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ANTIMONOPOLY ASPECTS OF BIG DATA UTILIZATION IN E-COMMERCE: INTERNATIONAL AND NATIONAL EXPERIENCE

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Abstract: This article examines the pressing issues of antimonopoly regulation concerning the use of Big Data in e-commerce. The author provides a detailed analysis of how the processing and control of large data volumes can lead to market distortion, including the creation of entry barriers for new market participants, personalized pricing, algorithmic collusion, and self-preferencing by platforms in favor of their own products. The study offers a comparative analysis of antitrust approaches in the European Union, the United States, and China based on specific cases and precedents (Amazon, Google, Alibaba). Special attention is paid to the legislation of the Republic of Uzbekistan, particularly the new Law "On Competition" (№. LRU-850), which, for the first time, includes specific provisions regarding digital platforms and the use of Big Data. Based on international experience, recommendations are formulated for the further improvement of national antimonopoly regulation in the context of the digital economy.

Keywords: Big Data, antimonopoly regulation, e-commerce, digital economy, dominant position, personalized pricing, algorithmic collusion, self-preferencing.

Introduction

In modern e-commerce, Big Data has become a strategic resource that significantly influences the competitive environment. This term generally refers to large volumes of heterogeneous data that companies collect and analyze at high speed to obtain commercially significant information. In the field of e-commerce, such data may include consumer behavior, purchase history, search queries, product ratings, and much more. The processing of such data enables online platforms to improve the personalization of services and enhance efficiency; however, it simultaneously creates new antimonopoly risks. Major technology companies with unique access to vast datasets gain competitive advantages that may hinder market entry for new players and distort competition conditions. As a result, antimonopoly authorities worldwide are closely monitoring how the use of Big Data impacts competition in the digital economy [1].

The purpose of this article is to examine how the application of Big Data can affect competition in the e-commerce sector and what measures regulators in different countries are taking to prevent exclusionary practices. Special attention is given to international experience—the practices of the European Union (EU), the United States, and China—as well as Uzbekistan's new national legislation. The article analyzes key legal provisions (such as Article 102 of the Treaty on the Functioning of the EU, Section 2 of the U.S. Sherman Act, and China's antimonopoly legislation) and provides precedent cases (cases against Amazon, Google, Alibaba, and others) that illustrate current trends. Based on this comparison, conclusions will be drawn about the most effective approaches and recommendations will be offered for areas that could be considered in Uzbek competition regulation practice.

Big Data and Competition in E-Commerce

The use of Big Data can affect competition in e-commerce in various ways. On the one hand, the extensive use of data allows companies to better meet consumer demand—for example, recommendation systems help customers find the products they need more quickly, while sellers can optimize inventory. On the other hand, the concentration of large datasets in the hands of certain major players may lead to the emergence of market power, which carries the risk of restricting competition. Let us consider the main aspects:

• **Entry Barriers and Strengthening of Dominance.** Data is often referred to as the "new oil" of the digital economy. The holder of an extensive database of user and transactional information gains a competitive advantage that is difficult for new market entrants to replicate. For example, global e-commerce platforms such as Amazon and Alibaba accumulate vast amounts of information on the behavior of buyers and sellers, which allows them to continually improve their services and strengthen their market positions. As a result, entry barriers for new firms increase—it becomes difficult for them to compete without comparable data resources and analytical capabilities. Antimonopoly regulators note that data is becoming an important factor when assessing dominance in digital markets. For instance, in China, the 2021 Guidelines on Platform Economy explicitly state that a company's ability to collect and process large datasets is one of the criteria for determining a dominant position [2].

• **Personalized Pricing and Discrimination.** The processing of large volumes of consumer data enables dynamic and personalized pricing—setting different prices for different users based on their profile, purchasing power, or previous behavior. From an economic perspective, this may increase pricing efficiency, but there is a risk of price discrimination, where loyal or less price-sensitive customers are systematically offered higher prices. Antimonopoly authorities are concerned that "surveillance pricing" using Big Data can lead to the infringement of the interests of certain consumer groups and weaken price competition. In 2024, the U.S. Federal Trade Commission launched a special inquiry into such practices, requiring a number of companies to disclose information on the use of algorithms and personal data for individualized pricing [3]. Such practices, if they result in the maintenance of inflated prices or the exclusion of competition, may be qualified as unfair and subject to regulatory intervention.

• **Algorithmic Collusion and Price Coordination.** Another issue is the risk that dynamic pricing algorithms based on Big Data may inadvertently lead to price coordination among competitors. If competing sellers use similar automated pricing systems (for example, on a major e-commerce platform), these algorithms, learning from the same market data, may develop alarmingly similar pricing strategies. In theory, this can result in "tacit collusion"—situations where prices remain consistently high without any explicit agreement between companies, simply as a result of the parallel operation of self-learning algorithms [4]. Although such cases are rarely identified in practice, there have been precedents. For example, in the United States in 2015, the Department of Justice charged a manager of a company selling goods on Amazon for participating in price-fixing using an algorithm—sellers had agreed to maintain elevated prices for certain products by programming their price bots accordingly [5]. This case demonstrated that even algorithms can become instruments of antitrust violations if their coordinated behavior is based on human agreements. In response, regulators and the academic community are now exploring how to update competition law tools to account for such situations.

• **Self-Preferencing and the Use of Data to Exclude Competitors.** The possession of Big Data in e-commerce gives platforms the ability to implement sophisticated pricing strategies and control access to the market. The risk lies in the fact that a platform, effectively acting as a "gatekeeper" to large groups of consumers, can promote its own goods or services at the expense of independent partners. For example, having information about the best-selling products of

third-party sellers, a platform can launch its own products in these niches and promote them through search and recommendation algorithms, thereby squeezing out competitors. A platform may also impose the use of its own services, technologies, or data on counterparties under threat of worsening their position on the marketplace. All of these practices are under close scrutiny by antimonopoly authorities, who seek to define the line between legitimate business strategy and abuse of market power.

Thus, Big Data is a double-edged sword: on the one hand, it increases efficiency and innovation in e-commerce, while on the other; it requires fine-tuned antimonopoly regulation to prevent digital giants from becoming unassailable monopolies. Let us consider how different jurisdictions approach this challenge.

International Regulation: The Experience of the EU, USA, and China

European Union

For the European Union, countering monopolistic practices has traditionally been a priority of competition policy. The main legal provision applicable to Big Data and digital platforms is Article 102 of the Treaty on the Functioning of the European Union (TFEU). This article directly prohibits the abuse of a dominant position by one or more undertakings within the internal market of the EU. Specifically, the text of the article lists examples of abuses: imposing unfair prices or trading conditions on counterparties, limiting production or technical development to the detriment of consumers, discriminating between trading partners, and making the conclusion of contracts subject to supplementary obligations unrelated to the subject of the contract [6]. In other words, dominance itself is not prohibited—a company may hold a large market share if it is achieved lawfully. However, a dominant undertaking bears a "special responsibility" not to engage in conduct that distorts competition. This principle has been established in the case law of the Court of Justice of the EU and serves as the basis for numerous cases against digital giants.

Big Data has become a focus in EU cases primarily through the lens of abuse of market power. One of the most high-profile cases was the investigation against Amazon concerning the use of data from third-party sellers. Amazon combines the functions of a platform (a marketplace for independent sellers) and its own retail operations. The European Commission found that Amazon, holding a dominant position in the largest EU markets (Germany, France) in online retail, systematically collected and analyzed confidential data on the sales of independent sellers on its platform and then used this information to make business decisions for its own retail operations. Essentially, the company could see which products sold best among third-party merchants and used this insider information to develop its own products and optimize pricing, thereby gaining an unfair advantage. The European Commission regarded these actions as a violation of Article 102 TFEU—an abuse of dominance—since fair competition on the platform was distorted to the detriment of third-party sellers [7].

At the same time, the EU regulator examined whether Amazon was abusing its position in managing key elements of the platform's infrastructure—specifically, the Buy Box system (the "Add to Cart" feature on product pages) and the Prime program. There were concerns that the algorithms determining the winner of the Buy Box and the admission of sellers to Prime unfairly favored either Amazon itself (when it sells products directly) or those sellers who use Amazon's logistics services (Fulfillment by Amazon). The European Commission's preliminary findings confirmed these concerns: Amazon could give preference to itself and its logistics partners, thereby making it more difficult for other sellers to access attractive options and, consequently, customers.

Facing the prospect of fines and prolonged litigation, Amazon, at the end of 2022, proposed a settlement (commitments) that the European Commission approved and made legally binding.

According to these commitments, Amazon undertook to cease using non-public data from independent sellers for its own commercial purposes. In particular, the company agreed not to use marketplace information (such as data on sales, prices, or inventory of sellers) to inform its own retail offers, including private label products. Furthermore, Amazon committed to ensuring equal access to the Buy Box and the Prime program: it must modify the algorithms so that all sellers compete for the Buy Box on equal terms according to clear criteria (without hidden favoritism), and the purchase box must simultaneously display two competing offers from different sellers if the second is not inferior in terms of price and delivery. Regarding Prime, Amazon agreed not to impose discriminatory requirements and to allow sellers to freely choose any delivery services without the risk of losing the Prime badge [8]. These measures are intended to restore competition on the platform and prevent possible future abuse of data.

Another landmark example is the Google Shopping case. Google was fined a record €2.42 billion by the European Commission for abuse of its dominant position in the search engine market, expressed in the unlawful self-preferencing of its own comparison shopping service (Google Shopping) in search results. According to the Commission's findings, Google, holding about 90% of the search market in the EU, artificially promoted its shopping service to the top of search results while demoting competing price comparison aggregators. This led to decreased traffic for competitors and strengthened Google's position in the adjacent comparison shopping market. The EU Court in 2021–2022 upheld the regulator's decision, explicitly stating that the practice of placing one's own product in the best positions on the search results page is discriminatory and violates Article 102 TFEU. The Google Shopping case set a precedent by establishing the obligation of digital platforms with dominant positions not to create privileges for their own services to the detriment of competitors.

Subsequently, the EU adopted the Digital Markets Act (DMA), which directly prohibits the largest online gatekeeper platforms from engaging in self-preferencing, mandatory use of their own services, and other behaviors observed in the Google, Amazon, and other cases [9]. While the DMA is an experiment in preventive regulation that goes beyond classical antitrust law, its adoption highlights a broader trend: the European Union seeks to actively control the impact of Big Data and digital platforms on competition by combining the application of existing rules (such as Article 102 TFEU) with new regulatory measures.

It is important to note that in the EU, precedents related to Big Data arise not only in the field of e-commerce but also in adjacent areas—such as social networks and user data. Antimonopoly authorities in some member states have attempted to interpret excessive data collection as a form of abuse of dominance (for example, the Facebook case in Germany, where the Bundeskartellamt found a violation of competition in the data collection policy without user consent). Although that case was strongly oriented toward data protection, it demonstrates the willingness of European regulators to interpret abuses broadly, including exploitative abuses, if the collection or use of data violates the interests of consumers and competitors [10]. Overall, the European model is characterized by its aim to ensure a level playing field in digital markets: a dominant company should not use its informational advantage to suppress competition. If such practices are identified, the EU has a wide array of measures (fines of up to 10% of global turnover, orders to change conduct, and now new regulations) to stop abuses and restore a competitive environment.

United States of America

U.S. antitrust policy is based on the Sherman Act of 1890, which became the world's first antitrust law. Section 2 of the Sherman Act states that "monopolization, attempted monopolization, or conspiracy to monopolize any part of trade or commerce" is illegal and subject to criminal prosecution [11]. In simple terms, U.S. law prohibits both the unfair

acquisition or maintenance of a monopoly and any attempt to do so. However, it is important to understand that under American legal doctrine, the mere fact of possessing monopoly power does not constitute a violation if that power was achieved through competitive merit (skill, foresight, and industry). The violation arises when there is abuse of that power—meaning deliberate actions aimed at suppressing competition (so-called "anticompetitive conduct"). Over the twentieth century, U.S. courts developed a test: to bring a charge under Section 2, it must be proven (1) that monopoly power exists in the market, and (2) that prohibited means were used to acquire or maintain it—i.e., means that exclude competitors without objective justification. This approach has long made U.S. law more tolerant of dominant firms, requiring authorities to carefully demonstrate specific harm to competition or consumers.

Nevertheless, the growing role of Big Data and digital platforms in the economy has led to a reassessment of American antitrust priorities. In recent years, the United States has launched a series of high-profile cases against the largest technology corporations, effectively accusing them of monopolizing digital markets. One of the central cases has been the lawsuit by the U.S. Department of Justice (DoJ) against Google. In 2020, the DoJ and a coalition of states filed suit against Google, alleging that the company had unlawfully monopolized the search engine and search advertising markets, in violation of Section 2 of the Sherman Act. The key argument of the prosecution was that Google, holding a dominant position in search (>90% of queries), had entered into exclusive agreements with Apple and other device and browser manufacturers, paying them billions to set Google as the default search engine on all major platforms. These actions were viewed as exclusionary conduct, leaving competitors (such as Bing or DuckDuckGo) with no realistic chance to reach a significant audience, thus entrenching Google's monopoly in the search market.

The case went to trial, and in 2024, a federal judge issued a historic decision: Google was found to be a monopolist that had unlawfully maintained its dominance through exclusive deals and other practices that restricted competition. This was the first major victory for U.S. authorities in the battle against Big Tech in recent decades and opened the way for discussions on possible remedies for restructuring the company (including the possible divestiture of parts of Google's business) [12]. While final measures are still pending, the very fact of the technological giant being found guilty of monopolization signals a turning point in the approach—the U.S. is now prepared to actively enforce existing laws to curb digital monopolies.

At the same time, the Federal Trade Commission (FTC) is taking action against another dominant e-commerce platform—Amazon. For a long time, Amazon avoided direct lawsuits in the United States, although its business model, especially its control over the online marketplace and use of data, raised questions. In September 2023, the FTC, together with 17 state attorneys general, filed an antitrust lawsuit against Amazon, accusing the company of unlawfully maintaining monopoly power in the online retail market. The complaint alleges that Amazon employs "a set of interrelated anticompetitive and unfair strategies" that create barriers for competitors and maintain its dominance. Specifically, Amazon is accused of punishing sellers for attempting to offer lower prices on other platforms (thus "inflating prices" across the internet), forcing them to use its paid services (logistics, advertising) under the threat of losing traffic, and hindering the growth of potential competing platforms by entering into exclusive agreements with them or simply acquiring them. According to regulators, such actions lead to higher prices, lower quality of service, and suppression of innovation, to the detriment of both consumers and sellers [13]. The FTC emphasizes that Amazon's size alone is not illegal; what is unlawful is the combination of exclusive measures aimed at preventing rivals from gaining a foothold or even emerging. This court case is just beginning, but it is already regarded as a key test for the new approach of American antitrust authorities: they will need to convince the court that the platform is abusing its Big Data and market ecosystem, even if final consumer prices have not increased significantly. A successful outcome in the case against Amazon could set an important precedent,

confirming the applicability of Section 2 of the Sherman Act to modern digital platforms and their data management practices.

In addition to direct enforcement, there is an active discussion in the U.S. about improving legislation in light of the digital economy. On Capitol Hill, bills have been discussed aimed at limiting the power of Big Tech (for example, the American Innovation and Choice Online Act, which prohibits large platforms from favoring their own services). Although these initiatives have not become law at the time of writing, they reflect a bipartisan consensus on the need to update antitrust rules. Notably, the new wave of interest in Big Data is also manifesting itself in related areas: issues of data privacy and competition are increasingly being linked. The FTC has openly stated that surveillance of user behavior and the accumulation of detailed profiles can be used not only to undermine privacy but also to undermine price competition (through personalized pricing, for example) [14]. As a result, the American regulator is in fact expanding its role, including "commercial surveillance" among the factors influencing the market.

In summary for the United States: the legal framework remains the same (the Sherman Act, the Clayton Act, etc.), but interpretation is changing—Big Data and the associated effects (network effects, economies of scale, information about competitors and consumers) are now recognized as significant elements of analysis. U.S. antitrust agencies are showing a willingness to aggressively pursue cases where the use of data and platform control leads to monopolization of e-commerce markets. This is a significant shift compared to previous decades, and it is likely that court practice in the coming years will clarify the boundaries of acceptable conduct for dominant digital firms.

China

China's antimonopoly legislation is relatively young—the basic PRC Anti-Monopoly Law (AML) was adopted in 2007 and entered into force in 2008. Structurally, it largely resembles EU regulations: it also prohibits anticompetitive agreements, abuse of dominant position, and anticompetitive economic concentrations. In particular, Article 17 of the AML (in its previous version) states that companies holding a dominant market position are not entitled to abuse it for the purpose of eliminating or restricting competition, and lists a number of prohibited practices (imposing excessively high or low prices, restricting production or sales, refusal to deal without objective grounds, exclusivity, discrimination, etc.) [15]. Thus, according to the letter of the law, Chinese rules are very similar to those of Europe—dominance itself is not prohibited, but its abuse is strictly suppressed.

For a long time, antimonopoly regulation in China was characterized by moderation, especially regarding national internet giants. However, the situation has changed in recent years. Due to the rapid growth of the platform economy, Chinese authorities have taken a course towards tightening control over big tech. Big Data and digital platforms have come into sharp focus for Chinese regulators around 2020–2021 [16]. This has manifested both in high-profile investigations and updates to the regulatory framework.

The most well-known case is the Alibaba matter. Alibaba Group, the operator of the largest e-commerce platforms in China (Taobao, Tmall), was fined a record 18.2 billion yuan (about $2.8 billion) by the State Administration for Market Regulation (SAMR) in April 2021 for abuse of its dominant position. The regulator found that since 2015, Alibaba had pursued a policy known as "er xuan yi" ("choose one out of two"): it forced sellers to work exclusively with its platforms, prohibiting them from selling on competing marketplaces [17]. Violations were punishable by sanctions (lower rankings, reduced traffic, etc.). This practice enabled Alibaba to maintain a leading market share by artificially limiting sellers' access to alternative sales channels and was found to be illegal. The Alibaba fine—the largest in China's history—became a demonstrative

measure, showing Beijing's serious intention to rein in the anticompetitive behavior of internet giants.

In addition to Alibaba, in 2021–2022, other major platforms also faced penalties: for example, the delivery service Meituan was fined for a similar exclusive practice, and several transactions involving Tencent, Baidu, and others were reviewed over concerns that the consolidation of big data was strengthening monopolies. Thus, Chinese authorities, almost simultaneously with Western regulators, launched a large-scale campaign against monopolistic trends in the digital sphere.

An important feature of China is the combination of retrospective penalties and preventive regulation. In February 2021 (amid the Alibaba case), the Anti-Monopoly Commission of the State Council of China issued the "Anti-Monopoly Guidelines for the Platform Economy." This document became a sort of interpretation of antimonopoly legislation as applied to major platforms. Among other things, it confirmed the role of data in the assessment of dominance: regulators now officially consider whether a company has significant advantages in access to data when determining its market power. It was also noted that the concentration of data (for example, during company mergers) can strengthen market power, and that when considering transactions, the authorities will analyze whether the merging of databases leads to the restriction of competition [18]. The Guidelines directly stated that it is prohibited to use data and algorithms to carry out monopolistic practices, whether it be collusion (such as data sharing to coordinate prices) or abuse of dominance.

A logical continuation of this process was the revision of the law itself. In June 2022, China adopted the first package of amendments to the Anti-Monopoly Law (AML). The amendments came into force in August 2022 and were largely aimed at the digital economy. In particular, the new provisions established that companies must not use data, algorithms, technology, capital, or platform rules to engage in monopolistic behavior. This general provision (Article 9 of the new version of the AML) reflects the principle that tools of the digital economy cannot serve as a cover for old anticompetitive practices. Additionally, specifically in cases of dominance, it is now stipulated that dominant companies are prohibited from abusing their position by using data, algorithms, technologies, or platform rules. This provision directly targets situations where, for example, a platform changes its recommendation algorithm to exclude competitors, or uses collected Big Data about users to lock them into its own service and exclude alternatives. The amendments significantly increased penalties for violations and introduced the concept of a temporary suspension ("stop-the-clock") in the review of transactions, allowing for more thorough scrutiny of mergers in the digital sector [19].

The practical application of the updated law has already begun. In 2023, it was reported that regulators are closely monitoring new business models (such as short-term rentals, sharing economy services) for signs of data monopolization, and are also requiring large platforms to improve third-party access to their ecosystems. The Chinese approach may seem strict: authorities essentially impose directive restrictions on the freedom of dominant firms, especially when they see a threat of "big data monopolies." However, it is important to consider that the Chinese market is unique—due to the absence of traditional competition from foreign companies (Google, Facebook, etc. are blocked in China), dominance by local giants can occur more rapidly. Therefore, the regulator acts as an active arbiter, leveling the playing field for competition out of considerations of national policy and consumer protection. Many experts note that international trends—EU fines, investigations in the US—gave Chinese authorities both a signal and justification for similar actions [20]. At the same time, China follows its own path, emphasizing preventive regulation through updated legislation. Already, the Chinese AML contains provisions not directly found in the EU or US (for example, a direct ban on the use of algorithms and data for monopolistic practices). Thus, China seeks to embed the control of Big Data into the

very foundations of antimonopoly law, striving to support the "healthy development of the digital economy," as proclaimed in their official documents.

National Experience: Uzbekistan

In recent years, the Republic of Uzbekistan has also modernized its competition legislation in response to global trends in the digital economy. In July 2023, a new Law of the Republic of Uzbekistan "On Competition" (№. LRU-850) was adopted and entered into force in autumn 2023. This law replaced the previous legislation and incorporated a number of innovations that reflect, among other things, the challenges of digital markets. The explanatory materials noted that new terminology has been introduced—concepts such as "digital platform," "superior bargaining power," and others directly related to the modern realities of e-commerce.

From the perspective of antimonopoly regulations, the Uzbek law is harmonized with the principles adopted in the EU and other jurisdictions. It prohibits anticompetitive agreements, unfair competition, abuse of dominant position, and so forth. Abuse of dominance covers the standard range of actions (setting monopoly high or low prices, creating artificial shortages, discriminatory conditions, forcing unfavorable deals, etc.)—effectively mirroring the provisions analogous to Article 102 of the TFEU and Article 17 of the Chinese AML. A significant innovation is a special provision aimed at digital platforms. The law introduces an article whereby an operator of a digital platform, recognized as holding a dominant position, is not entitled to engage in actions that restrict competition by imposing mandatory requirements for the use of certain information, technologies, or digital products. In other words, a dominant platform is prohibited from abusing its position by requiring market participants to use its informational resources or technical solutions if this leads to a restriction of competition. This provision directly correlates with the issues discussed above in the context of Amazon, Alibaba, and others: a platform should not force sellers or users to exclusively use its data or tools to retain them and prevent them from accessing competitors. The emergence of such a provision indicates that Uzbek lawmakers have carefully studied international experience and provided safeguards against potential abuses in digital markets.

In addition, the new Uzbek law has changed the criteria for determining dominance, including, apart from market share, other factors. In particular, it introduces the concept of "superior bargaining power," applicable in cases where a company's market share may not be formally monopolistic, but it possesses incomparably greater economic power in relation to its counterparties (for example, a large platform vs. many small suppliers). This innovation is once again inspired by modern practice: even if the market share of an electronic platform is less than 50%, it can still dictate terms to thousands of sellers, which requires oversight. Thus, Uzbekistan's competition legislation in its new version seeks to account for the specific mechanisms of the digital economy, where the power of a platform is determined not only by market percentage but also by the dependence of other players on it.

It is important to note that the Law "On Competition" (2023) establishes the priority of international rules, if an international treaty establishes rules different from national ones [21]. This demonstrates a willingness to follow the best global practices. In the context of Big Data and e-commerce, Uzbekistan, of course, does not yet have high-profile precedents comparable to those in the EU, US, or China—largely due to the smaller scale of the digital market. However, the prerequisites for attention to this topic already exist. National e-commerce is actively developing, with local marketplaces and fintech platforms emerging. In addition, foreign digital services (such as social networks, messengers, and marketplaces from neighboring countries) are beginning to play a noticeable role. Under these circumstances, the Antimonopoly Committee of the Republic of Uzbekistan is provided by the new law with modern tools to monitor and suppress possible abuses. For example, if a major platform begins to restrict sellers from working

with other marketplaces or uses collected data to squeeze out competitors, the law allows for intervention and the issuance of an order to cease such practices. Uzbek legislation now also provides for mandatory antimonopoly compliance requirements for dominant firms and government agencies, which should improve the culture of compliance with competition rules in the digital environment.

Overall, Uzbekistan's national experience is still at the initial stage of implementing the updated norms. It will be necessary to develop law enforcement practice, and perhaps to adopt bylaws or guidelines for interpreting new concepts (such as "digital platform"). Here, international experience will be especially valuable: cooperation with foreign antimonopoly authorities, studying Big Tech cases, and adapting successful methods for detecting and proving violations in the digital sphere. As Uzbekistan is integrated into the global economy and is attracting investment into the IT sector, harmonizing approaches to Big Data regulation with global standards will contribute both to the protection of competition and to the creation of clear conditions for business.

Conclusions and Recommendations

Analysis of international and national practice shows that the use of Big Data in e-commerce is a double-edged sword. On the one hand, Big Data enables companies to innovate, more accurately meet demand, and increase trading efficiency. On the other hand, its concentration in the hands of certain players can lead to a distortion of the competitive environment—from the creation of nearly insurmountable barriers for new companies to the emergence of subtle forms of abuse that are not immediately apparent to consumers (such as personalized pricing or algorithmic coordination).

International experience (EU, USA, China) demonstrates a converging trend: regulators worldwide do not intend to passively observe the rise of digital giants; instead, they seek to adapt antimonopoly tools to the era of Big Data. In the European Union, there is a combination of strict enforcement (fines and orders under Article 102 TFEU in cases against Google, Amazon, etc.) with new ex ante measures (DMA) specifically targeting major data gatekeepers. In the United States, which relies on the century-old Sherman Act, the focus of enforcement has shifted: from a relatively liberal approach to monopolies (as long as they supposedly benefit consumers) to a determined struggle against Big Tech—even if consumer prices do not rise, but competition and innovation are harmed. This is illustrated by the landmark lawsuits against Google and Amazon, intended to demonstrate that monopolization of digital markets is unacceptable. China, for its part, has taken a path of strict state control, quickly updating its laws and signaling to business that the use of data and algorithms is under oversight: monopolies will not be allowed to flourish, even if this requires record fines to curb the ambitions of the largest companies. Despite differences in political and legal systems, all three jurisdictions agree that Big Data can become a factor in strengthening market power, and that to keep e-commerce competitive and open, adequate regulatory responses are required.

For Uzbekistan, this experience is highly instructive. The updated national legislation has already laid a good foundation by introducing the concepts of digital platforms and restrictions for them, as well as expanding the tools for monitoring potential monopolists. Going forward, it is important to ensure the effective implementation of these provisions. The following recommendations are proposed:

- Continue monitoring digital markets (e-commerce, online services) for the emergence of companies with signs of dominance and analyze whether they are using Big Data to the detriment of competition (for example, collecting data on competitors or entering into exclusive agreements with key partners).

- Drawing on international practice, develop interpretative guidelines or methodological recommendations for businesses: what data practices are considered unacceptable. For instance, clarify that forcing counterparties into exclusivity or using others' data for self-preferencing should be under special scrutiny.

- Strengthen cooperation with foreign antimonopoly authorities. Exchanging information on global digital platforms will help to better understand their strategies. For example, if Amazon or Alibaba decide to enter the Uzbek market, the regulator will already be equipped with knowledge of their "typical" problematic behavior abroad.

- Enhance the competencies of antimonopoly authorities in the fields of Big Data and algorithms. As cases of algorithmic pricing show, regulators need to understand technical aspects. It may be advisable to involve IT experts and develop data science analytics within agencies to identify hidden anticompetitive practices.

- Ensure a balance between supporting digital transformation and protecting competition. The main task is not to turn Big Data control into a brake on innovation. The purpose of antimonopoly regulation is to prevent abuses, but also to encourage fair competition based on data—where companies compete in better analytics and service for consumers, not in building closed ecosystems.

In conclusion, the use of Big Data in e-commerce opens enormous opportunities for market growth and improving the consumer experience. But as global practice shows, without oversight, this can also lead to the concentration of power in the hands of a few platforms, which can dictate terms to others. The international community has already learned the first lessons and begun to develop new rules of the game—from court decisions prohibiting self-preferencing to entire laws regulating digital "gatekeepers." Uzbekistan, taking its first steps in this direction, has the opportunity to proactively implement the best approaches while its digital markets are still forming. The competent application of antimonopoly principles to Big Data will ensure that e-commerce develops on a competitive basis, innovation is not stifled by monopolism, and both consumers and businesses receive the maximum benefit from the digital economy without abuses by dominant players.

References:

1. China: SAMR tightens its grip on digital monopolies with stringent data use rules – Global Competition Review.

https://globalcompetitionreview.com/guide/data-antitrust-guide/second-edition/article/china-samr-tightens-its-grip-digital-monopolies-stringent-data-use-rules

2. China: SAMR tightens its grip on digital monopolies with stringent data use rules – Global Competition Review.

https://globalcompetitionreview.com/guide/data-antitrust-guide/second-edition/article/china-samr-tightens-its-grip-digital-monopolies-stringent-data-use-rules

3. FTC Issues Orders to Eight Companies Seeking Information on Surveillance Pricing | Federal Trade Commission. https://www.ftc.gov/news-events/news/press-releases/2024/07/ftc-issues-orders-eight-companies-seeking-information-surveillance-pricing

4. Competition authorities zero in on antitrust risks of algorithmic pricing – Global Competition Review. https://globalcompetitionreview.com/guide/digital-markets-guide/fourth-edition/article/competition-authorities-zero-in-antitrust-risks-of-algorithmic-pricing

5. Former E-Commerce Executive Charged with Price Fixing in the ... U.S. Department of Justice. https://www.justice.gov/archives/opa/pr/former-e-commerce-executive-charged-price-fixing-antitrust-divisions-first-online-marketplace

6. Consolidated version of the Treaty on the Functioning of the European Union – Article 102.

https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX%3A12008E102

7. Antitrust: Commission accepts commitments by Amazon barring it from using marketplace seller data, and ensuring equal access to Buy Box and Prime – Pub Affairs Bruxelles.

https://www.pubaffairsbruxelles.eu/eu-institution-news/antitrust-commission-accepts-commitments-by-amazon-barring-it-from-using-marketplace-seller-data-and-ensuring-equal-access-to-buy-box-and-prime/

8. Antitrust: Commission accepts commitments by Amazon barring it from using marketplace seller data, and ensuring equal access to Buy Box and Prime – Pub Affairs Bruxelles.

https://www.pubaffairsbruxelles.eu/eu-institution-news/antitrust-commission-accepts-commitments-by-amazon-barring-it-from-using-marketplace-seller-data-and-ensuring-equal-access-to-buy-box-and-prime/

9. Google loses EU court battle over €2.4B antitrust fine – POLITICO. https://www.politico.eu/article/google-loses-court-battle-over-first-eu-antitrust-fine/

10. China: SAMR tightens its grip on digital monopolies with stringent data use rules – Global Competition Review.

https://globalcompetitionreview.com/guide/data-antitrust-guide/second-edition/article/china-samr-tightens-its-grip-digital-monopolies-stringent-data-use-rules

11. U.S. Code § 2 – Monopolizing trade a felony; penalty | U.S. Code | US Law | LII / Legal Information Institute.

https://www.law.cornell.edu/uscode/text/15/2

12. Google has an illegal monopoly on search, US judge finds | Reuters. https://www.reuters.com/legal/us-judge-rules-google-broke-antitrust-law-search-case-2024-08-05/

13. FTC Sues Amazon for Illegally Maintaining Monopoly Power | Federal Trade Commission.

https://www.ftc.gov/news-events/news/press-releases/2023/09/ftc-sues-amazon-illegally-maintaining-monopoly-power

14. FTC Sues Amazon for Illegally Maintaining Monopoly Power | Federal Trade Commission.

https://www.ftc.gov/news-events/news/press-releases/2023/09/ftc-sues-amazon-illegally-maintaining-monopoly-power

15. Anti-monopoly Law of the People's Republic of China. https://english.www.gov.cn/services/doingbusiness/202102/24/content_WS6035f1ddc6d0719374af97b6.html

16. China: SAMR tightens its grip on digital monopolies with stringent data use rules – Global Competition Review.

https://globalcompetitionreview.com/guide/data-antitrust-guide/second-edition/article/china-samr-tightens-its-grip-digital-monopolies-stringent-data-use-rules

17. China fines Alibaba record $2.75 bln for anti-monopoly violations | Reuters.

https://www.reuters.com/business/retail-consumer/china-regulators-fine-alibaba-275-bln-anti-monopoly-violations-2021-04-10/

18. China: SAMR tightens its grip on digital monopolies with stringent data use rules – Global Competition Review.

https://globalcompetitionreview.com/guide/data-antitrust-guide/second-edition/article/china-samr-tightens-its-grip-digital-monopolies-stringent-data-use-rules

19. China Amends Anti-Monopoly Law: What You Need to Know. https://www.jonesday.com/-/media/files/publications/2022/07/china-amends-antimonopoly-law/files/china-amends-antimonopoly-lawwhat-you-need-to-kn/fileattachment/china-amends-antimonopoly-lawwhat-you-need-to-k.pdf

20. China fines Alibaba record $2.75 bln for anti-monopoly violations | Reuters. https://www.reuters.com/business/retail-consumer/china-regulators-fine-alibaba-275-bln-anti-monopoly-violations-2021-04-10/

21. Law of the Republic of Uzbekistan of 03.07.2023 No. ZRU-850 "On Competition" (adopted by the Legislative Chamber on 14.02.2023, approved by the Senate on 02.03.2023) | Competition, Restriction of Monopolistic Activities, Advertising and Protection of Consumer Rights | Regulatory Legal Acts NRM.uz. https://nrm.uz/contentf?doc=725779_zakon_respubliki_uzbekistan_ot_03_07_2023_g_n_zru850_o_konkurencii_(prinyat_zakonodatelnoy_palatoy_14_02_2023_g_odobren_senatom_02_03_2023_g_)&products=7_proverki_ot_a_do_ya