



February 15, 2022

Yandex Q4 2021 and Full Year 2021 Earnings: Letter to Shareholders

1. Introduction and Overview

- Total group revenue increased by 54% year-on-year in Q4 2021 and reached RUB 110.3 billion, with the share of non-advertising businesses expanding further to 56%. Full-year revenue increased by 54% year-on-year (on a like-for-like basis) and reached RUB 356.2 billion, ahead of our full-year guidance of RUB 340 billion to RUB 350 billion. These stronger than expected results reflected robust revenue trends across our Advertising and Ride-hailing businesses as well as solid performance in Media and Delivery services, Devices and Lavka sales.
- Based on our 2021 performance, we expect total group revenues to be between RUB 490 billion and RUB 500 billion for the full year 2022.
- Below are additional comments on our Q4 2021 results by key businesses, including Advertising, Mobility, E-commerce, FoodTech, Delivery (Logistics), Media Services and others.

2. Search and Advertising

- Q4 revenues in our Search & Portal business increased by 31% year-on-year, resulting in 32% year-on-year growth for the full year 2021. Our targeted investments in ad technology, SMB products and iOS search share among other initiatives, enabled us to outperform our percentage revenue growth guidance of high twenties, while delivering on our adjusted EBITDA margin guidance for the full year at the level of 48.2%.
- On a two-year stack basis (which evens out the effect of the Covid-19 pandemic), Search & Portal grew by 18% in Q4 2021. The best-performing sectors on a two-year stack basis were Home Appliances, IT & Telecom, Finance & Insurance, Consumer Electronics, Education & Employment and Healthcare with growth percentages ranging from the mid-twenties to low-thirties. Only Travel remained in negative territory on a two-year stack basis at the level of low single digits.
- We saw good progress in our iOS search share, which improved during the quarter to 44.3% in the last week of December 2021, up 2.7 pp year-on-year. Growth in app downloads and usage was driven by improvements in our Yandex Search and Browser products (video translation, caller ID, smart camera). The Yandex app appeared among the top iOS apps in Russia in 2021. Several successful marketing campaigns supported progress and drove an increase in Yandex Search's share as the default search engine within Safari, which grew by 10 pp over the year and reached 35% in January 2022.
- Our share on Android also continued to grow and reached 59.2% as of the end of Q4 2021. On the back of solid dynamics in terms of both iOS and Android we finished Q4 2021 with a 60.2% total search share, 0.9 pp higher than the end of the previous quarter and 0.5 pp higher year-on-year.
- Yandex is actively developing advertising formats for ecommerce players that enable advertisers to improve the presentation of their products on both search and network sites. In Q4 2021 we launched a product gallery (product cards with offers from several stores containing a picture of the product along with its name, price and other key information) that appears below the search bar. This advertising format enjoys better user perception and helps them make a choice faster, which proves to be more efficient for advertisers. The efficiency of the new format and its further expansion to cover more product categories should help us attract new advertisers and support our revenue growth.

- We continue to develop and enhance our conversion-based proposition for our clients by simplifying the usage of advertising strategies and providing more options for settings. Recent innovations include payment for conversions for multiple goals (e.g., a purchase and a phone call) and the addition of a dynamic value for goals as well as a post-click activity analysis using ML technologies. These enhancements further improve the transparency and efficiency of CPA strategies, while allowing Yandex to expand its advertising client base and increase its share of wallet in the market.
- Growth of conversion-oriented strategies continued in Q4, resulting in 36% of Search and Portal ad revenue (up from 30% in September and 25% in June) and 51% of Yandex's ad network revenue. Optimization for in-app events, improvements in cost revenue strategies, and loyalty programs supported this growth.
- We recently simplified and extended the user experience of Yandex Metrica, a free tool that enables our clients to evaluate site traffic and analyze user behavior, enhancing its value as a one-stop shop for analytics. Yandex Metrica is an important first step into the Yandex ecosystem for advertisers, as it allows users to jumpstart with Yandex Direct targeted and optimized campaigns. At the moment, more than a million websites have integrated Yandex Metrica.
- The SMB segment remained an important focus area and growth driver for Yandex's ad business in Q4 2021. We made good progress in our Yandex Business offer, a simplified monthly subscription. More than 50 thousand entrepreneurs now use Yandex Business advertising tools. The number doubled in 2021, and half of customers have renewed their subscription in the last six months.
- As part of our strategy of advancing tools for SMBs we have announced an acquisition (pending FAS approval) of eLama's technology platform and professional team to integrate it into Yandex and strengthen our position and expertise in collaborating with small businesses. Elama is the largest aggregating platform for small ad agencies and freelance ad campaign experts, which allows them to service SMB advertisers on the leading online ad platforms such as Yandex, Google, VK and Facebook.
- Zen continues to be our key video advertising platform, with a daily audience of 22.3 million as of the end of December. The share of video time spent has remained stable at around 40% in recent months, as we have further increased our focus on the quality of content. Our efforts have helped us to narrow the gap in net promoter score (NPS) between us and the leading content platforms. We continue to partner with content creators and have increased the amount of video content generated per day from 8 thousand in July to 11 thousand in January, which should support future video consumption growth on the platform.
- For the full year 2022 we expect ruble-based Search & Portal revenue to grow in the mid to high teens and our adjusted EBITDA margin to remain stable compared with 2021. We may consider reinvesting more margin only if the opportunities we chase: a) will help us to achieve a higher absolute adjusted EBITDA; and b) are in line with our long-term strategic priorities.

3. Mobility:

- **Ride-hailing**
- Q4 2021 was another exceptional quarter for Ride-hailing with year-on-year acceleration of the growth in rides and GMV.
- Rides grew 48% year-on-year, versus 44% in Q3 2021, and GMV increased 69% year-on-year in Q4 2021 compared to 62% a quarter earlier. As a result of this solid performance, our GMV reached RUB 171 billion in Q4, while the December annualized GMV run-rate exceeded RUB 800 billion (or USD 11 billion at the exchange rate as of December 31, 2021).
- Growth rates were primarily driven by a significant increase in the driver base, the number of active users and user frequency on the platform overall, partly driven by wider adoption of Plus on the platform, as well as solid growth rates of our businesses across CIS and both existing and new EMEA countries:
 - In December 2021 our driver base exceeded 1.2 million. This represents a 35% year-on-year increase and an 18%+ increase versus September 2021, driven by our targeted initiatives aimed at driver acquisition and retention earlier in the year.

- Total MAU of our Go app exceeded 35 million users in December, up 11% quarter-on-quarter and 43% year-on-year. Ride-hailing MAU exceeded 34 million, with Russia accounting for approximately 80%.
- In addition to the solid increase of MAU, we also saw a significant increase in user frequency. Our ride-hailing users made an average of 7.6 rides in December, compared to 6.7 rides per user in September 2021 and 7.2 rides in December 2020. This increase in frequency was partly due to seasonality and further cohort improvements, but was also driven by an increased share of ride-hailing users with Plus membership, who took an average of 9.3 rides in December. In January, despite the typically weak seasonality and Omicron impact, user frequency remained solid – at 7.1 riders per user
- Acceleration of growth was also driven by faster than average growth outside of Russia. In aggregate, the share of trips in the CIS, as well as existing and new EMEA countries expanded by 3 pp from a year ago to 24% in Q4 2021, and 25% in December. CIS grew 66% year-on-year in rides and 81% in GMV in Q4, while EMEA was up 137% in rides and 146% in GMV. We see significant room for further expansion in these markets and expect them to contribute to our long-term growth.
- Solid performance in Q4 allowed us to finish 2021 in excellent shape. Rides were up 50% year-on-year and reached 2.4 billion, GMV was up 75% year-on-year, implying 41% growth on a two-year stack basis. Earnings of our ride-hailing partners increased even faster – at 76% year-on-year and reached RUB 519 billion, since we maintained an effective take rate of below 10% - one of the lowest, if not the lowest effective take rate compared to other public ride-hailing services across the globe.
- While keeping take rates below 10%, we continued to improve our operational efficiency, which allowed us to post an exceptional Adjusted EBITDA in Q4 of 7.5 billion rubles. Adjusted EBITDA was up 131% year-on-year and 74% quarter-on-quarter. Adjusted EBITDA includes approximately 500 million rubles from a one-off effect related to a tax risk reverse. Excluding this effect, Adjusted EBITDA was RUB 7 billion, up 116% year-on-year and 62% quarter-on-quarter.
- On a full year basis, we generated Adjusted EBITDA of RUB 22 billion. This represents a 3.9% margin of GMV and 90 basis points expansion compared to 2020.
- **Drive**, our car-sharing business, with a roughly flat year-over-year fleet of 17.5 thousand vehicles as of the end of 2021, generated RUB 4.0 billion GMV in Q4, up 29% year-on-year. This growth was driven by a significant increase in vehicle utilization boosted by the rapid development of our B2B vertical. Although B2B was in the low single digits in terms of the number of orders, B2B share in GMV exceeded 20%, while its contribution to Drive revenues was 22% in Q4. Adjusted EBITDA of Drive reached 428 million rubles in Q4 and 1.2 billion rubles for the full year.
- We are excited about the development of our mobility businesses, and expect our Mobility GMV to be in the range of RUB 700 – 720 billion in 2022, which implies a slight acceleration of growth on a normalized two-year stack basis (normalizing for the impact of the Covid-19 pandemic). We expect the Adjusted EBITDA margin for the mobility business to improve by up to 50 bps as a percentage of GMV compared with 2021, with margin expansion across both our ride-hailing and car-sharing businesses.

4. E-commerce / Yandex Market

- We are very pleased with the progress in E-commerce last year, particularly the almost threefold growth of our business in terms of GMV and numerous improvements in customer value proposition, service quality and streamlining of key operational processes. Our total E-commerce GMV grew 192% year-on-year to RUB 58.8 billion in Q4 2021 (215% for Yandex Market standalone) and 187% year-on-year to RUB 160 billion for the full year 2021.
- The total cash burn for our E-commerce businesses for the full year 2021 amounted to RUB 44.6 billion, or USD 600 million, which was less than our guidance of USD 650 million (or RUB 48 billion), demonstrating our commitment to disciplined capital allocation. As we previously highlighted, we define total cash burn as the sum of adjusted EBITDA losses (which came to RUB 47.4 billion for the full year 2021 for the total E-commerce perimeter), capital expenditures (RUB billion in the high single digits combined for Market and Lavka) and changes to working capital (a positive WC release in 2021 more than offset our capex spend).

- Share of 3P GMV increased to 82% in Q4 from 78% in Q3 and 63% in Q4 2020. Next year, we expect our 1P/3P share to normalize around current levels, while our focus will be on increasing the share of orders/GMV fulfilled by Yandex (which currently accounts for about one-third of 3P GMV).
- Since September, we have expanded the number of active sellers (unique legal entities who made at least one sale in the last month prior to the reporting date) by more than a third to 23.9 thousand, which implies 3.1x growth of the active merchant base for the full year 2021. The number of active buyers almost doubled year-on-year to 9.8 million. Our assortment increased to 22.6 million SKUs as of the end of Q4 2021 and further expanded to 25.2 million SKUs as of the end of January 2022. It is worth noting that our unparalleled matching algorithms enable us to eliminate a significant number of duplicate offers from the platform. Over 70% of the increase in the assortment during Q4 2021 and January 2022 was provided by high-frequency categories such as Kids and Home Goods.
- In terms of category structure, Consumer Electronics and Grocery remained our largest categories with the strongest market position. The combined E-grocery GMV across our E-commerce businesses (Market, Lavka, Eats Grocery) increased by 119% year-on-year and reached RUB 18.2 billion in Q4 2021 (RUB 57.5 billion for the full year 2021).
- During Q4 2021 we made further progress on our supply side offering focused on improving the ease and effectiveness of merchants' cooperation with Yandex Market. Key examples include the following: we launched a special app for Market merchants (an important step toward developing a full-fledged mobile platform for our partners), expanded the offer of fintech instruments (including our BNPL service Split as well as a number of other financial products in partnership with third-party banks) and advertising tools available for our merchants (e.g., improved functionality to create promotions in the three-for-two format and others) and improved the flexibility of our Yandex Plus loyalty program (merchants are now able to set up Yandex Plus program cashback at the percentage of their choice for the products they sell).
- In addition, we are constantly improving the customer experience, and we recently redesigned the application: it is now easier to navigate and faster to use with a more convenient checkout option. These improvements as well as qualitative changes in the service, such as delivery time optimization and assortment expansion, drove an improvement in client metrics such as order frequency and visitor-to-buyer conversions (especially seen on our loyal audience - Plus subscribers). Overall in 2021 every second purchase on the Market was made by a Plus subscriber. GMV per Plus customer increased by 64% in 2021 compared to 2020 driven by year-on-year increase in frequency and higher average check compared to a non-Plus customer. Also, Plus subscribers are 2.4 times more likely to return for additional purchases at Yandex Market than customers without Plus.
- Most of our increment fulfillment capacity in 2021 was added during the first nine months of the year, with only a minor expansion of 20 thousand sqm (the second stage of the regional fulfillment center in Rostov-on-Don) during Q4 2021. That said, we finished 2021 with a fulfillment capacity of around 320 thousand sqm (including only fulfillment centers, not other logistics infrastructure), which represents more than threefold growth vs. the end of 2020. We believe our current capacity will be largely sufficient to support the growth of our business in 2022, and we will thus focus more on improving the efficiency of fulfillment operations (including further automation of our distribution centers) and increasing personnel productivity and the utilization of our existing warehouse infrastructure.
- We continued to expand our last-mile delivery infrastructure, i.e., pickup points, lockers and delivery fleet. The number of lockers more than doubled over the quarter and reached 2.9 thousand (growth of 4.1x compared with the end of 2020), and the number of pickup points increased to 7 thousand, including around 2 thousand branded points (vs. only a hundred at the end of 2020). Thanks to this expansion and the synergies with our Yandex Delivery (Logistics) business, the share of orders managed by our own delivery platform exceeded 95% (essentially leaving only remote regions to external services), up from 89% as of the end of Q3 2021 and 33% as of the end of Q4 2020.
- We continued to work on improving the quality of delivery, an important metric for customer satisfaction. The share of orders delivered on time through our own platform exceeded 95%, reaching ~98% of orders if they were shipped from our warehouses.
- We continued to actively develop Market Express, a fast (within two hours) delivery option, straight from merchant warehouses powered by Yandex Delivery (Logistics) and complementing the involvement of Yandex Go drivers. This service is currently available in 57 Russian cities, covering a population of 55 million people and offering the widest selection among competitors of over 1.4 million SKUs. In Q4 2021, the share of GMV delivered via Express reached

high single-digit percentages across all regions, while in Moscow the share was in the mid-teens, reaching percentages in the low thirties on peak days in late December.

- We continue to leverage our advertising expertise across segments, and advertising revenue from our marketplace platform (excluding CPC ad revenue) reached 2.9% of GMV and amounted to RUB 1.3 billion for Q4 and RUB 2.8 billion for the full year 2021. This stream continues to evolve into a sizable contributor for Yandex Market revenues and an important future driver of unit economics.
- We improved Market unit economics by approximately 15 pp during 2021, with steady average appreciation of ca. 1 pp per month in the second half of the year. Adjusted to exclude the impact from underutilization of our fulfillment and delivery infrastructure (the addition of which was front-loaded during the year to support growth in subsequent periods), our unit economics were in the negative low-single digits as a percentage of GMV in Q4 2021.
- Among the key drivers of our improved unit economics were measures aimed at 1) a top-line increase (such as discount optimization, 3P take rate increase, 1P pricing algorithmic curation) and 2) operations and cost-efficiency enhancement (doubling the efficiency of warehouse personnel since mid-year, optimization of the payment scheme for pickup points and channeling sales via the most cost-effective delivery channels, as well as increasing the utilization of sortation centers and lockers). Further improvement of unit economics is the key priority for 2022, which we expect to be supported by a meaningful increase in the efficiency of existing logistics facilities.
- In 2022 we expect our total E-commerce GMV to double, while limiting the increase in total cash burn to 20% or less (where maximum spending is subject to the achievement of certain profitability and growth KPIs). This is underpinned by a significant improvement in unit economics.

5. FoodTech

- In Q4, our FoodTech businesses continued growing at high double-digits with a 79% increase in orders and 105% growth in GMV compared to a year ago. On a two-year stack basis orders increased 142% and GMV was up 157%.
- On a full-year basis, FoodTech orders were up 108% year-on-year and 135% on a two-year stack basis, GMV grew 116% year-on-year and two-year stack was 139%.
- **Eats vertical** posted an acceleration of year-on-year growth rates in Q4 compared to Q3, with orders up 91% and GMV up 113% year-on-year. Acceleration of growth was driven by the restaurants business, which grew 67% in orders and 76% in GMV, as well as by the further development of our Grocery business, with its share of total GMV reaching 26% in Q4 and 28% in December 2021.
- The number of restaurants on the platform grew by 1.3 thousand to 35 thousand, while grocery stores on the platform reached 3.2 thousand.
- During the quarter we continued to focus on unit economics, and despite an undersupply of couriers, we were able to reduce the loss per order in the restaurant business, as well as in grocery. As a result, the Adjusted EBITDA loss of the Eats business as a percentage of GMV improved 3 pp in Q4 compared to Q3. We believe that even with our second position in the market, we are the most efficient player compared to our peers: our growth rates are similar to peers, while unit economics have been consistently improving.
- **Lavka** finished the year with 404 dark stores, up from 395 stores at the end of Q3 2021. Lavka orders grew 61% year-on-year in Q4 and GMV grew 90%, while our focus on unit economics allowed us to achieve solid results in Moscow and Saint Petersburg – locations that we are primarily focusing on. Gross Profit in these regions increased by 5.3 pp compared to Q3 as a result of greater operational efficiency and while losses per order decreased by approximately 80%.
- The Adjusted EBITDA loss of our FoodTech services improved to RUB 2.4 billion compared to RUB 3.2 billion in Q3. Adjusted EBITDA loss margin as a percent of GMV of FoodTech was 9% - a significant improvement of 6 pp from Q3.
- We are excited about the total addressable market of our FoodTech businesses, and will be focused on strengthening the grocery and retail product experience, including through synergies with e-commerce. At the same time, we will continue to focus on unit economics improvements, balancing it vs investments.

6. Yandex Delivery (Logistics)

- Deliveries reached 29 million in Q4 and grew 149% year-on-year and 36% compared to Q3. GMV was RUB 11.3 billion in Q4, up 171% year-on-year and 43% quarter-on-quarter. In December, the GMV annualized run-rate reached approximately RUB 57 billion.
- Expectedly, December was a strong month in terms of seasonality, and we were focused on building our supply. Despite strong demand for last-mile express delivery services, we were able to maintain a high quality of service with the acceptance rate in line with the traditional course of the business, as a result of our ongoing investments in supply. In December, the number of active couriers and drivers on the platform reached 80 thousand per week.
- Despite these investments, in Q4 our Adjusted EBITDA loss significantly improved and reached (0.5)% of GMV. Building unique supply is crucial for rapidly growing the business further and we will continue investing in it.
- We see our investments paying off. In the peak weeks in December we were doing approximately 400K deliveries per day – this is 2.3 times more than a year ago. We see ongoing growth in demand for such “cloud-courier” services in the light of growing demand for ecommerce and online retail services and are excited about the growth potential of the business. We reconfirm our belief that the long-term margins of the Express Delivery business may reach mid- to high-single digits of GMV.

7. Yandex Plus / Media Services

- Media Services continued its rapid growth, increasing revenues by 125% year-on-year in Q4 2021 despite a high-base effect (related to the pandemic shelter-in-place surge), reaching a record level of RUB 6.5 billion, along with improving its adjusted EBITDA margin to -29% vs -39% a year earlier.
- Growth was supported by the further expansion of the Yandex Plus subscriber base, an increasing share of paying subscribers, original and exclusive content license revenue due to the production of a significantly higher volume of original content and exclusive content purchased in 2021 vs 2020 as well as devices revenue due to the release of a number of new smart devices and transactional revenue mainly through ticket sales due to market recovery once pandemic restrictions were lifted.
- We finished 2021 with 12 million Yandex Plus subscribers (up 79% year-on-year) with the share of paying subscribers exceeding 80%. Our expanded subscription base has further cemented Yandex Plus’s leading position among ecosystem subscriptions in Russia.
- During Q4 we released original sequels of two of our highly successful projects, Principle-less 2 and Last Minister 2, and more than 40 premieres (19 of which were exclusive). Among the latter were the movies *Venom 2* and *Dune*, which were released exclusively on KinoPoisk and were available for our subscribers just three months after the official local cinema release. Overall, we are very pleased with the level of execution demonstrated by our content team ahead of the holiday season, with major studio top grossing blockbusters of 2021 being available in the Plus subscription during the New Year / Christmas holidays in Russia. As a result, the average number of DAUs during the 10-day holiday period in January exceeded 2 million viewing subscribers, more than double the audience during the January holidays of 2021.
- An important milestone in our content strategy was to reach an agreement with Guy Ritchie (the most popular director among KinoPoisk viewers) to executive-produce and distribute his new film, *The Interpreter*, starring Jake Gyllenhaal. This marks the first time a Russian streaming service has played a key role in co-financing a film by a top international director.
- As of mid-February 2022, KinoPoisk has 6 million viewing subscribers. Based on the latest GfK report for Q4 2021, KinoPoisk has further strengthened its number one position in the video-on-demand market and increased the gap between itself and its competitors.
- Integration between Yandex Plus and our key transactional services remains highly beneficial and creates significant synergies. During Q4 2021, Plus subscribers continued to spend more and complete transactions more often than non-Plus customers. On average they demonstrated around 45% higher frequency across key transactional services (for

the full year 2021, Plus subscribers placed 2.4x more orders on Yandex Market than non-Plus subscribers), which together with a higher average check resulted in a 50%-85% higher GMV than that generated by non-Plus customers. In Ride-hailing specifically the GMV generated by riders with a Yandex Plus subscription is more than double of those without a subscription thanks to the positive impact on the mix of ride classes (cash back is available for premium classes only). Overall, Plus subscribers continue to generate a material part of GMV for our E-commerce and FoodTech services: more than 50% of GMV for Market and Eats, and around 70% for Lavka.

8. Other businesses and products

Self-Driving Group

- In Q4 2021 we continued commercial deployment of our delivery robots through our partnership with Grubhub on the University of Arizona campus. More than 35 thousand campus residents are now able to order rover-delivery meals through the Grubhub app. This is the second university campus after Ohio State University, where our delivery robots are operating and we are preparing for further expansion and new launches across other campuses during 2022.
- The company's rovers have already delivered over 100 thousand orders in the US and Russia to date, which has enabled us to monetize our technology in our domestic as well as international markets and to improve the courier shortage situation.
- Also, we have expanded our footprint to the MENA and Asian markets by signing a memorandum of understanding with Majit Al Futtaim Group in Dubai (in Q4 2021) and with KT Corporation in South Korea (in early 2022) to launch autonomous robotic delivery later this year.
- On the robotaxi side, we have rolled out proprietary lidars across the AV fleet. We started making our own lidars in the spring of 2019, and nine months later we began testing the first driverless vehicles equipped with our lidars on city streets. Today, after another two years of development, all our fourth-generation cars are already equipped with them, and they will also be included in all of our new cars going forward.
- The preparation for the launch of our robotaxi service in Moscow is in its final stage, including the necessary regulation. We have received more than 10 thousand applications from those wishing to take part in the testing.

Fintech

- Since we obtained a banking license in July 2021, we have been focusing on the creation of several parts of the necessary banking infrastructure: the transactional infrastructure, including payment solutions, the core banking system, processing and integration with international payment systems. At the same time, we have been putting in place the processes required by regulators, including banking financial accounting, compliance, treasury, etc. In addition, we have been developing our proprietary risk management and credit scoring solutions both based on banking practices and using Yandex machine learning tools and anonymized data.
- Yandex Split is our first fintech product, which was launched in Q3 2021 for the limited audience of Yandex Market and scaled further in Q4 2021. The service had a successful start as it helped to attract over 100 thousand new customers and processed its first RUB 1 billion in GMV. On the merchant side, half of all Yandex Split orders are incremental, yielding more than 20x incremental sales / gross commission. In 2022 we plan to gradually scale Yandex Split outside of Yandex services, to work on retention and stickiness among consumers as well as to test several payment options.
- We expect to test the first transactional retail banking products in H1 2022 and the first credit retail banking products in H2 2022. Overall we are planning to focus on several retail products that we expect will be synergistic with other Yandex services, rather than building a wholesale bank.

Cloud

- Cloud continued to be one of our fastest-growing businesses in terms of revenue in Q4. Last-quarter revenues grew 174% year-on-year, and the annualized revenue run rate in December reached RUB 4.7 billion, almost 50% of which

was generated by enterprise clients on the back of continued demand for cloud services amid the shift towards digital transformation.

- Growth was also driven by an increasing monthly paying customer base, which reached around 16 thousand clients in total and a strong acceleration in the consumption of more value-added platform services, in particular databases and containers, which led to a change in the product mix in favor of PaaS (share of revenue reached 42% in Q4 vs 37% a year ago). The growing scale and improving efficiency of operations together with a changing mix of services (with an increasing share of more value-added products) enabled Cloud to materially improve its unit economics and narrow its adjusted EBITDA losses as a percentage of revenue.

Devices

- Devices revenue grew 111% year-on-year in Q4 2021 and 157% year-on-year for the full year 2021 to RUB 9.5 billion. Growth was supported by an improvement in our smart speakers offering and a number of product releases throughout the year, which now address all demand segments: Station Lite, Station Mini 2 and Yandex Module (smart box with Yandex TV). We have sold almost 3 million smart devices with voice assistant Alice since the launch. In 2021, the number of weekly active smart home devices on smart home platform by Yandex exceeded 1 million devices.

Classifieds

- In 2021 we maintained our leading position in key verticals in the auto and real estate markets and ended the year with RUB 8.2 billion in revenues (with 41% year-on-year growth) and an adjusted EBITDA margin of more than 25%. Top-line growth was supported by a strong base of unique users (30 million Auto.ru MAUs by the end of the year) and a number of new product initiatives which translated into a further improvement in monetization against the challenging external backdrop (the semiconductor crisis and related shortage of new cars).
- We recently launched the Yandex Rent service, a rental platform, which helps to manage pre-contract rental processes and subsequent administration of the payments. We are seeing good progress: a few months after the launch, we have expanded the service to four cities in Russia and added about 4 thousand apartments to the platform, 50% of which are signed online. Our service provides a 3D apartment tour, insures the risks of both parties to the transaction and supports clients on various issues even after signing a contract.

9. Technology and Other services

- In November 2021, Yandex's **supercomputer** Chervonenkis ranked 19th in a rating of the top-500 global supercomputers, making it the most productive system in Russia and Eastern Europe. Two more Yandex supercomputers entered the top 40 in the world ranking.
- At the end of October 2021, **ClickHouse Inc.** (spun off from Yandex in September 2021 and set up in partnership with the US-based Benchmark Capital and Index Ventures) raised USD 250 million in a second round of investment, with a company valuation of over USD 2 billion.
- We are starting to gain traction with **Toloka**, our data-centric AI solution that enables clients to generate machine learning data at scale. Toloka has built a broad portfolio of over 2 thousand clients from the US, Europe, Israel and the CIS, including AliExpress, Tinkoff, Samsung, Leroy Merlin, Kaspersky, IVI and number of others local and international companies. Gartner named Toloka one of the notable data labeling solutions on the market in its "Hype Cycle for Data Science and ML report." It's Q4 2021 run-rate revenue exceeded RUB 1.6 billion, with an external share of more than 40%.

FORWARD-LOOKING STATEMENTS

This document contains forward-looking statements that involve risks and uncertainties. All statements other than statements of historical facts, including, without limitation, statements regarding our future financial and business performance, our business and strategy and the impact of the COVID-19 pandemic on our industry, business and financial results, are forward-looking statements. The words “anticipate,” “believe,” “continue,” “estimate,” “expect,” “guide,” “intend,” “likely,” “may,” “will” and similar expressions and their negatives are intended to identify forward-looking statements. Actual results may differ materially from the results predicted or implied by such statements, and our reported results should not be considered as an indication of future performance. The potential risks and uncertainties that could cause actual results to differ from the results predicted or implied by such statements include, among others, the impact of the ongoing COVID-19 pandemic and regulatory and business responses to that crisis, macroeconomic and geopolitical developments affecting the Russian economy or our business, changes in the political, legal and/or regulatory environment, competitive pressures, changes in advertising patterns, changes in user preferences, technological developments, and our need to expend capital to accommodate the growth of the business, as well as those risks and uncertainties included under the captions “Risk Factors” and “Operating and Financial Review and Prospects” in our Annual Report on Form 20-F for the year ended December 31, 2020 and “Risk Factors” in the Shareholder Circular filed as Exhibit 99.2 to our Current Report on Form 6-K, which were filed with the U.S. Securities and Exchange Commission (SEC) on April 1, 2021 and November 18, 2019, respectively, and are available on our investor relations website at <https://ir.yandex/sec-filings> and on the SEC website at <https://www.sec.gov/>. All information in this document is as of February 15, 2022, and Yandex undertakes no duty to update this information unless required by law.

USE OF NON-GAAP FINANCIAL MEASURES

To supplement the financial information prepared and presented in accordance with U.S. GAAP, we present the following non-GAAP financial measures: adjusted EBITDA and adjusted EBITDA margin. The presentation of these financial measures is not intended to be considered in isolation or as a substitute for, or superior to, the financial information prepared and presented in accordance with U.S. GAAP. These non-GAAP financial measures are used by management for evaluating financial performance as well as decision-making. Management believes that these metrics reflect the organic, core operating performance of the company, and therefore are useful to analysts and investors in providing supplemental information that helps them understand, model and forecast the evolution of our operating business. For more information on these non-GAAP financial measures, please see the tables captioned “Reconciliations of non-GAAP financial measures to the nearest comparable U.S. GAAP measures”, included in Yandex’s press release dated February 15, 2022.