerce Development in the Context of the Covid-19 Pandemic

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Abstract

The use of e-commerce technologies in trade has been developing for several decades. Nevertheless, often the share of online purchases in the total retail trade turnover in some regions remains insignificant. The COVID-19 pandemic has been a strong driver for increasing the digital development of the population, including in the use of e-commerce. The article analyzes the direct impact of the COVID-19 pandemic on the development of e-commerce, using the example of the regions of the Russian Federation, and compares the corresponding growth rates. It is concluded that e-commerce has the greatest potential for its development in the case of initially low development in the region, due to the involvement of new users, rather than in more developed regions.

Key-words: E-Commerce, Regional Trade, Internet Technologies, Remote Trade, Digital Trade, Covid-19 Pandemic

1. Introduction

E-commerce, as a direction of development of remote trade, is becoming increasingly important in the modern life of society. The use of digital technologies in trade activities allows for better provision of the population with a product range, affecting the standard of living in general. Traditionally, remote trade is designed primarily to provide a product range of the territory with a low population density. Nevertheless, e-commerce is currently developing in large cities, where the problem of product assortment is the least acute.

It is advisable to highlight, first of all, a greater propensity for innovation in the most economically developed regions as the main reason for this situation. The importance of developing regional e-commerce is also noted in the work of L. Wang [39].

The introduction of new technologies in trade is devoted to the work of many authors. The work of M.J. Ferreira [8] is devoted to the analysis of digital technologies in retail trade. In particular, the paper shows that multi-party trading platforms combine online and offline markets to make shopping more convenient for consumers. Currently, an increasing number of trade organizations consider e-commerce as part of the multi-channel strategy of the firm [12]. An increasing number of trade organizations are switching to multi-channel sales, integrating various forms of trade [33]. Most retailers are currently undergoing a major transformation, becoming omnichannel retailers[1]. Marketplaces also play an important role in trade[29].

In turn, digital technologies can stimulate the decision of potential customers to purchase goods for trade organizations[17], as well as reduce the number of costs, primarily rent [21]. As shown in the work by G.N. Chernukhina [4], this allows trade to develop in conditions of a deficit of loan capital.

The increase in the share of online retail sales indicates a change in consumer behavior. The companies that were the first to react quickly to the change in the structure of demand were able not only to survive during the pandemic but also to increase their profits. It is important to note that the study of consumer behavior, the characteristics of age, and gender categories is a priority task in the formation of assortment policy, as well as the renewal and reorganization of the product range.

In particular, the work of C. Guthrie [11], J. Moon [26], D. Gabriel [9], and others shows the transformation of consumer behavior patterns in the Internet environment amid the pandemic. Direct analysis of consumers, the specifics of the formation of their requests in modern trade are presented in the work of O.S. Karashchuk [15]. The work of Juliana [14] also shows the high role of social interaction of potential consumers.

It is shown in the work of H. Moxsin [25], using the example of Malaysian buyers, that at present, the assumed risk of non-fulfillment and, accordingly, the financial risk when forming an order remain in the minds of consumers.

As a result of the analysis of consumers, several authors note the high role of mobile digital technologies [30]. This is especially true for millennials. Thus, the current direction of the development of digital commerce is connected not only with the wired connection of users to the Internet but also with the development of cellular networks.

The main task of the development of remote trade is the formation of a product range in regions with low population density. In this regard, it is appropriate to note the high social

significance of the development of e-commerce as a form of remote trade. It is shown in the work of E.A. Mayorova [23] that in modern conditions, an increasing number of trade organizations pay their attention to solving this problem. As mentioned earlier, the social role of remote trade is primarily manifested in the formation of a product range in regions with low population density. However, it is also worth noting such functions of e-commerce as its positive impact on pricing, organization of services for low-mobility groups of the population, and others. Thus, the problem of pricing for socially significant goods in the context of the state's food security is analyzed in detail in the work of E.A. Mayorova [22]. Y. Syaglova [35] notes that the further growth of the e-commerce market in Russia will occur due to active participation in the sales of product categories. The delivery of goods, in particular, the associated problem of unethical returns, is presented in the work of H. Chang [2]. C. Wang [38] noted that the surge in e-commerce has resulted in many businesses facing an influx of product returns.

The COVID-19 pandemic has had an impact on the way people live their daily lives. Various restrictions on the movement of residents were periodically imposed in many countries of the world. In addition, the population also tried not to leave their homes in conditions of high risk of infection. In this regard, Internet technologies have become very popular, and in turn, they stimulate the population to accept new technologies of trading activities. In particular, the work of M. Naeem [27] shows the prospects of non-cash forms of payment for goods in the context of a pandemic. As shown in the work of A. Nagurney [28], the COVID-19 pandemic also caused a transformation in the formation of supply chains. The work of Q. Ding [6] shows the economic features of controlling the risks of developing coronavirus infection in the logistics system of e-commerce. The work of R. Ishfaq [13] also shows the high role of digital technologies in supply chains.

Amid the pandemic, it is appropriate to compare the development vector of both the natural development of e-commerce and its development under the influence of the stimulating factor caused by the COVID-19 pandemic.

2. Methods

It was proposed to use the development of electronic commerce on the example of the Russian Federation as an information base of the study. This choice is explained by a rather strong regional differentiation. In particular, the maximum development of e-commerce was in Moscow – 9.3%, while in many regions sales via the Internet are insignificant, at the level of 0.1-0.2%. The

growth rate of the share of sales via the Internet also differs – if in the Russian Federation the growth rate is 95% as a whole, then in several regions it was more than 500% – these are regions where previously sales via the Internet did not exceed 0.5% (Orenburg Region, Kamchatka Territory, and others).

The data of the Federal State Statistics Service of the Russian Federation was used as a source of information. It should be noted that the calculation methods differ from one organization to another. Thus, if according to the Federal State Statistics Service of the Russian Federation [41] the share of Internet sales in the total volume of retail trade in 2020 is 3.9%, then according to the Association of Internet Trade Companies [42] the share of online purchases was 9,6% of the total retail turnover. It is also important that in the first half of the year it reached 10.2%, which is determined by the impact of the COVID-2019 pandemic. However, according to the Federal State Statistics Service, the turnover of retail trade in non-food products in April 2020 decreased by 36.7%. In this regard, a number of the largest non-food electronic platforms began to sell food and essential goods. The decision of the "Lamoda" company to cooperate with the retailer "VkusVill" and the introduction of long-term food products in its range brought the company an increase in turnover by 32% at the end of last year.

Thus, the methods of the study suggest a comparison of the pace of development of e-commerce during the pandemic and before it, which allows drawing qualitative conclusions about the impact of stimulating factors on the development of e-commerce. The study also analyzes the impact of factors that are also directly related to the sphere of trade.

3. Results

The overall increase in the share of sales via the Internet for 2020 compared to 2019 was 95%, while the value of 18% was noted in the previous period. This allows concluding that the share of sales via the Internet has a high impact in the context of the COVID-2019 Pandemic. Table 1 shows the distribution of the regions of the Russian Federation by the share of online sales

Table 1 - Distribution of regions of the Russian Federation by the share of online sales

| The share of online sales in the total volume of retail trade turnover, % | 0 to 1% | 1.1 to 2.0% | 2.1 to 3.0% | Over 3% |
|---|---------|-------------|-------------|---------|
| Share of regions, 2019, % | 72 | 19 | 3 | 6 |
| Share of regions, 2020, % | 11 | 46 | 31 | 12 |

Source – compiled by the authors based on the data of the Federal State Statistics Service of the Russian Federation [41]

As can be seen from Table 1, the level of sales above one% has been achieved in the vast majority of regions, but there is still no significant value of sales via the Internet – only in 12 regions the share of sales via the Internet exceeded 3%.

Table 2 shows the ratio of the growth rate of e-commerce to the share of Internet sales achieved in 2020.

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| The share of Internet sales in the total volume of retail trade turnover, % | 0 to 1% | 1.1 to 2.0% | 2.1 to 3.0% | Over 3% |
|--|---------|-------------|-------------|---------|
| The growth rate in 2019, % | | | | |
| Minimum | 75 | 75 | 82 | 95 |
| Maximum | 300 | 300 | 275 | 153 |
| Average | 138 | 141 | 149 | 117 |
| The growth rate in 2020, % | | | | |
| Minimum | 500 | 122 | 153 | 131 |
| Maximum | 319 | 567 | 414 | 266 |
| Average | 225 | 257 | 242 | 183 |
| The ratio of the growth rate of the average share of sales via the Internet in 2020 to 2019, % | 231 | 182 | 162 | 156 |

Source – compiled by the authors based on the data of the Federal State Statistics Service of the Russian Federation [41]

As can be seen from Table 2, the main potential for its development of e-commerce is acquired at the expense of regions where previously its development was the least. This is primarily since the population has previously used e-commerce technologies in localities with a high proportion of purchases via the Internet, and the growth of sales via the Internet was largely determined by forced self-isolation.

The period of forced self-isolation led to the involvement of buyers in e-commerce in regions with an initially low share of purchases via the Internet.

Table 3 shows the ratio of the growth rate of sales via the Internet with the direct use of telecommunications technologies by the population.

Table 3 - The ratio of the growth rate of sales via the Internet with the direct use of telecommunications technologies by the population.

| The share of Internet sales in the total volume of retail trade turnover, % | 0 to 1% | 1.1 to 2.0% | 2.1 to 3.0% | Over 3% |
|--|---------|-------------|-------------|---------|
| The ratio of the growth rate of the average share of sales via the Internet in 2020 to 2019, % | 231 | 182 | 162 | 156 |
| Internet usage by the population, % | | | | |
| Minimum value | 77 | 71 | 72 | 83 |
| Maximum value | 91 | 92 | 91 | 96 |
| Average value | 84 | 82 | 82 | 88 |

Source – compiled by the authors based on the data of the Federal State Statistics Service of the Russian Federation [41]

As can be seen from Table 3, the growth of e-commerce is not directly related to the use of the Internet by the population. Thus, there is also a higher share of sales via the Internet only in regions that have a relatively high share of sales via the Internet.

The share of retail trade networks is often considered as one of the characteristics of trade development. Table 4 shows the ratio of the growth rate of sales via the Internet with the development of retail trade networks.

Table 4 - The ratio of the growth rates of sales via the Internet with the development of retail trade networks

| The share of Internet sales in the total volume of retail trade turnover, % | 0 to 1% | 1.1 to 2.0% | 2.1 to 3.0% | Over 3% |
|---|---------|-------------|-------------|---------|
| Share of retail trade networks, % | | | | |
| Minimum value | 8 | 13 | 25 | 40 |
| Maximum value | 44 | 51 | 59 | 60 |
| Average value | 26 | 37 | 37 | 46 |

Source – compiled by the authors based on the data of the Federal State Statistics Service of the Russian Federation [41]

Thus, it can be seen from Table 4 that the development of the share of sales via the Internet is still more widely developed in regions where there is also a high level of trade development.

4. Discussion

The results obtained, based on the example of regional trade in the Russian Federation, are directly related to the conclusions obtained by various researchers in the world. Thus, the work of H. Chang, [3] based on data from the largest agri-food e-commerce platform in Taiwan, shows that the COVID-19 pandemic increased sales by 5.7% and the number of customers by 4.9%. The work of A. Marino [20] shows the directions of regional development in the context of overcoming coronavirus infection, and also shows the high role of the use of various digital technologies. The importance of regional logistics development is shown in the work of X. Tang [36]. As for the Russian Federation, it is shown in the work of L.M. Sadykova [31] that the development of Internet channels is gaining a significant role in the implementation of insurance products, and in the work of V. Zhurakovskaya – on the example of full-time and distance school education.

However, the work of P. Dannenberg [5] shows a general rise in grocery shopping and a disproportionately high growth in online grocery shopping, but also notes a relatively minor transition from a grocery store to a fully electronic one. This conclusion also confirms the hypothesis that if in regions with a small share of purchases via the Internet, the promotion of the use of digital technologies in trade was felt quite strongly, then it is also possible to distinguish a situation where, with sufficient development of the network of these technologies and an increase in the lockdown period, the further use of digital technologies in trade after the removal of restrictions remains a

matter of discussion. The formation of a contactless trading environment was most important in the context of the pandemic [32].

The development of new formats of retail trade in the context of the trend of digitalization of trade is considered in the work of D.K. Gauri [10].

As mentioned earlier, improving usability is also important in the development of Internet technologies. C. Koetz [18] identifies such categories of improving the efficiency of digital commerce as providing an improved multi-channel shopping experience, rewarding loyalty and connecting with customers, facilitating purchases on social networks, and admiring customers. It is advisable to pay special attention to mobile commerce in this situation. Despite the rapid spread of smartphones among consumers of digital fashion, their attitude to mobile applications and retailers' websites is causing growing dissatisfaction [37]. It should be noted that smartphones are the device that is directly located near the buyer permanently, being the center of his/her digital life. In this regard, several researchers [7] note the continuity of the shopping process, in contrast to a one-time visit to traditional stores. S. Singh [34] notes the potential for the development of e-commerce in the presence of multiple connections, which largely determines the level of customer involvement in digital commerce.

As noted in the article of O.S. Karashchuk [16], the growth of the share of retail e-commerce is an important indicator of the economic and social well-being of the whole country. It is also worth noting that in Russia, retail in its modern form has existed for a little more than twenty years, so its stable and effective development is one of the most important triggers for the economic growth of the entire retail trade. In particular, it is the grocery retail that is particularly acutely experiencing any crisis phenomena in the economic and social life of the country. The author also notes such factors as competition, insufficient demand, and high taxes as a deterrent to the development of trade in general.

However, it is important to note that the development of e-commerce does not completely replace other forms of the trade organization. Currently, retail stores and, in particular, shopping centers are experiencing a period of decline caused by the development of digital technologies in the modern economy[19]. Nevertheless, the article [19] analyzes how digital technologies can be used in traditional trade as well. It is also important to note the opinion of various scholars [24] that the use of multi-channel sales leads to an increase in customer loyalty to the product range.

5. Conclusion

Although the development of e-commerce has been going on for several decades, the growth of the share of online purchases is characterized by a fairly high rate. Currently, there are still quite a large number of regions where online sales are less than one%. The COVID-19 pandemic was a stimulating factor that largely contributed to its growth.

The authors, using the example of the Russian Federation, show that the largest growth in the share of e-commerce is currently achieved in regions where the share of Internet sales at present does not exceed two% – the maximum achieved value is 567%, while the indicated growth was 267% in regions with greater development of e-commerce.

As a result of the study, it can be concluded that the growth of the share of e-commerce under the influence of a stimulating factor, such as a pandemic is largely interrelated with the involvement of new customers in e-commerce.

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References

- Cakir, G., Iftikhar, R., Biellozorov, A., Pourzolfaghar, Z., and Helfert, M. (2021). Omnichannel retailing: Digital transformation of a medium-sized retailer. *Journal of Information Technology Teaching Cases*, doi:10.1177/2043886920959803
- Chang, H., and Guo, Y. -. (2021). Online fraudulent returns in Taiwan: The impacts of e-retailers' transaction ethics and consumer personality. *Journal of Retailing and Consumer Services*, 61 doi:10.1016/j.jretconser.2021.102529
- Chang, H. -, and Meyerhoefer, C. D. (2021). COVID-19 and the demand for online food shopping services: Empirical evidence from Taiwan. *American Journal of Agricultural Economics*, 103(2), 448-465. doi:10.1111/ajae.12170
- G. N. Chernukhina (a)*, E. A. Krasilnikova (b), R. V. Kamanina (c) Impact Of A Crisis On The Economic Performance Of Enterprises In Russia. *II International Scientific Conference GCPMED 2019 - "Global Challenges and Prospects of the Modern Economic Development" // European*

Proceedings of Social & Behavioural Sciences EpSBS e-ISSN: 2357-1330. Article no: 128. Pages 887-891. Doi: 10.15405/epsbs.2020.03.128.

Dannenberg, P., Fuchs, M., Riedler, T., and Wiedemann, C. (2020). Digital transition by COVID-19 pandemic? the german food online retail. *Tijdschrift voor Economisch en Social e Geografie*, 111(3), 543-560. doi:10.1111/tesg.12453

Ding, Q., and Zhao, H. (2021). Study on e-commerce logistics cost control methods in the context of COVID-19 prevention and control. *Soft Computing*, doi:10.1007/s00500-021-05624-

Faulds, D. J., Mangold, W. G., Raju, P. S., and Valsalan, S. (2018). *The mobile shopping revolution: Redefining the consumer decision process*. *Business Horizons*, 61(2), 323-338. doi:10.1016/j.bushor.2017.11.012

Ferreira, M. J., Moreira, F., Pereira, C. S., and Durão, N. (2020). *The digital transformation at organizations – the case of retail sector* doi:10.1007/978-3-030-45688-7_56

Gabriel, D., and Loredana, D. (2020). Using internet as a solution for sales in COVID-19 pandemic: E-commerce. Paper presented at the Annals of DAAAM and *Proceedings of the International DAAAM Symposium*, , 31(1) 104-110. doi:10.2507/31st.daaam.proceedings.014

Gauri, D. K., Jindal, R. P., Ratchford, B., Fox, E., Bhatnagar, A., Pandey, A., . . . Howerton, E. (2021). Evolution of retail formats: Past, present, and future. *Journal of Retailing*, 97(1), 42-61. doi:10.1016/j.jretai.2020.11.002

Guthrie, C., Fosso-Wamba, S., and Arnaud, J. B. (2021). Online consumer resilience during a pandemic: An exploratory study of e-commerce behavior before, during, and after a COVID-19 lockdown. *Journal of Retailing and Consumer Services*, 61 doi:10.1016/j.jretconser.2021.102570

Hänninen, M., Kwan, S. K., and Mitronen, L. (2021). From the store to omnichannel retail: Looking back over three decades of research. *International Review of Retail, Distribution and Consumer Research*, 31(1), 1-35. doi:10.1080/09593969.2020.1833961

Ishfaq, R., Davis-Sramek, E., and Gibson, B. (2021). Digital supply chains in omnichannel retail: A conceptual framework. *Journal of Business Logistics*, doi:10.1111/jbl.12277

Juliana, Pramono, R., Djakasaputra, A., and Bernarto, I. (2020). Observational learning and word of mouth against consumer online purchase decision during the pandemic COVID-19. *Systematic Reviews in Pharmacy*, 11(9), 751-758. doi:10.31838/srp.2020.9.106

Karashchuk, O.S., Mayorova, E.A., Nikishin, A.F., Kornilova, O.V. *The Method for Determining Time-Generation Range*. SAGE Open, 2020, 10 (4). DOI: 10.1177/2158244020968082

Karashchuk, O; Mayorova, E; Nikishin, A; Pankina, T. Factors Hindering Retail Development in Russia. *Vision 2025: Education Excellence and Management of Innovations Through Sustainable Economic Competitive Advantage*. 2019, 7819-7824.

Kim, H. Y., Lee, Y., cho, E., and Jung, Y. J. (2020). *The digital atmosphere of fashion retail stores*. *Fashion and Textiles*, 7(1) doi:10.1186/s40691-020-00217-6

Koetz, C. (2019). Managing the customer experience: A beauty retailer deploys all tactics. *Journal of Business Strategy*, 40(1), 10-17. doi:10.1108/JBS-09-2017-0139

Margetis, G., Ntoa, S., and Stephanidis, C. (2019). *Smart omni-channel consumer engagement in malls* doi:10.1007/978-3-030-23525-3_12

- Marino, A., and Pariso, P. (2020). Value governance, digital divided, and economic inequality in Italy during the COVID-19 emergency. Paper presented at the *ACM International Conference Proceeding Series*, 45-53. doi:10.1145/3409929.3414736
- Masebe, N., Moseneke, M., Burger, M., and van Heerden, A. H. (2020). *Digital disruption in retail: Management strategies for South African shopping centers* doi:10.1007/978-3-030-50791-6_30
- Mayorova, E. (2018). Changes in Prices for Staple Dairy Products in Russia. *Proceedings of the 32nd International Business Information Management Association Conference, IBIMA 2018*, ISBN: 978-0-9998551-1-9, November 15-16, 2018, Seville, Spain, 3796-3800.
- Mayorova, E. 2019. Corporate social responsibility disclosure: Evidence from the European retail sector. *Entrepreneurship and Sustainability Issues*, 7(2), 891-905. [http://doi.org/10.9770/jesi.2019.7.2\(7\)](http://doi.org/10.9770/jesi.2019.7.2(7))
- Mladenow, A., Mollova, A., and Strauss, C. (2018). Mobile technology contributing to omni-channel retail. Paper presented at the *ACM International Conference Proceeding Series*, 92-101. doi:10.1145/3282353.3282371
- Moksin, H., Fung, K. I., Ahmad, S. N. B., and Nazri, S. M. (2019). Consumer's repurchase behavior intention in online shopping: A Malaysian perspective. *International Journal of Innovation, Creativity, and Change*, 6(3), 339-350.
- Moon, J., Choe, Y., and Song, H. (2021). Determinants of consumers' online/offline shopping behaviours during the COVID-19 pandemic. *International Journal of Environmental Research and Public Health*, 18(4), 1-17. doi:10.3390/ijerph18041593
- Naeem, M., and Ozuem, W. (2021). The role of social media in internet banking transition during COVID-19 pandemic: Using multiple methods and sources in qualitative research. *Journal of Retailing and Consumer Services*, 60 doi:10.1016/j.jretconser.2021.102483
- Nagurney, A. (2021). Optimization of supply chain networks with inclusion of labor: Applications to COVID-19 pandemic disruptions. *International Journal of Production Economics*, 235 doi:10.1016/j.ijpe.2021.108080
- Popenkova, D. K., and Nikishin, A. F. (2020). Prospective directions of e-commerce development. *Journal of Advanced Research in Law and Economics*, 11(4), 1337-1344. doi:10.14505/jarle.v11.4(50).30
- Rodrigues, F. S., and Coelho, A. I. (2021). Omnichannel in FMCG: *Digitally enhancing retail consumer journey* doi:10.1007/978-981-33-4183-8_30
- Sadykova L.M., Donetskova O.Yu. Online sales channels: current state and prospects // *Azimuth of Scientific Research: Economics and Administration*. 2020. V. 9. No. 3 (32). p. 144-148.
- Sahinaslan, O., Sahinaslan, E., & Gunes, E. (2021). Review of the contributions of contactless payment technologies in the COVID-19 pandemic process. Paper presented at the *AIP Conference Proceedings*, , 2334 doi:10.1063/5.0042225
- Shao, X. (2021). Omnichannel retail move in a dual-channel supply chain. *European Journal of Operational Research*, doi:10.1016/j.ejor.2020.12.008
- Singh, S., and Swait, J. (2017). Channels for search and purchase: Does mobile internet matter? *Journal of Retailing and Consumer Services*, 39, 123-134. doi:10.1016/j.jretconser.2017.05.014

- Syaglova, Y. (2019). Digital transformation in food retailing. Paper presented at *the IOP Conference Series: Earth and Environmental Science*, 274(1) doi:10.1088/1755-1315/274/1/012099
- Tang, X., and Wang, G. (2020). Design and analysis of e-commerce and modern logistics for regional economic integration in wireless networks. *Eurasip Journal on Wireless Communications and Networking*, 2020(1) doi:10.1186/s13638-020-01816-z
- Tupikovskaja-Omovie, Z., and Tyler, D. (2020). Clustering consumers' shopping journeys: Eye tracking fashion m-retail. *Journal of Fashion Marketing and Management*, 24(3), 381-398. doi:10.1108/JFMM-09-2019-0195
- Wang, C. -, Dang, T. -, and Nguyen, N. -. -. (2021). *Outsourcing reverse logistics for e-commerce retailers: A two-stage fuzzy optimization approach*. *Axioms*, 10(1) doi:10.3390/axioms10010034
- Wang, L., and Li, H. (2021). The influence of e-commerce and modern logistics on regional economic structure and scope. Paper presented at *the IOP Conference Series: Earth and Environmental Science*, , 632(2) doi:10.1088/1755-1315/632/2/022046
- Zhurakovskaya, V., Sichinava, A., Simakova, T., Olicheva, O., Rykov, S., Valeeva, J., . . . Ilyashenko, S. (2020). Innovations in education—the development of a new pedagogical technology of a combinational type, focused on the development of the personality of students. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(4), 1-14. doi:10.3390/joitmc6040123 Federal State Statistics Service of the Russian Federation. URL: <http://www.gks.ru/> (reference date April 30, 2021). *Association of E-commerce Companies*. [Electronic resource] – Access mode <http://www.akit.ru> (reference date April 30, 2021).