

ANALYSIS OF GLOBAL TRENDS IN THE MOBILE APPLICATION INDUSTRY

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The article describes global trends across the mobile applications market, in particular, groups of trends formed by macro factors. In addition, statistical data and recommendations according to the impact of trends in the industry are considered.

Key words: trends; mobile application; mobile application market; macro factors; research; statistics.

АНАЛИЗ ГЛОБАЛЬНЫХ ТРЕНДОВ НА РЫНКЕ МОБИЛЬНЫХ ПРИЛОЖЕНИЙ

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В статье рассматриваются глобальные тренды рынка мобильных приложений, в частности группы трендов, сформированные по факторам макросреды. Кроме того, приведены статистические данные, а также рекомендации исходя из влияния тенденций на поведение пользователей рассматриваемой отрасли.

Ключевые слова: тренды; мобильные приложения; рынок мобильных приложений; макрофакторы; исследование; статистические данные.

The mobile application industry has been growing at an unprecedented pace over the past decade. With the increasing number of smartphone users and the rapid advancements in technology, mobile apps have become an integral part of our daily lives. From social media to e-commerce, healthcare to education, there is an app for everything.

According to the research released by Data.ai, one of the leading platforms providing app analytics data, the total time spent by mobile apps users will exceed 6 trillion hours by 2028, so the CAGR (compound annual growth rate) over a five-year period will be 6% [1].

As we move into 2023 and beyond, the mobile app market is expected to continue its growth, with new trends emerging that are set to shape the industry. To understand the global trends in the mobile application market

(Table), we can divide them into groups of macro factors using the TEMPLES+I model by A. M. Gershun [2].

Global trends list for mobile application market

Macro Factors		Trends
T	Technology	5G, AI, ML, IoT, VR, AR, blockchain
E	Economics	Monetization models, outsourcing, finance literacy
M	Market	Seamless user experience, on-demand apps, mobile commerce
P	Politics	Data security, uncertainty
L	Legal	Unification
E	Ecology	Eco-friendliness, green tech, sustainability
S	Society	Mental health, positive content, authentic sharing, creator marketing, app-based parenting, habit-building, personalized experiences
I	Information	Security, cloud-based apps, big data

Source: [1-10].

As the industry continues to evolve, there are several global trends that are shaping the future of mobile application industry:

1. As technology continues to evolve, so do mobile apps. One of the most significant advancements in recent years is the rise of 5G technology which has opened up new possibilities for mobile app developers, allowing them to create more complex and immersive apps. The global 5G services market size is expected to expand at a compound annual growth rate of 59.4% from 2023 to 2030 [3].

The global extended reality market that includes augmented reality (AR), virtual reality (VR), and mixed reality (MR) reached 29.26 billion U.S. dollars in 2022, rising to over 100 billion U.S. dollars by 2026 [4]. In line with this, the machine learning market is also the largest segment of the AI market. The usage of AR, VR, AI and ML is transforming the way we interact with mobile apps.

Other evolving trends are the Internet of Things (IoT), which creates connection between devices through the Internet, and Blockchain as a decentralized database that is used to store information securely. According to the statistics, for example, the total IoT market worldwide was worth around

182 billion U.S. dollars in 2020, and is expected to rise to more than 621 billion U.S. dollars in 2030, tripling its revenue in ten years [5].

2. Since the global economy affects everything, the mobile application market is no exception. There is a rise in the use of various monetization models, such as in-app purchases, subscriptions, and advertising.

The global IT services outsourcing market size is expected to grow at a compound annual growth rate (CAGR) of 7.7% from 2020 to 2027 [6]. So outsourcing of mobile application development is becoming more common, as companies look for cost-effective ways to develop and maintain their applications. From another perspective, consumer spending on mobile applications is increasing, as users become more willing to pay for premium applications and in-app purchases.

3. With the growth of the mobile application market, there is a significant increase in competition among app developers and companies. This has led to an emphasis on innovation, user experience, and pricing strategies. According to the statistics, the global user experience (UX) service market size was USD 1937.3 million in 2021 and market is expected to reach USD 18,700 million in 2028, exhibiting a growing CAGR of 37.8% from 2022 to 2028 [7].

Another technological advancement is on-demand apps which are becoming increasingly popular as they provide users with instant access to services such as food delivery, ride-sharing, and home cleaning.

4. Law and politics are deeply intertwined. The unification of the law and uncertainty in the political situation affect all the markets on every level.

5. The global “green technology and sustainability” market size is expected to expand at a CAGR of 22.4% from 2022 to 2030 [8]. The consumers are increasingly seeking out ways that they can reduce their personal impact on the environment, so they seek out businesses that are prioritizing authentic, effective forms of sustainability.

6. In 2022 the global mental health apps market size was valued at USD 5.2 billion and is expected to expand at a compound annual growth rate (CAGR) of 15.9% from 2023 to 2030 [9]. Personalization in the wellness space has become important for consumers, particularly as more people seek out the advice of various businesses to maintain their mental and physical health. In order to decrease the impact of negative news cycles on well-being, consumers pay a lot of attention to "digital detoxing".

7. Cloud-based apps are becoming popular and the cloud applications software market itself is anticipated to grow at a compound annual growth rate of 4.8 percent [10]. These apps provide users with the ability to access their data from anywhere and also offer scalability and cost-effectiveness for businesses.

8. More businesses are moving their operations online where a significant amount of business is being conducted and the amount of data produced has increased exponentially over the past decade. With large databases to be processed, data privacy issues are becoming more important to the average person. People are now becoming more concerned with how their data is used and the companies their information is being sold to—and are increasingly turning to tools that help enable their privacy online.

In conclusion, the global trends are shaping the industry and creating new opportunities for companies and consumers alike. With millions of apps available on the stores, competition is fierce, and companies must find ways to stand out from the crowd. One way to do this is to focus on **user experience**: companies should invest in designing an intuitive and user-friendly interface, and ensure that the app is easy to navigate, fast, and responsive. One of the most popular examples is TikTok which has become a massive success due to its simple and usable interface, which allows users to easily create and share short videos with their followers.

To stay ahead of competition it is essential for companies to prioritize **data privacy**: protect user data by implementing robust security measures and complying with relevant regulations since there are increasing concerns over data privacy.

As climate change worsens and the world becomes more environmentally conscious, sustainability has become top-of-mind for consumers, so it is needed for companies to incorporate sustainable practices into their mobile applications: include features that promote recycling, reduce carbon footprint or simply encourage eco-friendly behavior.

By incorporating social and humanistic trends into mobile applications, companies can differentiate themselves and provide users with a more meaningful and impactful experience. One way to do this is to support mental health topics by developing applications that offer resources, tools, and support for mental health issues which could play a crucial role in supporting users' mental well-being. In a world where social isolation is becoming increasingly common, companies should develop applications that facilitate social interaction and help users connect with like-minded individuals which can help foster social connection and community building.

As we move into 2023 and beyond, we can expect to see further growth and innovation in the mobile app market. It is needed for companies to apply the latest technologies, learn from user behavior and provide personalized recommendations by embracing artificial intelligence: AI-powered features such as voice assistants and chatbots. Companies should explore ways to integrate AI into their mobile applications to enhance user engagement. Speaking about such industries as gaming, retail, education or even

construction and manufacturing, augmented reality technology is rapidly gaining popularity, so it is important for companies to explore ways to incorporate AR into mobile applications to provide a more immersive user experience.

On a final note, if companies want to stand out it is essential to analyze user behavior, consider emerging trends and carefully apply them to improve existing products or create new ones. Since there is political uncertainty in the world, companies have to be agile and adapt quickly to changing conditions. By adopting trends and incorporating them into their mobile applications, companies can stay ahead of the competition and provide users with a more engaging and personalized experience.

References

1. Market Data: 2023 State of Mobile / Data.ai [Electronic resource]. – 2023. – Mode of access: <https://www.data.ai/en/insights/market-data/state-of-mobile-2023>. – Date of access: 02.04.2023.

2. *Churlei E.G.* Formation of a monitoring system for trend signals in the organization of the marketing information support process // Journal of the Belarusian State University, Economics. – 2021. – 71 P.

3. 5G Services Market Size, Share & Trends Analysis Report 2023 – 2030 / Grand View Research [Electronic resource]. – 2023. – Mode of access: <https://www.grandviewresearch.com/industry-analysis/5g-services-market> (date of access: 03.04.2023).

4. Extended reality (XR) market size worldwide from 2021 to 2026 / Statista [Electronic resource]. – 2021. – Mode of access: <https://www.statista.com/statistics/591181/global-augmented-virtual-reality-market-size> (date of access: 02.04.2023).

5. Internet of Things (IoT) total annual revenue worldwide from 2020 to 2030 / Statista [Electronic resource]. – 2020. – Mode of access: <https://www.statista.com/statistics/1194709/iot-revenue-worldwide> (date of access: 02.04.2023).

6. IT Services Outsourcing Market Size, Share & Trends Analysis Report By Service (Application, Emerging Technology), By Location (On-shore, Off-shore), By End-use, And Segment Forecasts, 2020 - 2027 / Grand View Research [Electronic resource]. – 2020. – Mode of access: <https://www.grandviewresearch.com/industry-analysis/it-services-outsourcing-market> (date of access: 02.04.2023).

7. User Experience Service Market Size, Share, Growth and Forecast From 2022 To 2030 / Business Research [Electronic resource]. – 2022. – Mode of access: [https://www.businessresearchinsights.com/market-reports/user-experience-ux-service-market-100334#:~:text=The%20global%20user%20experience%20\(UX,37.8%25%20during%20the%20forecast%20period](https://www.businessresearchinsights.com/market-reports/user-experience-ux-service-market-100334#:~:text=The%20global%20user%20experience%20(UX,37.8%25%20during%20the%20forecast%20period) (date of access: 01.04.2023).

8. Green Technology And Sustainability Market Size, Share & Trends Analysis Report And Segment Forecasts, 2022 – 2030 / Grand View Research [Electronic resource]. – 2022. – Mode of access: <https://www.grandviewresearch.com/industry-analysis/green-technology-sustainability-market-report> (date of access: 03.04.2023).

9. Mental Health Apps Market Size, Share & Trends Analysis Report And Segment Forecasts, 2023 – 2030 / Grand View Research [Electronic resource]. – 2023. – Mode of access: <https://www.grandviewresearch.com/industry-analysis/mental-health-apps-market-report> (date of access: 01.04.2023).

10. Cloud applications market size worldwide from 2013 to 2025 / Statista [Electronic resource]. – 2023. – Mode of access: <https://www.statista.com/statistics/475670/cloud-applications-market-size-worldwide> (date of access: 02.04.2023).